PLACER PARKWAY
CORRIDOR PRESERVATION

DRAFT
AIR QUALITY TECHNICAL MEMORANDUM
Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR

June 29, 2007

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

Caltrans

FHWA

Prepared by

URS Corporation

South Placer Regional Transportation Authority
California Department of Transportation
Federal Highway Administration

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Draft

AIR QUALITY TECHNICAL MEMORANDUM

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR
Placer and Sutter Counties, California

June 2007

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AADT	Annual Average Daily Trips
AAQS	Ambient Air Quality Standards
AFA	Analysis Focus Area
APCD	Air Pollution Control District
AQAP	Air Quality Attainment Plan
AQMD	Air Quality Management District
AQMP	Air Quality Management Plans
BMPs	Best Management Practices
CAA	Clean Air Act
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFCs	chlorofluorocarbons
CFR	Code of Federal Regulations
CH_4	methane
CO	Carbon Monoxide
DEIR	Draft Environmental Impact Report
DPM	diesel particulate matter
FEIR	Final Environmental Impact Report
FHWA	Federal Highway Administration
FRAQMD	Feather River Air Quality Management District
FTA	Federal Transit Administration
GHG	greenhouse gases
H_2S	hydrogen sulfide
HAPs	hazardous air pollutants
HCFCs	partially halogenated chlorofluorocarbons
HFCs	halogenated fluorocarbons
HRA	Health Risk Assessment
I-80	Interstate 80
ISTEA	Intermodal Surface Transportation Efficiency Act
LOS	level of service
MOU	memorandum of understanding
MPO	Metropolitan Planning Organization
MSATs	mobile sources air toxics
MTIP	Metropolitan Transportation Improvement Program
MTP	Metropolitan Transportation Plan
mph	miles per hour
NAAQS	National Ambient Air Quality Standards
NDIR	non-dispersive infrared photometry
NEPA	National Environmental Policy Act
NMVOCs	nonmethane volatile organic compounds
N_2O	nitrous oxide
NO_2	nitrogen dioxide
NO_X	oxides of nitrogen
NPS	National Park Service
O_3	ozone
OHW	Ordinary High Water
Pb	lead
PCAPCD	Placer County Air Pollution Control District

PCTPA	Placer County Transportation Planning Agency
PDF	project design feature
$PM_{2.5}$	Particulate matter less than or equal to 2.5 microns
PM_{10}	Particulate matter less than or equal to 10 microns
POAQC	Project of Air Quality Concern
ppm	parts per million
PSR	Project Study Report
ROG	reactive organic gases
ROW	right-of-way
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
SACMET	Sacramento Metropolitan Travel Demand Model
SACOG	Sacramento Area Council of Governments
SAFETEA-LU	Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users
SIP	State Implementation Plan
SMA	Sacramento Metropolitan Area
SMAQMD	Sacramento Air Quality Management District
SOI	Sphere of Influence
SO_2	sulfur dioxide
SO_X	Oxides of Sulfur
SPRTA	South Placer Regional Transportation Authority
SR	State Route
SVAB	Sacramento Valley Air Basin
TAC	Placer Parkway Corridor Preservation Technical Advisory Committee
TACs	toxic air contaminants
TASA	Transportation Analysis Study Area
TAZ	traffic analysis zone
TCM	Transportation Control Measures
TEA-21	Transportation Equity Act for the 21st Century
Tier 1 EIS/EIR	Tier 1 Environmental Impact Statement/Program Environmental Impact Report
TIP	Transportation Improvement Program
U.S. EPA	U.S. Environmental Protection Agency
VEE	Visible Emissions Evaluations
VHD	Vehicle Hours of Delay
VMT	Vehicle Miles of Travel
VOC	volatile organic compounds

AIR QUALITY
TECHNICAL MEMORANDUM
PLACER PARKWAY CORRIDOR PRESERVATION
TIER 1 EIS/PROGRAM EIR

1.0 INTRODUCTION

1.1 TIER 1 EIS/PROGRAM EIR

The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the South Placer Regional Transportation Authority (SPRTA) propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking State Route (SR) 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1).

The planning for Placer Parkway involves two phases: (1) the present action, selection of a corridor (titled the Placer Parkway Corridor Preservation Project), and (2) the future selection of a precise alignment within the corridor and a decision whether or not to build the Parkway. If a build alternative is selected and pursued after the second phase, the ultimate Placer Parkway project would be constructed and operated. Throughout this document the term "Proposed Action" is used to describe the selection of a corridor to preserve. The document generally uses the term "Parkway" to mean the ultimate roadway, including construction and operation, except where context indicates otherwise.

As stated, the action to be considered based on this Tier 1 analysis involves only the selection of a corridor to preserve, which has limited environmental effects by itself. However, the ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. In order to describe the effects of the ultimate Placer Parkway project to the greatest extent feasible at this early stage, the Tier 1 EIS/EIR also addresses the potential effects of construction and operation of the future roadway. This discussion of the roadway is necessarily limited, however, because only the general concepts of the roadway design and location are known at this time. If a corridor is selected and preserved at Tier 1, a subsequent Tier 2 analysis will evaluate the Parkway itself in detail—the specific roadway "footprint" within the selected corridor, including construction and operation of the roadway.

1.2 CORRIDOR SELECTION AND PRESERVATION

The concept for the Placer Parkway is over a decade old. Placer County's 1994 General Plan depicts a "plan line" for it. Two planning studies helped to refine the concept:

- DKS Associates, 2000, Placer Parkway Interconnect Study/Conceptual Plan
- DKS Associates, 2001, Project Study Report (Project Development Support) for Placer Parkway

Placer Parkway is cited as a high-priority regional transportation project by the Sacramento Area Council of Governments (SACOG) 2025 Metropolitan Transportation Plan and the 2027 Placer County Regional Transportation Plan. The project vicinity and surrounding area include some of the fastest growing communities in the Sacramento region. A number of large urban development proposals are being considered by Sutter and Placer counties. New development is expected to add a significant amount of residential, commercial, industrial, and educational uses.

A 2½-year screening and public outreach program that involved local jurisdictions (the Technical Advisory Committee); regional, state, and federal agencies; stakeholder groups that included representatives from planning and public works departments of all affected cities and counties, environmental, business, agricultural, development, and homeowner interests (the Study Advisory Committee); and elected officials (the Policy Advisory Committee), resulted in the identification of five potential corridors for the Parkway. The Tier 1 Environmental Impact Statement/Program Environmental Impact Report will analyze these five corridor alternatives along with a No-Build Alternative.

Other potential transportation modes such as bus rapid transit may be developed in the corridor in the future, although they are not proposed as part of the current project. The width of the corridor for Placer Parkway is to vary from approximately 500 feet in the Eastern and Western segments to approximately 1,000 feet in the Central Segment. Depending upon the alternative, the corridor's length ranges from a minimum of 14.2 miles to a maximum of 16.2 miles. The selected corridor would contain the roadway, including the median, travel lanes, shoulder, associated access ramps and a no-development buffer zone.

Corridor acquisition may not be completed until after Tier 2, as funding becomes available. Portions of the selected corridor would be preserved as a no-development buffer zone. The buffer would be maintained as a zone where development is either not permitted or is severely restricted. This is intended to restrict access to the proposed interchanges, protect the rural character of agriculturally designated areas in the vicinity of the Parkway as far as possible subject to future development, and maximize opportunities to incorporate adjacent sensitive areas. It is intended that the buffer would be owned and managed in the future to achieve these objectives. For subsequent Tier 2 (project-level) environmental reviews, the size of this buffer zone could be considered flexible for agriculturally designated land undergoing urban development. In the Tier 2 environmental review, the specific buffer size and location would be determined. This determination would be based on performance standards on a case-by-case basis, depending on the land use needs of future approved development, and taking into account the primary objective of restricting future access to the Parkway.

Project proponents are considering employment of several land management and control mechanisms to ensure that the buffer would be effectively maintained as an area where development would either not be permitted, or where construction of any additional access onto the Parkway would not be allowed. These mechanisms could include land use controls, land purchase/leases, general plan amendments, zoning/overlay zoning changes, covenants/deed restrictions, agricultural/conservation easements, urban growth boundaries, etc. "Layering" or using several of these methods would provide more assurance that the buffers would be permanent, or at least more difficult to undo.

1.3 TECHNICAL MEMORANDUM OBJECTIVE

This Air Quality Technical Memorandum has been prepared to support the Tier 1 Environmental Impact Statement/Program Environmental Impact Report. It presents a Tier 1/Program level assessment of potential impacts related to air quality for five corridor alternatives and the No-Build Alternative as described in Chapter 2.

Prior to preparing the Tier 1/Program air quality analysis, a technical memorandum describing the air quality methodology and approach for the air quality analysis for Placer Parkway Corridor Preservation project and its Tier 1 Environmental Impact Statement/Program Environmental Impact Report was submitted to Caltrans' staff, Mr. Japtej Gill, on January 27, 2006, for approval. The memorandum was approved by Mr. Gill on February 2, 2006 (Gill, 2006). In addition, the evaluation considered guidance from the FHWA Environmental Checklists for Draft and Final Environmental Documents (FHWA, 1998a; FHWA, 1998b).

This report is organized as follows:

Chapter 2: The Proposed Action
Chapter 3: Regulatory Setting
Chapter 4: Affected Environment
Chapter 5: Potential Direct Impacts
Chapter 6: Secondary and Indirect Impacts
Chapter 7: Cumulative Impacts
Chapter 8: Avoidance, Minimization and/or Mitigation Strategies
Chapter 9: Analyses to be Undertaken in Tier 2
Chapter 10: References

This report also includes figures and tables, which show the project location, each build alternative, and pertinent technical information prepared to evaluate the build alternatives.

Throughout this document, the Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report is referred to as the Tier 1 EIS/EIR.

2.0 THE PROPOSED ACTION

The Proposed Action for the Placer Parkway Corridor Preservation Project is to select and preserve a 500- to 1,000-foot-wide corridor in the study area, within which the future four- or six-lane Placer Parkway may be constructed. The ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction, and operation of the Parkway. Although the action taken at Tier 1 on the Placer Parkway Corridor Preservation Project is limited, the underlying project whose effects are studied in this document is the Placer Parkway. To the extent feasible at this early stage, the Tier 1 EIS/EIR addresses the potential effects of construction and operation of the future roadway.

2.1 THE PROJECT STUDY AREA

The study area is an area of approximately 33,460 acres located in Sutter and Placer counties, with a small section located in Sacramento County (see Figures 1-1 and 2-1). The portion of the study area in Sacramento County is located in the extreme southwestern corner of the study area and does not include any of the proposed corridor alignment alternatives. The study area extends from SR 70/SR 99 in the west to SR 65 in the east, with the northern boundary extending to Sunset Boulevard West and the southern boundary located adjacent to Baseline and Riego Roads.

For the purposes of the analysis the study area is divided into three segments:

- Western Segment: the Western Segment extends from SR 70/99 to Pleasant Grove Road in Sutter County.
- Central Segment: the Central Segment extends from Pleasant Grove Road in Sutter County to approximately 2,300 feet north of Pleasant Grove Creek in Placer County.
- Eastern Segment: the Eastern Segment extends from approximately 2,300 feet north of Pleasant Grove Creek to SR 65 in Placer County.

2.2 CORRIDOR ALTERNATIVES

The following subsections describe the corridor alignment alternatives, which are depicted on Figure 2-1, and are numbered according to location from south to north in the study area.

2.2.1 The No-Build Alternative

Under the No-Build Alternative, the project would not be implemented. A Placer Parkway corridor would not be selected/preserved, and the future Placer Parkway would not be constructed.

2.2.2 Alternative 1 – the Red Alternative

Alternative 1 would extend from SR 70/99 approximately ½ mile north of Riego Road, eastward approximately 1 mile north of Baseline Road to approximately Watt Avenue, proceeding north and transitioning in an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 16.2 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.3 Alternative 2 – the Orange Alternative

Alternative 2 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed northeast, then in a northerly direction

south of Pleasant Grove Creek, transitioning to an easterly direction before it reaches Sunset Boulevard West, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.4 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.4 Alternative 3 – the Blue Alternative

Alternative 3 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed north along the Sutter/Placer County Line, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.6 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.5 Alternative 4 – the Yellow Alternative

Alternative 4 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.3 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.2.6 Alternative 5 – the Green Alternative

Alternative 5 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 4,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.2 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.3 PARKWAY DESIGN ASSUMPTIONS

Although the Parkway would be designed and construction-level impacts analyzed during Tier 2, for the purpose of this report and the Tier 1 EIS/Program EIR, several assumptions have been made about potential design and configuration concepts. These assumptions would be subject to further development and refinement, and specific decisions about design of the roadway would be made during the Tier 2 process. For example, the number, location, and design of over-crossings would be determined at the time of final Parkway design, in consultation with local jurisdictions. The following sections outline assumptions for the future roadway.

Preliminary costs estimates for the Parkway range from $600 to $650 million (2005 dollars). This includes costs for right-of-way, design, construction and environmental mitigation for the four- to six-lane roadway. The funding situation has spurred interest in exploring other more creative funding options. These include a county-wide sales tax, more developer contributions, and tolling facilities. The Technical Report and Tier 1 EIS/EIR do not make any assumptions about funding sources.

2.3.1 Conceptual Roadway Configuration

The Parkway would be a high-speed, limited access roadway. Depending upon the timing of adjacent urban development proposals and funding, the Parkway may be designed and constructed incrementally

in segments. These could be built as a four-lane (interim) roadway until a six-lane segment is warranted, or as the full six-lane roadway. A preliminary conceptual cross section (see Figure 2-2) was developed to facilitate the Tier 1/Program evaluation. It illustrates both four-lane (two lanes in both directions) and six-lane (three lanes in both directions) configurations within the 500- to 1,000-foot corridor widths. The roadway would include a central median approximately 100 to 134 feet wide, depending on local conditions and reflecting Caltrans safety guidance. The Parkway would be designed and constructed to Caltrans standards, unless specific design exceptions are granted. For the purposes of the Tier 1 EIS/EIR, the Parkway's opening year is assumed to be 2020.

Access would be provided at the western and eastern ends of the Parkway, where existing areas of dense development are already located or planned. Access would be restricted for the 7-mile Parkway Central Segment. The analysis assumes no interchanges in this segment. (A possible future extension of Watt Avenue or another nearby roadway may be considered in the Central Segment as a separate project.)

2.3.2 Conceptual Roadway Elevation

As the study area is comprised of relatively flat terrain, the majority of the future Placer Parkway is assumed to be at-grade. As necessary, bridges would be used to span certain features and improvements such as the Union Pacific Railroad tracks along Industrial Boulevard, Pleasant Grove Creek, the Natomas East Main Drainage Canal, and floodplains. Generally, the approximate height of bridges is expected to range from 10 feet above streams to 30 feet above the railroad. Culverts would be used at smaller creek crossings as appropriate, depending on local conditions and permit requirements. The Pleasant Grove Creek floodplain would be crossed by bridges (one in each direction) supported by abutments located approximately 800 feet on both sides of the creek to avoid the riparian habitat associated with the creek.

Within the 100-year floodplain, the roadway would be elevated such that the bottom of any new bridges would be above the 100-year water surface elevation. The roadway support structures and bridges would be designed to minimize environmental impact, not impede stream and flood flows, and allow for the unobstructed passage of potential future streamside uses such as maintenance equipment, bikeways, or trails.

Throughout the project study area, the assumptions for creek and floodplain crossings include typical engineering specifications:

- a maximum bridge span of approximately 150 feet;
- for bridge spans exceeding 150 feet, assume one column, approximately 4 feet in diameter, every 150 feet; and
- all columns placed outside of the ordinary high water (OHW) level.

To maintain existing and future local roadway connectivity (for emergency access, farming operations, and community access), over-crossings would be constructed to convey traffic over the Parkway. These over-crossings would not connect to the Parkway. Parkway access would be via the interchanges described below.

2.3.3 Interchange Concepts

The analysis assumes that the location of interchanges (see Figure 2-1) is as follows.

- SR 70/99 (at ½ mile north of Riego Road or at Sankey Road)
- One or two locations to be determined in southern Sutter County
- Fiddyment Road
- Foothills Boulevard
- SR 65 at Whitney Ranch Parkway

The following discussion outlines concepts and assumptions for the six interchanges that could potentially serve Placer Parkway.

2.3.3.1 Western Segment

Within the Western Segment of the Parkway, a high-speed, freeway-to-freeway type interchange would connect the Parkway with SR 70/99 at one of following potential locations depending on the project alternative (see Section 2.2). Placer Parkway would terminate at SR 70/99.

- **Placer Parkway/SR 70/99 Interchange at North of Riego Road.** This alternative concept uses "braided" ramps to eliminate weaving problems or conflicts with the future SR 70/99 at Riego Road interchange being developed by Sutter County and Caltrans.

- **Placer Parkway/SR 70/99 Interchange at Sankey Road.** Under this alternative concept, the existing two-lane Sankey Road would be realigned to the south of Placer Parkway and the proposed freeway-to-freeway interchange, extending from approximately ¼ mile west of SR 70/99 to approximately ¼ mile east of the Union Pacific railroad tracks. There would be no direct access to SR 70/99 or Placer Parkway from the realigned Sankey Road.

Depending on the final alignment selected, one or two additional interchanges would also be located in south Sutter County. Conceptual locations are identified for purposes of this Tier 1/Program analysis (see Figure 2-1). The actual location of these interchanges would be developed in the Tier 2 phase, based on Sutter County requirements.

2.3.3.2 Central Segment

Within the Central Segment of the Parkway, there would not be any access proposed as part of the project in the 7-mile segment between Fiddyment Road and Pleasant Grove Road. Please see Section 2.4 regarding a potential connection with a future extension of Watt Avenue (Figure 2-3) which could be proposed and constructed by others in the Central Segment; such an interchange is not part of Placer Parkway.

2.3.3.3 Eastern Segment

Within the Eastern Segment of the Parkway, a signalized high-speed freeway-to-freeway and local access interchange would connect the Parkway to SR 65 at Whitney Ranch Parkway (Figure 2-1). From SR 65 eastward Placer Parkway would terminate and become Whitney Ranch Parkway east of the SR 65 exit ramp intersection. Traffic signals would be provided at the exit ramp terminals. This interchange would be approximately 1 mile north of a planned SR 65/Sunset Boulevard interchange and 1.2 miles south of the existing Twelve Bridges interchange.

As part of this interchange, auxiliary lanes would be required on SR 65 in both directions to enhance traffic operations on the north side of the future SR 65/Sunset Boulevard interchange. The southbound SR 65 exit-ramp at Sunset Boulevard is being designed to accommodate an additional auxiliary lane required for the future Placer Parkway/Whitney Ranch Parkway interchange to minimize the reconstruction of this ramp in the future. Within the Eastern Segment of the Parkway, from SR 65 westward, two interchanges with local roadways would be constructed, one at Foothills Boulevard and one at Fiddyment Road, as depicted on Figure 2-1.

The future interchange on Placer Parkway at Fiddyment Road would be located near the existing intersection of Fiddyment Road and Sunset Boulevard West. To provide acceptable traffic operations, additional distance needs to be provided between the Fiddyment Road/Sunset Boulevard West

intersection and the Fiddyment Road/Placer Parkway westbound off-ramp intersection. Therefore, Sunset Boulevard West will need to be realigned to the north as it nears Fiddyment Road.

2.3.4 Landscaping Concept

For the purposes of this environmental analysis, preliminary landscaping concepts have been developed for Placer Parkway. These are entirely conceptual and would be subject to further refinement during the Tier 2 environmental process. It is anticipated that landscaping would be used to reflect local topography and vistas in the study area and complement the varying character of land adjacent to the Parkway corridor. Landscape design would vary within the Parkway's three segments depending on corridor width and type and density of surrounding land uses. Landscaping would be used within the median and the Parkway buffer zone to enhance the aesthetics of the Parkway, and would be used to provide screening and enhance local and long-distance views. Where appropriate, more concentrated plantings would be considered to buffer the Parkway from future adjacent land uses that may be incompatible with the Parkway concept, and to prevent unwanted intrusion into shoulder or median areas. Landscape design would likely include a mix of compatible native and nonnative plants that may require some irrigation. Wherever possible, native plant species would be used in line with Caltrans policy. Where possible and depending on availability, feasibility and cost, recycled water would be used for irrigation.

During a future design phase, lighting elements would be designed for safety and would consider the proposed landscaping plan to minimize potential aesthetic impacts (e.g., shielding lighting elements, using lower-voltage lighting, and proposing lighting fixtures that conform with the visual character of the area).

2.4 POTENTIAL WATT AVENUE INTERCHANGE

The Placer County General Plan includes a number of new roadways that may be needed in Placer County, according to travel demand forecasts. An extension of Watt Avenue to Placer Parkway (from Baseline Road to a new Blue Oaks Boulevard Extension) is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto the Placer Parkway via a new interchange (see Figure 2-3). A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. It would be subject to independent future environmental analysis and review and is not being fully evaluated within this Technical Report or Tier 1 EIS/EIR. However, an interchange between Placer Parkway and a potential Watt Avenue extension could affect future travel patterns in the area, including use of the Parkway. Based on direction from previous planning studies, this Technical Study and the Tier 1 EIS/Program EIR will evaluate each corridor alternative with and without a Watt Avenue interchange. This evaluation does not predetermine the construction or alignment of a potential Watt Avenue or nearby roadway extension or the precise locations of any potential interchanges with Placer Parkway.

2.5 AGENCY PERMITS AND APPROVALS

The Proposed Action would preserve a preferred corridor for a future transportation facility. In the future, permits and approvals would be obtained from appropriate agencies prior to construction of the Parkway. These permits and approvals may include specific design or mitigation requirements that would be incorporated into the project.

2.6 SUBSEQUENT TIER 2 INFORMATION

As noted earlier, the design and construction of Placer Parkway—including its interchanges and over-crossings, and ancillary features such as stream crossings, safety devices, stormwater management structures, and similar improvements—would be evaluated in a subsequent Tier 2 environmental review.

3.0 REGULATORY SETTING

3.1 FEDERAL AND STATE AIR QUALITY STANDARDS

Federal and state governments have each established standards for ambient air quality. The U.S. Environmental Protection Agency (U.S. EPA) has established primary and secondary National Ambient Air Quality Standards (NAAQS) that specify allowable ambient concentrations for criteria pollutants under the provisions of the Clean Air Act (CAA). Primary NAAQS are established at levels necessary, with an adequate margin of safety, to protect the public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Similarly, secondary NAAQS specify the levels of air quality determined appropriate to protect the public welfare from any known or anticipated adverse effects associated with air contaminants. Allowable ambient concentrations are set for the following criteria pollutants: ozone (O_3), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), lead (Pb), and sulfur dioxide (SO_2). Table 3-1 summarizes the NAAQS for these pollutants. The 8-hour O_3 and $PM_{2.5}$ standards listed in the table were promulgated in 1997, but were challenged in the courts. In 2002, the courts upheld these two standards. The U.S. EPA made final designations for the 8-hour O_3 standards on April 15, 2004, and final designations for the new federal $PM_{2.5}$ standards in December 2004. Currently, the U.S. EPA and the states are working together to develop air quality plans to achieve compliance with these standards, where needed.

The U.S. EPA, under the provisions of the CAA, requires each state with regions that have not attained the NAAQS to prepare a State Implementation Plan (SIP), detailing how these standards are to be met in each local area. The SIP is a legal agreement between each state and the federal government to commit resources to improving air quality. It serves as the template for conducting regional and project-level air quality analysis. The regional analysis is performed by the appropriate Metropolitan Planning Organization (MPO) and the project-level analysis by the project sponsor. The SIP is not a single document, but a compilation of new and previously submitted plans, programs, district rules, state regulations, and federal controls. Areas designated as serious non-attainment are required to achieve attainment by June 15, 2013. The California Air Resources Board (CARB), which is part of the California Environmental Protection Agency, is the lead agency for developing this SIP. Local air districts and other agencies prepare Air Quality Attainment Plans (AQAPs) or Air Quality Management Plans (AQMPs) and submit them to CARB for review and approval.

In 1976, the California Legislature adopted the Lewis Air Quality Management Act, which created Air Quality Management Districts (AQMDs) and Air Pollution Control Districts (APCDs). Though separate from federal actions, the creation of AQMDs/APCDs became an integral part of transportation conformity, which is described below. CARB oversees activities of the APCDs and regional AQMDs. The AQMDs and APCDs promulgate the SIPs for achieving cleaner air quality on a region-by-region basis and provide technical assistance to the MPO and project sponsor for regional and project-level air quality analyses.

The CAA requires that no MPO approve any transportation plan, program, or project that does not conform to a SIP. The concept of transportation conformity was introduced in the CAA of 1977, which included a provision to ensure that transportation investments conform to a state's air quality plan for meeting the federal air quality standards. Conformity requirements were made substantially more rigorous in subsequent CAA amendments (Transportation Conformity: A Basic Guide for State and Local Officials: www.fhwa.dot.gov/ENVIRONMENT/conformity/basic1gd.htm). Revisions in 1990 require that transportation plans, programs, and projects must conform to the purpose of the SIP. This was accomplished by the development of the Transportation Conformity Rule (40 Code of Federal Regulations (CFR) Parts 51 and 93) in 1993. This rule established the criteria and procedures by which the FHWA, the Federal Transit Administration (FTA), and MPO entities determine the conformity of federally funded or approved highway and transit plans, programs, and projects to SIP provisions.

Table 3-1
Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)	1 hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8 hours	0.070 ppm (137 µg/m^3)		0.08 ppm (157 µg/m^3)[8]		
Respirable Particulate Matter (PM_{10})	24 hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		50 µg/m^3 (see footnote #9)		
Fine Particulate Matter ($PM_{2.5}$)	24 hours	No Separate State Standard		65 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	15 µg/m^3		
Carbon Monoxide (CO)	8 hours	9 ppm (10 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m^3)	None	Non-dispersive Infrared Photometry (NDIR)
	1 hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
	8 hours (Lake Tahoe)	6 ppm (7 mg/m^3)		–	–	–
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.03 ppm (57 µg/m^3)	Gas Phase Chemilumi-nescence	0.053 ppm (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 hour	0.18 ppm (338 µg/m^3)		–		
Lead[10]	30-day Average	1.5 µg/m^3	Atomic Absorption	–	–	–
	Calendar Quarter	–		1.5 µg/m^3	Same as Primary Standard	High Volume Sampler and Atomic Absorption
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	–	Ultraviolet Fluorescence	0.030 ppm (80 µg/m^3)	–	Spectro-photometry (Pararosaniline Method)
	24 hours	0.04 ppm (105 µg/m^3)		0.14 ppm (365 µg/m^3)	–	
	3 hours	–		–	0.5 ppm (1,300 µg/m^3)	
	1 hour	0.25 ppm (655 µg/m^3)		–	–	–

Table 3-1 (Continued)
Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Visibility Reducing Particles	8 hours	Extinction coefficient of 0.23 per kilometer – visibility of 10 miles of more (0.07–30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		**NO FEDERAL STANDARDS**		
Sulfates	24 hours	25 µg/m^3	Ion Chroma-tography			
Vinyl Chloride[10]	24 hours	0.01 ppm (26 µg/m^3)	Gas Chroma-tography			
Hydrogen Sulfide	1 hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			

Source: California Air Resources Board (2006)

Notes:

µg/m^3 = micrograms per cubic meter; mg/m^3 = milligrams per cubic meter; ppm = parts per million

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM_{10}, $PM_{2.5}$, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent procedure which can be shown to the satisfaction of CARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. New federal 8-hour ozone and fine particulate matter standards were promulgated by the U.S. EPA on July 18, 1997. In 2006, the U.S. EPA approved these standards, set attainment designation for all areas within the United States, and required non-attainment areas to develop attainment strategies.
9. Due to lack of evidence linking health problems to long-term exposure to coarse particle pollution, the agency revoked the annual PM_{10} standard in 2006 (effective December 17, 2006).
10. CARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

CARB oversees activities of local air quality management agencies, and is responsible for incorporating AQAPs and AQMPs from local air districts into the SIP for U.S. EPA approval. CARB also maintains air quality monitoring stations throughout the state in conjunction with local air districts. Data collected at these stations are used by CARB to classify air basins as being in "attainment" or "non-attainment" with respect to each pollutant and to monitor progress in attaining air quality standards.

CARB has promulgated ambient air quality standards for O_3, PM_{10}, $PM_{2.5}$, CO, NO_2, SO_2, and Pb that are more stringent than the U.S. EPA's standards, as shown in Table 3-1. In 2002, CARB revised the state annual PM_{10} standard and established an annual $PM_{2.5}$ standard. These standards went into effect on July 7, 2004. On April 17, 2006, the Office of Administrative Law approved amendments to the regulations for the state ambient air quality standard for O_3. Those amendments establish a new 8-hour average O_3 standard of 0.070 part per million (ppm), not to be exceeded, and revoking the existing 1-hour O_3 standard of 0.09 ppm. CARB has also developed standards for sulfates, hydrogen sulfide (H_2S), visibility reducing particulates, and vinyl chloride. Counties and metropolitan areas are classified as being in attainment or non-attainment with respect to federal and state ambient pollutant standards. An area's classification is determined by comparing actual monitored air pollutant concentrations with state and federal standards. More than 200 air monitoring stations are located in California and are part of the State and Local Air Monitoring Network. These stations are operated by CARB, APCDs or AQMDs, private contractors, and the National Park Service (NPS). Areas that do not have sufficient data for a determination are given an "unclassified" designation and are not considered to be non-attainment.

The California CAA requires that each area exceeding the state ambient air quality standards for O_3, CO, SO_2, and NO_2 must develop a plan aimed at achieving those standards (California Health and Safety Code 40911). California Health and Safety Code Section 40914 requires air districts to design a plan that achieves an annual reduction in district-wide emissions of 5 percent or more, averaged every consecutive three-year period. To satisfy this requirement, the AQMDs and APCDs have to develop and implement air pollution reduction measures, which are described in their AQAP/AQMP outlining strategies for achieving the state ambient air quality standard for any criteria pollutants for which the region is classified as non-attainment. The AQAP/AQMP outlines both stationary and mobile emission source control measures and emphasizes Transportation Control Measures (TCMs) and Indirect Source Control Measures to reduce mobile source emissions. These measures are also incorporated into the SIP to satisfy federal requirements.

It should be noted that in addition to criteria pollutants, hazardous air pollutants (HAPs) and toxic air contaminants (TACs) are also regulated. TACs are a subset of HAPs (i.e., TACs are also HAPs, but not all HAPs are TACs). HAPs and TACs are regulated on a case-by-case basis by the local AQMD/APCD. HAPs and TACs are typically emitted from stationary sources such as manufacturing or industrial facilities, internal combustion engines (stationary and mobile), and small area sources (such as solvent usage). As such, local rules and regulations limit the amount of HAPs and TACs emitted from stationary sources through the air permit application process. Facilities exceeding the air permitting exemption thresholds may be required to meet restrictions such as operating hours and annual operating limits, install air pollution control systems, and conduct a health risk assessment (HRA). The results of the HRA have to show that nearby sensitive receptors exposed to HAPs and TACs emitted from the facility will not have an increase in carcinogenic risks or detrimental acute or chronic noncancer health effects. HAPs and TACs are not expected to be emitted from any stationary sources associated with the operation of the Parkway, therefore, they will not be analyzed or discussed in this document. However, it should be noted that certain TACs are emitted from mobile sources (i.e., motor vehicles), known as mobile source air toxics (MSATs), which also present health concerns.

MSATs are classified as such to distinguish the originating sources (i.e., mobile versus stationary). MSATs are released as part of vehicle exhaust emissions and include acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, diesel particulate matter, and diesel exhaust organic gases (FHWA, 2006a).

Prolonged exposure to MSATs may cause cancer and/or other serious health effects, such as reproductive problems and birth defects. Such effects are also influenced by other variables, such as distance between sources of MSAT and sensitive receptors. For the purpose of future Tier 2 analysis, MSATs are the HAP of concern. Air toxics analysis is a continuing area of research and many questions remain unanswered. (FHWA, 2006). Because of the emerging state of the science, guidance manuals and protocols to assess air quality impacts are currently being developed by various regulatory agencies (e.g., Sacramento Air Quality Management District (SMAQMD), FHWA, CARB). A brief overview of each document is discussed below. The MSATs assessment for Placer Parkway will be conducted as part of the Tier 2 environmental analysis.

SMAQMD recently developed a document, *Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways, Version 1.0* (2007a), which was endorsed by their Board of Directors on January 25, 2007. Although it was endorsed, this is a draft document and may be modified during its final phases. This screening document is used to determine whether there is a potential for detrimental health effects from living near a major roadway. In addition, if the protocol shows undesirable results, then it recommends the next step be taken, which is to conduct a detailed health risk assessment (HRA) using an air dispersion model approved by the regulating agency. The SMAQMD protocol is a preliminary screening tool for land use decision makers for approving or denying the siting of residential projects or other sensitive land uses in close proximity (i.e., less than 500 feet) to a high traffic volume roadway (i.e., more than 100,000 annual average daily trips [AADT] [urban]; more than 50,000 AADT [rural]). Because the exact location of the corridor and preferred alignment are not known at this time, any necessary HRA will be conducted in the Tier 2 analysis.

To determine the type of air quality analysis required from exposure to MSATs, FHWA produced a guidance document, *Interim Guidance on Air Toxics in NEPA Documents* (FHWA, 2006d). The document provides general guidance that will enable the project developer to identify what type of analysis is required for the Parkway (i.e., No Analysis, Qualitative Analysis, or Quantitative Analysis). Depending on the type of analysis required, the prototype language for the No Analysis would be inserted into the document, otherwise, a Qualitative or Quantitative Analyses will be prepared according to the instructions specified in the guidance document. Similarly, without an exact corridor location and alignment, this type of analysis cannot be conducted until the Tier 2 analysis.

CARB also produced a document, *Air Quality and Land Use Handbook: A Community Health Perspective* (California Environmental Protection Agency/CARB, 2005a) which presents general information regarding potential detrimental health effects to sensitive receptors (e.g., residences, hospitals, day care centers) located less than 500 feet from a major roadway (i.e., > 100,000 daily vehicle trips). This document was consulted for this Technical Memorandum.

3.2 NATIONAL, REGIONAL, AND LOCAL REGULATIONS

3.2.1 National Regulations

In 2005, the President signed into law the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU is based on concepts and foundations in previous bills, Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21), which were created to meet the transportation needs within the United States. SAFETEA-LU addresses issues such as safety to reduce highway fatalities, reduce traffic congestion, improve efficiency in freight movement, increase intermodal connectivity, and protecting the environment. In addition to promoting federal surface transportation programs, state and local transportation decision makers are provided more flexibility for solving transportation problems in their communities.

SAFETEA-LU continues the TEA-21 concept of guaranteed funding for highway projects, which includes provisions to set aside federal funds to improve interregional transportation, address regional needs, and improve freight transportation. The fundamental provisions in the Act are aimed at reducing congestion, which in turn will save time and fuel, decrease vehicle emissions, lower transportation costs, allow more predictable and consistent travel times, and provide safer highways. Other provisions in the Act allow for Metropolitan Planning Organizations to coordinate with statewide transportation planning and achieve the same basic goals. Placer Parkway would potentially reduce traffic congestion, improve efficiency in freight movement, and increase intermodal connectivity.

3.2.2 Regional Regulations

The Transportation Conformity Rule (Section 3.1) requires a regional emissions analysis to be performed by the MPO for projects within its jurisdiction, unless exempt. The regional emissions analysis includes all projects listed in the Regional Transportation Plan (RTP) and the Regional Transportation Improvement Program (RTIP). The RTP is a planning document spanning at least a 20-year period and the RTIP implements it in 2-year increments. The RTP is updated every 2 to 3 years or amended to reflect any changes, such as new projects. Both the RTP and the RTIP must support an affirmative conformity finding to obtain FHWA approval. Projects that are included in the regional analysis are listed in the RTIP and referenced in the RTP. Projects listed in an approved RTP and RTIP that have met the conformity requirement for regional emissions analysis are considered to be conforming to the SIP.

PCTPA is the regional transportation planning agency for Placer County—exclusive of the Lake Tahoe Basin. PCTPA has the responsibility for the development and adoption of the Placer County RTP and the Placer County RTIP. Sacramento Area Council of Governments (SACOG) has the responsibility for development and adoption of the Metropolitan Transportation Plan (MTP) and Metropolitan Transportation Improvement Program (MTIP). SACOG also has the responsibility for making findings of conformity required under Section 176 of the CAA within the designated federal ozone non-attainment area. Under the terms of a Memorandum of Understanding (MOU) between PCTPA and SACOG, entered into in 1993, and amended in 2001, PCTPA submits the Placer County RTP for inclusion into the SACOG MTP. By doing so, the Placer County RTP is assessed for conformity along with the MTP by SACOG and submitted to the FHWA and Federal Transit Administration (FTA) for review and approval. Hence, if the MTP is approved for conformity by the FHWA and FTA, then all projects listed in the RTP are also considered conforming to the SIP. At the Tier 1 level, the Parkway is exempt from the requirements of the Transportation Conformity Rule. FHWA will make a project-level conformity determination on the Parkway in the Tier 2 EIS/EIR, at which time the Parkway would be included in the RTP for Placer County and SACOG's MTP, and would therefore conform with the SIP.

3.2.3 Local Regulations

The proposed project is located in Sutter and Placer counties, where air quality is regulated by the local regulatory agencies, Feather River Air Quality Management District (FRAQMD), and Placer County Air Pollution Control District (PCAPCD), respectively. FRAQMD also has jurisdiction over Yuba County. Although the project study area overlaps into Sacramento County, where air quality is regulated by SMAQMD, the project is not geographically located within Sacramento County. Therefore, SMAQMD's rules and regulations are not applicable or enforceable at the project site. As such, only general air quality data for Sacramento County will be discussed in this document. The analysis recognizes that air pollutants will inevitably transport back and forth between county and air basin boundaries. The amount and type of pollutants transported is dependent on meteorological conditions, day of the week (i.e., weekday versus weekend), and seasonal activities. During the transporting process, certain pollutants can contribute substantially to total air pollutant concentrations in the receiving region. In the Sacramento Valley Air Basin (SVAB), air quality is affected by air pollutants transported from the San Francisco Bay Area Air Basin (SFBAAB) in addition to emissions from within the Sacramento Valley and Mountain

Counties Air Basins. Similarly, air pollutants from SVAB contribute to air quality problems downwind in the San Joaquin Valley Air Basin and also upwind in the northern parts of the SVAB. Consequently, adjacent air basins with transporting pollutants must take into account local impacts to air quality from transport and local emissions as well as the impact of emissions to downwind areas.

FRAQMD and PCAPCD implement and enforce air quality regulations within their jurisdiction to reduce air pollutants in order to meet the federal and state AAQS. Through the California Environmental Quality Act (CEQA) review process, both agencies developed criteria pollutant significance thresholds for land use projects that generate air pollutants. These thresholds apply to both short-term (i.e., construction) and long-term (i.e., operation) air pollutant emissions. Projects with the potential to generate emissions exceeding the thresholds are considered to have a significant impact on air quality. If the project's emissions exceed any of the significance criteria, then feasible mitigation measures have to be implemented to reduce air quality impacts to a level considered less than significant. Tables 3-2 and 3-3 present the significance thresholds for criteria pollutants emitted from proposed projects located within FRAQMD and PCAPCD jurisdictions, respectively. Volatile organic compounds (VOCs) and reactive organic gases (ROGs) are terms used to describe the same category of pollutants and are used interchangeably throughout this section to correspond with terminology used by different regulatory agencies. VOC is a "newer" terminology to describe gases emitted from certain solids or liquids, whereas ROG is an "older" terminology used to describe the same type of gases.

Table 3-2
FRAQMD Significance Thresholds
Sutter and Yuba Counties

Pollutant	Significance Thresholds (lb/day)
ROG	25
NO_X	25
PM_{10}	80
Source: FRAQMD, 1998.	

Table 3-3
PCAPCD Operational and Significance Thresholds
Placer County

Pollutant	Cumulative Operational Thresholds (lb/day)	Significance Thresholds (lb/day)
ROG	10	82
NO_X	10	82
SO_2	N/A	136
PM_{10}	N/A	82
CO	N/A	550
Source: Backus, 2006.		

Table 3-3 presents two sets of thresholds: Cumulative Operational Thresholds and Significance Thresholds. Cumulative Operational Thresholds are used by PCAPCD to calculate monetary fees

required to be paid by the project developer to reduce overall Placer County pollutants for attainment purposes. Total fees are based on the difference between the thresholds and a proposed project's operational summer emissions, i.e., after all feasible and applicable mitigation measures have been implemented. Summer emissions are used to evaluate fees as winter emissions are not considered to be properly representative of most common or typical conditions due to use of heating equipment during the winter season. Significance thresholds are used to determine whether construction and operation of a proposed project will create air quality impacts considered to be significant. If a project is deemed to have significant air quality impacts, then all feasible mitigation measures must be implemented to reduce impacts to a level considered less than significant or to the maximum extent possible.

Sutter and Placer counties contribute to improved air quality through strategic land use and development planning, and coordination with adjacent counties to avoid conflicts with the goals of the APCD/AQMD to meet federal and state AAQS. The Sutter and Placer County General Plans include county-wide goals and policies aimed at improving air quality, as follows:

- Sutter County
  - Goal 4.I: To protect, maintain and improve the air quality in Sutter County; and
  - Goal 4.J: To integrate air quality planning with the land use and transportation planning process.

- Placer County
  - Goal 6.F: To protect and improve air quality in Placer County; and
  - Goal 6.G: To integrate air quality planning with the land use and transportation planning process.

4.0 AFFECTED ENVIRONMENT

This chapter describes the existing air quality conditions for the potential affected study area in Sutter County, Placer County, and northern Sacramento County. The ambient air quality setting is based on existing available data and reports available at the air districts' websites (FRAQMD, 2006a, b, and c; PCAPCD, 2006a and b; Sacramento County, CARB, 2006c).

The boundaries of the project study area were defined by traffic engineers to limit the traffic analysis to areas that are potentially affected by the operation of Placer Parkway. According to data provided in the traffic report, the implementation of the Parkway would change travel behaviors, redistribute traffic, and alleviate traffic congestion at various locations within the AFA and TASA. Therefore, the air quality study area is the same as the traffic analysis study area (i.e., AFA and TASA) and includes portions of Sutter County, Placer County, and a very small portion of northern Sacramento County. Air pollutants emitted can be dispersed to other areas within the region or outside the region because dispersion of air pollutants is highly dependent on local meteorological conditions. Dispersion conditions for the general project area are described in the next section. Air quality within the project study area is regulated by local government agencies, FRAQMD, PCAPCD, and the SMAQMD.

4.1 CLIMATE AND TOPOGRAPHY

The proposed project is located in the Sacramento Valley Air Basin (SVAB) (Figure 4-1), within southern Sutter County the southwestern portion of Placer County, and northern Sacramento County. The Sacramento Valley Air Basin includes Tehama, Glenn, Butte, Colusa, Yolo, Sutter, Yuba, Sacramento, and Shasta Counties as well as portions of Solano County and that portion of Placer County that lies west of Range 9 East—approximately 3 miles east of Auburn. Weather patterns throughout the SVAB are, in part, affected by the geography. SVAB is bounded by the North Coast Ranges to the west, the Northern Sierra Nevada Mountains to the east, and the Cascade Range to the north. The area within the ranges and mountains is relatively flat. The Carquinez Strait breaches the Coast Range, exposing the middle portion of the SVAB to the influence of Pacific Coast marine weather. This geography channels winds through the Sacramento Valley, but inhibits dispersion of pollutant emissions in portions of the valley. Typically, marine air enters the SVAB through the Carquinez Strait and transports pollutants out of the valley to the north. However, conditions can lead to the prevailing winds circling back south, particularly between July and September, elevating pollution levels in the SVAB. This marine influence can result in pollutants being carried from the San Francisco Bay Area and Sacramento regions to western Placer County and contributing to smog formation.

As the meteorological conditions within the region transport pollutants to and from adjacent regions, the California Clean Air Act (CCAA or Act) requires CARB to assess the contribution of ozone and ozone precursors from upwind regions on ozone concentrations that violate the state ozone standard in downwind areas. The Act also directs CARB to establish mitigation requirements for upwind districts designed to mitigate their impact on downwind districts. CARB originally established mitigation requirements in 1990, which are contained in Title 17, California Code of Regulations, Sections 70600 and 70601. These regulations were amended in 1993 and more recently in 2003. CARB adopted amendments on May 22, 2003, which were approved by the Office of Administrative Law on December 4, 2003, and became effective on January 3, 2004. These amendments added two new requirements for upwind districts. These amendments require upwind districts to (1) consult with their downwind neighbors and adopt "all feasible measures" for ozone precursors and (2) amend their "no net increase" thresholds for permitting so that they are equivalent to those of their downwind neighbors no later than December 31, 2004. The amendments clarify that upwind districts are required to comply with the mitigation requirements, even if they attain the state ozone standard in their own district, unless the mitigation measures are not needed in the downwind district.

The climate of the SVAB is Mediterranean in character, with mild, rainy winter weather from November through March, and hot, dry weather from May through September. January temperatures in the SVAB area range from an average low in the 30s (°F) to an average high in the 50s (°F). July temperatures range from an average low in the 50s (°F) to an average high in the 90s (°F). These high temperatures, combined with low humidity, produce hot, dry summers that contribute to the buildup of O_3, a major constituent of smog. Smog is a mixture of pollutants (i.e., dust, smoke, chemical fumes), principally ground-level ozone, produced by chemical reactions in the air involving smog-forming chemicals. A major portion of smog-forming chemicals comes from burning of petroleum-based fuels such as gasoline in mobile sources (i.e., automobile, truck, bus, and other vehicle exhausts). Other smog-forming chemicals, VOCs, are found in products such as paints and solvents. Smog can harm health, damage the environment, obscuring visibility and contributing to a number of respiratory problems.

The climatological station closest to the study area with historical temperature data is the Sacramento Federal Aviation Administration (FAA) Airport station, which is located approximately 17 miles to the south-southwest of the site. The monthly average temperature recorded between 1941 and 2005 at the Sacramento FAA Airport station ranges from 37.9ºF in January to 92.8ºF in July. January and December are typically the coldest months in the Sacramento area, with July and August being the hottest. Average rainfall measured in the Sacramento area varied from 2.11 inches in November to 1.12 inches or less between April and October, with an average annual total of 17.30 inches.

Ambient air quality is generally affected by climatological conditions, the topography of the air basin, the type and amounts of pollutants emitted, and, for some pollutants, sunlight. The following subsection discusses types of air pollutants, health effects, and existing air quality levels within the air quality study area.

4.2 COMPLIANCE WITH AIR QUALITY STANDARDS IN THE STUDY AREA

The Sacramento Metropolitan Area (SMA) comprised of Sacramento, Yolo and parts of Placer (including the study area), Sutter, El Dorado, and Yuba counties, is designated as severe non-attainment for the 8-hour average O_3 NAAQS. The air districts within the SMA, created under the Lewis Air Quality Management Act in California in 1976, have worked together to develop the 2003 Sacramento Area Regional Ozone Attainment Plan to satisfy the SIP requirement. This Attainment Plan identifies source controls and trip reduction strategies. This attainment strategy requires reductions of approximately 38 percent of ROG (see Section 3.2.3 for definition) and 40 percent of nitrogen oxide (NO_X) (O_3 precursors) relative to 1990 baseline emissions, and relies heavily on mobile source NO_X reductions as mobile sources generate the majority of regional NO_X emissions. While the federal 1-hour O_3 standard has been revoked, the air districts will continue to implement the existing control strategies and continue to strategize new control measures to meet the new 8-hour O_3 standard. Efforts are currently underway to develop and submit an 8-hour O_3 attainment plan by June 2007. Currently, the attainment date for the Sacramento region with the 8-hour O_3 standard is June 15, 2013.

Air monitoring stations are collecting ambient air data at designated locations throughout Sutter and Placer counties. The ambient data from all these stations are used by the U.S. EPA and CARB to determine attainment or non-attainment with federal and state AAQS, respectively. For reference purposes, monitoring data collected from the air monitoring stations in the study area located in Sutter and Placer counties are provided in Tables 4-1, 4-2, and 4-3 with the locations illustrated in Figure 4-2. In addition, the federal and state air quality designations for Placer, Sutter, and Sacramento counties are presented in Tables 4-4 through 4-6.

Table 4-1
Maximum Measured Pollutant Concentrations at
North Highlands, California Monitoring Station

Pollutant	Averaging Time	Units	Standards		Maximum Measured Concentration		
			Federal	State	2003	2004	2005
O_3	1 hour	ppm	None	0.09	0.131(2)	0.103(2)	0.103(2)
	8 hours	ppm	0.08	0.070	0.094(1,2)	0.088(1,2)	0.085(1,2)
PM_{10}	24 hours	$\mu g/m^3$	150	50	62.0(2)	44.0	110.0(2)
	Annual Average	$\mu g/m^3$	50	20	21.0(2)	24.0(2)	27.0
$PM_{2.5}$	24 hours	$\mu g/m^3$	65	None	NA	NA	NA
	Annual Average	$\mu g/m^3$	15	12	NA	NA	NA
NO_2	1 hour	ppm	None	0.25	0.087	0.146	0.06
	Annual Average	ppm	0.053	None	0.015	0.014	0.011
CO	1 hour	ppm	35	20	4.4	7.3	8.0
	8 hours	ppm	9	9.0	2.1	4.1	2.9
SO_2	1 hour	ppm	None	0.25	0.012	0.008	0.01
	3 hours	ppm	0.5	None	0.008	0.006	0.007
	24 hours	ppm	0.14	0.04	0.004	0.002	0.007
	Annual Average	ppm	0.030	None	0.001	0.001	0.001

Source: Monitoring station located at 7823 Blackfoot Way, North Highlands, California

Notes: 1. Exceeds the federal standard
2. Exceeds the state standard

NA = not available because data were not collected at this station.

Table 4-2
Maximum Measured Pollutant Concentrations at
Roseville, California (I-80) Monitoring Station

Pollutant	Averaging Time	Units	Standards		Maximum Measured Concentration		
			Federal	State	2003	2004	2005
O_3	1 hour	ppm	None	0.09	0.133(2)	0.106(2)	0.118(2)
	8 hours	ppm	0.08	0.070	0.109(1,2)	0.085(1,2)	0.106(1,2)
PM_{10}	24 hours	$\mu g/m^3$	150	50	58.0(2)	43.0	55.0(2)
	Annual Average	$\mu g/m^3$	50	20	21.0(2)	22.0(2)	19.0
$PM_{2.5}$	24 hours	$\mu g/m^3$	65	None	30.0	32.0	51.0
	Annual Average	$\mu g/m^3$	15	12	9.9	9.4	10.7
NO_2	1 hour	ppm	None	0.25	0.083	0.067	0.079
	Annual Average	ppm	0.053	None	0.014	0.013	0.013
CO	1 hour	ppm	35	20	2.4	2.6	2.0
	8 hours	ppm	9	9.0	1.6	1.9	1.3
SO_2	1 hour	ppm	None	0.25	NA	NA	NA
	3 hours	ppm	0.5	None	NA	NA	NA
	24 hours	ppm	0.14	0.04	NA	NA	NA
	Annual Average	ppm	0.030	None	NA	NA	NA

Source: Monitoring station located at 151 N. Sunrise Blvd., Roseville, California

Notes: 1. Exceeds the federal standard
2. Exceeds the state standard

NA = not available because data were not collected at this station.

Table 4-3
Maximum Measured Pollutant Concentrations
at Pleasant Grove, California, Monitoring Station

Pollutant	Averaging Time	Units	Standards		Maximum Measured Concentration		
			Federal	State	2002	2003	2004
O_3	1 hour	ppm	None	0.09	0.109(2)	NA	NA
	8 hours	ppm	0.08	0.070	0.092(1,2)	NA	NA
PM_{10}	24 hours	$\mu g/m^3$	150	50	NA	NA	NA
	Annual Average	$\mu g/m^3$	50	20	NA	NA	NA
$PM_{2.5}$	24 hours	$\mu g/m^3$	65	None	NA	NA	NA
	Annual Average	$\mu g/m^3$	15	12	NA	NA	NA
NO_2	1 hour	ppm	None	0.25	NA	NA	NA
	Annual Average	ppm	0.053	None	NA	NA	NA
CO	1 hour	ppm	35	20	NA	NA	NA
	8 hours	ppm	9	9.0	NA	NA	NA
SO_2	1 hour	ppm	None	0.25	NA	NA	NA
	3 hours	ppm	0.5	None	NA	NA	NA
	24 hours	ppm	0.14	0.04	NA	NA	NA
	Annual Average	ppm	0.030	None	NA	NA	NA

Source: Monitoring station located at 4sw-7310 Pacific Avenue, Pleasant Grove, California

Notes: 1. Exceeds the federal standard
2. Exceeds the state standard

NA = not available because data were not collected at this station. This station was closed in 2002.

Table 4-4
Placer County Area Designations for State and National Ambient Air Standards

Criteria Pollutant	Federal Designation	State Designation
O_3 (8 hours)	***Non-attainment***	***Serious – Non-attainment***
NO_2	Unclassified/Attainment	Attainment
CO	Unclassified/Attainment	Attainment
PM_{10}	Unclassified	***Non-attainment***
$PM_{2.5}$	Unclassified/Attainment	***Non-attainment***
SO_2	Unclassified	Attainment
Sulfates	No Standard	Attainment
Lead	No Standard	Attainment
Hydrogen Sulfide	No Standard	Unclassified
Visibility Reducing PM	No Standard	Unclassified

Source for Federal and State Information: Placer County Regional Transportation Plan 2027, September 2005. Chapter 4, Air Quality Element. Table 4-4, Attainment Status of Placer County derived from URL: http://www.arb.ca.gov/desig/adm/adm.htm (Proposed 2006 Federal and State Designation)

Table 4-5
Feather River Area Designations for State and National Ambient Air Standards

Criteria Pollutant	Federal Designation	State Designation
O_3 (8 hours)	***Serious Non-attainment***[1]	***Serious – Non-attainment***
NO_2	Unclassified/Attainment	Attainment
CO	Unclassified/Attainment	Unclassified/Attainment[2]
PM_{10}	Unclassified	***Non-attainment***
$PM_{2.5}$	Unclassified/Attainment	Unclassified
SO_2	Unclassified	Attainment
Sulfates	No Standard	Attainment
Lead	No Standard	Attainment
Hydrogen Sulfide	No Standard	Unclassified
Visibility Reducing PM	No Standard	Unclassified

Source for Federal and State Information: Table 4-5, Attainment Status of Sutter County derived from URL: http://www.arb.ca.gov/desig/adm/adm.htm (Proposed 2006 Federal and State Designation) FRAQMD's web site – www.fraqmd.org/2004%20Area%20Designations.html

Notes:
1. The federal designation for South Sutter is serious non-attainment, Sutter Buttes is non-attainment, and the remaining of FRAQMD is unclassified/attainment.
2. Yuba and Sutter counties are designated as unclassified and attainment, respectively.

Table 4-6
Sacramento Metropolitan Area Designations for State and National Ambient Air Standards

Criteria Pollutant	Federal Designation	State Designation
O_3 (8 hours)	***Serious Non-attainment***	***Serious – Non-attainment***
NO_2	Attainment	Attainment
CO	Attainment	Attainment
PM_{10}	***Moderate Non-attainment***	***Non-attainment***
$PM_{2.5}$	Unclassified/Attainment	***Non-attainment***
SO_2	Attainment	Attainment
Sulfates	No Standard	Attainment
Lead	No Standard	Attainment
Hydrogen Sulfide	No Standard	Unclassified
Visibility Reducing PM	No Standard	Unclassified
Source for Federal and State Information: Table 4-6, Attainment Status of Sacramento County derived from URL: http://www.arb.ca.gov/desig/adm/adm.htm (Proposed 2006 Federal and State Designation) SMAQMD's web site – http://www.airquality.org/aqdata/attainmentstat.shtml		

Placer Parkway is considered to be a regionally significant project for the purposes of air quality. The definition of regionally significant project under 40 CFR 93.101 is a transportation project (other than an exempt project) that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region; major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum all principal arterial highways and all fixed transit facilities that offer an alternative to regional highway travel.

In addition to the attainment or non-attainment designation, the U.S. EPA also uses an "unclassified" designation to classify areas that do not have sufficient data to support a designation of attainment or non-attainment. If sufficient data become available, these areas will be redesignated. An area could be designated as "unclassified/attainment" based on federal standards, but could also be designated as "non-attainment" based on state standards (e.g., $PM_{2.5}$). The reason for this difference is the more stringent standards imposed by the State of California. Therefore, an area may meet the federal standard, but not the state standard.

4.2.1 Ozone

O_3 is a colorless gas that has a pungent odor and causes eye and lung irritation, visibility reduction, and crop damage. A primary constituent of smog, O_3 is formed in the atmosphere in the presence of sunlight by a series of chemical reactions involving oxides of nitrogen (NO_X) and ROG. Because these reactions occur on a regional scale, O_3 is considered a regional air pollutant. Industrial fuel combustion and motor vehicles are primary sources of NO_X and ROG. As shown in Tables 4-1 through 4-3, O_3 concentrations in the project area consistently exceed federal and state ambient air quality standards. Sutter, Placer, and Sacramento counties are located in a non-attainment region known as the Sacramento Federal Nonattainment Area that includes all of Sacramento and Yolo counties, and portions of El Dorado, Placer (western Placer County), Sutter, and Yuba counties.

4.2.2 Particulate Matter

Particulate matter is generally composed of particles in the air such as dust, soot, aerosols, fumes, and mists. Of particular concern are inhalable particulates that have aerodynamic diameters of 10 micrometers or less (PM_{10}). A subgroup of these particulates is fine particulates (particles with aerodynamic diameters less than 2.5 micrometers ($PM_{2.5}$), which have very different characteristics, sources, and potential health effects. $PM_{2.5}$ is generally emitted from activities such as industrial combustion, vehicle exhaust, and residential wood-burning stoves and fireplaces. $PM_{2.5}$ is also formed in the atmosphere when gases such as SO_2, NO_X, and volatile organic compounds emitted by combustion activities are transformed by chemical reactions in the air. PM_{10} affects breathing and the respiratory system and, in particular, can damage lung tissue, and contribute to cancer and premature death. Separate standards for $PM_{2.5}$ were established in 1997 because these smaller particles can penetrate deeper into the human respiratory tract and potentially increase detrimental health effects.

$PM_{2.5}$ concentrations measured at the Roseville monitoring station have not exceeded federal PM_{10} 24-hour and annual average standards over the past 3 years. However, the state PM_{10} 24-hour standard was exceeded in 2003 and the annual average standard was exceeded in 2003 and 2004. The last exceedance of the state annual average $PM_{2.5}$ standard was in 2002. As of January 2006, Sutter, Placer, and Sacramento counties are federally designated as unclassifiable/attainment for $PM_{2.5}$. With regard to the state standard, Sutter County is designated as unclassified for $PM_{2.5}$ and Placer and Sacramento counties are designated as non-attainment for $PM_{2.5}$.

4.2.3 Carbon Monoxide

CO is an odorless, colorless gas that can impair the transport of oxygen in the bloodstream, aggravate cardiovascular disease and cause fatigue, headache, confusion, and dizziness. CO forms through incomplete combustion of fuels in vehicles, wood stoves, industrial operations, and fireplaces. In Placer County, vehicular exhaust is a major source of CO. CO tends to dissipate rapidly into the atmosphere and consequently is generally a concern at the local level, particularly at major road intersections.

CO concentrations at the Roseville and North Highlands monitoring station have been well below federal and state 1-hour and 8-hour average standards. Sutter and Placer counties are designated as unclassified/attainment for federal CO standards and attainment for state CO standards. Sacramento County is classified as attainment for both federal and state CO standards.

4.2.4 Nitrogen Dioxide

NO_2 is a brownish, highly reactive gas that can irritate the lungs, cause pneumonia, and lower the resistance to respiratory infections. NO_X, which includes NO_2, is a key precursor to O_3. NO_X forms when fuel is burned at high temperatures, and is primarily emitted by transportation sources and stationary fuel combustion sources such as electric utility and industrial boilers.

Tables 4-1 through 4-3 show that measured concentrations of NO_2 in the project area have consistently remained well below the federal and state standards. With similar trends throughout the region (and state), the area is well within federal and state NO_2 standards.

4.2.5 Sulfur Dioxide

SO_2 is a colorless acidic gas with a strong odor. High concentrations of SO_2 affect breathing and may aggravate existing respiratory and cardiovascular disease. SO_2 is also a primary contributor to acid deposition, which causes acidification of lakes and streams and can damage trees, crops, building materials, and statues. In addition, sulfur compounds in the air can contribute to visibility impairment. The major source category for SO_2 is fuel-burning equipment combusting fossil fuels. Table 4-2 shows

that measured concentrations of NO_2 at the North Highlands monitoring station have consistently remained well below the federal and state standards. SO_2 is not measured at the Roseville or Pleasant Grove monitoring stations. The air basin is designated as unclassified/attainment for federal and attainment for state standards. Sulfur oxides (SO_X) include SO_2 and other oxides of sulfurs and are reported in this analysis as equivalent to SO_2.

4.2.6 Mobile Source Air Toxics

MSATs are released as part of vehicle exhaust emissions and include acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, diesel particulate matter, and diesel exhaust organic gases (FHWA, 2006a). Prolonged exposure to MSATs may cause cancer and/or other serious health effects, such as reproductive problems and birth defects. Such effects are also influenced by other variables, such as distance between sources of MSAT and sensitive receptors. The extent of potential health effects of MSATs can only be determined by conducting a detailed health risk assessment (HRA) to assess carcinogenic risks and acute and chronic noncancer health effects. Currently, the "tools and techniques for assessing project-specific health impacts from MSATs are limited" (FHWA, 2006). FHWA has prepared guidance on when and how to analyze MSATs in the NEPA process: *Interim Guidance on Air Toxic Analysis in NEPA Documents*, February 3, 2006. During a Tier 2 air quality analysis, the MSATs section will identify what category the Placer Parkway falls under (i.e., No Analysis, Qualitative Analysis, or Quantitative Analysis) and use the prototype language or provide the data analysis as specified in the guidance document.

As previously mentioned, Placer Parkway is geographically located within Sutter and Placer counties, therefore, it is not subject to any other air district's rules and regulations. However, because FRAQMD and PCAPCD are relatively small air districts, they sometimes rely on other air districts' guidelines to supplement the needs of their district. This is a common and accepted practice among air districts within the State of California. Because MSAT assessment is an emerging science, guidance manuals and protocols to assess air quality impacts are currently in the development stage. For instance, SMAQMD recently developed a draft document, *Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways, Version 1.0*, January 2007, which was endorsed by their Board of Directors on January 25, 2007.

Similar to the CARB and FHWA documents (i.e., Cal-EPA/CARB, 2005 and FHWA, 2006d), the SMAQMD protocol serves as a screening tool for land use decision makers for approving or denying the siting of residential projects or other sensitive land uses in close proximity (i.e., < 500 feet) to a high traffic volume roadway (i.e., > 100,000 AADT [urban]; > 50,000 AADT [rural]). The screening tool is developed by assessing carcinogenic health risks from inhalation of diesel particulate matter (DPM). Only DPM is assessed because it is the dominant pollutant when compared with other MSATs of concern. The method does not consider multi-pathway exposures (e.g., ingestion, absorption) as they are not the dominant factors in assessing carcinogenic effects from exposure to MSATs. Based on this presumption, the method focuses on local meteorological data, traffic volume, and roadway elevation. Local meteorological data are used to determine whether the proposed development is located upwind or downwind of the roadway. Daily traffic volume and percentage of diesel vehicles determines DPM emissions, and roadway elevation determines dispersion of DPM. The protocol provides "look-up" tables for land use decision makers to determine whether the sensitive land uses may be affected due to proximity to the high traffic roadway and whether it is located upwind or downwind of the roadway in question (SMAQMD, 2007a, 2007b).

Currently, daily vehicle traffic for Placer Parkway in 2040 is estimated to range between 40,300 and 71,700, depending on the build alternative. The estimated daily vehicle traffic is well below the 100,000 AADT thresholds for urban areas. The use of only a single project parameter does not reveal all other potential air quality impacts; therefore, it is recommended that the relevant lead agency examine other locational and project-specific findings and use those in conjunction with daily traffic volumes prior to

approving or denying the siting of sensitive land uses near the Parkway once an alignment within a corridor is selected. In addition, Placer Parkway will include a no-development buffer zone, varying generally between 500 and 1,000 feet. This buffer will maintain at least a 500-foot distance from sensitive receptors or land uses. Thus, the 500-foot distance recommendation in the referenced documents will be included as part of the project.

In addition, the U.S. EPA and FHWA have developed a guidance document, *Transportation Conformity Guidance for Qualitative Hot-spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas* (2006), to help state and local agencies meet the final rule's hot spot analysis requirements. Within this document is a protocol to determine whether a "new" roadway is a Project Of Air Quality Concern (POAQC) (i.e., whether it will create undesirable concentration of $PM_{2.5}$ (DPM) emitted from diesel trucks). To determine whether a "new" roadway project is a POAQC, data such as existing traffic volume, build-out traffic volume, diesel truck volumes, among other parameters are required. Currently, Placer and Sutter counties are designated as unclassified/attainment for federal PM_{10} and $PM_{2.5}$ standards and therefore do not require any hot-spot analyses. However, if the attainment designations are changed prior to the approval of the Placer Parkway project, then the applicable hot-spot analyses shall be conducted during the Tier 2 analysis to assess MSAT impacts.

4.3 EXISTING EMISSIONS SOURCES

Pollutants that affect air quality are generated from both man-made and natural sources. Man-made sources of emissions are generally divided into three types: stationary, area-wide, and mobile sources. The contributions of these source categories vary from region to region. CARB maintains an emissions inventory to determine the sources and quantities of air pollution generated within the state's counties and air basins. Tables 4-7 through 4-9 present a summary of the estimated 2005 pollutant emission data for the Sacramento Valley portion of Sutter, Placer, and Sacramento counties, respectively. Similar data for Sacramento County are presented in Table 4-9. Mobile sources are the largest contributors to the ROG, CO, NO_X, and SO_X emission inventory, but are minor contributors to the PM_{10} and $PM_{2.5}$ emission inventories.

Table 4-7
Summary of 2005 Estimated Annual Average Emissions in Sutter County (lbs/day)

Source	ROG	CO	NO_X	SO_X	PM_{10}	$PM_{2.5}$
Stationary Sources						
Fuel Combustion	1,200	3,600	10,200	200	600	800
Cleaning and Surface Coatings	1,200	0	0	0	0	0
Petroleum Production and Marketing	5,200	0	0	0	0	0
Industrial Processes	0	0	0	0	2,800	1,200
Total Stationary Sources	**7,600**	**3,600**	**10,200**	**200**	**3,400**	**2,000**
Area Sources						
Solvent Evaporation	4,000	0	0	0	0	0
Miscellaneous Processes	2,000	20,800	1,200	200	24,000	7,000
Total Area Sources	**6,000**	**20,800**	**1,200**	**200**	**24,000**	**7,000**
Mobile Sources						
Other Mobile Sources	5,200	24,100	11,600	400	800	800
On-Road Motor Vehicles	5,200	50,300	8,800	0	200	200
Total Mobile Sources	**10,400**	**74,400**	**20,400**	**400**	**1,000**	**1,000**
Total All Sources	**24,000**	**98,800**	**31,800**	**800**	**28,600**	**10,000**

Source: CARB, 2006b.

Note: Original CARB data are in tons per day. Values in the table have been converted to lbs/day and rounded. Total may not result from the addition of the individual elements due to rounding.

Table 4-8
Summary of 2005 Estimated Annual Average Emissions in Placer County (lbs/day)

Source	ROG	CO	NO_X	SO_X	PM_{10}	$PM_{2.5}$
Stationary Sources						
Fuel Combustion	800	3,900	6,100	100	400	400
Waste Disposal	200	0	0	0	0	0
Cleaning and Surface Coatings	5,500	0	0	0	0	0
Petroleum Production and Marketing	2,100	0	0	0	0	0
Industrial Processes	3,000	500	300	100	3,000	1,600
Total Stationary Sources	**11,600**	**4,400**	**6,400**	**200**	**3,400**	**2,000**
Area Sources						
Solvent Evaporation	6,600	0	0	0	0	0
Miscellaneous Processes	7,000	93,200	2,200	400	44,400	16,600
Total Area Sources	**13,600**	**93,200**	**2,200**	**400**	**44,400**	**16,600**
Mobile Sources						
Other Mobile Sources	11,700	87,600	27,400	1,300	1,700	1,400
On-Road Motor Vehicles	16,100	153,700	24,400	200	800	600
Total Mobile Sources	**27,800**	**241,300**	**51,800**	**1,500**	**2,500**	**2,000**
Total All Sources	**53,000**	**338,900**	**60,200**	**2,100**	**50,400**	**20,800**

Source: http://www.arb.ca.gov/app/emsinv/emseic1_query.php

Note: Original CARB data are in tons per day. Values in the table have been converted to lbs/day and rounded. Total may not result from the addition of the individual elements due to rounding.

Table 4-9
Summary of 2005 Estimated Annual Average Emissions in Sacramento County (lbs/day)

Source	ROG	CO	NO_X	SO_X	PM_{10}	$PM_{2.5}$
Stationary Sources						
Fuel Combustion	700	6,600	6,900	100	1,000	1,000
Waste Disposal	500	200	100	0	0	0
Cleaning and Surface Coatings	11,000	0	0	0	0	0
Petroleum Production and Marketing	8,500	0	0	0	0	0
Industrial Processes	2,200	600	400	100	2,200	1,200
Total Stationary Sources	**22,900**	**7,400**	**7,400**	**200**	**3,200**	**2,200**
Area Sources						
Solvent Evaporation	27,600	0	0	0	0	0
Miscellaneous Processes	8,200	79,600	6,200	200	76,600	24,000
Total Area Sources	**35,800**	**79,600**	**6,200**	**200**	**76,600**	**24,000**
Mobile Sources						
Other Mobile Sources	21,600	183,400	53,000	1,300	3,600	3,200
On-Road Motor Vehicles	54,600	511,200	103,600	1,000	3,600	2,400
Total Mobile Sources	**76,200**	**694,600**	**156,600**	**2,300**	**7,200**	**5,600**
Total All Sources	**134,800**	**781,600**	**170,200**	**2,700**	**87,000**	**31,800**

Source: CARB, 2006b.

Note: Original CARB data are in tons per day. Values in the table have been converted to lbs/day and rounded. Total may not result from the addition of the individual elements due to rounding.

5.0 POTENTIAL DIRECT IMPACTS

5.1 ANALYSIS FRAMEWORK

The analysis of air quality impacts in this Technical Memorandum has been prepared for three analysis years:

- Existing Conditions (2005)
- A future opening year (2020), and
- A future cumulative year (2040).

These three analyses years are used to place Placer Parkway in the context of future expected conditions. The description of existing conditions establishes the base year from which future conditions for both the build alternatives and a No-Build Alternative can be projected. The assessment of existing conditions typically entails direct observation, the collection of primary and secondary data, and, in some cases, mathematical models or computer simulation. The analysis of the future No-Build Alternative utilizes the existing condition as a base year and adds known or expected changes to arrive at a reasonable estimate of the future. In the analysis of the No-Build Alternative, projects proposed, planned or under construction are considered, as are growth factors and other less quantifiable changes (see Chapter 6 for indirect and secondary effects discussion). The future build alternatives are then compared to the future No-Build Alternative, in both 2020 and 2040, to assess air quality impacts associated with the operation of the Parkway.

Vehicle Miles of Travel (VMT) data reported in the transportation analysis for Placer Parkway (DKS Associates, 2007) for each alternative for 2020 and 2040 were used to estimate mobile/vehicle emissions from each alternative. The traffic analysis developed the 2020 and 2040 VMT data based on existing conditions that are reflected in a travel forecasting tool for the Sacramento region (Sacramento Metropolitan Travel Demand Model or SACMET). Additionally, all build alternatives have been evaluated with and without a potential future interchange with Watt Avenue in 2020 and 2040. This potential future interchange is not proposed as part of the project (see Section 2.4).

VMT data and associated pollutant emissions for existing conditions in Sutter County, Placer County, and Sacramento County are presented. These data were derived from the Rate-of-Progress Plan EIR. While these data were not prepared as part of the traffic analysis for the project, they can be considered generally representative of existing conditions in the study area.

A calendar year 2027 discussion is also included to demonstrate that the project is part of a conforming metropolitan transportation plan. The planning horizon for the most recent metropolitan transportation plan ends in 2027 (see Section 5.6 for additional information).

5.2 EMISSION ESTIMATION AND IMPACT EVALUATION METHODOLOGY

Emissions associated with the long-term future operation of Placer Parkway have been estimated using CARB's EMFAC2002 mobile emissions model using input parameters such as projected VMT on the five build alternatives for 2020 and 2040. In addition to the assessment of these alternatives, the operation of a potential additional interchange at Watt Avenue has also been analyzed.

To accurately estimate regional emissions using VMT data as input parameters into the BURDEN option of the EMFAC2002 model, vehicle population and speed distributions among vehicles were adjusted according to methods utilized by CARB. The vehicle population adjustment method prescribed in the document, *Recommended Methods for Use of EMFAC2002 to Develop Motor Vehicle Emissions Budgets and Assess Conformity* (CARB, 2003), and the speed distribution adjustments described in the document,

Assessment 562: Sacramento Ozone Nonattainment Area ROG and NO_X Emissions for Rate of Progress Plan (Cal-EPA/CARB, 2005) were used for all the Parkway alternatives, including the No-Build Alternative. These methods are consistent with CARB's standard approach to estimating regional mobile source emissions.

The significance of air quality impacts is determined by quantifying the pollutants generated from each build alternative and comparing them to the No-Build Alternative to determine the net increase or decrease of pollutants. The difference is then compared to FRAQMD and PCAPCD pollutant thresholds (see Tables 3-2 and 3-3) to determine whether the alternative will have significant air quality impacts. Alternatives with an increase in pollutants exceeding the thresholds are considered to have significant air quality impacts. Please see Chapter 8 for a discussion of mitigation strategies to reduce the amount of pollutants associated with the Parkway.

The quantities of air pollutants emitted from each build alternative were estimated using the VMT data provided by DKS Associates as input data for the EMFAC2002 mobile emission factor model. The BURDEN option of the model was used to estimate daily pollutant emissions generated based on the daily VMT traveled. The quantity of pollutants emitted is directly correlated to the amount of VMT (i.e., the higher the VMT, the more pollutants emitted). The model output is in units of tons per day rounded to the nearest hundredth of a ton. It therefore lacks the resolution necessary to describe the actual differences of certain pollutants (e.g., ROG, SO_X, and PM_{10}) among alternatives with relatively minor differences in VMT (less than 0.5 percent). Therefore, minor differences in VMT may not result in identifiable differences in the quantity of pollutants shown on the tables presented later in this chapter. The emission rate is converted to pounds per day for all of the tables in this document to make comparison easier.

In addition to the VMT data, vehicle-hour delay (VHD) data are used to qualitatively assess air quality impacts. VHD, as defined in the Transportation Technical Report (DKS Associates, 2007) as the additional travel time that vehicles would take to travel on a roadway segment beyond the time that it would take under a given level of service (LOS) threshold. LOS is a qualitative measure of traffic flow based on a number of factors such as speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort, and convenience. An increase of VHD is associated with a longer travel time resulting from an increase in traffic volumes and a decrease in travel speeds. Conversely, a decrease of VHD is associated with a shorter travel time due to a decrease in traffic volumes and an increase in travel speeds. The quantities of pollutants emitted are directly correlated to travel speed (EMFAC2002 model manual). At speeds less than 65 mph, vehicles traveling at lower speeds emit larger quantities of pollutants than vehicles traveling at higher speeds. Therefore, a decrease in VHD (or vehicles traveling at a higher speed with less traffic congestion) correlates to a reduction in pollutants emitted.

5.2.1 Construction Impact Evaluation Methodology

In the analysis of potential impacts on air quality, construction impacts are generally considered as short-term effects and operational impacts are considered as long-term effects. This Tier 1/Program level of review focuses on the selection and acquisition of a corridor for the future Placer Parkway. Site-specific data are not available to calculate construction emissions; therefore, potential air quality impacts from construction activities associated with Placer Parkway can only be broadly evaluated. Based on the project description (Chapter 2), the area that is estimated to be used during construction could be up to 1,473 acres in size (16.2 miles long and 750 feet wide [assuming an average between the proposed 500- to 1,000-foot corridor width]). Depending on the construction timeline, a substantial amount of pollutants could be generated from the construction of Placer Parkway.

The Road Construction Emissions Model, Version 5.2, created by the Sacramento Metropolitan Air Quality Management District, was used to estimate the amount of construction emissions that would be

generated during site grading activities. Site grading activities would be expected to generate the greatest amount of air pollutants. For the purposes of this evaluation, it is assumed that site grading would occur at three different areas along the proposed Parkway corridor. The following data were entered into the model:

- 9 – Dozers
- 3 – Excavator
- 15 – Scrapers
- 9 – Signal Boards
- 3 – Water Truck
- A maximum of 15 acres could be disturbed at any one time on any given day

The modeled daily pollutant emission estimates are as follows:

Table 5-1
Estimated Amount of Pollutants Emitted During Site Grading Activities (lbs/day)

Description	ROG (lb/day)	CO (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)
Site Grading	84	363	387	97
FRAQMD Thresholds (lbs/day)	25	None	25	80
Exceed FRAQMD Threshold (Yes/No)?	Yes	Not Applicable	Yes	Yes
PCAPCD Thresholds (lbs/day)	82	550	82	82
Exceed PCAPCD Threshold (Yes/No)?	Yes	No	Yes	Yes

Based on the assumptions described above, daily construction emissions would exceed PCAPCD and FRAQMD thresholds for ROG, NOx and PM_{10}. This would be a short-term significant impact on air quality. Construction activities would have to be reduced substantially to be considered less than significant. These limitations, which would include restrictions on quantities of construction equipment in use at any one time, and limits to acres of land permitted to be disturbed, could unreasonably extend the project construction period, which could result in cost implications and unnecessary delay.

Construction emissions would result from construction equipment exhaust and fugitive dust generated from grading activities. These emissions would likely include criteria pollutants and diesel particulate matter (DPM). Therefore, to minimize emissions from construction activities, mitigations consistent with FRAQMD's and PCAPCD's regulations for fugitive dust control and best construction management practices would be implemented. For example, FRAQMD has a Best Available Mitigation Measures Construction Activity Plan (FRAQMD, 2006c) that must be adhered to during construction activities.

The likelihood that the implementation of mitigations would reduce overall emissions from construction activities to a less-than-significant level cannot be evaluated until project-specific data are available. Details of mitigation strategies for construction activities of similar types of roadway projects are provided in Chapter 8. A detailed analysis of construction emissions will be conducted during the Tier 2 analysis.

5.2.2 Operational Impact Evaluation Methodology

5.2.2.1 Introduction

It is generally expected that when a major new transportation project, such as Placer Parkway, is introduced into a heavily congested travel corridor, people's route choices and the mode and origin/destination of trips in that corridor are likely to be affected. A new or widened regional transportation corridor could "induce" travel and increase VMT within the region that is in close proximity to the proposed project by allowing people to travel farther in the same amount of time. Placer Parkway would have an impact on travel patterns across south/west Placer County, south Sutter County and north Sacramento County. While some roadway segments near proposed interchanges would have increases in VMT associated with the Parkway, especially on the state routes, a larger number of local roadway segments would have decreases in VMT.

The Transportation Technical Report (DKS Associates, 2007) provides peak-hour VMT data for the No-Build Alternative and Alternatives 1 through 5, along with scenarios with and without a Watt Avenue interchange. The transportation analysis comprised two distinct study areas, as described below:

- Transportation Analysis Study Area (TASA). The area where the travel model shows "significant" changes in traffic volumes, although the percentage of roadways that would be affected by the Placer Parkway decreases on the TASA's fringes (Figure 5-1).

- Analysis Focus Area (AFA). A portion of the TASA that is closer to the Parkway build alternatives. It represents the area where most of the transportation benefits of a future Placer Parkway would occur.

Because Placer Parkway would have an impact on travel patterns in a fairly large area, the traffic study area was defined based on an evaluation of the changes in traffic volumes. It covers the area where the travel model shows "significant" changes in traffic volumes, although the percentage of roadways that would be affected by Placer Parkway decreases on the fringes of that area. Although this air quality analysis assesses the significance of air quality impacts associated with pollutants emitted from mobile sources (i.e., motor vehicles) within the traffic study area (i.e., both TASA and AFA), it should be noted that air quality impacts could extend beyond the traffic study area because meteorological conditions such as prevailing wind could transport air pollutants to other areas within the SVAB.

5.3 EXISTING CONDITIONS ANALYSIS (2005)

The existing major roadways that would be located adjacent to Placer Parkway are SR 65 and SR 70/99, with I-5 and I-80 serving as the regional links between these two state routes. Use of these routes includes commuters traveling to work and school, and trucks transporting goods in and out of the region. A transportation corridor such as Placer Parkway has been proposed for over a decade with the ultimate goal of reducing anticipated congestion on the local and regional transportation system, that is, improving the LOS and accommodating the high levels of future growth projected in the region and advancing economic development goals in south Sutter County and southwestern Placer County. Data in the Placer Parkway traffic analysis indicate that portions of SR 65 and I-80 currently do not meet traffic operating standards and are therefore considered unacceptable. SMAQMD's Rate-of-Progress Plan EIR provides VMT data and vehicle emissions data for the Sacramento Valley portion of Placer County and Sutter County for 2005 (see Figure 4-1 and Table 5-2). These data are consistent with the on-road vehicle emissions inventory data presented earlier in Section 4.3. These data were not developed specifically from a traffic analysis in the Placer Parkway TASA or AFA.

Table 5-2
VMT and Criteria Pollutant Emissions for Year 2005

Location	VMT	ROG (lbs/day)	CO (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/day)
Sutter County	444,939	9,400	8,800	1,620	60
Placer County[1]	8,032,866	12,520	114,840	18,600	760
Sacramento County	32,319,034	56,240	519,360	105,280	3,740

Source: Data are from Appendix C of the DEIR Sacramento Regional Non-Attainment Area 8-Hour Ozone Rate-of-Progress Plan, Sacramento Metropolitan AQMD, September 2005. Data are also from Table 3 of the Sacramento Regional Nonattainment Area, 8-Hour Ozone Rate-of-Progress Plan Final Report, February 2006.

Note:
1. VMT data and pollutant data are for the Sacramento Valley portion of Placer County.

Based on a qualitative evaluation consistent with a Tier 1 analysis, the Placer Parkway traffic analysis for the 2005 Existing Plus Project conditions concluded that the project alternatives would result in similar but smaller changes in travel patterns in the Transportation Analysis Study Area in 2005 than in 2020. That is, the project alternatives would:

- Increase traffic volumes (VMT) on some roadway segments near proposed interchanges along the proposed project. These increases would likely be less than those under 2020 conditions.
- Result in decreases in traffic volumes on a larger number of local roadway segments in south Sutter County and southwestern Placer County. These decreases would likely be less than those under 2020 conditions.
- Have a lower traffic volume on Placer Parkway than 2020 conditions.

Based on these findings, because the traffic volumes for the Existing Plus Project conditions would increase vehicle volumes only at a few roadway segments and decrease volumes at a much larger number of local roadways, the air quality impacts under Existing Plus Project conditions would be potentially less than under 2020 conditions.

5.4 FUTURE ANALYSIS (2020) CONDITIONS

Travel demand in the study area will be influenced by growth in population and employment in the six-county Sacramento region, but especially by growth in south Sutter County, south/west Placer County, and northern Sacramento County. For planning purposes, PCTPA identified 2020 as the opening year of this facility. Based on discussions with the project's Technical Advisory Committee (TAC), the transportation analysis of project alternatives was conducted for the future development scenario consisting of a 2020 "Opening Year" scenario that reflects 2020 development levels based primarily on current general plans (Transportation Technical Report – Section 4.4 (DKS Associates, 2007).

Compared to the No-Build Alternative, all of the build alternatives would decrease VMT on many arterial/collector roadway segments in western Roseville, unincorporated portions of west Placer County, and unincorporated portions of south Sutter County, but would also cause increases in traffic volumes on the following roadway segments:

- SR 70/99 south of the projected Placer Parkway connection;
- SR 65 north of the projected Placer Parkway connection;
- Rocklin's Whitney Ranch Parkway and the future Valley View Parkway; and

- Some roadways near future Placer Parkway interchanges.

The Transportation Technical Report analysis concluded that, compared to the No-Build Alternative, all the build alternatives would:

- Increase the total VMT in the TASA;
- Reduce the VMT on congested roadways, especially in the AFA. For each alternative, the scenarios with a Watt Avenue interchange would provide a larger reduction in VMT on congested roadways than without one; and
- Significantly reduce VHD within the TASA and especially in the AFA. Vehicle delay would be lower for scenarios with a Watt Avenue interchange than without one. As discussed in Section 5.2, lower VHD can be correlated to lower quantities of air pollutants emitted from vehicles. VHD data in the traffic report show that a Watt Avenue connection would reduce travel time from 5.3 percent to 7.5 percent within the TASA. It would reduce travel time by approximately 32.3 to 35.5 percent within the AFA.

The following discussion presents the analysis of potential air quality impacts based on the Parkway traffic analysis. Although not proposed as part of the project, the effect of a potential future Watt Avenue interchange was also evaluated. Emissions associated with a Watt Avenue interchange were quantified using the VMT data from the traffic analysis.

5.4.1 No-Build Alternative

Future conditions under the No-Build Alternative were quantified using projected VMTs for the study area. These projections assumed vehicle movement within the region, without Placer Parkway, using SR 65, I-80, I-5, SR 70/99, and other viable arterial roads that provide connections within the TASA. VMT data and associated air pollutants are presented in Table 5-3.

Table 5-3
VMT and Criteria Pollutant Emissions for No-Build Alternative in 2020[1,2]

Description	VMT	ROG (lbs/day)	CO (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/day)	SO_X (lbs/day)
No-Build Alternative	17,725,900	8,900	68,320	9,880	1,440	160

Notes:

1. VMT data are from the Placer Pkwy VMT – 5mph Spds Bin – (values).xls, March 21, 2007, prepared by DKS Associates for this project.
2. Pollutant emissions are calculated using the Burden option in CARB's EMFAC2002 model and project-specific VMT data.
3. Although the model does not calculate $PM_{2.5}$ emissions, to ensure a conservative approach $PM_{2.5}$ emissions can be assumed to be the same as PM_{10} for the purposes of the analysis.

5.4.2 Alternative 1 – the Red Alternative

Alternative 1 was analyzed with and without a Watt Avenue interchange. The Watt Avenue scenario was analyzed with two options — a south interchange (Option 1) and a north interchange (Option 2) (see Figure 2-3).

Total emissions under these scenarios in 2020 are presented in Table 5-4. The percentage difference in emissions between these three Alternative 1 scenarios and the No-Build Alternative is presented in Table 5-5.

Table 5-4
VMT and Criteria Pollutant Emissions for Alternative 1 and the No-Build Alternative in 2020

Description	VMT	ROG (lbs/day)	CO (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/day)	SO_X (lbs/day)
No-Build Alternative	17,725,900	8,900	68,320	9,880	1,440	160
Alternative 1	17,846,974	8,960	68,640	9,940	1,440	180
Alternative 1 with Watt Avenue interchange Option 1	17,907,399	8,980	68,960	9,980	1,460	180
Alternative 1 with Watt Avenue interchange Option 2	17,890,925	8,980	68,960	9,980	1,460	180

Notes:
1. VMT data are from the Placer Pkwy VMT – 5mph Spds Bin – (values).xls, March 21, 2007, prepared by DKS Associates for this project.
2. Pollutants are calculated using the Burden option in CARB's EMFAC2002 model and project-specific VMT data.

Table 5-5
Percentage Change in VMT and Criteria Pollutant Emissions Between Alternative 1 and the No-Build Alternative in 2020

Description	VMT (%)	Emissions Increase Over No-Build Alternative (%)				
		ROG	CO	NO_X	PM_{10}	SO_X
Alternative 1	(+0.68)	0.67	0.47	0.61	0.00	12.50
Alternative 1 with Watt Avenue interchange Option 1	(+1.02)	0.90	0.73	1.01	1.39	12.50
Alternative 1 with Watt Avenue interchange Option 2	(+0.93)	0.90	0.94	1.01	1.39	12.50

Notes:
1. VMT data are from the Placer Pkwy VMT – 5mph Spds Bin – (values).xls, March 21, 2007, prepared by DKS Associates for this project.
2. Pollutants are calculated using the Burden option in CARB's EMFAC2002 model and project-specific VMT data.

Compared to the No-Build Alternative, Alternative 1 would:

- Increase VMT by 0.68 percent. All other alternatives would also increase VMT over the No-Build Alternative.
- Increase emissions by less than 1 percent, except for SO_X. All other alternatives would have similar increases.

- Both Watt Avenue interchange scenarios would have greater VMT and emissions than Alternative 1. An Option 1 (closer to Baseline Road) interchange would increase VMT and CO slightly more than Option 2 (north).

5.4.3 Alternative 2 – the Orange Alternative

Alternative 2 was analyzed with and without a Watt Avenue interchange. Total emissions for both of these scenarios are presented in Table 5-6. The percentage difference in emissions between these two scenarios and the No-Build Alternative is presented in Table 5-7.

Table 5-6
VMT and Criteria Pollutant Emissions for Alternative 2 and the No-Build Alternative in 2020[1,2]

Description	VMT	ROG (lbs/day)	CO (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/day)	SO_X (lbs/day)
No-Build Alternative	17,725,900	8,900	68,320	9,880	1,440	160
Alternative 2	17,875,272	8,960	68,740	9,960	1,460	180
Alternative 2 with Watt Avenue interchange	17,924,204	9,000	68,880	9,980	1,460	180

Notes:
1. VMT data are from the Placer Pkwy VMT – 5mph Spds Bin – (values).xls, March 21, 2007, prepared by DKS Associates for this project.
2. Pollutants are calculated using the Burden option in CARB's EMFAC2002 model and project-specific VMT data.

Table 5-7
Percentage Change in VMT and Criteria Pollutant Emissions Between Alternative 2 and the No-Build Alternative in 2020[1,2]

Description	VMT (%)	Emissions Increase Over No-Build Alternative (%)				
		ROG	CO	NO_X	PM_{10}	SO_X
Alternative 2	(+0.84)	0.67	0.61	0.81	1.39	12.50
Alternative 2 with Watt Avenue interchange	(+1.12)	1.12	0.82	1.01	1.39	12.50

Notes:
1. VMT data are from the Placer Pkwy VMT – 5mph Spds Bin – (values).xls, March 21, 2007, prepared by DKS Associates for this project.
2. Pollutants are calculated using the Burden option in CARB's EMFAC2002 model and project-specific VMT data.

Compared to the No-Build Alternative, Alternative 2 would:

- Increase VMT by 0.84 percent. All other alternatives would also increase VMT over the No-Build Alternative.

- Increase emissions by less than 1 percent, except for PM_{10} and SO_X. All other alternatives would have similar increases.

- The Watt Avenue interchange scenario would have greater VMT and emissions than Alternative 2. All other alternatives with a Watt Avenue interchange would have similar increases.

5.4.4 Alternative 3 – the Blue Alternative

Alternative 3 was analyzed with and without a Watt Avenue interchange. The emissions estimated for both scenarios are presented in Table 5-8 with the percentage increase in emissions between these two scenarios and the No-Build Alternative presented in Table 5-9.

Table 5-8
VMT and Criteria Pollutant Emissions for Alternative 3 and the No-Build Alternative in 2020[1,2]

Description	VMT	ROG (lbs/day)	CO (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/day)	SO_X (lbs/day)
No-Build Alternative	17,725,900	8,900	68,320	9,880	1,440	160
Alternative 3	17,888,226	8,980	68,780	9,960	1,460	180
Alternative 3 with Watt Avenue interchange	17,924,204	9,000	68,860	9,980	1,460	180

Notes:
1. VMT data are from the Placer Pkwy VMT – 5mph Spds Bin – (values).xls, March 21, 2007, prepared by DKS Associates for this project.
2. Pollutants are calculated using the Burden option in CARB's EMFAC2002 model and project-specific VMT data.

Table 5-9
Percentage Change in VMT and Criteria Pollutant Emissions Between Alternative 3 and the No-Build Alternative in 2020[1,2]

Description	VMT (%)	Emissions Increase Over No-Build Alternative (%)				
		ROG	CO	NO_X	PM_{10}	SO_X
Alternative 3	(+0.92)	0.90	0.67	0.81	1.39	12.50
Alternative 3 with Watt Avenue interchange	(+1.08)	0.90	0.79	1.01	1.39	12.50

Notes:
1. VMT data are from the Placer Pkwy VMT – 5mph Spds Bin – (values).xls, March 21, 2007, prepared by DKS Associates for this project.
2. Pollutants are calculated using the Burden option in CARB's EMFAC2002 model and project-specific VMT data.

Compared to the No-Build Alternative, Alternative 3 would:

- Increase VMT by 0.92 percent – the greatest of all the alternatives, but still less than a 1 percent increase. All other alternatives would also increase VMT over the No-Build Alternative.

- Increase emissions by less than 1 percent, except for PM_{10} and SO_X. All other alternatives would have similar increases.

- The Watt Avenue interchange scenario would have greater VMT and emissions than Alternative 3. All other alternatives with a Watt Avenue interchange would have similar increases.

5.4.5 Alternative 4 – the Yellow Alternative

Alternative 4 was analyzed with and without a Watt Avenue interchange. Total emissions for both scenarios are presented in Table 5-10. The increase in emissions between these two scenarios and the No-Build Alternative is presented in Table 5-11.

Table 5-10
VMT and Criteria Pollutant Emissions for Alternative 4 and the No-Build Alternative in 2020[1,2]

Description	VMT	ROG (lbs/day)	CO (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/day)	SO_X (lbs/day)
No-Build Alternative	17,725,900	8,900	68,320	9,880	1,440	160
Alternative 4	17,871,573	8,960	68,720	9,960	1,460	180
Alternative 4 with Watt Avenue interchange	17,913,320	8,980	68,840	9,980	1,460	180

Notes:
1. VMT data are from the Placer Pkwy VMT – 5mph Spds Bin – (values).xls, March 21, 2007, prepared by DKS Associates for this project.
2. Pollutants are calculated using the Burden option in CARB's EMFAC2002 model and project-specific VMT data.

Table 5-11
Percentage Change in VMT and Criteria Pollutant Emissions Between Alternative 4 and the No-Build Alternative in 2020[1,2]

Description	VMT (%)	Emissions Increase Over No-Build Alternative (%)				
		ROG	CO	NO_X	PM_{10}	SO_X
Alternative 4	(+0.82)	0.67	0.59	0.81	1.39	12.50
Alternative 4 with Watt Avenue interchange	(+1.06)	0.90	0.76	1.01	1.39	12.50

Notes:
1. VMT data are from the Placer Pkwy VMT – 5mph Spds Bin – (values).xls, March 21, 2007, prepared by DKS Associates for this project.
2. Pollutants are calculated using the Burden option in CARB's EMFAC2002 model and project-specific VMT data.

Compared to the No-Build Alternative, Alternative 4 would:

- Increase VMT by 0.82 percent. All other alternatives would also increase VMT over the No-Build Alternative.
- Increase emissions by less than 1 percent, except for PM_{10} and SO_X. All other alternatives would have similar increases.
- The Watt Avenue interchange scenario would have greater VMT and emissions than Alternative 4. All other alternatives with a Watt Avenue interchange would have similar increases.

5.4.6 Alternative 5 – the Green Alternative

Alternative 5 was analyzed with and without a Watt Avenue interchange. Total emissions for both of these scenarios are presented in Table 5-12. The percentage increase in emissions between these scenarios and the No-Build Alternative is presented in Table 5-13.

Table 5-12
VMT and Criteria Pollutant Emissions for Alternative 5 and the No-Build Alternative in 2020[1,2]

Description	VMT	ROG (lbs/day)	CO (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/day)	SO_X (lbs/day)
No-Build Alternative	17,725,900	8,900	68,320	9,880	1,440	160
Alternative 5	17,874,270	8,960	68,720	9,940	1,460	180
Alternative 5 with Watt Avenue interchange	17,900,678	8,980	68,820	9,980	1,460	180

Notes:
1. VMT data are from the Placer Pkwy VMT – 5mph Spds Bin – (values).xls, March 21, 2007, prepared by DKS Associates for this project.
2. Pollutants are calculated using the Burden option in CARB's EMFAC2002 model and project-specific VMT data.

Table 5-13
Percentage Change in VMT and Criteria Pollutant Emissions Between Alternative 5 and the No-Build Alternative in 2020[1,2]

Description	VMT(%)	Emissions Increase Over No-Build Alternative (%)				
		ROG	CO	NO_X	PM_{10}	SO_X
Build – Alternative 5	(+0.84)	0.67	0.59	0.61	1.39	12.50
Build – Alternative 5 with Watt Avenue interchange	(+0.99)	0.90	0.73	1.01	1.39	12.50

Notes:
1. VMT data are from the Placer Pkwy VMT – 5mph Spds Bin – (values).xls, March 21, 2007, prepared by DKS Associates for this project.
2. Pollutants are calculated using the Burden option in CARB's EMFAC2002 model and project-specific VMT data.

Compared to the No-Build Alternative, Alternative 5 would:

- Increase VMT by 0.84 percent. All other alternatives would also increase VMT over the No-Build Alternative.

- Increase emissions by less than 1 percent, except for PM_{10} and SO_X. All other alternatives would have similar increases.

- The Watt Avenue interchange scenario would have greater VMT and emissions than Alternative 5. All other alternatives with a Watt Avenue interchange would have similar increases.

5.4.7 Comparison of Alternatives

Potential impacts on air quality could occur during construction of Placer Parkway due to mobile-source pollutant emissions from construction vehicles and equipment. Impacts could also occur during operation through generation of mobile-source pollutants from vehicles. The Parkway would generate an increase in VMTs, which is typically associated with an increase of vehicle exhaust pollution. The comparison of VMT and operational emissions for all alternatives without the potential Watt Avenue interchange is shown in Table 5-14.

Table 5-14
Comparison of VMT and Operational Emissions for Build Alternatives in 2020[1]

Description	VMT	Emissions (lbs/day)				
		ROG	CO	NO_X	PM_{10}	SO_X
No-Build Alternative	17,725,900	8,900	68,320	9,880	1,440	160
Total Emissions Increase Over No-Build Alternative (lbs/day)						
Alternative 1	17,846,974	60	320	60	0	20
Alternative 2	17,875,272	60	420	80	20	20
Alternative 3	17,888,224	80	460	80	20	20
Alternative 4	17,871,573	60	400	80	20	20
Alternative 5	17,874,270	60	400	60	20	20
FRAQMD Significance Thresholds		***25***	***None***	***25***	***80***	***None***
PCAPCD Significance Thresholds		***82***	***550***	***82***	***82***	***136***

Note:
1. The net increase in emissions is calculated based on the comparison with the No-Build Alternative.

All build alternatives exceed the FRAQMD significance thresholds for ROG and NO_X, therefore, the project will have significant air quality impacts for these two pollutants under the FRAQMD thresholds. None of the build alternatives exceed the PCAPCD significance thresholds, therefore, under these thresholds, the project is considered to have less-than-significant air quality impacts. Since there will be a significant unavoidable adverse air quality impact, albeit only under one of the air district's thresholds, the impact is still substantial.

As shown in Table 5-14, Alternative 1 and Alternative 3 generate the least and most amount of pollutants, respectively. Hence, the implementation of Alternative 1 can be considered to have fewer air quality impacts when compared with the other four build alternatives. Conversely, implementation of Alternative 3 will generate the most air pollutants and potentially create the greatest air quality impacts. However, a comparison shows that most increases in criteria pollutants between Alternative 3 and the No-Build Alternative can be considered negligible. The incremental increase is approximately 0.8 percent for ROG, 0.6 percent for CO, 0.9 percent for NO_X, 1.3 percent for PM_{10}, and 12.5 percent for SO_X. The incremental increase, in percentage, is quantified by dividing the amount increased by the total amount

generated in the No-Build alternative. Incremental increases, in percentages, for other build alternatives will either be lower than or the same as Alternative 3. Although SO_X shows the highest increase, it should be noted that the amount of sulfur emitted correlates to the amount of sulfur in the fuel (i.e., a reduction in sulfur content in fuel will result in a lower amount of sulfur emitted.) Within California, ultra-low sulfur fuel (i.e., 15 ppm sulfur content) has been available for on-road vehicles since September 1, 2006. Therefore, sulfur emissions from vehicles are expected to be substantially lower in the future.

Additional Factors Affecting Air Quality

As fuel and vehicle technology improves over the next decade, vehicle emissions increases can be expected to be lower than the projections presented in Table 5-14; as this is already accounted for in the analysis model, these impacts are likely overstated.

The transportation analysis for Placer Parkway shows that the operation of Placer Parkway would alleviate traffic congestion on many arterial roadways within the TASA and AFA. Reducing traffic congestion would increase travel speed, which would reduce overall vehicle exhaust emissions (i.e., vehicle emissions are linearly correlated with travel speed). Historical and current studies and testing of vehicles show that lower travel speed results in emission of greater quantities of pollutants than vehicles traveling at higher speed (EMFAC2002, 2003).

Similarly, the Parkway would reduce VHD within the TASA and AFA, and would alleviate traffic congestion, reduce travel time, and increase average travel speed, resulting in reduced emissions (see Tables 5-15 and 5-16). While improved travel speed and reduced travel time are expected to reduce emissions, these reductions were not quantified because there are insufficient data at this Tier 1 level. To quantify pollutants from VHD, extremely detailed travel data would be required, such as travel speed for every type of vehicle for every hour in a day and the exact travel route. However, these factors related to reduced traffic congestion would likely reduce the emissions associated with the increase of VMTs. It is not known whether this reduction would reduce impacts related to air quality pollutant emissions to a less-than-significant level.

In addition to the increase in vehicle emissions, there would be an increase in emissions from the use of electricity or alternative power sources to operate traffic signals at on- and off-ramps and to power the lighting system along the corridor. The increase of these emissions may not occur within the region because electricity could be generated from another location beyond the study area (e.g., in another part of the state or in another state altogether). The level of emissions from these sources is negligible as traffic signals use a relatively small amount of energy in comparison to vehicle fuel consumption and lighting will be the minimum amount needed for safety purposes in accordance with Caltrans standards.

5.5 MOBILE SOURCE AIR TOXIC EMISSIONS

In addition to criteria pollutants, HAPs, and TACs, mobile source air toxics (MSATs) also present health concerns. MSATs are released as part of vehicle exhaust emissions and include acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, diesel particulate matter (DPM), and diesel exhaust organic gases (FHWA, 2006a). Prolonged exposure to MSATs may cause cancer and/or other serious health effects, such as reproductive problems and birth defects. Such effects are also influenced by other variables, such as distance between sources of MSAT and sensitive receptors. The extent of potential health effects of MSATs from a particular project can only be determined quantitatively by conducting a detailed health risk assessment (HRA) to assess carcinogenic risks and acute and chronic noncancer health effects. The Placer Parkway HRA will be conducted as part of the Tier 2 environmental analysis.

Table 5-15
Estimated Vehicle Hours of Delay within Transportation Analysis Study Area (TASA)

LOS	Facility Type	Estimated 2020 Vehicle Hours of Delay (3-Hour AM and 3-Hour PM Commute Periods[1])											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
>D[2]	Freeways	11,551	10,795	10,749	10,709	10,781	10,727	10,836	10,750	10,770	10,743	10,849	10,755
	Arterials	24,143	23,242	23,020	23,497	23,177	23,545	23,145	23,659	23,139	23,758	23,405	23,627
	Total	35,694	34,037	33,769	34,206	33,958	34,272	33,981	34,409	33,909	34,501	34,254	34,382
>E[3]	Freeways	7,250	6,528	6,471	6,433	6,497	6,460	6,546	6,476	6,441	6,448	6,524	6,463
	Arterials	17,827	17,209	16,983	17,350	17,141	17,420	17,110	17,516	17,094	17,629	17,329	17,488
	Total	25,077	23,737	23,454	23,783	23,638	23,880	23,656	23,992	23,535	24,077	23,853	23,951
>F2[4]	Freeways	3,720	3,196	3,138	3,094	3,138	3,125	3,172	3,131	3,106	3,122	3,180	3,134
	Arterials	12,727	12,313	12,076	12,354	12,247	12,405	12,228	12,486	12,150	12,617	12,396	12,454
	Total	16,447	15,509	15,214	15,448	15,385	15,530	15,400	15,617	15,256	15,739	15,576	15,588

Source: DKS Associates, 2007

Notes:

[1] 3-Hour a.m. and 3-Hour p.m. Commute Periods are 6 to 9 a.m. and 3 to 6 p.m., respectively.

[2] > LOS D is the added travel time for vehicles faced with LOS E and F conditions in the TASA during the 3-hour a.m. and p.m. commute periods

[3] > LOS E is the added travel time for vehicles faced with LOS F conditions in the TASA during the 3-hour a.m. and p.m. commute periods

[4] LOS F2 is the added travel time for vehicles faced with LOS F3+ conditions in the TASA during the 3-hour a.m. and p.m. commute periods

[5] See Figure 5-1 for Transportation Analysis Study Area (TASA)

Table 5-16
Estimated Vehicle Hours of Delay within Analysis Focus Area (AFA)

LOS	Facility Type	Estimated 2020 Vehicle Hours of Delay by Level of Service Category (3-Hour AM and 3-Hour PM Commute Periods[1])											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
>D[2]	Freeways	1,465	1,184	1,219	1,182	1,264	1,212	1,253	1,221	1,272	1,234	1,266	1,235
	Arterials	2,531	2,050	2,063	2,348	2,040	2,338	2,080	2,352	2,113	2,355	2,132	2,357
	Total	3,996	3,234	3,282	3,530	3,304	3,550	3,333	3,573	3,385	3,589	3,398	3,592
>E[3]	Freeways	987	667	693	670	721	688	714	693	689	688	690	691
	Arterials	1,423	1,120	1,128	1,338	1,112	1,338	1,146	1,347	1,169	1,350	1,179	1,348
	Total	2,410	1,787	1,821	2,008	1,833	2,026	1,860	2,040	1,858	2,038	1,869	2,039
>F2[4]	Freeways	519	257	259	258	257	251	257	250	259	259	265	261
	Arterials	708	535	542	674	537	681	555	682	553	681	566	676
	Total	1,227	792	801	932	794	932	812	932	812	940	831	937

Source: DKS Associates, 2006

Notes:

[1] 3-Hour a.m. and 3-Hour p.m. Commute Periods are 6 to 9 a.m. and 3 to 6 p.m., respectively.

[2] > LOS D is the added travel time for vehicles faced with LOS E and F conditions in the TASA during the 3-hour a.m. and p.m. commute periods

[3] > LOS E is the added travel time for vehicles faced with LOS F conditions in the TASA during the 3-hour a.m. and p.m. commute periods

[4] LOS F2 is the added travel time for vehicles faced with LOS F3+ conditions in the TASA during the 3-hour a.m. and p.m. commute periods

[5] See Figure 5-1 for Analysis Focus Area (AFA)

DPM is a primary contributor to carcinogenic health effects. The majority of DPM is emitted by heavy-duty trucks (i.e., 4 and 5 axles). Therefore, annual average daily traffic (AADT) data, including vehicle fleet mix (i.e., truck percentage) and existing vehicle data from nearby corridors are used to project the number of heavy-duty 4- and 5-axle trucks that will be traversing on Placer Parkway. Current data in the Transportation Technical Report projected AADT on Placer Parkway to be between approximately 40,300 and 71,700 vehicles in 2040 (DKS Associates, 2007). The AADT projection was derived from Caltrans traffic data for nearby transportation corridors (i.e., SR 65 and SR 99) that are considered to be representative of Placer Parkway (DKS Associates, 2007), with approximately 10 percent to 15 percent being trucks. In addition, existing Caltrans data on nearby transportation corridors show that more than half of the truck traffic (i.e., 61 percent) will be heavy-duty 4- and 5-axle trucks.

Taking the average value of AADT (i.e., ~56,000 vehicles per day), the average percentage of total traffic numbers comprised of truck traffic (i.e., 12.0 percent), the percentage of trucks that are heavy-duty 4- and 5-axle trucks, and the assumption that all 4- and 5-axle trucks operate on diesel fuel, it is estimated that approximately 4,100 diesel trucks will be traversing Placer Parkway on a daily basis. DPM emitted from these trucks has the potential to have detrimental health effects on sensitive receptors. Because of the proximity of the Parkway to existing and proposed developments, the *Air Quality and Land Use Handbook: A Community Health Perspective, April 2005* (California Environmental Protection Agency/CARB, 2005) was consulted to assess the potential impact of trucks using the Parkway on sensitive receptors in the study area. Such receptors include residences, schools, daycare centers, playgrounds, and medical facilities. The Air Quality Handbook recommends a distance of at least 500 feet between sensitive receptors and edge of roadways with daily vehicle traffic volumes exceeding 50,000. In traffic-related studies quoted in the CARB document, risks of other adverse health effects were identified within a distance of 1,000 feet, with greatest risks occurring within 300 feet. California freeway studies in the same CARB document show about a 70 percent drop-off in particulate pollution levels at 500 feet.

Ongoing MSAT exposure studies by scientists revealed that children living near busy transportation corridors (i.e., > 50,000 AADT) have increased risk of contracting respiratory ailments such as asthma and decreased lung functions. These respiratory ailments could continue well into early adulthood and may weaken their immune system and leave them vulnerable and more susceptible to other lung-related illnesses (e.g., pneumonia, infections). These studies also revealed that children living near large transportation corridors have similar health effects as children living in communities with the highest pollution levels (Lancet, 2007).

Unlike the criteria pollutants, MSATs are not subjected to national ambient air quality concentration standards. Similarly, states are not required to achieve an identified level of air toxics in the ambient air nor identify air toxics reduction measures in the SIP. Reduction of MSATs is a cooperative effort between federal and local reduction strategies. The Clean Air Act provides the U.S. EPA with authority to establish and regulate emission standards for engines and vehicles. The State of California also has the right to adopt its own emission regulations, which are often more stringent than the federal rules. To reduce mobile source emissions, mandatory and incentive-based programs are developed in conjunction with new engine emission regulations; additional emission testing requirements (i.e., Supplemental Emission Test [SET], Not-to-Exceed [NTE] limits); and limiting fuel sulfur content. These programs are implemented by all levels of government: federal, state, and local (Dieselnet, 2007).

To further reduce MSATs, in February 2007, U.S. EPA issued a final rule, *Control of Hazardous Air Pollutants from Mobile Sources: Final Rule to Reduce Mobile Source Air Toxics*, to reduce MSATs from mobile sources. The rule would lower benzene content in gasoline; reduce exhaust emissions from passenger vehicles operated at cold temperatures (i.e., < 75°F); and reduce emissions that evaporate from, and permeate through, portable fuel containers (OTAQ, 2007).

Even with the project's 500- to 1,000-foot-wide corridor widths, potential air toxic impacts could differ among the project's corridor alignment alternatives, depending on the roadway alignment within the selected corridor and its distance from existing/future sensitive receptors. Because the precise location of the alignment in any of the corridor alignment alternatives cannot be determined at this time, and the precise layout and location of future developments in the vicinity of the Parkway are not yet known, it is not possible to differentiate between build alternatives at the Tier 1 level of analysis with respect to air toxics. However, using the FHWA Interim Guidance (FHWA, 2006), some general statements can be made. Based on the projected ADT of 40,300 to 71,700 in 2040, Placer Parkway would most likely be characterized as a project with a low potential for MSAT emissions (ultimate traffic level less than 150,000 ADT). According to the FHWA Interim Guidance, the amount of MSATs emitted would be proportional to the VMT (assuming the fleet mix is the same for each alternative). The VMT differences between the alternatives, compared to the No-Build, vary from 0.68 percent to 0.92 percent, and are all less than a 1 percent increase over No-Build, as shown earlier in this section. Thus, it is expected there would be no appreciable difference in overall MSAT emissions among the various alternatives. "Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce MSAT emissions by 57 to 87 percent from 2000 to 2020" (FHWA, 2006). In addition, as described earlier, the project will result in a decrease in vehicle hours of delay compared to the No-Build Alternative. As noted in the FHWA Interim Guidance, projects that result in increased travel speeds (travel occurring in less congested conditions) will reduce emissions of certain MSATs. Detailed analysis would be performed during the Tier 2 analysis for the Parkway, as determined appropriate at that time.

5.6 YEAR 2027 – CONFORMITY YEAR

The Transportation Conformity Rule (see Section 3.1) requires a regional emissions analysis to be performed by the Metropolitan Planning Organization (MPO) for projects within its jurisdiction, unless exempt. The regional emissions analysis includes all projects listed in the Regional Transportation Plan (RTP) and the Regional Transportation Improvement Program (RTIP) (see Section 3.2 for details).

The Placer County RTP is assessed for conformity along with the MTP by SACOG and submitted to the U.S. EPA for review and approval. Hence, if the MTP is approved for conformity by the FHWA and FTA, then all projects listed in the RTP are also considered conforming to the SIP. The Placer Parkway project was included in the MTP prepared in 2002, which had a 2025 planning horizon (MTP 2025).

In 2006, SACOG prepared an updated MTP for the SACOG region. This MTP updated the MTP 2025 and extended the planning horizon to 2027. The current MTP (MTP 2027) includes the Placer Parkway project.

As required by CEQA, SACOG evaluated the potential environmental impacts of MTP 2027. The environmental work for MTP 2027 analyzed each environmental impact category identified in the Environmental Impact Report for the MTP 2025 to determine whether there was a potentially different level of impact or a more severe impact in the MTP 2027 than in the MTP 2025. This analysis concluded that under the MTP 2027 there were no new significant impacts, nor were there any impacts that were more severe than that identified in the MTP 2025.

SACOG prepared an Addendum to the MTP 2025 EIR, which was adopted by the SACOG Board on March 16, 2006. Air Quality Conformity determinations were also approved by the SACOG Board on the same date. The MTP 2027 was submitted to FHWA on April 7, 2006 for approval. The conformity findings for the MTP 2027 were approved by the FHWA on April 20, 2006. Therefore, the 2027 MTP is considered to be conforming to the SIP, as are projects identified in the MTP 2027 such as the Placer Parkway project.

Most recently, SACOG is in the process of developing the 2035 MTP, which is a 28-year plan for improving transportation within the six-county region (i.e., El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba counties). In addition to the city- and county-designated transportation projects listed in the 2035 MTP, federal funding proposed for the 2035 MTP will also be used for transit, roads, neighborhood improvements, bike trails, and other transportation–related projects. Development of the 2035 MTP pro-actively links land use, air quality, and transportation needs. The development process includes the following steps:

1. Identify a list of transportation improvement projects to best meet the region's needs;
2. Prepare technical analyses of each feasible project from previous MTP and drop the less-qualified projects;
3. Prepare the draft MTP with four alternatives for discussion;
4. Solicit, address, and incorporate public input into draft MTP and review of environmental documents associated with the MTP;
5. Drop any other projects deemed non-feasible;
6. Recombine projects into Preferred Alternative and one or two additional alternatives;
7. Finalize Draft MTP with Embedded Metropolitan Transportation Improvement Program;
8. Distribute for Public Review and address comments; and
9. Adopt MTP.

6.0 SECONDARY AND INDIRECT IMPACTS

Recent FHWA, U.S. EPA, and Caltrans guidance on growth inducement (Mare Island Accord, 2006) advises that analysis of potential impacts associated with growth should include an evaluation of the effects of growth on resources of concern. The following discussion presents a qualitative evaluation of potential secondary and indirect impacts of Anticipated Growth (see below for definition) on human and environmental resources in the study area.

The Council on Environmental Quality (CEQ) provided clarification of the terminology "indirect impacts" when it issued its National Environmental Policy Act (NEPA) regulation in 1978. Secondary and indirect impacts are defined as impacts "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." Moreover, indirect effects ". . .may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems."

A key term used in this section is "Anticipated Growth." This is defined as the growth that is anticipated in the study area as described in the relevant General Plans and adopted regional forecasts, such as the SACOG Blueprint scenario (as detailed in the Community Impact Assessment), including additional growth that may occur as a result of major new development proposals that have not yet been formally approved. It is possible that this additional growth may accelerate the rate of buildout in the study area, but it is not ultimately expected to result in any greater levels of development than is presented in adopted regional forecasts.

The following discussion considers secondary and indirect impacts on air quality that may occur as a result of direct impacts associated with the Parkway as well as a result of anticipated growth, and associated changes in traffic patterns. The study area for the analysis of secondary and indirect impacts is shown on Figure 6-1.

6.1 GROWTH INDUCEMENT SCENARIO

NEPA and CEQA both require environmental analyses to consider the effects of a project on growth. Caltrans defines growth inducement as the relationship between a proposed project and growth. This section summarizes the relationship between the Placer Parkway Corridor Preservation project and regional growth, and discusses potential secondary and indirect effects of the project related to growth inducement.

While the project study area is predominantly undeveloped at this time, parts of the study area are within local General Plan designations allowing urban growth. In addition, numerous proposals for major new development projects in and around the study area depicted on Figure 6-2 are currently in various stages of the approval and entitlement process. Portions of the surrounding area (especially northern Sacramento County and southwestern Placer County) have developed very rapidly over the past several decades. This has occurred as a result of many factors, including continuing net population growth statewide, strong employment growth in the Sacramento region, relative housing affordability, and location amenities.

Population and employment growth projections for California and the Sacramento Region in general, and for southwestern Placer County and south Sutter County in particular (described in detail in the Community Impact Assessment [Mara Feeney & Associates and North Fork Associates, 2007]), indicate that that development pressures in the project vicinity will remain relatively intense, irrespective of the Parkway. Between 1950 and 2000, the population of California more than tripled. During the same period, population in the six-county SACOG region increased by more than 800 percent (DOF, 2006). Projections and established goals and policies from a wide range of sources, including SACOG, Sutter,

Placer, and Sacramento counties, and the Cities of Roseville, Rocklin and Lincoln, confirm that relatively high rates of population and employment growth and housing and commercial development are anticipated in the six-county region by 2050. Between 2000 and 2050, California's population is expected to increase from approximately 34 million to 55 million. During the same time period, SACOG projects that the region's growth will double, from 1.9 million in 2000 to 3.95 million in 2050, with the Roseville-Rocklin-Lincoln area remaining one of the fastest growing areas in the region (Levy and Doche-Boulos, 2005; SACOG, 2006c).

Placer Parkway would be growth inducing because it would help support changes in the amount of growth beyond current general plan levels, and could influence the pace and location of some development. It is likely that Placer Parkway could help to implement the various specific development proposals in the study area, since it would serve to relieve traffic congestion associated with these proposals. Furthermore, the Parkway could affect the timing of development in the vicinity of the proposed interchange locations, particularly those proposed near vacant land adjacent to rapidly developing areas or areas now proposed for urban development. It could result in different land uses, or more intensive land uses, in the vicinity of interchanges where land use plans are still being developed and have not yet been approved. Also, it could hasten the buildout of planned commercial and industrial uses, especially in the Sunset Industrial Area and proposed Placer Ranch Specific Plan area, as well as in the proposed Sutter Pointe Specific Plan area.

In the longer term, improved access provided to lands in the Western and Eastern segments could be a factor in stimulating additional growth and development in areas west of SR 70/99 not protected by the Natomas Basin Habitat Conservation Plan, or north of the Sutter Pointe Specific Plan area, or north of Sunset Boulevard West in Placer County. Although growth is anticipated in these areas over time (as reflected in SACOG's preferred Blueprint scenario, the Sutter County General Plan, and the City of Lincoln General Plan), such development is not reflected in general plans at present and has not been formally proposed by landowners. By providing improved access to adjacent areas, Placer Parkway could be one of many factors that would encourage growth in these areas sooner than this might otherwise occur.

The factors influencing growth in the region are complex. The Parkway is one of several major urban development proposals in the region. While Placer Parkway would contribute to regional growth, including growth beyond the level identified in current general plans, it is not feasible to quantify the amount of its contribution. A single new transportation facility such as the Parkway is only one of the many factors contributing to regional growth, and it is speculative to assign a particular quantity of growth to any one factor.

Furthermore, several factors serve to limit the likely effect of the Parkway on growth, including the following:

- No interchanges are proposed for any areas that are not already approved or proposed for development;
- All approved and proposed residential development that has not already been built is projected to be built out prior to 2020, when the Parkway is proposed to open; and
- Real estate market pressures in the area have been and continue to be intense without the Parkway, and local government jurisdictions have been supportive of processing development applications in spite of anticipated regional transportation challenges.

It is unlikely that the choice of one Placer Parkway build alternative over another would substantially change expected patterns of growth and development in the project study area and the surrounding region. In the Western Segment, all corridor alignment alternatives would provide new access to an area that is

currently undeveloped farmland, but that is proposed for mixed use urban development. The three more southerly alignments (Alternatives 1, 2, and 3) would provide two interchanges in the Sutter Pointe Specific Plan area, while the more northerly alignments (Alternatives 4 and 5) would provide only one interchange in this area, approximately 1 mile farther north of the more southerly alignments in the Western Segment. Since none of the alternative alignments would include any intersections in the Central Segment, there would be little difference in growth inducement effects among the alternatives in this segment. In the Eastern Segment, two interchanges are proposed within the existing Sunset Industrial Area Plan, in an area proposed for the Placer Ranch Specific Plan. While these interchanges would provide new access to a currently undeveloped area, this area is planned for growth. In the Eastern Segment all alternatives would follow an identical alignment, so there would be no differences in growth inducement effects among the alternatives.

A future interchange at Watt Avenue could be growth inducing, because it would provide major new regional access to a portion of the project study area that is currently rural and undeveloped, although both conceptual interchange locations are now surrounded by formal development proposals or land controlled by development interests. A Watt Avenue interchange is not proposed as part of the Placer Parkway project.

The following secondary and indirect effects discussion considers impacts on air quality that may occur as a result of direct impacts associated with the Parkway, and also as a result of changes in traffic patterns as a result of anticipated growth.

6.2 SECONDARY AND INDIRECT EFFECT EVALUATION

Anticipated growth could result in secondary and indirect impacts on air quality that have not been evaluated in this Technical Study. Although the extent of such impacts cannot be determined at this Tier 1/Program level of environmental analysis, it is likely that this would be affected by a range of factors, such as type of growth (e.g., type of development [residential, commercial, industrial]), speed of growth (i.e., is rate of growth in-line with the regional projection and applicable General Plan), and viability of growth (i.e., is it temporary or permanent).

It is possible that this could result in regionally significant air quality impacts depending on whether growth occurs within the region or within the city limits or the Sphere of Influence of the cities of Roseville, Rocklin, Loomis, and Lincoln. If such growth was considered in the General Plan, then associated air quality impacts will have been taken into account in the SIP. If such growth is not accounted for in the General Plan, then it would be non-conforming to the SIP and may affect the goals of the local AQMP, which is to attain the AAQS.

6.2.1 No-Build Alternative

If Placer Parkway were not constructed, land would not be acquired for the Parkway and the Parkway would not be constructed. There would not be any secondary or indirect impacts on air quality under the No-Build Alternative.

6.2.2 Build Alternatives

Construction and operation of the Parkway and Parkway-induced growth could result in secondary impacts on air quality.

Anticipated growth would be expected to generate additional traffic in the study area that would most likely not have occurred in the absence of such growth. New traffic patterns and increased traffic volumes could adversely affect air quality, particularly if this results in additional congestion on roads in

the study area. These impacts would be direct impacts of other projects not associated with Placer Parkway, and would be required to be analyzed as part of independent environmental review.

Although it is not feasible to perform a detailed evaluation of these projects at this stage as specific design details are not known, potential impacts are taken into account in the Placer Parkway 2040 Cumulative analysis (see Section 7.2). This analysis evaluates a 2040 cumulative scenario, which is considered to be an appropriate projection of future development. This scenario includes full residential build-out in Placer County west of Sierra College Boulevard, including general plan areas and major developments, and employment and population growth in line with SACOG forecasts. It assumes levels of growth and development will occur at the higher end of a potential feasible range, and therefore represents a reasonable maximum development scenario for which cumulative and secondary and indirect impacts have been analyzed.

Although it is not possible to predict with any certainty where congestion associated with anticipated growth might occur, it is reasonable to assume that pollutant emissions associated with such congestion could adversely affect air quality. This could occur in a number of ways:

- Increased risk of adverse health effects on humans residing in areas affected by poor air quality;
- Impacts on pollution-sensitive wildlife species, such as lichens; and
- Contribution to climate change associated with higher levels of atmospheric carbon dioxide (CO_2) generated from vehicle emissions.

Similar secondary impacts could also occur as a result of emissions from construction vehicles and equipment during the construction of the Parkway, and through generation of mobile-source pollutants from vehicles using the Parkway. Conversely, the operation of the Parkway would reduce traffic congestion on numerous streets within the project study area, reduce travel time, and increase travel speed, which could potentially offset the increase in criteria pollutants.

6.2.3 Greenhouse Gases

Greenhouse gases (GHG) are chemical compounds found in the earth's atmosphere, and which can affect the temperature of the earth's surface. Many are naturally occurring compounds such as water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Synthetic compounds that are also classed as GHG include chlorofluorocarbons (CFCs), halogenated fluorocarbons (HFCs), and partially halogenated chlorofluorocarbons (HCFCs). GHGs are emitted from numerous commercial and industrial processes, with major sources of emissions resulting from burning of fossil fuels such as petroleum, coal, and natural gas, and vehicular exhaust emissions.

Additionally, gases referred to as "ozone precursors" (i.e., CO, NO_X, and nonmethane volatile organic compounds [NMVOCs]) can indirectly influence the formation and destruction of ozone, which itself has a direct radiative force. Greenhouse gases absorb the sun's radiation, and increased levels can inhibit the Earth's natural ability to radiate energy back to space, thereby, allowing less heat to escape and creating a "greenhouse effect." This greenhouse effect results in warming of the earth's surface and the lower atmosphere. Global warming is defined as an average increase in the temperature of the atmosphere near the earth's surface and the lowest part of the atmosphere, which can contribute to changes in global climate patterns. Climate change is any significant change in measures of climate (such as temperature, rainfall patterns, snow and ice cover, sea level, or wind, lasting for an extended period (decades or longer) (U.S. EPA 2007a and b). For purposes of this EIS/EIR, global warming, climate change and the greenhouse effect are used interchangeably. The greenhouse effect has worsened over the last 50 years due to anthropogenic activities (California Climate Change Portal, 2005). While this view is widely held, there is not universal agreement on the effect of human activities on climate change. Natural factors and natural processes are also sources of climate change (U.S. EPA, 2007a and b).

In California, transportation activities averaged approximately 59 percent of the total CO_2 emissions from fossil fuel combustion in California between 1990 and 1999. CO_2 emissions remained relatively constant during the 1990s, with approximately 200 million metric tons of CO_2 emitted annually. Within the transportation sector, motor gasoline consumption accounted for the greatest portion of emissions, with 36 percent of CO_2 emissions from fossil fuel combustion in 1999 (California Climate Change Portal, 2005).

On September 27, 2006, the Governor of California signed Assembly Bill 32 (AB32), the Global Warming Solutions Act, to reduce GHG emissions in California. The goals of AB32 are to reduce GHG to year 2000 levels by 2010; and to 1990 levels by 2020. Executive Order S-3-05 includes an additional reduction goal: 80 percent below 1990 levels by 2050. Provisions within AB32 provide CARB with the authority and responsibility to develop and enforce a GHG reduction program. By January 1, 2008, CARB will determine what the statewide greenhouse gas emissions level was in 1990, and approve a statewide greenhouse gas emissions limit that is equivalent to that level, to be achieved by 2020. The inventory would rely on data from existing and projections for future mobile, area, and stationary emission sources. Mobile data are readily available from CARB and MPOs. To procure GHG data from other sources, CARB would develop GHG reporting requirements for major industries and use growth projection data provided in General Plans.

6.2.3.1 GHG Analysis Under CEQA and NEPA

This Tier 1 EIS/EIR addresses project GHG emissions to the extent feasible at this time. There are no accepted thresholds for significance or magnitude relative to GHG emissions. Thus, there is no consistent means of determining whether project impacts, to the extent they can be identified, will make a "significant" or "substantial" contribution to greenhouse gases. In addition, global warming is a cumulative, world-wide environmental phenomenon, but there are no established mitigation measures that can be identified as reasonably sure to address and reduce the global problem. Measures that will reduce an individual project's GHG emissions have been identified, and it is expected that additional technological solutions will be available in the future (see the Findings and Declarations of AB 32, referencing the investment in the development of innovative and pioneering technologies to assist California in reaching the 2020 limit on GHG emissions). However, there is no way to correlate an individual project's impacts or reductions on this global phenomenon.

AB 32 does not directly amend CEQA. Instead, it provides for creation of a greenhouse gas emissions program, as described above. Under AB 32, CARB will implement GHG emissions reductions on a timetable that involves multiple steps, leading to regulations on or before January 1, 2011, that will become operative on January 1, 2012. Until that time, the potential source characterization of, and significance of emissions related to, new infrastructure will not be known, and numeric thresholds of significance cannot be established.

Factually, the carbon footprint of a roadway derives from a variety of sources, some of which are already subject to other requirements to achieve reductions in greenhouse gases. For example, California Executive Order S-01-07, signed January 18, 2007, establishes a low carbon fuel standard with a statewide goal of reducing the carbon intensity of California's transportation fuels by at least 10 percent by 2020. The relationship of project impacts, as mitigated by compliance with current requirements, and AB 32 reduction requirements that are yet to be established, are not known.

Direct impacts on climate change from a roadway are difficult to determine because infrastructure does not constitute a separate source of greenhouse gas emissions, distinct from overall emissions in the area. Potential cumulative incremental climate change impacts related to urban development, including infrastructure, cannot be discerned with a high degree of certainty. This Tier 1 EIS/EIR assesses the project's greenhouse gas emissions to the extent feasible. The assessment of impacts incorporates many

assumptions and generalized formulas. Impacts may be substantially overstated because of these limitations.

In making CEQA findings, CEQA provides that an agency can find that a mitigation measure is "within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency" (Public Resources Code section 21081(a)(2)). Greenhouse gas emissions resulting from tailpipe emissions are not within SPRTA's jurisdiction; they are the responsibility of the state and federal government. Thus, there is an argument that CEQA does not require the mitigation of these impacts on a project-by-project basis by SPRTA.

Under NEPA, all relevant and reasonable mitigation measures that could improve the project are to be identified, "even if they are outside the jurisdiction of the lead agency … and thus would not be committed as part of the ROD" (40 Most Asked Questions Concerning CEQ's NEPA Regulations, Question 19b, 1986). In the case of GHG, relevant and reasonable mitigation measures are within the jurisdiction of several state and federal agencies.

The California Climate Action Registry (CCAR) is authorized to establish methodologies to quantify greenhouse gas emissions (SB 1771 (Sher) 2000, and amended in 2001 by SB 527). CCAR publication "General Reporting Protocol, Version 2.2," March 2007 limits calculations of greenhouse gas emissions to those operations or facilities owned or controlled by the entity responsible for the emissions (Part II, Chapter 2). This statutorily authorized methodology recognizes that an entity cannot be responsible for emissions that it does not control. Once Placer Parkway is opened, SPRTA will not own the vehicles that use the road, and SPRTA will not control the vehicles in any way that could translate to the ability to reduce greenhouse gas emissions.

6.2.3.2 Construction Impacts

GHG would be generated during construction and operation of the Parkway. Construction activities would likely result in unavoidable and temporary increase of GHG, based on current, readily available construction equipment technology, which is likely to be improved to reduce GHG emissions by the time the project is constructed in approximately 2020. This Tier 1 analysis does not provide a construction level of clearance and, due to the level of detail available at this time, there is no project-specific data (e.g., construction timeline, equipment type and quantity), by which GHG associated with construction activities can be analyzed in this Tier 1 document.

6.2.3.3 Operational Impacts

GHG associated with the Parkway can only be preliminarily quantified at this time, based on the information available. Data such as VMT, traffic volume, vehicle fleet mix, LOS, vehicle operating time, net change in travel time, and fuel consumption for all affected roadways are integral to an accurate estimation of GHG emissions. However, because this is a Tier 1 analysis analyzing alternative corridors, and not a specific roadway alignment, not all data is available for the Tier 1 analysis. Therefore, GHG emissions from operation of the Parkway were estimated using only VMT data. VMT data estimated for the Parkway using traffic data for the No-Build and build alternatives were used as input parameters into the EMFAC2002 model. Currently, an accurate method to quantify the magnitude of CO_2 emissions emitted from vehicle exhausts does not exist because of all the different additives in fuel (e.g., ethanol, methyl tertiary-butyl ether, and feedstock). The additives affect the oxidation capability of carbon in fuel during combustion and there is not a complete conversion of all carbon to CO_2 (OTAQ, 2005). Because the EMFAC2002 model only provides CO_2 data, it was assumed that all fuel carbon would oxidize during combustion and convert to CO_2 emissions emitted from vehicles, and that these are directly converted to GHG. This is a conservative approach and results in an overestimate of GHG because not all of the fuel carbon would be converted.

CO_2 emission's were quantified using the EMFAC2002 model with VMT for the No-Build and build alternatives as model input. Compared to the No-Build Alternative, CO_2 emissions would increase by a maximum of 1.37 percent in 2020 and 2.02 percent in 2040. This increase does not account for emission reduced due to the decrease in travel time, faster traveling speed, and less congested roadways (i.e., VHD) related to project implementation.

The differences in travel time for each impacted roadway segment, LOS, vehicle trip data, and average travel speed on similar segments can be used to calculate the amount of GHGs generated from the No-Build and build alternatives when that information is available in the future. These detailed calculations will be conducted in the Tier 2 analysis. The amount of CO_2 emissions from vehicles are directly correlated with VMT, therefore, an increase in VMT would result in an increase of GHG/CO_2 emissions. Based solely on this factor, the alternatives with the greatest VMT would contribute the most GHG emissions. However, these emissions are expected to be offset by reductions in travel in congested conditions. Using only VMT data to quantify CO_2 emissions for all the build alternatives is conservative, and overestimates impacts because it does not account for all the congestion relief and travel time reductions associated with the Parkway. Project benefits such as reduction of VMT on congested roadways within the AFA and the reduction of VHD within the TASA and AFA would further reduce CO_2 emissions and potentially show negligible or beneficial differences between the No-Build and build alternatives. Vehicle hours of delay reductions are shown in Tables 5-15 and 5-16, but have not been incorporated into the CO_2 calculations at this time because they are based on rough estimates of speeds that will be refined at Tier 2. Nevertheless, the tables provide an indication of the general magnitude of reduction in vehicle hours of delay, which would reduce the emissions from the slight increase in vehicle miles traveled.

Since there are no thresholds for determining the level of climate change impact from the emissions described above, it is appropriate to evaluate potential impacts based on an assessment of the project's compliance with applicable regional planning and air quality policies. CO_2 emissions emitted from motor vehicles are currently unregulated. However, to meet clean air goals, other mobile air pollutants are regulated. As such, the Clean Air Act's conformity process establishes the link between transportation and air quality planning processes. Conformity is a way to ensure that federal funding and approval are only granted to transportation activities that are consistent with air quality goals. While the focus of approved conforming transportation activities is to reduce the amount of criteria air pollutants, reductions in energy use and other objectives of conforming projects will also reduce CO_2 emission. Federal, state, and local transportation planning goals and policies also focus on transportation system management programs to reduce congestion through improving traffic flow. Promoting efficient travel movement and various travel demand management programs (i.e., ride sharing, transit, and pedestrian and bicycle programs) will minimize the aggregate number of single occupancy trips and miles traveled. The ancillary benefits of these transportation programs also reduce greenhouse gas emissions. As previously described in Sections 3.1 and 3.2.2, Placer Parkway is included in the RTIP, which has been determined to conform with the SIP.

As described in Chapter 1, Introduction, Placer Parkway is consistent with, and included in, the SACOG Blueprint. Caltrans recognizes regional integrated planning and transportation programs such as the SACOG Blueprint, as an important component of reducing fuel use, and related GHGs. For example, the December 2006 report "Climate Action Program at Caltrans" published by Caltrans/Business, Transportation, and Housing Agency references Regional Blueprint planning as one component of Caltrans' strategy to reduce GHG emissions from transportation (see Climate Action Program at Caltrans, pp. 6, 8-9). Thus, Placer Parkway is a component of the SACOG Blueprint, and as such, is consistent with established policies and methods to reduce GHGs. Other strategies to reduce GHG could consist of landscaping, as described in Section 2.2.5, using energy-efficient light bulbs for lighting systems, and additional design features that would reduce overall energy use.

7.0 CUMULATIVE IMPACTS

7.1 CUMULATIVE IMPACT SCENARIO

Analysis of cumulative impacts is required under NEPA and CEQA. Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that are the focus of cumulative impact analysis. The Council on Environmental Quality's regulations (CEQ, 1987) explicitly state that cumulative impacts must be evaluated along with the direct and indirect effects of each alternative.

CEQA defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, §15355). Stated another way, "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the environmental document together with other projects causing related impacts" (CEQA Guidelines, §15130). Although a project may cause an individually limited or individually minor incremental impact that, by itself, is not significant, the increment may be "cumulatively considerable" and thus significant.

FHWA has requested that cumulative conditions for the analysis of project alternatives in the Tier 1 EIS/EIR on the Parkway be based on development levels that are 20 years beyond the projected opening of Placer Parkway. For planning purposes, PCTPA has identified 2020 as the opening year. Cumulative impacts are therefore being evaluated for 2040. This 2040 scenario includes the following projects (see Figure 6-2):

- Full build-out of all residential land in Placer County west of Sierra College Boulevard, including current general plan areas and the following major development proposals in west Placer County and south Sutter County:
  - The Creekview and Sierra Vista Specific Plan areas in Roseville's Memorandum of Understanding (MOU) Remainder Area
  - The Sphere of Influence (SOI) expansion areas of Lincoln
  - The Placer Vineyards, Regional University, and Placer Ranch Specific Plans in unincorporated Placer County
  - The Curry Creek Community Plan area
- Growth in retail employment in Placer County that balances the growth in residential development by matching SACOG's countywide estimate of about 0.32 employee per dwelling unit from their 2025 forecasts.
- Growth in total employment levels in Placer County that balances the growth in residential development by matching SACOG's 1.3 employees per dwelling unit from their 2025 forecasts.
- Full build-out of the residential development in the Sutter Pointe Specific Plan area along with a non-residential development level that balances the residential development in that area.
- Estimated 2040 developments in all other portions of SACOG's six-county region based on assuming a constant rate for the development growth between 2005 levels and the 2050 Preferred Blueprint scenario for each of SACOG's traffic analysis zones (TAZs).

7.2 CUMULATIVE IMPACT EVALUATION

The cumulative development scenario would result in development of a large portion of the study area and adjacent areas. This would result in an increase in vehicular emissions and other air pollutants associated with increased residential, commercial, educational, and industrial development.

Without the Parkway, traffic volumes are expected to increase by up to 100,000 vehicles per day on portions of SR 65 and SR 70/99. Growth in population and employment in the six-county Sacramento region, and especially growth in south/west Placer County, south Sutter County, and north Sacramento County will influence travel demand in and around the study area. Within the study area roadways, the increase in vehicles per day is expected to range from 2,700 vehicles on portions of Brewer Road to as much as 51,400 more vehicles on Pleasant Grove Boulevard east of Woodcreek Oaks Boulevard.

All of the build alternatives would increase the total VMT in the study area and would reduce vehicle hours of delay, as compared to the 2040 No-Build scenario. Based on the increase in traffic associated with this level of development (DKS Associates, 2007), the combined air quality impacts from both the Parkway and other projects would be cumulatively significant.

The Parkway transportation analysis indicates that a comparison between the No-Build Alternative and build alternatives in 2040 would decrease traffic on many arterial/collector roadway segments in western Roseville, unincorporated portions of west Placer County and unincorporated portions of south Sutter County. While all of the build alternatives would decrease traffic volumes on many roadway segments, they would all cause increases in traffic volumes on the following:

- SR 70/99 south of the Placer Parkway connector
- SR 65 north of the Placer Parkway connector
- Rocklin's Whitney Ranch Parkway and the future Valley View Parkway
- Some roadways near future Placer Parkway interchanges

The Parkway transportation analysis summarized VMT data in 2040 for the roadways that would operate at LOS F for one hour, two hours and for three or more hours and concluded that:

- Compared to the No-Build Alternative, all build alternatives would increase the total VMT in the TASA
- Compared to the No-Build Alternative, all build alternatives would reduce the VMT on congested roadways, especially in the AFA. For each alternative, the scenarios with a Watt Avenue interchange would provide a larger reduction in the VMT on congested roadways than without this interchange.

In 2040, Placer Parkway is expected to be fully operational as a six-lane facility (some portions may remain at four lanes depending on traffic volumes). Similar to the 2020 conditions, 2040 VMT data were used as input parameters into the EMFAC2002 model to estimate criteria pollutants emitted for each alternative. The study area for air quality cumulative impacts is the TASA and AFA.

7.2.1 No-Build Alternative

Emissions from the No-Build Alternative were quantified using projected VMTs for the study area assuming vehicle movement within the region traverses between the two state routes using I-80, I-5, and other viable arterial roads that provide connections within the Transportation Analysis Study Area. VMT and associated emissions for 2040 are presented in Table 7-1. The No-Build Alternative includes anticipated emissions associated with traffic generated by the other projects in the cumulative development scenario expected to be developed in the study area by 2040.

Table 7-1
VMT and Criteria Pollutant Emissions for No-Build Alternative in 2040

Description	VMT	ROG (lbs/day)	CO (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/day)	SO_X (lbs/day)
No-Build Alternative	25,983,131	6,060	44,260	4,960	2,100	240

Notes:
1. VMT data are from the Placer Pkwy VMT – 5mph Spds Bin – (values).xls, March 21, 2007, prepared by DKS Associates for this project.
2. Pollutants are calculated using the Burden option in CARB's EMFAC2002 model and project-specific VMT data.

7.2.2 Alternative 1 – the Red Alternative

The analysis includes three Alternative 1 scenarios: Alternative 1 without a Watt Avenue interchange (the proposed project), and Alternative 1 with two potential Watt Avenue interchanges (see Figure 2-3). Construction of a Watt Avenue interchange is not a part of the project, although it could be constructed by others as a separate project, subject to its own environmental review. A Watt Avenue interchange would generate additional VMT in the study because it would potentially serve future development areas.

Alternative 1 would provide two interchanges within the Sutter Pointe Specific Plan area in addition to a connection to SR 70/99 north of Riego Road. It would provide two interchanges within the Placer Ranch Specific Plan area, and an interchange with SR 65 at Whitney Ranch Parkway.

Total estimated emissions for all Alternative 1 scenarios are presented in Table 7-2.

Table 7-2
VMT and Criteria Pollutant Emissions for Alternative 1 in 2040

Description	VMT	ROG (lbs/day)	CO (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/day)	SO_X (lbs/day)
No-Build Alternative	25,983,131	6,060	44,260	4,960	2,100	240
Alternative 1	26,424,662	6,160	44,680	5,040	2,120	260
Alternative 1 with Watt Avenue interchange Option 1	26,524,214	6,180	44,780	5,060	2,140	260
Alternative 1 with Watt Avenue interchange Option 2	26,595,959	6,200	44,820	5,080	2,140	260

Notes:
1. VMT data are from the Placer Pkwy VMT – 5mph Spds Bin – (values).xls, March 21, 2007, prepared by DKS Associates for this project.
2. Pollutants are calculated using the Burden option in CARB's EMFAC2002 model and project-specific VMT data.

Compared to the No-Build Alternative, Alternative 1 would:

- Increase VMT by 1.7 percent
- Increase ROG by 1.7 percent
- Increase CO by 1.0 percent
- Increase NO_X by 1.6 percent
- Increase PM_{10} by 1.0 percent
- Increase SO_X by 8.3 percent

Under Alternative 1, either Watt Avenue interchange option would increase VMT, ROG, CO, and NO_X as compared to the Parkway. Emissions of SO_X would be similar. An Option One interchange (close to Baseline Road) would increase VMT, ROG, CO, NO_X, and PM_{10} more than would Option Two.

7.2.3 Alternative 2 – the Orange Alternative

Table 7-3 presents estimated pollutant emission information for Alternative 2, as well as with a Watt Avenue interchange (see Figure 2-3). Interchanges would be similar to Alternative 1.

Table 7-3
VMT and Criteria Pollutant Emissions for Alternative 2 in 2040

Description	VMT	ROG (lbs/day)	CO (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/day)	SO_X (lbs/day)
No-Build Alternative	25,983,131	6,060	44,260	4,960	2,100	240
Build – Alternative 2	26,477,729	6,180	44,740	5,060	2,120	260
Build – Alternative 2 with Watt Avenue interchange	26,569,226	6,200	44,760	5,060	2,120	260

Notes:
1. VMT data are from the Placer Pkwy VMT – 5mph Spds Bin – (values).xls, March 21, 2007, prepared by DKS Associates for this project.
2. Pollutants are calculated using the Burden option in CARB's EMFAC2002 model and project-specific VMT data.

Compared to the No-Build Alternative, Alternative 2 would:

- Increase VMT by 1.9 percent
- Increase ROG by 2 percent
- Increase CO by 1.1 percent
- Increase NO_X by 2 percent
- Increase PM_{10} by 1.0 percent
- Increase SO_X by 8.3 percent

Under Alternative 2, a Watt Avenue interchange would increase VMT, ROG, CO, NO_X, and PM_{10} as compared to the proposed project. Emissions of SO_X would be similar.

7.2.4 Alternative 3 – the Blue Alternative

Table 7-4 presents estimated pollutant emission information for Alternative 3, as well as with a Watt Avenue interchange (see Figure 2-3). Interchanges would be similar to Alternative 1.

Compared to the No-Build Alternative, Alternative 3 would:

- Increase VMT by 1.9 percent
- Increase ROG by 2 percent
- Increase CO by 1.1 percent
- Increase NO_X by 2 percent
- Increase PM_{10} by 1.0 percent
- Increase SO_X by 8.3 percent

Under Alternative 3, a Watt Avenue interchange would increase VMT, ROG, CO, NO_X, and PM_{10} as compared to the proposed project. Emissions of SO_X would be similar.

Table 7-4
VMT and Criteria Pollutants for Alternative 3 in 2040

Description	VMT	ROG (lbs/day)	CO (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/day)	SO_X (lbs/day)
No-Build Alternative	25,983,131	6,060	44,260	4,960	2,100	240
Build – Alternative 3	26,488,169	6,180	44,760	5,060	2,120	260
Build – Alternative 3 with Watt Avenue interchange	26,548,787	6,200	44,800	5,060	2,140	260

Notes:
1. VMT data are from the Placer Pkwy VMT – 5mph Spds Bin – (values).xls, March 21, 2007, prepared by DKS Associates for this project.
2. Pollutants are calculated using the Burden option in CARB's EMFAC2002 model and project-specific VMT data.

7.2.5 Alternative 4 – the Yellow Alternative

Table 7-5 presents estimated pollutant emission information for Alternative 4, as well as with a Watt Avenue interchange (see Figure 2-3). Alternative 4 would provide one interchange within the proposed Measure "M" Area in addition to a connection to SR 70/99 north of Riego Road. It would provide two interchanges within the Placer Ranch Specific Plan area, and an interchange with SR 65 at Whitney Ranch Parkway.

Table 7-5
VMT and Criteria Pollutant Emissions for Alternative 4 in 2040

Description	VMT	ROG (lbs/day)	CO (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/day)	SO_X (lbs/day)
No-Build Alternative	25,983,131	6,060	44,260	4,960	2,100	240
Alternative 4	26,482,450	6,180	44,760	5,060	2,120	260
Alternative 4 with Watt Avenue interchange	26,546,653	6,200	44,820	5,060	2,140	260

Notes:
1. VMT data are from the Placer Pkwy VMT – 5mph Spds Bin – (values).xls, March 21, 2007, prepared by DKS Associates for this project.
2. Pollutants are calculated using the Burden option in CARB's EMFAC2002 model and project-specific VMT data.

Compared to the No-Build Alternative, Alternative 4 would:

- Increase VMT by 1.9 percent
- Increase ROG by 2 percent
- Increase CO by 1.1 percent
- Increase NO_X by 2 percent
- Increase PM_{10} by 1.0 percent
- Increase SO_X by 8.3 percent

Under Alternative 4, a Watt Avenue interchange would increase VMT, CO, NO_X, and PM_{10} as compared to the proposed project. Emissions of ROG and SO_X would be similar.

7.2.6 Alternative 5 – the Green Alternative

Table 7-6 presents estimated pollutant emission information for Alternative 5, as well as with a Watt Avenue interchange (see Figure 2-3). Interchanges would be similar to Alternative 4.

Table 7-6
VMT and Criteria Pollutant Emissions for Alternative 5 in 2040

Description	VMT	ROG (lbs/day)	CO (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/day)	SO_X (lbs/day)
No-Build Alternative	25,983,131	6,060	44,260	4,960	2,100	240
Alternative 5	26,461,066	6,180	44,720	5,060	2,120	260
Alternative 5 with Watt Avenue interchange	26,533,413	6,180	44,800	5,060	2,140	260

Notes:
1. VMT data are from the Placer Pkwy VMT – 5mph Spds Bin – (values).xls, March 21, 2007, prepared by DKS Associates for this project.
2. Pollutants are calculated using the Burden option in CARB's EMFAC2002 model and project-specific VMT data.

Compared to the No-Build Alternative, Alternative 5 would:

- Increase VMT by 1.8 percent
- Increase ROG by 2.0 percent
- Increase CO by 1.0 percent
- Increase NO_X by 2 percent
- Increase PM_{10} by 1.0 percent
- Increase SO_X by 8.3 percent

Under Alternative 5, a Watt Avenue interchange would increase VMT, ROG, CO, and NO_X as compared to the proposed project. Emissions of PM_{10} and SO_X would be similar.

7.3 SUMMARY OF CUMULATIVE IMPACTS

Potential impacts to air quality could occur during construction of Placer Parkway as a result of the generation of pollutants from construction vehicles and equipment as development projects under the 2040 scenario are built along with portions of Placer Parkway. Impacts could also occur through the generation of pollutants from vehicles using Placer Parkway. The new Parkway would generate an increase in VMTs, which is typically associated with an increase of vehicle exhaust pollution. The comparison of VMT and estimated operational emissions for all alternatives excluding the Watt Avenue interchange under the cumulative impact scenario is shown in Table 7-7.

As shown in Table 7-7, the alternatives generating the most air pollutants can be associated with the highest VMT. Alternatives are ranked from the least impact on air quality to the most impact, as follows: No-Build Alternative, Alternative 1, Alternative 5, Alternative 2, Alternative 4, and Alternative 3. However, the increase in criteria pollutants between Alternative 3 and the No-Build Alternative in 2040 shows that most increases in criteria pollutants can be considered negligible. The incremental increase is approximately 2 percent for ROG, 1 percent for CO, 2 percent for NO_X, 1 percent for PM_{10}, and 8.3 percent for SO_X. The incremental increase, in percentage, is quantified by dividing the amount increased by the total amount generated in the No-Build Alternative. Incremental increases, in percentages, for other build alternatives will either be lower than or the same as Alternative 3. Although SO_X shows the highest increase, it should be noted that the amount of sulfur emitted correlates to the

Table 7-7
Operational Emissions from All Alternatives in 2040

Description	VMT	ROG (lbs/day)	CO (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/day)	SO_X (lbs/day)
No-Build	25,983,131	6,060	44,260	4,960	2,100	240
Alternative 1	26,424,662	6,160	44,680	5,040	2,120	260
Alternative 2	26,477,729	6,180	44,740	5,060	2,120	260
Alternative 3	26,488,169	6,180	44,760	5,060	2,120	260
Alternative 4	26,482,450	6,180	44,760	5,060	2,120	260
Alternative 5	26,461,066	6,180	44,720	5,060	2,120	260
Note: 1. Vehicle emissions are calculated using EMFAC2002 mobile emission factor and methodology prescribed by CARB.						

amount of sulfur in the fuel (i.e., a reduction in sulfur content in fuel will result in a lower amount of sulfur emitted.) Within California, ultra-low sulfur fuel (i.e., 15 ppm sulfur content) has been available for on-road vehicles since September 1, 2006. Therefore, sulfur emissions from vehicles are expected to be substantially lower in the future. The increase of daily emissions from all five alternatives in 2040 relative to the No-Build Alternative is provided in Table 7-8. The PCAPCD and FRAQMD significance thresholds are also presented in this table to determine whether the operation of the alternatives would create significant air quality impacts.

Table 7-8
Comparison of VMT and Operational Emissions from All Alternatives in 2040

Description	VMT	Emissions (lbs/day)				
		ROG	CO	NO_X	PM_{10}	SO_X
No Build Alternative	25,983,131	6,060	44,260	4,960	2,100	240
Total Emissions Increase Over No-Build Alternative (lbs/day)						
Alternative 1	26,424,662	100	420	80	20	20
Alternative 2	26,477,729	120	480	100	20	20
Alternative 3	26,488,169	120	500	100	20	20
Alternative 4	26,482,450	120	500	100	20	20
Alternative 5	26,461,066	120	460	100	20	20
FRAQMD Significant Thresholds		25	None	25	80	None
PCAPCD Significant Thresholds		82	550	82	82	136
Notes: 1. The difference in emissions is calculated based on the comparison with the No-Build Alternative.						

All Watt Avenue interchanges would result in increased emissions as compared with all Placer Parkway alternatives, including the No-Build Alternative.

Under cumulative conditions, incremental emissions associated with all build alternatives relative to the No-Build Alternative would exceed the FRAQMD significance thresholds for ROG and NO_X. All build alternatives would exceed the PCAPCD significance threshold for ROG. Similarly, all build alternatives would exceed the PCAPCD significance threshold for NO_X, with the exception of Alternative 1.

As fuel and vehicle technology improves over the next decade, vehicle emissions can be expected to be lower than those presented in Table 7-8. In addition, emissions associated with the reduction of VHD were not quantified because of lack of detailed data and were not included in Table 7-8. Therefore, the reduction of emissions associated with the reduced VHD could potentially result in lower emissions than the levels reported. Based on the early planning stage of this project, without verifiable and quantifiable data, air quality impacts from the operation of any of these alternatives are considered unavoidable and significant relative to existing significance thresholds.

All Placer Parkway alternatives would increase the total vehicle miles traveled in the traffic study area, and would reduce VHD, as compared to the 2040 No-Build scenario. The air quality analysis shows that Placer Parkway would contribute an additional increment to pollutant emissions to cumulatively significant air quality impacts in 2040. On an overall basis, the Parkway's incremental contribution to significant cumulative air quality impacts would be considerable. Incremental air quality impacts over the No-Build Alternative related to Placer Parkway would be significant and unavoidable.

7.3.1 Greenhouse Gases

GHG associated with the Parkway for 2040 were quantified using the EMFAC2002 model and VMT data for the No-Build and build alternatives. As previously mentioned, it was assumed that all CO_2 emissions emitted from vehicles are directly converted to GHG. Compared with the No-Build Alternative, CO_2 emissions would increase by a maximum of 2.02 percent in 2040.

CO_2 emissions estimated for all the build alternatives are considered to be overly conservative because only VMT data was used and other benefits of the Parkway such as reduction of VMT on congested roadways within the AFA and the reduction of VHD within the TASA and AFA were not included in the calculation of GHG. The inclusion of all the benefits associated with the Parkway would reduce CO_2 emissions for all the build alternatives, and would offset to some extent, or possibly neutralize, GHGs from the build alternatives.

8.0 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION STRATEGIES

During construction of the Parkway, there may be a potential for significant air quality impacts; therefore, as required by FRAQMD and/or PCAPCD, the following mitigation strategies shall be considered during construction activities. All mitigation strategies will be considered in detail during the Tier 2 analysis.

***Mitigation Strategy 1a*:** Within the selected corridor, consider locating the roadway away from sensitive receptors to the extent feasible. If this is not possible, conduct a health risk assessment to determine the potential health effects on the sensitive receptors. If risks exceed the accepted standards, provide mitigation as appropriate to reduce risks to an acceptable level as appropriate, including consideration of relocations if necessary.

***Mitigation Strategy 1b*:** During the development process of Placer Parkway, review environmental reports prepared for development projects that are in close proximity (i.e., 500 feet or less) to the Parkway. As appropriate, PCTPA should request, via comments on such documents, that potential detrimental health risks posed to individual living nearby the corridor are considered, and that cities and counties add policies to their development review process or General Plans that require assessment of air toxics for projects within 500 feet of the selected Parkway corridor. Since Placer Parkway includes a 500- to 1,000-foot no-development buffer zone, any development projects may be at least 500 feet from the roadway and it is possible that no additional assessment would be required.

***Mitigation Strategy 1c*:** Require that, before a city, county, special district or school district approve a project that would place sensitive receptors (e.g., children, the elderly, and hospitals) within 500 feet of the selected corridor, an analysis of potential air toxic contaminants be conducted to determine whether mitigation measures are needed as part of the proposed use, or if the location is not appropriate for such a use. This supplemental analysis would provide the decision makers with information regarding the potential health risks to exposed individuals and allow them to make the proper decision about the proposed development. With the 500- to 1,000-foot no-development buffer zone, this mitigation strategy may not be applicable.

Mitigation Strategy 2: Prepare and implement a dust control plan.

This plan should address the minimum Administrative Requirements found in Section 400 of *District Rule 228, Fugitive Dust* (PCAPCD, 2006b) and Regulation 3.16, *Fugitive Dust Emissions* (FRAQMD, 2006). Consideration should be given to including the following requirements during the Tier 2 environmental evaluation

The contractor shall:

- Keep a hard or electronic copy of *District Rule 228, Fugitive Dust* on site for reference.
- Hold a pre-construction meeting for grading activities covering 20 or more acres to discuss the construction emission/dust control plan, and the District will be invited.
- Suspend all grading operations when fugitive dusts exceed *District Rule 228, Fugitive Dust* limitations. A contractor representative, CARB-certified to perform Visible Emissions Evaluations (VEE), shall routinely evaluate compliance with *District Rule 228, Fugitive Dust.* This requirement for a VEE is for projects grading more than 20 or more acres in size regardless of how many acres are to be disturbed daily. It is to be noted that fugitive dust is not to exceed 40 percent opacity and is not to go beyond the property boundary at any time. If lime or other drying agents are used to dry out wet

grading areas, they shall be controlled so as to not to exceed *District Rule 228, Fugitive Dust limitations*.

- Schedule clearing, grading, and earthmoving activities during periods of low wind speeds and restrict those construction activities during high wind conditions with wind speeds greater than 20 mph average during an hour.

***Mitigation Strategy 3*:** Control dust and prevent dirt from going off site.

Consideration should be given to including the following requirements during the Tier 2 environmental evaluation:

- Apply water to control dust as needed to prevent dust impacts off site. Operational water truck(s), shall be on site, as required, to control fugitive dust.

- Construction vehicles leaving the site shall be cleaned to prevent dust, silt, mud, and dirt from being released or tracked off site. This includes the use of tarpaulins for haul trucks, which travel on public streets.

***Mitigation Strategy 4*:** Control dust from inactive areas.

- Consideration should be given to requiring the contractor to apply approved chemical soil stabilizers, vegetative mats, or other appropriate best management practices to manufacturer's specifications, to all inactive construction areas (previously graded areas which remain inactive for 96 hours).

***Mitigation Strategy 5*:** Control dust on unpaved roads and adjacent public thoroughfares.

Consideration should be given to including the following requirements during the Tier 2 environmental evaluation:

- Spread soil binders on unpaved roads and employee/equipment parking areas and wet broom or wash streets if silt is carried over to adjacent public thoroughfares.

- Reduce speeds on unpaved roads to 15 mph or lower (this speed must be posted).

***Mitigation Strategy 6*:** Provide FRAQMD and PCAPCD with a list of construction equipment and anticipated construction timeline.

- The prime contractor shall submit to the District a comprehensive inventory (i.e., make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower or greater) that will be used an aggregate of 40 or more hours for the construction project. The project representative shall provide the District with the anticipated construction timeline, including start date, and name and phone number of the project manager and onsite foreman. The contractor shall provide a plan for approval by the District demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average of 20 percent NO_X reduction and 45 percent particulate reduction compared to the most recent CARB fleet average. The District should be contacted for average fleet emission data. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. During smog season (May through October), the construction period shall be

lengthened so as to minimize the number of vehicles and equipment operating at the same time. Contractors can access the SMAQMD's website (SMAQMD, 2006) to determine whether their off-road fleets meet the requirements listed in this measure.

***Mitigation Strategy 7*:** Maintain construction equipment and vehicles.

- Construction equipment exhaust emissions shall not exceed District *Rule 202 Visible Emission* limitations. Operators of vehicles and equipment found to exceed opacity limits are to be immediately notified and the equipment must be repaired within 72 hours. An applicant representative that is CARB-certified to perform VEE shall routinely evaluate project-related off-road and heavy-duty on-road equipment emissions for compliance with this requirement.

***Mitigation Strategy 8*:** Minimize idling time for diesel-power equipment.

- Keep idling time to 5 minutes or less for all diesel-power equipment.

Mitigation Strategy 9: Use alternative power source (e.g., power poles) and fuel to operate equipment instead of using diesel-powered equipment.

- Use existing power sources (e.g., power poles) or clean fuel generators rather than temporary diesel power generators. If existing sources are not available, low sulfur fuel is to be used for diesel power generators. Use alternative fuel such as aqueous or emulsified diesel fuel for all equipment to reduce NO_X and diesel exhaust emissions.

***Mitigation Strategy 10*:** No open burning of removed vegetation.

- No open burning of removed vegetation is allowed during infrastructure improvements. Vegetative material shall be chipped and delivered to waste to energy facilities, or to an appropriate disposal site.

***Mitigation Strategy 11*:** Strategic placement of trees near roadways, as part of the previously described Landscaping Concept for the Parkway.

- Strategic placement of trees near roadways would enhance pollutant dispersal and leaf canopy provides shading that reduce diurnal hydrocarbon emissions.

9.0 ANALYSES TO BE UNDERTAKEN IN TIER 2

It should be noted that there is a potential for Placer Parkway to be operated as a toll road. Operating Placer Parkway as a toll road would require additional evaluation of air quality impacts. Toll roads are operated differently from freeways and often do not have to comply with federal regulations (FHWA, 2006b). Air quality impacts associated with toll roads would be associated with changes in traffic patterns within the study area, toll collection plazas, and at on- and off-ramps. If the decision is taken in the future to operate Placer Parkway as a potential toll road, then further analysis would be undertaken at Tier 2.

During the Tier 2 environmental analysis, a detailed air quality assessment will be conducted for all roadway alternatives identified within the selected corridor alternative alignment. The air quality analysis will include the following tasks:

- Construction activities – Impacts from construction activities will be evaluated by quantifying construction emissions and comparing them to the PCAPCD and FRAQMD significance thresholds to determine whether the increase in emissions would be considered significant, and if so, what mitigation measures can be implemented to reduce the air quality impacts from construction.

- CO hot spot analysis – To determine whether the proposed project would create a CO hot spot, the air quality analysis shall adhere to the procedures for preparing a screening analysis as provided in Appendix A of the document, *The Transportation Project-Level Carbon Monoxide Protocol*, University of California Davis, December 1997. If necessary, detailed modeling shall be conducted using the CALINE4 or CAL3QHCR model and corresponding emission factors from the latest version of the EMFAC model (e.g., EMFAC2007.)

- PM_{10} and $PM_{2.5}$ hot spots analyses – Currently, Placer and Sutter counties are designated as unclassified/attainment for federal PM_{10} and $PM_{2.5}$ standards and therefore do not require any PM_{10} and $PM_{2.5}$ hot-spot analyses. However, if the attainment designations are changed prior to the approval of the Parkway, then the applicable hot-spot analyses shall be conducted during the Tier 2 analysis to assess MSAT impacts. If required, the analyses shall follow guidelines provided in the document, *Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas*, U.S. EPA and FHWA, March 29, 2006. In addition, a project-level analysis determination will include a finding of whether the project is a "Project Of Air Quality Concern" (POAQC). If applicable, detailed mitigation measures would be provided to reduce air quality impacts.

- Mobile Source Air Toxics (MSAT) Analysis – Using guidance provided in the document, *Interim Guidance on Air Toxic Analysis in NEPA Documents*, FHWA, February 3, 2006, the air quality analysis will identify what category the Placer Parkway falls under (i.e., No Analysis, Qualitative Analysis, or Quantitative Analysis) and use the prototype language or provide the data analysis as specified in the guidance document. In addition, SMAQMD's protocol, *Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways,* as adjusted for local meteorological conditions, shall be discussed and recommendations provided for potential siting of sensitive land uses located in close proximity (i.e., < 500 feet) to the Parkway. As previously described, the project includes a 500- to 1,000-foot no-development buffer zone, and that design element may eliminate the need for further quantitative MSAT analysis, but, the need for MSAT analysis will be evaluated in Tier 2.

- Airborne Asbestos Impacts – Because the "preferred" alignment has not been identified, the air quality analysis will also include reviewing geological maps and pertinent asbestos documents such as *Relative Likelihood For the Presence of Naturally Occurring Asbestos in Placer County, California*, Department of Conservation California Geological Survey, 2006, to determine whether the proposed project is located in a Naturally Occurring Asbestos area. In addition, the document will also discuss the potential asbestos exposure if the proposed project requires demolition or renovation of existing building and bridges. These structures shall be checked for asbestos prior to construction activities. If applicable, the analysis will cite CARB's Air Toxics Control Measures (ATCM) for Construction, Grading, Quarrying, and Mining Operations dated July 29, 2002 (CARB, 2006d) and local agencies requirements.

- Health risk assessment – If required, PCTPA will be prepared to assess cancer risks and non-carcinogenic hazards for sensitive receptors (e.g., existing residences) located near the proposed project.

- If required, a more detailed analysis of greenhouse gases.

- Placer Parkway may be operated as a toll road. As such, the operation of a tolled versus non-tolled facility differs in terms of impacts and benefits. Therefore, the tolled alternatives shall analyze the air quality impacts associated with issues such as diverted traffic volumes, traffic congestions during peak hours; ingress and egress to the toll road/lane; and impact associated with a toll plaza.

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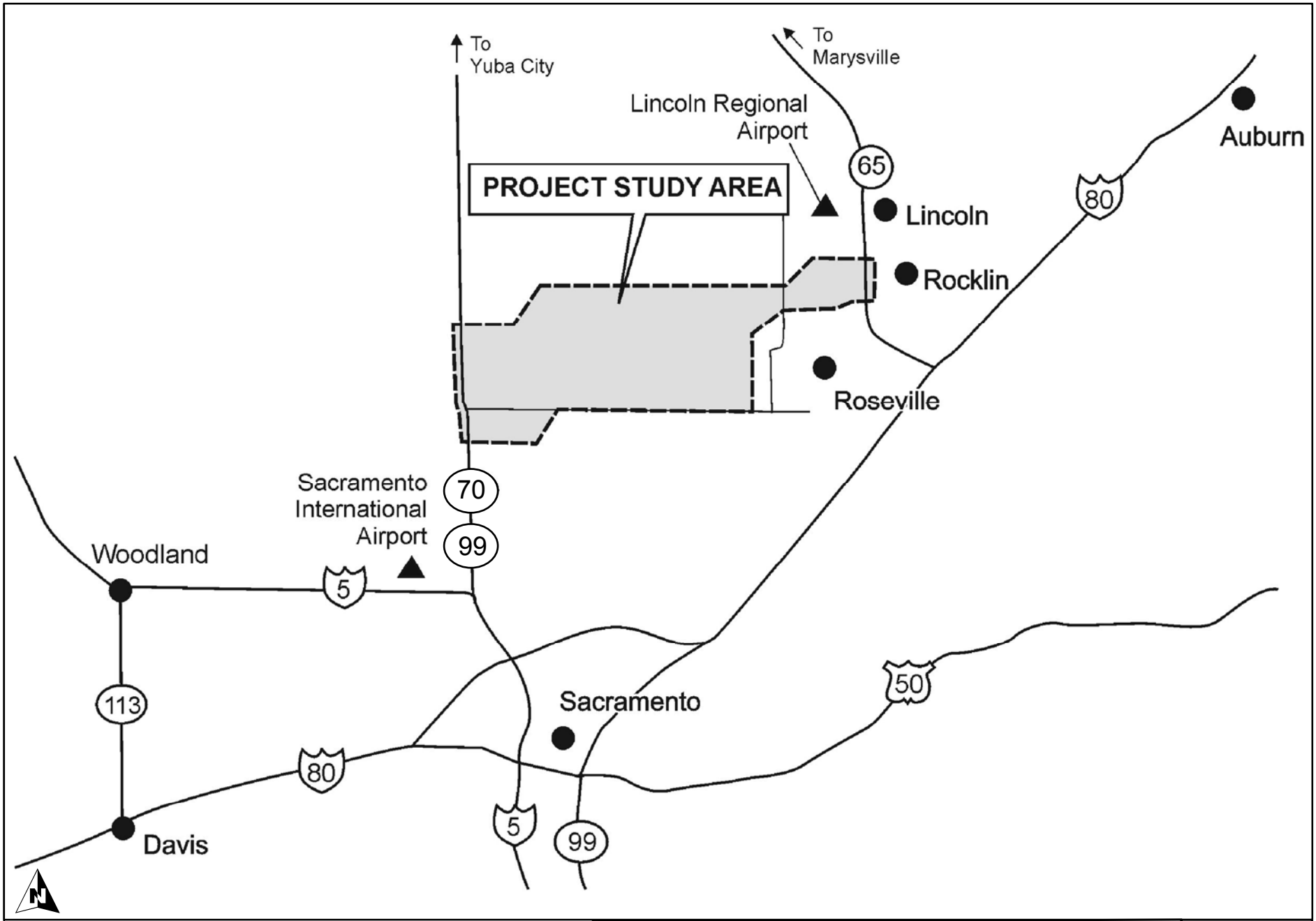
Figures



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Miles

PLACER PARKWAY

Tier 1 EIS/EIR
Air Quality
Technical Memorandum

Project Location

Figure 1-1

June 2007

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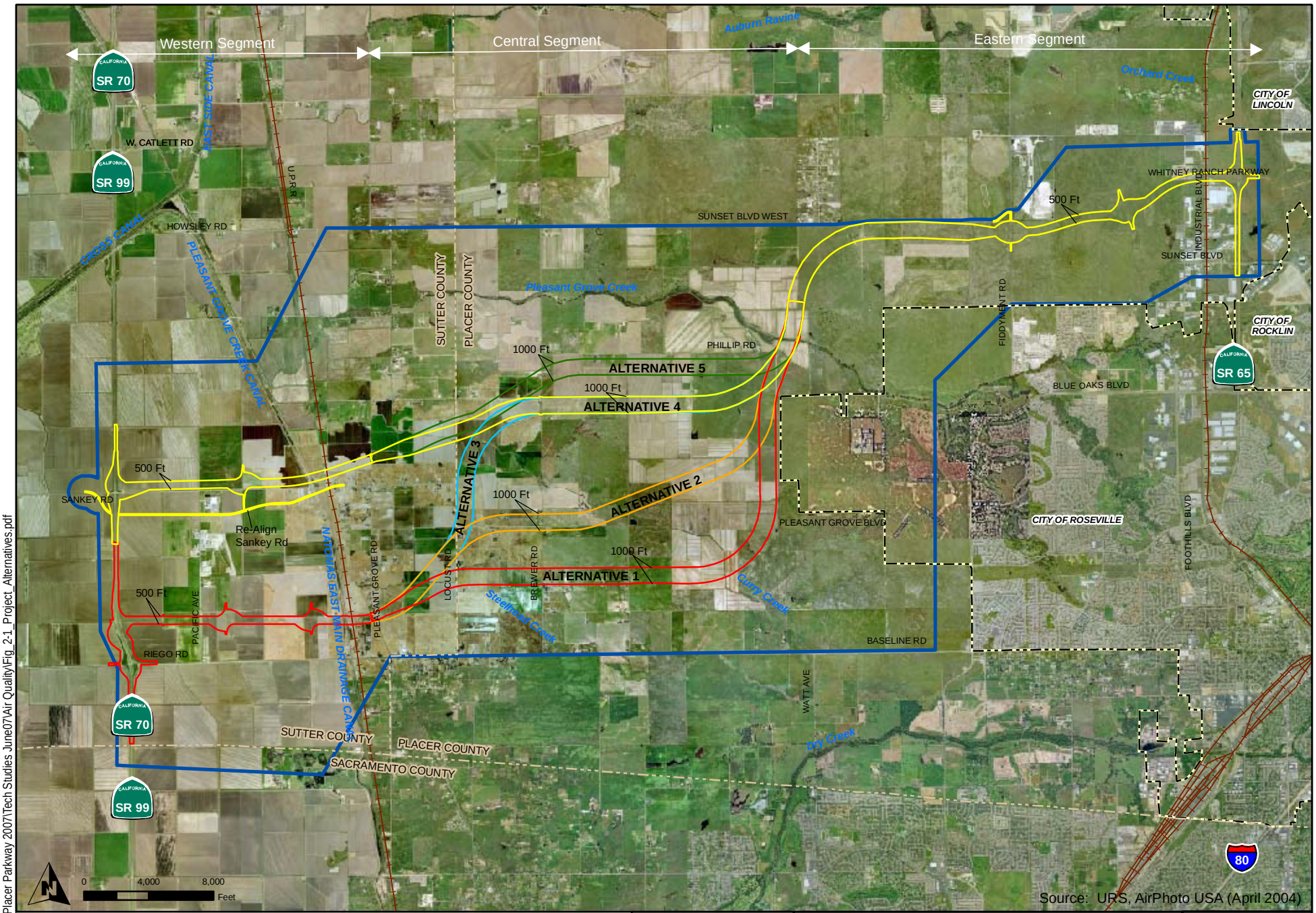

Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Air Quality
Technical Memorandum

Project Alternatives

Figure 2-1

June 2007

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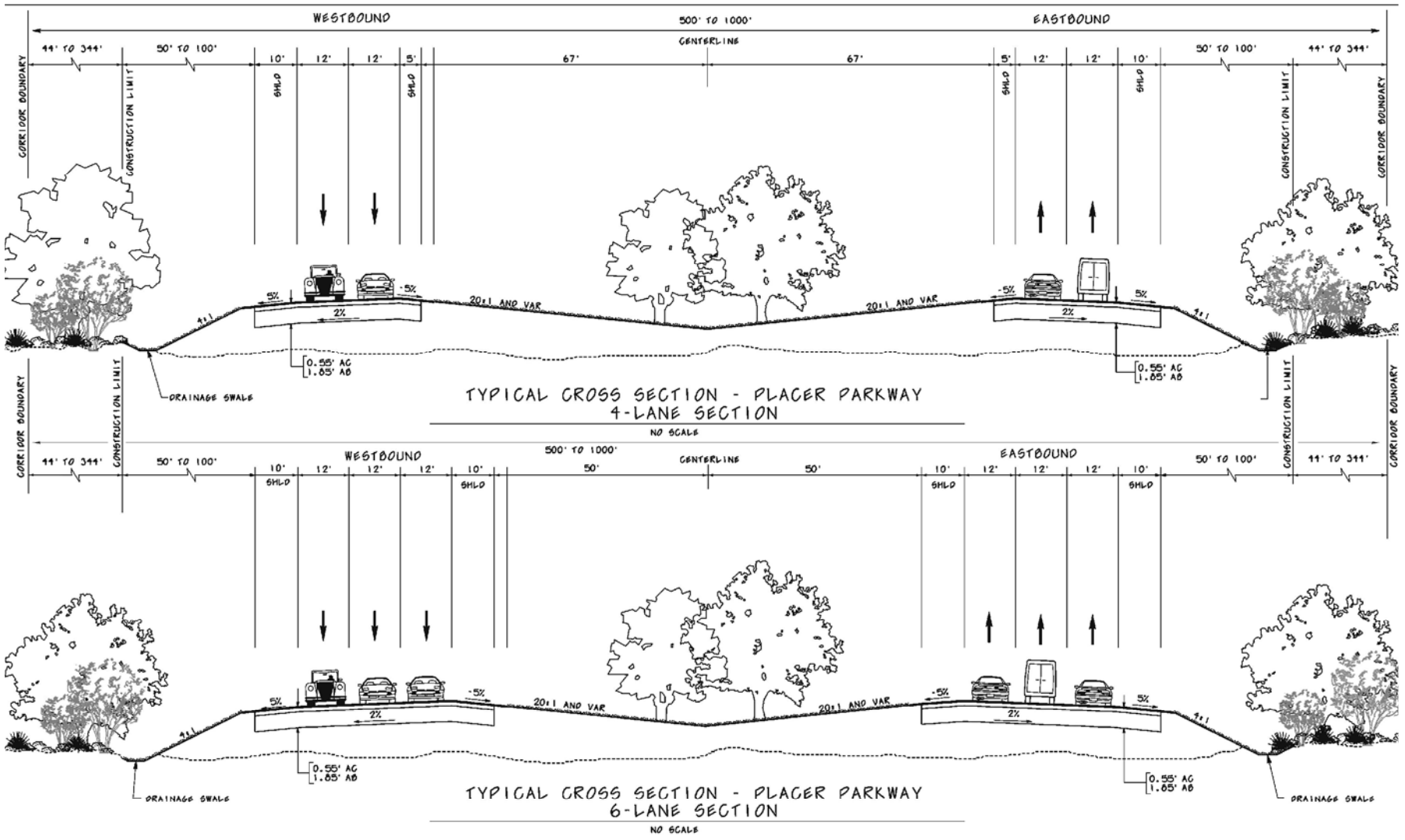
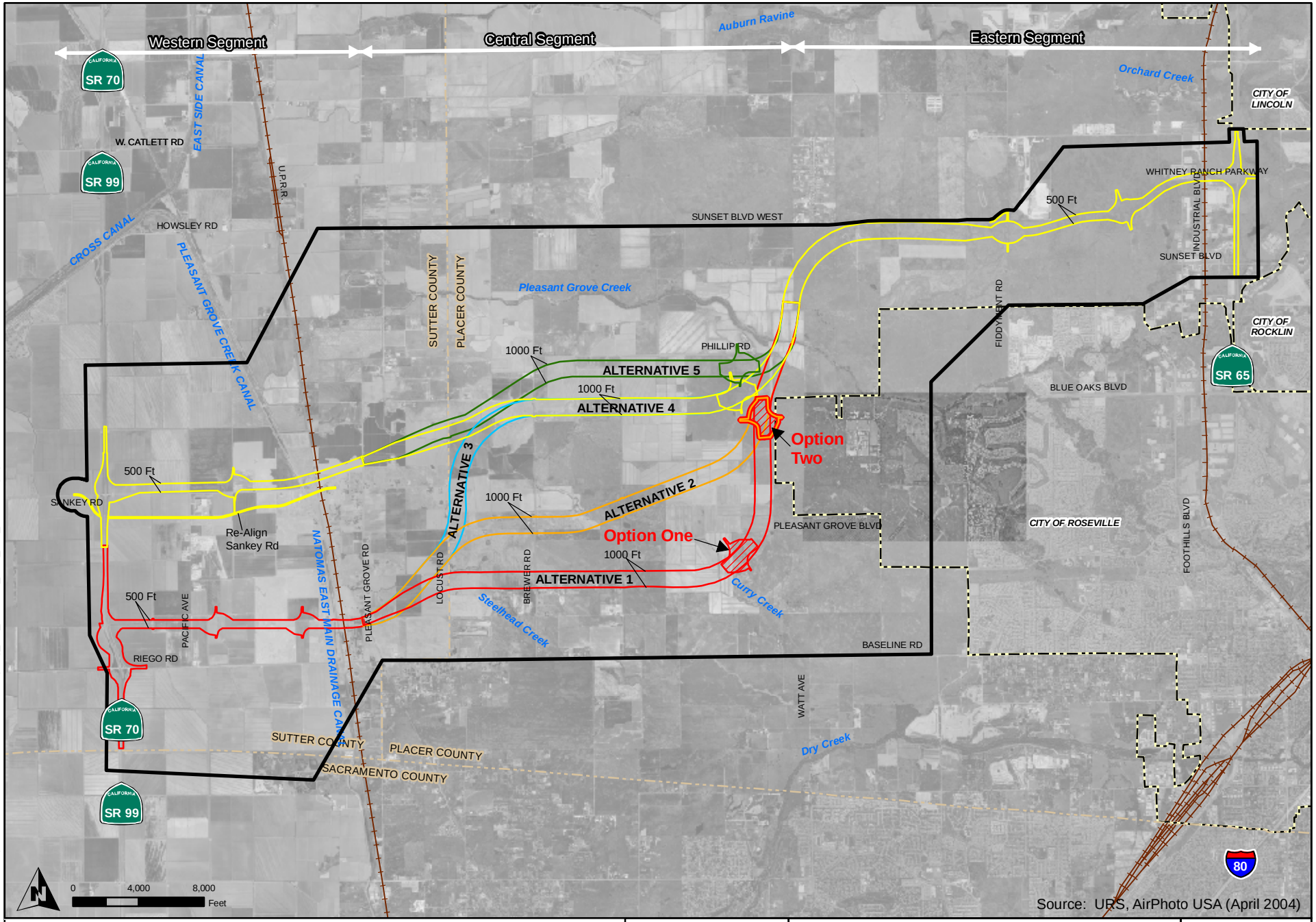


PLACER PARKWAY	Tier 1 EIS/EIR Air Quality Technical Memorandum	Typcial Cross Section (Conceptual)	***Figure 2-2*** ***June 2007***



Tier 1 EIS/EIR
Air Quality
Technical Memorandum

Potential Watt Avenue Interchange

Figure 2-3

June 2007

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Source: California Air Resources Board, http://www.arb.ca.gov/ei/maps/basins/absvmap.htm

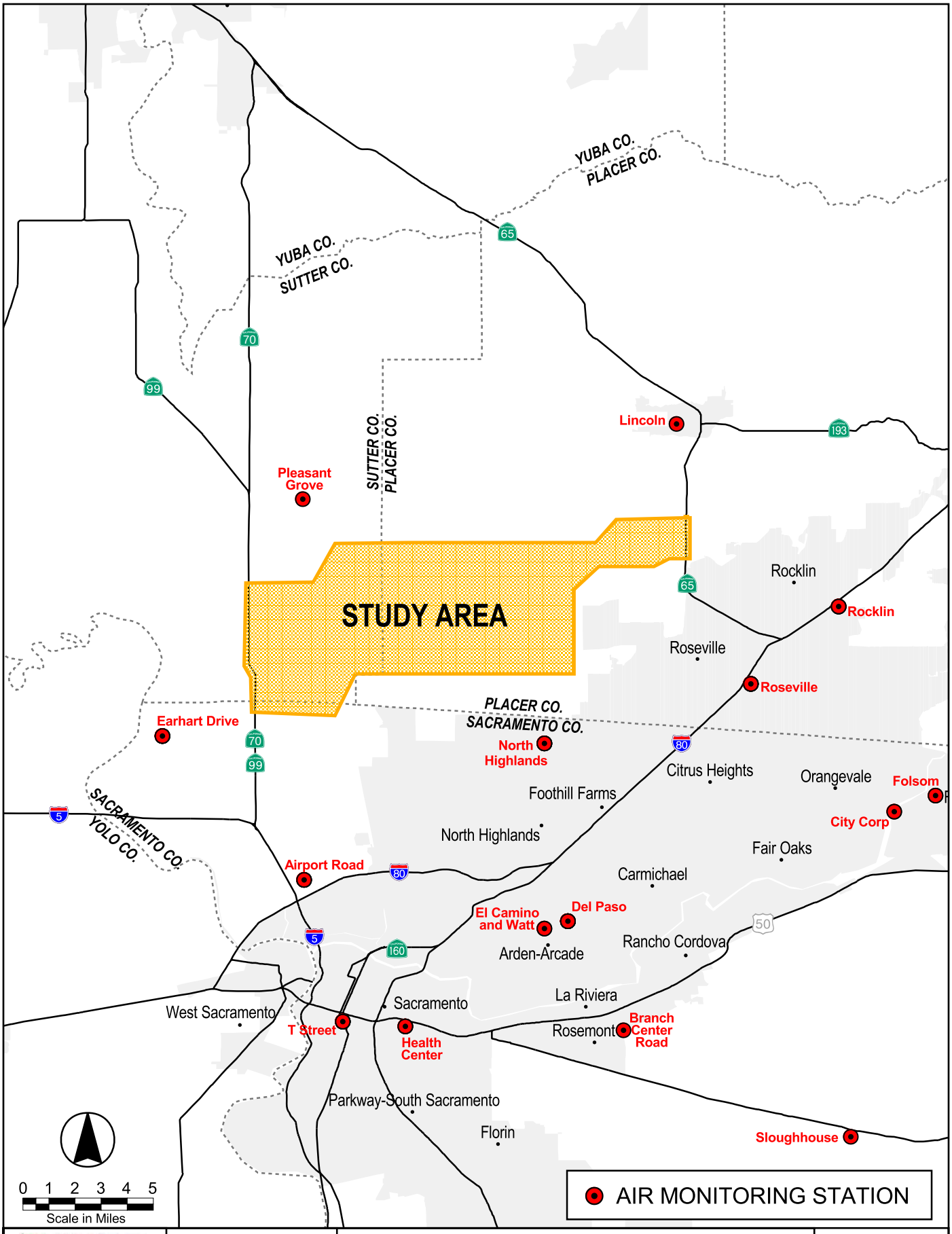
SVAB Boundary

Tier 1 EIS/EIR
Air Quality
Technical Memorandum

Sacramento Valley Air Basin

Figure 4-1

June 2007



PLACER PARKWAY	Tier 1 EIS/EIR Air Quality Technial Memorandum	Air Quality Monitoring Stations Placer and Sutter Counties	*Figure 4-2* *June 2007*

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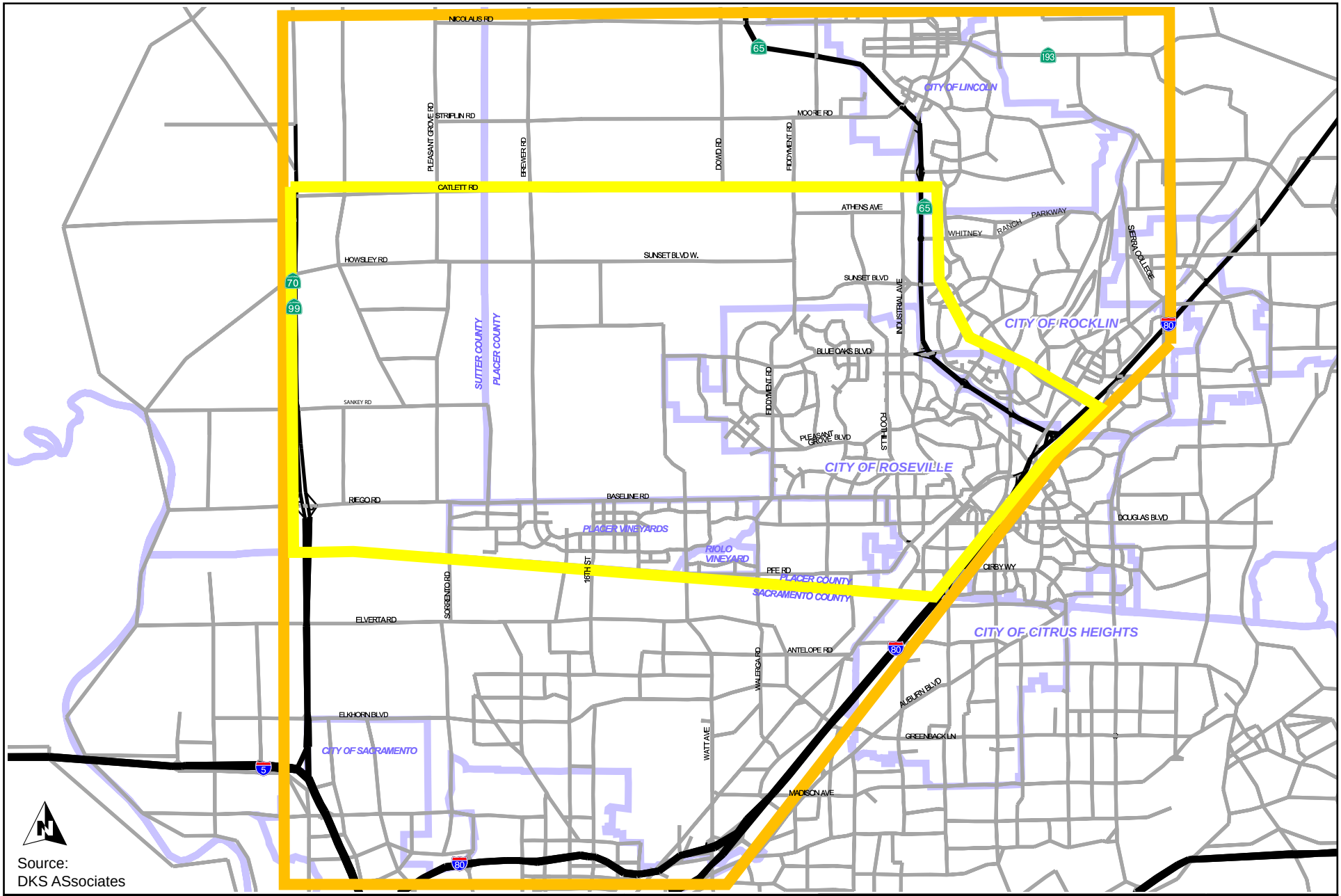

Source:
DKS ASsociates

Transportation Analysis Study Area

Analysis Focus Area

PLACER PARKWAY

Tier 1 EIS/EIR
Air Quality
Technical Memorandum

Transportation Analysis Areas

Figure 5-1

June 2007

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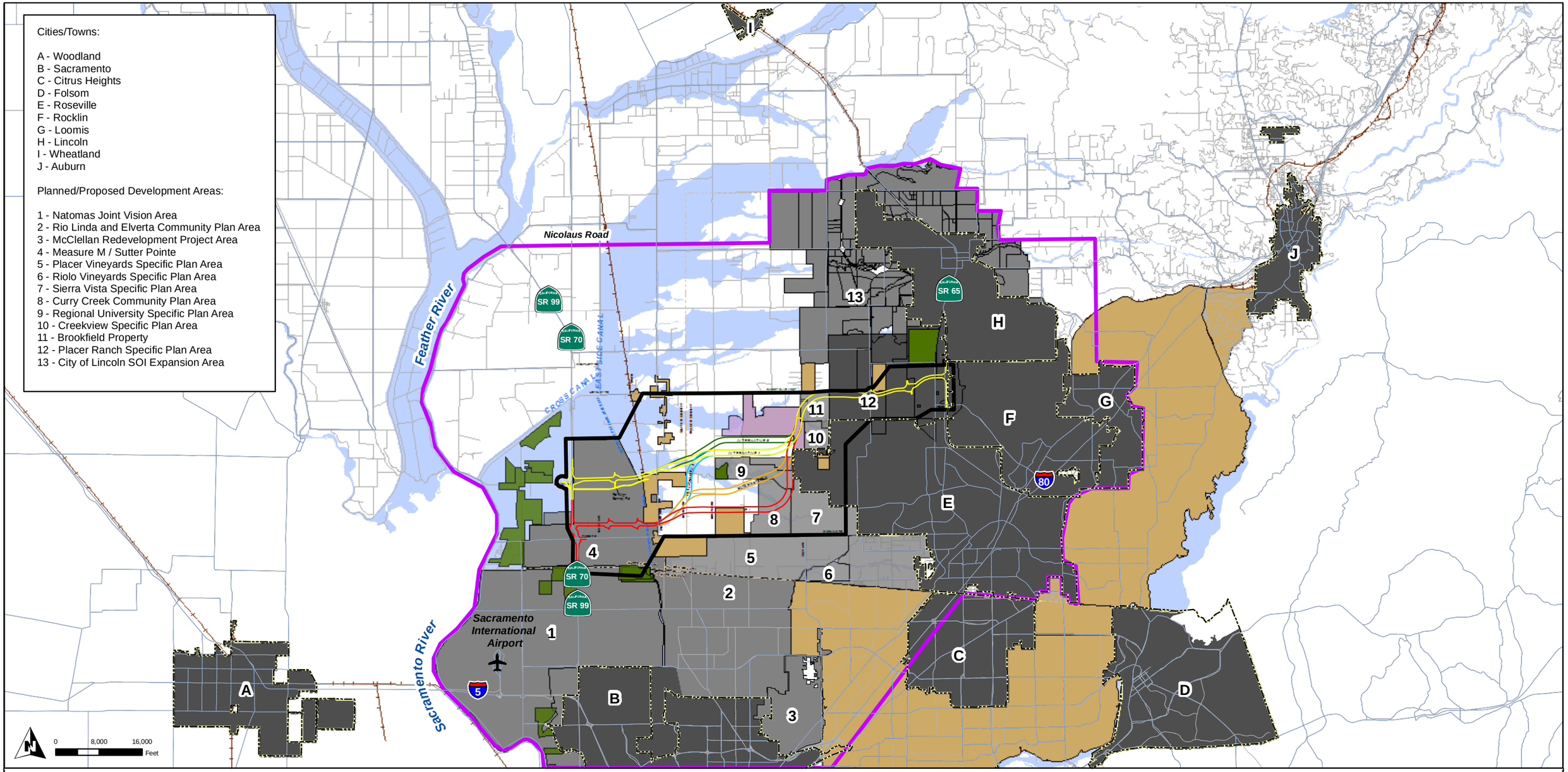
Cities/Towns:

A - Woodland
B - Sacramento
C - Citrus Heights
D - Folsom
E - Roseville
F - Rocklin
G - Loomis
H - Lincoln
I - Wheatland
J - Auburn

Planned/Proposed Development Areas:

1 - Natomas Joint Vision Area
2 - Rio Linda and Elverta Community Plan Area
3 - McClellan Redevelopment Project Area
4 - Measure M / Sutter Pointe
5 - Placer Vineyards Specific Plan Area
6 - Riolo Vineyards Specific Plan Area
7 - Sierra Vista Specific Plan Area
8 - Curry Creek Community Plan Area
9 - Regional University Specific Plan Area
10 - Creekview Specific Plan Area
11 - Brookfield Property
12 - Placer Ranch Specific Plan Area
13 - City of Lincoln SOI Expansion Area



County Boundary
Railroads
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Existing and Approved Development
Planned / Proposed Development (including future conservation areas)
Existing Conservation Areas
Developed Unincorporated Areas
Municipal Facilities
Study Area for Secondary and Indirect Impacts
Project Study Area Boundary
100 Year Floodplain Areas

Source: North Fork Associates;Mara Feeney Associates; Sutter County Planning Division; County of Sacramento Planning and Community Development Department; City of Sacramento Development Services Department; Sunset Industrial Area Plan; City of Lincoln Community Development Department; Natomas Basin HCP;Placer County Planning Deptartment; City of Sacramento; City of Roseville

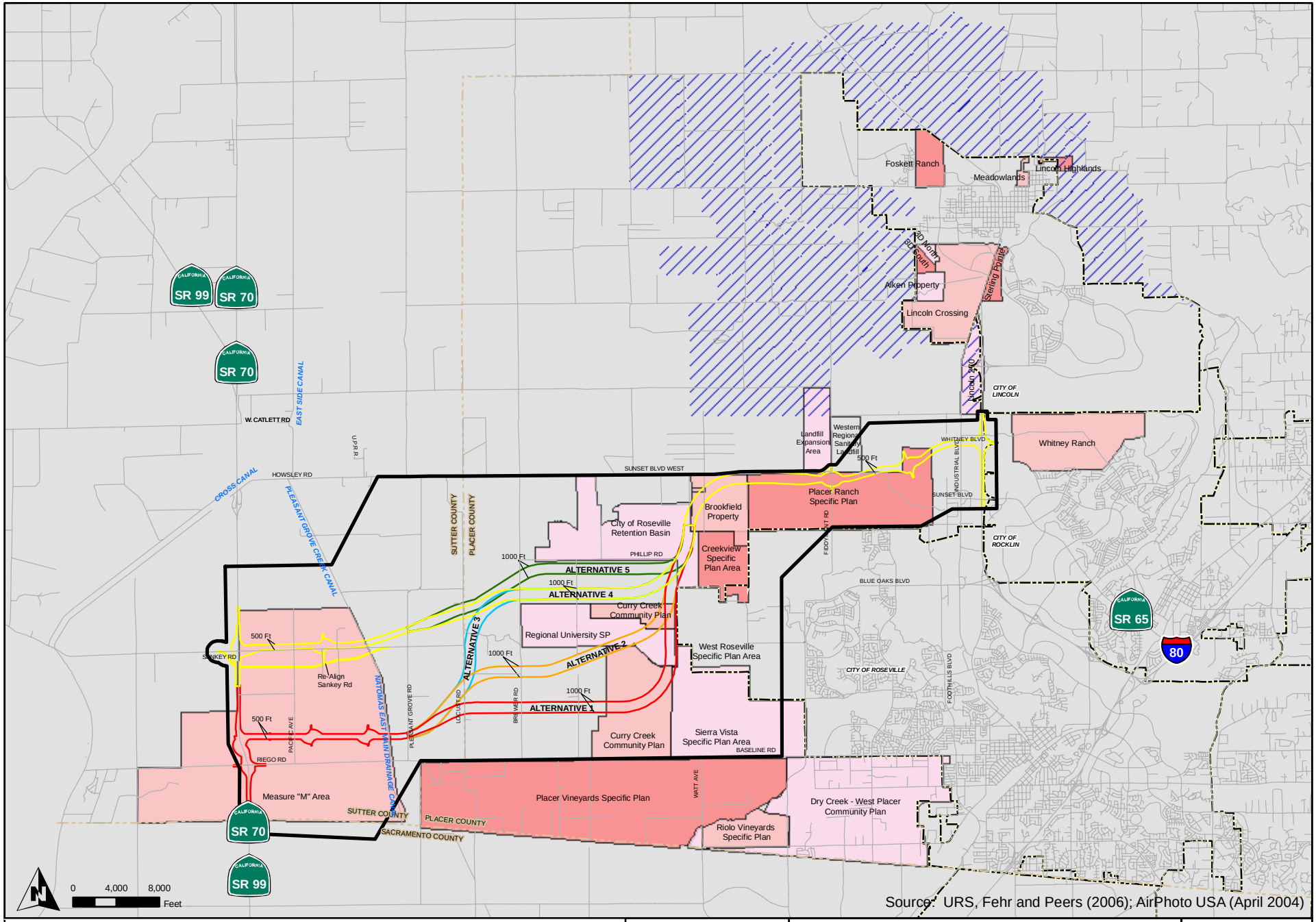
PLACER PARKWAY
CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Air Quality
Technical Memorandum

Secondary and Indirect Impact Analysis Study Area

Figure 6-1

June 2007



Study Area Boundary
City Boundary
County Boundary
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
City of Lincoln Sphere of Influence
Planned/Proposed Development

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Air Quality
Technical Memorandum

Planned / Proposed Development

Figure 6-2

June 2007

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Appendix A
EMFAC2002 Model Output Files

2020

Title : Placer County 2020 Annual - NO BUILD Refined Speed Bin
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/26/2007 19:25:51
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (LT)
I/M Stat : No I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	1	4088	2	4091	3	7527	43	7573	5	4410	82	4497	1	463	464	140	604	18	100	16882
VMT/1000	0	190	0	190	0	333	1	334	0	195	4	199	0	10	10	11	21	3	1	748
Trips	5	25412	10	25427	11	46543	236	46790	22	30818	795	31636	14	1117	1131	2080	3211	72	199	107334
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.03	0	0	0	0	0.01	0.02	0	0.09
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.05
Total Ex	0	0.01	0	0.02	0	0.04	0	0.04	0	0.05	0	0.05	0	0.01	0.01	0	0.01	0.02	0	0.14
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.12
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.03	0	0.03	0	0.11	0	0.11	0	0.1	0	0.1	0	0.01	0.01	0	0.01	0.02	0	0.29
Carbon Monoxide Emissions																				
Run Exh	0	0.26	0	0.26	0.01	0.82	0	0.83	0.04	0.63	0.01	0.67	0.01	0.05	0.06	0.02	0.08	0.07	0.02	1.93
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.11	0	0.11	0	0.28	0	0.28	0	0.26	0	0.26	0.01	0.05	0.06	0	0.06	0	0	0.72
Total Ex	0	0.37	0	0.37	0.01	1.1	0	1.11	0.04	0.89	0.01	0.93	0.02	0.1	0.12	0.02	0.14	0.07	0.02	2.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.03	0	0.03	0	0.1	0	0.1	0	0.1	0.01	0.11	0	0.01	0.01	0.05	0.05	0.03	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.07
Total Ex	0	0.03	0	0.03	0	0.12	0	0.12	0	0.13	0.01	0.14	0	0.02	0.02	0.05	0.07	0.03	0	0.39
Carbon Dioxide Emissions 0																				
Run Exh	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.13	0	0.01	0.01	0.02	0.03	0.01	0	0.4
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total Ex	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.14	0	0.01	0.01	0.02	0.03	0.01	0	0.41
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.04
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fuel Consumption (000 gallons)																				
Gasoline	0	7.61	0	7.61	0.01	16.91	0	16.92	0.01	13.96	0	13.97	0	0.78	0.79	0	0.79	0.15	0.02	39.46
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	0.18	0.18	0	0	0	2.12	2.12	0.36	0	2.7

```
Title    :       Placer     County          2020 Annual   -        NO       BUILD    Refined  Speed    Bin
Version  :       Emfac2002  V2.2        Sept           23     2002 **       WIS      Enabled  **
Run      Date    :            3/26/2007 19:25:51
Scen     Year:          2020 --          Model    Years:       1975 to           2020
Season   :       Annual
Area     :       Placer     (MC)
I/M      Stat    :          I           and      M        program  in       effect
Emission:Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	4	16307	12	16323	15	18590	187	18792	9	5489	158	5657	4	1903	1908	610	2518	17	335	43642
VMT/1000	0	484	0	484	0	532	3	535	0	159	5	164	0	25	26	38	64	2	2	1251
Trips	16	101147	56	101219	59	114210	993	115262	44	42802	1627	44472	17	2884	2900	6076	8976	67	670	270666
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.03	0	0.03	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0.01	0.08
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.03	0	0.03	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.04	0	0.01	0.01	0.01	0.02	0	0.01	0.18
Diurnal	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Hot Soak	0	0.01	0	0.01	0	0.01	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Running	0	0.04	0	0.04	0	0.11	0	0.11	0	0.04	0	0.04	0	0.01	0.01	0	0.01	0	0	0.21
Resting	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.1	0	0.1	0	0.22	0	0.22	0	0.09	0	0.09	0	0.02	0.02	0.01	0.03	0	0.01	0.46
Carbon Monoxide Emissions																				
Run Exh	0	0.48	0	0.48	0.02	1.1	0	1.12	0.03	0.35	0.01	0.38	0.01	0.12	0.13	0.05	0.18	0.01	0.06	2.23
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.53	0	0.53	0	0.24	0	0.24	0	0.11	0.11	0	0.11	0	0.01	1.21
Total Ex	0	0.79	0	0.8	0.02	1.63	0	1.65	0.03	0.59	0.01	0.63	0.01	0.23	0.24	0.06	0.3	0.01	0.06	3.46
Oxides of Nitrogen Emissions																				
Run Exh	0	0.05	0	0.05	0	0.13	0	0.13	0	0.05	0.01	0.07	0	0.02	0.02	0.15	0.17	0.01	0	0.44
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0.02	0	0.02	0	0.03	0	0.03	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.06	0	0.06	0	0.16	0	0.17	0	0.09	0.01	0.1	0	0.03	0.03	0.18	0.22	0.01	0	0.56
Carbon Dioxide Emissions 0																				
Run Exh	0	0.19	0	0.19	0	0.26	0	0.26	0	0.11	0	0.11	0	0.02	0.02	0.08	0.1	0	0	0.67
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total Ex	0	0.2	0	0.2	0	0.27	0	0.27	0	0.12	0	0.12	0	0.02	0.02	0.08	0.1	0	0	0.69
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt:(000 gallons)																				
Gasoline	0	20.15	0	20.15	0.02	28.03	0	28.05	0.02	12.06	0	12.08	0.01	2.03	2.03	0	2.03	0.09	0.05	62.44
Diesel	0	0	0	0	0	0	0.12	0.12	0	0	0.25	0.25	0	0	0	7.56	7.56	0.2	0	8.14

```
Title    :       Placer     County          2020 Annual   -        NO       BUILD    Refined  Speed    Bin
Version  :       Emfac2002  V2.2        Sept           23     2002 **       WIS      Enabled  **
Run      Date    :            3/26/2007 19:25:51
Scen     Year:          2020 --          Model    Years:       1975 to           2020
Season   :       Annual
Area     :       Placer     (SV)
I/M      Stat    :          I           and      M        program  in       effect
Emission:Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	29	297560	147	297736	76	211433	1275	212783	39	46954	1335	48327	13	17629	17642	4759	22401	397	2935	584579
VMT/1000	0	9213	2	9215	1	6396	26	6422	1	1441	50	1492	0	256	256	276	531	46	19	17726
Trips	110	1859690	715	1860520	289	1307390	6884	1314570	162	366100	13839	380101	154	27787	27942	48665	76607	1588	5869	3639250
Reactive Organic Gas Emissions																				
Run Exh	0	0.13	0	0.13	0	0.2	0	0.21	0.01	0.07	0.01	0.09	0	0.03	0.04	0.07	0.11	0.04	0.05	0.63
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.34	0	0.35	0	0.15	0	0.15	0	0.05	0.06	0	0.06	0	0.02	0.89
Total Ex	0	0.44	0	0.45	0	0.55	0	0.55	0.01	0.23	0.01	0.24	0	0.09	0.09	0.08	0.18	0.04	0.07	1.54
Diurnal	0	0.14	0	0.14	0	0.15	0	0.15	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.33
Hot Soak	0	0.13	0	0.13	0	0.14	0	0.14	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Running	0	0.56	0	0.57	0	1.08	0	1.08	0	0.32	0	0.32	0	0.11	0.11	0	0.11	0	0.01	2.09
Resting	0	0.07	0	0.07	0	0.08	0	0.08	0	0.02	0	0.02	0	0	0	0	0	0	0	0.17
Total	0	1.35	0	1.35	0.01	1.99	0	2	0.01	0.64	0.01	0.66	0	0.21	0.21	0.08	0.3	0.05	0.09	4.45
Carbon Monoxide Emissions																				
Run Exh	0.01	7.35	0	7.36	0.08	9.77	0.02	9.87	0.11	2.68	0.05	2.85	0.03	0.66	0.69	0.42	1.1	0.28	0.52	21.99
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.01	0.01	0.07	0.08	0	0	0.11
Start Exh	0	4.34	0	4.34	0.01	4.82	0	4.83	0.01	1.81	0	1.83	0.02	0.93	0.95	0	0.95	0.04	0.07	12.06
Total Ex	0.01	11.69	0	11.7	0.09	14.59	0.02	14.7	0.13	4.52	0.05	4.7	0.05	1.6	1.65	0.49	2.14	0.33	0.6	34.16
Oxides of Nitrogen Emissions																				
Run Exh	0	0.63	0	0.63	0	1.05	0.04	1.09	0.01	0.39	0.1	0.49	0	0.17	0.18	1.07	1.25	0.31	0.03	3.8
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.22	0.22	0	0	0.22
Start Exh	0	0.24	0	0.24	0	0.3	0	0.3	0	0.26	0	0.26	0	0.1	0.1	0	0.1	0.01	0	0.91
Total Ex	0	0.87	0	0.87	0	1.35	0.04	1.4	0.01	0.65	0.1	0.76	0	0.28	0.28	1.29	1.57	0.31	0.03	4.94
Carbon Dioxide Emissions 0																				
Run Exh	0	3.47	0	3.47	0	3.05	0.01	3.06	0	1	0.03	1.02	0	0.19	0.19	0.58	0.78	0.08	0	8.41
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.14	0	0.14	0	0.13	0	0.13	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Total Ex	0	3.62	0	3.62	0	3.18	0.01	3.19	0	1.04	0.03	1.07	0	0.19	0.19	0.59	0.79	0.08	0	8.74
PM10 Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.03	0	0.04	0	0	0	0.04	0.04	0.01	0	0.28
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.03
Total Ex	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.04	0	0	0	0.04	0.04	0.01	0	0.31
TireWear	0	0.08	0	0.08	0	0.06	0	0.06	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.16
BrakeWr	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0.01	0	0	0.25
Total	0	0.31	0	0.31	0	0.26	0	0.27	0	0.07	0	0.08	0	0.01	0.01	0.05	0.06	0.01	0	0.72
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.03	0	0.03	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.08
Fuel Consumpt:(000 gallons)																				
Gasoline	0.01	372.29	0	372.31	0.08	328.02	0	328.1	0.07	107.09	0	107.15	0.02	20.19	20.22	0	20.22	2.1	0.48	830.36
Diesel	0	0	0.06	0.06	0	0	0.88	0.88	0	0	2.41	2.41	0	0	0	53.42	53.42	5.25	0	62.01

```
Title    :       Placer     County          2020 Annual   -        NO       BUILD    Refined  Speed    Bin
Version  :       Emfac2002  V2.2        Sept           23     2002 **       WIS      Enabled  **
Run      Date    :            3/26/2007 19:25:51
Scen     Year:          2020 --          Model    Years:       1975 to           2020
Season   :       Annual
Area     :       Placer     County      Grand    Total
I/M      Stat    :          I           and      M        program  in       effect
Emission Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	34	317954	161	318150	94	237550	1504	239149	53	56853	1574	58481	18	19996	20013	5510	25523	432	3370	645104
VMT/1000	0	9888	2	9890	1	7260	30	7292	1	1795	59	1854	0	291	291	325	616	51	22	19725
Trips	131	1986250	781	1987160	360	1468150	8113	1476620	228	439720	16261	456209	185	31788	31973	56821	88794	1726	6738	4017250
Reactive Organic Gas Emissions																				
Run Exh	0	0.15	0	0.15	0	0.26	0	0.27	0.01	0.11	0.01	0.13	0	0.04	0.04	0.08	0.13	0.07	0.06	0.8
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Ex	0	0.35	0	0.35	0	0.4	0	0.4	0	0.2	0	0.2	0	0.06	0.06	0	0.06	0	0.02	1.04
Total Ex	0	0.5	0	0.5	0	0.66	0	0.67	0.01	0.31	0.01	0.33	0	0.11	0.11	0.1	0.21	0.07	0.08	1.86
Diurnal	0	0.15	0	0.15	0	0.17	0	0.17	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.38
Hot Soak	0	0.15	0	0.15	0	0.16	0	0.16	0	0.04	0	0.04	0	0	0	0	0	0	0	0.36
Running	0	0.61	0	0.61	0	1.24	0	1.25	0	0.41	0	0.41	0	0.13	0.13	0	0.13	0	0.01	2.41
Resting	0	0.08	0	0.08	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0	0	0	0.2
Total	0	1.48	0	1.49	0.01	2.33	0	2.34	0.01	0.83	0.01	0.85	0.01	0.24	0.24	0.1	0.34	0.07	0.1	5.2
Carbon Monoxide Emissions																				
Run Exh	0.01	8.09	0	8.1	0.11	11.69	0.02	11.82	0.18	3.66	0.07	3.9	0.04	0.83	0.87	0.49	1.36	0.36	0.6	26.15
Idle Exh	0	0	0	0	0	0	0	0	0	0.03	0	0.03	0	0.01	0.01	0.08	0.1	0	0	0.13
Start Ex	0	4.76	0	4.77	0.01	5.63	0	5.64	0.02	2.31	0	2.33	0.03	1.09	1.12	0	1.12	0.05	0.08	13.99
Total Ex	0.01	12.85	0	12.86	0.12	17.32	0.02	17.46	0.2	6	0.07	6.26	0.07	1.93	2.01	0.57	2.58	0.41	0.68	40.26
Oxides of Nitrogen Emissions																				
Run Exh	0	0.7	0	0.7	0.01	1.28	0.04	1.33	0.01	0.54	0.12	0.67	0	0.21	0.21	1.27	1.48	0.35	0.03	4.56
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.26	0.26	0	0	0.26
Start Ex	0	0.26	0	0.26	0	0.36	0	0.36	0	0.33	0	0.33	0	0.12	0.12	0	0.12	0.01	0	1.08
Total Ex	0	0.96	0	0.97	0.01	1.64	0.04	1.68	0.01	0.87	0.12	1.01	0	0.32	0.33	1.52	1.85	0.35	0.03	5.89
Carbon Dioxide Emissions 0																				
Run Exh	0	3.73	0	3.73	0	3.47	0.01	3.48	0	1.24	0.03	1.27	0	0.22	0.22	0.69	0.91	0.09	0	9.48
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Ex	0	0.15	0	0.15	0	0.14	0	0.14	0	0.05	0	0.05	0	0	0	0	0	0	0	0.35
Total Ex	0	3.89	0	3.89	0	3.61	0.01	3.63	0	1.29	0.03	1.32	0	0.22	0.22	0.7	0.92	0.09	0	9.85
PM10 Emissions																				
Run Exh	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.05	0	0	0	0.04	0.05	0.01	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.11	0	0.11	0	0.14	0	0.14	0	0.05	0	0.05	0	0	0	0.05	0.05	0.01	0	0.36
TireWear	0	0.09	0	0.09	0	0.06	0	0.06	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.18
BrakeWr	0	0.14	0	0.14	0	0.1	0	0.1	0	0.02	0	0.03	0	0	0	0	0.01	0	0	0.27
Total	0	0.33	0	0.33	0	0.3	0	0.3	0	0.09	0	0.1	0	0.01	0.01	0.06	0.07	0.01	0	0.81
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.03	0	0.04	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.1
Fuel Consumpt: (000 gallons)																				
Gasoline	0.02	400.05	0	400.07	0.1	372.96	0	373.06	0.1	133.1	0	133.2	0.03	23	23.04	0	23.04	2.34	0.55	932.26
Diesel	0	0	0.06	0.06	0	0	1.05	1.05	0	0	2.84	2.84	0	0	0	63.1	63.1	5.81	0	72.86

Title : Placer County Subarea 2020 Annual ALT 1 No Watt
Version : Emfac2002 V2.2 23-Sep 2002 ** WIS Enabled **
Run Date : 3/26/2007 19:12:03
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (LT)
I/M Stat : No I and M program in effect
Emissions:Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	1	4088	2	4091	3	7527	43	7573	5	4410	82	4497	1	463	464	140	604	18	100	16882
VMT/1000	0	190	0	190	0	333	1	334	0	195	4	199	0	10	10	11	21	3	1	748
Trips	5	25412	10	25427	11	46543	236	46790	22	30818	795	31636	14	1117	1131	2080	3211	72	199	107334
Reactive Organic Gas Emissons																				
Run Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.03	0	0	0	0	0.01	0.02	0	0.09
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.05
Total Ex	0	0.01	0	0.02	0	0.04	0	0.04	0	0.05	0	0.05	0	0.01	0.01	0	0.01	0.02	0	0.14
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.12
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.03	0	0.03	0	0.11	0	0.11	0	0.1	0	0.1	0	0.01	0.01	0	0.01	0.02	0	0.29
Carbon Monoxide Emissions																				
Run Exh	0	0.26	0	0.26	0.01	0.82	0	0.83	0.04	0.63	0.01	0.67	0.01	0.05	0.06	0.02	0.08	0.07	0.02	1.93
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.11	0	0.11	0	0.28	0	0.28	0	0.26	0	0.26	0.01	0.05	0.06	0	0.06	0	0	0.72
Total Ex	0	0.37	0	0.37	0.01	1.1	0	1.11	0.04	0.89	0.01	0.93	0.02	0.1	0.12	0.02	0.14	0.07	0.02	2.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.03	0	0.03	0	0.1	0	0.1	0	0.1	0.01	0.11	0	0.01	0.01	0.05	0.05	0.03	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.07
Total	0	0.03	0	0.03	0	0.12	0	0.12	0	0.13	0.01	0.14	0	0.02	0.02	0.05	0.07	0.03	0	0.39
Carbon Dioxide Emissions 0																				
Run Exh	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.13	0	0.01	0.01	0.02	0.03	0.01	0	0.4
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total Ex	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.14	0	0.01	0.01	0.02	0.03	0.01	0	0.41
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.04
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fuel Consumpti(000 gallons)																				
Gasoline	0	7.61	0	7.61	0.01	16.91	0	16.92	0.01	13.96	0	13.97	0	0.78	0.79	0	0.79	0.15	0.02	39.46
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	0.18	0.18	0	0	0	2.12	2.12	0.36	0	2.7

Title : Placer County Subarea 2020 Annual ALT 1 No Watt
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/26/2007 19:12:03
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emissions: Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	4	16307	12	16323	15	18590	187	18792	9	5489	158	5657	4	1903	1908	610	2518	17	335	43642
VMT/1000	0	484	0	484	0	532	3	535	0	159	5	164	0	25	26	38	64	2	2	1251
Trips	16	101147	56	101219	59	114210	993	115262	44	42803	1627	44472	17	2884	2900	6076	8976	67	670	270666
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.03	0	0.03	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0.01	0.08
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.03	0	0.03	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.04	0	0.01	0.01	0.01	0.02	0	0.01	0.18
Diurnal	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Hot Soak	0	0.01	0	0.01	0	0.01	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Running	0	0.04	0	0.04	0	0.11	0	0.11	0	0.04	0	0.04	0	0.01	0.01	0	0.01	0	0	0.21
Resting	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.1	0	0.1	0	0.22	0	0.22	0	0.09	0	0.09	0	0.02	0.02	0.01	0.03	0	0.01	0.46
Carbon Monoxide Emissions																				
Run Exh	0	0.48	0	0.48	0.02	1.1	0	1.12	0.03	0.35	0.01	0.38	0.01	0.12	0.13	0.05	0.18	0.01	0.06	2.23
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.53	0	0.53	0	0.24	0	0.24	0	0.11	0.11	0	0.11	0	0.01	1.21
Total Ex	0	0.79	0	0.8	0.02	1.63	0	1.65	0.03	0.59	0.01	0.63	0.01	0.23	0.24	0.06	0.3	0.01	0.06	3.46
Oxides of Nitrogen Emissions																				
Run Exh	0	0.05	0	0.05	0	0.13	0	0.13	0	0.05	0.01	0.07	0	0.02	0.02	0.15	0.17	0.01	0	0.44
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0.02	0	0.02	0	0.03	0	0.03	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.06	0	0.06	0	0.16	0	0.17	0	0.09	0.01	0.1	0	0.03	0.03	0.18	0.22	0.01	0	0.56
Carbon Dioxide Emissions 0																				
Run Exh	0	0.19	0	0.19	0	0.26	0	0.26	0	0.11	0	0.11	0	0.02	0.02	0.08	0.1	0	0	0.67
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total Ex	0	0.2	0	0.2	0	0.27	0	0.27	0	0.12	0	0.12	0	0.02	0.02	0.08	0.1	0	0	0.69
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpti(000 gallons)																				
Gasoline	0	20.15	0	20.15	0.02	28.03	0	28.05	0.02	12.06	0	12.08	0.01	2.03	2.03	0	2.03	0.09	0.05	62.44
Diesel	0	0	0	0	0	0	0.12	0.12	0	0	0.25	0.25	0	0	0	7.56	7.56	0.2	0	8.14

Title : Placer County Subarea 2020 Annual ALT 1 No Watt
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/26/2007 19:12:03
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emissions: Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	29	299592	148	299769	76	212878	1283	214237	39	47275	1344	48658	13	17750	17763	4791	22554	399	2955	588572
VMT/1000	0	9276	2	9278	1	6439	26	6466	1	1451	50	1502	0	257	257	278	535	46	19	17847
Trips	111	1872390	720	1873220	291	1316330	6931	1323550	163	368611	13936	382710	155	27979	28134	48999	77133	1596	5909	3664120
Reactive Organic Gas Emissions																				
Run Exh	0	0.13	0	0.13	0	0.2	0	0.21	0.01	0.07	0.01	0.09	0	0.04	0.04	0.07	0.11	0.04	0.05	0.63
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.35	0	0.35	0	0.15	0	0.16	0	0.05	0.06	0	0.06	0	0.02	0.9
Total Ex	0	0.45	0	0.45	0	0.55	0	0.56	0.01	0.23	0.01	0.25	0	0.09	0.09	0.08	0.18	0.05	0.07	1.55
Diurnal	0	0.14	0	0.14	0	0.15	0	0.15	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.34
Hot Soak	0	0.14	0	0.14	0	0.14	0	0.14	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Running	0	0.57	0	0.57	0	1.08	0	1.08	0	0.32	0	0.32	0	0.11	0.12	0	0.12	0	0.01	2.1
Resting	0	0.07	0	0.07	0	0.08	0	0.08	0	0.02	0	0.02	0	0	0	0	0	0	0	0.17
Total	0	1.36	0	1.36	0.01	2.01	0	2.02	0.01	0.64	0.01	0.66	0	0.21	0.21	0.08	0.3	0.05	0.09	4.48
Carbon Monoxide Emissions																				
Run Exh	0.01	7.37	0	7.37	0.08	9.8	0.02	9.9	0.12	2.69	0.05	2.86	0.03	0.67	0.69	0.42	1.11	0.28	0.54	22.07
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.01	0.01	0.07	0.08	0	0	0.11
Start Exh	0	4.37	0	4.37	0.01	4.85	0	4.86	0.01	1.83	0	1.84	0.02	0.93	0.95	0	0.95	0.04	0.07	12.14
Total Ex	0.01	11.73	0	11.74	0.09	14.65	0.02	14.76	0.13	4.54	0.06	4.73	0.05	1.61	1.66	0.49	2.15	0.33	0.61	34.32
Oxides of Nitrogen Emissions																				
Run Exh	0	0.63	0	0.64	0	1.06	0.04	1.1	0.01	0.39	0.1	0.5	0	0.18	0.18	1.08	1.26	0.31	0.03	3.83
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.22	0.22	0	0	0.22
Start Exh	0	0.24	0	0.24	0	0.31	0	0.31	0	0.27	0	0.27	0	0.1	0.1	0	0.1	0.01	0	0.92
Total Ex	0	0.87	0	0.88	0.01	1.36	0.04	1.41	0.01	0.66	0.1	0.77	0	0.28	0.28	1.3	1.58	0.32	0.03	4.97
Carbon Dioxide Emissions 0																				
Run Exh	0	3.5	0	3.5	0	3.07	0.01	3.08	0	1	0.03	1.03	0	0.19	0.19	0.59	0.78	0.08	0	8.47
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.15	0	0.15	0	0.13	0	0.13	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Total Ex	0	3.64	0	3.64	0	3.2	0.01	3.21	0	1.05	0.03	1.07	0	0.2	0.2	0.6	0.79	0.08	0	8.81
PM10 Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.03	0	0.04	0	0	0	0.04	0.04	0.01	0	0.28
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.03
Total Ex	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.04	0	0	0	0.04	0.04	0.01	0	0.31
TireWear	0	0.08	0	0.08	0	0.06	0	0.06	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.16
BrakeWr	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0	0	0	0.25
Total	0	0.31	0	0.31	0	0.27	0	0.27	0	0.07	0	0.08	0	0.01	0.01	0.05	0.06	0.01	0	0.72
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.09
Fuel Consumpti(000 gallons)																				
Gasoline	0.01	375.04	0	375.05	0.08	330.44	0	330.52	0.07	107.87	0	107.94	0.02	20.33	20.35	0	20.35	2.11	0.48	836.46
Diesel	0	0	0.06	0.06	0	0	0.89	0.89	0	0	2.43	2.43	0	0	0	53.78	53.78	5.27	0	62.43

Title : Placer County Subarea 2020 Annual ALT 1 No Watt
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/26/2007 19:12:03
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emissions:Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	35	319986	162	320183	94	238995	1513	240603	53	57175	1584	58812	18	20117	20134	5542	25676	434	3390	649097
VMT/1000	0	9951	2	9953	1	7304	31	7336	1	1805	59	1865	0	293	293	327	620	51	23	19846
Trips	132	1998950	786	1999870	362	1477080	8160	1485600	229	442231	16358	458818	186	31979	32165	57155	89320	1734	6778	4042120
Reactive Organic Gas Emissions																				
Run Exh	0	0.15	0	0.15	0	0.26	0	0.27	0.01	0.11	0.01	0.13	0	0.04	0.04	0.08	0.13	0.07	0.06	0.8
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Exh	0	0.35	0	0.35	0	0.41	0	0.41	0	0.2	0	0.2	0	0.06	0.07	0	0.07	0	0.02	1.04
Total Ex	0	0.5	0	0.5	0	0.67	0	0.67	0.01	0.31	0.01	0.33	0	0.11	0.11	0.1	0.21	0.07	0.08	1.87
Diurnal	0	0.15	0	0.15	0	0.17	0	0.17	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.38
Hot Soak	0	0.15	0	0.15	0	0.16	0	0.16	0	0.04	0	0.04	0	0	0	0	0	0	0	0.36
Running	0	0.62	0	0.62	0	1.25	0	1.25	0	0.41	0	0.41	0	0.13	0.13	0	0.13	0	0.01	2.43
Resting	0	0.08	0	0.08	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0	0	0	0.2
Total	0	1.49	0	1.5	0.01	2.34	0	2.35	0.01	0.83	0.01	0.86	0.01	0.24	0.25	0.1	0.34	0.07	0.11	5.23
Carbon Monoxide Emissions																				
Run Exh	0.01	8.1	0	8.11	0.11	11.72	0.02	11.85	0.18	3.67	0.07	3.91	0.04	0.83	0.88	0.49	1.37	0.37	0.61	26.23
Idle Exh	0	0	0	0	0	0	0	0	0	0.03	0	0.03	0	0.01	0.01	0.08	0.1	0	0	0.13
Start Exh	0	4.79	0	4.8	0.01	5.66	0	5.68	0.02	2.33	0	2.34	0.03	1.1	1.12	0	1.12	0.05	0.08	14.07
Total Ex	0.01	12.89	0	12.91	0.13	17.38	0.02	17.52	0.2	6.02	0.07	6.29	0.07	1.94	2.02	0.58	2.59	0.42	0.7	40.43
Oxides of Nitrogen Emissions																				
Run Exh	0	0.71	0	0.71	0.01	1.29	0.04	1.34	0.01	0.54	0.12	0.67	0	0.21	0.21	1.27	1.48	0.35	0.03	4.58
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.26	0.26	0	0	0.26
Start Exh	0	0.26	0	0.26	0	0.36	0	0.36	0	0.33	0	0.33	0	0.12	0.12	0	0.12	0.01	0	1.08
Total Ex	0	0.97	0	0.97	0.01	1.65	0.04	1.7	0.01	0.88	0.12	1.01	0	0.33	0.33	1.53	1.86	0.36	0.03	5.93
Carbon Dioxide Emissions 0																				
Run Exh	0	3.76	0	3.76	0	3.49	0.01	3.5	0	1.25	0.03	1.28	0	0.22	0.22	0.69	0.91	0.09	0	9.54
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.16	0	0.16	0	0.15	0	0.15	0	0.05	0	0.05	0	0	0	0	0	0	0	0.35
Total Ex	0	3.91	0	3.91	0	3.64	0.01	3.65	0	1.3	0.03	1.33	0	0.22	0.22	0.71	0.93	0.09	0	9.91
PM10 Emissions																				
Run Exh	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.05	0	0	0	0.05	0.05	0.01	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.11	0	0.11	0	0.14	0	0.14	0	0.05	0	0.05	0	0	0	0.05	0.05	0.01	0	0.36
TireWear	0	0.09	0	0.09	0	0.06	0	0.06	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.18
BrakeWr	0	0.14	0	0.14	0	0.1	0	0.1	0	0.02	0	0.03	0	0	0	0	0.01	0	0	0.27
Total	0	0.33	0	0.34	0	0.3	0	0.31	0	0.09	0	0.1	0	0.01	0.01	0.06	0.07	0.01	0	0.82
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.04	0	0.04	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.1
Fuel Consumpti(000 gallons)																				
Gasoline	0.02	402.8	0	402.81	0.11	375.37	0	375.48	0.1	133.89	0	133.99	0.03	23.14	23.17	0	23.17	2.35	0.56	938.36
Diesel	0	0	0.06	0.06	0	0	1.05	1.05	0	0	2.86	2.86	0	0	0	63.46	63.46	5.83	0	73.27

```
Title    :       Placer    County    Subarea     2020 Annual  ALT           1 NORTH   IC
Version  :       Emfac2002 V2.2      Sept          23     2002 **      WIS     Enabled  **
Run      Date    :          3/27/2007 18:57:02
Scen     Year:         2020 --       Model   Years:       1975 to          2020
Season   :       Annual
Area     :       Placer    (LT)
I/M      Stat    :         No        I       and     M       program  in      effect
Emissions:Tons   Per       Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	1	4088	2	4091	3	7527	43	7573	5	4410	82	4497	1	463	464	140	604	18	100	16882
VMT/1000	0	190	0	190	0	333	1	334	0	195	4	199	0	10	10	11	21	3	1	748
Trips	5	25412	10	25427	11	46543	236	46790	22	30818	795	31636	14	1117	1131	2080	3211	72	199	107334
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.03	0	0	0	0	0.01	0.02	0	0.09
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.05
Total Ex	0	0.01	0	0.02	0	0.04	0	0.04	0	0.05	0	0.05	0	0.01	0.01	0	0.01	0.02	0	0.14
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.12
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.03	0	0.03	0	0.11	0	0.11	0	0.1	0	0.1	0	0.01	0.01	0	0.01	0.02	0	0.29
Carbon Monoxide Emissions																				
Run Exh	0	0.26	0	0.26	0.01	0.82	0	0.83	0.04	0.63	0.01	0.67	0.01	0.05	0.06	0.02	0.08	0.07	0.02	1.93
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.11	0	0.11	0	0.28	0	0.28	0	0.26	0	0.26	0.01	0.05	0.06	0	0.06	0	0	0.72
Total Ex	0	0.37	0	0.37	0.01	1.1	0	1.11	0.04	0.89	0.01	0.93	0.02	0.1	0.12	0.02	0.14	0.07	0.02	2.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.03	0	0.03	0	0.1	0	0.1	0	0.1	0.01	0.11	0	0.01	0.01	0.05	0.05	0.03	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.07
Total Ex	0	0.03	0	0.03	0	0.12	0	0.12	0	0.13	0.01	0.14	0	0.02	0.02	0.05	0.07	0.03	0	0.39
Carbon Dioxide Emissions 0																				
Run Exh	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.13	0	0.01	0.01	0.02	0.03	0.01	0	0.4
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total Ex	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.14	0	0.01	0.01	0.02	0.03	0.01	0	0.41
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.04
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fuel Consumpt:(000 gallons)																				
Gasoline	0	7.61	0	7.61	0.01	16.91	0	16.92	0.01	13.96	0	13.97	0	0.78	0.79	0	0.79	0.15	0.02	39.46
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	0.18	0.18	0	0	0	2.12	2.12	0.36	0	2.7

```
Title     :       Placer     County     Subarea      2020 Annual   ALT            1 NORTH    IC
Version   :       Emfac2002  V2.2       Sept           23     2002 **       WIS      Enabled  **
Run       Date    :           3/27/2007 18:57:02
Scen      Year:         2020 --         Model    Years:       1975 to           2020
Season    :       Annual
Area      :       Placer     (MC)
I/M       Stat    :          I          and      M        program  in       effect
Emissions:Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	4	16307	12	16323	15	18590	187	18792	9	5489	158	5657	4	1903	1908	610	2518	17	335	43642
VMT/1000	0	484	0	484	0	532	3	535	0	159	5	164	0	25	26	38	64	2	2	1251
Trips	16	101147	56	101219	59	114210	993	115262	44	42802	1627	44472	17	2884	2900	6076	8976	67	670	270666
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.03	0	0.03	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0.01	0.08
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.03	0	0.03	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.04	0	0.01	0.01	0.01	0.02	0	0.01	0.18
Diurnal	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Hot Soak	0	0.01	0	0.01	0	0.01	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Running	0	0.04	0	0.04	0	0.11	0	0.11	0	0.04	0	0.04	0	0.01	0.01	0	0.01	0	0	0.21
Resting	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.1	0	0.1	0	0.22	0	0.22	0	0.09	0	0.09	0	0.02	0.02	0.01	0.03	0	0.01	0.46
Carbon Monoxide Emissions																				
Run Exh	0	0.48	0	0.48	0.02	1.1	0	1.12	0.03	0.35	0.01	0.38	0.01	0.12	0.13	0.05	0.18	0.01	0.06	2.23
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.53	0	0.53	0	0.24	0	0.24	0	0.11	0.11	0	0.11	0	0.01	1.21
Total Ex	0	0.79	0	0.8	0.02	1.63	0	1.65	0.03	0.59	0.01	0.63	0.01	0.23	0.24	0.06	0.3	0.01	0.06	3.46
Oxides of Nitrogen Emissions																				
Run Exh	0	0.05	0	0.05	0	0.13	0	0.13	0	0.05	0.01	0.07	0	0.02	0.02	0.15	0.17	0.01	0	0.44
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0.02	0	0.02	0	0.03	0	0.03	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.06	0	0.06	0	0.16	0	0.17	0	0.09	0.01	0.1	0	0.03	0.03	0.18	0.22	0.01	0	0.56
Carbon Dioxide Emissions 0																				
Run Exh	0	0.19	0	0.19	0	0.26	0	0.26	0	0.11	0	0.11	0	0.02	0.02	0.08	0.1	0	0	0.67
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total Ex	0	0.2	0	0.2	0	0.27	0	0.27	0	0.12	0	0.12	0	0.02	0.02	0.08	0.1	0	0	0.69
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt:(000 gallons)																				
Gasoline	0	20.15	0	20.15	0.02	28.03	0	28.05	0.02	12.06	0	12.08	0.01	2.03	2.03	0	2.03	0.09	0.05	62.44
Diesel	0	0	0	0	0	0	0.12	0.12	0	0	0.25	0.25	0	0	0	7.56	7.56	0.2	0	8.14

Title : Placer County Subarea 2020 Annual ALT 1 NORTH IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/27/2007 18:57:02
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emissions:Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	29	300329	149	300507	76	213401	1287	214764	39	47392	1347	48778	13	17794	17806	4803	22609	400	2962	590020
VMT/1000	0	9299	2	9301	1	6455	26	6482	1	1455	50	1506	0	258	258	278	536	46	20	17891
Trips	111	1877000	722	1877830	292	1319570	6948	1326810	164	369534	13972	383670	156	28040	28195	49106	77301	1600	5923	3673140
Reactive Organic Gas Emissions																				
Run Exh	0	0.13	0	0.13	0	0.21	0	0.21	0.01	0.07	0.01	0.09	0	0.04	0.04	0.07	0.11	0.04	0.06	0.64
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.35	0	0.35	0	0.15	0	0.16	0	0.05	0.06	0	0.06	0	0.02	0.9
Total Ex	0	0.45	0	0.45	0	0.55	0	0.56	0.01	0.23	0.01	0.25	0	0.09	0.09	0.08	0.18	0.05	0.07	1.55
Diurnal	0	0.14	0	0.14	0	0.15	0	0.15	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.33
Hot Soak	0	0.14	0	0.14	0	0.14	0	0.14	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Running	0	0.57	0	0.57	0	1.09	0	1.09	0	0.32	0	0.32	0	0.12	0.12	0	0.12	0	0.01	2.11
Resting	0	0.07	0	0.07	0	0.08	0	0.08	0	0.02	0	0.02	0	0	0	0	0	0	0	0.18
Total	0	1.36	0	1.37	0.01	2.01	0	2.02	0.01	0.65	0.01	0.66	0	0.21	0.21	0.08	0.3	0.05	0.09	4.49
Carbon Monoxide Emissions																				
Run Exh	0.01	7.41	0	7.42	0.08	9.86	0.02	9.96	0.12	2.71	0.05	2.88	0.03	0.67	0.69	0.42	1.11	0.29	0.54	22.2
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.01	0.01	0.07	0.08	0	0	0.11
Start Exh	0	4.38	0	4.38	0.01	4.86	0	4.87	0.01	1.83	0	1.84	0.02	0.94	0.96	0	0.96	0.04	0.07	12.17
Total Ex	0.01	11.79	0	11.8	0.09	14.72	0.02	14.83	0.13	4.56	0.06	4.75	0.05	1.62	1.66	0.49	2.16	0.33	0.61	34.48
Oxides of Nitrogen Emissions																				
Run Exh	0	0.64	0	0.64	0	1.06	0.04	1.11	0.01	0.39	0.1	0.5	0	0.18	0.18	1.08	1.26	0.31	0.03	3.84
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.22	0.22	0	0	0.22
Start Exh	0	0.24	0	0.24	0	0.31	0	0.31	0	0.27	0	0.27	0	0.1	0.1	0	0.1	0.01	0	0.92
Total Ex	0	0.88	0	0.88	0.01	1.37	0.04	1.41	0.01	0.66	0.1	0.77	0	0.28	0.28	1.3	1.58	0.32	0.03	4.99
Carbon Dioxide Emissions 0																				
Run Exh	0	3.52	0	3.52	0	3.09	0.01	3.1	0	1.01	0.03	1.04	0	0.19	0.19	0.59	0.78	0.08	0	8.53
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.15	0	0.15	0	0.13	0	0.13	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Total Ex	0	3.67	0	3.67	0	3.22	0.01	3.23	0	1.05	0.03	1.08	0	0.2	0.2	0.6	0.8	0.08	0	8.86
PM10 Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.03	0	0.04	0	0	0	0.04	0.04	0.01	0	0.28
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.03
Total Ex	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.04	0	0	0	0.04	0.04	0.01	0	0.32
TireWear	0	0.08	0	0.08	0	0.06	0	0.06	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.17
BrakeWr	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0.01	0	0	0.25
Total	0	0.31	0	0.31	0	0.27	0	0.27	0	0.07	0	0.08	0	0.01	0.01	0.05	0.06	0.01	0	0.73
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.09
Fuel Consumpt:(000 gallons)																				
Gasoline	0.01	377.55	0	377.56	0.08	332.65	0	332.73	0.07	108.53	0	108.6	0.02	20.38	20.4	0	20.4	2.12	0.49	841.91
Diesel	0	0	0.06	0.06	0	0	0.89	0.89	0	0	2.43	2.43	0	0	0	53.91	53.91	5.29	0	62.57

Title : Placer County Subarea 2020 Annual ALT 1 NORTH IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/27/2007 18:57:02
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emissions:Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	35	320724	163	320921	95	239519	1516	241130	53	57291	1587	58932	18	20160	20178	5553	25731	435	3397	650545
VMT/1000	0	9974	2	9976	1	7320	31	7352	1	1808	59	1868	0	293	293	327	621	51	23	19890
Trips	132	2003560	787	2004480	363	1480320	8177	1488860	230	443155	16393	459778	186	32040	32226	57261	89488	1738	6792	4051130
Reactive Organic Gas Emissions																				
Run Exh	0	0.15	0	0.15	0	0.26	0	0.27	0.01	0.11	0.01	0.13	0	0.04	0.04	0.08	0.13	0.07	0.06	0.81
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Exh	0	0.35	0	0.35	0	0.41	0	0.41	0	0.2	0	0.2	0	0.06	0.07	0	0.07	0	0.02	1.04
Total Ex	0	0.5	0	0.5	0	0.67	0	0.68	0.01	0.31	0.01	0.33	0	0.11	0.11	0.1	0.21	0.07	0.08	1.88
Diurnal	0	0.15	0	0.15	0	0.17	0	0.17	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.38
Hot Soak	0	0.15	0	0.15	0	0.16	0	0.16	0	0.04	0	0.04	0	0	0	0	0	0	0	0.36
Running	0	0.62	0	0.62	0	1.25	0	1.26	0	0.41	0	0.41	0	0.13	0.13	0	0.13	0	0.01	2.43
Resting	0	0.08	0	0.08	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0	0	0	0.2
Total	0	1.5	0	1.5	0.01	2.35	0	2.36	0.01	0.83	0.01	0.86	0.01	0.24	0.25	0.1	0.35	0.07	0.11	5.24
Carbon Monoxide Emissions																				
Run Exh	0.01	8.15	0	8.16	0.11	11.78	0.02	11.91	0.18	3.68	0.07	3.93	0.04	0.84	0.88	0.49	1.37	0.37	0.61	26.35
Idle Exh	0	0	0	0	0	0	0	0	0	0.03	0	0.03	0	0.01	0.02	0.08	0.1	0	0	0.13
Start Exh	0	4.8	0	4.81	0.01	5.68	0	5.69	0.02	2.33	0	2.35	0.03	1.1	1.13	0	1.13	0.05	0.08	14.1
Total Ex	0.01	12.95	0	12.97	0.13	17.45	0.02	17.6	0.2	6.04	0.07	6.31	0.07	1.95	2.02	0.58	2.6	0.42	0.7	40.58
Oxides of Nitrogen Emissions																				
Run Exh	0	0.71	0	0.71	0.01	1.29	0.04	1.34	0.01	0.54	0.12	0.67	0	0.21	0.21	1.28	1.49	0.35	0.03	4.6
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.26	0.26	0	0	0.26
Start Exh	0	0.26	0	0.26	0	0.36	0	0.36	0	0.33	0	0.34	0	0.12	0.12	0	0.12	0.01	0	1.08
Total Ex	0	0.97	0	0.97	0.01	1.65	0.04	1.7	0.01	0.88	0.12	1.01	0	0.33	0.33	1.54	1.86	0.36	0.03	5.94
Carbon Dioxide Emissions 0																				
Run Exh	0	3.78	0	3.78	0	3.51	0.01	3.53	0	1.25	0.03	1.28	0	0.22	0.22	0.69	0.91	0.09	0	9.6
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.16	0	0.16	0	0.15	0	0.15	0	0.05	0	0.05	0	0	0	0	0	0	0	0.35
Total Ex	0	3.94	0	3.94	0	3.66	0.01	3.67	0	1.3	0.03	1.34	0	0.22	0.22	0.71	0.93	0.09	0	9.97
PM10 Emissions																				
Run Exh	0	0.1	0	0.1	0	0.12	0	0.13	0	0.04	0	0.05	0	0	0	0.05	0.05	0.01	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.11	0	0.11	0	0.14	0	0.14	0	0.05	0	0.05	0	0	0	0.05	0.05	0.01	0	0.36
TireWear	0	0.09	0	0.09	0	0.06	0	0.06	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.18
BrakeWr	0	0.14	0	0.14	0	0.1	0	0.1	0	0.03	0	0.03	0	0	0	0	0.01	0	0	0.28
Total	0	0.34	0	0.34	0	0.3	0	0.31	0	0.09	0	0.1	0	0.01	0.01	0.06	0.07	0.01	0	0.82
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.04	0	0.04	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.1
Fuel Consumpt:(000 gallons)																				
Gasoline	0.02	405.31	0	405.33	0.11	377.59	0	377.7	0.1	134.55	0	134.65	0.03	23.19	23.22	0	23.22	2.36	0.56	943.82
Diesel	0	0	0.07	0.07	0	0	1.06	1.06	0	0	2.86	2.86	0	0	0	63.59	63.59	5.85	0	73.42

```
Title    :       Placer     County     Subarea       2020 Annual   ALT            1 SOUTH    IC
Version  :       Emfac2002  V2.2       Sept            23     2002 **       WIS      Enabled  **
Run      Date    :          3/27/2007  19:12:11
Scen     Year:          2020 --         Model     Years:       1975 to           2020
Season   :       Annual
Area     :       Placer     (LT)
I/M      Stat    :          No         I         and      M        program  in       effect
Emission:Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	1	4088	2	4091	3	7527	43	7573	5	4410	82	4497	1	463	464	140	604	18	100	16882
VMT/1000	0	190	0	190	0	333	1	334	0	195	4	199	0	10	10	11	21	3	1	748
Trips	5	25412	10	25427	11	46543	236	46790	22	30818	795	31636	14	1117	1131	2080	3211	72	199	107334
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.03	0	0	0	0	0.01	0.02	0	0.09
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.05
Total Ex	0	0.01	0	0.02	0	0.04	0	0.04	0	0.05	0	0.05	0	0.01	0.01	0	0.01	0.02	0	0.14
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.12
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.03	0	0.03	0	0.11	0	0.11	0	0.1	0	0.1	0	0.01	0.01	0	0.01	0.02	0	0.29
Carbon Monoxide Emissions																				
Run Exh	0	0.26	0	0.26	0.01	0.82	0	0.83	0.04	0.63	0.01	0.67	0.01	0.05	0.06	0.02	0.08	0.07	0.02	1.93
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.11	0	0.11	0	0.28	0	0.28	0	0.26	0	0.26	0.01	0.05	0.06	0	0.06	0	0	0.72
Total Ex	0	0.37	0	0.37	0.01	1.1	0	1.11	0.04	0.89	0.01	0.93	0.02	0.1	0.12	0.02	0.14	0.07	0.02	2.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.03	0	0.03	0	0.1	0	0.1	0	0.1	0.01	0.11	0	0.01	0.01	0.05	0.05	0.03	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.07
Total Ex	0	0.03	0	0.03	0	0.12	0	0.12	0	0.13	0.01	0.14	0	0.02	0.02	0.05	0.07	0.03	0	0.39
Carbon Dioxide Emissions 0																				
Run Exh	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.13	0	0.01	0.01	0.02	0.03	0.01	0	0.4
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total Ex	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.14	0	0.01	0.01	0.02	0.03	0.01	0	0.41
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.04
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fuel Consumpt:(000 gallons)																				
Gasoline	0	7.61	0	7.61	0.01	16.91	0	16.92	0.01	13.96	0	13.97	0	0.78	0.79	0	0.79	0.15	0.02	39.46
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	0.18	0.18	0	0	0	2.12	2.12	0.36	0	2.7

```
Title    :       Placer     County     Subarea      2020 Annual   ALT            1 SOUTH    IC
Version  :       Emfac2002  V2.2       Sept           23     2002 **       WIS      Enabled  **
Run      Date    :          3/27/2007  19:12:11
Scen     Year:         2020 --         Model     Years:       1975 to          2020
Season   :       Annual
Area     :       Placer     (MC)
I/M      Stat    :          I          and       M        program  in       effect
Emission:Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	4	16307	12	16323	15	18590	187	18792	9	5489	158	5657	4	1903	1908	610	2518	17	335	43642
VMT/1000	0	484	0	484	0	532	3	535	0	159	5	164	0	25	26	38	64	2	2	1251
Trips	16	101147	56	101219	59	114210	993	115262	44	42802	1627	44472	17	2884	2900	6076	8976	67	670	270666
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.03	0	0.03	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0.01	0.08
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.03	0	0.03	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.04	0	0.01	0.01	0.01	0.02	0	0.01	0.18
Diurnal	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Hot Soak	0	0.01	0	0.01	0	0.01	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Running	0	0.04	0	0.04	0	0.11	0	0.11	0	0.04	0	0.04	0	0.01	0.01	0	0.01	0	0	0.21
Resting	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.1	0	0.1	0	0.22	0	0.22	0	0.09	0	0.09	0	0.02	0.02	0.01	0.03	0	0.01	0.46
Carbon Monoxide Emissions																				
Run Exh	0	0.48	0	0.48	0.02	1.1	0	1.12	0.03	0.35	0.01	0.38	0.01	0.12	0.13	0.05	0.18	0.01	0.06	2.23
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.53	0	0.53	0	0.24	0	0.24	0	0.11	0.11	0	0.11	0	0.01	1.21
Total Ex	0	0.79	0	0.8	0.02	1.63	0	1.65	0.03	0.59	0.01	0.63	0.01	0.23	0.24	0.06	0.3	0.01	0.06	3.46
Oxides of Nitrogen Emissions																				
Run Exh	0	0.05	0	0.05	0	0.13	0	0.13	0	0.05	0.01	0.07	0	0.02	0.02	0.15	0.17	0.01	0	0.44
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0.02	0	0.02	0	0.03	0	0.03	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.06	0	0.06	0	0.16	0	0.17	0	0.09	0.01	0.1	0	0.03	0.03	0.18	0.22	0.01	0	0.56
Carbon Dioxide Emissions 0																				
Run Exh	0	0.19	0	0.19	0	0.26	0	0.26	0	0.11	0	0.11	0	0.02	0.02	0.08	0.1	0	0	0.67
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total Ex	0	0.2	0	0.2	0	0.27	0	0.27	0	0.12	0	0.12	0	0.02	0.02	0.08	0.1	0	0	0.69
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt:(000 gallons)																				
Gasoline	0	20.15	0	20.15	0.02	28.03	0	28.05	0.02	12.06	0	12.08	0.01	2.03	2.03	0	2.03	0.09	0.05	62.44
Diesel	0	0	0	0	0	0	0.12	0.12	0	0	0.25	0.25	0	0	0	7.56	7.56	0.2	0	8.14

```
Title    :       Placer     County     Subarea      2020 Annual   ALT            1 SOUTH    IC
Version  :       Emfac2002  V2.2       Sept           23     2002 **       WIS      Enabled  **
Run      Date    :          3/27/2007  19:12:11
Scen     Year:          2020 --         Model     Years:       1975 to          2020
Season   :       Annual
Area     :       Placer     (SV)
I/M      Stat    :          I          and       M        program  in       effect
Emission:Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	29	300606	149	300784	76	213598	1288	214962	39	47435	1348	48823	13	17810	17822	4808	22630	401	2965	590565
VMT/1000	0	9308	2	9309	1	6461	26	6488	1	1456	50	1507	0	258	258	278	537	46	20	17907
Trips	111	1878730	723	1879570	292	1320780	6955	1328030	164	369863	13985	384011	156	28067	28223	49156	77380	1604	5929	3676520
Reactive Organic Gas Emissions																				
Run Exh	0	0.13	0	0.13	0	0.21	0	0.21	0.01	0.07	0.01	0.09	0	0.04	0.04	0.07	0.11	0.04	0.06	0.63
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Ex	0	0.32	0	0.32	0	0.35	0	0.35	0	0.15	0	0.16	0	0.05	0.06	0	0.06	0	0.02	0.9
Total Ex	0	0.45	0	0.45	0	0.55	0	0.56	0.01	0.23	0.01	0.25	0	0.09	0.09	0.08	0.18	0.05	0.07	1.55
Diurnal	0	0.14	0	0.14	0	0.15	0	0.15	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.34
Hot Soak	0	0.14	0	0.14	0	0.14	0	0.14	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Running	0	0.57	0	0.57	0	1.09	0	1.09	0	0.32	0	0.32	0	0.12	0.12	0	0.12	0	0.01	2.11
Resting	0	0.07	0	0.07	0	0.08	0	0.08	0	0.02	0	0.02	0	0	0	0	0	0	0	0.17
Total	0	1.36	0	1.37	0.01	2.01	0	2.02	0.01	0.65	0.01	0.66	0	0.21	0.21	0.08	0.3	0.05	0.09	4.49
Carbon Monoxide Emissions																				
Run Exh	0.01	7.38	0	7.39	0.08	9.82	0.02	9.92	0.12	2.7	0.05	2.87	0.03	0.67	0.69	0.42	1.11	0.29	0.54	22.12
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.01	0.01	0.07	0.09	0	0	0.11
Start Ex	0	4.38	0	4.38	0.01	4.87	0	4.88	0.01	1.83	0	1.85	0.02	0.94	0.96	0	0.96	0.04	0.07	12.18
Total Ex	0.01	11.76	0	11.77	0.09	14.69	0.02	14.8	0.13	4.55	0.06	4.74	0.05	1.62	1.67	0.49	2.16	0.33	0.61	34.41
Oxides of Nitrogen Emissions																				
Run Exh	0	0.64	0	0.64	0	1.06	0.04	1.1	0.01	0.39	0.1	0.5	0	0.18	0.18	1.08	1.26	0.31	0.03	3.84
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.22	0.22	0	0	0.22
Start Ex	0	0.24	0	0.24	0	0.31	0	0.31	0	0.27	0	0.27	0	0.1	0.1	0	0.1	0.01	0	0.92
Total Ex	0	0.87	0	0.88	0.01	1.37	0.04	1.41	0.01	0.66	0.1	0.77	0	0.28	0.28	1.31	1.58	0.32	0.03	4.99
Carbon Dioxide Emissions 0																				
Run Exh	0	3.51	0	3.51	0	3.08	0.01	3.09	0	1.01	0.03	1.03	0	0.19	0.19	0.59	0.78	0.08	0	8.51
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Ex	0	0.15	0	0.15	0	0.13	0	0.13	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Total Ex	0	3.66	0	3.66	0	3.21	0.01	3.22	0	1.05	0.03	1.08	0	0.2	0.2	0.6	0.8	0.08	0	8.84
PM10 Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.03	0	0.04	0	0	0	0.04	0.04	0.01	0	0.28
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.03
Total Ex	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.04	0	0	0	0.04	0.04	0.01	0	0.31
TireWear	0	0.08	0	0.08	0	0.06	0	0.06	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.17
BrakeWr	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.25
Total	0	0.31	0	0.31	0	0.27	0	0.27	0	0.07	0	0.08	0	0.01	0.01	0.05	0.06	0.01	0	0.73
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.09
Fuel Consumpt:(000 gallons)																				
Gasoline	0.01	376.4	0	376.41	0.08	331.63	0	331.72	0.07	108.26	0	108.33	0.02	20.4	20.42	0	20.42	2.13	0.49	839.49
Diesel	0	0	0.06	0.06	0	0	0.89	0.89	0	0	2.43	2.43	0	0	0	53.95	53.95	5.3	0	62.64

```
Title    :       Placer     County     Subarea      2020 Annual   ALT            1 SOUTH    IC
Version  :       Emfac2002  V2.2       Sept           23     2002 **       WIS      Enabled  **
Run      Date    :          3/27/2007  19:12:11
Scen     Year:          2020 --        Model     Years:       1975 to          2020
Season   :       Annual
Area     :       Placer     County     Grand     Total
I/M      Stat    :          I          and       M        program  in       effect
Emission:Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	35	321000	163	321198	95	239715	1518	241328	53	57335	1588	58977	18	20176	20194	5558	25752	436	3400	651090
VMT/1000	0	9982	2	9984	1	7326	31	7358	1	1810	59	1870	0	294	294	328	621	51	23	19907
Trips	133	2005290	788	2006210	363	1481540	8184	1490080	230	443483	16406	460119	187	32068	32254	57312	89566	1742	6798	4054520
Reactive Organic Gas Emissions																				
Run Exh	0	0.15	0	0.15	0	0.26	0	0.27	0.01	0.11	0.01	0.13	0	0.04	0.04	0.08	0.13	0.07	0.06	0.81
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Ex	0	0.35	0	0.35	0	0.41	0	0.41	0	0.2	0	0.2	0	0.06	0.07	0	0.07	0	0.02	1.05
Total Ex	0	0.5	0	0.5	0	0.67	0	0.68	0.01	0.31	0.01	0.33	0	0.11	0.11	0.1	0.21	0.07	0.08	1.87
Diurnal	0	0.15	0	0.15	0	0.17	0	0.17	0	0.05	0	0.05	0	0	0	0	0	0	0.01	0.38
Hot Soak	0	0.15	0	0.15	0	0.16	0	0.16	0	0.04	0	0.04	0	0	0	0	0	0	0	0.36
Running	0	0.62	0	0.62	0	1.26	0	1.26	0	0.41	0	0.41	0	0.13	0.13	0	0.13	0	0.01	2.43
Resting	0	0.08	0	0.08	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0	0	0	0.2
Total	0	1.5	0	1.5	0.01	2.35	0	2.36	0.01	0.83	0.01	0.86	0.01	0.24	0.25	0.1	0.35	0.07	0.11	5.25
Carbon Monoxide Emissions																				
Run Exh	0.01	8.11	0	8.13	0.11	11.73	0.02	11.87	0.18	3.67	0.07	3.92	0.04	0.84	0.88	0.49	1.38	0.37	0.62	26.27
Idle Exh	0	0	0	0	0	0	0	0	0	0.03	0	0.03	0	0.01	0.02	0.08	0.1	0	0	0.13
Start Ex	0	4.81	0	4.81	0.01	5.68	0	5.69	0.02	2.33	0	2.35	0.03	1.1	1.13	0	1.13	0.05	0.08	14.11
Total Ex	0.01	12.92	0	12.94	0.13	17.42	0.02	17.56	0.2	6.03	0.07	6.3	0.07	1.95	2.02	0.58	2.6	0.42	0.7	40.51
Oxides of Nitrogen Emissions																				
Run Exh	0	0.71	0	0.71	0.01	1.29	0.04	1.34	0.01	0.54	0.12	0.67	0	0.21	0.21	1.28	1.49	0.35	0.03	4.6
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.26	0.26	0	0	0.26
Start Ex	0	0.26	0	0.26	0	0.36	0	0.36	0	0.33	0	0.34	0	0.12	0.12	0	0.12	0.01	0	1.08
Total Ex	0	0.97	0	0.97	0.01	1.65	0.04	1.7	0.01	0.88	0.12	1.01	0	0.33	0.33	1.54	1.87	0.36	0.03	5.94
Carbon Dioxide Emissions 0																				
Run Exh	0	3.77	0	3.77	0	3.5	0.01	3.52	0	1.25	0.03	1.28	0	0.22	0.22	0.69	0.92	0.09	0	9.57
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Ex	0	0.16	0	0.16	0	0.15	0	0.15	0	0.05	0	0.05	0	0	0	0	0	0	0	0.35
Total Ex	0	3.93	0	3.93	0	3.65	0.01	3.66	0	1.3	0.03	1.33	0	0.22	0.22	0.71	0.93	0.09	0	9.94
PM10 Emissions																				
Run Exh	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.05	0	0	0	0.05	0.05	0.01	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.11	0	0.11	0	0.14	0	0.14	0	0.05	0	0.05	0	0	0	0.05	0.05	0.01	0	0.36
TireWear	0	0.09	0	0.09	0	0.06	0	0.06	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.18
BrakeWr	0	0.14	0	0.14	0	0.1	0	0.1	0	0.03	0	0.03	0	0	0	0	0.01	0	0	0.28
Total	0	0.34	0	0.34	0	0.3	0	0.31	0	0.09	0	0.1	0	0.01	0.01	0.06	0.07	0.01	0	0.82
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.04	0	0.04	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.1
Fuel Consumpt:(000 gallons)																				
Gasoline	0.02	404.16	0	404.18	0.11	376.57	0	376.68	0.1	134.28	0	134.38	0.03	23.21	23.24	0	23.24	2.36	0.56	941.4
Diesel	0	0	0.07	0.07	0	0	1.06	1.06	0	0	2.87	2.87	0	0	0	63.63	63.63	5.86	0	73.48

```
Title    :       Placer     County     Subarea     2020 Annual   ALT            2 NO       WATT
Version  :       Emfac2002  V2.2       Sept          23     2002 **       WIS      Enabled  **
Run      Date    :           3/27/2007 19:30:07
Scen     Year:         2020 --         Model    Years:       1975 to           2020
Season   :       Annual
Area     :       Placer     (LT)
I/M      Stat    :         No         I       and     M       program  in       effect
Emission Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	1	4088	2	4091	3	7527	43	7573	5	4410	82	4497	1	463	464	140	604	18	100	16882
VMT/1000	0	190	0	190	0	333	1	334	0	195	4	199	0	10	10	11	21	3	1	748
Trips	5	25412	10	25427	11	46543	236	46790	22	30818	795	31636	14	1117	1131	2080	3211	72	199	107334
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.03	0	0	0	0	0.01	0.02	0	0.09
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.05
Total Ex	0	0.01	0	0.02	0	0.04	0	0.04	0	0.05	0	0.05	0	0.01	0.01	0	0.01	0.02	0	0.14
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.12
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.03	0	0.03	0	0.11	0	0.11	0	0.1	0	0.1	0	0.01	0.01	0	0.01	0.02	0	0.29
Carbon Monoxide Emissions																				
Run Exh	0	0.26	0	0.26	0.01	0.82	0	0.83	0.04	0.63	0.01	0.67	0.01	0.05	0.06	0.02	0.08	0.07	0.02	1.93
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.11	0	0.11	0	0.28	0	0.28	0	0.26	0	0.26	0.01	0.05	0.06	0	0.06	0	0	0.72
Total Ex	0	0.37	0	0.37	0.01	1.1	0	1.11	0.04	0.89	0.01	0.93	0.02	0.1	0.12	0.02	0.14	0.07	0.02	2.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.03	0	0.03	0	0.1	0	0.1	0	0.1	0.01	0.11	0	0.01	0.01	0.05	0.05	0.03	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.07
Total Ex	0	0.03	0	0.03	0	0.12	0	0.12	0	0.13	0.01	0.14	0	0.02	0.02	0.05	0.07	0.03	0	0.39
Carbon Dioxide Emissions 0																				
Run Exh	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.13	0	0.01	0.01	0.02	0.03	0.01	0	0.4
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total Ex	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.14	0	0.01	0.01	0.02	0.03	0.01	0	0.41
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.04
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fuel Consumpt: (000 gallons)																				
Gasoline	0	7.61	0	7.61	0.01	16.91	0	16.92	0.01	13.96	0	13.97	0	0.78	0.79	0	0.79	0.15	0.02	39.46
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	0.18	0.18	0	0	0	2.12	2.12	0.36	0	2.7

Title : Placer County Subarea 2020 Annual ALT 2 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/27/2007 19:30:07
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	4	16307	12	16323	15	18590	187	18792	9	5489	158	5657	4	1903	1908	610	2518	17	335	43642
VMT/1000	0	484	0	484	0	532	3	535	0	159	5	164	0	25	26	38	64	2	2	1251
Trips	16	101147	56	101219	59	114210	993	115262	44	42802	1627	44472	17	2884	2900	6076	8976	67	670	270666
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.03	0	0.03	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0.01	0.08
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.03	0	0.03	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.04	0	0.01	0.01	0.01	0.02	0	0.01	0.18
Diurnal	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Hot Soak	0	0.01	0	0.01	0	0.01	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Running	0	0.04	0	0.04	0	0.11	0	0.11	0	0.04	0	0.04	0	0.01	0.01	0	0.01	0	0	0.21
Resting	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.1	0	0.1	0	0.22	0	0.22	0	0.09	0	0.09	0	0.02	0.02	0.01	0.03	0	0.01	0.46
Carbon Monoxide Emissions																				
Run Exh	0	0.48	0	0.48	0.02	1.1	0	1.12	0.03	0.35	0.01	0.38	0.01	0.12	0.13	0.05	0.18	0.01	0.06	2.23
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.53	0	0.53	0	0.24	0	0.24	0	0.11	0.11	0	0.11	0	0.01	1.21
Total Ex	0	0.79	0	0.8	0.02	1.63	0	1.65	0.03	0.59	0.01	0.63	0.01	0.23	0.24	0.06	0.3	0.01	0.06	3.46
Oxides of Nitrogen Emissions																				
Run Exh	0	0.05	0	0.05	0	0.13	0	0.13	0	0.05	0.01	0.07	0	0.02	0.02	0.15	0.17	0.01	0	0.44
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0.02	0	0.02	0	0.03	0	0.03	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.06	0	0.06	0	0.16	0	0.17	0	0.09	0.01	0.1	0	0.03	0.03	0.18	0.22	0.01	0	0.56
Carbon Dioxide Emissions 0																				
Run Exh	0	0.19	0	0.19	0	0.26	0	0.26	0	0.11	0	0.11	0	0.02	0.02	0.08	0.1	0	0	0.67
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total Ex	0	0.2	0	0.2	0	0.27	0	0.27	0	0.12	0	0.12	0	0.02	0.02	0.08	0.1	0	0	0.69
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumption (000 gallons)																				
Gasoline	0	20.15	0	20.15	0.02	28.03	0	28.05	0.02	12.06	0	12.08	0.01	2.03	2.03	0	2.03	0.09	0.05	62.44
Diesel	0	0	0	0	0	0	0.12	0.12	0	0	0.25	0.25	0	0	0	7.56	7.56	0.2	0	8.14

```
Title    :       Placer     County     Subarea     2020 Annual   ALT            2 NO       WATT
Version  :       Emfac2002  V2.2       Sept          23     2002 **       WIS      Enabled  **
Run      Date    :           3/27/2007 19:30:07
Scen     Year:         2020 --         Model    Years:       1975 to          2020
Season   :       Annual
Area     :       Placer     (SV)
I/M      Stat    :          I          and      M        program  in       effect
Emission Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	29	300067	149	300245	76	213214	1285	214576	39	47350	1346	48735	13	17778	17790	4799	22589	400	2960	589505
VMT/1000	0	9291	2	9293	1	6450	26	6477	1	1454	50	1504	0	258	258	278	536	46	20	17875
Trips	111	1875360	721	1876200	292	1318410	6942	1325640	163	369197	13957	383318	156	28023	28178	49076	77254	1600	5919	3669930
Reactive Organic Gas Emissions																				
Run Exh	0	0.13	0	0.13	0	0.2	0	0.21	0.01	0.07	0.01	0.09	0	0.04	0.04	0.07	0.11	0.04	0.06	0.63
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.35	0	0.35	0	0.15	0	0.16	0	0.05	0.06	0	0.06	0	0.02	0.9
Total Ex	0	0.45	0	0.45	0	0.55	0	0.56	0.01	0.23	0.01	0.25	0	0.09	0.09	0.08	0.18	0.05	0.07	1.55
Diurnal	0	0.14	0	0.14	0	0.15	0	0.15	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.33
Hot Soak	0	0.14	0	0.14	0	0.14	0	0.14	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Running	0	0.57	0	0.57	0	1.08	0	1.09	0	0.32	0	0.32	0	0.12	0.12	0	0.12	0	0.01	2.11
Resting	0	0.07	0	0.07	0	0.08	0	0.08	0	0.02	0	0.02	0	0	0	0	0	0	0	0.18
Total	0	1.36	0	1.36	0.01	2.01	0	2.02	0.01	0.64	0.01	0.66	0	0.21	0.21	0.08	0.3	0.05	0.09	4.48
Carbon Monoxide Emissions																				
Run Exh	0.01	7.37	0	7.38	0.08	9.81	0.02	9.91	0.12	2.7	0.05	2.87	0.03	0.67	0.69	0.42	1.11	0.29	0.54	22.1
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.01	0.01	0.07	0.08	0	0	0.11
Start Exh	0	4.37	0	4.38	0.01	4.86	0	4.87	0.01	1.83	0	1.84	0.02	0.94	0.96	0	0.96	0.04	0.07	12.16
Total Ex	0.01	11.75	0	11.76	0.09	14.67	0.02	14.78	0.13	4.55	0.06	4.73	0.05	1.61	1.66	0.49	2.15	0.33	0.61	34.37
Oxides of Nitrogen Emissions																				
Run Exh	0	0.63	0	0.64	0	1.06	0.04	1.1	0.01	0.39	0.1	0.5	0	0.18	0.18	1.08	1.26	0.31	0.03	3.83
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.22	0.22	0	0	0.22
Start Exh	0	0.24	0	0.24	0	0.31	0	0.31	0	0.27	0	0.27	0	0.1	0.1	0	0.1	0.01	0	0.92
Total Ex	0	0.87	0	0.88	0.01	1.37	0.04	1.41	0.01	0.66	0.1	0.77	0	0.28	0.28	1.3	1.58	0.32	0.03	4.98
Carbon Dioxide Emissions 0																				
Run Exh	0	3.5	0	3.51	0	3.08	0.01	3.09	0	1.01	0.03	1.03	0	0.19	0.19	0.59	0.78	0.08	0	8.49
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.15	0	0.15	0	0.13	0	0.13	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Total Ex	0	3.65	0	3.65	0	3.21	0.01	3.22	0	1.05	0.03	1.08	0	0.2	0.2	0.6	0.79	0.08	0	8.82
PM10 Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.03	0	0.04	0	0	0	0.04	0.04	0.01	0	0.28
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.03
Total Ex	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.04	0	0	0	0.04	0.04	0.01	0	0.31
TireWear	0	0.08	0	0.08	0	0.06	0	0.06	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.17
BrakeWr	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.25
Total	0	0.31	0	0.31	0	0.27	0	0.27	0	0.07	0	0.08	0	0.01	0.01	0.05	0.06	0.01	0	0.73
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.09
Fuel Consumption (000 gallons)																				
Gasoline	0.01	375.8	0	375.82	0.08	331.11	0	331.19	0.07	108.08	0	108.15	0.02	20.36	20.38	0	20.38	2.12	0.49	838.15
Diesel	0	0	0.06	0.06	0	0	0.89	0.89	0	0	2.43	2.43	0	0	0	53.86	53.86	5.29	0	62.53

```
Title    :       Placer     County     Subarea     2020 Annual   ALT            2 NO       WATT
Version  :       Emfac2002  V2.2       Sept          23     2002 **       WIS      Enabled  **
Run      Date    :           3/27/2007 19:30:07
Scen     Year:         2020 --         Model    Years:       1975 to           2020
Season   :       Annual
Area     :       Placer     County     Grand    Total
I/M      Stat    :          I          and      M        program  in       effect
Emission Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	35	320462	163	320659	95	239332	1515	240942	53	57250	1586	58889	18	20144	20162	5549	25711	435	3395	650030
VMT/1000	0	9965	2	9967	1	7314	31	7346	1	1807	59	1867	0	293	293	327	620	51	23	19875
Trips	132	2001920	787	2002840	362	1479160	8171	1487700	230	442817	16379	459426	186	32023	32209	57232	89441	1738	6788	4047930
Reactive Organic Gas Emissions																				
Run Exh	0	0.15	0	0.15	0	0.26	0	0.27	0.01	0.11	0.01	0.13	0	0.04	0.04	0.08	0.13	0.07	0.06	0.81
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Exh	0	0.35	0	0.35	0	0.41	0	0.41	0	0.2	0	0.2	0	0.06	0.07	0	0.07	0	0.02	1.04
Total Ex	0	0.5	0	0.5	0	0.67	0	0.67	0.01	0.31	0.01	0.33	0	0.11	0.11	0.1	0.21	0.07	0.08	1.87
Diurnal	0	0.15	0	0.15	0	0.17	0	0.17	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.38
Hot Soak	0	0.15	0	0.15	0	0.16	0	0.16	0	0.04	0	0.04	0	0	0	0	0	0	0	0.36
Running	0	0.62	0	0.62	0	1.25	0	1.26	0	0.41	0	0.41	0	0.13	0.13	0	0.13	0	0.01	2.43
Resting	0	0.08	0	0.08	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0	0	0	0.2
Total	0	1.49	0	1.5	0.01	2.35	0	2.36	0.01	0.83	0.01	0.86	0.01	0.24	0.25	0.1	0.35	0.07	0.11	5.24
Carbon Monoxide Emissions																				
Run Exh	0.01	8.11	0	8.12	0.11	11.73	0.02	11.86	0.18	3.67	0.07	3.92	0.04	0.83	0.88	0.49	1.37	0.37	0.62	26.26
Idle Exh	0	0	0	0	0	0	0	0	0	0.03	0	0.03	0	0.01	0.01	0.08	0.1	0	0	0.13
Start Exh	0	4.8	0	4.8	0.01	5.67	0	5.68	0.02	2.33	0	2.35	0.03	1.1	1.12	0	1.12	0.05	0.08	14.09
Total Ex	0.01	12.91	0	12.92	0.13	17.4	0.02	17.54	0.2	6.03	0.07	6.29	0.07	1.95	2.02	0.58	2.6	0.42	0.7	40.48
Oxides of Nitrogen Emissions																				
Run Exh	0	0.71	0	0.71	0.01	1.29	0.04	1.34	0.01	0.54	0.12	0.67	0	0.21	0.21	1.28	1.49	0.35	0.03	4.59
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.26	0.26	0	0	0.26
Start Exh	0	0.26	0	0.26	0	0.36	0	0.36	0	0.33	0	0.34	0	0.12	0.12	0	0.12	0.01	0	1.08
Total Ex	0	0.97	0	0.97	0.01	1.65	0.04	1.7	0.01	0.88	0.12	1.01	0	0.33	0.33	1.54	1.86	0.36	0.03	5.94
Carbon Dioxide Emissions 0																				
Run Exh	0	3.76	0	3.76	0	3.5	0.01	3.51	0	1.25	0.03	1.28	0	0.22	0.22	0.69	0.91	0.09	0	9.56
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.16	0	0.16	0	0.15	0	0.15	0	0.05	0	0.05	0	0	0	0	0	0	0	0.35
Total Ex	0	3.92	0	3.92	0	3.64	0.01	3.66	0	1.3	0.03	1.33	0	0.22	0.22	0.71	0.93	0.09	0	9.93
PM10 Emissions																				
Run Exh	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.05	0	0	0	0.05	0.05	0.01	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.11	0	0.11	0	0.14	0	0.14	0	0.05	0	0.05	0	0	0	0.05	0.05	0.01	0	0.36
TireWear	0	0.09	0	0.09	0	0.06	0	0.06	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.18
BrakeWr	0	0.14	0	0.14	0	0.1	0	0.1	0	0.02	0	0.03	0	0	0	0	0.01	0	0	0.27
Total	0	0.34	0	0.34	0	0.3	0	0.31	0	0.09	0	0.1	0	0.01	0.01	0.06	0.07	0.01	0	0.82
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.04	0	0.04	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.1
Fuel Consumpt: (000 gallons)																				
Gasoline	0.02	403.56	0	403.58	0.11	376.05	0	376.15	0.1	134.1	0	134.2	0.03	23.17	23.21	0	23.21	2.36	0.56	940.05
Diesel	0	0	0.07	0.07	0	0	1.05	1.05	0	0	2.86	2.86	0	0	0	63.55	63.55	5.85	0	73.37

Title : Placer County Subarea 2020 Annual ALT 2 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 11:34:01
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (LT)
I/M Stat : No I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	1	4088	2	4091	3	7527	43	7573	5	4410	82	4497	1	463	464	140	604	18	100	16882
VMT/1000	0	190	0	190	0	333	1	334	0	195	4	199	0	10	10	11	21	3	1	748
Trips	5	25412	10	25427	11	46543	236	46790	22	30818	795	31636	14	1117	1131	2080	3211	72	199	107334
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.03	0	0	0	0	0.01	0.02	0	0.09
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.05
Total Ex	0	0.01	0	0.02	0	0.04	0	0.04	0	0.05	0	0.05	0	0.01	0.01	0	0.01	0.02	0	0.14
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.12
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.03	0	0.03	0	0.11	0	0.11	0	0.1	0	0.1	0	0.01	0.01	0	0.01	0.02	0	0.29
Carbon Monoxide Emissions																				
Run Exh	0	0.26	0	0.26	0.01	0.82	0	0.83	0.04	0.63	0.01	0.67	0.01	0.05	0.06	0.02	0.08	0.07	0.02	1.93
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.11	0	0.11	0	0.28	0	0.28	0	0.26	0	0.26	0.01	0.05	0.06	0	0.06	0	0	0.72
Total Ex	0	0.37	0	0.37	0.01	1.1	0	1.11	0.04	0.89	0.01	0.93	0.02	0.1	0.12	0.02	0.14	0.07	0.02	2.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.03	0	0.03	0	0.1	0	0.1	0	0.1	0.01	0.11	0	0.01	0.01	0.05	0.05	0.03	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.07
Total Ex	0	0.03	0	0.03	0	0.12	0	0.12	0	0.13	0.01	0.14	0	0.02	0.02	0.05	0.07	0.03	0	0.39
Carbon Dioxide Emissions 0																				
Run Exh	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.13	0	0.01	0.01	0.02	0.03	0.01	0	0.4
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total Ex	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.14	0	0.01	0.01	0.02	0.03	0.01	0	0.41
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.04
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fuel Consumption (000 gallons)																				
Gasoline	0	7.61	0	7.61	0.01	16.91	0	16.92	0.01	13.96	0	13.97	0	0.78	0.79	0	0.79	0.15	0.02	39.46
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	0.18	0.18	0	0	0	2.12	2.12	0.36	0	2.7

Title : Placer County Subarea 2020 Annual ALT 2 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 11:34:01
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	4	16307	12	16323	15	18590	187	18792	9	5489	158	5657	4	1903	1908	610	2518	17	335	43642
VMT/1000	0	484	0	484	0	532	3	535	0	159	5	164	0	25	26	38	64	2	2	1251
Trips	16	101147	56	101219	59	114210	993	115262	44	42802	1627	44472	17	2884	2900	6076	8976	67	670	270666
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.03	0	0.03	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0.01	0.08
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.03	0	0.03	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.04	0	0.01	0.01	0.01	0.02	0	0.01	0.18
Diurnal	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Hot Soak	0	0.01	0	0.01	0	0.01	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Running	0	0.04	0	0.04	0	0.11	0	0.11	0	0.04	0	0.04	0	0.01	0.01	0	0.01	0	0	0.21
Resting	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.1	0	0.1	0	0.22	0	0.22	0	0.09	0	0.09	0	0.02	0.02	0.01	0.03	0	0.01	0.46
Carbon Monoxide Emissions																				
Run Exh	0	0.48	0	0.48	0.02	1.1	0	1.12	0.03	0.35	0.01	0.38	0.01	0.12	0.13	0.05	0.18	0.01	0.06	2.23
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.53	0	0.53	0	0.24	0	0.24	0	0.11	0.11	0	0.11	0	0.01	1.21
Total Ex	0	0.79	0	0.8	0.02	1.63	0	1.65	0.03	0.59	0.01	0.63	0.01	0.23	0.24	0.06	0.3	0.01	0.06	3.46
Oxides of Nitrogen Emissions																				
Run Exh	0	0.05	0	0.05	0	0.13	0	0.13	0	0.05	0.01	0.07	0	0.02	0.02	0.15	0.17	0.01	0	0.44
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0.02	0	0.02	0	0.03	0	0.03	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.06	0	0.06	0	0.16	0	0.17	0	0.09	0.01	0.1	0	0.03	0.03	0.18	0.22	0.01	0	0.56
Carbon Dioxide Emissions 0																				
Run Exh	0	0.19	0	0.19	0	0.26	0	0.26	0	0.11	0	0.11	0	0.02	0.02	0.08	0.1	0	0	0.67
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total Ex	0	0.2	0	0.2	0	0.27	0	0.27	0	0.12	0	0.12	0	0.02	0.02	0.08	0.1	0	0	0.69
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumption (000 gallons)																				
Gasoline	0	20.15	0	20.15	0.02	28.03	0	28.05	0.02	12.06	0	12.08	0.01	2.03	2.03	0	2.03	0.09	0.05	62.44
Diesel	0	0	0	0	0	0	0.12	0.12	0	0	0.25	0.25	0	0	0	7.56	7.56	0.2	0	8.14

Title : Placer County Subarea 2020 Annual ALT 2 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 11:34:01
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	29	300888	149	301066	76	213798	1289	215163	39	47480	1350	48869	13	17826	17839	4811	22650	401	2968	591117
VMT/1000	0	9316	2	9318	1	6467	26	6494	1	1458	50	1509	0	258	259	279	537	46	20	17924
Trips	111	1880490	723	1881330	293	1322020	6961	1329270	164	370219	13999	384382	156	28095	28251	49204	77455	1604	5935	3679980
Reactive Organic Gas Emissions																				
Run Exh	0	0.13	0	0.13	0	0.21	0	0.21	0.01	0.07	0.01	0.09	0	0.04	0.04	0.07	0.11	0.04	0.06	0.63
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.35	0	0.35	0	0.15	0	0.16	0	0.05	0.06	0	0.06	0	0.02	0.9
Total Ex	0	0.45	0	0.45	0	0.55	0	0.56	0.01	0.23	0.01	0.25	0	0.09	0.09	0.08	0.18	0.05	0.07	1.55
Diurnal	0	0.14	0	0.14	0	0.15	0	0.15	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.34
Hot Soak	0	0.14	0	0.14	0	0.14	0	0.14	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Running	0	0.57	0	0.57	0	1.09	0	1.09	0	0.32	0	0.33	0	0.12	0.12	0	0.12	0	0.01	2.11
Resting	0	0.07	0	0.07	0	0.08	0	0.08	0	0.02	0	0.02	0	0	0	0	0	0	0	0.17
Total	0	1.37	0	1.37	0.01	2.02	0	2.02	0.01	0.65	0.01	0.66	0	0.21	0.21	0.08	0.3	0.05	0.09	4.5
Carbon Monoxide Emissions																				
Run Exh	0.01	7.38	0	7.39	0.08	9.83	0.02	9.93	0.12	2.7	0.05	2.87	0.03	0.67	0.7	0.42	1.12	0.29	0.54	22.14
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.01	0.01	0.07	0.09	0	0	0.11
Start Exh	0	4.39	0	4.39	0.01	4.87	0	4.88	0.01	1.83	0	1.85	0.02	0.94	0.96	0	0.96	0.04	0.07	12.19
Total Ex	0.01	11.77	0	11.78	0.09	14.7	0.02	14.81	0.13	4.56	0.06	4.74	0.05	1.62	1.67	0.49	2.16	0.33	0.61	34.44
Oxides of Nitrogen Emissions																				
Run Exh	0	0.64	0	0.64	0	1.06	0.04	1.11	0.01	0.39	0.1	0.5	0	0.18	0.18	1.09	1.26	0.31	0.03	3.84
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.22	0.22	0	0	0.22
Start Exh	0	0.24	0	0.24	0	0.31	0	0.31	0	0.27	0	0.27	0	0.1	0.1	0	0.1	0.01	0	0.92
Total Ex	0	0.88	0	0.88	0.01	1.37	0.04	1.41	0.01	0.66	0.1	0.77	0	0.28	0.28	1.31	1.59	0.32	0.03	4.99
Carbon Dioxide Emissions 0																				
Run Exh	0	3.51	0	3.51	0	3.09	0.01	3.1	0	1.01	0.03	1.03	0	0.19	0.2	0.59	0.78	0.08	0	8.51
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.15	0	0.15	0	0.13	0	0.13	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Total Ex	0	3.66	0	3.66	0	3.22	0.01	3.23	0	1.05	0.03	1.08	0	0.2	0.2	0.6	0.8	0.08	0	8.84
PM10 Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.03	0	0.04	0	0	0	0.04	0.04	0.01	0	0.28
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.03
Total Ex	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.04	0	0	0	0.04	0.04	0.01	0	0.31
TireWear	0	0.08	0	0.08	0	0.06	0	0.06	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.17
BrakeWr	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0.01	0	0	0.25
Total	0	0.31	0	0.31	0	0.27	0	0.27	0	0.07	0	0.08	0	0.01	0.01	0.05	0.06	0.01	0	0.73
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.09
Fuel Consumption (000 gallons)																				
Gasoline	0.01	376.62	0	376.63	0.08	331.83	0	331.91	0.07	108.33	0	108.4	0.02	20.42	20.44	0	20.44	2.13	0.49	840
Diesel	0	0	0.06	0.06	0	0	0.89	0.89	0	0	2.44	2.44	0	0	0	53.99	53.99	5.3	0	62.68

Title : Placer County Subarea 2020 Annual ALT 2 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 11:34:01
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	35	321282	163	321480	95	239915	1519	241529	53	57380	1590	59023	18	20193	20210	5562	25772	436	3403	651642
VMT/1000	0	9991	2	9993	1	7332	31	7364	1	1811	59	1871	0	294	294	328	622	51	23	19924
Trips	133	2007050	789	2007970	363	1482770	8190	1491320	230	443839	16421	460490	187	32095	32282	57360	89641	1742	6804	4057970
Reactive Organic Gas Emissions																				
Run Exh	0	0.15	0	0.15	0	0.26	0	0.27	0.01	0.11	0.01	0.13	0	0.04	0.04	0.08	0.13	0.07	0.06	0.81
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Exh	0	0.35	0	0.35	0	0.41	0	0.41	0	0.2	0	0.2	0	0.06	0.07	0	0.07	0	0.02	1.05
Total Ex	0	0.5	0	0.5	0	0.67	0	0.68	0.01	0.31	0.01	0.33	0	0.11	0.11	0.1	0.21	0.07	0.08	1.87
Diurnal	0	0.15	0	0.15	0	0.17	0	0.18	0	0.05	0	0.05	0	0	0	0	0	0	0.01	0.38
Hot Soak	0	0.15	0	0.15	0	0.16	0	0.16	0	0.04	0	0.04	0	0	0	0	0	0	0	0.36
Running	0	0.62	0	0.62	0	1.26	0	1.26	0	0.41	0	0.41	0	0.13	0.13	0	0.13	0	0.01	2.44
Resting	0	0.08	0	0.08	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0	0	0	0.2
Total	0	1.5	0	1.5	0.01	2.35	0	2.36	0.01	0.83	0.01	0.86	0.01	0.24	0.25	0.1	0.35	0.07	0.11	5.25
Carbon Monoxide Emissions																				
Run Exh	0.01	8.12	0	8.13	0.11	11.74	0.02	11.88	0.18	3.68	0.07	3.92	0.04	0.84	0.88	0.49	1.38	0.37	0.62	26.29
Idle Exh	0	0	0	0	0	0	0	0	0	0.03	0	0.03	0	0.01	0.02	0.08	0.1	0	0	0.13
Start Exh	0	4.81	0	4.81	0.01	5.69	0	5.7	0.02	2.33	0	2.35	0.03	1.1	1.13	0	1.13	0.05	0.08	14.13
Total Ex	0.01	12.93	0	12.95	0.13	17.43	0.02	17.57	0.2	6.04	0.07	6.3	0.07	1.95	2.02	0.58	2.6	0.42	0.7	40.55
Oxides of Nitrogen Emissions																				
Run Exh	0	0.71	0	0.71	0.01	1.29	0.04	1.34	0.01	0.54	0.12	0.68	0	0.21	0.21	1.28	1.49	0.35	0.03	4.6
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.26	0.26	0	0	0.26
Start Exh	0	0.26	0	0.26	0	0.36	0	0.36	0	0.34	0	0.34	0	0.12	0.12	0	0.12	0.01	0	1.09
Total Ex	0	0.97	0	0.97	0.01	1.65	0.04	1.7	0.01	0.88	0.12	1.01	0	0.33	0.33	1.54	1.87	0.36	0.03	5.95
Carbon Dioxide Emissions 0																				
Run Exh	0	3.77	0	3.77	0	3.5	0.01	3.52	0	1.25	0.03	1.28	0	0.22	0.22	0.69	0.92	0.09	0	9.58
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.16	0	0.16	0	0.15	0	0.15	0	0.05	0	0.05	0	0	0	0	0	0	0	0.35
Total Ex	0	3.93	0	3.93	0	3.65	0.01	3.66	0	1.3	0.03	1.33	0	0.22	0.22	0.71	0.93	0.09	0	9.95
PM10 Emissions																				
Run Exh	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.05	0	0	0	0.05	0.05	0.01	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.11	0	0.11	0	0.14	0	0.14	0	0.05	0	0.05	0	0	0	0.05	0.05	0.01	0	0.36
TireWear	0	0.09	0	0.09	0	0.06	0	0.06	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.18
BrakeWr	0	0.14	0	0.14	0	0.1	0	0.1	0	0.03	0	0.03	0	0	0	0	0.01	0	0	0.28
Total	0	0.34	0	0.34	0	0.3	0	0.31	0	0.09	0	0.1	0	0.01	0.01	0.06	0.07	0.01	0	0.82
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.04	0	0.04	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.1
Fuel Consumpt (000 gallons)																				
Gasoline	0.02	404.38	0	404.4	0.11	376.77	0	376.87	0.1	134.35	0	134.45	0.03	23.23	23.26	0	23.26	2.36	0.56	941.9
Diesel	0	0	0.07	0.07	0	0	1.06	1.06	0	0	2.87	2.87	0	0	0	63.68	63.68	5.86	0	73.52

```
Title    :       Placer     County     Subarea      2020 Annual   ALT            3 NO       WATT
Version  :       Emfac2002  V2.2       Sept           23     2002 **       WIS      Enabled  **
Run      Date    :           3/28/2007 11:55:41
Scen     Year:          2020 --         Model    Years:       1975 to           2020
Season   :       Annual
Area     :       Placer     (LT)
I/M      Stat    :          No         I        and      M        program  in       effect
Emission Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	1	4088	2	4091	3	7527	43	7573	5	4410	82	4497	1	463	464	140	604	18	100	16882
VMT/1000	0	190	0	190	0	333	1	334	0	195	4	199	0	10	10	11	21	3	1	748
Trips	5	25412	10	25427	11	46543	236	46790	22	30818	795	31636	14	1117	1131	2080	3211	72	199	107334
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.03	0	0	0	0	0.01	0.02	0	0.09
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.05
Total Ex	0	0.01	0	0.02	0	0.04	0	0.04	0	0.05	0	0.05	0	0.01	0.01	0	0.01	0.02	0	0.14
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.12
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.03	0	0.03	0	0.11	0	0.11	0	0.1	0	0.1	0	0.01	0.01	0	0.01	0.02	0	0.29
Carbon Monoxide Emissions																				
Run Exh	0	0.26	0	0.26	0.01	0.82	0	0.83	0.04	0.63	0.01	0.67	0.01	0.05	0.06	0.02	0.08	0.07	0.02	1.93
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.11	0	0.11	0	0.28	0	0.28	0	0.26	0	0.26	0.01	0.05	0.06	0	0.06	0	0	0.72
Total Ex	0	0.37	0	0.37	0.01	1.1	0	1.11	0.04	0.89	0.01	0.93	0.02	0.1	0.12	0.02	0.14	0.07	0.02	2.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.03	0	0.03	0	0.1	0	0.1	0	0.1	0.01	0.11	0	0.01	0.01	0.05	0.05	0.03	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.07
Total Ex	0	0.03	0	0.03	0	0.12	0	0.12	0	0.13	0.01	0.14	0	0.02	0.02	0.05	0.07	0.03	0	0.39
Carbon Dioxide Emissions 0																				
Run Exh	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.13	0	0.01	0.01	0.02	0.03	0.01	0	0.4
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total Ex	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.14	0	0.01	0.01	0.02	0.03	0.01	0	0.41
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.04
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fuel Consumption (000 gallons)																				
Gasoline	0	7.61	0	7.61	0.01	16.91	0	16.92	0.01	13.96	0	13.97	0	0.78	0.79	0	0.79	0.15	0.02	39.46
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	0.18	0.18	0	0	0	2.12	2.12	0.36	0	2.7

Title : Placer County Subarea 2020 Annual ALT 3 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 11:55:41
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	4	16307	12	16323	15	18590	187	18792	9	5489	158	5657	4	1903	1908	610	2518	17	335	43642
VMT/1000	0	484	0	484	0	532	3	535	0	159	5	164	0	25	26	38	64	2	2	1251
Trips	16	101147	56	101219	59	114210	993	115262	44	42802	1627	44472	17	2884	2900	6076	8976	67	670	270666
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.03	0	0.03	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0.01	0.08
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.03	0	0.03	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.04	0	0.01	0.01	0.01	0.02	0	0.01	0.18
Diurnal	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Hot Soak	0	0.01	0	0.01	0	0.01	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Running	0	0.04	0	0.04	0	0.11	0	0.11	0	0.04	0	0.04	0	0.01	0.01	0	0.01	0	0	0.21
Resting	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.1	0	0.1	0	0.22	0	0.22	0	0.09	0	0.09	0	0.02	0.02	0.01	0.03	0	0.01	0.46
Carbon Monoxide Emissions																				
Run Exh	0	0.48	0	0.48	0.02	1.1	0	1.12	0.03	0.35	0.01	0.38	0.01	0.12	0.13	0.05	0.18	0.01	0.06	2.23
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.53	0	0.53	0	0.24	0	0.24	0	0.11	0.11	0	0.11	0	0.01	1.21
Total Ex	0	0.79	0	0.8	0.02	1.63	0	1.65	0.03	0.59	0.01	0.63	0.01	0.23	0.24	0.06	0.3	0.01	0.06	3.46
Oxides of Nitrogen Emissions																				
Run Exh	0	0.05	0	0.05	0	0.13	0	0.13	0	0.05	0.01	0.07	0	0.02	0.02	0.15	0.17	0.01	0	0.44
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0.02	0	0.02	0	0.03	0	0.03	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.06	0	0.06	0	0.16	0	0.17	0	0.09	0.01	0.1	0	0.03	0.03	0.18	0.22	0.01	0	0.56
Carbon Dioxide Emissions 0																				
Run Exh	0	0.19	0	0.19	0	0.26	0	0.26	0	0.11	0	0.11	0	0.02	0.02	0.08	0.1	0	0	0.67
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total Ex	0	0.2	0	0.2	0	0.27	0	0.27	0	0.12	0	0.12	0	0.02	0.02	0.08	0.1	0	0	0.69
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumption (000 gallons)																				
Gasoline	0	20.15	0	20.15	0.02	28.03	0	28.05	0.02	12.06	0	12.08	0.01	2.03	2.03	0	2.03	0.09	0.05	62.44
Diesel	0	0	0	0	0	0	0.12	0.12	0	0	0.25	0.25	0	0	0	7.56	7.56	0.2	0	8.14

Title : Placer County Subarea 2020 Annual ALT 3 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 11:55:41
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	29	300284	149	300462	76	213369	1286	214732	39	47384	1347	48770	13	17791	17803	4803	22606	400	2962	589932
VMT/1000	0	9298	2	9299	1	6454	26	6481	1	1455	50	1505	0	258	258	278	536	46	20	17888
Trips	111	1876720	722	1877550	292	1319370	6947	1326610	164	369465	13969	383598	156	28039	28195	49105	77301	1600	5923	3672580
Reactive Organic Gas Emissions																				
Run Exh	0	0.13	0	0.13	0	0.2	0	0.21	0.01	0.07	0.01	0.09	0	0.04	0.04	0.07	0.11	0.04	0.06	0.63
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.35	0	0.35	0	0.15	0	0.16	0	0.05	0.06	0	0.06	0	0.02	0.9
Total Ex	0	0.45	0	0.45	0	0.55	0	0.56	0.01	0.23	0.01	0.25	0	0.09	0.09	0.08	0.18	0.05	0.07	1.55
Diurnal	0	0.14	0	0.14	0	0.15	0	0.15	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.33
Hot Soak	0	0.14	0	0.14	0	0.14	0	0.14	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Running	0	0.57	0	0.57	0	1.09	0	1.09	0	0.32	0	0.32	0	0.12	0.12	0	0.12	0	0.01	2.11
Resting	0	0.07	0	0.07	0	0.08	0	0.08	0	0.02	0	0.02	0	0	0	0	0	0	0	0.18
Total	0	1.36	0	1.37	0.01	2.01	0	2.02	0.01	0.64	0.01	0.66	0	0.21	0.21	0.08	0.3	0.05	0.09	4.49
Carbon Monoxide Emissions																				
Run Exh	0.01	7.38	0	7.39	0.08	9.82	0.02	9.92	0.12	2.7	0.05	2.87	0.03	0.67	0.69	0.42	1.11	0.29	0.54	22.11
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.01	0.01	0.07	0.08	0	0	0.11
Start Exh	0	4.38	0	4.38	0.01	4.86	0	4.87	0.01	1.83	0	1.84	0.02	0.94	0.96	0	0.96	0.04	0.07	12.17
Total Ex	0.01	11.75	0	11.77	0.09	14.68	0.02	14.79	0.13	4.55	0.06	4.74	0.05	1.62	1.66	0.49	2.16	0.33	0.61	34.39
Oxides of Nitrogen Emissions																				
Run Exh	0	0.63	0	0.64	0	1.06	0.04	1.1	0.01	0.39	0.1	0.5	0	0.18	0.18	1.08	1.26	0.31	0.03	3.84
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.22	0.22	0	0	0.22
Start Exh	0	0.24	0	0.24	0	0.31	0	0.31	0	0.27	0	0.27	0	0.1	0.1	0	0.1	0.01	0	0.92
Total Ex	0	0.87	0	0.88	0.01	1.37	0.04	1.41	0.01	0.66	0.1	0.77	0	0.28	0.28	1.3	1.58	0.32	0.03	4.98
Carbon Dioxide Emissions 0																				
Run Exh	0	3.51	0	3.51	0	3.08	0.01	3.09	0	1.01	0.03	1.03	0	0.19	0.19	0.59	0.78	0.08	0	8.49
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.15	0	0.15	0	0.13	0	0.13	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Total Ex	0	3.65	0	3.65	0	3.21	0.01	3.22	0	1.05	0.03	1.08	0	0.2	0.2	0.6	0.8	0.08	0	8.83
PM10 Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.03	0	0.04	0	0	0	0.04	0.04	0.01	0	0.28
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.03
Total Ex	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.04	0	0	0	0.04	0.04	0.01	0	0.31
TireWear	0	0.08	0	0.08	0	0.06	0	0.06	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.17
BrakeWr	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.25
Total	0	0.31	0	0.31	0	0.27	0	0.27	0	0.07	0	0.08	0	0.01	0.01	0.05	0.06	0.01	0	0.73
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.09
Fuel Consumption (000 gallons)																				
Gasoline	0.01	375.94	0	375.95	0.08	331.23	0	331.31	0.07	108.13	0	108.2	0.02	20.38	20.4	0	20.4	2.12	0.49	838.47
Diesel	0	0	0.06	0.06	0	0	0.89	0.89	0	0	2.43	2.43	0	0	0	53.9	53.9	5.29	0	62.57

Title : Placer County Subarea 2020 Annual ALT 3 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 11:55:41
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	35	320679	163	320876	95	239487	1516	241098	53	57284	1587	58924	18	20157	20175	5553	25728	435	3397	650457
VMT/1000	0	9972	2	9974	1	7319	31	7351	1	1808	59	1868	0	293	293	327	621	51	23	19888
Trips	132	2003280	787	2004200	363	1480120	8176	1488660	230	443085	16391	459705	186	32040	32226	57261	89487	1738	6792	4050580
Reactive Organic Gas Emissions																				
Run Exh	0	0.15	0	0.15	0	0.26	0	0.27	0.01	0.11	0.01	0.13	0	0.04	0.04	0.08	0.13	0.07	0.06	0.81
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Exh	0	0.35	0	0.35	0	0.41	0	0.41	0	0.2	0	0.2	0	0.06	0.07	0	0.07	0	0.02	1.04
Total Ex	0	0.5	0	0.5	0	0.67	0	0.67	0.01	0.31	0.01	0.33	0	0.11	0.11	0.1	0.21	0.07	0.08	1.87
Diurnal	0	0.15	0	0.15	0	0.17	0	0.17	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.38
Hot Soak	0	0.15	0	0.15	0	0.16	0	0.16	0	0.04	0	0.04	0	0	0	0	0	0	0	0.36
Running	0	0.62	0	0.62	0	1.25	0	1.26	0	0.41	0	0.41	0	0.13	0.13	0	0.13	0	0.01	2.43
Resting	0	0.08	0	0.08	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0	0	0	0.2
Total	0	1.49	0	1.5	0.01	2.35	0	2.36	0.01	0.83	0.01	0.86	0.01	0.24	0.25	0.1	0.35	0.07	0.11	5.24
Carbon Monoxide Emissions																				
Run Exh	0.01	8.11	0	8.13	0.11	11.73	0.02	11.86	0.18	3.67	0.07	3.92	0.04	0.84	0.88	0.49	1.37	0.37	0.62	26.26
Idle Exh	0	0	0	0	0	0	0	0	0	0.03	0	0.03	0	0.01	0.02	0.08	0.1	0	0	0.13
Start Exh	0	4.8	0	4.81	0.01	5.68	0	5.69	0.02	2.33	0	2.35	0.03	1.1	1.13	0	1.13	0.05	0.08	14.1
Total Ex	0.01	12.92	0	12.93	0.13	17.41	0.02	17.55	0.2	6.03	0.07	6.29	0.07	1.95	2.02	0.58	2.6	0.42	0.7	40.49
Oxides of Nitrogen Emissions																				
Run Exh	0	0.71	0	0.71	0.01	1.29	0.04	1.34	0.01	0.54	0.12	0.67	0	0.21	0.21	1.28	1.49	0.35	0.03	4.59
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.26	0.26	0	0	0.26
Start Exh	0	0.26	0	0.26	0	0.36	0	0.36	0	0.33	0	0.34	0	0.12	0.12	0	0.12	0.01	0	1.08
Total Ex	0	0.97	0	0.97	0.01	1.65	0.04	1.7	0.01	0.88	0.12	1.01	0	0.33	0.33	1.54	1.86	0.36	0.03	5.94
Carbon Dioxide Emissions 0																				
Run Exh	0	3.77	0	3.77	0	3.5	0.01	3.51	0	1.25	0.03	1.28	0	0.22	0.22	0.69	0.91	0.09	0	9.56
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.16	0	0.16	0	0.15	0	0.15	0	0.05	0	0.05	0	0	0	0	0	0	0	0.35
Total Ex	0	3.92	0	3.92	0	3.64	0.01	3.66	0	1.3	0.03	1.33	0	0.22	0.22	0.71	0.93	0.09	0	9.93
PM10 Emissions																				
Run Exh	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.05	0	0	0	0.05	0.05	0.01	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.11	0	0.11	0	0.14	0	0.14	0	0.05	0	0.05	0	0	0	0.05	0.05	0.01	0	0.36
TireWear	0	0.09	0	0.09	0	0.06	0	0.06	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.18
BrakeWr	0	0.14	0	0.14	0	0.1	0	0.1	0	0.02	0	0.03	0	0	0	0	0	0	0	0.27
Total	0	0.34	0	0.34	0	0.3	0	0.31	0	0.09	0	0.1	0	0.01	0.01	0.06	0.07	0.01	0	0.82
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.04	0	0.04	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.1
Fuel Consumption (000 gallons)																				
Gasoline	0.02	403.7	0	403.71	0.11	376.17	0	376.27	0.1	134.14	0	134.25	0.03	23.19	23.22	0	23.22	2.36	0.56	940.37
Diesel	0	0	0.07	0.07	0	0	1.06	1.06	0	0	2.86	2.86	0	0	0	63.59	63.59	5.85	0	73.41

Title : Placer County Subarea 2020 Annual ALT 3 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 14:15:27
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (LT)
I/M Stat : No I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	1	4088	2	4091	3	7527	43	7573	5	4410	82	4497	1	463	464	140	604	18	100	16882
VMT/1000	0	190	0	190	0	333	1	334	0	195	4	199	0	10	10	11	21	3	1	748
Trips	5	25412	10	25427	11	46543	236	46790	22	30818	795	31636	14	1117	1131	2080	3211	72	199	107334
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.03	0	0	0	0	0.01	0.02	0	0.09
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.05
Total Ex	0	0.01	0	0.02	0	0.04	0	0.04	0	0.05	0	0.05	0	0.01	0.01	0	0.01	0.02	0	0.14
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.12
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.03	0	0.03	0	0.11	0	0.11	0	0.1	0	0.1	0	0.01	0.01	0	0.01	0.02	0	0.29
Carbon Monoxide Emissions																				
Run Exh	0	0.26	0	0.26	0.01	0.82	0	0.83	0.04	0.63	0.01	0.67	0.01	0.05	0.06	0.02	0.08	0.07	0.02	1.93
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.11	0	0.11	0	0.28	0	0.28	0	0.26	0	0.26	0.01	0.05	0.06	0	0.06	0	0	0.72
Total Ex	0	0.37	0	0.37	0.01	1.1	0	1.11	0.04	0.89	0.01	0.93	0.02	0.1	0.12	0.02	0.14	0.07	0.02	2.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.03	0	0.03	0	0.1	0	0.1	0	0.1	0.01	0.11	0	0.01	0.01	0.05	0.05	0.03	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.07
Total Ex	0	0.03	0	0.03	0	0.12	0	0.12	0	0.13	0.01	0.14	0	0.02	0.02	0.05	0.07	0.03	0	0.39
Carbon Dioxide Emissions 0																				
Run Exh	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.13	0	0.01	0.01	0.02	0.03	0.01	0	0.4
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total Ex	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.14	0	0.01	0.01	0.02	0.03	0.01	0	0.41
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.04
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fuel Consumption (000 gallons)																				
Gasoline	0	7.61	0	7.61	0.01	16.91	0	16.92	0.01	13.96	0	13.97	0	0.78	0.79	0	0.79	0.15	0.02	39.46
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	0.18	0.18	0	0	0	2.12	2.12	0.36	0	2.7

Title : Placer County Subarea 2020 Annual ALT 3 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 14:15:27
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	4	16307	12	16323	15	18590	187	18792	9	5489	158	5657	4	1903	1908	610	2518	17	335	43642
VMT/1000	0	484	0	484	0	532	3	535	0	159	5	164	0	25	26	38	64	2	2	1251
Trips	16	101147	56	101219	59	114210	993	115262	44	42802	1627	44472	17	2884	2900	6076	8976	67	670	270666
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.03	0	0.03	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0.01	0.08
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.03	0	0.03	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.04	0	0.01	0.01	0.01	0.02	0	0.01	0.18
Diurnal	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Hot Soak	0	0.01	0	0.01	0	0.01	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Running	0	0.04	0	0.04	0	0.11	0	0.11	0	0.04	0	0.04	0	0.01	0.01	0	0.01	0	0	0.21
Resting	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.1	0	0.1	0	0.22	0	0.22	0	0.09	0	0.09	0	0.02	0.02	0.01	0.03	0	0.01	0.46
Carbon Monoxide Emissions																				
Run Exh	0	0.48	0	0.48	0.02	1.1	0	1.12	0.03	0.35	0.01	0.38	0.01	0.12	0.13	0.05	0.18	0.01	0.06	2.23
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.53	0	0.53	0	0.24	0	0.24	0	0.11	0.11	0	0.11	0	0.01	1.21
Total Ex	0	0.79	0	0.8	0.02	1.63	0	1.65	0.03	0.59	0.01	0.63	0.01	0.23	0.24	0.06	0.3	0.01	0.06	3.46
Oxides of Nitrogen Emissions																				
Run Exh	0	0.05	0	0.05	0	0.13	0	0.13	0	0.05	0.01	0.07	0	0.02	0.02	0.15	0.17	0.01	0	0.44
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0.02	0	0.02	0	0.03	0	0.03	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.06	0	0.06	0	0.16	0	0.17	0	0.09	0.01	0.1	0	0.03	0.03	0.18	0.22	0.01	0	0.56
Carbon Dioxide Emissions 0																				
Run Exh	0	0.19	0	0.19	0	0.26	0	0.26	0	0.11	0	0.11	0	0.02	0.02	0.08	0.1	0	0	0.67
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total Ex	0	0.2	0	0.2	0	0.27	0	0.27	0	0.12	0	0.12	0	0.02	0.02	0.08	0.1	0	0	0.69
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumption (000 gallons)																				
Gasoline	0	20.15	0	20.15	0.02	28.03	0	28.05	0.02	12.06	0	12.08	0.01	2.03	2.03	0	2.03	0.09	0.05	62.44
Diesel	0	0	0	0	0	0	0.12	0.12	0	0	0.25	0.25	0	0	0	7.56	7.56	0.2	0	8.14

Title : Placer County Subarea 2020 Annual ALT 3 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 14:15:27
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	29	300761	149	300939	76	213708	1288	215073	39	47460	1349	48848	13	17818	17831	4810	22641	401	2967	590869
VMT/1000	0	9312	2	9314	1	6464	26	6492	1	1457	50	1508	0	258	258	279	537	46	20	17917
Trips	111	1879700	723	1880530	293	1321460	6958	1328720	164	370057	13991	384212	156	28083	28239	49182	77422	1604	5933	3678420
Reactive Organic Gas Emissions																				
Run Exh	0	0.13	0	0.13	0	0.21	0	0.21	0.01	0.07	0.01	0.09	0	0.04	0.04	0.07	0.11	0.04	0.06	0.63
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.35	0	0.35	0	0.15	0	0.16	0	0.05	0.06	0	0.06	0	0.02	0.9
Total Ex	0	0.45	0	0.45	0	0.55	0	0.56	0.01	0.23	0.01	0.25	0	0.09	0.09	0.08	0.18	0.05	0.07	1.55
Diurnal	0	0.14	0	0.14	0	0.15	0	0.15	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.33
Hot Soak	0	0.14	0	0.14	0	0.14	0	0.14	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Running	0	0.57	0	0.57	0	1.09	0	1.09	0	0.32	0	0.33	0	0.12	0.12	0	0.12	0	0.01	2.11
Resting	0	0.07	0	0.07	0	0.08	0	0.08	0	0.02	0	0.02	0	0	0	0	0	0	0	0.18
Total	0	1.36	0	1.37	0.01	2.01	0	2.02	0.01	0.65	0.01	0.66	0	0.21	0.21	0.08	0.3	0.05	0.09	4.49
Carbon Monoxide Emissions																				
Run Exh	0.01	7.38	0	7.39	0.08	9.82	0.02	9.92	0.12	2.7	0.05	2.87	0.03	0.67	0.69	0.42	1.12	0.29	0.54	22.13
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.01	0.01	0.07	0.09	0	0	0.11
Start Exh	0	4.38	0	4.39	0.01	4.87	0	4.88	0.01	1.83	0	1.85	0.02	0.94	0.96	0	0.96	0.04	0.07	12.19
Total Ex	0.01	11.77	0	11.78	0.09	14.69	0.02	14.8	0.13	4.55	0.06	4.74	0.05	1.62	1.67	0.49	2.16	0.33	0.61	34.43
Oxides of Nitrogen Emissions																				
Run Exh	0	0.64	0	0.64	0	1.06	0.04	1.1	0.01	0.39	0.1	0.5	0	0.18	0.18	1.09	1.26	0.31	0.03	3.84
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.22	0.22	0	0	0.22
Start Exh	0	0.24	0	0.24	0	0.31	0	0.31	0	0.27	0	0.27	0	0.1	0.1	0	0.1	0.01	0	0.92
Total Ex	0	0.88	0	0.88	0.01	1.37	0.04	1.41	0.01	0.66	0.1	0.77	0	0.28	0.28	1.31	1.58	0.32	0.03	4.99
Carbon Dioxide Emissions 0																				
Run Exh	0	3.51	0	3.51	0	3.08	0.01	3.1	0	1.01	0.03	1.03	0	0.19	0.19	0.59	0.78	0.08	0	8.51
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.15	0	0.15	0	0.13	0	0.13	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Total Ex	0	3.66	0	3.66	0	3.21	0.01	3.23	0	1.05	0.03	1.08	0	0.2	0.2	0.6	0.8	0.08	0	8.84
PM10 Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.03	0	0.04	0	0	0	0.04	0.04	0.01	0	0.28
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.03
Total Ex	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.04	0	0	0	0.04	0.04	0.01	0	0.31
TireWear	0	0.08	0	0.08	0	0.06	0	0.06	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.17
BrakeWr	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.25
Total	0	0.31	0	0.31	0	0.27	0	0.27	0	0.07	0	0.08	0	0.01	0.01	0.05	0.06	0.01	0	0.73
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.09
Fuel Consumption (000 gallons)																				
Gasoline	0.01	376.46	0	376.48	0.08	331.69	0	331.78	0.07	108.28	0	108.35	0.02	20.41	20.43	0	20.43	2.12	0.49	839.65
Diesel	0	0	0.06	0.06	0	0	0.89	0.89	0	0	2.43	2.43	0	0	0	53.99	53.99	5.3	0	62.67

Title : Placer County Subarea 2020 Annual ALT 3 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 14:15:27
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	35	321155	163	321353	95	239826	1518	241439	53	57360	1589	59002	18	20185	20203	5560	25763	436	3402	651394
VMT/1000	0	9987	2	9989	1	7329	31	7361	1	1810	59	1870	0	294	294	328	622	51	23	19916
Trips	133	2006260	789	2007180	363	1482220	8187	1490770	230	443677	16412	460319	187	32083	32270	57338	89608	1742	6802	4056420
Reactive Organic Gas Emissions																				
Run Exh	0	0.15	0	0.15	0	0.26	0	0.27	0.01	0.11	0.01	0.13	0	0.04	0.04	0.08	0.13	0.07	0.06	0.81
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Exh	0	0.35	0	0.35	0	0.41	0	0.41	0	0.2	0	0.2	0	0.06	0.07	0	0.07	0	0.02	1.05
Total Ex	0	0.5	0	0.5	0	0.67	0	0.68	0.01	0.31	0.01	0.33	0	0.11	0.11	0.1	0.21	0.07	0.08	1.87
Diurnal	0	0.15	0	0.15	0	0.17	0	0.17	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.38
Hot Soak	0	0.15	0	0.15	0	0.16	0	0.16	0	0.04	0	0.04	0	0	0	0	0	0	0	0.36
Running	0	0.62	0	0.62	0	1.26	0	1.26	0	0.41	0	0.41	0	0.13	0.13	0	0.13	0	0.01	2.43
Resting	0	0.08	0	0.08	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0	0	0	0.2
Total	0	1.5	0	1.5	0.01	2.35	0	2.36	0.01	0.83	0.01	0.86	0.01	0.24	0.25	0.1	0.35	0.07	0.11	5.25
Carbon Monoxide Emissions																				
Run Exh	0.01	8.12	0	8.13	0.11	11.74	0.02	11.87	0.18	3.67	0.07	3.92	0.04	0.84	0.88	0.49	1.38	0.37	0.62	26.28
Idle Exh	0	0	0	0	0	0	0	0	0	0.03	0	0.03	0	0.01	0.02	0.08	0.1	0	0	0.13
Start Exh	0	4.81	0	4.81	0.01	5.68	0	5.7	0.02	2.33	0	2.35	0.03	1.1	1.13	0	1.13	0.05	0.08	14.12
Total Ex	0.01	12.93	0	12.94	0.13	17.42	0.02	17.57	0.2	6.03	0.07	6.3	0.07	1.95	2.02	0.58	2.6	0.42	0.7	40.53
Oxides of Nitrogen Emissions																				
Run Exh	0	0.71	0	0.71	0.01	1.29	0.04	1.34	0.01	0.54	0.12	0.67	0	0.21	0.21	1.28	1.49	0.35	0.03	4.6
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.26	0.26	0	0	0.26
Start Exh	0	0.26	0	0.26	0	0.36	0	0.36	0	0.33	0	0.34	0	0.12	0.12	0	0.12	0.01	0	1.09
Total Ex	0	0.97	0	0.97	0.01	1.65	0.04	1.7	0.01	0.88	0.12	1.01	0	0.33	0.33	1.54	1.87	0.36	0.03	5.95
Carbon Dioxide Emissions 0																				
Run Exh	0	3.77	0	3.77	0	3.5	0.01	3.52	0	1.25	0.03	1.28	0	0.22	0.22	0.69	0.92	0.09	0	9.58
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.16	0	0.16	0	0.15	0	0.15	0	0.05	0	0.05	0	0	0	0	0	0	0	0.35
Total Ex	0	3.93	0	3.93	0	3.65	0.01	3.66	0	1.3	0.03	1.33	0	0.22	0.22	0.71	0.93	0.09	0	9.95
PM10 Emissions																				
Run Exh	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.05	0	0	0	0.05	0.05	0.01	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.11	0	0.11	0	0.14	0	0.14	0	0.05	0	0.05	0	0	0	0.05	0.05	0.01	0	0.36
TireWear	0	0.09	0	0.09	0	0.06	0	0.06	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.18
BrakeWr	0	0.14	0	0.14	0	0.1	0	0.1	0	0.03	0	0.03	0	0	0	0	0.01	0	0	0.28
Total	0	0.34	0	0.34	0	0.3	0	0.31	0	0.09	0	0.1	0	0.01	0.01	0.06	0.07	0.01	0	0.82
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.04	0	0.04	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.1
Fuel Consumption (000 gallons)																				
Gasoline	0.02	404.22	0	404.24	0.11	376.63	0	376.74	0.1	134.3	0	134.4	0.03	23.22	23.25	0	23.25	2.36	0.56	941.55
Diesel	0	0	0.07	0.07	0	0	1.06	1.06	0	0	2.87	2.87	0	0	0	63.67	63.67	5.86	0	73.52

Title : Placer County Subarea 2020 Annual ALT 4 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 14:35:31
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (LT)
I/M Stat : No I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars			Light Duty Trucks			Medium Duty Trucks			Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Non-cat	Cat	Diesel	Non-cat	Cat	Diesel	Non-cat	Cat		Trucks	Trucks	Buses	cycles	Vehicles
			Total			Total			Total			Total					
Vehicles	1	4088	2	3	7527	43	5	4410	82	1	463	464	140	604	18	100	16882
			4091			7573			4497								
VMT/1000	0	190	0	0	333	1	0	195	4	0	10	10	11	21	3	1	748
			190			334			199								
Trips	5	25412	10	11	46543	236	22	30818	795	14	1117	1131	2080	3211	72	199	107334
			25427			46790			31636								
Reactive Organic Gas Emissions																	
Run Exh	0	0.01	0	0	0.02	0	0	0.02	0	0	0.03	0	0	0	0.01	0.02	0	0.09
			0.01			0.02			0.02			0	0	0				
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0			0			0									
Start Exh	0	0.01	0	0	0.02	0	0	0.02	0	0	0.02	0	0	0	0	0	0	0.05
			0.01			0.02			0.02									
Total Ex	0	0.01	0	0	0.04	0	0	0.05	0	0	0.05	0	0	0.01	0.01	0	0.01	0.14
			0.02			0.04			0.05			0.01						
Diurnal	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0.01
			0			0.01			0			0						
Hot Soak	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0.01
			0			0.01			0			0						
Running	0	0.01	0	0	0.06	0	0	0.04	0	0	0.04	0	0	0	0	0	0	0.12
			0.01			0.06			0.04									
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
			0			0			0			0						
Total	0	0.03	0	0	0.11	0	0	0.1	0	0	0.1	0	0	0.01	0.01	0	0.01	0.29
			0.03			0.11			0.1			0.01						
Carbon Monoxide Emissions																	
Run Exh	0	0.26	0	0.01	0.82	0	0.04	0.63	0.01	0.01	0.67	0.01	0.05	0.06	0.02	0.08	0.07	0.02	1.93
			0.26			0.83			0.67										
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0			0			0			0							
Start Exh	0	0.11	0	0	0.28	0	0	0.26	0	0	0.26	0.01	0.05	0.06	0	0	0	0	0.72
			0.11			0.28			0.26			0.06							
Total Ex	0	0.37	0	0.01	1.1	0	0.04	0.89	0.01	0.02	0.1	0.12	0.02	0.14	0.07	0.02	2.66
			0.37			1.11			0.93										
Oxides of Nitrogen Emissions																	
Run Exh	0	0.03	0	0	0.1	0	0	0.1	0.01	0	0.11	0	0.01	0.01	0.05	0.05	0.03	0	0.32
			0.03			0.1			0.11										
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
			0			0			0			0							
Start Exh	0	0.01	0	0	0.02	0	0	0.03	0	0	0.03	0	0.01	0.01	0	0.01	0	0	0.07
			0.01			0.02			0.03										
Total Ex	0	0.03	0	0	0.12	0	0	0.13	0.01	0	0.14	0	0.02	0.02	0.05	0.07	0.03	0	0.39
			0.03			0.12			0.14			0.02							
Carbon Dioxide Emissions 0																	
Run Exh	0	0.07	0	0	0.16	0	0	0.13	0	0	0.13	0	0.01	0.01	0.02	0.03	0.01	0	0.4
			0.07			0.16			0.13										
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0			0			0			0							
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
			0			0			0			0							
Total Ex	0	0.07	0	0	0.16	0	0	0.14	0	0	0.14	0	0.01	0.01	0.02	0.03	0.01	0	0.41
			0.07			0.16			0.14			0.01							
PM10 Emissions																	
Run Exh	0	0	0	0	0.01	0	0	0.01	0	0	0.01	0	0	0	0	0	0	0	0.02
			0			0.01			0.01										
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0			0			0			0							
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0			0			0			0							
Total Ex	0	0	0	0	0.01	0	0	0.01	0	0	0.01	0	0	0	0	0	0	0	0.02
			0			0.01			0.01			0							
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
			0			0			0			0							
BrakeWr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
			0			0			0			0							
Total	0	0.01	0	0	0.02	0	0	0.01	0	0	0.01	0	0	0	0	0	0	0	0.04
			0.01			0.02			0.01			0							
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0			0			0			0							
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0			0			0			0							
Fuel Consumpt (000 gallons)																	
Gasoline	0	7.64	0	0.01	16.98	0	0.01	14.01	0	0	14.02	0	0.78	0.79	0	0.79	0.15	0.02	39.61
			7.64			16.98			14.02			0							
Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.12	2.12	0.36	0	2.7
			0			0.04			0.18			0.18							

```
Title    :       Placer     County      Subarea       2020 Annual   ALT            4 NO       WATT
Version  :       Emfac2002  V2.2        Sept            23     2002 **       WIS      Enabled  **
Run      Date    :            3/28/2007  14:35:31
Scen     Year:          2020 --          Model     Years:       1975 to           2020
Season   :       Annual
Area     :       Placer     (MC)
I/M      Stat    :          I           and       M        program  in       effect
Emission:Tons    Per        Day
```

	Light Duty Passenger Cars			Light Duty Trucks			Medium Duty Trucks			Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	4	16307	12	16323	15	18590	187	18792	9	5489	158	5657	4	1903	1908	610	2518	17	335	43642
VMT/1000	0	484	0	484	0	532	3	535	0	159	5	164	0	25	26	38	64	2	2	1251
Trips	16	101147	56	101219	59	114210	993	115262	44	42802	1627	44472	17	2884	2900	6076	8976	67	670	270666
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.03	0	0.03	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0.01	0.08
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.03	0	0.03	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.04	0	0.01	0.01	0.01	0.02	0	0.01	0.18
Diurnal	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Hot Soak	0	0.01	0	0.01	0	0.01	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Running	0	0.04	0	0.04	0	0.11	0	0.11	0	0.04	0	0.04	0	0.01	0.01	0	0.01	0	0	0.21
Resting	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.1	0	0.1	0	0.22	0	0.22	0	0.09	0	0.09	0	0.02	0.02	0.01	0.03	0	0.01	0.46
Carbon Monoxide Emissions																				
Run Exh	0	0.48	0	0.48	0.02	1.1	0	1.12	0.03	0.35	0.01	0.38	0.01	0.12	0.13	0.05	0.18	0.01	0.06	2.23
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.53	0	0.53	0	0.24	0	0.24	0	0.11	0.11	0	0.11	0	0.01	1.21
Total Ex	0	0.79	0	0.8	0.02	1.63	0	1.65	0.03	0.59	0.01	0.63	0.01	0.23	0.24	0.06	0.3	0.01	0.06	3.46
Oxides of Nitrogen Emissions																				
Run Exh	0	0.05	0	0.05	0	0.13	0	0.13	0	0.05	0.01	0.07	0	0.02	0.02	0.15	0.17	0.01	0	0.44
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0.02	0	0.02	0	0.03	0	0.03	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.06	0	0.06	0	0.16	0	0.17	0	0.09	0.01	0.1	0	0.03	0.03	0.18	0.22	0.01	0	0.56
Carbon Dioxide Emissions 0																				
Run Exh	0	0.19	0	0.19	0	0.26	0	0.26	0	0.11	0	0.11	0	0.02	0.02	0.08	0.1	0	0	0.67
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total Ex	0	0.2	0	0.2	0	0.27	0	0.27	0	0.12	0	0.12	0	0.02	0.02	0.08	0.1	0	0	0.69
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt:(000 gallons)																				
Gasoline	0	20.15	0	20.15	0.02	28.03	0	28.05	0.02	12.06	0	12.08	0.01	2.03	2.03	0	2.03	0.09	0.05	62.44
Diesel	0	0	0	0	0	0	0.12	0.12	0	0	0.25	0.25	0	0	0	7.56	7.56	0.2	0	8.14

Title : Placer County Subarea 2020 Annual ALT 4 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 14:35:31
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars			Light Duty Trucks			Medium Duty Trucks			Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Non-cat	Cat	Diesel	Non-cat	Cat	Diesel	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	29	300004	148	300182	76	213171	1285	214532	39	47339	1346	48724	13	17774	17786	4798	22584	400	2959	589381
VMT/1000	0	9289	2	9291	1	6448	26	6475	1	1453	50	1504	0	258	258	278	536	46	20	17872
Trips	111	1874970	721	1875800	292	1318140	6941	1325370	163	369109	13954	383227	156	28011	28167	49055	77222	1600	5917	3669140
Reactive Organic Gas Emissions																				
Run Exh	0	0.13	0	0.13	0	0.2	0	0.21	0.01	0.07	0.01	0.09	0	0.04	0.04	0.07	0.11	0.04	0.05	0.63
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.35	0	0.35	0	0.15	0	0.16	0	0.05	0.06	0	0.06	0	0.02	0.9
Total Ex	0	0.45	0	0.45	0	0.55	0	0.56	0.01	0.23	0.01	0.25	0	0.09	0.09	0.08	0.18	0.05	0.07	1.55
Diurnal	0	0.14	0	0.14	0	0.15	0	0.15	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.34
Hot Soak	0	0.14	0	0.14	0	0.14	0	0.14	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Running	0	0.57	0	0.57	0	1.08	0	1.09	0	0.32	0	0.32	0	0.12	0.12	0	0.12	0	0.01	2.11
Resting	0	0.07	0	0.07	0	0.08	0	0.08	0	0.02	0	0.02	0	0	0	0	0	0	0	0.17
Total	0	1.36	0	1.36	0.01	2.01	0	2.02	0.01	0.64	0.01	0.66	0	0.21	0.21	0.08	0.3	0.05	0.09	4.48
Carbon Monoxide Emissions																				
Run Exh	0.01	7.37	0	7.38	0.08	9.81	0.02	9.91	0.12	2.7	0.05	2.87	0.03	0.67	0.69	0.42	1.11	0.29	0.54	22.09
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.01	0.01	0.07	0.08	0	0	0.11
Start Exh	0	4.37	0	4.38	0.01	4.86	0	4.87	0.01	1.83	0	1.84	0.02	0.92	0.94	0.96	0	0.04	0.07	12.16
Total Ex	0.01	11.75	0	11.76	0.09	14.67	0.02	14.78	0.13	4.55	0.06	4.73	0.05	1.61	1.66	0.49	2.15	0.33	0.61	34.36
Oxides of Nitrogen Emissions																				
Run Exh	0	0.63	0	0.64	0	1.06	0.04	1.1	0.01	0.39	0.1	0.5	0	0.18	0.18	1.08	1.26	0.31	0.03	3.83
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.22	0.22	0	0	0.22
Start Exh	0	0.24	0	0.24	0	0.31	0	0.31	0	0.27	0	0.27	0	0.1	0.1	0	0.1	0.01	0	0.92
Total Ex	0	0.87	0	0.88	0.01	1.37	0.04	1.41	0.01	0.66	0.1	0.77	0	0.28	0.28	1.3	1.58	0.32	0.03	4.98
Carbon Dioxide Emissions 0																				
Run Exh	0	3.5	0	3.5	0	3.08	0.01	3.09	0	1	0.03	1.03	0	0.19	0.19	0.59	0.78	0.08	0	8.48
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.15	0	0.15	0	0.13	0	0.13	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Total Ex	0	3.65	0	3.65	0	3.21	0.01	3.22	0	1.05	0.03	1.07	0	0.2	0.2	0.6	0.79	0.08	0	8.81
PM10 Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.03	0	0.04	0	0	0	0.04	0.04	0.01	0	0.28
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.03
Total Ex	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.04	0	0	0	0.04	0.04	0.01	0	0.31
TireWear	0	0.08	0	0.08	0	0.06	0	0.06	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.17
BrakeWr	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0.01	0	0	0.25
Total	0	0.31	0	0.31	0	0.27	0	0.27	0	0.07	0	0.08	0	0.01	0.01	0.05	0.06	0.01	0	0.73
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.09
Fuel Consumpt:(000 gallons)																				
Gasoline	0.01	375.39	0	375.4	0.08	330.75	0	330.83	0.07	107.97	0	108.04	0.02	20.36	20.38	0	20.38	2.12	0.48	837.26
Diesel	0	0	0.06	0.06	0	0	0.89	0.89	0	0	2.43	2.43	0	0	0	53.86	53.86	5.29	0	62.52

```
Title    :       Placer     County     Subarea      2020 Annual   ALT            4 NO       WATT
Version  :       Emfac2002  V2.2       Sept           23     2002 **       WIS      Enabled  **
Run      Date    :            3/28/2007  14:35:31
Scen     Year:          2020 --         Model     Years:       1975 to          2020
Season   :       Annual
Area     :       Placer     County     Grand     Total
I/M      Stat    :          I          and       M        program  in       effect
Emission Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	35	320399	163	320596	95	239288	1515	240898	53	57239	1586	58878	18	20140	20158	5548	25706	435	3394	649906
VMT/1000	0	9963	2	9966	1	7313	31	7345	1	1807	59	1867	0	293	293	327	620	51	23	19871
Trips	132	2001530	787	2002450	362	1478890	8170	1487430	230	442729	16376	459335	186	32012	32198	57210	89408	1738	6786	4047140
Reactive Organic Gas Emissions																				
Run Exh	0	0.15	0	0.15	0	0.26	0	0.27	0.01	0.11	0.01	0.13	0	0.04	0.04	0.08	0.13	0.07	0.06	0.81
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Ex	0	0.35	0	0.35	0	0.41	0	0.41	0	0.2	0	0.2	0	0.06	0.07	0	0.07	0	0.02	1.04
Total Ex	0	0.5	0	0.5	0	0.67	0	0.67	0.01	0.31	0.01	0.33	0	0.11	0.11	0.1	0.21	0.07	0.08	1.87
Diurnal	0	0.15	0	0.15	0	0.17	0	0.17	0	0.04	0	0.05	0	0	0	0	0	0	0.01	0.38
Hot Soak	0	0.15	0	0.15	0	0.16	0	0.16	0	0.04	0	0.04	0	0	0	0	0	0	0	0.36
Running	0	0.62	0	0.62	0	1.25	0	1.25	0	0.41	0	0.41	0	0.13	0.13	0	0.13	0	0.01	2.43
Resting	0	0.08	0	0.08	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0	0	0	0.2
Total	0	1.49	0	1.5	0.01	2.35	0	2.36	0.01	0.83	0.01	0.86	0.01	0.24	0.25	0.1	0.35	0.07	0.11	5.24
Carbon Monoxide Emissions																				
Run Exh	0.01	8.11	0	8.12	0.11	11.73	0.02	11.86	0.18	3.67	0.07	3.92	0.04	0.83	0.88	0.49	1.37	0.37	0.61	26.25
Idle Exh	0	0	0	0	0	0	0	0	0	0.03	0	0.03	0	0.01	0.01	0.08	0.1	0	0	0.13
Start Ex	0	4.8	0	4.8	0.01	5.67	0	5.68	0.02	2.33	0	2.35	0.03	1.1	1.12	0	1.12	0.05	0.08	14.09
Total Ex	0.01	12.91	0	12.92	0.13	17.4	0.02	17.54	0.2	6.03	0.07	6.29	0.07	1.95	2.02	0.58	2.6	0.42	0.7	40.47
Oxides of Nitrogen Emissions																				
Run Exh	0	0.71	0	0.71	0.01	1.29	0.04	1.34	0.01	0.54	0.12	0.67	0	0.21	0.21	1.28	1.49	0.35	0.03	4.59
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.26	0.26	0	0	0.26
Start Ex	0	0.26	0	0.26	0	0.36	0	0.36	0	0.33	0	0.34	0	0.12	0.12	0	0.12	0.01	0	1.08
Total Ex	0	0.97	0	0.97	0.01	1.65	0.04	1.7	0.01	0.88	0.12	1.01	0	0.33	0.33	1.53	1.86	0.36	0.03	5.93
Carbon Dioxide Emissions 0																				
Run Exh	0	3.76	0	3.76	0	3.49	0.01	3.51	0	1.25	0.03	1.28	0	0.22	0.22	0.69	0.91	0.09	0	9.55
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Ex	0	0.16	0	0.16	0	0.15	0	0.15	0	0.05	0	0.05	0	0	0	0	0	0	0	0.35
Total Ex	0	3.92	0	3.92	0	3.64	0.01	3.65	0	1.3	0.03	1.33	0	0.22	0.22	0.71	0.93	0.09	0	9.92
PM10 Emissions																				
Run Exh	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.05	0	0	0	0.05	0.05	0.01	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.11	0	0.11	0	0.14	0	0.14	0	0.05	0	0.05	0	0	0	0.05	0.05	0.01	0	0.36
TireWear	0	0.09	0	0.09	0	0.06	0	0.06	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.18
BrakeWr	0	0.14	0	0.14	0	0.1	0	0.1	0	0.02	0	0.03	0	0	0	0	0.01	0	0	0.27
Total	0	0.34	0	0.34	0	0.3	0	0.31	0	0.09	0	0.1	0	0.01	0.01	0.06	0.07	0.01	0	0.82
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.04	0	0.04	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.1
Fuel Consumpt:(000 gallons)																				
Gasoline	0.02	403.18	0	403.2	0.11	375.75	0	375.86	0.1	134.04	0	134.14	0.03	23.17	23.2	0	23.2	2.36	0.56	939.31
Diesel	0	0	0.07	0.07	0	0	1.05	1.05	0	0	2.86	2.86	0	0	0	63.54	63.54	5.85	0	73.36

Title : Placer County Subarea 2020 Annual ALT 4 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 14:59:55
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (LT)
I/M Stat : No I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	1	4088	2	4091	3	7527	43	7573	5	4410	82	4497	1	463	464	140	604	18	100	16882
VMT/1000	0	190	0	190	0	333	1	334	0	195	4	199	0	10	10	11	21	3	1	748
Trips	5	25412	10	25427	11	46543	236	46790	22	30818	795	31636	14	1117	1131	2080	3211	72	199	107334
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.03	0	0	0	0	0.01	0.02	0	0.09
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.05
Total Ex	0	0.01	0	0.02	0	0.04	0	0.04	0	0.05	0	0.05	0	0.01	0.01	0	0.01	0.02	0	0.14
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.12
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.03	0	0.03	0	0.11	0	0.11	0	0.1	0	0.1	0	0.01	0.01	0	0.01	0.02	0	0.29
Carbon Monoxide Emissions																				
Run Exh	0	0.26	0	0.26	0.01	0.82	0	0.83	0.04	0.63	0.01	0.67	0.01	0.05	0.06	0.02	0.08	0.07	0.02	1.93
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.11	0	0.11	0	0.28	0	0.28	0	0.26	0	0.26	0.01	0.05	0.06	0	0.06	0	0	0.72
Total Ex	0	0.37	0	0.37	0.01	1.1	0	1.11	0.04	0.89	0.01	0.93	0.02	0.1	0.12	0.02	0.14	0.07	0.02	2.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.03	0	0.03	0	0.1	0	0.1	0	0.1	0.01	0.11	0	0.01	0.01	0.05	0.05	0.03	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.07
Total Ex	0	0.03	0	0.03	0	0.12	0	0.12	0	0.13	0.01	0.14	0	0.02	0.02	0.05	0.07	0.03	0	0.39
Carbon Dioxide Emissions 0																				
Run Exh	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.13	0	0.01	0.01	0.02	0.03	0.01	0	0.4
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total Ex	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.14	0	0.01	0.01	0.02	0.03	0.01	0	0.41
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.04
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fuel Consumption (000 gallons)																				
Gasoline	0	7.61	0	7.61	0.01	16.91	0	16.92	0.01	13.96	0	13.97	0	0.78	0.79	0	0.79	0.15	0.02	39.46
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	0.18	0.18	0	0	0	2.12	2.12	0.36	0	2.7

Title : Placer County Subarea 2020 Annual ALT 4 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 14:59:55
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	4	16307	12	16323	15	18590	187	18792	9	5489	158	5657	4	1903	1908	610	2518	17	335	43642
VMT/1000	0	484	0	484	0	532	3	535	0	159	5	164	0	25	26	38	64	2	2	1251
Trips	16	101147	56	101219	59	114210	993	115262	44	42802	1627	44472	17	2884	2900	6076	8976	67	670	270666
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.03	0	0.03	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0.01	0.08
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.03	0	0.03	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.04	0	0.01	0.01	0.01	0.02	0	0.01	0.18
Diurnal	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Hot Soak	0	0.01	0	0.01	0	0.01	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Running	0	0.04	0	0.04	0	0.11	0	0.11	0	0.04	0	0.04	0	0.01	0.01	0	0.01	0	0	0.21
Resting	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.1	0	0.1	0	0.22	0	0.22	0	0.09	0	0.09	0	0.02	0.02	0.01	0.03	0	0.01	0.46
Carbon Monoxide Emissions																				
Run Exh	0	0.48	0	0.48	0.02	1.1	0	1.12	0.03	0.35	0.01	0.38	0.01	0.12	0.13	0.05	0.18	0.01	0.06	2.23
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.53	0	0.53	0	0.24	0	0.24	0	0.11	0.11	0	0.11	0	0.01	1.21
Total Ex	0	0.79	0	0.8	0.02	1.63	0	1.65	0.03	0.59	0.01	0.63	0.01	0.23	0.24	0.06	0.3	0.01	0.06	3.46
Oxides of Nitrogen Emissions																				
Run Exh	0	0.05	0	0.05	0	0.13	0	0.13	0	0.05	0.01	0.07	0	0.02	0.02	0.15	0.17	0.01	0	0.44
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0.02	0	0.02	0	0.03	0	0.03	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.06	0	0.06	0	0.16	0	0.17	0	0.09	0.01	0.1	0	0.03	0.03	0.18	0.22	0.01	0	0.56
Carbon Dioxide Emissions 0																				
Run Exh	0	0.19	0	0.19	0	0.26	0	0.26	0	0.11	0	0.11	0	0.02	0.02	0.08	0.1	0	0	0.67
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total Ex	0	0.2	0	0.2	0	0.27	0	0.27	0	0.12	0	0.12	0	0.02	0.02	0.08	0.1	0	0	0.69
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt (000 gallons)																				
Gasoline	0	20.15	0	20.15	0.02	28.03	0	28.05	0.02	12.06	0	12.08	0.01	2.03	2.03	0	2.03	0.09	0.05	62.44
Diesel	0	0	0	0	0	0	0.12	0.12	0	0	0.25	0.25	0	0	0	7.56	7.56	0.2	0	8.14

Title : Placer County Subarea 2020 Annual ALT 4 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 14:59:55
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	29	300706	149	300884	76	213668	1288	215033	39	47450	1349	48838	13	17816	17828	4810	22638	401	2966	590760
VMT/1000	0	9311	2	9312	1	6463	26	6490	1	1457	50	1508	0	258	258	279	537	46	20	17913
Trips	111	1879360	723	1880190	293	1321220	6957	1328470	164	369975	13988	384127	156	28083	28239	49182	77421	1604	5931	3677740
Reactive Organic Gas Emissions																				
Run Exh	0	0.13	0	0.13	0	0.21	0	0.21	0.01	0.07	0.01	0.09	0	0.04	0.04	0.07	0.11	0.04	0.06	0.63
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.35	0	0.35	0	0.15	0	0.16	0	0.05	0.06	0	0.06	0	0.02	0.9
Total Ex	0	0.45	0	0.45	0	0.55	0	0.56	0.01	0.23	0.01	0.25	0	0.09	0.09	0.08	0.18	0.05	0.07	1.55
Diurnal	0	0.14	0	0.14	0	0.15	0	0.15	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.34
Hot Soak	0	0.14	0	0.14	0	0.14	0	0.14	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Running	0	0.57	0	0.57	0	1.09	0	1.09	0	0.32	0	0.33	0	0.12	0.12	0	0.12	0	0.01	2.11
Resting	0	0.07	0	0.07	0	0.08	0	0.08	0	0.02	0	0.02	0	0	0	0	0	0	0	0.17
Total	0	1.36	0	1.37	0.01	2.01	0	2.02	0.01	0.65	0.01	0.66	0	0.21	0.21	0.08	0.3	0.05	0.09	4.49
Carbon Monoxide Emissions																				
Run Exh	0.01	7.38	0	7.39	0.08	9.82	0.02	9.92	0.12	2.7	0.05	2.87	0.03	0.67	0.69	0.42	1.12	0.29	0.54	22.13
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.01	0.01	0.07	0.09	0	0	0.11
Start Exh	0	4.38	0	4.39	0.01	4.87	0	4.88	0.01	1.83	0	1.85	0.02	0.94	0.96	0	0.96	0.04	0.07	12.19
Total Ex	0.01	11.77	0	11.78	0.09	14.69	0.02	14.8	0.13	4.55	0.06	4.74	0.05	1.62	1.67	0.49	2.16	0.33	0.61	34.42
Oxides of Nitrogen Emissions																				
Run Exh	0	0.64	0	0.64	0	1.06	0.04	1.1	0.01	0.39	0.1	0.5	0	0.18	0.18	1.09	1.26	0.31	0.03	3.84
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.22	0.22	0	0	0.22
Start Exh	0	0.24	0	0.24	0	0.31	0	0.31	0	0.27	0	0.27	0	0.1	0.1	0	0.1	0.01	0	0.92
Total Ex	0	0.88	0	0.88	0.01	1.37	0.04	1.41	0.01	0.66	0.1	0.77	0	0.28	0.28	1.31	1.58	0.32	0.03	4.99
Carbon Dioxide Emissions 0																				
Run Exh	0	3.51	0	3.51	0	3.08	0.01	3.09	0	1.01	0.03	1.03	0	0.19	0.19	0.59	0.78	0.08	0	8.5
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.15	0	0.15	0	0.13	0	0.13	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Total Ex	0	3.66	0	3.66	0	3.21	0.01	3.22	0	1.05	0.03	1.08	0	0.2	0.2	0.6	0.8	0.08	0	8.84
PM10 Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.03	0	0.04	0	0	0	0.04	0.04	0.01	0	0.28
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.03
Total Ex	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.04	0	0	0	0.04	0.04	0.01	0	0.31
TireWear	0	0.08	0	0.08	0	0.06	0	0.06	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.17
BrakeWr	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.25
Total	0	0.31	0	0.31	0	0.27	0	0.27	0	0.07	0	0.08	0	0.01	0.01	0.05	0.06	0.01	0	0.73
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.09
Fuel Consumption (000 gallons)																				
Gasoline	0.01	376.3	0	376.31	0.08	331.55	0	331.63	0.07	108.23	0	108.3	0.02	20.41	20.43	0	20.43	2.12	0.49	839.29
Diesel	0	0	0.06	0.06	0	0	0.89	0.89	0	0	2.43	2.43	0	0	0	53.99	53.99	5.3	0	62.67

Title : Placer County Subarea 2020 Annual ALT 4 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 14:59:55
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	35	321100	163	321298	95	239786	1518	241399	53	57350	1589	58992	18	20182	20200	5560	25760	436	3401	651285
VMT/1000	0	9985	2	9987	1	7328	31	7360	1	1810	59	1870	0	294	294	328	622	51	23	19913
Trips	133	2005920	788	2006840	363	1481970	8186	1490520	230	443596	16409	460235	187	32083	32270	57338	89608	1742	6800	4055740
Reactive Organic Gas Emissions																				
Run Exh	0	0.15	0	0.15	0	0.26	0	0.27	0.01	0.11	0.01	0.13	0	0.04	0.04	0.08	0.13	0.07	0.06	0.81
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Exh	0	0.35	0	0.35	0	0.41	0	0.41	0	0.2	0	0.2	0	0.06	0.07	0	0.07	0	0.02	1.05
Total Ex	0	0.5	0	0.5	0	0.67	0	0.68	0.01	0.31	0.01	0.33	0	0.11	0.11	0.1	0.21	0.07	0.08	1.87
Diurnal	0	0.15	0	0.15	0	0.17	0	0.17	0	0.05	0	0.05	0	0	0	0	0	0	0.01	0.38
Hot Soak	0	0.15	0	0.15	0	0.16	0	0.16	0	0.04	0	0.04	0	0	0	0	0	0	0	0.36
Running	0	0.62	0	0.62	0	1.26	0	1.26	0	0.41	0	0.41	0	0.13	0.13	0	0.13	0	0.01	2.43
Resting	0	0.08	0	0.08	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0	0	0	0.2
Total	0	1.5	0	1.5	0.01	2.35	0	2.36	0.01	0.83	0.01	0.86	0.01	0.24	0.25	0.1	0.35	0.07	0.11	5.25
Carbon Monoxide Emissions																				
Run Exh	0.01	8.12	0	8.13	0.11	11.74	0.02	11.87	0.18	3.67	0.07	3.92	0.04	0.84	0.88	0.49	1.38	0.37	0.62	26.29
Idle Exh	0	0	0	0	0	0	0	0	0	0.03	0	0.03	0	0.01	0.02	0.08	0.1	0	0	0.13
Start Exh	0	4.81	0	4.81	0.01	5.68	0	5.69	0.02	2.33	0	2.35	0.03	1.1	1.13	0	1.13	0.05	0.08	14.12
Total Ex	0.01	12.93	0	12.94	0.13	17.42	0.02	17.57	0.2	6.03	0.07	6.3	0.07	1.95	2.02	0.58	2.6	0.42	0.7	40.53
Oxides of Nitrogen Emissions																				
Run Exh	0	0.71	0	0.71	0.01	1.29	0.04	1.34	0.01	0.54	0.12	0.67	0	0.21	0.21	1.28	1.49	0.35	0.03	4.6
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.26	0.26	0	0	0.26
Start Exh	0	0.26	0	0.26	0	0.36	0	0.36	0	0.33	0	0.34	0	0.12	0.12	0	0.12	0.01	0	1.09
Total Ex	0	0.97	0	0.97	0.01	1.65	0.04	1.7	0.01	0.88	0.12	1.01	0	0.33	0.33	1.54	1.87	0.36	0.03	5.95
Carbon Dioxide Emissions 0																				
Run Exh	0	3.77	0	3.77	0	3.5	0.01	3.51	0	1.25	0.03	1.28	0	0.22	0.22	0.69	0.92	0.09	0	9.57
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.16	0	0.16	0	0.15	0	0.15	0	0.05	0	0.05	0	0	0	0	0	0	0	0.35
Total Ex	0	3.92	0	3.93	0	3.65	0.01	3.66	0	1.3	0.03	1.33	0	0.22	0.22	0.71	0.93	0.09	0	9.94
PM10 Emissions																				
Run Exh	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.05	0	0	0	0.05	0.05	0.01	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.11	0	0.11	0	0.14	0	0.14	0	0.05	0	0.05	0	0	0	0.05	0.05	0.01	0	0.36
TireWear	0	0.09	0	0.09	0	0.06	0	0.06	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.18
BrakeWr	0	0.14	0	0.14	0	0.1	0	0.1	0	0.03	0	0.03	0	0	0	0	0.01	0	0	0.28
Total	0	0.34	0	0.34	0	0.3	0	0.31	0	0.09	0	0.1	0	0.01	0.01	0.06	0.07	0.01	0	0.82
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.04	0	0.04	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.1
Fuel Consumption (000 gallons)																				
Gasoline	0.02	404.06	0	404.08	0.11	376.48	0	376.59	0.1	134.25	0	134.35	0.03	23.22	23.25	0	23.25	2.36	0.56	941.19
Diesel	0	0	0.07	0.07	0	0	1.06	1.06	0	0	2.87	2.87	0	0	0	63.67	63.67	5.86	0	73.51

Title : Placer County Subarea 2020 Annual ALT 5 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 15:52:13
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (LT)
I/M Stat : No I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	1	4088	2	4091	3	7527	43	7573	5	4410	82	4497	1	463	464	140	604	18	100	16882
VMT/1000	0	190	0	190	0	333	1	334	0	195	4	199	0	10	10	11	21	3	1	748
Trips	5	25412	10	25427	11	46543	236	46790	22	30818	795	31636	14	1117	1131	2080	3211	72	199	107334
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.03	0	0	0	0	0.01	0.02	0	0.09
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.05
Total Ex	0	0.01	0	0.02	0	0.04	0	0.04	0	0.05	0	0.05	0	0.01	0.01	0	0.01	0.02	0	0.14
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.12
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.03	0	0.03	0	0.11	0	0.11	0	0.1	0	0.1	0	0.01	0.01	0	0.01	0.02	0	0.29
Carbon Monoxide Emissions																				
Run Exh	0	0.26	0	0.26	0.01	0.82	0	0.83	0.04	0.63	0.01	0.67	0.01	0.05	0.06	0.02	0.08	0.07	0.02	1.93
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.11	0	0.11	0	0.28	0	0.28	0	0.26	0	0.26	0.01	0.05	0.06	0	0.06	0	0	0.72
Total Ex	0	0.37	0	0.37	0.01	1.1	0	1.11	0.04	0.89	0.01	0.93	0.02	0.1	0.12	0.02	0.14	0.07	0.02	2.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.03	0	0.03	0	0.1	0	0.1	0	0.1	0.01	0.11	0	0.01	0.01	0.05	0.05	0.03	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.07
Total Ex	0	0.03	0	0.03	0	0.12	0	0.12	0	0.13	0.01	0.14	0	0.02	0.02	0.05	0.07	0.03	0	0.39
Carbon Dioxide Emissions 0																				
Run Exh	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.13	0	0.01	0.01	0.02	0.03	0.01	0	0.4
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total Ex	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.14	0	0.01	0.01	0.02	0.03	0.01	0	0.41
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.04
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fuel Consumption (000 gallons)																				
Gasoline	0	7.61	0	7.61	0.01	16.91	0	16.92	0.01	13.96	0	13.97	0	0.78	0.79	0	0.79	0.15	0.02	39.46
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	0.18	0.18	0	0	0	2.12	2.12	0.36	0	2.7

Title : Placer County Subarea 2020 Annual ALT 5 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 15:52:13
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	4	16307	12	16323	15	18590	187	18792	9	5489	158	5657	4	1903	1908	610	2518	17	335	43642
VMT/1000	0	484	0	484	0	532	3	535	0	159	5	164	0	25	26	38	64	2	2	1251
Trips	16	101147	56	101219	59	114210	993	115262	44	42802	1627	44472	17	2884	2900	6076	8976	67	670	270666
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.03	0	0.03	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0.01	0.08
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.03	0	0.03	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.04	0	0.01	0.01	0.01	0.02	0	0.01	0.18
Diurnal	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Hot Soak	0	0.01	0	0.01	0	0.01	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Running	0	0.04	0	0.04	0	0.11	0	0.11	0	0.04	0	0.04	0	0.01	0.01	0	0.01	0	0	0.21
Resting	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.1	0	0.1	0	0.22	0	0.22	0	0.09	0	0.09	0	0.02	0.02	0.01	0.03	0	0.01	0.46
Carbon Monoxide Emissions																				
Run Exh	0	0.48	0	0.48	0.02	1.1	0	1.12	0.03	0.35	0.01	0.38	0.01	0.12	0.13	0.05	0.18	0.01	0.06	2.23
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.53	0	0.53	0	0.24	0	0.24	0	0.11	0.11	0	0.11	0	0.01	1.21
Total Ex	0	0.79	0	0.8	0.02	1.63	0	1.65	0.03	0.59	0.01	0.63	0.01	0.23	0.24	0.06	0.3	0.01	0.06	3.46
Oxides of Nitrogen Emissions																				
Run Exh	0	0.05	0	0.05	0	0.13	0	0.13	0	0.05	0.01	0.07	0	0.02	0.02	0.15	0.17	0.01	0	0.44
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0.02	0	0.02	0	0.03	0	0.03	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.06	0	0.06	0	0.16	0	0.17	0	0.09	0.01	0.1	0	0.03	0.03	0.18	0.22	0.01	0	0.56
Carbon Dioxide Emissions 0																				
Run Exh	0	0.19	0	0.19	0	0.26	0	0.26	0	0.11	0	0.11	0	0.02	0.02	0.08	0.1	0	0	0.67
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total Ex	0	0.2	0	0.2	0	0.27	0	0.27	0	0.12	0	0.12	0	0.02	0.02	0.08	0.1	0	0	0.69
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt (000 gallons)																				
Gasoline	0	20.15	0	20.15	0.02	28.03	0	28.05	0.02	12.06	0	12.08	0.01	2.03	2.03	0	2.03	0.09	0.05	62.44
Diesel	0	0	0	0	0	0	0.12	0.12	0	0	0.25	0.25	0	0	0	7.56	7.56	0.2	0	8.14

Title : Placer County Subarea 2020 Annual ALT 5 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 15:52:13
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Gasoline Trucks Non-cat	Gasoline Trucks Cat	Gasoline Trucks Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
Vehicles	29	300050	149	300228	76	213202	1285	214564	39	47347	1346	48732	13	17769	17782	4775	22557	400	2960	589441
VMT/1000	0	9291	2	9293	1	6450	26	6477	1	1454	50	1504	0	257	258	277	535	46	20	17874
Trips	111	1875260	721	1876090	292	1318340	6942	1325570	163	369179	13957	383299	154	27687	27841	48414	76255	1600	5919	3668740
Reactive Organic Gas Emissions																				
Run Exh	0	0.13	0	0.13	0	0.2	0	0.21	0.01	0.07	0.01	0.09	0	0.04	0.04	0.07	0.11	0.04	0.06	0.63
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.35	0	0.35	0	0.15	0	0.16	0	0.05	0.06	0	0.06	0	0.02	0.9
Total Ex	0	0.45	0	0.45	0	0.55	0	0.56	0.01	0.23	0.01	0.25	0	0.09	0.09	0.08	0.18	0.05	0.07	1.55
Diurnal	0	0.14	0	0.14	0	0.15	0	0.15	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.33
Hot Soak	0	0.14	0	0.14	0	0.14	0	0.14	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Running	0	0.57	0	0.57	0	1.08	0	1.09	0	0.32	0	0.32	0	0.11	0.11	0	0.11	0	0.01	2.11
Resting	0	0.07	0	0.07	0	0.08	0	0.08	0	0.02	0	0.02	0	0	0	0	0	0	0	0.18
Total	0	1.36	0	1.36	0.01	2.01	0	2.02	0.01	0.64	0.01	0.66	0	0.21	0.21	0.08	0.3	0.05	0.09	4.48
Carbon Monoxide Emissions																				
Run Exh	0.01	7.38	0	7.39	0.08	9.81	0.02	9.91	0.12	2.7	0.05	2.87	0.03	0.67	0.69	0.42	1.11	0.29	0.54	22.1
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.01	0.01	0.07	0.08	0	0	0.11
Start Exh	0	4.37	0	4.38	0.01	4.86	0	4.87	0.01	1.83	0	1.84	0.02	0.93	0.95	0	0.95	0.04	0.07	12.15
Total Ex	0.01	11.75	0	11.76	0.09	14.67	0.02	14.78	0.13	4.55	0.06	4.73	0.05	1.61	1.65	0.49	2.14	0.33	0.61	34.36
Oxides of Nitrogen Emissions																				
Run Exh	0	0.63	0	0.64	0	1.06	0.04	1.1	0.01	0.39	0.1	0.5	0	0.18	0.18	1.08	1.25	0.31	0.03	3.83
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.22	0.22	0	0	0.22
Start Exh	0	0.24	0	0.24	0	0.31	0	0.31	0	0.27	0	0.27	0	0.1	0.1	0	0.1	0.01	0	0.92
Total Ex	0	0.87	0	0.88	0.01	1.37	0.04	1.41	0.01	0.66	0.1	0.77	0	0.28	0.28	1.3	1.58	0.32	0.03	4.97
Carbon Dioxide Emissions 0																				
Run Exh	0	3.5	0	3.5	0	3.08	0.01	3.09	0	1	0.03	1.03	0	0.19	0.19	0.59	0.78	0.08	0	8.48
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.15	0	0.15	0	0.13	0	0.13	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Total Ex	0	3.65	0	3.65	0	3.21	0.01	3.22	0	1.05	0.03	1.07	0	0.2	0.2	0.6	0.79	0.08	0	8.82
PM10 Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.03	0	0.04	0	0	0	0.04	0.04	0.01	0	0.28
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.03
Total Ex	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.04	0	0	0	0.04	0.04	0.01	0	0.31
TireWear	0	0.08	0	0.08	0	0.06	0	0.06	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.17
BrakeWr	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.25
Total	0	0.31	0	0.31	0	0.27	0	0.27	0	0.07	0	0.08	0	0.01	0.01	0.05	0.06	0.01	0	0.73
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.09
Fuel Consumption (000 gallons)																				
Gasoline	0.01	375.57	0	375.59	0.08	330.91	0	330.99	0.07	108.03	0	108.1	0.02	20.34	20.36	0	20.36	2.12	0.48	837.64
Diesel	0	0	0.06	0.06	0	0	0.89	0.89	0	0	2.43	2.43	0	0	0	53.71	53.71	5.29	0	62.38

Title : Placer County Subarea 2020 Annual ALT 5 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 15:52:13
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks						
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Gasoline Trucks Non-cat	Gasoline Trucks Cat	Gasoline Trucks Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
Vehicles	35	320445	163	320642	95	239320	1515	240930	53	57247	1586	58886	18	20136	20154	5526	25679	435	3395	649966
VMT/1000	0	9966	2	9968	1	7314	31	7346	1	1807	59	1867	0	293	293	326	619	51	23	19874
Trips	132	2001820	787	2002740	362	1479090	8171	1487620	230	442799	16379	459407	185	31687	31872	56570	88441	1738	6788	4046740
Reactive Organic Gas Emissions																				
Run Exh	0	0.15	0	0.15	0	0.26	0	0.27	0.01	0.11	0.01	0.13	0	0.04	0.04	0.08	0.13	0.07	0.06	0.81
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Exh	0	0.35	0	0.35	0	0.41	0	0.41	0	0.2	0	0.2	0	0.06	0.06	0	0.06	0	0.02	1.04
Total Ex	0	0.5	0	0.5	0	0.67	0	0.67	0.01	0.31	0.01	0.33	0	0.11	0.11	0.1	0.21	0.07	0.08	1.87
Diurnal	0	0.15	0	0.15	0	0.17	0	0.17	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.38
Hot Soak	0	0.15	0	0.15	0	0.16	0	0.16	0	0.04	0	0.04	0	0	0	0	0	0	0	0.36
Running	0	0.62	0	0.62	0	1.25	0	1.26	0	0.41	0	0.41	0	0.13	0.13	0	0.13	0	0.01	2.43
Resting	0	0.08	0	0.08	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0	0	0	0.2
Total	0	1.49	0	1.5	0.01	2.35	0	2.36	0.01	0.83	0.01	0.86	0.01	0.24	0.24	0.1	0.34	0.07	0.11	5.23
Carbon Monoxide Emissions																				
Run Exh	0.01	8.11	0	8.13	0.11	11.73	0.02	11.86	0.18	3.67	0.07	3.92	0.04	0.83	0.88	0.49	1.37	0.37	0.61	26.26
Idle Exh	0	0	0	0	0	0	0	0	0	0.03	0	0.03	0	0.01	0.01	0.08	0.1	0	0	0.13
Start Exh	0	4.8	0	4.8	0.01	5.67	0	5.68	0.02	2.33	0	2.35	0.03	1.09	1.12	0	1.12	0.05	0.08	14.08
Total Ex	0.01	12.91	0	12.93	0.13	17.4	0.02	17.55	0.2	6.03	0.07	6.29	0.07	1.94	2.01	0.58	2.59	0.42	0.7	40.47
Oxides of Nitrogen Emissions																				
Run Exh	0	0.71	0	0.71	0.01	1.29	0.04	1.34	0.01	0.54	0.12	0.67	0	0.21	0.21	1.27	1.48	0.35	0.03	4.58
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.26	0.26	0	0	0.26
Start Exh	0	0.26	0	0.26	0	0.36	0	0.36	0	0.33	0	0.34	0	0.12	0.12	0	0.12	0.01	0	1.08
Total Ex	0	0.97	0	0.97	0.01	1.65	0.04	1.7	0.01	0.88	0.12	1.01	0	0.33	0.33	1.53	1.86	0.36	0.03	5.93
Carbon Dioxide Emissions 0																				
Run Exh	0	3.76	0	3.76	0	3.5	0.01	3.51	0	1.25	0.03	1.28	0	0.22	0.22	0.69	0.91	0.09	0	9.55
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.16	0	0.16	0	0.15	0	0.15	0	0.05	0	0.05	0	0	0	0	0	0	0	0.35
Total Ex	0	3.92	0	3.92	0	3.64	0.01	3.65	0	1.3	0.03	1.33	0	0.22	0.22	0.7	0.93	0.09	0	9.92
PM10 Emissions																				
Run Exh	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.05	0	0	0	0.05	0.05	0.01	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.11	0	0.11	0	0.14	0	0.14	0	0.05	0	0.05	0	0	0	0.05	0.05	0.01	0	0.36
TireWear	0	0.09	0	0.09	0	0.06	0	0.06	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.18
BrakeWr	0	0.14	0	0.14	0	0.1	0	0.1	0	0.02	0	0.03	0	0	0	0.01	0.01	0	0	0.27
Total	0	0.34	0	0.34	0	0.3	0	0.31	0	0.09	0	0.1	0	0.01	0.01	0.06	0.07	0.01	0	0.82
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.04	0	0.04	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.1
Fuel Consumption (000 gallons)																				
Gasoline	0.02	403.33	0	403.35	0.11	375.85	0	375.95	0.1	134.04	0	134.15	0.03	23.15	23.18	0	23.18	2.36	0.56	939.55
Diesel	0	0	0.07	0.07	0	0	1.05	1.05	0	0	2.86	2.86	0	0	0	63.39	63.39	5.85	0	73.22

Title : Placer County Subarea 2020 Annual ALT 5 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 16:02:49
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (LT)
I/M Stat : No I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Gasoline Trucks Non-cat	Gasoline Trucks Cat	Gasoline Trucks Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
Vehicles	1	4088	2	4091	3	7527	43	7573	5	4410	82	4497	1	463	464	140	604	18	100	16882
VMT/1000	0	190	0	190	0	333	1	334	0	195	4	199	0	10	10	11	21	3	1	748
Trips	5	25412	10	25427	11	46543	236	46790	22	30818	795	31636	14	1117	1131	2080	3211	72	199	107334
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.03	0	0	0	0	0.01	0.02	0	0.09
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.05
Total Ex	0	0.01	0	0.02	0	0.04	0	0.04	0	0.05	0	0.05	0	0.01	0.01	0	0.01	0.02	0	0.14
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.12
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.03	0	0.03	0	0.11	0	0.11	0	0.1	0	0.1	0	0.01	0.01	0	0.01	0.02	0	0.29
Carbon Monoxide Emissions																				
Run Exh	0	0.26	0	0.26	0.01	0.82	0	0.83	0.04	0.63	0.01	0.67	0.01	0.05	0.06	0.02	0.08	0.07	0.02	1.93
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.11	0	0.11	0	0.28	0	0.28	0	0.26	0	0.26	0.01	0.05	0.06	0	0.06	0	0	0.72
Total Ex	0	0.37	0	0.37	0.01	1.1	0	1.11	0.04	0.89	0.01	0.93	0.02	0.1	0.12	0.02	0.14	0.07	0.02	2.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.03	0	0.03	0	0.1	0	0.1	0	0.1	0.01	0.11	0	0.01	0.01	0.05	0.05	0.03	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.07
Total Ex	0	0.03	0	0.03	0	0.12	0	0.12	0	0.13	0.01	0.14	0	0.02	0.02	0.05	0.07	0.03	0	0.39
Carbon Dioxide Emissions 0																				
Run Exh	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.13	0	0.01	0.01	0.02	0.03	0.01	0	0.4
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total Ex	0	0.07	0	0.07	0	0.16	0	0.16	0	0.13	0	0.14	0	0.01	0.01	0.02	0.03	0.01	0	0.41
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.04
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fuel Consumption (000 gallons)																				
Gasoline	0	7.61	0	7.61	0.01	16.91	0	16.92	0.01	13.96	0	13.97	0	0.78	0.79	0	0.79	0.15	0.02	39.46
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	0.18	0.18	0	0	0	2.12	2.12	0.36	0	2.7

Title : Placer County Subarea 2020 Annual ALT 5 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 16:02:49
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	4	16307	12	16323	15	18590	187	18792	9	5489	158	5657	4	1903	1908	610	2518	17	335	43642
VMT/1000	0	484	0	484	0	532	3	535	0	159	5	164	0	25	26	38	64	2	2	1251
Trips	16	101147	56	101219	59	114210	993	115262	44	42802	1627	44472	17	2884	2900	6076	8976	67	670	270666
Reactive Organic Gas Emissions																				
Run Exh	0	0.01	0	0.01	0	0.03	0	0.03	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0.01	0.08
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.03	0	0.03	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.04	0	0.01	0.01	0.01	0.02	0	0.01	0.18
Diurnal	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Hot Soak	0	0.01	0	0.01	0	0.01	0	0.02	0	0	0	0	0	0	0	0	0	0	0	0.03
Running	0	0.04	0	0.04	0	0.11	0	0.11	0	0.04	0	0.04	0	0.01	0.01	0	0.01	0	0	0.21
Resting	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.1	0	0.1	0	0.22	0	0.22	0	0.09	0	0.09	0	0.02	0.02	0.01	0.03	0	0.01	0.46
Carbon Monoxide Emissions																				
Run Exh	0	0.48	0	0.48	0.02	1.1	0	1.12	0.03	0.35	0.01	0.38	0.01	0.12	0.13	0.05	0.18	0.01	0.06	2.23
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.53	0	0.53	0	0.24	0	0.24	0	0.11	0.11	0	0.11	0	0.01	1.21
Total Ex	0	0.79	0	0.8	0.02	1.63	0	1.65	0.03	0.59	0.01	0.63	0.01	0.23	0.24	0.06	0.3	0.01	0.06	3.46
Oxides of Nitrogen Emissions																				
Run Exh	0	0.05	0	0.05	0	0.13	0	0.13	0	0.05	0.01	0.07	0	0.02	0.02	0.15	0.17	0.01	0	0.44
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0.02	0	0.02	0	0.03	0	0.03	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.09
Total Ex	0	0.06	0	0.06	0	0.16	0	0.17	0	0.09	0.01	0.1	0	0.03	0.03	0.18	0.22	0.01	0	0.56
Carbon Dioxide Emissions 0																				
Run Exh	0	0.19	0	0.19	0	0.26	0	0.26	0	0.11	0	0.11	0	0.02	0.02	0.08	0.1	0	0	0.67
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total Ex	0	0.2	0	0.2	0	0.27	0	0.27	0	0.12	0	0.12	0	0.02	0.02	0.08	0.1	0	0	0.69
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumption (000 gallons)																				
Gasoline	0	20.15	0	20.15	0.02	28.03	0	28.05	0.02	12.06	0	12.08	0.01	2.03	2.03	0	2.03	0.09	0.05	62.44
Diesel	0	0	0	0	0	0	0.12	0.12	0	0	0.25	0.25	0	0	0	7.56	7.56	0.2	0	8.14

Title : Placer County Subarea 2020 Annual ALT 5 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 16:02:49
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	29	300493	149	300671	76	213517	1287	214881	39	47417	1348	48804	13	17803	17816	4805	22621	401	2964	590342
VMT/1000	0	9304	2	9306	1	6459	26	6486	1	1456	50	1506	0	258	258	278	537	46	20	17901
Trips	111	1878030	722	1878860	292	1320280	6952	1327530	164	369714	13976	383853	156	28055	28211	49132	77343	1604	5927	3675120
Reactive Organic Gas Emissions																				
Run Exh	0	0.13	0	0.13	0	0.2	0	0.21	0.01	0.07	0.01	0.09	0	0.04	0.04	0.07	0.11	0.04	0.06	0.63
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.32	0	0.32	0	0.35	0	0.35	0	0.15	0	0.16	0	0.05	0.06	0	0.06	0	0.02	0.9
Total Ex	0	0.45	0	0.45	0	0.55	0	0.56	0.01	0.23	0.01	0.25	0	0.09	0.09	0.08	0.18	0.05	0.07	1.55
Diurnal	0	0.14	0	0.14	0	0.15	0	0.15	0	0.04	0	0.04	0	0	0	0	0	0	0.01	0.34
Hot Soak	0	0.14	0	0.14	0	0.14	0	0.14	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Running	0	0.57	0	0.57	0	1.09	0	1.09	0	0.32	0	0.32	0	0.12	0.12	0	0.12	0	0.01	2.11
Resting	0	0.07	0	0.07	0	0.08	0	0.08	0	0.02	0	0.02	0	0	0	0	0	0	0	0.17
Total	0	1.36	0	1.37	0.01	2.01	0	2.02	0.01	0.65	0.01	0.66	0	0.21	0.21	0.08	0.3	0.05	0.09	4.49
Carbon Monoxide Emissions																				
Run Exh	0.01	7.38	0	7.39	0.08	9.82	0.02	9.92	0.12	2.7	0.05	2.87	0.03	0.67	0.69	0.42	1.11	0.29	0.54	22.12
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.01	0.01	0.07	0.09	0	0	0.11
Start Exh	0	4.38	0	4.38	0.01	4.87	0	4.88	0.01	1.83	0	1.85	0.02	0.94	0.96	0	0.96	0.04	0.07	12.18
Total Ex	0.01	11.76	0	11.77	0.09	14.69	0.02	14.8	0.13	4.55	0.06	4.74	0.05	1.62	1.66	0.49	2.16	0.33	0.61	34.41
Oxides of Nitrogen Emissions																				
Run Exh	0	0.64	0	0.64	0	1.06	0.04	1.1	0.01	0.39	0.1	0.5	0	0.18	0.18	1.08	1.26	0.31	0.03	3.84
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.22	0.22	0	0	0.22
Start Exh	0	0.24	0	0.24	0	0.31	0	0.31	0	0.27	0	0.27	0	0.1	0.1	0	0.1	0.01	0	0.92
Total Ex	0	0.87	0	0.88	0.01	1.37	0.04	1.41	0.01	0.66	0.1	0.77	0	0.28	0.28	1.3	1.58	0.32	0.03	4.99
Carbon Dioxide Emissions 0																				
Run Exh	0	3.51	0	3.51	0	3.08	0.01	3.09	0	1.01	0.03	1.03	0	0.19	0.19	0.59	0.78	0.08	0	8.5
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.15	0	0.15	0	0.13	0	0.13	0	0.04	0	0.04	0	0	0	0	0	0	0	0.32
Total Ex	0	3.65	0	3.65	0	3.21	0.01	3.22	0	1.05	0.03	1.08	0	0.2	0.2	0.6	0.8	0.08	0	8.83
PM10 Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.03	0	0.04	0	0	0	0.04	0.04	0.01	0	0.28
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.03
Total Ex	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.04	0	0	0	0.04	0.04	0.01	0	0.31
TireWear	0	0.08	0	0.08	0	0.06	0	0.06	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.17
BrakeWr	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0.01	0	0	0.25
Total	0	0.31	0	0.31	0	0.27	0	0.27	0	0.07	0	0.08	0	0.01	0.01	0.05	0.06	0.01	0	0.73
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.09
Fuel Consumption (000 gallons)																				
Gasoline	0.01	375.94	0	375.95	0.08	331.23	0	331.31	0.07	108.14	0	108.21	0.02	20.39	20.41	0	20.41	2.13	0.49	838.5
Diesel	0	0	0.06	0.06	0	0	0.89	0.89	0	0	2.43	2.43	0	0	0	53.94	53.94	5.3	0	62.62

Title : Placer County Subarea 2020 Annual ALT 5 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 16:02:49
Scen Year: 2020 -- Model Years: 1975 to 2020
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Gasoline Trucks Non-cat	Gasoline Trucks Cat	Gasoline Trucks Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
Vehicles	35	320887	163	321085	95	239635	1517	241246	53	57317	1588	58958	18	20170	20187	5556	25743	436	3399	650866
VMT/1000	0	9979	2	9981	1	7323	31	7355	1	1809	59	1869	0	293	294	328	621	51	23	19900
Trips	133	2004580	788	2005510	363	1481040	8181	1489580	230	443334	16397	459961	187	32056	32242	57287	89530	1742	6796	4053120
Reactive Organic Gas Emissions																				
Run Exh	0	0.15	0	0.15	0	0.26	0	0.27	0.01	0.11	0.01	0.13	0	0.04	0.04	0.08	0.13	0.07	0.06	0.81
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Exh	0	0.35	0	0.35	0	0.41	0	0.41	0	0.2	0	0.2	0	0.06	0.07	0	0.07	0	0.02	1.05
Total Ex	0	0.5	0	0.5	0	0.67	0	0.67	0.01	0.31	0.01	0.33	0	0.11	0.11	0.1	0.21	0.07	0.08	1.87
Diurnal	0	0.15	0	0.15	0	0.17	0	0.17	0	0.05	0	0.05	0	0	0	0	0	0	0.01	0.38
Hot Soak	0	0.15	0	0.15	0	0.16	0	0.16	0	0.04	0	0.04	0	0	0	0	0	0	0	0.36
Running	0	0.62	0	0.62	0	1.25	0	1.26	0	0.41	0	0.41	0	0.13	0.13	0	0.13	0	0.01	2.43
Resting	0	0.08	0	0.08	0	0.09	0	0.09	0	0.02	0	0.02	0	0	0	0	0	0	0	0.2
Total	0	1.5	0	1.5	0.01	2.35	0	2.36	0.01	0.83	0.01	0.86	0.01	0.24	0.25	0.1	0.35	0.07	0.11	5.24
Carbon Monoxide Emissions																				
Run Exh	0.01	8.12	0	8.13	0.11	11.74	0.02	11.87	0.18	3.67	0.07	3.92	0.04	0.84	0.88	0.49	1.37	0.37	0.62	26.28
Idle Exh	0	0	0	0	0	0	0	0	0	0.03	0	0.03	0	0.01	0.02	0.08	0.1	0	0	0.13
Start Exh	0	4.81	0	4.81	0.01	5.68	0	5.69	0.02	2.33	0	2.35	0.03	1.1	1.13	0	1.13	0.05	0.08	14.11
Total Ex	0.01	12.92	0	12.94	0.13	17.42	0.02	17.56	0.2	6.03	0.07	6.3	0.07	1.95	2.02	0.58	2.6	0.42	0.7	40.51
Oxides of Nitrogen Emissions																				
Run Exh	0	0.71	0	0.71	0.01	1.29	0.04	1.34	0.01	0.54	0.12	0.67	0	0.21	0.21	1.28	1.49	0.35	0.03	4.59
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.26	0.26	0	0	0.26
Start Exh	0	0.26	0	0.26	0	0.36	0	0.36	0	0.33	0	0.34	0	0.12	0.12	0	0.12	0.01	0	1.08
Total Ex	0	0.97	0	0.97	0.01	1.65	0.04	1.7	0.01	0.88	0.12	1.01	0	0.33	0.33	1.54	1.87	0.36	0.03	5.94
Carbon Dioxide Emissions 0																				
Run Exh	0	3.77	0	3.77	0	3.5	0.01	3.51	0	1.25	0.03	1.28	0	0.22	0.22	0.69	0.92	0.09	0	9.56
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.16	0	0.16	0	0.15	0	0.15	0	0.05	0	0.05	0	0	0	0	0	0	0	0.35
Total Ex	0	3.92	0	3.92	0	3.64	0.01	3.66	0	1.3	0.03	1.33	0	0.22	0.22	0.71	0.93	0.09	0	9.93
PM10 Emissions																				
Run Exh	0	0.1	0	0.1	0	0.12	0	0.12	0	0.04	0	0.05	0	0	0	0.05	0.05	0.01	0	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.11	0	0.11	0	0.14	0	0.14	0	0.05	0	0.05	0	0	0	0.05	0.05	0.01	0	0.36
TireWear	0	0.09	0	0.09	0	0.06	0	0.06	0	0.02	0	0.02	0	0	0	0.01	0.01	0	0	0.18
BrakeWr	0	0.14	0	0.14	0	0.1	0	0.1	0	0.03	0	0.03	0	0	0	0.01	0.01	0	0	0.28
Total	0	0.34	0	0.34	0	0.3	0	0.31	0	0.09	0	0.1	0	0.01	0.01	0.06	0.07	0.01	0	0.82
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.04	0	0.04	0	0.04	0	0.04	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.1
Fuel Consumption (000 gallons)																				
Gasoline	0.02	403.7	0	403.72	0.11	376.17	0	376.27	0.1	134.16	0	134.26	0.03	23.2	23.23	0	23.23	2.36	0.56	940.4
Diesel	0	0	0.07	0.07	0	0	1.06	1.06	0	0	2.86	2.86	0	0	0	63.62	63.62	5.86	0	73.47

2040

Title : Placer County Subarea 2040 Annual NO BUILD
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 16:23:51
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (LT)
I/M Stat : No I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars			Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Gasoline Trucks Non-cat	Gasoline Trucks Cat	Gasoline Trucks Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
Vehicles	0	6482	0	6482	0	12010	3	12013	0	6920	31	6951	0	1353	1353	187	1539	26	29	27041
VMT/1000	0	302	0	302	0	529	0	529	0	301	2	303	0	27	27	9	36	4	0	1175
Trips	0	40467	0	40467	0	73991	11	74001	0	44690	357	45047	0	663	663	1289	1952	105	58	161631
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.04
Diurnal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.05	0	0.05	0	0.05	0	0.05	0	0	0	0	0	0	0	0.11
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.02	0	0.02	0	0.08	0	0.08	0	0.08	0	0.08	0	0	0	0	0	0	0	0.18
Carbon Monoxide Emissions																				
Run Exh	0	0.21	0	0.21	0	0.52	0	0.52	0	0.5	0	0.5	0	0.01	0.01	0.01	0.02	0	0.01	1.26
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.05	0	0.05	0	0.15	0	0.15	0	0.18	0	0.18	0	0.01	0.01	0	0.01	0	0	0.39
Total Ex	0	0.26	0	0.26	0	0.66	0	0.66	0	0.68	0	0.68	0	0.02	0.02	0.01	0.03	0.01	0.01	1.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.05	0	0.05	0	0.04	0	0.04	0	0.01	0.01	0.01	0.02	0.01	0	0.13
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.02	0	0.02	0	0.05	0	0.05	0	0.05	0	0.06	0	0.01	0.01	0.01	0.02	0.01	0	0.16
Carbon Dioxide Emissions 0																				
Run Exh	0	0.11	0	0.11	0	0.25	0	0.25	0	0.2	0	0.2	0	0.02	0.02	0.02	0.04	0.01	0	0.61
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.12	0	0.12	0	0.26	0	0.26	0	0.2	0	0.21	0	0.02	0.02	0.02	0.04	0.01	0	0.63
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.01	0	0.01	0	0.03	0	0.03	0	0.02	0	0.02	0	0	0	0	0	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt:(000 gallons)																				
Gasoline	0	11.91	0	11.91	0	26.58	0	26.58	0	21.08	0	21.08	0	2.11	2.11	0	2.11	0.2	0.01	61.88
Diesel	0	0	0	0	0	0	0	0	0	0	0.08	0.08	0	0	0	1.62	1.62	0.44	0	2.14

Title : Placer County Subarea 2040 Annual NO BUILD
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 16:23:51
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars			Light Duty Trucks			Medium Duty Trucks			Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	20118	0	20119	0	23170	10	23180	0	6639	69	6708	0	5973	5973	900	6873	25	103	57008
VMT/1000	0	586	0	586	0	645	0	645	0	183	2	185	0	79	79	32	110	3	1	1530
Trips	0	124634	0	124634	0	141358	40	141398	0	45981	817	46798	0	2052	2052	4142	6194	101	205	319330
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.03	0	0.03	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.13
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.04	0	0.04	0	0.09	0	0.09	0	0.05	0	0.05	0	0.01	0.01	0.01	0.01	0	0	0.2
Carbon Monoxide Emissions																				
Run Exh	0	0.27	0	0.27	0	0.41	0	0.41	0	0.21	0	0.21	0	0.02	0.02	0.04	0.06	0	0.01	0.97
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.1	0	0.1	0	0.17	0	0.17	0	0.12	0	0.12	0	0.02	0.02	0	0.02	0	0	0.41
Total Ex	0	0.37	0	0.37	0	0.58	0	0.58	0	0.33	0	0.33	0	0.04	0.04	0.04	0.09	0	0.02	1.39
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0.04	0.05	0.01	0	0.14
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0.03
Total Ex	0	0.03	0	0.03	0	0.05	0	0.05	0	0.03	0	0.04	0	0.02	0.02	0.07	0.08	0.01	0	0.2
Carbon Dioxide Emissions 0																				
Run Exh	0	0.22	0	0.22	0	0.31	0	0.31	0	0.13	0	0.13	0	0.06	0.06	0.06	0.12	0	0	0.79
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.23	0	0.23	0	0.33	0	0.33	0	0.13	0	0.13	0	0.06	0.06	0.07	0.13	0	0	0.82
PM10 Emissions																				
Run Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0	0.01	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt (000 gallons)																				
Gasoline	0	24.02	0	24.02	0	33.67	0	33.67	0	13.46	0	13.46	0	6.09	6.09	0	6.09	0.12	0.02	77.38
Diesel	0	0	0	0	0	0	0	0	0	0	0.11	0.11	0	0	0	5.93	5.93	0.31	0	6.35

Title : Placer County Subarea 2040 Annual NO BUILD
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 16:23:51
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars			Light Duty Trucks			Medium Duty Trucks			Heavy Duty Trucks							
	Non-cat Cat	Diesel	Total	Non-cat Cat	Diesel	Total	Non-cat Cat	Diesel	Total	Non-cat Cat	Gasoline Trucks Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
Vehicles	0 447256	3	447259	0 315922	77	315999	0 68266	727	68993	0 66093	66093	9247	75340	740	1082	909413
VMT/1000	0 13392	0	13392	0 9272	1	9273	0 1984	25	2009	0 915	915	301	1217	86	7	25983
Trips	0 2768050	11	2768060	0 1923250	296	1923550	0 471266	8593	479859	0 21628	21628	40955	62583	2960	2164	5239180
Reactive Organic Gas Emissions																
Run Exh	0 0.09	0	0.09	0 0.1	0	0.1	0 0.04	0	0.04	0 0.01	0.01	0.05	0.06	0.01	0.02	0.31
Idle Exh	0 0	0	0	0 0	0	0	0 0	0	0	0 0	0	0.01	0.01	0	0	0.02
Start Exh	0 0.1	0	0.1	0 0.14	0	0.14	0 0.07	0	0.07	0 0.01	0.01	0	0.01	0	0.01	0.33
Total Ex	0 0.19	0	0.19	0 0.23	0	0.23	0 0.11	0	0.11	0 0.03	0.03	0.06	0.08	0.02	0.02	0.66
Diurnal	0 0.05	0	0.05	0 0.09	0	0.09	0 0.03	0	0.03	0 0	0	0	0	0	0	0.18
Hot Soak	0 0.07	0	0.07	0 0.08	0	0.08	0 0.03	0	0.03	0 0	0	0	0	0	0	0.18
Running	0 0.58	0	0.58	0 0.9	0	0.9	0 0.36	0	0.36	0 0.03	0.03	0	0.03	0	0	1.87
Resting	0 0.04	0	0.04	0 0.07	0	0.07	0 0.03	0	0.03	0 0	0	0	0	0	0	0.14
Total	0 0.93	0	0.93	0 1.38	0	1.38	0 0.55	0	0.56	0 0.05	0.05	0.06	0.11	0.02	0.03	3.03
Carbon Monoxide Emissions																
Run Exh	0 6.22	0	6.22	0 6.4	0	6.4	0 2.29	0.03	2.32	0 0.23	0.23	0.34	0.57	0.17	0.15	15.83
Idle Exh	0 0	0	0	0 0	0	0	0 0.02	0	0.02	0 0.01	0.01	0.07	0.08	0	0	0.1
Start Exh	0 2.24	0	2.24	0 2.47	0	2.47	0 1.2	0	1.2	0 0.21	0.21	0	0.21	0.04	0.03	6.2
Total Ex	0 8.47	0	8.47	0 8.87	0	8.88	0 3.5	0.03	3.53	0 0.46	0.46	0.4	0.86	0.21	0.18	22.13
Oxides of Nitrogen Emissions																
Run Exh	0 0.48	0	0.48	0 0.52	0	0.52	0 0.18	0.02	0.2	0 0.15	0.15	0.36	0.51	0.15	0.01	1.87
Idle Exh	0 0	0	0	0 0	0	0	0 0	0	0	0 0	0	0.2	0.2	0	0	0.21
Start Exh	0 0.1	0	0.1	0 0.13	0	0.13	0 0.15	0	0.15	0 0.03	0.03	0	0.03	0.01	0	0.41
Total Ex	0 0.57	0	0.57	0 0.65	0	0.65	0 0.33	0.02	0.35	0 0.18	0.18	0.57	0.74	0.16	0.01	2.48
Carbon Dioxide Emissions 0																
Run Exh	0 5.11	0	5.11	0 4.51	0	4.51	0 1.36	0.01	1.37	0 0.69	0.69	0.6	1.29	0.13	0	12.42
Idle Exh	0 0	0	0	0 0	0	0	0 0	0	0	0 0	0	0.01	0.01	0	0	0.01
Start Exh	0 0.21	0	0.21	0 0.19	0	0.19	0 0.06	0	0.06	0 0	0	0	0	0	0	0.46
Total Ex	0 5.33	0	5.33	0 4.7	0	4.7	0 1.42	0.01	1.43	0 0.69	0.69	0.61	1.3	0.13	0	12.89
PM10 Emissions																
Run Exh	0 0.14	0	0.14	0 0.17	0	0.17	0 0.05	0	0.05	0 0	0	0.03	0.03	0	0	0.4
Idle Exh	0 0	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0	0	0	0
Start Exh	0 0.02	0	0.02	0 0.02	0	0.02	0 0.01	0	0.01	0 0	0	0	0	0	0	0.05
Total Ex	0 0.16	0	0.16	0 0.19	0	0.19	0 0.06	0	0.06	0 0	0	0.03	0.03	0	0	0.45
TireWear	0 0.12	0	0.12	0 0.08	0	0.08	0 0.02	0	0.02	0 0.01	0.01	0.01	0.02	0	0	0.24
BrakeWr	0 0.19	0	0.19	0 0.13	0	0.13	0 0.03	0	0.03	0 0.01	0.01	0	0.02	0	0	0.36
Total	0 0.46	0	0.46	0 0.4	0	0.4	0 0.11	0	0.11	0 0.03	0.03	0.04	0.07	0.01	0	1.05
Lead	0 0	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0	0	0	0
SOx	0 0.05	0	0.05	0 0.05	0	0.05	0 0.01	0	0.01	0 0.01	0.01	0.01	0.01	0	0	0.12
Fuel Consumption (000 gallons)																
Gasoline	0 546.8	0	546.8	0 482.85	0	482.85	0 145.54	0	145.54	0 71.02	71.02	0	71.02	4.03	0.17	1250.42
Diesel	0 0	0	0	0 0	0.04	0.04	0 0	1.26	1.26	0 0	0	54.61	54.61	8.33	0	64.25

Title : Placer County Subarea 2040 Annual NO BUILD
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/28/2007 16:23:51
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars			Light Duty Trucks			Medium Duty Trucks			Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	473857	3	473860	0	351102	90	351192	0	81825	827	82652	0	73418	73418	10334	83752	791	1214	993462
VMT/1000	0	14280	0	14280	0	10446	1	10447	0	2468	28	2497	0	1021	1021	342	1363	93	8	28688
Trips	0	2933150	12	2933170	0	2138600	347	2138950	0	561938	9766	571704	0	24343	24343	46387	70729	3166	2427	5720140
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.05	0	0.05	0	0.01	0.01	0.05	0.07	0.01	0.02	0.36
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Exh	0	0.11	0	0.11	0	0.15	0	0.15	0	0.09	0	0.09	0	0.01	0.01	0	0.01	0	0.01	0.37
Total Ex	0	0.2	0	0.2	0	0.26	0	0.26	0	0.14	0	0.14	0	0.03	0.03	0.07	0.1	0.02	0.03	0.75
Diurnal	0	0.06	0	0.06	0	0.1	0	0.1	0	0.04	0	0.04	0	0	0	0	0	0	0	0.2
Hot Soak	0	0.08	0	0.08	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.2
Running	0	0.61	0	0.61	0	1.01	0	1.01	0	0.45	0	0.45	0	0.03	0.03	0	0.03	0	0	2.11
Resting	0	0.04	0	0.04	0	0.08	0	0.08	0	0.03	0	0.03	0	0	0	0	0	0	0	0.15
Total	0	0.99	0	0.99	0	1.55	0	1.55	0	0.68	0	0.69	0	0.06	0.06	0.07	0.13	0.02	0.03	3.41
Carbon Monoxide Emissions																				
Run Exh	0	6.71	0	6.71	0	7.33	0	7.33	0	3	0.03	3.04	0	0.26	0.26	0.38	0.65	0.18	0.17	18.07
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.08	0.09	0	0	0.11
Start Exh	0	2.4	0	2.4	0	2.79	0	2.79	0	1.49	0	1.49	0	0.24	0.24	0	0.24	0.05	0.03	7
Total Ex	0	9.11	0	9.11	0	10.12	0	10.12	0	4.51	0.03	4.54	0	0.52	0.52	0.46	0.98	0.22	0.2	25.18
Oxides of Nitrogen Emissions																				
Run Exh	0	0.52	0	0.52	0	0.6	0	0.61	0	0.23	0.03	0.26	0	0.17	0.17	0.41	0.58	0.16	0.01	2.14
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.23	0.23	0	0	0.24
Start Exh	0	0.1	0	0.1	0	0.15	0	0.15	0	0.18	0	0.18	0	0.03	0.03	0	0.03	0.01	0	0.47
Total Ex	0	0.62	0	0.62	0	0.75	0	0.75	0	0.41	0.03	0.44	0	0.2	0.2	0.65	0.85	0.17	0.01	2.84
Carbon Dioxide Emissions 0																				
Run Exh	0	5.45	0	5.45	0	5.08	0	5.08	0	1.68	0.02	1.7	0	0.77	0.77	0.68	1.45	0.14	0	13.82
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.23	0	0.23	0	0.21	0	0.21	0	0.07	0	0.07	0	0	0	0	0	0	0	0.5
Total Ex	0	5.68	0	5.68	0	5.29	0	5.29	0	1.75	0.02	1.77	0	0.77	0.77	0.69	1.46	0.14	0	14.34
PM10 Emissions																				
Run Exh	0	0.15	0	0.15	0	0.2	0	0.2	0	0.07	0	0.07	0	0	0	0.03	0.03	0	0	0.45
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.17	0	0.17	0	0.22	0	0.22	0	0.08	0	0.08	0	0	0	0.03	0.04	0	0	0.51
TireWear	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.26
BrakeWr	0	0.2	0	0.2	0	0.14	0	0.14	0	0.03	0	0.03	0	0.01	0.01	0	0.02	0	0	0.4
Total	0	0.49	0	0.49	0	0.46	0	0.46	0	0.13	0	0.13	0	0.03	0.03	0.05	0.08	0.01	0	1.17
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.05	0	0.05	0	0.05	0	0.05	0	0.02	0	0.02	0	0.01	0.01	0.01	0.01	0	0	0.14
Fuel Consumpt: (000 gallons)																				
Gasoline	0	582.73	0	582.73	0	543.1	0	543.1	0	180.09	0	180.09	0	79.22	79.22	0	79.22	4.35	0.19	1389.68
Diesel	0	0	0	0	0	0	0.05	0.05	0	0	1.46	1.46	0	0	0	62.16	62.16	9.08	0	72.74

Title : Placer County Subarea 2040 Annual ALT 1 NO WATT
Version : Emfac2002 V2.2 Apr 23 2003 ** WIS Enabled **
Run Date : 3/28/2007 17:59:30
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (LT)
I/M Stat : No I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	6482	0	6482	0	12010	3	12013	0	6920	31	6951	0	1353	1353	187	1539	26	29	27041
VMT/1000	0	302	0	302	0	529	0	529	0	301	2	303	0	27	27	9	36	4	0	1175
Trips	0	40469	0	40469	0	73990	11	74000	0	44689	357	45046	0	663	663	1289	1952	105	58	161630
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.04
Diurnal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.05	0	0.05	0	0.05	0	0.05	0	0	0	0	0	0	0	0.11
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.02	0	0.02	0	0.08	0	0.08	0	0.08	0	0.08	0	0	0	0	0	0	0	0.18
Carbon Monoxide Emissions																				
Run Exh	0	0.21	0	0.21	0	0.52	0	0.52	0	0.5	0	0.5	0	0.01	0.01	0.01	0.02	0	0.01	1.26
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.05	0	0.05	0	0.15	0	0.15	0	0.18	0	0.18	0	0.01	0.01	0	0.01	0	0	0.39
Total Ex	0	0.26	0	0.26	0	0.66	0	0.66	0	0.68	0	0.68	0	0.02	0.02	0.01	0.03	0.01	0.01	1.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.05	0	0.05	0	0.04	0	0.04	0	0.01	0.01	0.01	0.02	0.01	0	0.13
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.02	0	0.02	0	0.05	0	0.05	0	0.05	0	0.06	0	0.01	0.01	0.01	0.02	0.01	0	0.16
Carbon Dioxide Emissions 0																				
Run Exh	0	0.11	0	0.11	0	0.25	0	0.25	0	0.2	0	0.2	0	0.02	0.02	0.02	0.04	0.01	0	0.61
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.12	0	0.12	0	0.26	0	0.26	0	0.2	0	0.21	0	0.02	0.02	0.02	0.04	0.01	0	0.63
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.01	0	0.01	0	0.03	0	0.03	0	0.02	0	0.02	0	0	0	0	0	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumption (000 gallons)																				
Gasoline	0	11.91	0	11.91	0	26.58	0	26.58	0	21.08	0	21.08	0	2.11	2.11	0	2.11	0.2	0.01	61.88
Diesel	0	0	0	0	0	0	0	0	0	0	0.08	0.08	0	0	0	1.62	1.62	0.44	0	2.14

Title : Placer County Subarea 2040 Annual ALT 1 NO WATT
Version : Emfac2002 V2.2 Apr 23 2003 ** WIS Enabled **
Run Date : 3/28/2007 17:59:30
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	20119	0	20119	0	23170	10	23180	0	6639	69	6708	0	5973	5973	900	6873	25	103	57008
VMT/1000	0	586	0	586	0	645	0	645	0	183	2	185	0	79	79	32	110	3	1	1530
Trips	0	124638	0	124638	0	141357	40	141396	0	45980	817	46796	0	2052	2052	4142	6194	101	205	319330
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.03	0	0.03	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.13
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.04	0	0.04	0	0.09	0	0.09	0	0.05	0	0.05	0	0.01	0.01	0.01	0.01	0	0	0.2
Carbon Monoxide Emissions																				
Run Exh	0	0.27	0	0.27	0	0.41	0	0.41	0	0.21	0	0.21	0	0.02	0.02	0.04	0.06	0	0.01	0.97
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.1	0	0.1	0	0.17	0	0.17	0	0.12	0	0.12	0	0.02	0.02	0	0.02	0	0	0.41
Total Ex	0	0.37	0	0.37	0	0.58	0	0.58	0	0.33	0	0.33	0	0.04	0.04	0.04	0.09	0	0.02	1.39
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0.04	0.05	0.01	0	0.14
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0.03
Total Ex	0	0.03	0	0.03	0	0.05	0	0.05	0	0.03	0	0.04	0	0.02	0.02	0.07	0.08	0.01	0	0.2
Carbon Dioxide Emissions 0																				
Run Exh	0	0.22	0	0.22	0	0.31	0	0.31	0	0.13	0	0.13	0	0.06	0.06	0.06	0.12	0	0	0.79
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.23	0	0.23	0	0.33	0	0.33	0	0.13	0	0.13	0	0.06	0.06	0.07	0.13	0	0	0.82
PM10 Emissions																				
Run Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0	0.01	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt: (000 gallons)																				
Gasoline	0	24.02	0	24.02	0	33.67	0	33.67	0	13.46	0	13.46	0	6.09	6.09	0	6.09	0.12	0.02	77.38
Diesel	0	0	0	0	0	0	0	0	0	0	0.11	0.11	0	0	0	5.93	5.93	0.31	0	6.35

Title : Placer County Subarea 2040 Annual ALT 1 NO WATT
Version : Emfac2002 V2.2 Apr 23 2003 ** WIS Enabled **
Run Date : 3/28/2007 17:59:30
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	454857	3	454860	0	321291	78	321369	0	69427	739	70166	0	67216	67216	9404	76620	753	1100	924868
VMT/1000	0	13619	0	13619	0	9430	1	9431	0	2018	25	2043	0	931	931	307	1237	87	7	26425
Trips	0	2815100	12	2815110	0	1955940	301	1956240	0	479288	8739	488027	0	21997	21997	41655	63652	3012	2200	5328240
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.1	0	0.1	0	0.04	0	0.04	0	0.01	0.01	0.05	0.06	0.01	0.02	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.11	0	0.11	0	0.14	0	0.14	0	0.07	0	0.07	0	0.01	0.01	0	0.01	0	0.01	0.34
Total Ex	0	0.19	0	0.19	0	0.24	0	0.24	0	0.11	0	0.11	0	0.03	0.03	0.06	0.09	0.02	0.02	0.67
Diurnal	0	0.06	0	0.06	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.18
Hot Soak	0	0.07	0	0.07	0	0.08	0	0.08	0	0.03	0	0.03	0	0	0	0	0	0	0	0.18
Running	0	0.59	0	0.59	0	0.91	0	0.91	0	0.37	0	0.37	0	0.03	0.03	0	0.03	0	0	1.9
Resting	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.03	0	0	0	0	0	0	0	0.14
Total	0	0.95	0	0.95	0	1.4	0	1.4	0	0.56	0	0.57	0	0.06	0.06	0.06	0.12	0.02	0.03	3.08
Carbon Monoxide Emissions																				
Run Exh	0	6.26	0	6.26	0	6.44	0	6.44	0	2.31	0.03	2.33	0	0.24	0.24	0.34	0.58	0.17	0.16	15.94
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.07	0.08	0	0	0.1
Start Exh	0	2.28	0	2.28	0	2.52	0	2.52	0	1.22	0	1.22	0	0.22	0.22	0	0.22	0.05	0.03	6.3
Total Ex	0	8.54	0	8.54	0	8.95	0	8.95	0	3.54	0.03	3.57	0	0.47	0.47	0.41	0.88	0.22	0.19	22.34
Oxides of Nitrogen Emissions																				
Run Exh	0	0.48	0	0.48	0	0.53	0	0.53	0	0.18	0.02	0.2	0	0.15	0.15	0.37	0.52	0.15	0.01	1.9
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.21	0.21	0	0	0.21
Start Exh	0	0.1	0	0.1	0	0.13	0	0.13	0	0.15	0	0.15	0	0.03	0.03	0	0.03	0.01	0	0.42
Total Ex	0	0.58	0	0.58	0	0.66	0	0.66	0	0.33	0.02	0.36	0	0.18	0.18	0.58	0.76	0.16	0.01	2.52
Carbon Dioxide Emissions 0																				
Run Exh	0	5.19	0	5.19	0	4.58	0	4.58	0	1.38	0.01	1.39	0	0.7	0.7	0.61	1.31	0.13	0	12.61
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.22	0	0.22	0	0.19	0	0.19	0	0.06	0	0.06	0	0	0	0	0	0	0	0.47
Total Ex	0	5.41	0	5.41	0	4.77	0	4.77	0	1.44	0.01	1.45	0	0.7	0.7	0.62	1.32	0.13	0	13.09
PM10 Emissions																				
Run Exh	0	0.14	0	0.14	0	0.17	0	0.17	0	0.05	0	0.06	0	0	0	0.03	0.03	0	0	0.4
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.16	0	0.16	0	0.2	0	0.2	0	0.06	0	0.06	0	0	0	0.03	0.03	0	0	0.45
TireWear	0	0.12	0	0.12	0	0.08	0	0.08	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.24
BrakeWr	0	0.19	0	0.19	0	0.13	0	0.13	0	0.03	0	0.03	0	0.01	0.01	0	0.02	0	0	0.37
Total	0	0.47	0	0.47	0	0.41	0	0.41	0	0.11	0	0.11	0	0.03	0.03	0.04	0.07	0.01	0	1.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.05	0	0.05	0	0.05	0	0.05	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0	0.13
Fuel Consumpt (000 gallons)																				
Gasoline	0	555.03	0	555.03	0	490.12	0	490.12	0	147.75	0	147.75	0	72.22	72.22	0	72.22	4.11	0.18	1269.41
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	1.29	1.29	0	0	0	55.55	55.55	8.48	0	65.36

Title : Placer County Subarea 2040 Annual ALT 1 NO WATT
Version : Emfac2002 V2.2 Apr 23 2003 ** WIS Enabled **
Run Date : 3/28/2007 17:59:30
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	481458	3	481461	0	356471	91	356562	0	82986	840	83825	0	74541	74541	10491	85032	804	1232	1008920
VMT/1000	0	14508	0	14508	0	10604	1	10605	0	2502	29	2531	0	1036	1036	347	1384	94	8	29130
Trips	0	2980200	12	2980210	0	2171280	352	2171630	0	569957	9912	579869	0	24711	24711	47086	71798	3218	2463	5809200
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.05	0	0.05	0	0.01	0.01	0.06	0.07	0.01	0.02	0.36
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Ex	0	0.11	0	0.11	0	0.15	0	0.15	0	0.09	0	0.09	0	0.01	0.01	0	0.01	0.01	0.01	0.38
Total Ex	0	0.21	0	0.21	0	0.27	0	0.27	0	0.14	0	0.14	0	0.03	0.03	0.07	0.1	0.02	0.03	0.76
Diurnal	0	0.06	0	0.06	0	0.1	0	0.1	0	0.04	0	0.04	0	0	0	0	0	0	0	0.2
Hot Soak	0	0.08	0	0.08	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.2
Running	0	0.62	0	0.62	0	1.03	0	1.03	0	0.45	0	0.45	0	0.03	0.03	0	0.03	0	0	2.14
Resting	0	0.04	0	0.04	0	0.08	0	0.08	0	0.03	0	0.03	0	0	0	0	0	0	0	0.15
Total	0	1	0	1	0	1.57	0	1.57	0	0.69	0	0.7	0	0.06	0.06	0.07	0.13	0.02	0.04	3.46
Carbon Monoxide Emissions																				
Run Exh	0	6.74	0	6.74	0	7.37	0	7.37	0	3.02	0.03	3.05	0	0.27	0.27	0.39	0.66	0.18	0.18	18.17
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.08	0.09	0	0	0.11
Start Ex	0	2.44	0	2.44	0	2.83	0	2.83	0	1.51	0	1.51	0	0.25	0.25	0	0.25	0.05	0.03	7.1
Total Ex	0	9.18	0	9.18	0	10.2	0	10.2	0	4.54	0.03	4.58	0	0.53	0.53	0.47	1	0.23	0.21	25.39
Oxides of Nitrogen Emissions																				
Run Exh	0	0.52	0	0.52	0	0.61	0	0.61	0	0.24	0.03	0.26	0	0.17	0.17	0.42	0.59	0.16	0.01	2.16
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.24	0.24	0	0	0.24
Start Ex	0	0.1	0	0.1	0	0.15	0	0.15	0	0.18	0	0.18	0	0.03	0.03	0	0.03	0.01	0	0.48
Total Ex	0	0.63	0	0.63	0	0.76	0	0.76	0	0.42	0.03	0.45	0	0.2	0.2	0.66	0.86	0.17	0.01	2.88
Carbon Dioxide Emissions 0																				
Run Exh	0	5.53	0	5.53	0	5.15	0	5.15	0	1.7	0.02	1.72	0	0.78	0.78	0.69	1.47	0.15	0	14.01
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Ex	0	0.23	0	0.23	0	0.21	0	0.21	0	0.07	0	0.07	0	0	0	0	0	0	0	0.51
Total Ex	0	5.76	0	5.76	0	5.36	0	5.36	0	1.77	0.02	1.79	0	0.78	0.78	0.7	1.49	0.15	0	14.54
PM10 Emissions																				
Run Exh	0	0.15	0	0.15	0	0.2	0	0.2	0	0.07	0	0.07	0	0	0	0.03	0.03	0	0	0.46
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.17	0	0.17	0	0.22	0	0.22	0	0.08	0	0.08	0	0	0	0.03	0.04	0	0	0.51
TireWear	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.27
BrakeWr	0	0.2	0	0.2	0	0.15	0	0.15	0	0.03	0	0.03	0	0.01	0.01	0	0.02	0	0	0.4
Total	0	0.5	0	0.5	0	0.46	0	0.46	0	0.13	0	0.14	0	0.03	0.03	0.05	0.08	0.01	0	1.18
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.06	0	0.06	0	0.05	0	0.05	0	0.02	0	0.02	0	0.01	0.01	0.01	0.01	0	0	0.14
Fuel Consumpt (000 gallons)																				
Gasoline	0	590.97	0	590.97	0	550.36	0	550.36	0	182.3	0	182.3	0	80.42	80.42	0	80.42	4.42	0.2	1408.67
Diesel	0	0	0	0	0	0	0.05	0.05	0	0	1.48	1.48	0	0	0	63.1	63.1	9.22	0	73.85

Title : Placer County Subarea 2040 Annual ALT 1 NORTH IC
Version : Emfac2002 V2.2 Apr 23 2003 ** WIS Enabled **
Run Date : 3/28/2007 18:12:09
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (LT)
I/M Stat : No I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	6482	0	6482	0	12010	3	12013	0	6920	31	6951	0	1353	1353	187	1539	26	29	27041
VMT/1000	0	302	0	302	0	529	0	529	0	301	2	303	0	27	27	9	36	4	0	1175
Trips	0	40469	0	40469	0	73990	11	74000	0	44689	357	45046	0	663	663	1289	1952	105	58	161630
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.04
Diurnal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.05	0	0.05	0	0.05	0	0.05	0	0	0	0	0	0	0	0.11
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.02	0	0.02	0	0.08	0	0.08	0	0.08	0	0.08	0	0	0	0	0	0	0	0.18
Carbon Monoxide Emissions																				
Run Exh	0	0.21	0	0.21	0	0.52	0	0.52	0	0.5	0	0.5	0	0.01	0.01	0.01	0.02	0	0.01	1.26
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.05	0	0.05	0	0.15	0	0.15	0	0.18	0	0.18	0	0.01	0.01	0	0.01	0	0	0.39
Total Ex	0	0.26	0	0.26	0	0.66	0	0.66	0	0.68	0	0.68	0	0.02	0.02	0.01	0.03	0.01	0.01	1.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.05	0	0.05	0	0.04	0	0.04	0	0.01	0.01	0.01	0.02	0.01	0	0.13
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.02	0	0.02	0	0.05	0	0.05	0	0.05	0	0.06	0	0.01	0.01	0.01	0.02	0.01	0	0.16
Carbon Dioxide Emissions 0																				
Run Exh	0	0.11	0	0.11	0	0.25	0	0.25	0	0.2	0	0.2	0	0.02	0.02	0.02	0.04	0.01	0	0.61
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.12	0	0.12	0	0.26	0	0.26	0	0.2	0	0.21	0	0.02	0.02	0.02	0.04	0.01	0	0.63
PM10 Emissions																				
Run	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Idle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.01	0	0.01	0	0.03	0	0.03	0	0.02	0	0.02	0	0	0	0	0	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumption (000 gallons)																				
Gasoline	0	11.91	0	11.91	0	26.58	0	26.58	0	21.08	0	21.08	0	2.11	2.11	0	2.11	0.2	0.01	61.88
Diesel	0	0	0	0	0	0	0	0	0	0	0.08	0.08	0	0	0	1.62	1.62	0.44	0	2.14

Title : Placer County Subarea 2040 Annual ALT 1 NORTH IC
Version : Emfac2002 V2.2 Apr 23 2003 ** WIS Enabled **
Run Date : 3/28/2007 18:12:09
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	20119	0	20119	0	23170	10	23180	0	6639	69	6708	0	5973	5973	900	6873	25	103	57008
VMT/1000	0	586	0	586	0	645	0	645	0	183	2	185	0	79	79	32	110	3	1	1530
Trips	0	124638	0	124638	0	141357	40	141396	0	45980	817	46796	0	2052	2052	4142	6194	101	205	319330
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.03	0	0.03	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.13
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.04	0	0.04	0	0.09	0	0.09	0	0.05	0	0.05	0	0.01	0.01	0.01	0.01	0	0	0.2
Carbon Monoxide Emissions																				
Run Exh	0	0.27	0	0.27	0	0.41	0	0.41	0	0.21	0	0.21	0	0.02	0.02	0.04	0.06	0	0.01	0.97
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.1	0	0.1	0	0.17	0	0.17	0	0.12	0	0.12	0	0.02	0.02	0	0.02	0	0	0.41
Total Ex	0	0.37	0	0.37	0	0.58	0	0.58	0	0.33	0	0.33	0	0.04	0.04	0.04	0.09	0	0.02	1.39
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0.04	0.05	0.01	0	0.14
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0.03
Total Ex	0	0.03	0	0.03	0	0.05	0	0.05	0	0.03	0	0.04	0	0.02	0.02	0.07	0.08	0.01	0	0.2
Carbon Dioxide Emissions 0																				
Run Exh	0	0.22	0	0.22	0	0.31	0	0.31	0	0.13	0	0.13	0	0.06	0.06	0.06	0.12	0	0	0.79
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.23	0	0.23	0	0.33	0	0.33	0	0.13	0	0.13	0	0.06	0.06	0.07	0.13	0	0	0.82
PM10 Emissions																				
Run Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0	0.01	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt (000 gallons)																				
Gasoline	0	24.02	0	24.02	0	33.67	0	33.67	0	13.46	0	13.46	0	6.09	6.09	0	6.09	0.12	0.02	77.38
Diesel	0	0	0	0	0	0	0	0	0	0	0.11	0.11	0	0	0	5.93	5.93	0.31	0	6.35

```
Title    :       Placer     County     Subarea      2040 Annual   ALT            1 NORTH    IC
Version  :       Emfac2002  V2.2       Apr            23     2003 **       WIS      Enabled  **
Run      Date    :          3/28/2007 18:12:09
Scen     Year:          2040 --         Model    Years:       1995 to           2040
Season   :       Annual
Area     :       Placer     (SV)
I/M      Stat    :          I          and      M        program  in       effect
Emission:Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	456570	3	456573	0	322502	78	322580	0	69687	742	70429	0	67469	67469	9439	76908	756	1104	928350
VMT/1000	0	13670	0	13670	0	9465	1	9466	0	2025	25	2051	0	934	934	308	1242	87	7	26524
Trips	0	2825700	12	2825710	0	1963310	303	1963610	0	481073	8769	489842	0	22085	22085	41819	63904	3024	2208	5348300
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.1	0	0.1	0	0.04	0	0.04	0	0.01	0.01	0.05	0.06	0.01	0.02	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Ex	0	0.11	0	0.11	0	0.14	0	0.14	0	0.07	0	0.07	0	0.01	0.01	0	0.01	0	0.01	0.34
Total Ex	0	0.19	0	0.19	0	0.24	0	0.24	0	0.11	0	0.11	0	0.03	0.03	0.06	0.09	0.02	0.02	0.67
Diurnal	0	0.06	0	0.06	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.18
Hot Soak	0	0.07	0	0.07	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.19
Running	0	0.59	0	0.59	0	0.92	0	0.92	0	0.37	0	0.37	0	0.03	0.03	0	0.03	0	0	1.91
Resting	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.03	0	0	0	0	0	0	0	0.14
Total	0	0.95	0	0.95	0	1.4	0	1.4	0	0.57	0	0.57	0	0.06	0.06	0.06	0.12	0.02	0.03	3.09
Carbon Monoxide Emissions																				
Run Exh	0	6.26	0	6.26	0	6.44	0	6.44	0	2.31	0.03	2.34	0	0.24	0.24	0.34	0.58	0.17	0.16	15.96
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.07	0.08	0	0	0.1
Start Ex	0	2.29	0	2.29	0	2.53	0	2.53	0	1.22	0	1.22	0	0.22	0.22	0	0.22	0.05	0.03	6.33
Total Ex	0	8.55	0	8.55	0	8.97	0	8.97	0	3.55	0.03	3.57	0	0.47	0.47	0.41	0.88	0.22	0.19	22.39
Oxides of Nitrogen Emissions																				
Run Exh	0	0.48	0	0.48	0	0.53	0	0.53	0	0.18	0.02	0.2	0	0.15	0.15	0.37	0.52	0.15	0.01	1.9
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.21	0.21	0	0	0.21
Start Ex	0	0.1	0	0.1	0	0.13	0	0.13	0	0.15	0	0.15	0	0.03	0.03	0	0.03	0.01	0	0.42
Total Ex	0	0.58	0	0.58	0	0.66	0	0.66	0	0.33	0.02	0.36	0	0.18	0.18	0.58	0.76	0.16	0.01	2.53
Carbon Dioxide Emissions 0																				
Run Exh	0	5.21	0	5.21	0	4.6	0	4.6	0	1.38	0.01	1.4	0	0.71	0.71	0.61	1.31	0.13	0	12.65
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Ex	0	0.22	0	0.22	0	0.19	0	0.19	0	0.06	0	0.06	0	0	0	0	0	0	0	0.47
Total Ex	0	5.43	0	5.43	0	4.79	0	4.79	0	1.44	0.01	1.46	0	0.71	0.71	0.62	1.33	0.13	0	13.13
PM10 Emissions																				
Run Exh	0	0.14	0	0.14	0	0.17	0	0.18	0	0.05	0	0.06	0	0	0	0.03	0.03	0	0	0.41
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.16	0	0.16	0	0.2	0	0.2	0	0.06	0	0.06	0	0	0	0.03	0.03	0	0	0.46
TireWear	0	0.12	0	0.12	0	0.08	0	0.08	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.24
BrakeWr	0	0.19	0	0.19	0	0.13	0	0.13	0	0.03	0	0.03	0	0.01	0.01	0	0.02	0	0	0.37
Total	0	0.47	0	0.47	0	0.41	0	0.41	0	0.11	0	0.11	0	0.03	0.03	0.04	0.07	0.01	0	1.07
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.05	0	0.05	0	0.05	0	0.05	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0	0.13
Fuel Consumpt:(000 gallons)																				
Gasoline	0	556.91	0	556.91	0	491.78	0	491.78	0	148.25	0	148.25	0	72.5	72.5	0	72.5	4.12	0.18	1273.74
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	1.29	1.29	0	0	0	55.74	55.74	8.51	0	65.58

Title : Placer County Subarea 2040 Annual ALT 1 NORTH IC
Version : Emfac2002 V2.2 Apr 23 2003 ** WIS Enabled **
Run Date : 3/28/2007 18:12:09
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	483172	3	483175	0	357681	91	357772	0	83246	842	84088	0	74795	74795	10526	85320	807	1236	1012400
VMT/1000	0	14559	0	14559	0	10639	1	10641	0	2510	29	2538	0	1040	1040	348	1388	95	8	29229
Trips	0	2990800	12	2990820	0	2178650	353	2179000	0	571742	9942	581684	0	24799	24799	47251	72050	3230	2471	5829260
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.05	0	0.05	0	0.01	0.01	0.06	0.07	0.01	0.02	0.36
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Exh	0	0.11	0	0.11	0	0.15	0	0.15	0	0.09	0	0.09	0	0.01	0.01	0	0.01	0.01	0.01	0.38
Total Ex	0	0.21	0	0.21	0	0.27	0	0.27	0	0.14	0	0.14	0	0.03	0.03	0.07	0.1	0.02	0.03	0.76
Diurnal	0	0.06	0	0.06	0	0.1	0	0.1	0	0.04	0	0.04	0	0	0	0	0	0	0	0.2
Hot Soak	0	0.08	0	0.08	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.2
Running	0	0.63	0	0.63	0	1.03	0	1.03	0	0.46	0	0.46	0	0.03	0.03	0	0.03	0	0	2.15
Resting	0	0.04	0	0.04	0	0.08	0	0.08	0	0.03	0	0.03	0	0	0	0	0	0	0	0.16
Total	0	1.01	0	1.01	0	1.58	0	1.58	0	0.7	0	0.7	0	0.06	0.06	0.07	0.13	0.02	0.04	3.47
Carbon Monoxide Emissions																				
Run Exh	0	6.75	0	6.75	0	7.38	0	7.38	0	3.02	0.03	3.05	0	0.27	0.27	0.39	0.66	0.18	0.18	18.19
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.08	0.09	0	0	0.11
Start Exh	0	2.45	0	2.45	0	2.84	0	2.84	0	1.51	0	1.51	0	0.25	0.25	0	0.25	0.05	0.03	7.13
Total Ex	0	9.19	0	9.19	0	10.22	0	10.22	0	4.55	0.03	4.58	0	0.53	0.53	0.47	1	0.23	0.21	25.43
Oxides of Nitrogen Emissions																				
Run Exh	0	0.52	0	0.52	0	0.61	0	0.61	0	0.24	0.03	0.26	0	0.17	0.17	0.42	0.59	0.16	0.01	2.17
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.24	0.24	0	0	0.24
Start Exh	0	0.1	0	0.1	0	0.15	0	0.15	0	0.18	0	0.18	0	0.03	0.03	0	0.03	0.01	0	0.48
Total Ex	0	0.63	0	0.63	0	0.76	0	0.76	0	0.42	0.03	0.45	0	0.2	0.2	0.66	0.86	0.17	0.01	2.89
Carbon Dioxide Emissions 0																				
Run Exh	0	5.55	0	5.55	0	5.16	0	5.16	0	1.71	0.02	1.72	0	0.79	0.79	0.69	1.48	0.15	0	14.06
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.23	0	0.23	0	0.21	0	0.21	0	0.07	0	0.07	0	0	0	0	0	0	0	0.51
Total Ex	0	5.78	0	5.78	0	5.38	0	5.38	0	1.78	0.02	1.79	0	0.79	0.79	0.7	1.49	0.15	0	14.58
PM10 Emissions																				
Run Exh	0	0.15	0	0.15	0	0.2	0	0.2	0	0.07	0	0.07	0	0	0	0.03	0.03	0	0	0.46
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.17	0	0.17	0	0.22	0	0.22	0	0.08	0	0.08	0	0	0	0.03	0.04	0	0	0.51
TireWear	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.27
BrakeWr	0	0.2	0	0.2	0	0.15	0	0.15	0	0.03	0	0.04	0	0.01	0.01	0	0.02	0	0	0.4
Total	0	0.5	0	0.5	0	0.46	0	0.46	0	0.13	0	0.14	0	0.03	0.03	0.05	0.08	0.01	0	1.19
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.06	0	0.06	0	0.05	0	0.05	0	0.02	0	0.02	0	0.01	0.01	0.01	0.01	0	0	0.14
Fuel Consumpt: (000 gallons)																				
Gasoline	0	592.85	0	592.85	0	552.02	0	552.02	0	182.8	0	182.8	0	80.7	80.7	0	80.7	4.44	0.2	1413
Diesel	0	0	0	0	0	0	0.05	0.05	0	0	1.48	1.48	0	0	0	63.29	63.29	9.26	0	74.07

```
Title    :        Placer     County     Subarea       2040 Annual   ALT             1 SOUTH    IC
Version  :        Emfac2002  V2.2       Apr             23     2003 **       WIS       Enabled  **
Run      Date     :           3/28/2007  18:24:41
Scen     Year:          2040 --         Model     Years:       1995 to           2040
Season   :        Annual
Area     :        Placer     (LT)
I/M      Stat     :          No         I         and      M        program  in       effect
Emission:Tons     Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	0	6482	0	6482	0	12010	3	12013	0	6920	31	6951	0	1353	1353	187	1539	26	29	27041
VMT/1000	0	302	0	302	0	529	0	529	0	301	2	303	0	27	27	9	36	4	0	1175
Trips	0	40469	0	40469	0	73990	11	74000	0	44689	357	45046	0	663	663	1289	1952	105	58	161630
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.04
Diurnal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.05	0	0.05	0	0.05	0	0.05	0	0	0	0	0	0	0	0.11
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.02	0	0.02	0	0.08	0	0.08	0	0.08	0	0.08	0	0	0	0	0	0	0	0.18
Carbon Monoxide Emissions																				
Run Exh	0	0.21	0	0.21	0	0.52	0	0.52	0	0.5	0	0.5	0	0.01	0.01	0.01	0.02	0	0.01	1.26
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.05	0	0.05	0	0.15	0	0.15	0	0.18	0	0.18	0	0.01	0.01	0	0.01	0	0	0.39
Total Ex	0	0.26	0	0.26	0	0.66	0	0.66	0	0.68	0	0.68	0	0.02	0.02	0.01	0.03	0.01	0.01	1.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.05	0	0.05	0	0.04	0	0.04	0	0.01	0.01	0.01	0.02	0.01	0	0.13
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.02	0	0.02	0	0.05	0	0.05	0	0.05	0	0.06	0	0.01	0.01	0.01	0.02	0.01	0	0.16
Carbon Dioxide Emissions 0																				
Run Exh	0	0.11	0	0.11	0	0.25	0	0.25	0	0.2	0	0.2	0	0.02	0.02	0.02	0.04	0.01	0	0.61
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.12	0	0.12	0	0.26	0	0.26	0	0.2	0	0.21	0	0.02	0.02	0.02	0.04	0.01	0	0.63
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.01	0	0.01	0	0.03	0	0.03	0	0.02	0	0.02	0	0	0	0	0	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpti(000 gallons)																				
Gasoline	0	11.91	0	11.91	0	26.58	0	26.58	0	21.08	0	21.08	0	2.11	2.11	0	2.11	0.2	0.01	61.88
Diesel	0	0	0	0	0	0	0	0	0	0	0.08	0.08	0	0	0	1.62	1.62	0.44	0	2.14

Title : Placer County Subarea 2040 Annual ALT 1 SOUTH IC
Version : Emfac2002 V2.2 Apr 23 2003 ** WIS Enabled **
Run Date : 3/28/2007 18:24:41
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	20119	0	20119	0	23170	10	23180	0	6639	69	6708	0	5973	5973	900	6873	25	103	57008
VMT/1000	0	586	0	586	0	645	0	645	0	183	2	185	0	79	79	32	110	3	1	1530
Trips	0	124638	0	124638	0	141357	40	141396	0	45980	817	46796	0	2052	2052	4142	6194	101	205	319330
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.03	0	0.03	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.13
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.04	0	0.04	0	0.09	0	0.09	0	0.05	0	0.05	0	0.01	0.01	0.01	0.01	0	0	0.2
Carbon Monoxide Emissions																				
Run Exh	0	0.27	0	0.27	0	0.41	0	0.41	0	0.21	0	0.21	0	0.02	0.02	0.04	0.06	0	0.01	0.97
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Ex	0	0.1	0	0.1	0	0.17	0	0.17	0	0.12	0	0.12	0	0.02	0.02	0	0.02	0	0	0.41
Total Ex	0	0.37	0	0.37	0	0.58	0	0.58	0	0.33	0	0.33	0	0.04	0.04	0.04	0.09	0	0.02	1.39
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0.04	0.05	0.01	0	0.14
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Ex	0	0	0	0	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0.03
Total Ex	0	0.03	0	0.03	0	0.05	0	0.05	0	0.03	0	0.04	0	0.02	0.02	0.07	0.08	0.01	0	0.2
Carbon Dioxide Emissions 0																				
Run Exh	0	0.22	0	0.22	0	0.31	0	0.31	0	0.13	0	0.13	0	0.06	0.06	0.06	0.12	0	0	0.79
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.23	0	0.23	0	0.33	0	0.33	0	0.13	0	0.13	0	0.06	0.06	0.07	0.13	0	0	0.82
PM10 Emissions																				
Run Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0	0.01	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpti(000 gallons)																				
Gasoline	0	24.02	0	24.02	0	33.67	0	33.67	0	13.46	0	13.46	0	6.09	6.09	0	6.09	0.12	0.02	77.38
Diesel	0	0	0	0	0	0	0	0	0	0	0.11	0.11	0	0	0	5.93	5.93	0.31	0	6.35

Title : Placer County Subarea 2040 Annual ALT 1 SOUTH IC
Version : Emfac2002 V2.2 Apr 23 2003 ** WIS Enabled **
Run Date : 3/28/2007 18:24:41
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	457805	3	457808	0	323375	78	323453	0	69876	744	70620	0	67652	67652	9465	77117	758	1107	930863
VMT/1000	0	13707	0	13707	0	9491	1	9492	0	2031	25	2056	0	937	937	309	1245	88	7	26596
Trips	0	2833340	12	2833350	0	1968620	303	1968920	0	482380	8794	491174	0	22146	22146	41938	64084	3032	2214	5362780
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.1	0	0.1	0	0.04	0	0.04	0	0.01	0.01	0.05	0.06	0.01	0.02	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.11	0	0.11	0	0.14	0	0.14	0	0.07	0	0.07	0	0.01	0.01	0	0.01	0	0.01	0.34
Total Ex	0	0.19	0	0.19	0	0.24	0	0.24	0	0.11	0	0.11	0	0.03	0.03	0.06	0.09	0.02	0.02	0.67
Diurnal	0	0.06	0	0.06	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.19
Hot Soak	0	0.07	0	0.07	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.19
Running	0	0.59	0	0.59	0	0.92	0	0.92	0	0.37	0	0.37	0	0.03	0.03	0	0.03	0	0	1.92
Resting	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.03	0	0	0	0	0	0	0	0.14
Total	0	0.95	0	0.95	0	1.41	0	1.41	0	0.57	0	0.57	0	0.06	0.06	0.06	0.12	0.02	0.03	3.1
Carbon Monoxide Emissions																				
Run Exh	0	6.26	0	6.26	0	6.45	0	6.45	0	2.31	0.03	2.34	0	0.24	0.24	0.34	0.58	0.17	0.16	15.96
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.07	0.08	0	0	0.1
Start Exh	0	2.3	0	2.3	0	2.53	0	2.53	0	1.22	0	1.22	0	0.22	0.22	0	0.22	0.05	0.03	6.35
Total Ex	0	8.56	0	8.56	0	8.98	0	8.98	0	3.55	0.03	3.58	0	0.47	0.47	0.41	0.88	0.22	0.19	22.41
Oxides of Nitrogen Emissions																				
Run Exh	0	0.48	0	0.48	0	0.53	0	0.53	0	0.18	0.02	0.2	0	0.15	0.15	0.37	0.53	0.15	0.01	1.91
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.21	0.21	0	0	0.21
Start Exh	0	0.1	0	0.1	0	0.13	0	0.13	0	0.16	0	0.16	0	0.03	0.03	0	0.03	0.01	0	0.42
Total Ex	0	0.58	0	0.58	0	0.66	0	0.67	0	0.33	0.02	0.36	0	0.18	0.18	0.58	0.76	0.16	0.01	2.54
Carbon Dioxide Emissions 0																				
Run Exh	0	5.22	0	5.22	0	4.6	0	4.6	0	1.38	0.01	1.4	0	0.71	0.71	0.61	1.32	0.13	0	12.67
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.22	0	0.22	0	0.19	0	0.19	0	0.06	0	0.06	0	0	0	0	0	0	0	0.47
Total Ex	0	5.43	0	5.43	0	4.8	0	4.8	0	1.44	0.01	1.46	0	0.71	0.71	0.62	1.33	0.13	0	13.15
PM10 Emissions																				
Run Exh	0	0.14	0	0.14	0	0.17	0	0.17	0	0.05	0	0.06	0	0	0	0.03	0.03	0	0	0.41
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.16	0	0.16	0	0.2	0	0.2	0	0.06	0	0.06	0	0	0	0.03	0.03	0	0	0.46
TireWear	0	0.12	0	0.12	0	0.08	0	0.08	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.24
BrakeWr	0	0.19	0	0.19	0	0.13	0	0.13	0	0.03	0	0.03	0	0.01	0.01	0	0.02	0	0	0.37
Total	0	0.47	0	0.47	0	0.41	0	0.41	0	0.11	0	0.11	0	0.03	0.03	0.04	0.07	0.01	0	1.07
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.05	0	0.05	0	0.05	0	0.05	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0	0.13
Fuel Consumption (000 gallons)																				
Gasoline	0	557.67	0	557.67	0	492.45	0	492.45	0	148.47	0	148.47	0	72.69	72.69	0	72.69	4.13	0.18	1275.6
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	1.29	1.29	0	0	0	55.9	55.9	8.53	0	65.77

Title : Placer County Subarea 2040 Annual ALT 1 SOUTH IC
Version : Emfac2002 V2.2 Apr 23 2003 ** WIS Enabled **
Run Date : 3/28/2007 18:24:41
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	484407	3	484410	0	358554	91	358645	0	83435	844	84279	0	74977	74977	10552	85529	809	1239	1014910
VMT/1000	0	14596	0	14596	0	10665	1	10666	0	2515	29	2544	0	1042	1042	349	1392	95	8	29301
Trips	0	2998450	12	2998460	0	2183970	354	2184320	0	573049	9968	583017	0	24860	24860	47370	72230	3238	2477	5843740
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.05	0	0.05	0	0.01	0.01	0.06	0.07	0.01	0.02	0.36
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Ex	0	0.11	0	0.11	0	0.15	0	0.15	0	0.09	0	0.09	0	0.01	0.01	0	0.01	0.01	0.01	0.38
Total Ex	0	0.21	0	0.21	0	0.27	0	0.27	0	0.14	0	0.14	0	0.03	0.03	0.07	0.1	0.02	0.03	0.76
Diurnal	0	0.06	0	0.06	0	0.1	0	0.1	0	0.04	0	0.04	0	0	0	0	0	0	0	0.2
Hot Soak	0	0.08	0	0.08	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.2
Running	0	0.63	0	0.63	0	1.03	0	1.03	0	0.46	0	0.46	0	0.03	0.03	0	0.03	0	0	2.16
Resting	0	0.04	0	0.04	0	0.08	0	0.08	0	0.03	0	0.03	0	0	0	0	0	0	0	0.16
Total	0	1.01	0	1.01	0	1.58	0	1.58	0	0.7	0	0.7	0	0.06	0.06	0.07	0.13	0.02	0.04	3.48
Carbon Monoxide Emissions																				
Run Exh	0	6.75	0	6.75	0	7.38	0	7.38	0	3.02	0.03	3.05	0	0.27	0.27	0.39	0.66	0.18	0.18	18.2
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.08	0.09	0	0	0.11
Start Ex	0	2.45	0	2.45	0	2.85	0	2.85	0	1.52	0	1.52	0	0.25	0.25	0	0.25	0.05	0.03	7.14
Total Ex	0	9.2	0	9.2	0	10.22	0	10.23	0	4.55	0.03	4.59	0	0.53	0.53	0.47	1	0.23	0.21	25.46
Oxides of Nitrogen Emissions																				
Run Exh	0	0.52	0	0.52	0	0.61	0	0.62	0	0.24	0.03	0.26	0	0.17	0.17	0.42	0.6	0.17	0.01	2.17
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.24	0.24	0	0	0.24
Start Ex	0	0.1	0	0.1	0	0.15	0	0.15	0	0.18	0	0.18	0	0.03	0.03	0	0.03	0.01	0	0.48
Total Ex	0	0.63	0	0.63	0	0.76	0	0.77	0	0.42	0.03	0.45	0	0.2	0.2	0.66	0.86	0.17	0.01	2.89
Carbon Dioxide Emissions 0																				
Run Exh	0	5.55	0	5.55	0	5.17	0	5.17	0	1.71	0.02	1.73	0	0.79	0.79	0.69	1.48	0.15	0	14.07
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Ex	0	0.23	0	0.23	0	0.21	0	0.21	0	0.07	0	0.07	0	0	0	0	0	0	0	0.52
Total Ex	0	5.78	0	5.78	0	5.38	0	5.38	0	1.78	0.02	1.8	0	0.79	0.79	0.7	1.49	0.15	0	14.6
PM10 Emissions																				
Run Exh	0	0.15	0	0.15	0	0.2	0	0.2	0	0.07	0	0.07	0	0	0	0.03	0.03	0	0	0.46
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.17	0	0.17	0	0.22	0	0.22	0	0.08	0	0.08	0	0	0	0.03	0.04	0	0	0.51
TireWear	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.27
BrakeWr	0	0.2	0	0.2	0	0.15	0	0.15	0	0.03	0	0.04	0	0.01	0.01	0	0.02	0	0	0.41
Total	0	0.5	0	0.5	0	0.46	0	0.46	0	0.13	0	0.14	0	0.03	0.03	0.05	0.08	0.01	0	1.19
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.06	0	0.06	0	0.05	0	0.05	0	0.02	0	0.02	0	0.01	0.01	0.01	0.01	0	0	0.14
Fuel Consumpti(000 gallons)																				
Gasoline	0	593.61	0	593.61	0	552.7	0	552.7	0	183.01	0	183.01	0	80.89	80.89	0	80.89	4.45	0.2	1414.86
Diesel	0	0	0	0	0	0	0.05	0.05	0	0	1.49	1.49	0	0	0	63.45	63.45	9.28	0	74.26

Title : Placer County Subarea 2040 Annual ALT 2 NO WATT
Version : Emfac2002 V2.2 Apr 23 2003 ** WIS Enabled **
Run Date : 3/28/2007 18:38:09
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (LT)
I/M Stat : No I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	0	6482	0	6482	0	12010	3	12013	0	6920	31	6951	0	1353	1353	187	1539	26	29	27041
VMT/1000	0	302	0	302	0	529	0	529	0	301	2	303	0	27	27	9	36	4	0	1175
Trips	0	40469	0	40469	0	73990	11	74000	0	44689	357	45046	0	663	663	1289	1952	105	58	161630
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.04
Diurnal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.05	0	0.05	0	0.05	0	0.05	0	0	0	0	0	0	0	0.11
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.02	0	0.02	0	0.08	0	0.08	0	0.08	0	0.08	0	0	0	0	0	0	0	0.18
Carbon Monoxide Emissions																				
Run Exh	0	0.21	0	0.21	0	0.52	0	0.52	0	0.5	0	0.5	0	0.01	0.01	0.01	0.02	0	0.01	1.26
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.05	0	0.05	0	0.15	0	0.15	0	0.18	0	0.18	0	0.01	0.01	0	0.01	0	0	0.39
Total Ex	0	0.26	0	0.26	0	0.66	0	0.66	0	0.68	0	0.68	0	0.02	0.02	0.01	0.03	0.01	0.01	1.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.05	0	0.05	0	0.04	0	0.04	0	0.01	0.01	0.01	0.02	0.01	0	0.13
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.02	0	0.02	0	0.05	0	0.05	0	0.05	0	0.06	0	0.01	0.01	0.01	0.02	0.01	0	0.16
Carbon Dioxide Emissions 0																				
Run Exh	0	0.11	0	0.11	0	0.25	0	0.25	0	0.2	0	0.2	0	0.02	0.02	0.02	0.04	0.01	0	0.61
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.12	0	0.12	0	0.26	0	0.26	0	0.2	0	0.21	0	0.02	0.02	0.02	0.04	0.01	0	0.63
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.01	0	0.01	0	0.03	0	0.03	0	0.02	0	0.02	0	0	0	0	0	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumption (000 gallons)																				
Gasoline	0	11.91	0	11.91	0	26.58	0	26.58	0	21.08	0	21.08	0	2.11	2.11	0	2.11	0.2	0.01	61.88
Diesel	0	0	0	0	0	0	0	0	0	0	0.08	0.08	0	0	0	1.62	1.62	0.44	0	2.14

Title : Placer County Subarea 2040 Annual ALT 2 NO WATT
Version : Emfac2002 V2.2 Apr 23 2003 ** WIS Enabled **
Run Date : 3/28/2007 18:38:09
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Heavy Duty Trucks Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	0	20119	0	20119	0	23170	10	23180	0	6639	69	6708	0	5973	5973	900	6873	25	103	57008
VMT/1000	0	586	0	586	0	645	0	645	0	183	2	185	0	79	79	32	110	3	1	1530
Trips	0	124638	0	124638	0	141357	40	141396	0	45980	817	46796	0	2052	2052	4142	6194	101	205	319330
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.03	0	0.03	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.13
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.04	0	0.04	0	0.09	0	0.09	0	0.05	0	0.05	0	0.01	0.01	0.01	0.01	0	0	0.2
Carbon Monoxide Emissions																				
Run Exh	0	0.27	0	0.27	0	0.41	0	0.41	0	0.21	0	0.21	0	0.02	0.02	0.04	0.06	0	0.01	0.97
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.1	0	0.1	0	0.17	0	0.17	0	0.12	0	0.12	0	0.02	0.02	0	0.02	0	0	0.41
Total Ex	0	0.37	0	0.37	0	0.58	0	0.58	0	0.33	0	0.33	0	0.04	0.04	0.04	0.09	0	0.02	1.39
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0.04	0.05	0.01	0	0.14
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0.03
Total Ex	0	0.03	0	0.03	0	0.05	0	0.05	0	0.03	0	0.04	0	0.02	0.02	0.07	0.08	0.01	0	0.2
Carbon Dioxide Emissions 0																				
Run Exh	0	0.22	0	0.22	0	0.31	0	0.31	0	0.13	0	0.13	0	0.06	0.06	0.06	0.12	0	0	0.79
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.23	0	0.23	0	0.33	0	0.33	0	0.13	0	0.13	0	0.06	0.06	0.07	0.13	0	0	0.82
PM10 Emissions																				
Run Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0	0.01	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpti(000 gallons)																				
Gasoline	0	24.02	0	24.02	0	33.67	0	33.67	0	13.46	0	13.46	0	6.09	6.09	0	6.09	0.12	0.02	77.38
Diesel	0	0	0	0	0	0	0	0	0	0	0.11	0.11	0	0	0	5.93	5.93	0.31	0	6.35

Title : Placer County Subarea 2040 Annual ALT 2 NO WATT
Version : Emfac2002 V2.2 Apr 23 2003 ** WIS Enabled **
Run Date : 3/28/2007 18:38:09
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks						
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Gasoline Trucks Non-cat	Gasoline Trucks Cat	Gasoline Trucks Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
Vehicles	0	455770	3	455773	0	321936	78	322014	0	69566	740	70306	0	67351	67351	9423	76774	754	1102	926723
VMT/1000	0	13646	0	13646	0	9449	1	9450	0	2022	25	2047	0	933	933	307	1240	87	7	26478
Trips	0	2820750	12	2820760	0	1959860	302	1960160	0	480232	8754	488986	0	22042	22042	41740	63782	3016	2204	5338910
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.1	0	0.1	0	0.04	0	0.04	0	0.01	0.01	0.05	0.06	0.01	0.02	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Ex	0	0.11	0	0.11	0	0.14	0	0.14	0	0.07	0	0.07	0	0.01	0.01	0	0.01	0	0.01	0.34
Total Ex	0	0.19	0	0.19	0	0.24	0	0.24	0	0.11	0	0.11	0	0.03	0.03	0.06	0.09	0.02	0.02	0.67
Diurnal	0	0.06	0	0.06	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.18
Hot Soak	0	0.07	0	0.07	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.18
Running	0	0.59	0	0.59	0	0.91	0	0.91	0	0.37	0	0.37	0	0.03	0.03	0	0.03	0	0	1.91
Resting	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.03	0	0	0	0	0	0	0	0.14
Total	0	0.95	0	0.95	0	1.4	0	1.4	0	0.56	0	0.57	0	0.06	0.06	0.06	0.12	0.02	0.03	3.09
Carbon Monoxide Emissions																				
Run Exh	0	6.26	0	6.26	0	6.44	0	6.44	0	2.31	0.03	2.34	0	0.24	0.24	0.34	0.58	0.17	0.16	15.96
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.07	0.08	0	0	0.1
Start Ex	0	2.29	0	2.29	0	2.52	0	2.52	0	1.22	0	1.22	0	0.22	0.22	0	0.22	0.05	0.03	6.32
Total Ex	0	8.55	0	8.55	0	8.97	0	8.97	0	3.54	0.03	3.57	0	0.47	0.47	0.41	0.88	0.22	0.19	22.37
Oxides of Nitrogen Emissions																				
Run Exh	0	0.48	0	0.48	0	0.53	0	0.53	0	0.18	0.02	0.2	0	0.15	0.15	0.37	0.52	0.15	0.01	1.9
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.21	0.21	0	0	0.21
Start Ex	0	0.1	0	0.1	0	0.13	0	0.13	0	0.15	0	0.15	0	0.03	0.03	0	0.03	0.01	0	0.42
Total Ex	0	0.58	0	0.58	0	0.66	0	0.66	0	0.33	0.02	0.36	0	0.18	0.18	0.58	0.76	0.16	0.01	2.53
Carbon Dioxide Emissions 0																				
Run Exh	0	5.2	0	5.2	0	4.59	0	4.59	0	1.38	0.01	1.4	0	0.7	0.7	0.61	1.31	0.13	0	12.64
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Ex	0	0.22	0	0.22	0	0.19	0	0.19	0	0.06	0	0.06	0	0	0	0	0	0	0	0.47
Total Ex	0	5.42	0	5.42	0	4.78	0	4.78	0	1.44	0.01	1.45	0	0.71	0.71	0.62	1.32	0.13	0	13.12
PM10 Emissions																				
Run Exh	0	0.14	0	0.14	0	0.18	0	0.18	0	0.05	0	0.06	0	0	0	0.03	0.03	0	0	0.41
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.16	0	0.16	0	0.2	0	0.2	0	0.06	0	0.06	0	0	0	0.03	0.03	0	0	0.46
TireWear	0	0.12	0	0.12	0	0.08	0	0.08	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.24
BrakeWr	0	0.19	0	0.19	0	0.13	0	0.13	0	0.03	0	0.03	0	0.01	0.01	0	0.02	0	0	0.37
Total	0	0.47	0	0.47	0	0.41	0	0.41	0	0.11	0	0.11	0	0.03	0.03	0.04	0.07	0.01	0	1.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.05	0	0.05	0	0.05	0	0.05	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0	0.13
Fuel Consumpti(000 gallons)																				
Gasoline	0	556.35	0	556.35	0	491.29	0	491.29	0	148.1	0	148.1	0	72.37	72.37	0	72.37	4.11	0.18	1272.39
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	1.29	1.29	0	0	0	55.66	55.66	8.49	0	65.48

Title : Placer County Subarea 2040 Annual ALT 2 NO WATT
Version : Emfac2002 V2.2 Apr 23 2003 ** WIS Enabled **
Run Date : 3/28/2007 18:38:09
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	482372	3	482375	0	357115	91	357207	0	83124	841	83965	0	74676	74676	10510	85186	805	1234	1010770
VMT/1000	0	14535	0	14535	0	10623	1	10624	0	2506	29	2535	0	1038	1038	348	1386	94	8	29183
Trips	0	2985850	12	2985870	0	2175210	352	2175560	0	570901	9927	580828	0	24757	24757	47171	71928	3222	2467	5819870
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.05	0	0.05	0	0.01	0.01	0.06	0.07	0.01	0.02	0.36
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Exh	0	0.11	0	0.11	0	0.15	0	0.15	0	0.09	0	0.09	0	0.01	0.01	0	0.01	0.01	0.01	0.38
Total Ex	0	0.21	0	0.21	0	0.27	0	0.27	0	0.14	0	0.14	0	0.03	0.03	0.07	0.1	0.02	0.03	0.76
Diurnal	0	0.06	0	0.06	0	0.1	0	0.1	0	0.04	0	0.04	0	0	0	0	0	0	0	0.2
Hot Soak	0	0.08	0	0.08	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.2
Running	0	0.63	0	0.63	0	1.03	0	1.03	0	0.45	0	0.45	0	0.03	0.03	0	0.03	0	0	2.15
Resting	0	0.04	0	0.04	0	0.08	0	0.08	0	0.03	0	0.03	0	0	0	0	0	0	0	0.15
Total	0	1.01	0	1.01	0	1.57	0	1.57	0	0.69	0	0.7	0	0.06	0.06	0.07	0.13	0.02	0.04	3.47
Carbon Monoxide Emissions																				
Run Exh	0	6.75	0	6.75	0	7.38	0	7.38	0	3.02	0.03	3.05	0	0.27	0.27	0.39	0.66	0.18	0.18	18.19
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.08	0.09	0	0	0.11
Start Exh	0	2.44	0	2.44	0	2.84	0	2.84	0	1.51	0	1.51	0	0.25	0.25	0	0.25	0.05	0.03	7.11
Total Ex	0	9.19	0	9.19	0	10.21	0	10.21	0	4.55	0.03	4.58	0	0.53	0.53	0.47	1	0.23	0.21	25.42
Oxides of Nitrogen Emissions																				
Run Exh	0	0.52	0	0.52	0	0.61	0	0.61	0	0.24	0.03	0.26	0	0.17	0.17	0.42	0.59	0.16	0.01	2.17
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.24	0.24	0	0	0.24
Start Exh	0	0.1	0	0.1	0	0.15	0	0.15	0	0.18	0	0.18	0	0.03	0.03	0	0.03	0.01	0	0.48
Total Ex	0	0.63	0	0.63	0	0.76	0	0.76	0	0.42	0.03	0.45	0	0.2	0.2	0.66	0.86	0.17	0.01	2.88
Carbon Dioxide Emissions 0																				
Run Exh	0	5.54	0	5.54	0	5.16	0	5.16	0	1.71	0.02	1.72	0	0.78	0.78	0.69	1.47	0.15	0	14.04
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.23	0	0.23	0	0.21	0	0.21	0	0.07	0	0.07	0	0	0	0	0	0	0	0.51
Total Ex	0	5.77	0	5.77	0	5.37	0	5.37	0	1.78	0.02	1.79	0	0.79	0.79	0.7	1.49	0.15	0	14.57
PM10 Emissions																				
Run Exh	0	0.15	0	0.15	0	0.2	0	0.2	0	0.07	0	0.07	0	0	0	0.03	0.03	0	0	0.46
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.17	0	0.17	0	0.22	0	0.22	0	0.08	0	0.08	0	0	0	0.03	0.04	0	0	0.51
TireWear	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.27
BrakeWr	0	0.2	0	0.2	0	0.15	0	0.15	0	0.03	0	0.04	0	0.01	0.01	0	0.02	0	0	0.4
Total	0	0.5	0	0.5	0	0.46	0	0.46	0	0.13	0	0.14	0	0.03	0.03	0.05	0.08	0.01	0	1.18
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.06	0	0.06	0	0.05	0	0.05	0	0.02	0	0.02	0	0.01	0.01	0.01	0.01	0	0	0.14
Fuel Consumption(000 gallons)																				
Gasoline	0	592.29	0	592.29	0	551.53	0	551.53	0	182.64	0	182.64	0	80.57	80.57	0	80.57	4.43	0.2	1411.65
Diesel	0	0	0	0	0	0	0.05	0.05	0	0	1.48	1.48	0	0	0	63.21	63.21	9.23	0	73.97

Title : Placer County Subarea 2040 Annual ALT 2 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 9:44:07
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (LT)
I/M Stat : No I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks							
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Gasoline Trucks Non-cat	Gasoline Trucks Cat	Gasoline Trucks Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
Vehicles	0	6482	0	6482	0	12010	3	12013	0	6920	31	6951	0	1353	1353	187	1539	26	29	27041
VMT/1000	0	302	0	302	0	529	0	529	0	301	2	303	0	27	27	9	36	4	0	1175
Trips	0	40467	0	40467	0	73991	11	74001	0	44690	357	45047	0	663	663	1289	1952	105	58	161631
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.04
Diurnal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.05	0	0.05	0	0.05	0	0.05	0	0	0	0	0	0	0	0.11
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.02	0	0.02	0	0.08	0	0.08	0	0.08	0	0.08	0	0	0	0	0	0	0	0.18
Carbon Monoxide Emissions																				
Run Exh	0	0.21	0	0.21	0	0.52	0	0.52	0	0.5	0	0.5	0	0.01	0.01	0.01	0.02	0	0.01	1.26
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.05	0	0.05	0	0.15	0	0.15	0	0.18	0	0.18	0	0.01	0.01	0	0.01	0	0	0.39
Total Ex	0	0.26	0	0.26	0	0.66	0	0.66	0	0.68	0	0.68	0	0.02	0.02	0.01	0.03	0.01	0.01	1.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.05	0	0.05	0	0.04	0	0.04	0	0.01	0.01	0.01	0.02	0.01	0	0.13
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.02	0	0.02	0	0.05	0	0.05	0	0.05	0	0.06	0	0.01	0.01	0.01	0.02	0.01	0	0.16
Carbon Dioxide Emissions 0																				
Run Exh	0	0.11	0	0.11	0	0.25	0	0.25	0	0.2	0	0.2	0	0.02	0.02	0.02	0.04	0.01	0	0.61
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.12	0	0.12	0	0.26	0	0.26	0	0.2	0	0.21	0	0.02	0.02	0.02	0.04	0.01	0	0.63
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.01	0	0.01	0	0.03	0	0.03	0	0.02	0	0.02	0	0	0	0	0	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt:(000 gallons)																				
Gasoline	0	11.91	0	11.91	0	26.58	0	26.58	0	21.08	0	21.08	0	2.11	2.11	0	2.11	0.2	0.01	61.88
Diesel	0	0	0	0	0	0	0	0	0	0	0.08	0.08	0	0	0	1.62	1.62	0.44	0	2.14

Title : Placer County Subarea 2040 Annual ALT 2 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 9:44:07
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	20118	0	20119	0	23170	10	23180	0	6639	69	6708	0	5973	5973	900	6873	25	103	57008
VMT/1000	0	586	0	586	0	645	0	645	0	183	2	185	0	79	79	32	110	3	1	1530
Trips	0	124634	0	124634	0	141358	40	141398	0	45981	817	46798	0	2052	2052	4142	6194	101	205	319330
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0
Running	0	0.03	0	0.03	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.13
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.04	0	0.04	0	0.09	0	0.09	0	0.05	0	0.05	0	0.01	0.01	0.01	0.01	0	0	0.2
Carbon Monoxide Emissions																				
Run Exh	0	0.27	0	0.27	0	0.41	0	0.41	0	0.21	0	0.21	0	0.02	0.02	0.04	0.06	0	0.01	0.97
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.1	0	0.1	0	0.17	0	0.17	0	0.12	0	0.12	0	0.02	0.02	0	0.02	0	0	0.41
Total Ex	0	0.37	0	0.37	0	0.58	0	0.58	0	0.33	0	0.33	0	0.04	0.04	0.04	0.09	0	0.02	1.39
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0.04	0.05	0.01	0	0.14
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0.03
Total Ex	0	0.03	0	0.03	0	0.05	0	0.05	0	0.03	0	0.04	0	0.02	0.02	0.07	0.08	0.01	0	0.2
Carbon Dioxide Emissions 0																				
Run Exh	0	0.22	0	0.22	0	0.31	0	0.31	0	0.13	0	0.13	0	0.06	0.06	0.06	0.12	0	0	0.79
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.23	0	0.23	0	0.33	0	0.33	0	0.13	0	0.13	0	0.06	0.06	0.07	0.13	0	0	0.82
PM10 Emissions																				
Run Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0	0.01	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt: (000 gallons)																				
Gasoline	0	24.02	0	24.02	0	33.67	0	33.67	0	13.46	0	13.46	0	6.09	6.09	0	6.09	0.12	0.02	77.38
Diesel	0	0	0	0	0	0	0	0	0	0	0.11	0.11	0	0	0	5.93	5.93	0.31	0	6.35

Title : Placer County Subarea 2040 Annual ALT 2 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 9:44:07
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks						
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Gasoline Trucks Non-cat	Gasoline Trucks Cat	Gasoline Trucks Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
Vehicles	0	457345	3	457348	0	323049	78	323127	0	69807	743	70550	0	67583	67583	9456	77039	757	1106	929927
VMT/1000	0	13694	0	13694	0	9481	1	9482	0	2029	25	2054	0	936	936	308	1244	88	7	26569
Trips	0	2830490	12	2830510	0	1966630	303	1966940	0	481915	8789	490704	0	22119	22119	41885	64004	3028	2212	5357390
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.1	0	0.1	0	0.04	0	0.04	0	0.01	0.01	0.05	0.06	0.01	0.02	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.11	0	0.11	0	0.14	0	0.14	0	0.07	0	0.07	0	0.01	0.01	0	0.01	0	0.01	0.34
Total Ex	0	0.19	0	0.19	0	0.24	0	0.24	0	0.11	0	0.11	0	0.03	0.03	0.06	0.09	0.02	0.02	0.67
Diurnal	0	0.06	0	0.06	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.18
Hot Soak Soak		0	0.07	0	0.07	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0
Running	0	0.59	0	0.59	0	0.92	0	0.92	0	0.37	0	0.37	0	0.03	0.03	0	0.03	0	0	1.91
Resting	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.03	0	0	0	0	0	0	0	0.14
Total	0	0.95	0	0.95	0	1.41	0	1.41	0	0.57	0	0.57	0	0.06	0.06	0.06	0.12	0.02	0.03	3.1
Carbon Monoxide Emissions																				
Run Exh	0	6.27	0	6.27	0	6.43	0	6.43	0	2.3	0.03	2.33	0	0.24	0.24	0.34	0.58	0.17	0.16	15.94
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.07	0.08	0	0	0.1
Start Exh	0	2.3	0	2.3	0	2.53	0	2.53	0	1.22	0	1.22	0	0.22	0.22	0	0.22	0.05	0.03	6.34
Total Ex	0	8.56	0	8.56	0	8.96	0	8.96	0	3.54	0.03	3.57	0	0.47	0.47	0.41	0.88	0.22	0.19	22.38
Oxides of Nitrogen Emissions																				
Run Exh	0	0.48	0	0.48	0	0.53	0	0.53	0	0.18	0.02	0.2	0	0.15	0.15	0.37	0.53	0.15	0.01	1.9
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.21	0.21	0	0	0.21
Start Exh	0	0.1	0	0.1	0	0.13	0	0.13	0	0.15	0	0.15	0	0.03	0.03	0	0.03	0.01	0	0.42
Total Ex	0	0.58	0	0.58	0	0.66	0	0.66	0	0.33	0.02	0.36	0	0.18	0.18	0.58	0.76	0.16	0.01	2.53
Carbon Dioxide Emissions 0																				
Run Exh	0	5.22	0	5.22	0	4.59	0	4.59	0	1.38	0.01	1.39	0	0.71	0.71	0.61	1.32	0.13	0	12.65
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.22	0	0.22	0	0.19	0	0.19	0	0.06	0	0.06	0	0	0	0	0	0	0	0.47
Total Ex	0	5.43	0	5.43	0	4.78	0	4.78	0	1.44	0.01	1.45	0	0.71	0.71	0.62	1.33	0.13	0	13.13
PM10 Emissions																				
Run Exh	0	0.14	0	0.14	0	0.17	0	0.17	0	0.05	0	0.05	0	0	0	0.03	0.03	0	0	0.4
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.16	0	0.16	0	0.2	0	0.2	0	0.06	0	0.06	0	0	0	0.03	0.03	0	0	0.45
TireWear	0	0.12	0	0.12	0	0.08	0	0.08	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.24
BrakeWr	0	0.19	0	0.19	0	0.13	0	0.13	0	0.03	0	0.03	0	0.01	0.01	0	0.02	0	0	0.37
Total	0	0.47	0	0.47	0	0.41	0	0.41	0	0.11	0	0.11	0	0.03	0.03	0.04	0.07	0.01	0	1.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.05	0	0.05	0	0.05	0	0.05	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0	0.13
Fuel Consumpt: (000 gallons)																				
Gasoline	0	557.84	0	557.84	0	490.87	0	490.87	0	148.01	0	148.01	0	72.62	72.62	0	72.62	4.13	0.18	1273.64
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	1.29	1.29	0	0	0	55.85	55.85	8.52	0	65.7

```
Title    :       Placer     County     Subarea      2040 Annual   ALT            2 WATT     IC
Version  :       Emfac2002  V2.2       Sept           23     2002 **       WIS      Enabled  **
Run      Date    :           3/29/2007  9:44:07
Scen     Year:          2040 --         Model    Years:       1995 to           2040
Season   :       Annual
Area     :       Placer     County     Grand    Total
I/M      Stat    :          I          and      M        program  in       effect
Emission Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	483946	3	483949	0	358229	91	358320	0	83366	844	84210	0	74909	74909	10542	85451	808	1238	1013980
VMT/1000	0	14582	0	14582	0	10655	1	10657	0	2513	29	2542	0	1042	1042	349	1390	95	8	29274
Trips	0	2995600	12	2995610	0	2181980	353	2182340	0	572586	9963	582549	0	24833	24833	47316	72150	3234	2475	5838350
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.05	0	0.05	0	0.01	0.01	0.06	0.07	0.01	0.02	0.36
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Ex	0	0.11	0	0.11	0	0.15	0	0.15	0	0.09	0	0.09	0	0.01	0.01	0	0.01	0.01	0.01	0.38
Total Ex	0	0.21	0	0.21	0	0.27	0	0.27	0	0.14	0	0.14	0	0.03	0.03	0.07	0.1	0.02	0.03	0.76
Diurnal	0	0.06	0	0.06	0	0.1	0	0.1	0	0.04	0	0.04	0	0	0	0	0	0	0	0.2
Hot Soak	0	0.08	0	0.08	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.2
Running	0	0.63	0	0.63	0	1.03	0	1.03	0	0.46	0	0.46	0	0.03	0.03	0	0.03	0	0	2.15
Resting	0	0.04	0	0.04	0	0.08	0	0.08	0	0.03	0	0.03	0	0	0	0	0	0	0	0.16
Total	0	1.01	0	1.01	0	1.58	0	1.58	0	0.7	0	0.7	0	0.06	0.06	0.07	0.13	0.02	0.04	3.48
Carbon Monoxide Emissions																				
Run Exh	0	6.75	0	6.75	0	7.36	0	7.36	0	3.01	0.03	3.05	0	0.27	0.27	0.39	0.66	0.18	0.18	18.18
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.08	0.09	0	0	0.11
Start Ex	0	2.45	0	2.45	0	2.85	0	2.85	0	1.51	0	1.51	0	0.25	0.25	0	0.25	0.05	0.03	7.14
Total Ex	0	9.2	0	9.2	0	10.2	0	10.2	0	4.55	0.03	4.58	0	0.53	0.53	0.47	1	0.23	0.21	25.43
Oxides of Nitrogen Emissions																				
Run Exh	0	0.52	0	0.52	0	0.61	0	0.61	0	0.24	0.03	0.26	0	0.17	0.17	0.42	0.6	0.16	0.01	2.17
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.24	0.24	0	0	0.24
Start Ex	0	0.1	0	0.1	0	0.15	0	0.15	0	0.18	0	0.18	0	0.03	0.03	0	0.03	0.01	0	0.48
Total Ex	0	0.63	0	0.63	0	0.76	0	0.76	0	0.42	0.03	0.45	0	0.2	0.2	0.66	0.86	0.17	0.01	2.89
Carbon Dioxide Emissions 0																				
Run Exh	0	5.55	0	5.55	0	5.15	0	5.15	0	1.7	0.02	1.72	0	0.79	0.79	0.69	1.48	0.15	0	14.06
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Ex	0	0.23	0	0.23	0	0.21	0	0.21	0	0.07	0	0.07	0	0	0	0	0	0	0	0.52
Total Ex	0	5.78	0	5.78	0	5.37	0	5.37	0	1.78	0.02	1.79	0	0.79	0.79	0.7	1.49	0.15	0	14.58
PM10 Emissions																				
Run Exh	0	0.15	0	0.15	0	0.2	0	0.2	0	0.07	0	0.07	0	0	0	0.03	0.03	0	0	0.46
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.17	0	0.17	0	0.22	0	0.22	0	0.08	0	0.08	0	0	0	0.03	0.04	0	0	0.51
TireWear	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.27
BrakeWr	0	0.2	0	0.2	0	0.15	0	0.15	0	0.03	0	0.04	0	0.01	0.01	0	0.02	0	0	0.4
Total	0	0.5	0	0.5	0	0.46	0	0.46	0	0.13	0	0.14	0	0.03	0.03	0.05	0.08	0.01	0	1.19
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.06	0	0.06	0	0.05	0	0.05	0	0.02	0	0.02	0	0.01	0.01	0.01	0.01	0	0	0.14
Fuel Consumpt: (000 gallons)																				
Gasoline	0	593.77	0	593.77	0	551.11	0	551.11	0	182.55	0	182.55	0	80.82	80.82	0	80.82	4.45	0.2	1412.9
Diesel	0	0	0	0	0	0	0.05	0.05	0	0	1.48	1.48	0	0	0	63.39	63.39	9.27	0	74.19

```
Title    :       Placer     County     Subarea       2040 Annual   ALT            3 NO       WATT
Version  :       Emfac2002  V2.2       Sept            23     2002 **       WIS      Enabled  **
Run      Date    :          3/29/2007  10:58:25
Scen     Year:          2040 --         Model     Years:       1995 to           2040
Season   :       Annual
Area     :       Placer     (LT)
I/M      Stat    :          No         I         and      M        program  in       effect
Emission Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	0	6482	0	6482	0	12010	3	12013	0	6920	31	6951	0	1353	1353	187	1539	26	29	27041
VMT/1000	0	302	0	302	0	529	0	529	0	301	2	303	0	27	27	9	36	4	0	1175
Trips	0	40467	0	40467	0	73991	11	74001	0	44690	357	45047	0	663	663	1289	1952	105	58	161631
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.04
Diurnal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.05	0	0.05	0	0.05	0	0.05	0	0	0	0	0	0	0	0.11
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.02	0	0.02	0	0.08	0	0.08	0	0.08	0	0.08	0	0	0	0	0	0	0	0.18
Carbon Monoxide Emissions																				
Run Exh	0	0.21	0	0.21	0	0.52	0	0.52	0	0.5	0	0.5	0	0.01	0.01	0.01	0.02	0	0.01	1.26
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.05	0	0.05	0	0.15	0	0.15	0	0.18	0	0.18	0	0.01	0.01	0	0.01	0	0	0.39
Total Ex	0	0.26	0	0.26	0	0.66	0	0.66	0	0.68	0	0.68	0	0.02	0.02	0.01	0.03	0.01	0.01	1.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.05	0	0.05	0	0.04	0	0.04	0	0.01	0.01	0.01	0.02	0.01	0	0.13
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.02	0	0.02	0	0.05	0	0.05	0	0.05	0	0.06	0	0.01	0.01	0.01	0.02	0.01	0	0.16
Carbon Dioxide Emissions 0																				
Run Exh	0	0.11	0	0.11	0	0.25	0	0.25	0	0.2	0	0.2	0	0.02	0.02	0.02	0.04	0.01	0	0.61
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.12	0	0.12	0	0.26	0	0.26	0	0.2	0	0.21	0	0.02	0.02	0.02	0.04	0.01	0	0.63
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.01	0	0.01	0	0.03	0	0.03	0	0.02	0	0.02	0	0	0	0	0	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt: (000 gallons)																				
Gasoline	0	11.91	0	11.91	0	26.58	0	26.58	0	21.08	0	21.08	0	2.11	2.11	0	2.11	0.2	0.01	61.88
Diesel	0	0	0	0	0	0	0	0	0	0	0.08	0.08	0	0	0	1.62	1.62	0.44	0	2.14

```
Title    :       Placer     County     Subarea       2040 Annual   ALT            3 NO       WATT
Version  :       Emfac2002  V2.2       Sept            23     2002 **       WIS      Enabled  **
Run      Date    :          3/29/2007  10:58:25
Scen     Year:          2040 --         Model     Years:       1995 to           2040
Season   :       Annual
Area     :       Placer     (MC)
I/M      Stat    :          I          and       M        program  in       effect
Emission Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	20118	0	20119	0	23170	10	23180	0	6639	69	6708	0	5973	5973	900	6873	25	103	57008
VMT/1000	0	586	0	586	0	645	0	645	0	183	2	185	0	79	79	32	110	3	1	1530
Trips	0	124634	0	124634	0	141358	40	141398	0	45981	817	46798	0	2052	2052	4142	6194	101	205	319330
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.03	0	0.03	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.13
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.04	0	0.04	0	0.09	0	0.09	0	0.05	0	0.05	0	0.01	0.01	0.01	0.01	0	0	0.2
Carbon Monoxide Emissions																				
Run Exh	0	0.27	0	0.27	0	0.41	0	0.41	0	0.21	0	0.21	0	0.02	0.02	0.04	0.06	0	0.01	0.97
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.1	0	0.1	0	0.17	0	0.17	0	0.12	0	0.12	0	0.02	0.02	0	0.02	0	0	0.41
Total Ex	0	0.37	0	0.37	0	0.58	0	0.58	0	0.33	0	0.33	0	0.04	0.04	0.04	0.09	0	0.02	1.39
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0.04	0.05	0.01	0	0.14
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0.03
Total Ex	0	0.03	0	0.03	0	0.05	0	0.05	0	0.03	0	0.04	0	0.02	0.02	0.07	0.08	0.01	0	0.2
Carbon Dioxide Emissions 0																				
Run Exh	0	0.22	0	0.22	0	0.31	0	0.31	0	0.13	0	0.13	0	0.06	0.06	0.06	0.12	0	0	0.79
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.23	0	0.23	0	0.33	0	0.33	0	0.13	0	0.13	0	0.06	0.06	0.07	0.13	0	0	0.82
PM10 Emissions																				
Run Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0	0.01	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt: (000 gallons)																				
Gasoline	0	24.02	0	24.02	0	33.67	0	33.67	0	13.46	0	13.46	0	6.09	6.09	0	6.09	0.12	0.02	77.38
Diesel	0	0	0	0	0	0	0	0	0	0	0.11	0.11	0	0	0	5.93	5.93	0.31	0	6.35

Title : Placer County Subarea 2040 Annual ALT 3 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 10:58:25
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars			Light Duty Trucks			Medium Duty Trucks			Heavy Duty Trucks							
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Gasoline Trucks Cat	Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
Vehicles	0	455950	3	455953	0	322063	78	322141	0	69594	741	70335	0	67378	67378	9427	76805	755	1103	927092
VMT/1000	0	13652	0	13652	0	9452	1	9454	0	2023	25	2048	0	933	933	307	1240	87	7	26488
Trips	0	2821860	12	2821870	0	1960630	302	1960940	0	480441	8762	489203	0	22055	22055	41766	63820	3020	2206	5341060
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.1	0	0.1	0	0.04	0	0.04	0	0.01	0.01	0.05	0.06	0.01	0.02	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.11	0	0.11	0	0.14	0	0.14	0	0.07	0	0.07	0	0.01	0.01	0	0.01	0	0.01	0.34
Total Ex	0	0.19	0	0.19	0	0.24	0	0.24	0	0.11	0	0.11	0	0.03	0.03	0.06	0.09	0.02	0.02	0.67
Diurnal	0	0.06	0	0.06	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.18
Hot Soak	0	0.07	0	0.07	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.18
Running	0	0.59	0	0.59	0	0.92	0	0.92	0	0.37	0	0.37	0	0.03	0.03	0	0.03	0	0	1.91
Resting	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.03	0	0	0	0	0	0	0	0.14
Total	0	0.95	0	0.95	0	1.4	0	1.4	0	0.56	0	0.57	0	0.06	0.06	0.06	0.12	0.02	0.03	3.09
Carbon Monoxide Emissions																				
Run Exh	0	6.27	0	6.27	0	6.45	0	6.45	0	2.31	0.03	2.34	0	0.24	0.24	0.34	0.58	0.17	0.16	15.96
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.07	0.08	0	0	0.1
Start Exh	0	2.29	0	2.29	0	2.52	0	2.52	0	1.22	0	1.22	0	0.22	0.22	0	0.22	0.05	0.03	6.32
Total Ex	0	8.55	0	8.55	0	8.97	0	8.97	0	3.54	0.03	3.57	0	0.47	0.47	0.41	0.88	0.22	0.19	22.38
Oxides of Nitrogen Emissions																				
Run Exh	0	0.48	0	0.48	0	0.53	0	0.53	0	0.18	0.02	0.2	0	0.15	0.15	0.37	0.52	0.15	0.01	1.9
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.21	0.21	0	0	0.21
Start Exh	0	0.1	0	0.1	0	0.13	0	0.13	0	0.15	0	0.15	0	0.03	0.03	0	0.03	0.01	0	0.42
Total Ex	0	0.58	0	0.58	0	0.66	0	0.66	0	0.33	0.02	0.36	0	0.18	0.18	0.58	0.76	0.16	0.01	2.53
Carbon Dioxide Emissions 0																				
Run Exh	0	5.2	0	5.2	0	4.59	0	4.59	0	1.38	0.01	1.4	0	0.7	0.7	0.61	1.31	0.13	0	12.64
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.22	0	0.22	0	0.19	0	0.19	0	0.06	0	0.06	0	0	0	0	0	0	0	0.47
Total Ex	0	5.42	0	5.42	0	4.78	0	4.79	0	1.44	0.01	1.46	0	0.71	0.71	0.62	1.32	0.13	0	13.12
PM10 Emissions																				
Run Exh	0	0.14	0	0.14	0	0.18	0	0.18	0	0.05	0	0.06	0	0	0	0.03	0.03	0	0	0.41
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.16	0	0.16	0	0.2	0	0.2	0	0.06	0	0.06	0	0	0	0.03	0.03	0	0	0.46
TireWear	0	0.12	0	0.12	0	0.08	0	0.08	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.24
BrakeWr	0	0.19	0	0.19	0	0.13	0	0.13	0	0.03	0	0.03	0	0.01	0.01	0	0.01	0	0	0.37
Total	0	0.47	0	0.47	0	0.41	0	0.41	0	0.11	0	0.11	0	0.03	0.03	0.04	0.07	0.01	0	1.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.05	0	0.05	0	0.05	0	0.05	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0	0.13
Fuel Consumpt: (000 gallons)																				
Gasoline	0	556.45	0	556.45	0	491.38	0	491.38	0	148.13	0	148.13	0	72.4	72.4	0	72.4	4.12	0.18	1272.65
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	1.29	1.29	0	0	0	55.68	55.68	8.5	0	65.51

Title : Placer County Subarea 2040 Annual ALT 3 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 10:58:25
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars			Light Duty Trucks			Medium Duty Trucks			Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	482551	3	482554	0	357243	91	357334	0	83153	841	83994	0	74703	74703	10514	85217	806	1235	1011140
VMT/1000	0	14541	0	14541	0	10626	1	10628	0	2507	29	2536	0	1039	1039	348	1387	95	8	29193
Trips	0	2986960	12	2986970	0	2175980	353	2176330	0	571113	9935	581048	0	24769	24769	47197	71966	3226	2469	5822020
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.05	0	0.05	0	0.01	0.01	0.06	0.07	0.01	0.02	0.36
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Exh	0	0.11	0	0.11	0	0.15	0	0.15	0	0.09	0	0.09	0	0.01	0.01	0	0.01	0.01	0.01	0.38
Total Ex	0	0.21	0	0.21	0	0.27	0	0.27	0	0.14	0	0.14	0	0.03	0.03	0.07	0.1	0.02	0.03	0.76
Diurnal	0	0.06	0	0.06	0	0.1	0	0.1	0	0.04	0	0.04	0	0	0	0	0	0	0	0.2
Hot Soak	0	0.08	0	0.08	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.2
Running	0	0.63	0	0.63	0	1.03	0	1.03	0	0.45	0	0.45	0	0.03	0.03	0	0.03	0	0	2.15
Resting	0	0.04	0	0.04	0	0.08	0	0.08	0	0.03	0	0.03	0	0	0	0	0	0	0	0.15
Total	0	1.01	0	1.01	0	1.58	0	1.58	0	0.69	0	0.7	0	0.06	0.06	0.07	0.13	0.02	0.04	3.47
Carbon Monoxide Emissions																				
Run Exh	0	6.75	0	6.75	0	7.38	0	7.38	0	3.02	0.03	3.05	0	0.27	0.27	0.39	0.66	0.18	0.18	18.2
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.08	0.09	0	0	0.11
Start Exh	0	2.44	0	2.44	0	2.84	0	2.84	0	1.51	0	1.51	0	0.25	0.25	0	0.25	0.05	0.03	7.12
Total Ex	0	9.19	0	9.19	0	10.22	0	10.22	0	4.55	0.03	4.58	0	0.53	0.53	0.47	1	0.23	0.21	25.43
Oxides of Nitrogen Emissions																				
Run Exh	0	0.52	0	0.52	0	0.61	0	0.61	0	0.24	0.03	0.26	0	0.17	0.17	0.42	0.59	0.16	0.01	2.17
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.24	0.24	0	0	0.24
Start Exh	0	0.1	0	0.1	0	0.15	0	0.15	0	0.18	0	0.18	0	0.03	0.03	0	0.03	0.01	0	0.48
Total Ex	0	0.63	0	0.63	0	0.76	0	0.76	0	0.42	0.03	0.45	0	0.2	0.2	0.66	0.86	0.17	0.01	2.89
Carbon Dioxide Emissions 0																				
Run Exh	0	5.54	0	5.54	0	5.16	0	5.16	0	1.71	0.02	1.72	0	0.78	0.78	0.69	1.48	0.15	0	14.04
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.23	0	0.23	0	0.21	0	0.21	0	0.07	0	0.07	0	0	0	0	0	0	0	0.51
Total Ex	0	5.77	0	5.77	0	5.37	0	5.37	0	1.78	0.02	1.79	0	0.79	0.79	0.7	1.49	0.15	0	14.57
PM10 Emissions																				
Run Exh	0	0.15	0	0.15	0	0.2	0	0.2	0	0.07	0	0.07	0	0	0	0.03	0.03	0	0	0.46
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.17	0	0.17	0	0.22	0	0.22	0	0.08	0	0.08	0	0	0	0.03	0.04	0	0	0.51
TireWear	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.27
BrakeWr	0	0.2	0	0.2	0	0.15	0	0.15	0	0.03	0	0.04	0	0.01	0.01	0	0.01	0	0	0.4
Total	0	0.5	0	0.5	0	0.46	0	0.46	0	0.13	0	0.14	0	0.03	0.03	0.05	0.08	0.01	0	1.18
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.06	0	0.06	0	0.05	0	0.05	0	0.02	0	0.02	0	0.01	0.01	0.01	0.01	0	0	0.14
Fuel Consumpt (000 gallons)																				
Gasoline	0	592.38	0	592.38	0	551.62	0	551.62	0	182.67	0	182.67	0	80.6	80.6	0	80.6	4.44	0.2	1411.91
Diesel	0	0	0	0	0	0	0.05	0.05	0	0	1.48	1.48	0	0	0	63.22	63.22	9.24	0	74

```
Title    :       Placer     County     Subarea       2040 Annual   ALT            3 WATT     IC
Version  :       Emfac2002  V2.2       Sept            23     2002 **       WIS      Enabled  **
Run      Date    :           3/29/2007  11:11:11
Scen     Year:          2040 --         Model     Years:       1995 to           2040
Season   :       Annual
Area     :       Placer     (LT)
I/M      Stat    :          No         I         and      M        program  in       effect
Emission Tons    Per        Day
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	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	0	6482	0	6482	0	12010	3	12013	0	6920	31	6951	0	1353	1353	187	1539	26	29	27041
VMT/1000	0	302	0	302	0	529	0	529	0	301	2	303	0	27	27	9	36	4	0	1175
Trips	0	40467	0	40467	0	73991	11	74001	0	44690	357	45047	0	663	663	1289	1952	105	58	161631
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.04
Diurnal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.05	0	0.05	0	0.05	0	0.05	0	0	0	0	0	0	0	0.11
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.02	0	0.02	0	0.08	0	0.08	0	0.08	0	0.08	0	0	0	0	0	0	0	0.18
Carbon Monoxide Emissions																				
Run Exh	0	0.21	0	0.21	0	0.52	0	0.52	0	0.5	0	0.5	0	0.01	0.01	0.01	0.02	0	0.01	1.26
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.05	0	0.05	0	0.15	0	0.15	0	0.18	0	0.18	0	0.01	0.01	0	0.01	0	0	0.39
Total Ex	0	0.26	0	0.26	0	0.66	0	0.66	0	0.68	0	0.68	0	0.02	0.02	0.01	0.03	0.01	0.01	1.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.05	0	0.05	0	0.04	0	0.04	0	0.01	0.01	0.01	0.02	0.01	0	0.13
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.02	0	0.02	0	0.05	0	0.05	0	0.05	0	0.06	0	0.01	0.01	0.01	0.02	0.01	0	0.16
Carbon Dioxide Emissions 0																				
Run Exh	0	0.11	0	0.11	0	0.25	0	0.25	0	0.2	0	0.2	0	0.02	0.02	0.02	0.04	0.01	0	0.61
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.12	0	0.12	0	0.26	0	0.26	0	0.2	0	0.21	0	0.02	0.02	0.02	0.04	0.01	0	0.63
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.01	0	0.01	0	0.03	0	0.03	0	0.02	0	0.02	0	0	0	0	0	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumption (000 gallons)																				
Gasoline	0	11.91	0	11.91	0	26.58	0	26.58	0	21.08	0	21.08	0	2.11	2.11	0	2.11	0.2	0.01	61.88
Diesel	0	0	0	0	0	0	0	0	0	0	0.08	0.08	0	0	0	1.62	1.62	0.44	0	2.14

Title : Placer County Subarea 2040 Annual ALT 3 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 11:11:11
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars			Light Duty Trucks			Medium Duty Trucks			Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Non-cat	Cat	Diesel	Non-cat	Cat	Diesel	Non-cat	Cat		Trucks	Trucks	Buses	cycles	Vehicles
			Total			Total			Total			Total					
Vehicles	0	20118	0	0	23170	10	0	6639	69	0	5973	5973	900	6873	25	103	57008
	0	20119		0	23180		0	6708		0							
VMT/1000	0	586	0	0	645	0	0	183	2	0	79	79	32	110	3	1	1530
	0	586		0	645		0	185		0							
Trips	0	124634	0	0	141358	40	0	45981	817	0	2052	2052	4142	6194	101	205	319330
	0	124634		0	141398		0	46798		0							
Reactive Organic Gas Emissions																	
Run Exh	0	0	0	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
	0	0		0	0.01		0	0		0							
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0		0	0		0	0		0							
Start Exh	0	0	0	0	0.01	0	0	0.01	0	0	0	0	0	0	0	0	0.02
	0	0		0	0.01		0	0.01		0							
Total Ex	0	0.01	0	0	0.02	0	0	0.01	0	0	0	0	0.01	0.01	0	0	0.05
	0	0.01		0	0.02		0	0.01		0							
Diurnal	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
	0	0		0	0.01		0	0		0							
Hot Soak	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
	0	0		0	0.01		0	0		0							
Running	0	0.03	0	0	0.06	0	0	0.04	0	0	0	0	0	0	0	0	0.13
	0	0.03		0	0.06		0	0.04		0							
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
	0	0		0	0		0	0		0							
Total	0	0.04	0	0	0.09	0	0	0.05	0	0	0.01	0.01	0.01	0.01	0	0	0.2
	0	0.04		0	0.09		0	0.05		0							
Carbon Monoxide Emissions																	
Run Exh	0	0.27	0	0	0.41	0	0	0.21	0	0	0.02	0.02	0.04	0.06	0	0.01	0.97
	0	0.27		0	0.41		0	0.21		0							
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
	0	0		0	0		0	0		0							
Start Exh	0	0.1	0	0	0.17	0	0	0.12	0	0	0.02	0.02	0	0.02	0	0	0.41
	0	0.1		0	0.17		0	0.12		0							
Total Ex	0	0.37	0	0	0.58	0	0	0.33	0	0	0.04	0.04	0.04	0.09	0	0.02	1.39
	0	0.37		0	0.58		0	0.33		0							
Oxides of Nitrogen Emissions																	
Run Exh	0	0.02	0	0	0.04	0	0	0.02	0	0	0.01	0.01	0.04	0.05	0.01	0	0.14
	0	0.02		0	0.04		0	0.02		0							
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
	0	0		0	0		0	0		0							
Start Exh	0	0	0	0	0.01	0	0	0.02	0	0	0	0	0	0	0	0	0.03
	0	0		0	0.01		0	0.02		0							
Total Ex	0	0.03	0	0	0.05	0	0	0.03	0	0	0.02	0.02	0.07	0.08	0.01	0	0.2
	0	0.03		0	0.05		0	0.04		0							
Carbon Dioxide Emissions 0																	
Run Exh	0	0.22	0	0	0.31	0	0	0.13	0	0	0.06	0.06	0.06	0.12	0	0	0.79
	0	0.22		0	0.31		0	0.13		0							
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0		0	0		0	0		0							
Start Exh	0	0.01	0	0	0.01	0	0	0.01	0	0	0	0	0	0	0	0	0.03
	0	0.01		0	0.01		0	0.01		0							
Total Ex	0	0.23	0	0	0.33	0	0	0.13	0	0	0.06	0.06	0.07	0.13	0	0	0.82
	0	0.23		0	0.33		0	0.13		0							
PM10 Emissions																	
Run Exh	0	0.01	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
	0	0.01		0	0.01		0	0		0							
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0		0	0		0	0		0							
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0		0	0		0	0		0							
Total Ex	0	0.01	0	0	0.01	0	0	0.01	0	0	0	0	0	0	0	0	0.03
	0	0.01		0	0.01		0	0.01		0							
TireWear	0	0.01	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
	0	0.01		0	0.01		0	0		0							
BrakeWr	0	0.01	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
	0	0.01		0	0.01		0	0		0							
Total	0	0.02	0	0	0.03	0	0	0.01	0	0	0	0	0	0	0.01	0	0.06
	0	0.02		0	0.03		0	0.01		0							
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0		0	0		0	0		0							
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
	0	0		0	0		0	0		0							
Fuel Consumpt:(000 gallons)																	
Gasoline	0	24.02	0	0	33.67	0	0	13.46	0	0	6.09	6.09	0	6.09	0.12	0.02	77.38
	0	24.02		0	33.67		0	13.46		0							
Diesel	0	0	0	0	0	0	0	0	0.11	0	0	0	5.93	5.93	0.31	0	6.35
	0	0		0	0		0	0.11		0							

Title : Placer County Subarea 2040 Annual ALT 3 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 11:11:11
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	456993	3	456996	0	322801	78	322879	0	69753	742	70495	0	67532	67532	9448	76980	756	1105	929211
VMT/1000	0	13683	0	13683	0	9474	1	9475	0	2027	25	2053	0	935	935	308	1243	87	7	26549
Trips	0	2828320	12	2828330	0	1965120	303	1965430	0	481527	8779	490306	0	22102	22102	41854	63956	3024	2210	5353250
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.1	0	0.1	0	0.04	0	0.04	0	0.01	0.01	0.05	0.06	0.01	0.02	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.11	0	0.11	0	0.14	0	0.14	0	0.07	0	0.07	0	0.01	0.01	0	0.01	0	0.01	0.34
Total Ex	0	0.19	0	0.19	0	0.24	0	0.24	0	0.11	0	0.11	0	0.03	0.03	0.06	0.09	0.02	0.02	0.67
Diurnal	0	0.06	0	0.06	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.18
Hot Soak	0	0.07	0	0.07	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.19
Running	0	0.59	0	0.59	0	0.92	0	0.92	0	0.37	0	0.37	0	0.03	0.03	0	0.03	0	0	1.91
Resting	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.03	0	0	0	0	0	0	0	0.14
Total	0	0.95	0	0.95	0	1.41	0	1.41	0	0.57	0	0.57	0	0.06	0.06	0.06	0.12	0.02	0.03	3.1
Carbon Monoxide Emissions																				
Run Exh	0	6.26	0	6.26	0	6.45	0	6.45	0	2.31	0.03	2.34	0	0.24	0.24	0.34	0.58	0.17	0.16	15.96
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.07	0.08	0	0	0.1
Start Exh	0	2.29	0	2.29	0	2.53	0	2.53	0	1.22	0	1.22	0	0.22	0.22	0	0.22	0.05	0.03	6.33
Total Ex	0	8.56	0	8.56	0	8.97	0	8.97	0	3.55	0.03	3.58	0	0.47	0.47	0.41	0.88	0.22	0.19	22.4
Oxides of Nitrogen Emissions																				
Run Exh	0	0.48	0	0.48	0	0.53	0	0.53	0	0.18	0.02	0.2	0	0.15	0.15	0.37	0.52	0.15	0.01	1.9
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.21	0.21	0	0	0.21
Start Exh	0	0.1	0	0.1	0	0.13	0	0.13	0	0.15	0	0.15	0	0.03	0.03	0	0.03	0.01	0	0.42
Total Ex	0	0.58	0	0.58	0	0.66	0	0.66	0	0.33	0.02	0.36	0	0.18	0.18	0.58	0.76	0.16	0.01	2.53
Carbon Dioxide Emissions 0																				
Run Exh	0	5.21	0	5.21	0	4.6	0	4.6	0	1.38	0.01	1.4	0	0.71	0.71	0.61	1.32	0.13	0	12.66
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.22	0	0.22	0	0.19	0	0.19	0	0.06	0	0.06	0	0	0	0	0	0	0	0.47
Total Ex	0	5.43	0	5.43	0	4.79	0	4.79	0	1.44	0.01	1.46	0	0.71	0.71	0.62	1.33	0.13	0	13.14
PM10 Emissions																				
Run Exh	0	0.14	0	0.14	0	0.18	0	0.18	0	0.05	0	0.06	0	0	0	0.03	0.03	0	0	0.41
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.16	0	0.16	0	0.2	0	0.2	0	0.06	0	0.06	0	0	0	0.03	0.03	0	0	0.46
TireWear	0	0.12	0	0.12	0	0.08	0	0.08	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.24
BrakeWr	0	0.19	0	0.19	0	0.13	0	0.13	0	0.03	0	0.03	0	0.01	0.01	0	0.02	0	0	0.37
Total	0	0.47	0	0.47	0	0.41	0	0.41	0	0.11	0	0.11	0	0.03	0.03	0.04	0.07	0.01	0	1.07
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.05	0	0.05	0	0.05	0	0.05	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0	0.13
Fuel Consumpt: (000 gallons)																				
Gasoline	0	557.33	0	557.33	0	492.15	0	492.15	0	148.37	0	148.37	0	72.56	72.56	0	72.56	4.12	0.18	1274.71
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	1.29	1.29	0	0	0	55.8	55.8	8.51	0	65.64

Title : Placer County Subarea 2040 Annual ALT 3 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 11:11:11
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	483594	3	483597	0	357981	91	358072	0	83312	843	84154	0	74857	74857	10535	85392	807	1237	1013260
VMT/1000	0	14572	0	14572	0	10648	1	10649	0	2511	29	2540	0	1041	1041	349	1389	95	8	29254
Trips	0	2993420	12	2993430	0	2180470	353	2180830	0	572198	9952	582151	0	24817	24817	47285	72102	3230	2473	5834210
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.05	0	0.05	0	0.01	0.01	0.06	0.07	0.01	0.02	0.36
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Exh	0	0.11	0	0.11	0	0.15	0	0.15	0	0.09	0	0.09	0	0.01	0.01	0	0.01	0.01	0.01	0.38
Total Ex	0	0.21	0	0.21	0	0.27	0	0.27	0	0.14	0	0.14	0	0.03	0.03	0.07	0.1	0.02	0.03	0.76
Diurnal	0	0.06	0	0.06	0	0.1	0	0.1	0	0.04	0	0.04	0	0	0	0	0	0	0	0.2
Hot Soak	0	0.08	0	0.08	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.2
Running	0	0.63	0	0.63	0	1.03	0	1.03	0	0.46	0	0.46	0	0.03	0.03	0	0.03	0	0	2.15
Resting	0	0.04	0	0.04	0	0.08	0	0.08	0	0.03	0	0.03	0	0	0	0	0	0	0	0.16
Total	0	1.01	0	1.01	0	1.58	0	1.58	0	0.7	0	0.7	0	0.06	0.06	0.07	0.13	0.02	0.04	3.48
Carbon Monoxide Emissions																				
Run Exh	0	6.75	0	6.75	0	7.38	0	7.38	0	3.02	0.03	3.05	0	0.27	0.27	0.39	0.66	0.18	0.18	18.2
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.08	0.09	0	0	0.11
Start Exh	0	2.45	0	2.45	0	2.84	0	2.84	0	1.51	0	1.51	0	0.25	0.25	0	0.25	0.05	0.03	7.13
Total Ex	0	9.2	0	9.2	0	10.22	0	10.22	0	4.55	0.03	4.59	0	0.53	0.53	0.47	1	0.23	0.21	25.45
Oxides of Nitrogen Emissions																				
Run Exh	0	0.52	0	0.52	0	0.61	0	0.62	0	0.24	0.03	0.26	0	0.17	0.17	0.42	0.59	0.16	0.01	2.17
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.24	0.24	0	0	0.24
Start Exh	0	0.1	0	0.1	0	0.15	0	0.15	0	0.18	0	0.18	0	0.03	0.03	0	0.03	0.01	0	0.48
Total Ex	0	0.63	0	0.63	0	0.76	0	0.76	0	0.42	0.03	0.45	0	0.2	0.2	0.66	0.86	0.17	0.01	2.89
Carbon Dioxide Emissions 0																				
Run Exh	0	5.55	0	5.55	0	5.17	0	5.17	0	1.71	0.02	1.72	0	0.79	0.79	0.69	1.48	0.15	0	14.07
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.23	0	0.23	0	0.21	0	0.21	0	0.07	0	0.07	0	0	0	0	0	0	0	0.51
Total Ex	0	5.78	0	5.78	0	5.38	0	5.38	0	1.78	0.02	1.8	0	0.79	0.79	0.7	1.49	0.15	0	14.59
PM10 Emissions																				
Run Exh	0	0.15	0	0.15	0	0.2	0	0.2	0	0.07	0	0.07	0	0	0	0.03	0.03	0	0	0.46
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.17	0	0.17	0	0.22	0	0.22	0	0.08	0	0.08	0	0	0	0.03	0.04	0	0	0.51
TireWear	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.27
BrakeWr	0	0.2	0	0.2	0	0.15	0	0.15	0	0.03	0	0.04	0	0.01	0.01	0	0.02	0	0	0.4
Total	0	0.5	0	0.5	0	0.46	0	0.46	0	0.13	0	0.14	0	0.03	0.03	0.05	0.08	0.01	0	1.19
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.06	0	0.06	0	0.05	0	0.05	0	0.02	0	0.02	0	0.01	0.01	0.01	0.01	0	0	0.14
Fuel Consumpt: (000 gallons)																				
Gasoline	0	593.26	0	593.26	0	552.39	0	552.39	0	182.91	0	182.91	0	80.76	80.76	0	80.76	4.44	0.2	1413.97
Diesel	0	0	0	0	0	0	0.05	0.05	0	0	1.48	1.48	0	0	0	63.34	63.34	9.26	0	74.13

Title : Placer County Subarea 2040 Annual ALT 4 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 11:45:34
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (LT)
I/M Stat : No I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars			Light Duty Trucks			Medium Duty Trucks			Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Non-cat	Cat	Diesel	Non-cat	Cat	Diesel	Non-cat	Cat		Trucks	Trucks	Buses	cycles	Vehicles
			Total			Total			Total			Total					
Vehicles	0	6482	0 6482	0	12010	3 12013	0	6920	31 6951	0	1353	1353	187	1539	26	29	27041
VMT/1000	0	302	0 302	0	529	0 529	0	301	2 303	0	27	27	9	36	4	0	1175
Trips	0	40467	0 40467	0	73991	11 74001	0	44690	357 45047	0	663	663	1289	1952	105	58	161631
Reactive Organic Gas Emissions																	
Run Exh	0	0	0 0	0	0.01	0 0.01	0	0.01	0 0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0	0	0	0	0	0
Start Exh	0	0	0 0	0	0.01	0 0.01	0	0.01	0 0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0 0.01	0	0.02	0 0.02	0	0.02	0 0.02	0	0	0	0	0	0	0	0.04
Diurnal	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0 0.01	0	0.05	0 0.05	0	0.05	0 0.05	0	0	0	0	0	0	0	0.11
Resting	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0	0	0	0	0	0.01
Total	0	0.02	0 0.02	0	0.08	0 0.08	0	0.08	0 0.08	0	0	0	0	0	0	0	0.18
Carbon Monoxide Emissions																	
Run Exh	0	0.21	0 0.21	0	0.52	0 0.52	0	0.5	0 0.5	0	0.01	0.01	0.01	0.02	0	0.01	1.26
Idle Exh	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0	0	0	0	0	0
Start Exh	0	0.05	0 0.05	0	0.15	0 0.15	0	0.18	0 0.18	0	0.01	0.01	0	0.01	0	0	0.39
Total Ex	0	0.26	0 0.26	0	0.66	0 0.66	0	0.68	0 0.68	0	0.02	0.02	0.01	0.03	0.01	0.01	1.65
Oxides of Nitrogen Emissions																	
Run Exh	0	0.02	0 0.02	0	0.05	0 0.05	0	0.04	0 0.04	0	0.01	0.01	0.01	0.02	0.01	0	0.13
Idle Exh	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0	0	0	0	0	0
Start Exh	0	0	0 0	0	0.01	0 0.01	0	0.01	0 0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.02	0 0.02	0	0.05	0 0.05	0	0.05	0 0.06	0	0.01	0.01	0.01	0.02	0.01	0	0.16
Carbon Dioxide Emissions 0																	
Run Exh	0	0.11	0 0.11	0	0.25	0 0.25	0	0.2	0 0.2	0	0.02	0.02	0.02	0.04	0.01	0	0.61
Idle Exh	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0	0	0	0	0	0
Start Exh	0	0	0 0	0	0.01	0 0.01	0	0.01	0 0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.12	0 0.12	0	0.26	0 0.26	0	0.2	0 0.21	0	0.02	0.02	0.02	0.04	0.01	0	0.63
PM10 Emissions																	
Run Exh	0	0	0 0	0	0.01	0 0.01	0	0.01	0 0.01	0	0	0	0	0	0	0	0.03
Idle Exh	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0	0	0	0	0	0
Start Exh	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0	0	0	0	0	0
Total Ex	0	0	0 0	0	0.01	0 0.01	0	0.01	0 0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0 0	0	0.01	0 0.01	0	0	0 0	0	0	0	0	0	0	0	0.02
Total	0	0.01	0 0.01	0	0.03	0 0.03	0	0.02	0 0.02	0	0	0	0	0	0	0	0.06
Lead	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0	0	0	0	0	0
SOx	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0	0	0	0	0	0.01
Fuel Consumpt: (000 gallons)																	
Gasoline	0	11.91	0 11.91	0	26.58	0 26.58	0	21.08	0 21.08	0	2.11	2.11	0	2.11	0.2	0.01	61.88
Diesel	0	0	0 0	0	0	0 0	0	0	0.08 0.08	0	0	0	1.62	1.62	0.44	0	2.14

Title : Placer County Subarea 2040 Annual ALT 4 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 11:45:34
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars			Light Duty Trucks			Medium Duty Trucks			Heavy Duty Trucks							
	Non-cat	Cat	Diesel	Non-cat	Cat	Diesel	Non-cat	Cat	Diesel	Gasoline Trucks Non-cat	Gasoline Trucks Cat	Gasoline Trucks Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
Vehicles	0	20118	0	0	23170	10	0	6639	69	0	5973	5973	900	6873	25	103	57008
VMT/1000	0	586	0	0	645	0	0	183	2	0	79	79	32	110	3	1	1530
Trips	0	124634	0	0	141358	40	0	45981	817	0	2052	2052	4142	6194	101	205	319330
Reactive Organic Gas Emissions																	
Run Exh	0	0	0	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0.01	0	0	0.01	0	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0	0.02	0	0	0.01	0	0	0	0	0.01	0.01	0	0	0.05
Diurnal	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.03	0	0.03	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.13
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.04	0	0.04	0.09	0	0.09	0.05	0	0.05	0	0.05	0	0.01	0.01	0.01	0.01	0	0	0.2
Carbon Monoxide Emissions																	
Run Exh	0	0.27	0	0.27	0.41	0	0.41	0.21	0	0.21	0	0.21	0	0.02	0.02	0.04	0.06	0	0.01	0.97
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.1	0	0.1	0.17	0	0.17	0.12	0	0.12	0	0.12	0	0.02	0.02	0	0.02	0	0	0.41
Total Ex	0	0.37	0	0.37	0.58	0	0.58	0.33	0	0.33	0	0.33	0	0.04	0.04	0.04	0.09	0	0.02	1.39
Oxides of Nitrogen Emissions																	
Run Exh	0	0.02	0	0.02	0.04	0	0.04	0.02	0	0.02	0	0.02	0	0.01	0.01	0.04	0.05	0.01	0	0.14
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0	0	0	0.01	0	0.01	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.03
Total Ex	0	0.03	0	0.03	0.05	0	0.05	0.03	0	0.04	0	0.04	0	0.02	0.02	0.07	0.08	0.01	0	0.2
Carbon Dioxide Emissions 0																	
Run Exh	0	0.22	0	0.22	0.31	0	0.31	0.13	0	0.13	0	0.13	0	0.06	0.06	0.06	0.12	0	0	0.79
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0.01	0	0.01	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.23	0	0.23	0.33	0	0.33	0.13	0	0.13	0	0.13	0	0.06	0.06	0.07	0.13	0	0	0.82
PM10 Emissions																	
Run Exh	0	0.01	0	0.01	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0.01	0	0.01	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0.01	0	0.01	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0.03	0	0.03	0.01	0	0.01	0	0.01	0	0	0	0	0.01	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt:(000 gallons)																	
Gasoline	0	24.02	0	24.02	33.67	0	33.67	13.46	0	13.46	0	6.09	6.09	0	6.09	0.12	0.02	77.38
Diesel	0	0	0	0	0	0	0	0	0.11	0.11	0	0	0	5.93	5.93	0.31	0	6.35

Title : Placer County Subarea 2040 Annual ALT 4 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 11:45:34
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars			Light Duty Trucks			Medium Duty Trucks			Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	455851	3	455854	0	321993	78	322071	0	69579	740	70319	0	67363	67363	9424	76787	755	1103	926889
VMT/1000	0	13649	0	13649	0	9450	1	9451	0	2022	25	2047	0	933	933	307	1240	87	7	26482
Trips	0	2821250	12	2821260	0	1960210	302	1960510	0	480332	8756	489088	0	22043	22043	41740	63783	3020	2206	5339860
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.1	0	0.1	0	0.04	0	0.04	0	0.01	0.01	0.05	0.06	0.01	0.02	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Ex	0	0.11	0	0.11	0	0.14	0	0.14	0	0.07	0	0.07	0	0.01	0.01	0	0.01	0	0.01	0.34
Total Ex	0	0.19	0	0.19	0	0.24	0	0.24	0	0.11	0	0.11	0	0.03	0.03	0.06	0.09	0.02	0.02	0.67
Diurnal	0	0.06	0	0.06	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.18
Hot Soak	0	0.07	0	0.07	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.18
Running	0	0.59	0	0.59	0	0.91	0	0.91	0	0.37	0	0.37	0	0.03	0.03	0	0.03	0	0	1.91
Resting	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.03	0	0	0	0	0	0	0	0.14
Total	0	0.95	0	0.95	0	1.4	0	1.4	0	0.56	0	0.57	0	0.06	0.06	0.06	0.12	0.02	0.03	3.09
Carbon Monoxide Emissions																				
Run Exh	0	6.27	0	6.27	0	6.45	0	6.45	0	2.31	0.03	2.34	0	0.24	0.24	0.34	0.58	0.17	0.16	15.96
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.07	0.08	0	0	0.1
Start Ex	0	2.29	0	2.29	0	2.52	0	2.52	0	1.22	0	1.22	0	0.22	0.22	0	0.22	0.05	0.03	6.32
Total Ex	0	8.55	0	8.55	0	8.97	0	8.97	0	3.54	0.03	3.57	0	0.47	0.47	0.41	0.88	0.22	0.19	22.38
Oxides of Nitrogen Emissions																				
Run Exh	0	0.48	0	0.48	0	0.53	0	0.53	0	0.18	0.02	0.2	0	0.15	0.15	0.37	0.52	0.15	0.01	1.9
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.21	0.21	0	0	0.21
Start Ex	0	0.1	0	0.1	0	0.13	0	0.13	0	0.15	0	0.15	0	0.03	0.03	0	0.03	0.01	0	0.42
Total Ex	0	0.58	0	0.58	0	0.66	0	0.66	0	0.33	0.02	0.36	0	0.18	0.18	0.58	0.76	0.16	0.01	2.53
Carbon Dioxide Emissions 0																				
Run Exh	0	5.21	0	5.21	0	4.59	0	4.6	0	1.38	0.01	1.4	0	0.7	0.7	0.61	1.31	0.13	0	12.65
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Ex	0	0.22	0	0.22	0	0.19	0	0.19	0	0.06	0	0.06	0	0	0	0	0	0	0	0.47
Total Ex	0	5.42	0	5.42	0	4.79	0	4.79	0	1.44	0.01	1.46	0	0.71	0.71	0.62	1.32	0.13	0	13.13
PM10 Emissions																				
Run Exh	0	0.14	0	0.14	0	0.18	0	0.18	0	0.05	0	0.06	0	0	0	0.03	0.03	0	0	0.41
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.16	0	0.16	0	0.2	0	0.2	0	0.06	0	0.06	0	0	0	0.03	0.03	0	0	0.46
TireWear	0	0.12	0	0.12	0	0.08	0	0.08	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.24
BrakeWr	0	0.19	0	0.19	0	0.13	0	0.13	0	0.03	0	0.03	0	0.01	0.01	0	0.02	0	0	0.37
Total	0	0.47	0	0.47	0	0.41	0	0.41	0	0.11	0	0.11	0	0.03	0.03	0.04	0.07	0.01	0	1.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.05	0	0.05	0	0.05	0	0.05	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0	0.13
Fuel Consumpt (000 gallons)																				
Gasoline	0	556.66	0	556.66	0	491.56	0	491.56	0	148.18	0	148.18	0	72.38	72.38	0	72.38	4.12	0.18	1273.07
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	1.29	1.29	0	0	0	55.66	55.66	8.5	0	65.49

```
Title    :       Placer     County     Subarea      2040 Annual   ALT            4 NO       WATT
Version  :       Emfac2002  V2.2       Sept           23     2002 **       WIS      Enabled  **
Run      Date    :            3/29/2007  11:45:34
Scen     Year:         2040 --          Model     Years:       1995 to           2040
Season   :       Annual
Area     :       Placer     County     Grand     Total
I/M      Stat    :          I          and       M        program  in       effect
Emission Tons    Per        Day
```

	Light Duty Passenger Cars			Light Duty Trucks			Medium Duty Trucks			Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	482452	3	482455	0	357173	91	357264	0	83137	841	83978	0	74688	74688	10511	85199	806	1235	1010940
VMT/1000	0	14538	0	14538	0	10624	1	10626	0	2506	29	2535	0	1038	1038	348	1386	95	8	29187
Trips	0	2986350	12	2986360	0	2175560	352	2175910	0	571003	9929	580933	0	24758	24758	47171	71929	3226	2469	5820830
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.05	0	0.05	0	0.01	0.01	0.06	0.07	0.01	0.02	0.36
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Ex	0	0.11	0	0.11	0	0.15	0	0.15	0	0.09	0	0.09	0	0.01	0.01	0	0.01	0.01	0.01	0.38
Total Ex	0	0.21	0	0.21	0	0.27	0	0.27	0	0.14	0	0.14	0	0.03	0.03	0.07	0.1	0.02	0.03	0.76
Diurnal	0	0.06	0	0.06	0	0.1	0	0.1	0	0.04	0	0.04	0	0	0	0	0	0	0	0.2
Hot Soak	0	0.08	0	0.08	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.2
Running	0	0.63	0	0.63	0	1.03	0	1.03	0	0.45	0	0.45	0	0.03	0.03	0	0.03	0	0	2.15
Resting	0	0.04	0	0.04	0	0.08	0	0.08	0	0.03	0	0.03	0	0	0	0	0	0	0	0.15
Total	0	1.01	0	1.01	0	1.58	0	1.58	0	0.69	0	0.7	0	0.06	0.06	0.07	0.13	0.02	0.04	3.47
Carbon Monoxide Emissions																				
Run Exh	0	6.75	0	6.75	0	7.38	0	7.38	0	3.02	0.03	3.05	0	0.27	0.27	0.39	0.66	0.18	0.18	18.2
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.08	0.09	0	0	0.11
Start Ex	0	2.44	0	2.44	0	2.84	0	2.84	0	1.51	0	1.51	0	0.25	0.25	0	0.25	0.05	0.03	7.12
Total Ex	0	9.19	0	9.19	0	10.22	0	10.22	0	4.55	0.03	4.58	0	0.53	0.53	0.47	1	0.23	0.21	25.43
Oxides of Nitrogen Emissions																				
Run Exh	0	0.52	0	0.52	0	0.61	0	0.61	0	0.24	0.03	0.26	0	0.17	0.17	0.42	0.59	0.16	0.01	2.17
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.24	0.24	0	0	0.24
Start Ex	0	0.1	0	0.1	0	0.15	0	0.15	0	0.18	0	0.18	0	0.03	0.03	0	0.03	0.01	0	0.48
Total Ex	0	0.63	0	0.63	0	0.76	0	0.76	0	0.42	0.03	0.45	0	0.2	0.2	0.66	0.86	0.17	0.01	2.89
Carbon Dioxide Emissions 0																				
Run Exh	0	5.54	0	5.54	0	5.16	0	5.16	0	1.71	0.02	1.72	0	0.78	0.78	0.69	1.47	0.15	0	14.05
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Ex	0	0.23	0	0.23	0	0.21	0	0.21	0	0.07	0	0.07	0	0	0	0	0	0	0	0.51
Total Ex	0	5.77	0	5.77	0	5.37	0	5.37	0	1.78	0.02	1.79	0	0.79	0.79	0.7	1.49	0.15	0	14.58
PM10 Emissions																				
Run Exh	0	0.15	0	0.15	0	0.2	0	0.2	0	0.07	0	0.07	0	0	0	0.03	0.03	0	0	0.46
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.17	0	0.17	0	0.22	0	0.22	0	0.08	0	0.08	0	0	0	0.03	0.04	0	0	0.51
TireWear	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.27
BrakeWr	0	0.2	0	0.2	0	0.15	0	0.15	0	0.03	0	0.04	0	0.01	0.01	0	0.02	0	0	0.4
Total	0	0.5	0	0.5	0	0.46	0	0.46	0	0.13	0	0.14	0	0.03	0.03	0.05	0.08	0.01	0	1.19
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.06	0	0.06	0	0.05	0	0.05	0	0.02	0	0.02	0	0.01	0.01	0.01	0.01	0	0	0.14
Fuel Consumpt (000 gallons)																				
Gasoline	0	592.59	0	592.59	0	551.8	0	551.8	0	182.72	0	182.72	0	80.58	80.58	0	80.58	4.44	0.2	1412.33
Diesel	0	0	0	0	0	0	0.05	0.05	0	0	1.48	1.48	0	0	0	63.21	63.21	9.24	0	73.98

```
Title    :       Placer     County       Subarea        2040 Annual   ALT            4 WATT     IC
Version  :       Emfac2002  V2.2         Sept             23     2002 **       WIS      Enabled  **
Run      Date    :             3/29/2007   11:40:02
Scen     Year:          2040 --           Model      Years:       1995 to           2040
Season   :       Annual
Area     :       Placer     (LT)
I/M      Stat    :          No           I          and      M        program  in       effect
Emission:Tons    Per        Day
```

	Light Duty Passenger Cars			Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	6482	0	6482	0	12010	3	12013	0	6920	31	6951	0	1353	1353	187	1539	26	29	27041
VMT/1000	0	302	0	302	0	529	0	529	0	301	2	303	0	27	27	9	36	4	0	1175
Trips	0	40467	0	40467	0	73991	11	74001	0	44690	357	45047	0	663	663	1289	1952	105	58	161631
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.04
Diurnal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.05	0	0.05	0	0.05	0	0.05	0	0	0	0	0	0	0	0.11
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.02	0	0.02	0	0.08	0	0.08	0	0.08	0	0.08	0	0	0	0	0	0	0	0.18
Carbon Monoxide Emissions																				
Run Exh	0	0.21	0	0.21	0	0.52	0	0.52	0	0.5	0	0.5	0	0.01	0.01	0.01	0.02	0	0.01	1.26
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.05	0	0.05	0	0.15	0	0.15	0	0.18	0	0.18	0	0.01	0.01	0	0.01	0	0	0.39
Total Ex	0	0.26	0	0.26	0	0.66	0	0.66	0	0.68	0	0.68	0	0.02	0.02	0.01	0.03	0.01	0.01	1.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.05	0	0.05	0	0.04	0	0.04	0	0.01	0.01	0.01	0.02	0.01	0	0.13
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.02	0	0.02	0	0.05	0	0.05	0	0.05	0	0.06	0	0.01	0.01	0.01	0.02	0.01	0	0.16
Carbon Dioxide Emissions 0																				
Run Exh	0	0.11	0	0.11	0	0.25	0	0.25	0	0.2	0	0.2	0	0.02	0.02	0.02	0.04	0.01	0	0.61
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.12	0	0.12	0	0.26	0	0.26	0	0.2	0	0.21	0	0.02	0.02	0.02	0.04	0.01	0	0.63
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.01	0	0.01	0	0.03	0	0.03	0	0.02	0	0.02	0	0	0	0	0	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt:(000 gallons)																				
Gasoline	0	11.91	0	11.91	0	26.58	0	26.58	0	21.08	0	21.08	0	2.11	2.11	0	2.11	0.2	0.01	61.88
Diesel	0	0	0	0	0	0	0	0	0	0	0.08	0.08	0	0	0	1.62	1.62	0.44	0	2.14

```
Title    :       Placer     County       Subarea        2040 Annual   ALT            4 WATT     IC
Version  :       Emfac2002  V2.2         Sept             23     2002 **       WIS      Enabled  **
Run      Date    :             3/29/2007   11:40:02
Scen     Year:          2040 --           Model      Years:       1995 to           2040
Season   :       Annual
Area     :       Placer     (MC)
I/M      Stat    :          I            and        M        program  in       effect
Emission Tons    Per        Day
```

	Light Duty Passenger Cars			Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	0	20118	0	20119	0	23170	10	23180	0	6639	69	6708	0	5973	5973	900	6873	25	103	57008
VMT/1000	0	586	0	586	0	645	0	645	0	183	2	185	0	79	79	32	110	3	1	1530
Trips	0	124634	0	124634	0	141358	40	141398	0	45981	817	46798	0	2052	2052	4142	6194	101	205	319330
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.03	0	0.03	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.13
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.04	0	0.04	0	0.09	0	0.09	0	0.05	0	0.05	0	0.01	0.01	0.01	0.01	0	0	0.2
Carbon Monoxide Emissions																				
Run Exh	0	0.27	0	0.27	0	0.41	0	0.41	0	0.21	0	0.21	0	0.02	0.02	0.04	0.06	0	0.01	0.97
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.1	0	0.1	0	0.17	0	0.17	0	0.12	0	0.12	0	0.02	0.02	0	0.02	0	0	0.41
Total Ex	0	0.37	0	0.37	0	0.58	0	0.58	0	0.33	0	0.33	0	0.04	0.04	0.04	0.09	0	0.02	1.39
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0.04	0.05	0.01	0	0.14
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0.03
Total Ex	0	0.03	0	0.03	0	0.05	0	0.05	0	0.03	0	0.04	0	0.02	0.02	0.07	0.08	0.01	0	0.2
Carbon Dioxide Emissions 0																				
Run Exh	0	0.22	0	0.22	0	0.31	0	0.31	0	0.13	0	0.13	0	0.06	0.06	0.06	0.12	0	0	0.79
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.23	0	0.23	0	0.33	0	0.33	0	0.13	0	0.13	0	0.06	0.06	0.07	0.13	0	0	0.82
PM10 Emissions																				
Run Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0	0.01	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumption (000 gallons)																				
Gasoline	0	24.02	0	24.02	0	33.67	0	33.67	0	13.46	0	13.46	0	6.09	6.09	0	6.09	0.12	0.02	77.38
Diesel	0	0	0	0	0	0	0	0	0	0	0.11	0.11	0	0	0	5.93	5.93	0.31	0	6.35

Title : Placer County Subarea 2040 Annual ALT 4 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 11:40:02
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars			Light Duty Trucks			Medium Duty Trucks			Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	456957	3	456960	0	322774	78	322852	0	69748	742	70490	0	67526	67526	9447	76973	756	1105	929136
VMT/1000	0	13682	0	13682	0	9473	1	9474	0	2027	25	2052	0	935	935	308	1243	87	7	26547
Trips	0	2828090	12	2828100	0	1964960	303	1965260	0	481497	8779	490276	0	22101	22101	41850	63952	3024	2210	5352830
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.1	0	0.1	0	0.04	0	0.04	0	0.01	0.01	0.05	0.06	0.01	0.02	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.11	0	0.11	0	0.14	0	0.14	0	0.07	0	0.07	0	0.01	0.01	0	0.01	0	0.01	0.34
Total Ex	0	0.19	0	0.19	0	0.24	0	0.24	0	0.11	0	0.11	0	0.03	0.03	0.06	0.09	0.02	0.02	0.67
Diurnal	0	0.06	0	0.06	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.18
Hot Soak	0	0.07	0	0.07	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.19
Running	0	0.59	0	0.59	0	0.92	0	0.92	0	0.37	0	0.37	0	0.03	0.03	0	0.03	0	0	1.91
Resting	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.03	0	0	0	0	0	0	0	0.14
Total	0	0.95	0	0.95	0	1.41	0	1.41	0	0.57	0	0.57	0	0.06	0.06	0.06	0.12	0.02	0.03	3.1
Carbon Monoxide Emissions																				
Run Exh	0	6.27	0	6.27	0	6.45	0	6.45	0	2.31	0.03	2.34	0	0.24	0.24	0.34	0.58	0.17	0.16	15.97
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.07	0.08	0	0	0.1
Start Exh	0	2.29	0	2.29	0	2.53	0	2.53	0	1.22	0	1.22	0	0.22	0.22	0	0.22	0.05	0.03	6.33
Total Ex	0	8.56	0	8.56	0	8.98	0	8.98	0	3.55	0.03	3.58	0	0.47	0.47	0.41	0.88	0.22	0.19	22.41
Oxides of Nitrogen Emissions																				
Run Exh	0	0.48	0	0.48	0	0.53	0	0.53	0	0.18	0.02	0.2	0	0.15	0.15	0.37	0.52	0.15	0.01	1.9
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.21	0.21	0	0	0.21
Start Exh	0	0.1	0	0.1	0	0.13	0	0.13	0	0.15	0	0.15	0	0.03	0.03	0	0.03	0.01	0	0.42
Total Ex	0	0.58	0	0.58	0	0.66	0	0.66	0	0.33	0.02	0.36	0	0.18	0.18	0.58	0.76	0.16	0.01	2.53
Carbon Dioxide Emissions 0																				
Run Exh	0	5.21	0	5.21	0	4.6	0	4.6	0	1.38	0.01	1.4	0	0.71	0.71	0.61	1.32	0.13	0	12.66
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.22	0	0.22	0	0.19	0	0.19	0	0.06	0	0.06	0	0	0	0	0	0	0	0.47
Total Ex	0	5.43	0	5.43	0	4.79	0	4.79	0	1.44	0.01	1.46	0	0.71	0.71	0.62	1.33	0.13	0	13.15
PM10 Emissions																				
Run Exh	0	0.14	0	0.14	0	0.18	0	0.18	0	0.05	0	0.06	0	0	0	0.03	0.03	0	0	0.41
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.16	0	0.16	0	0.2	0	0.2	0	0.06	0	0.06	0	0	0	0.03	0.03	0	0	0.46
TireWear	0	0.12	0	0.12	0	0.08	0	0.08	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.24
BrakeWr	0	0.19	0	0.19	0	0.13	0	0.13	0	0.03	0	0.03	0	0.01	0.01	0	0.02	0	0	0.37
Total	0	0.47	0	0.47	0	0.41	0	0.41	0	0.11	0	0.11	0	0.03	0.03	0.04	0.07	0.01	0	1.07
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.05	0	0.05	0	0.05	0	0.05	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0	0.13
Fuel Consumpt: (000 gallons)																				
Gasoline	0	557.41	0	557.41	0	492.22	0	492.22	0	148.39	0	148.39	0	72.56	72.56	0	72.56	4.12	0.18	1274.88
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	1.29	1.29	0	0	0	55.79	55.79	8.51	0	65.63

Title : Placer County Subarea 2040 Annual ALT 4 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 11:40:02
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars			Light Duty Trucks			Medium Duty Trucks			Heavy Duty Trucks							
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Gasoline Trucks Cat	Total	Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
Vehicles	0	483558	3	483561	0	357954	91	358045	0	83307	843	84149	0	74852	74852	10534	85385	807	1237	1013180
VMT/1000	0	14571	0	14571	0	10647	1	10649	0	2511	29	2540	0	1041	1041	349	1389	95	8	29252
Trips	0	2993190	12	2993210	0	2180310	353	2180660	0	572168	9952	582121	0	24816	24816	47282	72098	3230	2473	5833790
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.05	0	0.05	0	0.01	0.01	0.06	0.07	0.01	0.02	0.36
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Ex	0	0.11	0	0.11	0	0.15	0	0.15	0	0.09	0	0.09	0	0.01	0.01	0	0.01	0.01	0.01	0.38
Total Ex	0	0.21	0	0.21	0	0.27	0	0.27	0	0.14	0	0.14	0	0.03	0.03	0.07	0.1	0.02	0.03	0.76
Diurnal	0	0.06	0	0.06	0	0.1	0	0.1	0	0.04	0	0.04	0	0	0	0	0	0	0	0.2
Hot Soak	0	0.08	0	0.08	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.2
Running	0	0.63	0	0.63	0	1.03	0	1.03	0	0.46	0	0.46	0	0.03	0.03	0	0.03	0	0	2.15
Resting	0	0.04	0	0.04	0	0.08	0	0.08	0	0.03	0	0.03	0	0	0	0	0	0	0	0.16
Total	0	1.01	0	1.01	0	1.58	0	1.58	0	0.7	0	0.7	0	0.06	0.06	0.07	0.13	0.02	0.04	3.48
Carbon Monoxide Emissions																				
Run Exh	0	6.75	0	6.75	0	7.38	0	7.38	0	3.02	0.03	3.05	0	0.27	0.27	0.39	0.66	0.18	0.18	18.21
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.08	0.09	0	0	0.11
Start Ex	0	2.45	0	2.45	0	2.84	0	2.84	0	1.51	0	1.51	0	0.25	0.25	0	0.25	0.05	0.03	7.13
Total Ex	0	9.2	0	9.2	0	10.22	0	10.22	0	4.55	0.03	4.59	0	0.53	0.53	0.47	1	0.23	0.21	25.45
Oxides of Nitrogen Emissions																				
Run Exh	0	0.52	0	0.52	0	0.61	0	0.62	0	0.24	0.03	0.26	0	0.17	0.17	0.42	0.59	0.16	0.01	2.17
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.24	0.24	0	0	0.24
Start Ex	0	0.1	0	0.1	0	0.15	0	0.15	0	0.18	0	0.18	0	0.03	0.03	0	0.03	0.01	0	0.48
Total Ex	0	0.63	0	0.63	0	0.76	0	0.76	0	0.42	0.03	0.45	0	0.2	0.2	0.66	0.86	0.17	0.01	2.89
Carbon Dioxide Emissions 0																				
Run Exh	0	5.55	0	5.55	0	5.17	0	5.17	0	1.71	0.02	1.72	0	0.79	0.79	0.69	1.48	0.15	0	14.07
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Ex	0	0.23	0	0.23	0	0.21	0	0.21	0	0.07	0	0.07	0	0	0	0	0	0	0	0.51
Total Ex	0	5.78	0	5.78	0	5.38	0	5.38	0	1.78	0.02	1.8	0	0.79	0.79	0.7	1.49	0.15	0	14.6
PM10																				
Run Exh	0	0.15	0	0.15	0	0.2	0	0.2	0	0.07	0	0.07	0	0	0	0.03	0.03	0	0	0.46
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.17	0	0.17	0	0.22	0	0.22	0	0.08	0	0.08	0	0	0	0.03	0.04	0	0	0.51
TireWear	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.27
BrakeWr	0	0.2	0	0.2	0	0.15	0	0.15	0	0.03	0	0.04	0	0.01	0.01	0	0.02	0	0	0.4
Total	0	0.5	0	0.5	0	0.46	0	0.46	0	0.13	0	0.14	0	0.03	0.03	0.05	0.08	0.01	0	1.19
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.06	0	0.06	0	0.05	0	0.05	0	0.02	0	0.02	0	0.01	0.01	0.01	0.01	0	0	0.14
Fuel Consumpt: (000 gallons)																				
Gasoline	0	593.35	0	593.35	0	552.47	0	552.47	0	182.93	0	182.93	0	80.76	80.76	0	80.76	4.44	0.2	1414.14
Diesel	0	0	0	0	0	0	0.05	0.05	0	0	1.48	1.48	0	0	0	63.34	63.34	9.26	0	74.12

Title : Placer County Subarea 2040 Annual ALT 5 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 13:11:12
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (LT)
I/M Stat : No I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	0	6482	0	6482	0	12010	3	12013	0	6920	31	6951	0	1353	1353	187	1539	26	29	27041
VMT/1000	0	302	0	302	0	529	0	529	0	301	2	303	0	27	27	9	36	4	0	1175
Trips	0	40467	0	40467	0	73991	11	74001	0	44690	357	45047	0	663	663	1289	1952	105	58	161631
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.04
Diurnal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.05	0	0.05	0	0.05	0	0.05	0	0	0	0	0	0	0	0.11
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.02	0	0.02	0	0.08	0	0.08	0	0.08	0	0.08	0	0	0	0	0	0	0	0.18
Carbon Monoxide Emissions																				
Run Exh	0	0.21	0	0.21	0	0.52	0	0.52	0	0.5	0	0.5	0	0.01	0.01	0.01	0.02	0	0.01	1.26
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.05	0	0.05	0	0.15	0	0.15	0	0.18	0	0.18	0	0.01	0.01	0	0.01	0	0	0.39
Total Ex	0	0.26	0	0.26	0	0.66	0	0.66	0	0.68	0	0.68	0	0.02	0.02	0.01	0.03	0.01	0.01	1.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.05	0	0.05	0	0.04	0	0.04	0	0.01	0.01	0.01	0.02	0.01	0	0.13
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.02	0	0.02	0	0.05	0	0.05	0	0.05	0	0.06	0	0.01	0.01	0.01	0.02	0.01	0	0.16
Carbon Dioxide Emissions 0																				
Run Exh	0	0.11	0	0.11	0	0.25	0	0.25	0	0.2	0	0.2	0	0.02	0.02	0.02	0.04	0.01	0	0.61
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.12	0	0.12	0	0.26	0	0.26	0	0.2	0	0.21	0	0.02	0.02	0.02	0.04	0.01	0	0.63
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.01	0	0.01	0	0.03	0	0.03	0	0.02	0	0.02	0	0	0	0	0	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumption (000 gallons)																				
Gasoline	0	11.91	0	11.91	0	26.58	0	26.58	0	21.08	0	21.08	0	2.11	2.11	0	2.11	0.2	0.01	61.88
Diesel	0	0	0	0	0	0	0	0	0	0	0.08	0.08	0	0	0	1.62	1.62	0.44	0	2.14

Title : Placer County Subarea 2040 Annual ALT 5 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 13:11:12
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars			Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	20118	0	20119	0	23170	10	23180	0	6639	69	6708	0	5973	5973	900	6873	25	103	57008
VMT/1000	0	586	0	586	0	645	0	645	0	183	2	185	0	79	79	32	110	3	1	1530
Trips	0	124634	0	124634	0	141358	40	141398	0	45981	817	46798	0	2052	2052	4142	6194	101	205	319330
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.03	0	0.03	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.13
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.04	0	0.04	0	0.09	0	0.09	0	0.05	0	0.05	0	0.01	0.01	0.01	0.01	0	0	0.2
Carbon Monoxide Emissions																				
Run Exh	0	0.27	0	0.27	0	0.41	0	0.41	0	0.21	0	0.21	0	0.02	0.02	0.04	0.06	0	0.01	0.97
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.1	0	0.1	0	0.17	0	0.17	0	0.12	0	0.12	0	0.02	0.02	0	0.02	0	0	0.41
Total Ex	0	0.37	0	0.37	0	0.58	0	0.58	0	0.33	0	0.33	0	0.04	0.04	0.04	0.09	0	0.02	1.39
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0.04	0.05	0.01	0	0.14
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0.03
Total Ex	0	0.03	0	0.03	0	0.05	0	0.05	0	0.03	0	0.04	0	0.02	0.02	0.07	0.08	0.01	0	0.2
Carbon Dioxide Emissions 0																				
Run Exh	0	0.22	0	0.22	0	0.31	0	0.31	0	0.13	0	0.13	0	0.06	0.06	0.06	0.12	0	0	0.79
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.23	0	0.23	0	0.33	0	0.33	0	0.13	0	0.13	0	0.06	0.06	0.07	0.13	0	0	0.82
PM10 Emissions																				
Run Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0	0.01	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumption (000 gallons)																				
Gasoline	0	24.02	0	24.02	0	33.67	0	33.67	0	13.46	0	13.46	0	6.09	6.09	0	6.09	0.12	0.02	77.38
Diesel	0	0	0	0	0	0	0	0	0	0	0.11	0.11	0	0	0	5.93	5.93	0.31	0	6.35

Title : Placer County Subarea 2040 Annual ALT 5 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 13:11:12
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (SV)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars			Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	0	455483	3	455486	0	321734	78	321812	0	69522	740	70262	0	67309	67309	9416	76725	754	1102	926141
VMT/1000	0	13638	0	13638	0	9443	1	9444	0	2021	25	2046	0	932	932	307	1239	87	7	26461
Trips	0	2818970	12	2818980	0	1958630	302	1958930	0	479945	8751	488696	0	22027	22027	41709	63736	3016	2204	5335570
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.1	0	0.1	0	0.04	0	0.04	0	0.01	0.01	0.05	0.06	0.01	0.02	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Exh	0	0.11	0	0.11	0	0.14	0	0.14	0	0.07	0	0.07	0	0.01	0.01	0	0.01	0	0.01	0.34
Total Ex	0	0.19	0	0.19	0	0.24	0	0.24	0	0.11	0	0.11	0	0.03	0.03	0.06	0.09	0.02	0.02	0.67
Diurnal	0	0.06	0	0.06	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.18
Hot Soak	0	0.07	0	0.07	0	0.08	0	0.08	0	0.03	0	0.03	0	0	0	0	0	0	0	0.18
Running	0	0.59	0	0.59	0	0.91	0	0.91	0	0.37	0	0.37	0	0.03	0.03	0	0.03	0	0	1.91
Resting	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.03	0	0	0	0	0	0	0	0.14
Total	0	0.95	0	0.95	0	1.4	0	1.4	0	0.56	0	0.57	0	0.06	0.06	0.06	0.12	0.02	0.03	3.09
Carbon Monoxide Emissions																				
Run Exh	0	6.26	0	6.26	0	6.44	0	6.44	0	2.31	0.03	2.34	0	0.24	0.24	0.34	0.58	0.17	0.16	15.95
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.07	0.08	0	0	0.1
Start Exh	0	2.29	0	2.29	0	2.52	0	2.52	0	1.22	0	1.22	0	0.22	0.22	0	0.22	0.05	0.03	6.31
Total Ex	0	8.54	0	8.54	0	8.96	0	8.96	0	3.54	0.03	3.57	0	0.47	0.47	0.41	0.88	0.22	0.19	22.36
Oxides of Nitrogen Emissions																				
Run Exh	0	0.48	0	0.48	0	0.53	0	0.53	0	0.18	0.02	0.2	0	0.15	0.15	0.37	0.52	0.15	0.01	1.9
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.21	0.21	0	0	0.21
Start Exh	0	0.1	0	0.1	0	0.13	0	0.13	0	0.15	0	0.15	0	0.03	0.03	0	0.03	0.01	0	0.42
Total Ex	0	0.58	0	0.58	0	0.66	0	0.66	0	0.33	0.02	0.36	0	0.18	0.18	0.58	0.76	0.16	0.01	2.53
Carbon Dioxide Emissions 0																				
Run Exh	0	5.2	0	5.2	0	4.59	0	4.59	0	1.38	0.01	1.4	0	0.7	0.7	0.61	1.31	0.13	0	12.64
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.22	0	0.22	0	0.19	0	0.19	0	0.06	0	0.06	0	0	0	0	0	0	0	0.47
Total Ex	0	5.42	0	5.42	0	4.78	0	4.78	0	1.44	0.01	1.45	0	0.71	0.71	0.62	1.32	0.13	0	13.12
PM10 Emissions																				
Run Exh	0	0.14	0	0.14	0	0.18	0	0.18	0	0.05	0	0.06	0	0	0	0.03	0.03	0	0	0.41
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.16	0	0.16	0	0.2	0	0.2	0	0.06	0	0.06	0	0	0	0.03	0.03	0	0	0.46
TireWear	0	0.12	0	0.12	0	0.08	0	0.08	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.24
BrakeWr	0	0.19	0	0.19	0	0.13	0	0.13	0	0.03	0	0.03	0	0.01	0.01	0	0.02	0	0	0.37
Total	0	0.47	0	0.47	0	0.41	0	0.41	0	0.11	0	0.11	0	0.03	0.03	0.04	0.07	0.01	0	1.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.05	0	0.05	0	0.05	0	0.05	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0	0.13
Fuel Consumption (000 gallons)																				
Gasoline	0	556.19	0	556.19	0	491.14	0	491.14	0	148.05	0	148.05	0	72.32	72.32	0	72.32	4.11	0.18	1271.99
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	1.29	1.29	0	0	0	55.61	55.61	8.49	0	65.43

Title : Placer County Subarea 2040 Annual ALT 5 NO WATT
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 13:11:12
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars			Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	482084	3	482087	0	356914	91	357005	0	83081	841	83922	0	74634	74634	10503	85137	805	1234	1010190
VMT/1000	0	14527	0	14527	0	10617	1	10618	0	2505	29	2534	0	1038	1038	348	1385	94	8	29166
Trips	0	2984070	12	2984080	0	2173980	352	2174330	0	570616	9925	580541	0	24741	24741	47140	71881	3222	2467	5816530
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.05	0	0.05	0	0.01	0.01	0.06	0.07	0.01	0.02	0.36
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Ex	0	0.11	0	0.11	0	0.15	0	0.15	0	0.09	0	0.09	0	0.01	0.01	0	0.01	0.01	0.01	0.38
Total Ex	0	0.21	0	0.21	0	0.27	0	0.27	0	0.14	0	0.14	0	0.03	0.03	0.07	0.1	0.02	0.03	0.76
Diurnal	0	0.06	0	0.06	0	0.1	0	0.1	0	0.04	0	0.04	0	0	0	0	0	0	0	0.2
Hot Soak	0	0.08	0	0.08	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.2
Running	0	0.62	0	0.62	0	1.03	0	1.03	0	0.45	0	0.45	0	0.03	0.03	0	0.03	0	0	2.15
Resting	0	0.04	0	0.04	0	0.08	0	0.08	0	0.03	0	0.03	0	0	0	0	0	0	0	0.15
Total	0	1.01	0	1.01	0	1.57	0	1.57	0	0.69	0	0.7	0	0.06	0.06	0.07	0.13	0.02	0.04	3.47
Carbon Monoxide Emissions																				
Run Exh	0	6.74	0	6.74	0	7.37	0	7.37	0	3.02	0.03	3.05	0	0.27	0.27	0.39	0.66	0.18	0.18	18.18
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.08	0.09	0	0	0.11
Start Ex	0	2.44	0	2.44	0	2.83	0	2.83	0	1.51	0	1.51	0	0.25	0.25	0	0.25	0.05	0.03	7.11
Total Ex	0	9.18	0	9.18	0	10.21	0	10.21	0	4.55	0.03	4.58	0	0.53	0.53	0.47	1	0.23	0.21	25.41
Oxides of Nitrogen Emissions																				
Run Exh	0	0.52	0	0.52	0	0.61	0	0.61	0	0.24	0.03	0.26	0	0.17	0.17	0.42	0.59	0.16	0.01	2.17
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.24	0.24	0	0	0.24
Start Ex	0	0.1	0	0.1	0	0.15	0	0.15	0	0.18	0	0.18	0	0.03	0.03	0	0.03	0.01	0	0.48
Total Ex	0	0.63	0	0.63	0	0.76	0	0.76	0	0.42	0.03	0.45	0	0.2	0.2	0.66	0.86	0.17	0.01	2.88
Carbon Dioxide Emissions 0																				
Run Exh	0	5.54	0	5.54	0	5.16	0	5.16	0	1.71	0.02	1.72	0	0.78	0.78	0.69	1.47	0.15	0	14.04
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Ex	0	0.23	0	0.23	0	0.21	0	0.21	0	0.07	0	0.07	0	0	0	0	0	0	0	0.51
Total Ex	0	5.77	0	5.77	0	5.37	0	5.37	0	1.78	0.02	1.79	0	0.79	0.79	0.7	1.49	0.15	0	14.56
PM10 Emissions																				
Run Exh	0	0.15	0	0.15	0	0.2	0	0.2	0	0.07	0	0.07	0	0	0	0.03	0.03	0	0	0.46
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.17	0	0.17	0	0.22	0	0.22	0	0.08	0	0.08	0	0	0	0.03	0.04	0	0	0.51
TireWear	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.27
BrakeWr	0	0.2	0	0.2	0	0.15	0	0.15	0	0.03	0	0.04	0	0.01	0.01	0	0.02	0	0	0.4
Total	0	0.5	0	0.5	0	0.46	0	0.46	0	0.13	0	0.14	0	0.03	0.03	0.05	0.08	0.01	0	1.18
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.06	0	0.06	0	0.05	0	0.05	0	0.02	0	0.02	0	0.01	0.01	0.01	0.01	0	0	0.14
Fuel Consumpti(000 gallons)																				
Gasoline	0	592.12	0	592.12	0	551.38	0	551.38	0	182.6	0	182.6	0	80.52	80.52	0	80.52	4.43	0.2	1411.25
Diesel	0	0	0	0	0	0	0.05	0.05	0	0	1.48	1.48	0	0	0	63.16	63.16	9.23	0	73.92

```
Title    :       Placer     County     Subarea      2040 Annual   ALT            5 WATT     IC
Version  :       Emfac2002  V2.2       Sept           23     2002 **       WIS      Enabled  **
Run      Date    :          3/29/2007  13:27:17
Scen     Year:          2040 --         Model     Years:       1995 to           2040
Season   :       Annual
Area     :       Placer     (LT)
I/M      Stat    :          No         I         and      M        program  in       effect
Emission:Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	0	6482	0	6482	0	12010	3	12013	0	6920	31	6951	0	1353	1353	187	1539	26	29	27041
VMT/1000	0	302	0	302	0	529	0	529	0	301	2	303	0	27	27	9	36	4	0	1175
Trips	0	40467	0	40467	0	73991	11	74001	0	44690	357	45047	0	663	663	1289	1952	105	58	161631
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0.04
Diurnal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.01	0	0.01	0	0.05	0	0.05	0	0.05	0	0.05	0	0	0	0	0	0	0	0.11
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.02	0	0.02	0	0.08	0	0.08	0	0.08	0	0.08	0	0	0	0	0	0	0	0.18
Carbon Monoxide Emissions																				
Run Exh	0	0.21	0	0.21	0	0.52	0	0.52	0	0.5	0	0.5	0	0.01	0.01	0.01	0.02	0	0.01	1.26
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.05	0	0.05	0	0.15	0	0.15	0	0.18	0	0.18	0	0.01	0.01	0	0.01	0	0	0.39
Total Ex	0	0.26	0	0.26	0	0.66	0	0.66	0	0.68	0	0.68	0	0.02	0.02	0.01	0.03	0.01	0.01	1.65
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.05	0	0.05	0	0.04	0	0.04	0	0.01	0.01	0.01	0.02	0.01	0	0.13
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.02	0	0.02	0	0.05	0	0.05	0	0.05	0	0.06	0	0.01	0.01	0.01	0.02	0.01	0	0.16
Carbon Dioxide Emissions 0																				
Run Exh	0	0.11	0	0.11	0	0.25	0	0.25	0	0.2	0	0.2	0	0.02	0.02	0.02	0.04	0.01	0	0.61
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.12	0	0.12	0	0.26	0	0.26	0	0.2	0	0.21	0	0.02	0.02	0.02	0.04	0.01	0	0.63
PM10 Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.01	0	0.01	0	0.03	0	0.03	0	0.02	0	0.02	0	0	0	0	0	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt:(000 gallons)																				
Gasoline	0	11.91	0	11.91	0	26.58	0	26.58	0	21.08	0	21.08	0	2.11	2.11	0	2.11	0.2	0.01	61.88
Diesel	0	0	0	0	0	0	0	0	0	0	0.08	0.08	0	0	0	1.62	1.62	0.44	0	2.14

Title : Placer County Subarea 2040 Annual ALT 5 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 13:27:17
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer (MC)
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	20118	0	20119	0	23170	10	23180	0	6639	69	6708	0	5973	5973	900	6873	25	103	57008
VMT/1000	0	586	0	586	0	645	0	645	0	183	2	185	0	79	79	32	110	3	1	1530
Trips	0	124634	0	124634	0	141358	40	141398	0	45981	817	46798	0	2052	2052	4142	6194	101	205	319330
Reactive Organic Gas Emissions																				
Run Exh	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.02
Total Ex	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0.01	0.01	0	0	0.05
Diurnal	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Hot Soak	0	0	0	0	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
Running	0	0.03	0	0.03	0	0.06	0	0.06	0	0.04	0	0.04	0	0	0	0	0	0	0	0.13
Resting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Total	0	0.04	0	0.04	0	0.09	0	0.09	0	0.05	0	0.05	0	0.01	0.01	0.01	0.01	0	0	0.2
Carbon Monoxide Emissions																				
Run Exh	0	0.27	0	0.27	0	0.41	0	0.41	0	0.21	0	0.21	0	0.02	0.02	0.04	0.06	0	0.01	0.97
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.1	0	0.1	0	0.17	0	0.17	0	0.12	0	0.12	0	0.02	0.02	0	0.02	0	0	0.41
Total Ex	0	0.37	0	0.37	0	0.58	0	0.58	0	0.33	0	0.33	0	0.04	0.04	0.04	0.09	0	0.02	1.39
Oxides of Nitrogen Emissions																				
Run Exh	0	0.02	0	0.02	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0.01	0.04	0.05	0.01	0	0.14
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0.03	0	0	0.03
Start Exh	0	0	0	0	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0.03
Total Ex	0	0.03	0	0.03	0	0.05	0	0.05	0	0.03	0	0.04	0	0.02	0.02	0.07	0.08	0.01	0	0.2
Carbon Dioxide Emissions 0																				
Run Exh	0	0.22	0	0.22	0	0.31	0	0.31	0	0.13	0	0.13	0	0.06	0.06	0.06	0.12	0	0	0.79
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
Total Ex	0	0.23	0	0.23	0	0.33	0	0.33	0	0.13	0	0.13	0	0.06	0.06	0.07	0.13	0	0	0.82
PM10 Emissions																				
Run Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0.03
TireWear	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.01
BrakeWr	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0.02
Total	0	0.02	0	0.02	0	0.03	0	0.03	0	0.01	0	0.01	0	0	0	0	0.01	0	0	0.06
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
Fuel Consumpt:(000 gallons)																				
Gasoline	0	24.02	0	24.02	0	33.67	0	33.67	0	13.46	0	13.46	0	6.09	6.09	0	6.09	0.12	0.02	77.38
Diesel	0	0	0	0	0	0	0	0	0	0	0.11	0.11	0	0	0	5.93	5.93	0.31	0	6.35

```
Title    :       Placer     County     Subarea      2040 Annual   ALT            5 WATT     IC
Version  :       Emfac2002  V2.2       Sept           23     2002 **       WIS      Enabled  **
Run      Date    :          3/29/2007  13:27:17
Scen     Year:          2040 --         Model     Years:       1995 to           2040
Season   :       Annual
Area     :       Placer     (SV)
I/M      Stat    :          I          and       M        program  in       effect
Emission Tons    Per        Day
```

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Total HD Trucks	Urban Buses	Motor cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	0	456729	3	456732	0	322614	78	322692	0	69713	742	70455	0	67493	67493	9443	76936	756	1105	928676
VMT/1000	0	13675	0	13675	0	9469	1	9470	0	2026	25	2051	0	935	935	308	1243	87	7	26533
Trips	0	2826680	12	2826690	0	1963990	303	1964290	0	481264	8777	490041	0	22088	22088	41828	63916	3024	2210	5350170
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.1	0	0.1	0	0.04	0	0.04	0	0.01	0.01	0.05	0.06	0.01	0.02	0.32
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.02
Start Ex	0	0.11	0	0.11	0	0.14	0	0.14	0	0.07	0	0.07	0	0.01	0.01	0	0.01	0	0.01	0.34
Total Ex	0	0.19	0	0.19	0	0.24	0	0.24	0	0.11	0	0.11	0	0.03	0.03	0.06	0.09	0.02	0.02	0.67
Diurnal	0	0.06	0	0.06	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.18
Hot Soak	0	0.07	0	0.07	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.19
Running	0	0.59	0	0.59	0	0.92	0	0.92	0	0.37	0	0.37	0	0.03	0.03	0	0.03	0	0	1.91
Resting	0	0.04	0	0.04	0	0.07	0	0.07	0	0.03	0	0.03	0	0	0	0	0	0	0	0.14
Total	0	0.95	0	0.95	0	1.41	0	1.41	0	0.57	0	0.57	0	0.06	0.06	0.06	0.12	0.02	0.03	3.09
Carbon Monoxide Emissions																				
Run Exh	0	6.27	0	6.27	0	6.45	0	6.45	0	2.31	0.03	2.34	0	0.24	0.24	0.34	0.58	0.17	0.16	15.97
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.07	0.08	0	0	0.1
Start Ex	0	2.29	0	2.29	0	2.53	0	2.53	0	1.22	0	1.22	0	0.22	0.22	0	0.22	0.05	0.03	6.33
Total Ex	0	8.56	0	8.56	0	8.98	0	8.98	0	3.55	0.03	3.58	0	0.47	0.47	0.41	0.88	0.22	0.19	22.4
Oxides of Nitrogen Emissions																				
Run Exh	0	0.48	0	0.48	0	0.53	0	0.53	0	0.18	0.02	0.2	0	0.15	0.15	0.37	0.52	0.15	0.01	1.9
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.21	0.21	0	0	0.21
Start Ex	0	0.1	0	0.1	0	0.13	0	0.13	0	0.15	0	0.15	0	0.03	0.03	0	0.03	0.01	0	0.42
Total Ex	0	0.58	0	0.58	0	0.66	0	0.66	0	0.33	0.02	0.36	0	0.18	0.18	0.58	0.76	0.16	0.01	2.53
Carbon Dioxide Emissions 0																				
Run Exh	0	5.21	0	5.21	0	4.6	0	4.6	0	1.38	0.01	1.4	0	0.71	0.71	0.61	1.32	0.13	0	12.66
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Ex	0	0.22	0	0.22	0	0.19	0	0.19	0	0.06	0	0.06	0	0	0	0	0	0	0	0.47
Total Ex	0	5.43	0	5.43	0	4.79	0	4.79	0	1.44	0.01	1.46	0	0.71	0.71	0.62	1.33	0.13	0	13.14
PM10 Emissions																				
Run Exh	0	0.14	0	0.14	0	0.18	0	0.18	0	0.05	0	0.06	0	0	0	0.03	0.03	0	0	0.41
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.16	0	0.16	0	0.2	0	0.2	0	0.06	0	0.06	0	0	0	0.03	0.03	0	0	0.46
TireWear	0	0.12	0	0.12	0	0.08	0	0.08	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.24
BrakeWr	0	0.19	0	0.19	0	0.13	0	0.13	0	0.03	0	0.03	0	0.01	0.01	0	0.02	0	0	0.37
Total	0	0.47	0	0.47	0	0.41	0	0.41	0	0.11	0	0.11	0	0.03	0.03	0.04	0.07	0.01	0	1.07
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.05	0	0.05	0	0.05	0	0.05	0	0.01	0	0.01	0	0.01	0.01	0.01	0.01	0	0	0.13
Fuel Consumpt: (000 gallons)																				
Gasoline	0	557.16	0	557.16	0	492	0	492	0	148.32	0	148.32	0	72.52	72.52	0	72.52	4.12	0.18	1274.3
Diesel	0	0	0	0	0	0	0.04	0.04	0	0	1.29	1.29	0	0	0	55.78	55.78	8.51	0	65.62

Title : Placer County Subarea 2040 Annual ALT 5 WATT IC
Version : Emfac2002 V2.2 Sept 23 2002 ** WIS Enabled **
Run Date : 3/29/2007 13:27:17
Scen Year: 2040 -- Model Years: 1995 to 2040
Season : Annual
Area : Placer County Grand Total
I/M Stat : I and M program in effect
Emission Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks Gasoline Trucks			Diesel	Total HD	Urban	Motor	All
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total	Trucks	Trucks	Buses	cycles	Vehicles
Vehicles	0	483330	3	483333	0	357794	91	357885	0	83272	843	84114	0	74818	74818	10530	85348	807	1237	1012720
VMT/1000	0	14564	0	14564	0	10642	1	10644	0	2510	29	2539	0	1040	1040	349	1389	95	8	29238
Trips	0	2991780	12	2991800	0	2179340	353	2179690	0	571936	9950	581886	0	24803	24803	47259	72062	3230	2473	5831130
Reactive Organic Gas Emissions																				
Run Exh	0	0.09	0	0.09	0	0.11	0	0.11	0	0.05	0	0.05	0	0.01	0.01	0.06	0.07	0.01	0.02	0.36
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0	0	0.02
Start Exh	0	0.11	0	0.11	0	0.15	0	0.15	0	0.09	0	0.09	0	0.01	0.01	0	0.01	0.01	0.01	0.38
Total Ex	0	0.21	0	0.21	0	0.27	0	0.27	0	0.14	0	0.14	0	0.03	0.03	0.07	0.1	0.02	0.03	0.76
Diurnal	0	0.06	0	0.06	0	0.1	0	0.1	0	0.04	0	0.04	0	0	0	0	0	0	0	0.2
Hot Soak	0	0.08	0	0.08	0	0.09	0	0.09	0	0.03	0	0.03	0	0	0	0	0	0	0	0.2
Running	0	0.63	0	0.63	0	1.03	0	1.03	0	0.46	0	0.46	0	0.03	0.03	0	0.03	0	0	2.15
Resting	0	0.04	0	0.04	0	0.08	0	0.08	0	0.03	0	0.03	0	0	0	0	0	0	0	0.16
Total	0	1.01	0	1.01	0	1.58	0	1.58	0	0.7	0	0.7	0	0.06	0.06	0.07	0.13	0.02	0.04	3.48
Carbon Monoxide Emissions																				
Run Exh	0	6.75	0	6.75	0	7.38	0	7.38	0	3.02	0.03	3.05	0	0.27	0.27	0.39	0.66	0.18	0.18	18.21
Idle Exh	0	0	0	0	0	0	0	0	0	0.02	0	0.02	0	0.02	0.02	0.08	0.09	0	0	0.11
Start Exh	0	2.45	0	2.45	0	2.84	0	2.84	0	1.51	0	1.51	0	0.25	0.25	0	0.25	0.05	0.03	7.13
Total Ex	0	9.2	0	9.2	0	10.22	0	10.22	0	4.55	0.03	4.59	0	0.53	0.53	0.47	1	0.23	0.21	25.45
Oxides of Nitrogen Emissions																				
Run Exh	0	0.52	0	0.52	0	0.61	0	0.62	0	0.24	0.03	0.26	0	0.17	0.17	0.42	0.59	0.16	0.01	2.17
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.24	0.24	0	0	0.24
Start Exh	0	0.1	0	0.1	0	0.15	0	0.15	0	0.18	0	0.18	0	0.03	0.03	0	0.03	0.01	0	0.48
Total Ex	0	0.63	0	0.63	0	0.76	0	0.76	0	0.42	0.03	0.45	0	0.2	0.2	0.66	0.86	0.17	0.01	2.89
Carbon Dioxide Emissions 0																				
Run Exh	0	5.55	0	5.55	0	5.16	0	5.16	0	1.71	0.02	1.72	0	0.79	0.79	0.69	1.48	0.15	0	14.06
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0.01
Start Exh	0	0.23	0	0.23	0	0.21	0	0.21	0	0.07	0	0.07	0	0	0	0	0	0	0	0.51
Total Ex	0	5.78	0	5.78	0	5.38	0	5.38	0	1.78	0.02	1.8	0	0.79	0.79	0.7	1.49	0.15	0	14.59
PM10 Emissions																				
Run Exh	0	0.15	0	0.15	0	0.2	0	0.2	0	0.07	0	0.07	0	0	0	0.03	0.03	0	0	0.46
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Exh	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	0	0	0	0	0.05
Total Ex	0	0.17	0	0.17	0	0.22	0	0.22	0	0.08	0	0.08	0	0	0	0.03	0.04	0	0	0.51
TireWear	0	0.13	0	0.13	0	0.09	0	0.09	0	0.02	0	0.02	0	0.01	0.01	0.01	0.02	0	0	0.27
BrakeWr	0	0.2	0	0.2	0	0.15	0	0.15	0	0.03	0	0.04	0	0.01	0.01	0	0.02	0	0	0.4
Total	0	0.5	0	0.5	0	0.46	0	0.46	0	0.13	0	0.14	0	0.03	0.03	0.05	0.08	0.01	0	1.19
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.06	0	0.06	0	0.05	0	0.05	0	0.02	0	0.02	0	0.01	0.01	0.01	0.01	0	0	0.14
Fuel Consumpt:(000 gallons)																				
Gasoline	0	593.09	0	593.09	0	552.24	0	552.24	0	182.87	0	182.87	0	80.72	80.72	0	80.72	4.44	0.2	1413.56
Diesel	0	0	0	0	0	0	0.05	0.05	0	0	1.48	1.48	0	0	0	63.32	63.32	9.26	0	74.11

PLACER PARKWAY
CORRIDOR PRESERVATION

DRAFT
ARCHAEOLOGICAL SURVEY REPORT
Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR

June 29, 2007

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

Caltrans

FHWA

Prepared by

URS Corporation

for
South Placer Regional Transportation Authority
California Department of Transportation
Federal Highway Administration

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Draft

ARCHAEOLOGICAL SURVEY REPORT

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR
Placer and Sutter Counties, California

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June 2007

SUMMARY OF FINDINGS

The Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans), in conjunction with the South Placer Regional Transportation Authority (SPRTA), propose to identify and preserve or acquire right-of-way for a future Placer Parkway, which would link State Route (SR) 65 in Placer County to SR 70/99 in Sutter County (Maps 1 and 2). The FHWA is the federal lead agency for the National Environmental Policy Act (NEPA), and SPRTA is the lead agency for the California Environmental Quality Act (CEQA). The project is using federal funding and is therefore subject to review under the January 2004 *Programmatic Agreement (PA) (Appendix A) among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 PA).

This report documents the results of an archaeological resources investigation conducted for the Parkway Corridor Preservation project (Placer Parkway), the proposed preservation of a transportation right-of-way (ROW) through Sutter and Placer Counties, California (Figure 1-1). SPRTA and FHWA propose to preserve the ROW for a new or upgraded east-west connector between SR 65 and SR 70/99 serving cities and unincorporated areas across south Sutter County and southwestern Placer County.

URS Corporation (URS) prepared this Archaeological Survey Report (ASR) to document archaeological resource identification efforts in the Area of Potential Effects (APE) in accordance with applicable sections of the National Historic Preservation Act (NHPA) and the implementing regulations of the Advisory Council on Historic Preservation (ACHP).

As outlined in the Programmatic Agreement for the Parkway project, the ASR investigation consisted of background and archival research, contact with the Native American Heritage Commission (NAHC) and members of the local Native American community as identified by the NAHC, intensive pedestrian reconnaissance of the common alignment of the Parkway corridor alternative alignments, and the development of a predictive model to assess the relative archaeological sensitivity of the project alternatives.

No archaeological resources were identified in the common alignment portion of the Parkway project's APE. The predictive model for the alignment alternatives of the APE ranked the corridors for their relative archaeological sensitivity using environmental factors known to influence past human activity in the study area. This analysis determined that Alternative 1 is the most archaeologically sensitive alignment, followed in descending order by Alternative 3, Alternative 2, Alternative 4, and Alternative 5. Based on this analysis, Alternative 5 is the least sensitive alignment in terms of potential archaeological resources.

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LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
AES	Analytical Environmental Services
APE	Area of Potential Effects
ASR	Archaeological Survey Report
Caltrans	California Department of Transportation
CCRR	California Central Railroad
CCTS	Central California Taxonomic System
CDC	California Department of Conservation
CDFG	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CHRIS	California Historical Resources information System
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GIS	Geographical Information System
NAHC	Native American Heritage Commission
NCIC	North Central information center
NEIC	Northeast Information Center
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
OHP	Office of Historic Preservation
PA	Programmatic Agreement
PCTPA	Placer County Transportation Planning Authority
RD 1000	Reclamation District No. 1000
ROW	right-of-way
SACOG	Sacramento Area Council of Governments
SJC	Sacramento Junior College
SPRTA	South Placer Regional Transportation Authority
Tier 1 EIS/EIR	Tier 1 Environmental Impact Statement/Program Environmental Impact Report
UC	University of California
URS	URS Corporation
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

ARCHAEOLOGICAL SURVEY REPORT
PLACER PARKWAY CORRIDOR PRESERVATION
TIER 1 EIS/PROGRAM EIR

1.0 INTRODUCTION

1.1 TIER 1 EIS/PROGRAM EIR

The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the South Placer Regional Transportation Authority (SPRTA) propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking State Route (SR) 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1).

The planning for Placer Parkway involves two phases: (1) the present action, selection of a corridor (titled the Placer Parkway Corridor Preservation Project), and (2) the future selection of a precise alignment within the corridor and a decision whether or not to build the Parkway. If a build alternative is selected and pursued after the second phase, the ultimate Placer Parkway project would be constructed and operated. Throughout this document the term "Proposed Action" is used to describe the selection of a corridor to preserve. The document generally uses the term "Parkway" to mean the ultimate roadway, including construction and operation, except where context indicates otherwise.

As stated, the action to be considered based on this Tier 1 analysis involves only the selection of a corridor to preserve, which has limited environmental effects by itself. However, the ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. In order to describe the effects of the ultimate Placer Parkway project to the greatest extent feasible at this early stage, the Tier 1 EIS/EIR also addresses the potential effects of construction and operation of the future roadway. This discussion of the roadway is necessarily limited, however, because only the general concepts of the roadway design and location are known at this time. If a corridor is selected and preserved at Tier 1, a subsequent Tier 2 analysis will evaluate the Parkway itself in detail—the specific roadway "footprint" within the selected corridor, including construction and operation of the roadway.

1.2 CORRIDOR SELECTION AND PRESERVATION

The concept for the Parkway is over a decade old. Placer County's 1994 General Plan depicts a "plan line" for it. Two planning studies helped to refine the concept:

- DKS Associates, 2000, Placer Parkway Interconnect Study/Conceptual Plan
- DKS Associates, 2001, Project Study Report (Project Development Support) for Placer Parkway

Placer Parkway is cited as a high-priority regional transportation project by the Sacramento Area Council of Governments (SACOG) 2025 Metropolitan Transportation Plan and the 2027 Placer County Regional Transportation Plan. The project vicinity and surrounding area include some of the fastest growing communities in the Sacramento region. A number of large urban development proposals are being considered by Placer and Sutter counties. New development is expected to add a significant amount of residential, commercial, industrial, and educational uses.

A 2½-year screening and public outreach program that involved local jurisdictions (the Technical Advisory Committee); regional, state, and federal agencies; stakeholder groups that included

representatives from planning and public works departments of all affected cities and counties, environmental, business, agricultural, development, and homeowner interests (the Study Advisory Committee); and elected officials (the Policy Advisory Committee), resulted in the identification of five potential corridors for the Parkway. The Tier 1 Environmental Impact Statement/Program Environmental Impact Report will analyze these five corridor alternatives along with a No-Build Alternative.

Other potential transportation modes such as bus rapid transit may be developed in the corridor in the future, although they are not proposed as part of the current project. The width of the corridor for Placer Parkway is to vary from approximately 500 feet in the Eastern and Western segments to approximately 1,000 feet in the Central Segment. Depending upon the alternative, the corridor's length ranges from a minimum of 14.2 miles to a maximum of 16.2 miles. The selected corridor would contain the roadway, including the median, travel lanes, shoulder, associated access ramps and a no-development buffer zone.

Corridor acquisition may not be completed until after Tier 2, as funding becomes available. Portions of the selected corridor would be preserved as a no-development buffer zone. The buffer would be maintained as a zone where development is either not permitted or is severely restricted. This is intended to restrict access to the proposed interchanges, protect the rural character of agriculturally designated areas in the vicinity of the Parkway as far as possible subject to future development, and to maximize opportunities to incorporate adjacent sensitive areas. It is intended that the buffer would be owned and managed in the future to achieve these objectives. For subsequent Tier 2 (project-level) environmental reviews, the size of this buffer zone could be considered flexible for agriculturally designated land undergoing urban development. In the Tier 2 environmental review, the specific buffer size and location would be determined. This determination would be based on performance standards on a case-by-case basis, depending on the land use needs of future approved development, and taking into account the primary objective of restricting future access to the Parkway.

Project proponents are considering employment of several land management and control mechanisms in order to ensure that the buffer would be effectively maintained as an area where development would either not be permitted, and where construction of any additional access onto the Parkway would not be allowed. These mechanisms could include land use controls, land purchase/leases, general plan amendments, zoning/overlay zoning changes, covenants/deed restrictions, agricultural/conservation easements, urban growth boundaries, etc. "Layering" or using several of these methods would provide more assurance that the buffers would be permanent, or at least more difficult to undo.

1.3 TECHNICAL STUDY OBJECTIVE

This Archaeological Survey Report has been prepared to support the Environmental Impact Statement/ Program Environmental Impact Report. It presents a Tier 1/Program level assessment of potential impacts related to archaeological resources for five corridor alternatives and the No-Build Alternative as described in Chapter 2.

The scope of work performed for this report is based on the Caltrans Local Assistance Procedures Manual (Caltrans, 2006), as modified for purposes of Tier 1/Program analysis by agreement of Caltrans and the Caltrans Environmental Handbook (Caltrans, 2004) on preparing an archaeological survey. In addition, the evaluation considered guidance from the Federal Highway Administration (FHWA), Environmental Checklists for Draft and Final Environmental Documents (FHWA, 1998a; FHWA, 1998b).

This report is organized as follows:

Chapter 2 The Proposed Action
Chapter 3 Sources Consulted
Chapter 4 Background

Chapter 5 Inventory Methods
Chapter 6 Study Findings and Conclusions
Chapter 7 References

This report also includes figures and tables, which show the project location, each build alternative, and pertinent technical information prepared to evaluate the build alternatives.

Throughout this document, the Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report is referred to as the Tier 1 EIS/EIR.

2.0 THE PROPOSED ACTION

The Proposed Action for the Placer Parkway Corridor Preservation Project is to select and preserve a 500- to 1,000-foot-wide corridor in the project study area, within which the future four- or six-lane Placer Parkway may be constructed. The ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction, and operation of the Parkway. Although the action taken at Tier 1 on the Parkway Corridor Preservation Project is limited, the underlying project whose effects are studied in this document is the Parkway. To the extent feasible at this early stage, the Tier 1 EIS/EIR addresses the potential effects of construction and operation of the future roadway.

2.1 THE PROJECT STUDY AREA

The project study area is an area of approximately 33,460 acres located in Placer and Sutter counties, with a small section located in Sacramento County (see Figures 1-1 and 2-1). The portion of the study area in Sacramento County is located in the extreme southwestern corner of the study area and does not include any of the proposed corridor alignment alternatives. It extends from SR 70/SR 99 in the west to SR 65 in the east, with the northern boundary extending to Sunset Boulevard West and the southern boundary located adjacent to Baseline and Riego roads.

For the purposes of the analysis the study area is divided into three segments:

- Western Segment: the Western Segment extends from SR 70/99 to Pleasant Grove Road in Sutter County.
- Central Segment: the Central Segment extends from Pleasant Grove Road in Sutter County to approximately 2,300 feet north of Pleasant Grove Creek in Placer County.
- Eastern Segment: the Eastern Segment extends from approximately 2,300 feet north of Pleasant Grove Creek to SR 65 in Placer County.

2.2 CORRIDOR ALTERNATIVES

The following subsections describe the corridor alternatives, which are depicted on Figure 2-1, and are numbered according to location from south to north in the study area.

2.2.1 The No-Build Alternative

Under the No-Build Alternative, the project would not be implemented. A Placer Parkway corridor would not be selected/preserved, and the future Placer Parkway would not be constructed.

2.2.2 Alternative 1 – the Red Alternative

Alternative 1 would extend from SR 70/99 approximately ½ mile north of Riego Road, eastward approximately 1 mile north of Baseline Road to approximately Watt Avenue, proceeding north and transitioning in an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 16.2 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.3 Alternative 2 – the Orange Alternative

Alternative 2 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed northeast, then in a northerly direction

south of Pleasant Grove Creek, transitioning to an easterly direction before it reaches Sunset Boulevard West, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.4 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.4 Alternative 3 – the Blue Alternative

Alternative 3 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed north along the Sutter/Placer County Line, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.6 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.5 Alternative 4 – the Yellow Alternative

Alternative 4 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.3 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.2.6 Alternative 5 – the Green Alternative

Alternative 5 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 4,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.2 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.3 PARKWAY DESIGN ASSUMPTIONS

Although the Parkway would be designed and construction-level impacts analyzed during Tier 2, for the purpose of this report and the Tier 1 EIS/Program EIR, several assumptions have been made about potential design and configuration concepts. These assumptions would be subject to further development and refinement, and specific decisions about design of the roadway would be made during the Tier 2 process. For example, the number, location, and design of over-crossings would be determined at the time of final Parkway design, in consultation with local jurisdictions. The following sections outline assumptions for the future roadway.

Preliminary costs estimates for the Parkway range from $600 to $650 million (2005 dollars). This includes costs for right-of-way, design, construction, and environmental mitigation for the four- to six-lane facility. The funding situation has spurred interest in exploring other more creative funding options. These include a county-wide sales tax, more developer contributions, and tolling facilities. The Technical Report and Tier 1 EIS/Program EIR do not make any assumptions about funding sources.

2.3.1 Conceptual Roadway Configuration

The Parkway would be a high-speed, limited access roadway. Depending upon the timing of adjacent urban development proposals and funding, the Parkway may be designed and constructed incrementally in segments. These could be built as a four-lane (interim) roadway until a six-lane segment is warranted, or as the full six-lane facility. A preliminary conceptual cross section (see Figure 2-2) was developed to facilitate the Tier 1/Program evaluation. It illustrates both four-lane (two lanes in both directions) and six-lane (three lanes in both directions) configurations within the 500- to 1,000-foot corridor widths. The roadway would include a central median approximately 100 to 134 feet wide, depending on local conditions and reflecting Caltrans safety guidance. The Parkway would be designed and constructed to Caltrans standards, unless specific design exceptions are granted. For the purposes of the Tier 1 EIS/ Program EIR, the Parkway's opening year is assumed to be 2020.

Access would be provided at the western and eastern ends of the Parkway, where existing areas of dense development are already located or planned. Access would be restricted for the 7-mile Parkway Central Segment. The analysis assumes no interchanges in this segment. (A possible future extension of Watt Avenue or another nearby roadway may be considered in the Central Segment as a separate project.)

2.3.2 Conceptual Roadway Elevation

As the study area is comprised of relatively flat terrain, the majority of the future Placer Parkway is assumed to be at-grade. As necessary, bridges would be used to span certain features and improvements such as the Union Pacific Railroad tracks along Industrial Boulevard, Pleasant Grove Creek, the Natomas East Main Drainage Canal, and floodplains. Generally, the approximate height of bridges is expected to range from 10 feet above streams to 30 feet above the railroad. Culverts would be used at smaller creek crossings as appropriate, depending on local conditions and permit requirements. The Pleasant Grove Creek floodplain would be crossed by bridges (one in each direction) supported by abutments located approximately 800 feet on either side of the creek to avoid the riparian habitat associated with the creek.

Within the 100-year floodplain, the roadway would be elevated such that the bottom of any new bridges would be above the 100-year water surface elevation. The roadway support structures and bridges would be designed to minimize environmental impact, not impede stream and flood flows, and allow for the unobstructed passage of potential future streamside uses such as maintenance equipment, bikeways or trails.

Throughout the project study area, the assumptions for creek and floodplain crossings include typical engineering specifications:

- a maximum bridge span of approximately 150 feet;
- for bridge spans exceeding 150 feet, assume one column, approximately 4 feet in diameter, every 150 feet; and
- all columns placed outside of the ordinary high water (OHW) level.

To maintain existing and future local roadway connectivity (for emergency access, farming operations, and community access), over-crossings would be constructed to convey traffic over the Parkway. These over-crossings would not connect to the Parkway. Parkway access would be via the interchanges described below.

2.3.3 Interchange Concepts

The analysis assumes that the location of interchanges (see Figure 2-1) is as follows.

- SR 70/99 (at ½ mile north of Riego Road or at Sankey Road)

- One or two locations to be determined in southern Sutter County
- Fiddyment Road
- Foothills Boulevard
- SR 65 at Whitney Ranch Parkway

The following discussion outlines concepts and assumptions for the six interchanges that could potentially serve the Parkway.

2.3.3.1 Western Segment

Within the Western Segment of the Parkway, a high-speed, freeway-to-freeway type interchange would connect the Parkway with SR 70/99 at one of following potential locations depending on the project alternative (see Section 2.2). Placer Parkway would terminate at SR 70/99.

- **Placer Parkway/SR 70/99 Interchange at North of Riego Road.** This alternative concept uses "braided" ramps to eliminate weaving problems or conflicts with the future SR 70/99 at Riego Road interchange being developed by Sutter County and Caltrans.

- **Placer Parkway/SR 70/99 Interchange at Sankey Road.** Under this alternative concept, the existing two-lane Sankey Road would be realigned to the south of Placer Parkway and the proposed freeway-to-freeway interchange, extending from approximately ¼ mile west of SR 70/99 to approximately ¼ mile east of the Union Pacific railroad tracks. There would be no direct access to SR 70/99 or Placer Parkway from the realigned Sankey Road.

Depending on the final alignment selected, one or two additional interchanges would also be located in south Sutter County. Conceptual locations are identified for purposes of this Tier 1/Program analysis (see Figure 2-1). The actual location of these interchanges would be developed in the Tier 2 phase, based on Sutter County requirements.

2.3.3.2 Central Segment

Within the Central Segment of the Parkway, there would not be any access proposed as part of the Project in the 7-mile segment between Fiddyment Road and Pleasant Grove Road. Please see Section 2.4 regarding a potential connection to a future extension of Watt Avenue (Figure 2-3) which could be proposed and constructed by others in the Central Segment; such an interchange is not part of the Parkway.

2.3.3.3 Eastern Segment

Within the Eastern Segment of the Parkway, a signalized high-speed freeway-to-freeway and local access interchange would connect the Parkway to SR 65 at Whitney Ranch Parkway (Figure 2-1). From SR 65 eastward Placer Parkway would terminate and become Whitney Ranch Parkway east of the SR 65 exit ramp intersection. Traffic signals would be provided at the exit ramp terminals. This interchange would be approximately 1 mile north of a planned SR 65/Sunset Boulevard interchange and 1.2 miles south of the existing Twelve Bridges interchange.

As part of this interchange, auxiliary lanes would be required on SR 65 in both directions to enhance traffic operations on the north side of the future SR 65/Sunset Boulevard interchange. The southbound SR 65 exit-ramp at Sunset Boulevard is being designed to accommodate an additional auxiliary lane required for the future Placer Parkway/Whitney Ranch Parkway interchange to minimize the reconstruction of this ramp in the future. Within the Eastern Segment of the Parkway, from SR 65

westward, two interchanges with local roadways would be constructed, one at Foothills Boulevard and one at Fiddyment Road, as depicted on Figure 2-1.

The future interchange on Placer Parkway at Fiddyment Road would be located near the existing intersection of Fiddyment Road and Sunset Boulevard West. To provide acceptable traffic operations, additional distance needs to be provided between the Fiddyment Road/Sunset Boulevard West intersection and the Fiddyment Road/Placer Parkway westbound off-ramp intersection. Therefore, Sunset Boulevard West will need to be realigned to the north as it nears Fiddyment Road.

2.3.4 Landscaping Concept

For the purposes of this environmental analysis, preliminary landscaping concepts have been developed for Placer Parkway. These are entirely conceptual and would be subject to further refinement during the Tier 2 environmental process. It is anticipated that landscaping would be used to reflect local topography and vistas in the study area and complement the varying character of land adjacent to the Parkway corridor. Landscape design would vary within the Parkway's three segments depending on corridor width and type and density of surrounding land uses. Landscaping would be used within the median and the Parkway buffer zone to enhance the aesthetics of the Parkway, and would be used to provide screening and enhance local and long-distance views. Where appropriate, more concentrated plantings would be considered to buffer the Parkway from future adjacent land uses that may be incompatible with the Parkway concept, and to prevent unwanted intrusion into shoulder or median areas. Landscape design would likely include a mix of compatible native and non-native plants that may require some irrigation. Where possible and depending on availability, feasibility and cost, recycled water would be used for irrigation.

During a future design phase, lighting elements would be designed for safety and would consider the proposed landscaping plan in order to minimize potential aesthetic impacts (e.g., shielding lighting elements, using lower-voltage lighting, and proposing lighting fixtures that conform with the visual character of the area).

2.4 POTENTIAL WATT AVENUE INTERCHANGE

The Placer County General Plan includes a number of new roadways that may be needed in Placer County, according to travel demand forecasts. An extension of Watt Avenue to Placer Parkway (from Baseline Road to a new Blue Oaks Boulevard Extension) is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto the Parkway via a new interchange (see Figure 2-3). A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. It would be subject to independent future environmental analysis and review and is not being fully evaluated within this Technical Report or Tier 1 EIS/Program EIR. However, the connection of Placer Parkway to a potential Watt Avenue interchange could affect future travel patterns in the area, including use of the Parkway. Based on direction from previous planning studies, this Technical Study and the Tier 1 EIS/Program EIR will evaluate each corridor alternative with and without a Watt Avenue interchange. This evaluation does not predetermine the construction or alignment of a potential Watt Avenue or nearby roadway extension or the precise locations of any potential interchanges with Placer Parkway.

2.5 AGENCY PERMITS AND APPROVALS

The Proposed Action would preserve a preferred corridor for a future transportation facility. In the future, permits and approvals would be obtained from appropriate agencies prior to construction of the Parkway. These permits and approvals may include specific design or mitigation requirements that would be incorporated into the project.

2.6 SUBSEQUENT TIER 2 INFORMATION

As noted earlier, the design and construction of Placer Parkway — including its interchanges and over-crossings, and ancillary features such as stream crossings, safety devices, stormwater management structures, and similar improvements — would be evaluated in a subsequent Tier 2 environmental review process, once a corridor has been identified.

3.0 SOURCES CONSULTED

3.1 SUMMARY OF METHODS AND RESULTS

The study area for Placer Parkway encompasses a total area of 35,443.31 acres within Sutter and Placer counties, California (Figure 2-1). The study area encapsulates all of the original alignment alternatives from which the current corridor and alternatives were derived. The total acreage of the current alternative corridors combined is 3,987.65 acres.

The archaeological records search for the initial Parkway screening exercise was conducted in June 2003 and included the entire study area as well as areas within a ¼-mile radius of the study area boundary. Because the archaeological records for Sutter County are housed separately from those in Placer and Sacramento counties, two separate record searches were conducted for the project. For Sutter County, a record search request was submitted to the Northeast Information Center (NEIC) of the California Historical Resources Information System (CHRIS). The record search was conducted by the staff of the NEIC (File #D03-28) and was delivered to URS on June 30, 2003. A similar request was sent to the North Central Information Center (NCIC) of the CHRIS for the Placer and Sacramento County components of the project. The record search was conducted by the staff of the NCIC (File No. PLA-03-57/SAC-03-44) and delivered to URS on June 12, 2003.

The record searches at the NCIC and NEIC included searches of archaeological site and historic property files, the National and California Registers of Historic Places, the Historic Property Data File for their respective counties, California Historic Landmarks, California Points of Historic Interest, Caltrans Local Bridge Survey, and historic General Land Office Maps.

The records search results were used to develop corridor alignment alternatives routed to avoid and/or minimize potential impacts to various resources including historic and prehistoric archaeological sites. As such, no previously identified archaeological sites occur within the corridors subject to the current investigation. The corridor alignment alternatives selection process was also used to locate, to the extent possible given other environmental constraints, the corridor alignment alternatives within areas previously subjected to archaeological inventory. Previous archaeological inventory studies that include lands bisected by the project include:

- Cultural Resources Unlimited, 1992. *A Cultural Resources Study for Sutter Bay Project, Sutter County, California*.
- Cultural Resources Unlimited, 1994. *A Cultural Resources Study for the Twelve Bridges/State Route 65 Interchange and Freeway Widening, Placer County, California*.
- Cultural Resources Unlimited, 1994. *A Preliminary Cultural Resources Review for the Twelve Bridges/SR 65 Interchange and Widening, Placer County, California*.
- Dames & Moore, 1994. *Archeological Inventory Report – Natomas Locality, Cultural Resources Inventory and Evaluation for the American River Watershed Investigation, El Dorado, Placer, Sacramento, and Sutter Counties, California*.
- Derr, Eleanor, 1997. *Bill Graham Presents Placer County Amphitheater: Cultural Resource Survey Report.* Cultural Resources Unlimited Prepared for Environmental Science Associates.

- Ebasco Environmental, 1992. *Cultural Resources Survey of the Sacramento Energy Project Sacramento County, California*.
- ECORP Consulting Inc., 2001. *Cultural Resources Assessment of the Sunset-Athens Connector Placer County, California*.
- Egherman, R. and B. Hatoff, 2000. *Roseville Energy Facilities Cultural Resources. Appendix J-1*. URS Corporation.
- Foster, John and Daniel Foster, 1983. *An Archaeological Reconnaissance of the Placer Industrial Park and Whitney Business Park, Placer County California*.
- Hale, Mark, 2002. *Archaeological Reconnaissance of the 1,329-Acre Reason Farms, for the City of Roseville, Placer County, California*. URS Corporation.
- Jensen, Peter, 2000. *Archaeological Inventory Survey Auburn Rancheria Gamin Project's Proposed Access Road and Sewer Lien Construction Project, near Lincoln, Placer County, California*. Jensen & Associates.
- Jones & Stokes, 2000. *Archaeological Survey Report for 3301 Industrial Avenue, Rocklin, Placer County, California*.
- Lindstrom, Susan, 1991. *A Cultural Resource Surface Survey of the Stanford Ranch West Project Involving 690 Acres Between Roseville and Lincoln California, Placer County. Prepared for CSW Planning Associates*.
- Mainery, James, 2001. *Cultural Resources Investigation of the Westpark/Fiddyment Ranch and Live Oak Enterprises/Signature Property Development Project, Placer County, California*. PAR Environmental Services, Inc.
- McGowan Seldner, Dana, 1985. *Archeological Survey of the Proposed Western Regional Sanitary Landfill Expansion Placer County, California*. Foundation of California State University, Sacramento.
- Norton, W.L., 1998. *Historic Property Survey Report and Finding of No Effect for State Route 65 Widening Project, Placer County, California*. Jones & Stokes Associates.
- PAR Environmental Services, Inc., 2002. *Cultural Resources Inventory of Highway 65 Self Storage Project, Placer County, California*.
- Pastron, Allen, 1989. *An Archaeological Surface Reconnaissance of the Stanford Ranch West Property, Placer County, California*. Archeo-Tec.
- Peak & Associates, 1986a. *Cultural Resource Assessment of the CEMO Industrial Park, Placer County, California*.
- Peak & Associates, 1986b. *Cultural Resource Assessment of the Sunset Motor Sport Park, Placer County, California*.
- Weigel, Lawrence, 1982. *First Addendum Archaeological Survey Report for the Proposed Roseville Bypass Project*. California Department of Transportation

- Wesson, A. and B. Hatoff, 2001. *Roseville Energy Facilities Cultural Resources. Appendix J-1*. URS Corporation.

- Wiant, Wayne, 1982. *Archaeological Reconnaissance of the Proposed Roseville Bypass Project*. California Department of Transportation.

Because the screening process was used to avoid historic and prehistoric archaeological sites, none of these efforts resulted in the identification of archaeological sites within the corridor alignment alternatives.

Since the record search and screening efforts were conducted, three additional studies have been conducted that include tracts of land traversed by the common alignment alternatives (see Section 5.2). These studies were completed for the Amoruso Property (ECORP, 2006), the Placer Ranch Project (Hale, 2004), Reason Farms Retention Basin (URS, 2002), and the SR 65 Widening Project (Norton, 1998). Given the recent dates of completion of these surveys, in agreement with Caltrans, the common corridor alignment alternative through these parcels was not re-inventoried for archaeological resources. None of these efforts identified archaeological resources within any of the project alignment alternatives.

This section briefly describes the known archaeological sites identified in the record search for the Tier 1 Archaeological Survey Report.

CA-PLA-136

Unfortunately, the site record for CA-Pla-136 on file at the NCIC is difficult to read due to the poor quality of the reproduction (the whereabouts of the original is unknown). It appears that the site was identified in April of 1960, and at the time of recordation contained a milling slab (i.e., metate) and possibly two handstones (i.e., manos).

CA-PLA-137

URS Corporation recorded this site with historic resources in 2001. The site was originally recorded by Mott in 1961. A subsequent attempt to relocate this resource by URS Corporation in the location plotted on the master maps at the NCIC has proved unsuccessful. Heavy grass cover obscured native soils during the survey. Surface vegetation was scraped back in several locations within the area mapped as Locus B, revealing dark-colored sand, but no cultural material. The original site form indicates that artifacts including a metate and several manos and pestles had been unearthed due to plowing on both the northern and southern sides of Pleasant Grove Creek.

CA-PLA-138H

Derr describes CA-PLA-138H as a prehistoric site with fragments of ground stone (bowl mortar), pestle fragments, mano fragments, a possible chopper, some core tools, and flakes (two obsidian, too small to date/source) as well as fire-fractured rock. The 515-meter by 60-meter site area (at an elevation of 90 to 95 feet) was slated for development as of 1999, when it was recorded (it was previously recorded in 1994). Note: although identified in the record search, this site is outside of the Parkway study area.

CA-PLA-147

CA-PLA-147, recorded in 1999 by Derr, is described as a site with a scatter of prehistoric artifactual materials. Artifactual materials observed include preform mano, metate, and complete mano, located in the northern, central, and western portions of the site, as well as flaked fragments of basalt and slate, located in the northwestern area. Remarks on the site record state that the 35-meter by 50-meter site was

thought to have been intensively used during prehistoric times, and there is a possibility that at a greater depth, burials may be present. Currently, there are signs of disturbance, and artifacts that were previously identified are missing.

CA-PLA-429

Recorded by Peak and Associates in 1994, CA-PLA-429 is described as an area with two prehistoric artifacts located on the surface: one bifacially shaped mano fragment, and one basalt debitage fragment. The site was originally recorded in 1981 when Foothill found two chopping tools, basalt flakes, and fire-cracked rocks (one shaped pestle midsection, one percussion-flaked cobble tool). Note: although identified in the record search, this site is outside of the Parkway study area.

CA-PLA-730H

Peak and Associates recorded this site in 1989. The historic site is described as part of the foundation for the old Pleasant Grove School. The foundation is made of unmodified rough rocks in a rectangular shape. The cornerstone on the northeast is missing. In addition to the foundation, the site also contains a depression, 3 feet by 4 feet, which may have been a privy pit. The privy pit is located 7 feet from the foundation.

CA-PLA-944H

Dan Osanna recorded CA-PLA-944H in 1999. The site is 110 feet by 140 feet, with an elevation of 87 feet. The site contains a concrete barn foundation (in the middle of a cultivated field) comprised of four parallel foundation walls. The foundation walls are 92 feet long. Approximately 90 feet from the barn foundation is a small well casing and pumphouse foundation. The pumphouse foundation is shaped in a "U," and the 1-foot-diameter well casing is surrounded by a concrete foundation (4 feet on each side). Additional elements identified include barbed wire fragments, metal strapping, and tin sheeting.

CA-PLA-945H

Recorded by Dan Osanna and Ric Windmiller in 1999, the 110-foot by 65-foot site has an elevation of 84 feet, and is located in a plowed field next to Baseline Road. The site consists of a scatter of historic trash. Artifacts include ceramic fragments glazed brown, bottle fragments of clear glass, and earthenware fragments of white ironstone. The age of the historic trash is estimated to be between 1848 and 1914.

CA-PLA-968H

Recorded by PAR in 2001, the historic site contains a depression (reportedly the site of a well) with fragments of a windmill. In addition, there are fragments of white improved earthenware, glass, and metal. Farther away (approximately 490 meters) there are fragments of three windmills (may be related to the site). The age of the resources is circa late 1930s. The site is 92 feet above mean sea level and is 145 feet by 100 feet. The site has a low degree of integrity, because 95 percent of the windmill remains have been removed and the well has collapsed.

CA-PLA-969H

Discovered in 2001 by PAR, the resources present on the 77-meter by 43-meter site, with an elevation of 100 feet, are as follows: a set of concrete footings (66 set in six rows); a water spigot with adjoining concrete foundation, and a structure foundation (three sections) and an in situ piece of machinery. The resources are historic, circa 1953. The site is located on a working ranch (formerly a turkey ranch) and has been disturbed by livestock activity.

CA-PLA-974H

Derr recorded this site in 1991, encompassing an area 22 feet by 17 feet at an elevation of 140 feet. The site contains historic artifacts; namely, an animal feeding station with feed troughs (though the troughs are unconfirmed). The troughs appear to be moved, and one cement trough is broken. There is also a well, and electrical power source, mostly likely for a pump. The record notes that the site does not appear to be disturbed. Note: although identified in the record search, this site is outside of the Parkway study area.

CA-PLA-975H

The site was recorded by Derr in 1991, and is stated to be historic. The 5-foot by 5-foot site has an elevation of 145 feet. Artifacts on the site include an iron pipe (upright in soil) that is 10 inches in diameter, located within a depression. The record states this is probably a well that extends approximately 16 feet deep and 28 inches above ground. There is no water inside. The metal is ¼-inch-thick and has vertical breaks/slits in various locations. The site appears undisturbed. Note: although identified in the record search, this site is outside of the Parkway study area.

CA-PLA-977H

CA-PLA-977H, recorded in 1995 by PAR, is described as a historic farm complex with the following elements: a residential foundation (wood remnants and rusted stove); concrete foundation (three-sided) with pieces of lumber and siding/roofing (metal); a fallen windmill (metal) with troughs, concrete footings and pads; and a concrete pad with wood posts, lumber, and siding/roofing (metal). The 863-foot by 250-foot site has an elevation of 108 feet and is bisected by a barbed wire fence and wood post. The historic site is dated between 1880 and 1945. The site has been impacted by livestock, target shooting, and damage from the wind.

CA-PLA-I086H

Recorded in 1989 by Kosta & Ruskin, this historic site is 40 meters by 30 meters with an elevation of 115 feet, and contains mixed scatter surrounding two leaved willows. The artifacts stated in the record are as follows: fencing (barbed wire); tractor leaf-spring; porcelain doll hand and arm; fragments of glass bottles, ceramics, handpainted porcelain, unglazed stoneware, and earthenware; a variety of metal (nails, stakes, chain link, buttons); and roofing slate.

CA-PLA-I087H

Kosta & Ruskin recorded this historic site in 1989. The 20-meter by 30-meter site, with an elevation of 125 feet, consists of a historic water well with a small scatter of mixed historic fragments. The artifacts include fragments of an aqua culinary bottle (gothic style), shards of bottles (alcohol beverage types); square nails; and fragments of white earthenware vessels. The site has been disturbed by plowing.

CA-PLA-1104

CA-PLA-l104, recorded in 1989 by Kosta & Ruskin is described as a scatter of groundstone/lithic and associated discoloration of soil on a 58-meter by 56-meter site with an elevation of 100 feet. This discoloration may result from the presence of subsurface midden deposits. The prehistoric artifacts are as follows: groundstone mano, groundstone fragment, andesite flake (primary), projectile point fragment (mid-section), primary flake (silica cemented conglomerate composed of small siliceous gravels), and primary flake (fine-grained quartzite).

CA-PLA-1126H

Recorded by Derr in 1999, CA-PLA-1126H is a historic site located on a ranch. The historic site contains a house (known to exist in the 1940s), driveway, well, and small barn, along with a larger barn and related foundations. The foundations are all that remains; there are several small piles of broken foundation from the house. Note: although identified in the record search, this site is outside of the Parkway study area.

P-31-001215

PAR Environmental Services, Inc., recorded the site in 2001. The historic site has foundation and structure pads dating from the 1930s. The site has an imbedded post (the top is missing), metal fragments scattered, two can lids, burnt wood fragments, as well as clear and aqua-colored glass bottle fragments. The base of a clear bottle has an angular "G" over a "C" embossed on it, which is stated in the record to be the maker's mark.

P-31-001216

PAR recorded this site in 2001, which is comprised of privy pits and trash scatters, in a farm's dump, adjacent to a dirt road. The site has a shallow, water-filled area, where fenceposts and bales of barbed wire have been tossed. There are approximately 150 fenceposts and five types of barbed wire (both modern and historic types). In addition, there is part of a windmill (made of pipes) nearby. Approximately 100 meters north are scattered auto tires (about 10) and a metal wheel rim. Approximately 200 meters north are additional barbed wire bales. South of the site (approximately 200 meters) is an oil drum.

P-31-001217

Recorded in 2001 by PAR, the site has a scatter of debris along the drainage bed of the Pleasant Grove Creek. Historic artifacts were observed among modem pieces of debris, snagged by nearby trees. The artifacts are fragments and are listed as follows: solarized bottle glass (one), olive glass bottle (one), bright green bottle glass (one), aqua glass bottle (multiple), clear glass bottle (multiple), porcelain (one), and white improved earthenware (10+).

P-31-001218

Recorded by PAR in 2001, P-31-001218 is a site with three historic windmill components, comprised of fragments of a wooden beam with steel or iron braces or clamps. The other fragments include large metal supports (mostly pipe and L-shaped beams). South of the metal fragments are the remains of a section of fence that ran east-west. The three windmill components are located close to a dirt road, and may be related to the Fiddyment 2 site (nearby).

REF 3

The site was recorded in 2002 by URS Corporation. The site is comprised of a concrete structural foundation and several pieces of abandoned farm machinery and equipment. The foundation is situated to the south of a grove of black locusts and a single elm and approximately 220 feet south on an unmarked dirt road. Portions of the concrete foundation are intact at its northern and southern perimeters. The portion of the foundation at the southwestern comer is 2.5 feet in height and 4 inches thick, and is capped at its northernmost edge by a piece of wood with round nails. The portion of foundation marking the northern perimeter is 30 feet in length. Concrete debris is scattered just beyond the northern boundary of the foundation. Post-field research indicates the age of the resources range from 1882 to 1931.

Although a number of archaeological resources have been identified in the larger study area as evidenced in the record search data provided above, the general archaeological sensitivity of the current archaeological APE for both prehistoric and historic archaeological resources is low. This supposition is based on the fact that while resources have been identified, relatively few archaeological sites have been identified given the total acreage of land subjected to archaeological survey.

Furthermore, given that the current project APE (see Section 5.1 and also Appendix B) was designed to both avoid known archaeological resources as well as maximize, to the extent possible given other environmental constraints, the placement of the corridors within lands previously subjected to archaeological inventory efforts, the likelihood of archaeological resources within the current APE is reduced.

3.2 SUMMARY OF OTHERS WHO WERE CONSULTED

A request for a review of the Sacred Lands File was sent to the Native American Heritage Commission (NAHC) on May 27, 2003.

A search of the Sacred Lands File by the staff of the NAHC did not indicate the presence of Native American cultural resources in the immediate study area. A letter from the NAHC reporting these findings as well as providing a list of local Native American individuals and organizations was sent to URS on June 6, 2003, and is included, with responses, as Appendix C.

Other sources of information consulted for the Parkway cultural resources investigations included the Placer County Historical Society, Lincoln Arts and Culture Foundation, Roseville Historical Society, Community Memorial Museum, Placer County Museum, Sutter County Historical Society, and Rocklin Historical Society.

3.3 SUMMARY OF NATIVE AMERICAN CONSULTATION

On three occasions (June 16, 2003, October 13, 2003, and March 6, 2006) letters requesting information and comment were sent to the Native American individuals identified on the NAHC contact list for Placer, Sacramento, and Sutter counties. In addition to the letters, telephone calls were made in August of 2003 notifying, when possible, these same individuals about the project. The list provided by the NAHC comprised:

- Harvey Angle, Chairperson, Enterprise Rancheria of Maidu Indians
- Rose Enos
- David Keyser, United Auburn Indian Community of the Auburn Rancheria
- Joe Marine
- Jeff Murray, Cultural Resources Manager Shingle Springs Band of Miwok Indians
- Martha Noel, Maidu Elders Organization
- Sam Starkey, United Auburn Indian Community of the Auburn Rancheria
- Christopher Suehead, Cultural Representative Todd Valley Miwok-Maidu Cultural Foundation
- Jessica Tavares, Chairperson, United Auburn Indian Community of the Auburn Rancheria

On October 21, 2003 a response was received from Greg Baker, Tribal Administrator, United Auburn Indian Community of the Auburn Rancheria (Auburn Rancheria). Mr. Baker requested that a copy of the technical report be provided to the United Auburn Indian Community of the Auburn Rancheria. The

letter also instructed URS Corporation to contact Dr. Shelley McGinnis of Analytical Environmental Services (AES). No other responses were received.

Contact with was made Dr. McGinnis and a decision was made to hold a formal meeting between representatives of the Auburn Rancheria, South Placer Regional Transportation Authority (SPRTA), the Federal Highway Administration (FHWA), Caltrans, and URS Corporation. This meeting was held on January 9, 2004 and was used to provide the Auburn Rancheria with project specifics including levels of effort for the Tier 1 investigation as well as potential avenues of investigation during Tier 2.

4.0 BACKGROUND

4.1 ENVIRONMENTAL SETTING

The study area is comprised of 35,443.31 acres of an irregular shape, bounded by SR 65 near Rocklin on the east and SR 70/99 in the west (Figure 1-1). Baseline Road is adjacent to part of the southern boundary and Sunset Boulevard along the north. The majority of the study area is located in western Placer County. A substantial area is in eastern Sutter County, and a small portion is in northern Sacramento County.

The Sacramento Valley through which the current project passes can be characterized as a low-elevation flatland bisected by river channels, creeks, and sloughs. The region cannot, however, be described as topographically featureless. Four types of topography are recognized within the Sacramento Valley: (1) low hills and dissected alluvial uplands; (2) low alluvial plains and fans; (3) floodplains and natural levees; and (4) flood basins.

The westernmost portion of the study area is located within a 100- or 500-year floodplain and is predominately in rice cultivation, which results in areas that are submerged in shallow water during all or part of the year. The central portion of the study area is comprised of a patchwork of seasonally flooded habitat and drier annual grasslands/agricultural areas, which are either dry-farmed, irrigated for crops, or used for livestock grazing. As the study area approaches the foothills of the Sierra-Nevada Mountains in the eastern portion of the study area, habitat is almost entirely comprised of grassland, some of it cultivated. Scattered throughout the entire study are various wetlands and vernal pool complexes.

The following habitat types are present in the project study area:

Cultivated Rice Fields and Other Seasonally Flooded Habitat. Rice fields in the study area have frequently been leveled and terraced to facilitate seasonal inundation necessary to cultivate rice. Fields are typically inundated during the growing season from late May to early August. Some fields may be flooded again during the winter months to attract waterfowl. Native vegetation is typically excluded from cultivated rice fields. Many species of migratory waterfowl may congregate in rice fields during the winter, depending on flooding cycles and management practices. Such species include snow goose (*Chen caerulescens*), greater white-fronted goose (*Anser albifrons*), northern shoveler (*Anas clypeata*), and bufflehead (*Bucephala albeola*). The habitat also supports giant garter snake (*Thamnophis gigas*), a federal and state-listed threatened species, and ruddy duck (*Oxyura jamaicensis*).

Other Agricultural Habitats. Non-irrigated pasture and/or irrigated croplands comprise the majority of other agricultural habitats in the study area. These may include a mix of perennial grasses and legumes that may be used for grazing of livestock, or seed-producing grasses such as barley, rye and wheat that are planted in the fall and harvested in the spring. Many species of birds and rodents have adapted to use these habitats, and as a result larger birds of prey (hawks, falcons) also use these areas for hunting.

Annual Grassland. Annual grassland is comprised of upland areas that have not been previously cultivated. Typical species include ryegrass (*Lolium* sp.), barley (*Hordeum* sp.), ripgut brome (*Bromus diandrus*), and filaree (*Erodium* sp.). Grassland provides habitat for wildlife species such as western meadowlark (*Sturnella neglecta*), red-tailed hawk (*Buteo jamaicensis*), killdeer (*Charadrius vociferous*), western fence lizard (*Sceloporus occidentalis*), voles (*Microtus* sp.), deer mice (*Peromyscus maniculatus*), coyote (*Canis latrans*), and other species. Annual grasslands are often associated with vernal pools, as discussed below.

Vernal Pools and Other Seasonal Wetlands. Vernal pool complexes are areas that contain vernal pools of varying sizes and densities. They are seasonal flooded depressions that are underlain with a subsurface

layer that limits water infiltration. The seasonal ponding and drying associated with vernal pools supports a unique community of plants and animals. Vernal pool vegetation is dominated by species such as coyote thistle (*Eryngium vaseyi*), popcorn flower (*Plagiobothrys stipitatus*), downingia (*Downingia pusilla*), quaking grass (*Briza minor*) and buttercup (*Ranunculus bonariensis*). Invertebrates, including listed vernal pool fairy shrimp (*Branchinecta lynchi*) and vernal pool tadpole shrimp (*Lepidurus packardi*) may occupy vernal pools and other seasonal wetlands in the project study area.

Two types of vernal pools occur in Placer County: northern hardpan vernal pools, and northern volcanic mudflow vernal pools (Brussard, 1999). The average pool size of northern volcanic mudflow types is typically small (<100 m^2), the pools are irregularly spaced and do not form large pool complexes. These pools have characteristically shallow soils, <30 cm deep, and are underlain by impervious mudflow welded tuff. They have a "flashy hydrology," filling and refilling many times over the wet season. Northern hardpan pools are typically found in complexes in areas of hummocky ground on old terraces above the recent river floodplains and below the foothills. These pools are often larger than northern volcanic mudflow pool, and can be more than 1 acre. They have a less flashy hydrology, with pools remaining filled longer than volcanic mudflow vernal pools.

Seasonal and/or Perennial Stream. These habitats are contained within the ordinary high water mark of seasonal or perennial streams, creeks, or rivers. There are four such stream systems in the study area: Pleasant Grove Creek, Orchard Creek, Curry Creek, and Steelback Creek. Each of these creeks has multiple branches and/or tributaries. In places, stream features have been converted to channelized irrigation ditches, which is common in areas developed for agricultural purposes. Channel conditions within the study area are generally degraded.

Prior to development within the watershed, Pleasant Grove Creek and its tributaries were seasonal streams, however, summer flows are now maintained by irrigation runoff. Pleasant Grove Creek has the largest drainage network within the study area. It originates in the far Eastern Segment of the study area and flows westward, where it terminates in the Pleasant Grove Creek Drainage Canal. Sections of Pleasant Grove Creek in the Central Segment are surrounded by well developed riparian forest, as described in the Riparian Woodland section, below. Fish species likely to occur in Pleasant Grove Creek include California roach (*Lavinia symmetricus*), Sacramento sucker (*Catostomus occidentalis*) smallmouth bass (*Micropterus dolomieui*) and spotted bass (*Micropterus punctulatus*).

Orchard Creek, a tributary to Auburn Ravine, is located in the northeastern corner of the study area. It flows westward under Fiddyment Road north of the study area and then joins Auburn Ravine. Curry Creek has several tributaries that originate in the southeastern corner of the study area and flow to the west; the creek intersects the Pleasant Grove Creek Drainage Canal, and terminates in the Western Segment of the study area. Recent field observations indicate that at least some areas of Curry Creek and its tributaries have been channelized and embanked to the edge of the channel and that there is a lot of fine sediment depositing in the channel.

A fourth stream system, Steelhead Creek, exists south of Curry Creek. It originates near the southern edge of the study area and terminates into the Natomas East Main Drainage Canal.

Riparian Woodland. Riparian woodland borders most of the central part of Pleasant Grove Creek. Less developed (fewer large trees) riparian areas occur adjacent to tributaries of Pleasant Grove Creek and limited areas of Curry Creek. Typical woody species include Goodding's willow (*Salix gooddingii*), Fremont cottonwood (*Populus fremontii*), and valley oak (*Quercus lobata*). Large trees in or adjacent to riparian areas are considered habitat for state listed Swainson's hawk. Understory riparian vegetation containing elderberry bushes (*Sambucus* species) is considered habitat for federally threatened Valley elderberry longhorn beetles (*Desmocerus californicus dimorphus*). The well-developed riparian woodland supports a high diversity of resident and migratory bird species, such as scrub jay (*Aphelocoma*

coerulescens), black-crowned night heron (*Nycticorax nycticorax*), ruby-crowned kinglet (*Regulus calendula*), Wilson's warbler (*Wilsonia pusilla*), Lincoln's sparrow (*Melospiza lincolnii*), great horned owl (*Bubo virginianus*), and Bullock's oriole (*Icterus bullockii*).

Wetlands. Freshwater marsh habitats are characterized by saturated or periodically flooded soils that support some combination of rushes (*Juncus* spp.), sedges (*Cyperus* spp.), cattail (*Typha* spp.) and bulrush (*Scirpus* spp.). Bird species such as mallard (*Anas platyrhynchos*), American widgeon (*Anas americana*) and red-winged blackbirds (*Agelaius pheoniceus*) can be found in freshwater marsh habitat throughout the study area.

4.2 CULTURAL SETTING

4.2.1 Ethnography

The study area is within the ethnographic territory of the Nisenan, one of three Maiduan speaking tribelets inhabiting the northeastern half of the Sacramento Valley and the adjoining western slopes of the Sierra Nevada. Also known as the Southern Maidu, the Nisenan inhabited the five named villages in the general vicinity of the project area: *Pichiku* near present day Roseville; *Bamuma* near present day Lincoln and *Wollok; Leuch;* and *Wishuna* along the eastern edge of the Sacramento River (Wilson and Towne, 1978: Figure 1).

Ethnographic data on the Nisenan have been presented within several original works specifically focused upon them (Beals, 1933; Faye, 1923; Gifford, 1927; Kroeber, 1929; Littlejohn, 1928; Ritter and Schulz, 1972; Uldall and Shipley, 1966); however, the primary reference is found within Kroeber's (1925) overview of California Indians. A synthesis of Nisenan ethnography has been written by Wilson and Towne (1978), who also compiled a bibliography devoted to general Maidu ethnography (1972). An early account of Nisenan life is found within Powers' (1877) study of California Indians.

The Nisenan were the southernmost of three groups (Konkow, Nisenan, and Maidu) who spoke a Maiduan language. Maiduan is one of California's four Penutian languages, the others being Wintuan, Utian, and Yokutsan. Ethnographic groups speaking non-Maiduan Penutian languages within California include the Wintu, Nomlaki, and Patwin (Wintuan), the Costanoan and the Miwok (Utian), and the Yokuts (Yokutsan) (Shipley, 1978:82-85).

The Nisenan specifically inhabited the area within the American, Bear, Yuba, and lower Feather River watersheds. The region is bordered by the Sierran Crest on the east and by the Sacramento River on the west. The northern boundary is ill-defined due to linguistic and cultural similarities between the Nisenan and their northern neighbors, the Konkow. The southern boundary is also vaguely defined, being situated somewhere between the American and Cosumnes Rivers (Kroeber, 1925; Levy, 1978; Riddell, 1978; Wilson and Towne, 1978).

As stated above, within the general vicinity of the study area, the Nisenan inhabited a village near Roseville (*Pichiku*), another near Lincoln (*Bamuma*) and three along the eastern edge of the Sacramento River (*Wollok*, *Leuchi*, and *Wishuna*). It is unknown whether these were permanent settlements, although references describe them as "major villages" (Wilson and Towne, 1978, Figure 1). Nisenan villages varied considerably in size, with a large village containing from 40 to 50 houses and more than 500 people. A typical settlement within the lowland areas of the Nisenan territory would be situated upon natural rises along the major rivers and streams (Kroeber, 1925:395; Powers, 1877:316; Wilson and Towne, 1978:388). Structures occurring within major villages would include brush shelters, sweat house(s), acorn granaries, a dance house, as well as the above mentioned houses (Kroeber, 1925:407-409; Wilson and Towne, 1978:388-389).

The principal subsistence activities of the Nisenan were hunting, fishing, and the gathering of wild plants. Subsistence practices relied upon a large variety of food sources, rather than being dependent on a limited number of staples. Typical of California groups, acorns from various species of oak were eaten, as were the nuts from bull and sugar pine, and buckeye. Other plants consumed included wild fruits and berries, various seeds, roots, and bulbs. Most animal species were eaten with the exception of canine species, grizzly bears, vultures, amphibians, and reptiles (Kroeber, 1925:409-411; Wilson and Towne, 1978:389-390).

The Nisenan were organized similarly to many California Indians in that a certain territory was identified as belonging to a group and that group recognized themselves as a unit (i.e., tribelet). Several affiliated villages may have occurred within the tribelet territory. Each village, and often a group of allied villages, had a headman, whose duty was to advise the members of the community. No larger levels of political organization occurred beyond these village affiliations (Kroeber, 1925:396-398; Wilson and Towne, 1978:393).

Warfare, though rare, did occur. Fighting is known to have occurred between Nisenan tribelets as well as with non-Nisenan peoples. Generally, conflict occurred following trespass or similar territorial violations. An example of inter-tribelet conflict involved Nisenan from the Roseville area in the 1820s. Evidently, men from the Auburn/Nevada City area were killed in the Roseville vicinity. The hatred and distrust between these peoples lasted for several years, as evidenced by the report that the Nisenan attributed an epidemic in 1833 to bad air, sent to the valley by revengeful hill dwelling shamans (Wilson and Towne, 1978:388 citing Payen, 1961:23; Wilson, 1957-1963).

The Nisenan were affected little by the Spanish and Mexican incursions into California's interior (Wilson and Towne, 1978:396). They were, however, greatly impacted by the above mentioned epidemic, which ravaged parts of California during the 1830s. Believed to have been brought by fur trappers, this pestilence often killed the population of entire villages. It is estimated that 75 percent of the population died as a result of the epidemic, with many of the survivors retreating to mountain locations (Cook, 1955).

The Nisenan who survived the epidemic were among the California groups most affected by the Gold Rush of 1849. It was within Nisenan territory that John Marshall discovered gold at Coloma in 1848. Soon afterwards, hoards of fortune seekers descended upon Nisenan and adjoining territories. Within a short span of time, the lands of the Nisenan were overrun and the wholesale killing of Nisenan by whites began (Chartkoff and Chartkoff, 1984:279-282; Powers, 1877:317; Wilson and Towne, 1978:396).

In the early 1870s the Nisenan adopted the religious cults that swept through much of northern California following the inception of the Ghost Dance by the Paviotso near Walker Lake, Nevada in 1868. Unlike northwestern California, where the cults persisted well into the twentieth century, the Nisenan abandoned the movement in the 1890s (Du Bois, 1939; Kroeber, 1932).

4.2.2 Prehistory

The study area lies directly adjacent to one of the most intensively archaeologically studied areas in California, the Sacramento/San Joaquin River Delta and adjoining sections of the Sacramento and San Joaquin Valleys. Beginning in the last decade of the nineteenth century, avocational archaeologists recovered thousands of artifacts from numerous sites in the Delta vicinity. A general synthesis of these early works is found in Schenk and Dawson (1929).

The next series of excavations in the general region were conducted by student crews from Sacramento Junior College (SJC). Beginning in 1931, various sites adjacent to the Cosumnes River and Deer Creek confluence were excavated. Joined a few years later by crews from the University of California (UC), the

SJC archaeologists continued their excavations within the Delta region. These efforts culminated in the milestone works of Lillard and Purves (1936) and Lillard, Heizer, and Fenenga (1939), both of which identified a sequence of cultural change within the Delta and adjacent vicinities.

The cultural sequence identified by Lillard and his colleagues (1936; 1939) contained three cultural periods (Early, Intermediate/Transitional, Late), which were based upon changes observed within the mortuary patterns and grave furniture recovered from their sample of sites. Lillard, Heizer, and Fenenga (1939) believed that the sequence represented a single cultural progression, the Early Period evolving into the Transitional Period, the Transitional Period evolving into the Late Period.

As more archaeological work was conducted within central California during the 1940s and 1950s, the cultural sequence developed by Lillard and his colleagues (1936; 1939) was refined and expanded to accommodate the additional data. The most significant of these revisions was Beardsley's (1954) Temporal and Areal Relationships in Central California Archaeology, in which the Central California Taxonomic System (CCTS) was formally developed.

As archaeologists in central California attempted to incorporate their data into the CCTS, the limitations of Beardsley's system became apparent. Alterations to the CCTS began appearing in the literature of the discipline, with the doctoral dissertation of Fredrickson (1973) being of the most consequence.

After many debates and numerous revisions, the cultural sequence for the central California region, first defined by Lillard and his colleagues (1936; 1939), currently stands as follows:

4.2.2.1 Windmiller Pattern (ca. 3000 B.C. – 500 B.C.)

The artifact assemblage characteristic of this cultural manifestation includes a variety of flaked stone, ground stone, baked clay, and shell items reflecting exploitation of diverse subsistence resources and acquisition of materials from distant geographic areas through trade. The burial pattern of Windmiller cemeteries and grave plots is unique in that virtually all of the interments are ventrally extended, with the head oriented to the west. The primary exception to this burial pattern is that aged females were buried in a flexed position. Social stratification can be inferred from the burial practices of Windmiller peoples. Males appear to generally have higher status than females, as evidenced in their deeper and artifactually richer graves. Social status may have been at least partially inherited, for some female, child, and infant burials contained elaborate grave furniture, while others lacked such wealth (Moratto, 1984:201-207).

4.2.2.2 Berkeley Pattern (ca. 500 B.C. – A.D. 500)

The Berkeley Pattern represents a gradual shift in adaptation and material culture that appears to have originated within the San Francisco Bay region. The subsistence practices of Berkeley peoples differs from that of the Windmiller peoples in that the use of acorns for food seems to have increased dramatically. The reliance on acorns is evidenced in the increase in mortars and pestles recovered from Berkeley Pattern sites. Other differences in material culture include the occurrence of an extensive bone tool kit, unique knapping techniques, and certain types of shell beads and pendants within Berkeley Pattern sites. Burial practices of Berkeley peoples also differed from those of Windmiller Pattern sites. No longer were corpses placed into graves extended towards the west. Instead, Berkeley Pattern burials are flexed with variable orientation (Moratto, 1984:207-211).

4.2.2.3 Augustine Pattern (ca. A.D. 500 – A.D. 1880)

The Augustine Pattern reflects local innovation in technology, as well as the incorporation of new developments with traits of the Berkeley Pattern. The artifact assemblages of Augustine Pattern sites indicate an increased reliance on hunting, gathering, and fishing. Acorns appear to have become

particularly important. Many burials continue to be flexed, however, cremation becomes the mortuary practice for high-status burials. Extensive trade networks developed to accommodate the resource and social needs of the burgeoning populations (Moratto, 1984:211-214).

4.2.3 History

Although it was not until after the discovery of gold at Sutter's Mill in 1848 that Euro-American people began entering the region en masse, the general area was visited by non-native peoples prior to that year. Gabriel Moraga, under the flag of Spain, led an expedition from Mission San Jose up to the Cosumnes and Feather Rivers in 1808. In 1813, Jose Arguello reached the Cosumnes River, where he battled a band of hostile Miwok. Narciso Duran and Luis Arguello left San Francisco in 1817 and passed through the region on their expedition. Arguello is credited with naming the Feather River, his El Rio de Las Plumas (Beck and Haase, 1974; McGowan, 1961).

Following the Spanish entrance, this region of California was visited by American trappers looking for new areas to exploit. Beck and Haase (1974) indicate that Jedediah Smith, Joseph Walker, and Ewing Young passed through the region on their journeys through California.

Captain John Sutter was granted his roughly 1,000 square mile "New Helvetia" ranch near present day Sacramento in 1839. It was from Sutter's Mill, near present day Coloma, that John Marshall discovered gold in 1848. Soon afterwards the famous gold rush began and the region became quickly populated with prospectors, entrepreneurs, and others seeking easy fortunes (Bean, 1977; Lavender, 1972; McGowan, 1961).

Local histories following on from Marshall's gold discovery for Placer and Sutter counties and Reclamation District 1000 are presented below.

4.2.3.1 Sutter County Portion of the APE

One of the smaller counties in the state, Sutter County is situated in the heart of the Sacramento and Feather River valleys. Settlement patterns in the southernmost portion of Sutter County followed a similar development pattern as southwestern Placer County. As unsuccessful miners staked out homesteads and started farming the region's grasslands, small hamlets were established in the outer regions of the county (Yuba City and Marysville, 2006).

One such community in the vicinity of the study area was Pleasant Grove, located 20 miles southeast of Yuba City. Initially known as Gouge Eye, the town of Pleasant Grove developed in the late 1860s around Charles Bishop's general store, at the present day intersection of Howsley and Pleasant Grove roads. When the post office was constructed in 1867, Gouge Eye was renamed Pleasant Grove Creek, which was later shortened to its present name in 1875. The town grew quickly in the early years, and by the late 1880s included shoemaker, doctor, town hall, barber, fraternal organizations like the Pleasant Grove Odd Fellows, a hotel, salon, blacksmiths, and general store. Early settlers included Ephraim Johnson, who purchased a 240-acre farm in 1878 just south of Pleasant Grove (south of the present day intersection of Pleasant Valley and Sankey roads and outside of the architectural APE) where he constructed a residence. Over the years he added 440 acres to his property, farming wheat, oats and barley on this land as well as more than 3,000 acres of leased land. By the mid 1880s, the town included a population of 100 people living on large farms. Grain, primarily wheat, and livestock formed the principal crops during this period, which continued into the first half of the twentieth century, while rice became an important crop in later years. Unlike the fruit regions of the county to the north and southeast, the area within the APE remained rooted in the production of grain throughout the twentieth century (Wagner, 2006; Crawford and Hurd, 1935; Lowe et al., 1990:59).

4.2.3.2 Placer County Portion of the APE

Placer County was created in 1851 from portions of Sutter and Yuba counties, two of California's original counties. Bordered by Sacramento County to the south, Lake Tahoe to the east, and Bear River to the north, many of the county's communities owe their origins to the gold rush. Nevertheless, in the southwestern portion of the county, or "the valley," gold was never found in any quantity, so beginning in the 1850s, former miners staked out homesteads and started farming the region's undulating grasslands (Davis, 1975:11,15; 1964). Even with gold mining as the major industry in the county through the 1880s, in the area around Roseville and Lincoln, farming continued to be the economic mainstay, along with timber harvesting. Bypassed by gold prospectors on their way to the goldfields, local farmers quickly built up large land holdings in the area (Abeloe, 1966:265).

One of the first areas to be settled in the vicinity of the study area was the Dry Creek District, which extends east, south and west of present-day Roseville, followed by Pleasant Grove District (located northwest of Roseville, extending west to Sutter County) where Stephen A. Boutwell, William Dunlap and others acquired large tracts of land (Davis, 1975:19; 1964:1-2). Local farmers quickly built up large land holdings along the various creeks that flow west into the American Basin. Called the "plains" by early prospectors on their way to the goldfields, early settlers came to the area in the 1850s. The region was eventually named the Pleasant Grove District after the creek which passed through. The Fiddyment family also settled in this district in 1856 when Elizabeth Jane Fiddyment and her young son, Walter F. Fiddyment Jr., joined her family on their large farm. Mrs. Fiddyment went on to become a large landholder, reportedly owning more than 13,000 acres in Placer County, while her son turned to raising sheep and cattle. The Fiddyment family maintained a strong presence in the region, expanding their holdings and improving their ranch complexes. Walter eventually became one of the largest grain and stock ranchers in the county, while his sons and grandsons went into the poultry business on the family land (Davis, 2002:10; U.S. Census Bureau, 1870; PAR Environmental Services, Inc., 2001; EIP Associates, 2004:4.8-3 through 4.8-6).

To the northeast of the Fiddyments, a New England farmer, George Whitney, settled on 180 acres about 3 miles northeast of present-day Rocklin in 1857. In this unoccupied and open land he established the Spring Valley Ranch, also known as the Whitney Ranch, where he successfully bred sheep. Between 1861 and 1873 he acquired numerous parcels of land, some under the Pre-emption Law of 1841, some former homesteaded lands purchased outright, and some from the Southern Pacific Railroad, ranging in size from 40 to 2,000 acres. The Whitney Ranch grew to encompass more than 20,000 acres of land in the Sacramento Valley, 2,000 acres of land at the confluence of the Feather and Sacramento Rivers (in Sutter County), 15,000 acres of private land within Tahoe National Forest, and grazing rights for sheep on 50,000 acres of railroad and government land. In addition to stock raising, the Whitney Ranch also produced wheat, with 1,200 acres in production in 1872. After 1875, Whitney's son, Joel Parker Whitney, began cultivating all available grain land on the ranch, eventually planting more than 8,000 acres of wheat. The ranch exported its grain crops and livestock from Whitney Station (located near the present day intersection of Sunset and Industrial boulevards), 3 miles west of the Whitney Ranch (Thompson and West, 1882:246-47; Donaldson, 1958:C2-3).

The construction and development of the railroad industry in the 1860s and 1870s played a significant role in the development of the region. The construction of the California Central Railroad (CCRR), an 18½-mile line that would linkup the cities of Marysville and Sacramento by means of a connection with Sacramento Valley Railroad, and later the Central Pacific Railroad, which was absorbed into Southern Pacific railway system, led to the establishment of Lincoln and Roseville (Tuturo, 2004:262-263; Lardener and Brock, 1924:1043; Thompson and West, 1882:273; Hart, 1978:363; Davis, 1975:29). Agriculture remained first in the region's economy into the twentieth century, with Roseville eventually becoming the shipping and trading center for southern Placer County. Despite this, the area's population remained low,

even after the construction of the state highway (LRN 3) from Sacramento (through Roseville) to Lincoln in 1909 (Caltrans, no date; California Highway Commission, 1922:201; Department of Public Works, California Highway Commission, 1922).

While agricultural production continues to be an important land use in southwestern Placer County, the region began undergoing extensive development following World War II as the accelerated growth rate in the greater Sacramento metropolitan area began impacting surrounding communities. The completion of SR 65 in the westernmost portion of the APE in 1971, and the growth of Lincoln, Roseville and Rocklin that began in the 1960s, has impacted the rural character of western Placer County. Suburban housing and commercial developments just south of the project area and industrial development dating from the late 1960s along Industrial Boulevard occupy much of the land that was once open range. Since 1980 new employment centers have been established in an emerging area of high-tech companies locating along the SR 65 corridor, and many new commercial and residential developments have been constructed.

4.2.3.3 Reclamation District 1000

In the forty-year period from 1870 to 1910, Sutter, Placer and other mid-valley counties remained sparsely populated and some actually declined in population. A completely new pattern emerged between 1910 and 1930 as large numbers of new settlers came to the Sacramento Valley, many attracted by improved flood control systems, irrigation, and the promising development of fruit and nut orchards. Unlike wheat farming or dairying, orchard culture provided a viable family income from relatively small parcels of land. Agrarian visionaries foresaw vast parts of the region populated with small prosperous farms living on 10- to 20-acre farms. Through reclamation and irrigation of the Sacramento Valley during the late nineteenth and early twentieth centuries, the number of people and individual farms expanded tremendously in the fruit growing regions of Sutter and Yuba counties during this period (McGowan, 1961:1; Jelinek, 1924:55-58, 61-63).

With the influx of population in Sutter County in the late nineteenth century, the state sought to control seasonal flooding while promoting agriculture in the American Basin. Great strides had already been made with construction of a series of levees, river gauges to monitor water levels and the establishment reclamation districts. The region had been devastated by major floods in 1861-1862 and again in 1875, and while the government had severely restricted hydraulic mining in the mid 1880s, the region was still vulnerable to damage from mining debris and flooding. Use of much of the land in the southernmost portion of the county was limited to seasonal grazing and some farming on higher ground, and for fishing and hunting (USGS, 1892, 1910a, 1910b; Dames & Moore, 1995:40-41; Gordon, 1988:68-70). New reclamation efforts in the first decade of the twentieth century spurred the state legislature to create Reclamation District No. 1000 (RD 1000) in 1911. It later became part of the Sacramento Valley Flood Control Project. Located in northeastern Sacramento and southern Sutter counties, this district consisted of an area of approximately 55,130 acres, located east of the Sacramento River and extending to the Western Pacific Railroad tracks (currently part of the Southern Pacific). It included drainage canals, pumps, levees, ditches, pumping plants and a system of roads. After drainage and construction of levees, the Natomas Consolidated Company land surveyed and subdivided the land.

Part of the construction included the Natomas East Main Drainage Canal, which is crossed by the western ends of all of the project's alternatives reaching SR 70/99. To promote RD 1000 by demonstrating land productivity, Natomas Consolidated leased large acreage blocks for wheat and grain crop production, thus establishing a pattern of large acreage, single-crop land use. The company also built a 60-mile network of roads across RD 1000 to provide access to drainage canals for construction and maintenance, as well as to serve farm roads to parcels within the district's various subdivisions. This network was originally comprised of dirt roads (roughly two lanes wide) that the Natomas Company graded. Most of these roads were paved with macadam or concrete during the 1920s and 1930s. They generally followed the township

and section survey lines and the drainage canals to form large regularly spaced grids in the landscape (Dames & Moore, 1995:29-32, 40-41, 62, and 99; Bonte, 1931:181 and 183; USGS, 1994, 1953a; Commissioner of Public Works, 1905; House Document Number 81, 1911). Despite these improvement efforts, selling land in the district was a slow process into the 1940s (Dames & Moore, 1995:14).

5.0 INVENTORY METHODS

5.1 INTRODUCTION

Because the current undertaking consists only of the preservation of a transportation ROW, the archaeological APE for this Tier 1 investigation consists of the area within the boundaries of the corridor alignment alternatives. Furthermore, because the project has yet to be designed, the APE is currently limited to the ground surface only and there is no vertical APE. An APE encompassing areas that potentially would be disturbed by construction activity, as well as areas that potentially would be used for construction excavation, will be developed and assessed in Tier 2.

The APE for the project is depicted on Figure 5-1 (sheets 1 through 4). The approved APE is provided in Appendix B.

In accordance with stipulation of the Parkway PA (Appendix A), only the alignment common to all build alternatives (Figure 5-2) was subject to archaeological pedestrian reconnaissance. The common alignment occurs primarily in the Eastern Segment of the study area, although a small section of common alignment also is found in the eastern extent of the Central Segment.

As depicted in Figure 2-1, the remaining portions of the APE are comprised of a series of interconnected corridor alternatives. Archaeological issues in these corridors, as agreed upon by the signatories and concurring parties of the PA, were addressed through the use of environmental factors including length of stream corridor, area above floodplain, and area of farm land to rank the archaeological sensitivity of the project alternatives. The results of the ranking efforts would then be used in the Tier 1 EIS/EIR.

The ASR study consisted of background and archival research, contact with the Native American Heritage Commission (NAHC) and local Native American groups and individuals identified by the NAHC, an intensive archaeological pedestrian reconnaissance of the previously unsurveyed portion of the common alignment where access had been secured, and the development and use of a predictive model based on environmental factors to assess the relative archaeological sensitivity of the project alternatives.

The majority of the common alignment has been previously investigated in the recent past. As depicted on Figure 5-2, the corridor bisects a number of areas currently under environmental review for other development project proposals. Environmental review of these projects has included archaeological investigations, and the results of these investigations have been used in this report to characterize the baseline conditions of the corridor analysis.

Mark R. Hale, URS Senior Project Archaeologist, prepared this Archaeological Survey Report (ASR) to document cultural resources identification efforts in the project's Area of Potential Effect (APE). Pedestrian archaeological reconnaissance was led by URS Senior Project Archaeologist Mr. Hale. Mr. Hale holds a B.A. in Anthropology from the University of California, Berkeley, and has completed his course work, completed his research, and defended his thesis for an M.A. in cultural resources management from Sonoma State University. He has more than 20 years of professional experience in conducting and managing cultural resources. Project oversight was provided by Mr. Brian Hatoff (URS Senior Archaeologist). Mr. Hatoff received both his B.A. and his M.A. in Anthropology from the University of California, Davis; is a Registered Professional Archaeologist, and has more than 30 years of professional experience in California and the Great Basin.

5.2 COMMON ALIGNMENT

As mentioned above, an agreement between FHWA, OHP, Caltrans, and SPRTA states that only the "common alignment" of the Parkway need be physically inventoried for archaeological resources for

preparation of the Tier 1 EIS/EIR. The common alignment occurs primarily in the Eastern Segment of the study area; however, a portion also occurs in the eastern portion of the Central Segment (Figure 5-2).

Given the recent dates of archaeological surveys on several parcels through which the common alternative passes, with Caltrans approval, some parcels were not reinventoried for archaeological resources. These parcels are:

- Amoruso Property (Brookfield) (ECORP Consulting 2006)
- Placer Ranch (Hale, 2004)
- Reason Farms Retention Basin (Hale, 2002)
- SR 65 Widening Project (Norton, 1998)

Prior to the initiation of field efforts, letters requesting access were sent to relevant landowners. Figure 5-2 identifies the parcels found within the common alignment. Landowners did not respond to request for access to conduct surveys on two properties: Macor Incorporated Property APN.017-061-044 and Whitney Industrial Park APN.017-061-045. It should be noted, however, that although access to these two parcels has not been secured for the current effort, the majority of both had been previously inventoried with negative results (Derr, 1997; McGowan Seldner, 1985). Furthermore, based on past surveys within the immediate vicinity of these parcels (see Section 3.0), the overall archaeological sensitivity of these parcels is low. This supposition is based on the fact that intensive archaeological surveys have for the most part proved negative.

The survey corridor, comprised of parcels within the common alignment, was subjected to an archaeological pedestrian reconnaissance following the guidelines proposed by King (1978). Specifically, the previously unsurveyed portions of the common alignment where access had been secured were visually inspected using 20-meter (66-foot) parallel transects.

In general, ground visibility within the surveyed are of the common alignment was poor. At the time of the survey, dense growth of grasses obscured the ground surface. To help alleviate the situation, in areas where non-agricultural vegetation obscured the ground surface, approximately 20 cm by 20 cm patches were occasionally cleared with hand tools or footwear to increase ground visibility. Attention was focused on potential vernal pools and alongside minor drainages, rodent burrow spoils, vehicle tracks, recently graded exposures, and erosion gullies. Recently excavated and graded areas adjacent to the survey area were also inspected (i.e., Sunset Boulevard extension).

5.3 ALTERNATIVES

5.3.1 Predictive Model

As indicated previously, signatories to the PA agreed that only the common alignment of the Parkway needed to be inventoried for archaeological resources prior to the preparation of the Tier 1 EIS/EIR. The portion of the archaeological APE outside of the common alignment consists of the remaining five interconnected corridor alignment alternatives described in Chapter 2. The draft PA outlines that a predictive model would be used to assess the various alternatives for their relative archaeological sensitivity. These data could then be used in the Tier 1 EIS/EIR to make conclusions about potential impacts to archaeological resources.

For the current investigation, the predictive model is a GIS-based application that assesses the relative sensitivity of each alternative corridor based on various, common environmental factors known to influence past human activity in the project vicinity. This is based on the assumption (see Bettinger, 1977) that:

> "… culture systems are adaptations to their environments, and, as such, their subsistence and settlement patterns are structured to fit the existing patterns of regional resource distribution."

Although some, including Bettinger, have used such models to predict site locations and/or densities within a given area with varying levels of success, this was not attempted herein for it is believed that there is insufficient data at this time to make more than general statements of archaeological sensitivity for the current APE. In fact, Bettinger warns that:

> "Predicting the density of archaeological sites is a difficult proposition at best. Frequently the information necessary for the proper computations is unavailable, requiring more assumptions than are desirable" (Bettinger, 1977:222).

It should also be noted that the corridor chosen for preservation would ultimately be subjected to intensive pedestrian reconnaissance during Tier 2.

The environmental factors used in this investigation are those known to influence (either attract or deter) past human activity in the study area based on archaeological evidence, ethnographic data, and historic land-use information.

As the project's corridor alignment alternatives are located in relatively close proximity to each other, the environmental setting does not differ significantly between alternatives. For this reason many commonly used environmental factors such as slope and exposure cannot effectively differentiate between alignments. Further complicating matters is the fact that environmental conditions in the study area were significantly altered in the twentieth century. Vast tracts were reclaimed, stream courses altered, and wetlands were drained to create valuable farmland. Riparian vegetation was removed in order to increase sunlight to farmlands. As such, it should be noted herein, that the modeling in this report was based on available data. It should also be noted that environmental factors were not ranked and calculations were not adjusted based on the corridors' lengths.

Given the basic human need for water, within the Sacramento Valley as elsewhere in the world, both prehistoric and historic settlement tended to intensify around perennial water sources. Besides providing direct sustenance to human populations, water also provides sustenance to both plant and animal resources used by human populations.

The majority of previously recorded prehistoric sites within the region are situated along the perennial watercourses that flow toward the Sacramento and American Rivers (as well as along these two major waterways). Prior to the construction of the levees and diversion canals that were constructed in the early part of the twentieth century, local hydrology was well suited to support a myriad of floral and faunal species important to the diet of prehistoric populations and the ethnographic Nisenan. Many previously investigated archaeological sites in the region, including those where only surface observations were possible, have produced faunal remains from riparian-adapted species. Similarly, baked clay net weights with impressions of tule wrapping have been noted in site collections, providing evidence for use of this plant by native populations. The presence of bone and antler fishhooks, harpoon toggles, fish spears, and net weights of stone and clay among sites in the region also attest to the importance of water–based resources.

Early historic populations likewise tended to focus settlement near perennial waterways. In fact, many early historic homesteads were placed atop prehistoric deposits as evidenced by numerous multi-component archaeological deposits as well as the non-native vegetation including palm, olive, black walnut, English walnut, plum, peach, apricot, apple, pomegranate, and various citrus often noted on archaeological site forms from the region.

Given the above circumstances, proximity to stream courses clearly elevates sensitivity in the study area. The total length in miles of existing stream course within each corridor alignment alternative was thus one factor used to assess the archaeological sensitivity of the project alternatives. A similar approach of using length of stream corridor (converted to "fish miles") was used in the landmark study by Baumhoff (1963) to analyze prehistoric settlement. It should be noted, however, that there is currently no evidence that any of the streams bisecting the current APE historically supported runs of anadromous fish (GANDA, 2006).

Proximity to perennial stream courses can also provide insight into the issue of buried archaeological resources (i.e., those with no surface manifestation). Buried archaeological resources are of concern as it is well recognized that natural cycles of soil erosion and deposition have buried archaeological resources, often deeply (Meyer and Rosenthal, 1997; Rosenthal and Meyer, 2004a, 2004b). Implementation of a project with ground-disturbing activities could inadvertently expose such a resource, possibly resulting in both unanticipated impacts and project delays.

Assessment of the potential for the current project to encounter buried archaeological deposits is somewhat problematic given that the project has not yet been designed. As described previously, the project consists of selecting and preserving a corridor for the future Placer Parkway. During Tier 2, when specific project components can be analyzed, the issue of buried archaeological resources can be addressed more intensively.

For this Tier 1 analysis, the total length of stream course is also used to rank the likelihood of each alternative to contain buried archaeological resources. As indicated by Rosenthal (2005) distance to water has proven to be an important predictor of archaeological site locations throughout central California" and as such, it is adjacent to areas of surface water that they focus their geoarchaeological investigations. For this study, it is assumed that the greater the total length of stream corridor within an alternative, the greater the potential for the presence of buried archaeological resources as well as those exhibiting surface manifestations.

Although other water-oriented environmental features, including wetlands, vernal pools, and riparian habitat, may have once drawn both prehistoric and historic populations, for purposes of the current analysis it was determined that the current altered distribution in the region prevented the meaningful use of such features as determinants of archaeological sensitivity.

Although the presence of water is a natural draw for both prehistoric and historic populations, this can also present an obstacle to settlement in areas where the risk of flooding is high. The majority of previously recorded prehistoric and pre-reclamation-era historic archaeological sites in the region are situated above historic floodplains including such areas as natural levees along the watercourses, upon "high spots" within natural floodplains, and in the uplands above the floodplains. This pattern is apparently driven by the human preference for inhabiting high, dry ground located in close proximity to water.

As current reclamation, irrigation, and flood control efforts have drastically altered the natural flood patterns, the use of current flood mapping data (e.g., 100-, 200-, and 500-year floods) is of limited value. For example, most prehistoric and pre-reclamation historic archaeological sites would have received little impact from flooding prior to the construction of dams and levees on the Sacramento and American Rivers and their respective tributaries. Today, however, seasonal flooding routinely inundates many sites. In this region, this is perhaps most evident in the large number of sites recorded along Dry Creek near Roseville. These sites become flooded when water backs up because it is restricted through the Natomas East Main Drainage Canal.

As a means to identify pre-reclamation floodplains, historic sources were consulted. Pre-reclamation reports and maps (Commission of Engineers, 1904; Commissioner of Public Works, 1895; Hall, 1887)

reveal that the margin of the floodplain prior to the reclamation and flood control projects of the historic and modern eras was located at approximately 30 feet above mean sea level. Based on available GIS-ready FEMA topographic data, an elevation of 33 feet (i.e., 10 meters) above mean sea was determined to be the approximate break between floodplain and non-floodplain. The total amount of acreage at or above this elevation was used for the assessment of general archaeological sensitivity of the alternative corridors

As much of the study area was converted to agricultural use following the reclamation efforts of the early twentieth century, it was determined that identifying those areas potentially most attractive to agricultural pursuits would be an appropriate avenue of investigation. As developed land was avoided during the screening process, however, the project alternatives are comprised nearly entirely of agricultural lands, including both dry and irrigated farming, and grazing. Although grazing has and continues to occur in the study area it is a much less intensive agricultural pursuit than the raising of crops (farming), which is more likely to remain physically evident over time.

The California Department of Conservation (CDC) has classified soils in terms of their desirability as farmland. Several categories are recognized and mapped, including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance. In addition to these, both Grazing and Urban Built-up lands are also mapped. Using these available data, total acreage of farmland was tabulated to assess the archaeological sensitivity of the project alternatives.

Environmental data were entered into URS' Geographical Information System (GIS) using ArcGIS 8.3 software, which consists of the following modules: ArcMap, ArcCatalog, and ArcToolbox. The development of a GIS for the project involved a series of tasks, including collection of spatial data from a variety of sources; importation of that data into ArcGIS 8.3; projection of the data into Stateplane Feet NAD 83 Zone II; development of new data from pertinent existing data or input from project team members; creation of metadata for each data layer; map and figure creation displaying the data in a useful manner; data version control and maintenance; and input into an analysis program called Community VIZ by Moore, Iacofano Goltsmith (MIG) and URS Corporation. URS created the figures and numeric data presented below.

Spatial data were collected from a variety of sources. Aerial photography was obtained from AIRPHOTO USA. Images of the project area were taken in April 2001 and again in November 2002. The color images have a 2-foot pixel ground sample distance. The 2002 images are used as the base for most maps. Several existing GIS data layers were gathered from Placer County, Sutter County, Sacramento County, City of Roseville, DKS Associates, North Fork Associates, Sacramento Area Council of Governments (SACOG), CH2M Hill, Federal Emergency Management Agency (FEMA), United State Geological Survey (USGS), U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), California Historical Resources Information System, and California Department of Conservation. Project team members created some data by aerial photograph interpretation, input from resource specialists, or through analyzing existing data.

Based on the data collected and displayed on maps created through GIS, total land areas were determined (in acres or length) for the environmental factors described above. Specifically, the total length of stream course, the total amount of land above historic floodplain (i.e., equal to or greater than 10-meter [33-foot] elevation), and the total amount of farmland were the environmental factors used to differentiate the archaeological sensitivity of the various corridors.

5.3.2 General Land Office Plat Maps

To further assess the historic archaeological sensitivity of the various project corridors, General Land Office surveyor's plat maps were also consulted. The United States Public Land Survey (USPLS) system

was established in 1785 with the Geographer of the United States as the director. This began the system of subdividing land areas into regular parcels, generally Townships comprised of 36 sections, each section being one square mile. Divisions of these parcels, often 160-acre quarter sections, could then be sold to provide income for the Federal treasury. In May of 1796 the post of Surveyor General was established, who was given the power to deputize surveyors to carry out land surveys. In April of 1812 the General Land Office (GLO) was established within the Department of the Treasury and in 1849 the GLO was reassigned to the Department of the Interior.

In the latter half of the nineteenth century, the GLO was responsible for surveying the largely unsettled lands of the western United States in response of an ever-increasing number of homesteaders. Having the lands surveyed made it easier to locate and legally describe the homesteaded parcels.

The value of GLO plat maps is that they depict historic features that may be represented in the archaeological record. Data retrieved from these maps is used here to complement the environmental parameters discussed in the previous section. It should be noted that although GLO plat maps are valuable tools, their accuracy is somewhat limited. According to the Iowa State University GLO Project "modern surveyors describe the GLO survey as one with low accuracy and lack of precision" (http://www.glo.gis.iastate.edu/pinfo/info_faq.html#21). The web site goes on to say that "probably the most important reason that the surveys were not as concerned with accuracy as surveys are today is because the price of land was low ... Low land prices did not warrant any delay in the survey procedure."

It should also be pointed out that GLO surveyors were only required to survey (i.e., follow) section lines. As such, the surveyors tended to only plot the features they encountered along the section line being followed. This is perhaps most evident in the case for minor roadways where only the section of road crossing the section line is plotted. Although the complete course of some, more major roadways are depicted on GLO maps, this may be simply a case of "plotting" the alignment by drawing a line to connect the sections of road actually encountered (i.e., a case of connecting the dots).

As a means to identify potential historic archaeological resources and thus assess the archaeological sensitivity of the project alternatives, the GLO plat maps (USDI 1855a, 1855b, 1868, 1871) were pieced together to form one map. The Parkway alignments were then overlaid on the composite GLO plat map. Although the accuracy of the GLO maps is limited, by using the section grid lines as reference points a satisfactory overlay can be produced and the location of potential historic archaeological resources identified.

6.0 STUDY FINDINGS AND CONCLUSIONS

As a means to determine the potential effects of the project on archaeological resources, a number of tasks were completed. As previously discussed, these comprised archival research, Native American consultation, a pedestrian reconnaissance of the common corridor alignment alternatives, and the development and use of a predictive model to determine the general archaeological sensitivity of the five corridor alignment alternatives. Because the screening process was used to avoid archaeological sites, no previously recorded historic or prehistoric archaeological sites occur within the APE for the project.

6.1 COMMON CORRIDOR ALIGNMENT ALTERNATIVES

An archaeological survey of previously unsurveyed portions of the common corridor alignment alternative was conducted on June 2-3, 2006. All areas within the archeological APE were subjected to intensive pedestrian survey using transects spaced no more than 20 meters (66 feet) apart.

Prehistoric sites in the general vicinity typically are manifested by darkened midden soils, often with some amount of shell, ground-stone artifacts, fire-affected rock, animal bone, and chips and tools of obsidian and/or cryptocrystalline silicates. Historic–era sites range from remnants of late nineteenth and early twentieth century homesteads including structural remains, trash deposits, privies and cisterns to mid-twentieth century refuse scatters. No prehistoric or historic archaeological materials, evidence of archaeological deposits, or indications of occupation were found on the surface within the APE.

It is Caltrans' policy to avoid cultural resources whenever possible. At this time no further archaeological work is necessary within the common corridor alignment alternatives. The selected corridor alignment alternative will be subjected to pedestrian archaeological inventory during Tier 2 efforts.

6.2 REMAINING CORRIDOR ALTERNATIVE ALIGNMENTS

6.2.1 Predictive Model

Using environmental factors known to both attract and deter past human settlement in the project vicinity, the relative archaeological sensitivity of the remaining corridor alignment alternatives was determined. Specifically, the total length of stream course, the total amount of land above the historic floodplain (i.e., at or above an elevation of 10 meters [33 feet] above msl), and the total amount of farmland were the environmental factors used to determine the archaeological sensitivity of the various corridors.

As depicted in Figure 2-1, each alternative shares some portion of its length with other alternatives. Rather than present the calculations for the portions of each alternative by segment, for ease of analysis and presentation, the data for each alternative have been collapsed and tabulated together (Table 6-1). Data for the Eastern Segment are not included in these calculations, as it comprises the common alignment that was subjected to archaeological pedestrian reconnaissance as described previously.

As can be seen in Table 6-1, Alternative 1 contains the greatest length of stream course, the most acreage above floodplain, and the most acreage of farmland. Using the criteria described above, Alternative 1 is the most archaeologically sensitive alignment alternative. Alternative 3 is the next most archaeologically sensitive alignment, ranking second in both total acreage above floodplain and total acreage of farmland and scoring third in total length of stream course. Alternative 2 follows, ranking second total length of stream course and third for both total land above floodplain and total acreage of farmland. Alternative 4 is next, ranking fourth for all identified criteria. Lastly, Alternative 5 ranks fifth for all categories, making it the least sensitive for archaeological resources.

Table 6-1
Predictive Model for Assessment of Archaeological Sensitivity of Project Alternatives (Excluding Common Alignment)

Alignment	Total Miles of Stream Corridor (Ranking)		Total Acreage Above Floodplain (Ranking)		Total Acreage of Farmland (Ranking)	
Alternative 1	3.0099	(1)	950.8	(1)	1238.4	(1)
Alternative 2	1.2942	(2)	868.8	(3)	1153.10	(3)
Alternative 3	0.9148	(3)	904.7	(2)	1188.1	(2)
Alternative 4	0.7720	(4)	782.4	(4)	953.7	(4)
Alternative 5	0.6906	(5)	778.2	(5)	945.0	(5)
Note: 1 = most sensitive 5 = least sensitive						

The total length of stream corridor, as described previously, can also provide insight to the potential for a corridor to contain buried archaeological deposits. Based on total stream corridor length, it can be predicted that Alternative 1 is the most likely corridor to contain buried archaeological resources while Alternative 5 is the least likely (Table 6-1).

As stated previously, the general archaeological sensitivity of the current archaeological APE for both prehistoric and historic archaeological resources is low. This is based on the fact that while resources have been identified, relatively few archaeological sites have been identified given the total acreage of land subjected to archaeological survey.

6.2.2 General Land Office Plat Maps

The current Placer Parkway project area is situated in lands contained within four Townships, specifically T10N/R4E, T11N/R4E, T11N/R5E, and T11N/R6E. These Townships were mapped by the GLO in 1855 (T11N/R5E, T11N/R6E), 1868 (T11N/R4E), and 1871 (T10N/R4E).

As can be seen on Figure 6-1, the common corridor alignment of Placer Parkway is situated in the northwestern corner of T11N/R6E and passes into the northeastern corner of T11N/R5E in a westerly direction before turning southward towards what is labeled on the plat map as Dry Creek (today's Pleasant Grove Creek). South of the Pleasant Grove Creek crossing (labeled on GLO map as Dry Creek), the corridor begins dividing into the five project alternatives. It is from this point southwestward that the current exercise is focused. The various historic features intercepted by Placer Parkway corridor alignment alternatives are discussed below.

It should be noted herein that various mapping inaccuracies, as discussed in Section 5.2.2, are depicted on Figure 6-1. Perhaps the clearest is along the section line separating Townships T11N/R4E and T11N/R5E. As is quite apparent, the course of Dry Creek and the unnamed road paralleling the north side of the stream on one map do not align with the same features on the adjacent map. A discrepancy of approximately one-quarter mile exists between how these features were mapped on their respective GLO plat maps. Other incongruities include the lack of a connection between the course of Pleasant Grove/Dry Creek between Townships T11N/R5E and T11N/R6E; the course of Slough/Dry Slough, also between Townships T11N/R5E and T11N/R6E; and the numerous sections of road plotted as sections of dashed lines that have neither a beginning nor an end and do not appear to connect to anything. These small sections of road, all occurring in the immediate vicinity of a section line, are prime examples of the surveyor only plotting what was encountered along the section line being followed.

6.2.2.1 Roads

As can be seen on Figure 6-1, the paths of several historic roadways are bisected by the corridor alignment alternatives. Although the common alignment is not part of the sensitivity exercise, it can be seen on Figure 6-1 that the corridor bisects an unnamed road in the northwestern corner of Section 8 of T11N/R6E, as well as another, less fully plotted and also unnamed road in Section 7 of T11N/R6E, and Section 12 of T11N/R5E.

A northwest-to-southeast–trending roadway is intersected by all corridor alignment alternatives as they begin branching out south of Dry Creek in Section 15 of T11N/R5E. This unnamed roadway parallels the south side of Dry Creek, appearing to cross the stream in Section 9 of T11N/R5E). It thus appears that this unnamed road may have crossed Dry Creek at the same location as the Sacramento and Nevada Road discussed below.

Further west, within the central section of the project area, all the alternative corridors also bisect the course of the Sacramento and Nevada Road. The course of the Sacramento and Nevada Road is nearly due north/south across the project area. According to Hoover et al. (1990:259), the Sacramento and Nevada Road was used by freight teams traversing the Sacramento Valley. With the building of the California Central Railroad through this area in the 1860s, staging and teaming along the Sacramento and Nevada Road, as well as elsewhere in the valley, became unnecessary.

Within Township T11N/R4E, another "Road" is plotted in the project area. As depicted, this north-south–trending road appears to go no further south than the northeastern corner of Section 26. This is likely an omission of the GLO surveyor as discussed in Section 5.2.2, as just barely visible in the northeast corner of Section 2 of T10N/R4E is the Marysville Road. It is possible that the Marysville Road extending northward from the GLO plat map of T10N/R4E is the same as the "Road" discussed above. If these sections of plotted road connect, as inferred here, all corridor alternative alignments of the Parkway intersect this potential resource.

What is labeled as a Stage Road is bisected by all of the alternative alignments in the western end of the project area in Township T11N/R4E. Running north to south where the corridor alignment alternatives bisect its path, this Stage Road begins turning to the northwest at the border between Sections 16 and 21. A branch of this unnamed Stage Road extends southeastward, perhaps connecting with the aforementioned Marysville Road.

A number of smaller, unnamed, and not fully plotted road segments occur within or immediately adjacent to various project alternatives. For example, Alternative 1 bisects a small section of road in Sections 33 and 34 of T11N/R5E. Although only a small section of this unnamed road is depicted, it is clearly on a course to intersect the Sacramento and Nevada Road near the course of Alternative 2. Other similar, only partially plotted road segments are depicted in Sections 21 and 22 of T11N/R4E, Sections 24 and 25 of T11N/R4E, Sections 27 and 34 of T11N/R4E, and Sections 35 and 36 of T11N/R4E.

As all alternatives intersect all of the major roads, or at least can be comfortably inferred to intersect them, as well as bisect a number of not fully plotted ancillary roads, no one corridor alternative alignment is more or less archaeologically sensitive then another, based solely upon the roads intersected along their length.

6.2.2.2 "House"

Besides the aforementioned roads, only one other potential historic archaeological resource was identified from the GLO maps within any of the potential corridor alignment alternatives of the Parkway project. Labeled as a "house" on the GLO plat map for Township T11N/R4E, the potential resource is situated in

the southeast quadrant of Section 23 directly within the path of the corridor alignment alternative common to both Alternatives 4 and 5, where it intersects Sankey Road at its easternmost point. No other information is known about the structure other than it was present by 1868. Air photos of this location reveal that the vicinity is currently under cultivation.

Intact remnants of this structure would likely represent an important cultural resource. Unfortunately, this section of the project area has not been previously subjected to an intensive archaeological pedestrian reconnaissance. As such, it is unknown whether remnants of this structure occur within the current APE. The potential presence of this structure elevates the archaeological sensitivity of both Alternatives 4 and 5.

Although a potential historic archaeological resource was identified in Alternatives 4 and 5, elevating the archaeological sensitivity of both of these corridor alignment alternatives, given the limitations in the original GLO mapping and the fact that the area has been plowed, this finding does not outweigh the sensitivity of the alternative corridors as determined in Section 6.2.1.

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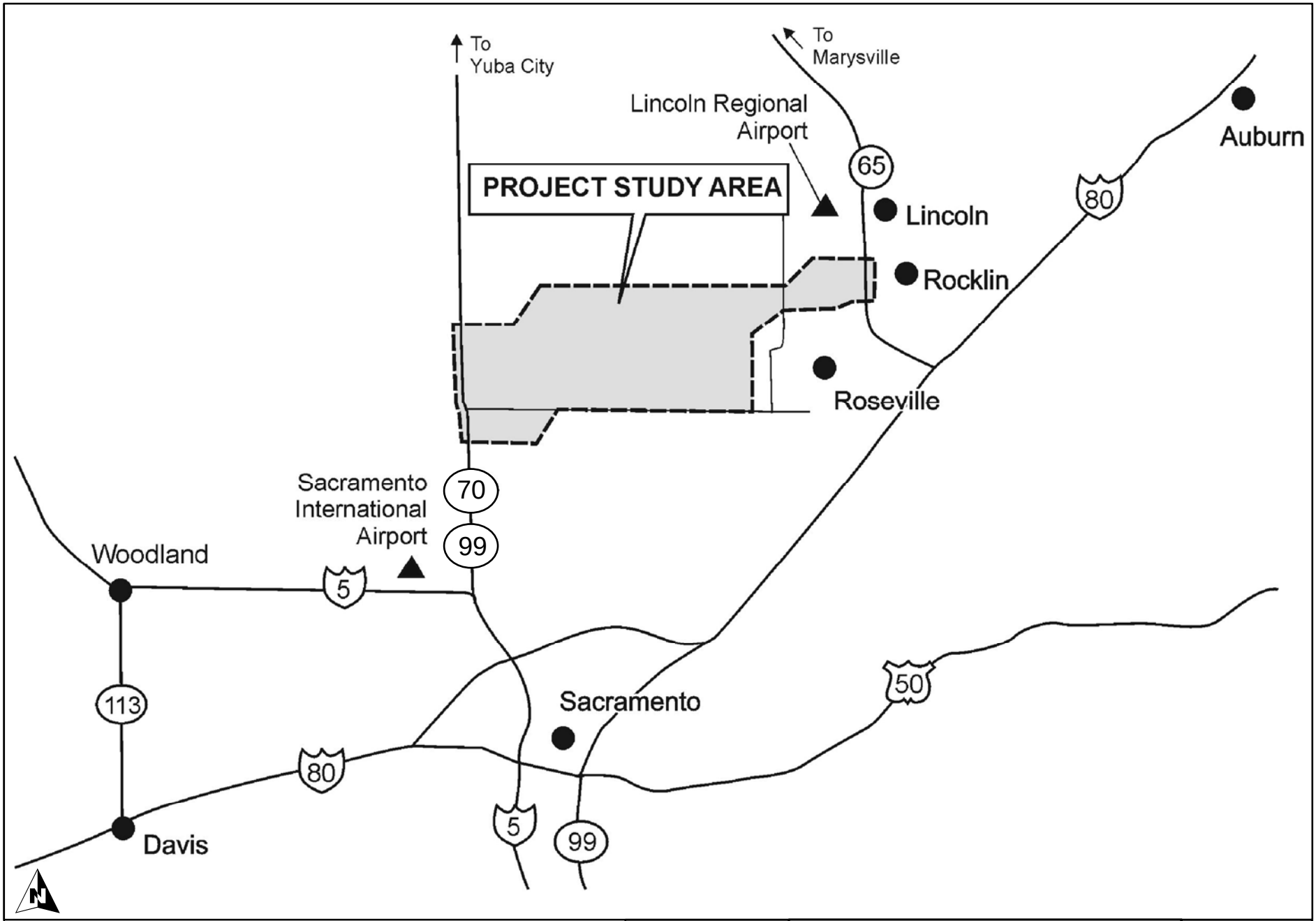
Figures



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PLACER PARKWAY

Tier 1 EIS/EIR
Archaeological
Survey Report

Project Location

Figure 1-1

June 2007

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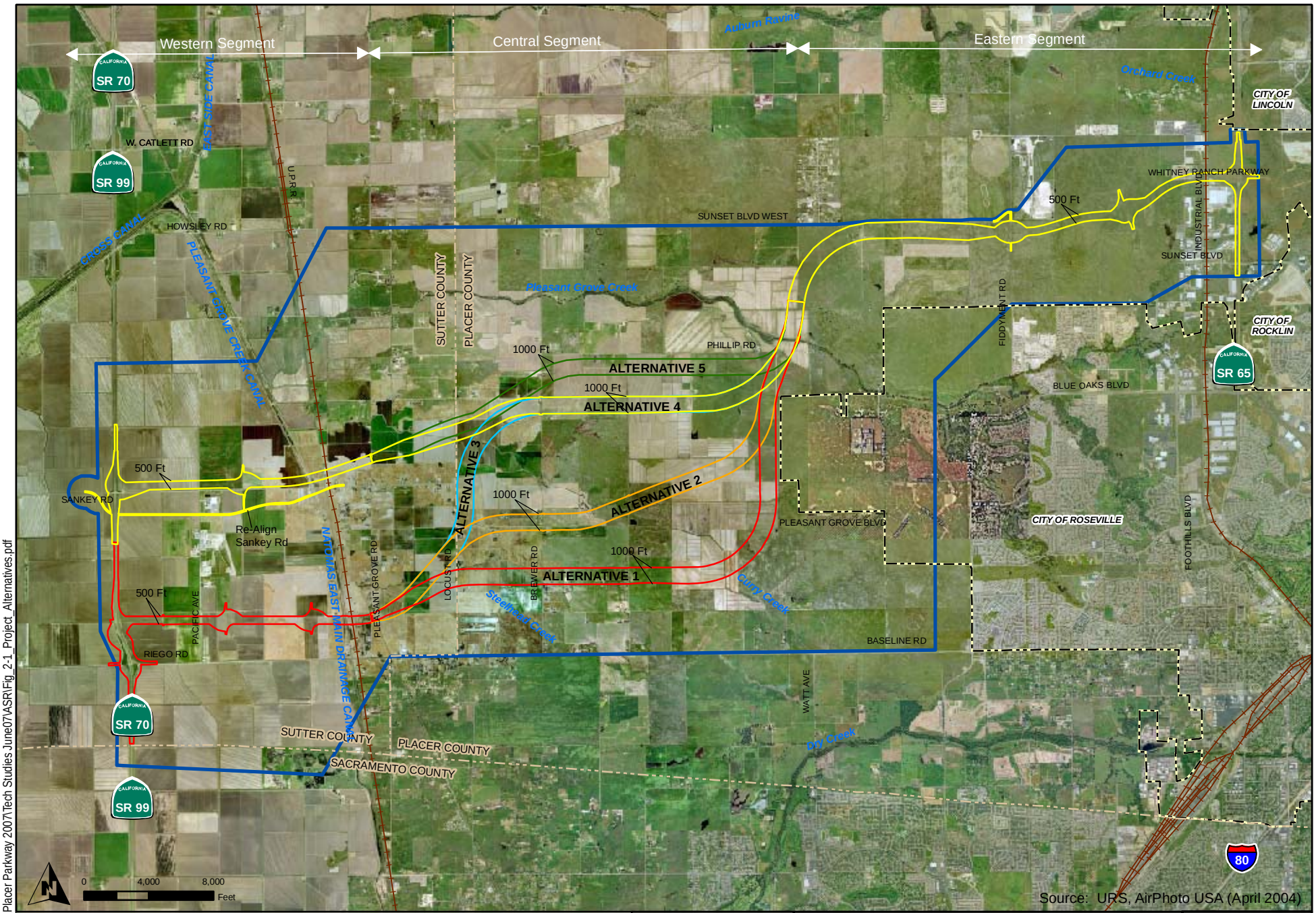
Western Segment
Central Segment
Eastern Segment
SR 70
SR 99
SR 65
SR 80
W. CATLETT RD
HOWSLEY RD
SANKEY RD
RIEGO RD
SUNSET BLVD WEST
SUNSET BLVD
WHITNEY RANCH PARKWAY
PHILLIP RD
BLUE OAKS BLVD
PLEASANT GROVE BLVD
BASELINE RD
FIDDYMENT RD
INDUSTRIAL BLVD
FOOTHILLS BLVD
WATT AVE
PACIFIC AVE
PLEASANT GROVE RD
LOCUST RD
BREWER RD
SUTTER COUNTY
PLACER COUNTY
SACRAMENTO COUNTY
CITY OF LINCOLN
CITY OF ROCKLIN
CITY OF ROSEVILLE
Auburn Ravine
Orchard Creek
Pleasant Grove Creek
Curry Creek
Steelhead Creek
Dry Creek
EAST SIDE CANAL
CROSS CANAL
PLEASANT GROVE CREEK CANAL
NATOMAS EAST MAIN DRAINAGE CANAL
ALTERNATIVE 1
ALTERNATIVE 2
ALTERNATIVE 3
ALTERNATIVE 4
ALTERNATIVE 5
500 Ft
1000 Ft
Re-Align Sankey Rd
0
4,000
8,000
Feet
Source: URS, AirPhoto USA (April 2004)
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary
PLACER PARKWAY
Tier 1 EIS/EIR
Archaeological Survey Report
Project Alternatives
Figure 2-1
June 2007
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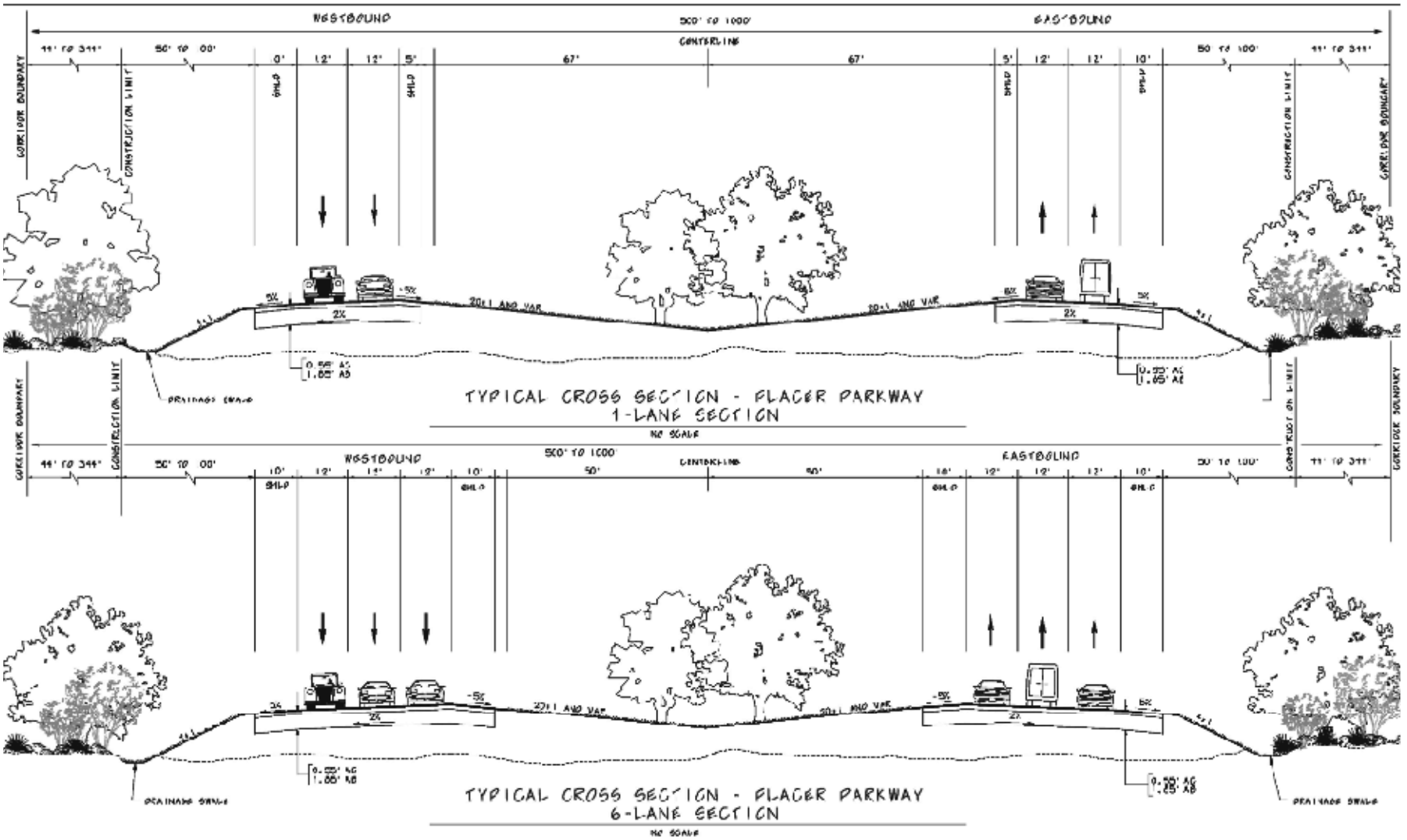

PLACER PARKWAY

Tier 1 EIS/EIR
Archaeological
Survey Report

Typcial Cross Section
(Conceptual)

Figure 2-2

June 2007

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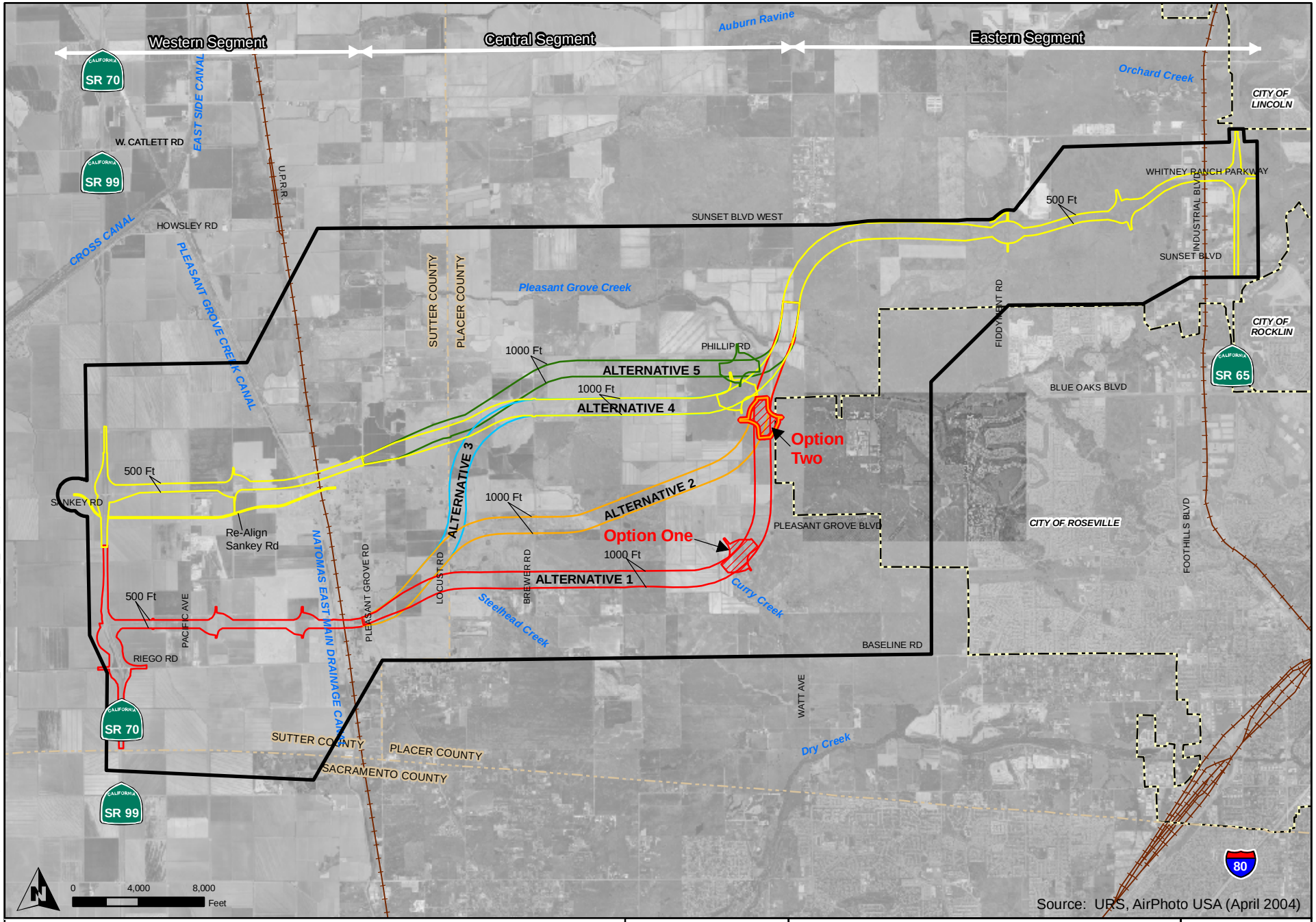

Tier 1 EIS/EIR
Archaeological
Survey Report

Potential Watt Avenue Interchange

Figure 2-3

June 2007

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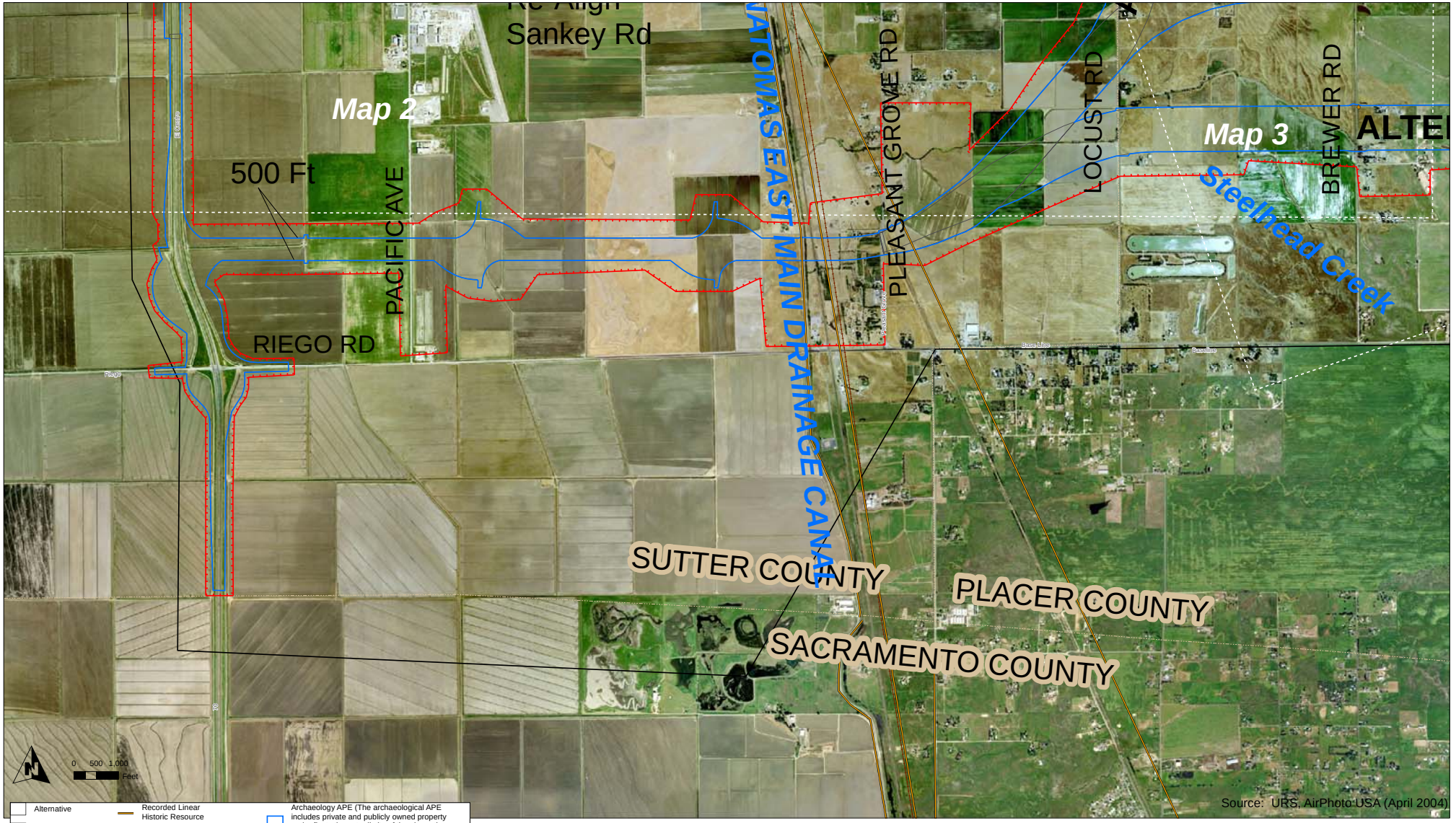
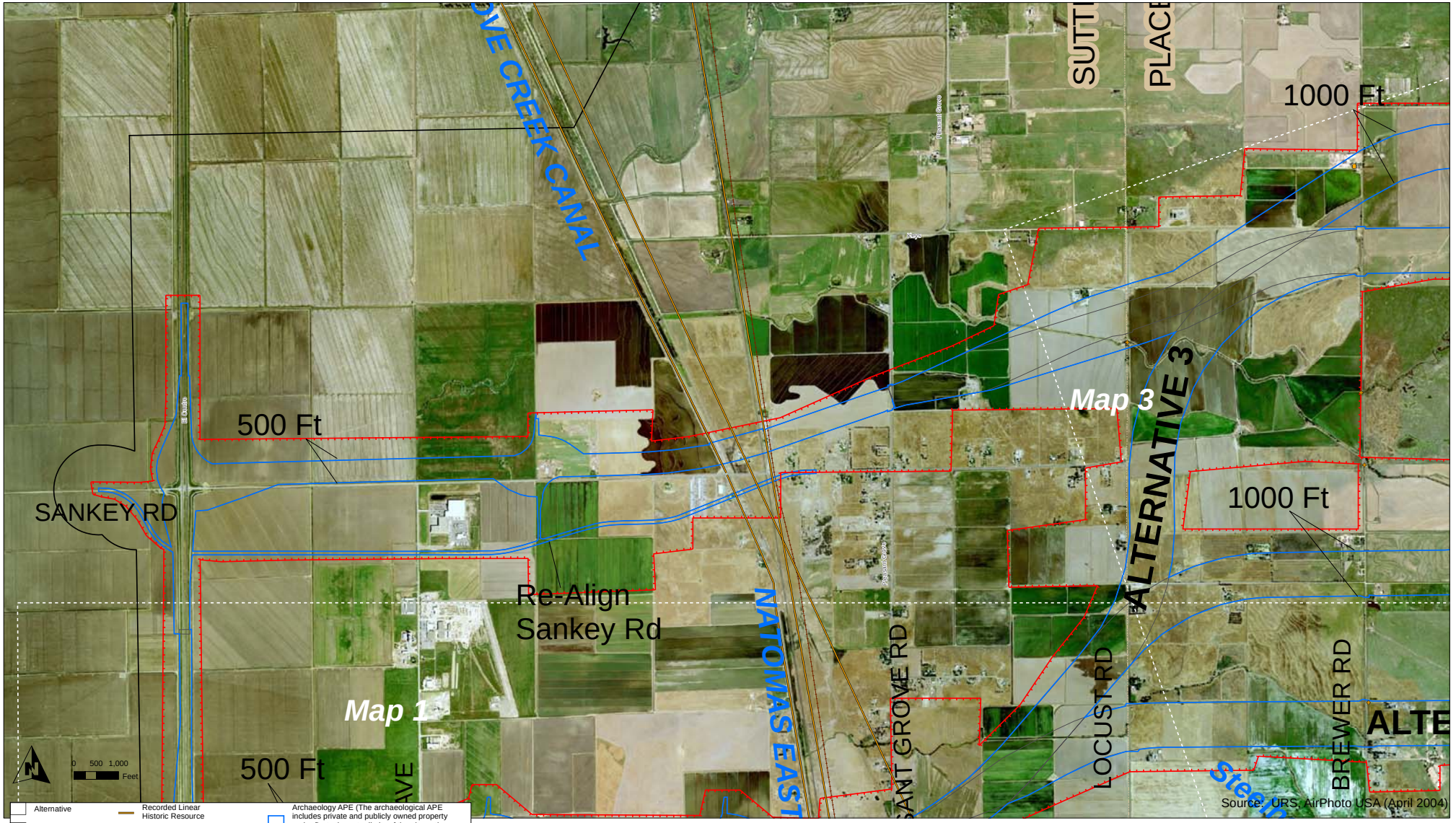


Tier 1 EIS/EIR Archaeological Survey Report

Area of Potential Effect

Figure 5-1 - Sheet 1

June 2007

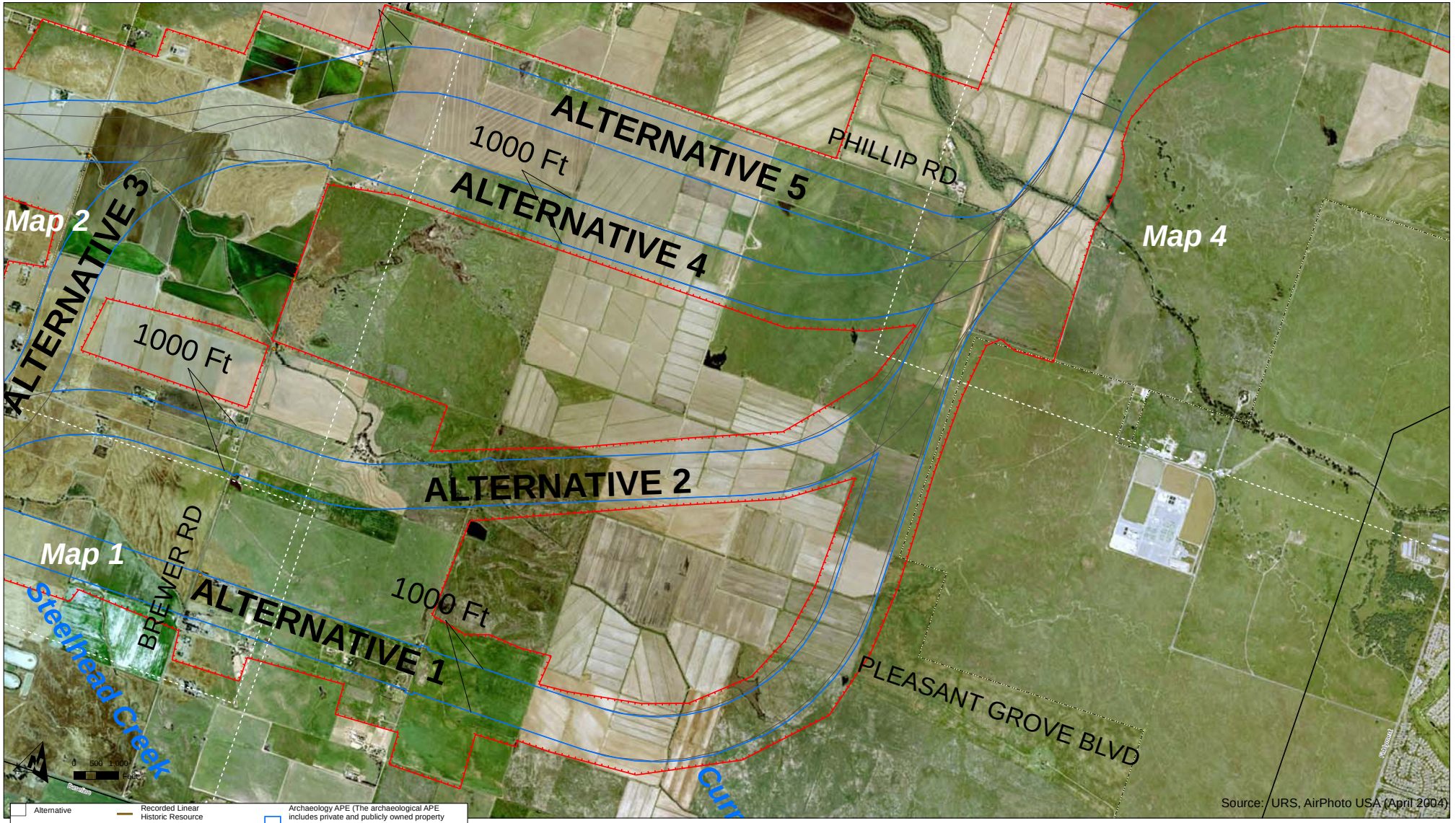


Tier 1 EIS/EIR Archaeological Survey Report

Area of Potential Effect

Figure 5-1 - Sheet 2

June 2007

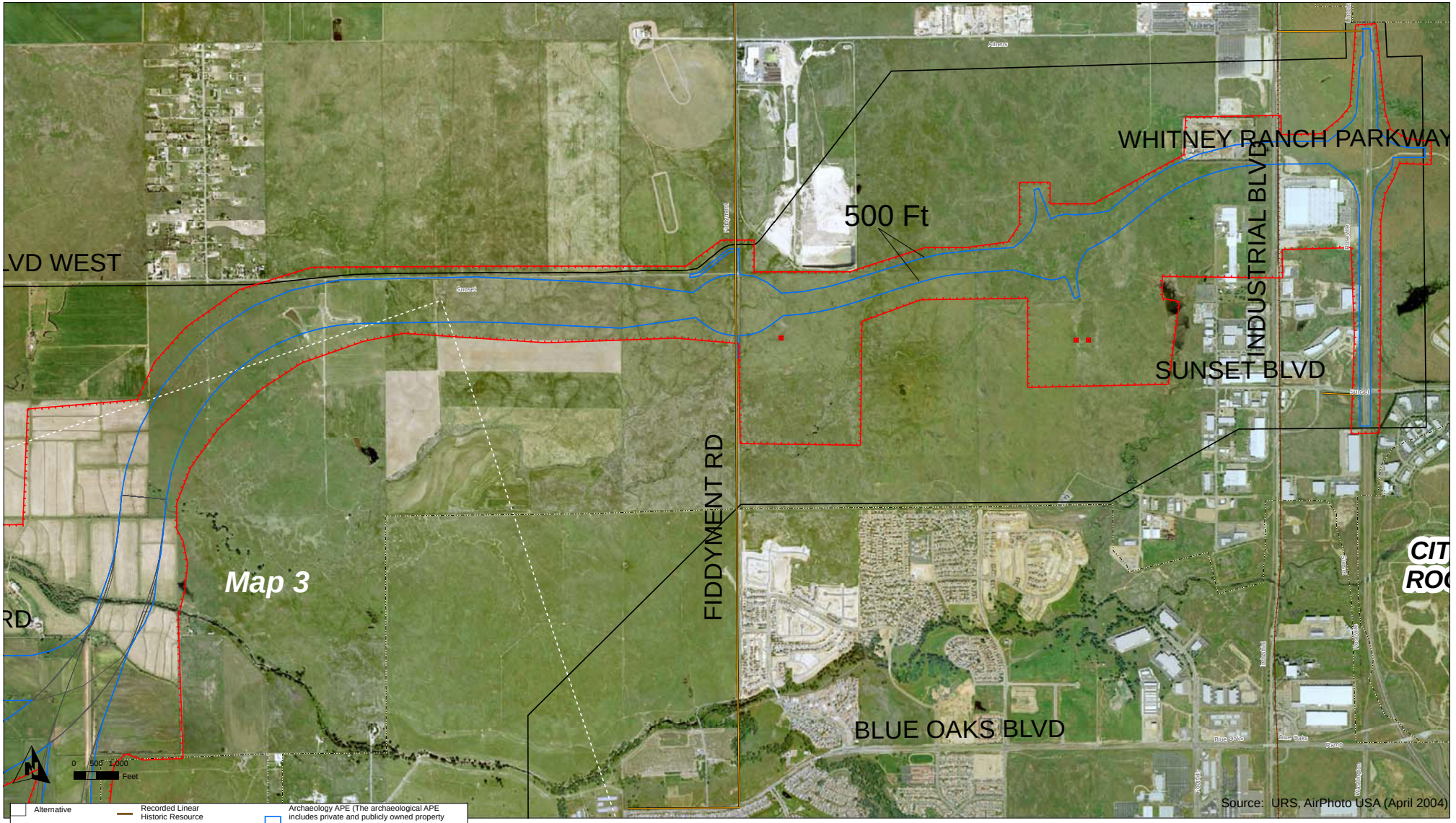


Tier 1 EIS/EIR
Archaeological
Survey Report

Area of Potential Effect

Figure 5-1 - Sheet 3

June 2007



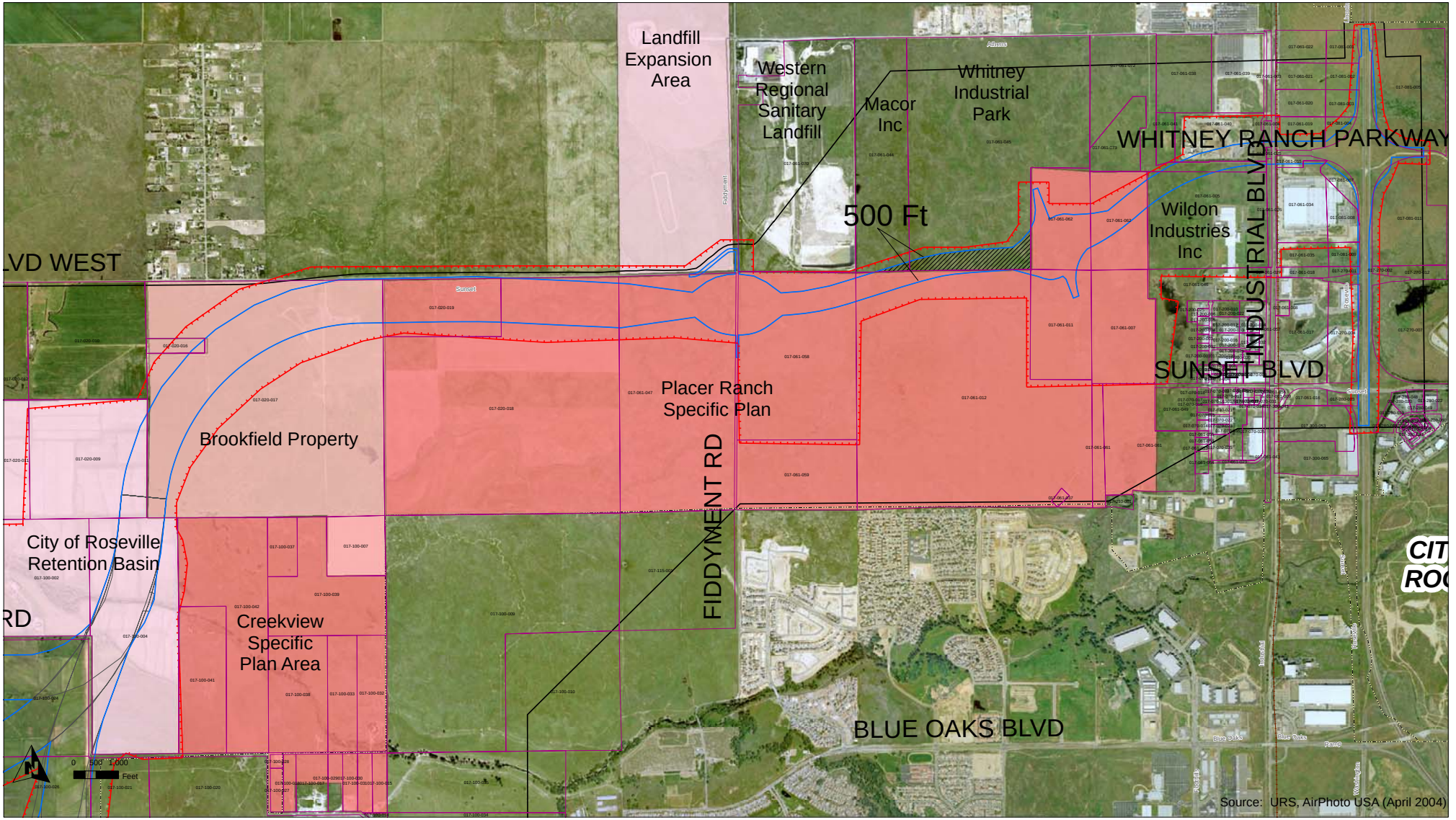
- Alternative
- Study Area Boundary
- County Boundary
- City Boundary
- Recorded Linear Historic Resource
- Recorded Architectural Resource
- Recorded Archaeological Site (Surface Point Only)
- Identified Bridge from Caltrans Bridge Inventory
- Archaeology APE (The archaeological APE includes private and publicly owned property and reflects the outer limits of the alternative alignment corridors.)
- Historic Architecture APE (The historic architecture APE includes private and publicly owned property, and comprises areas which could be subject to potential direct impacts associated with any of the alignment alternatives.)

Tier 1 EIS/EIR Archaeological Survey Report

Area of Potential Effect

Figure 5-1 - Sheet 4

June 2007



Study Area Boundary
County Boundary
City Boundary

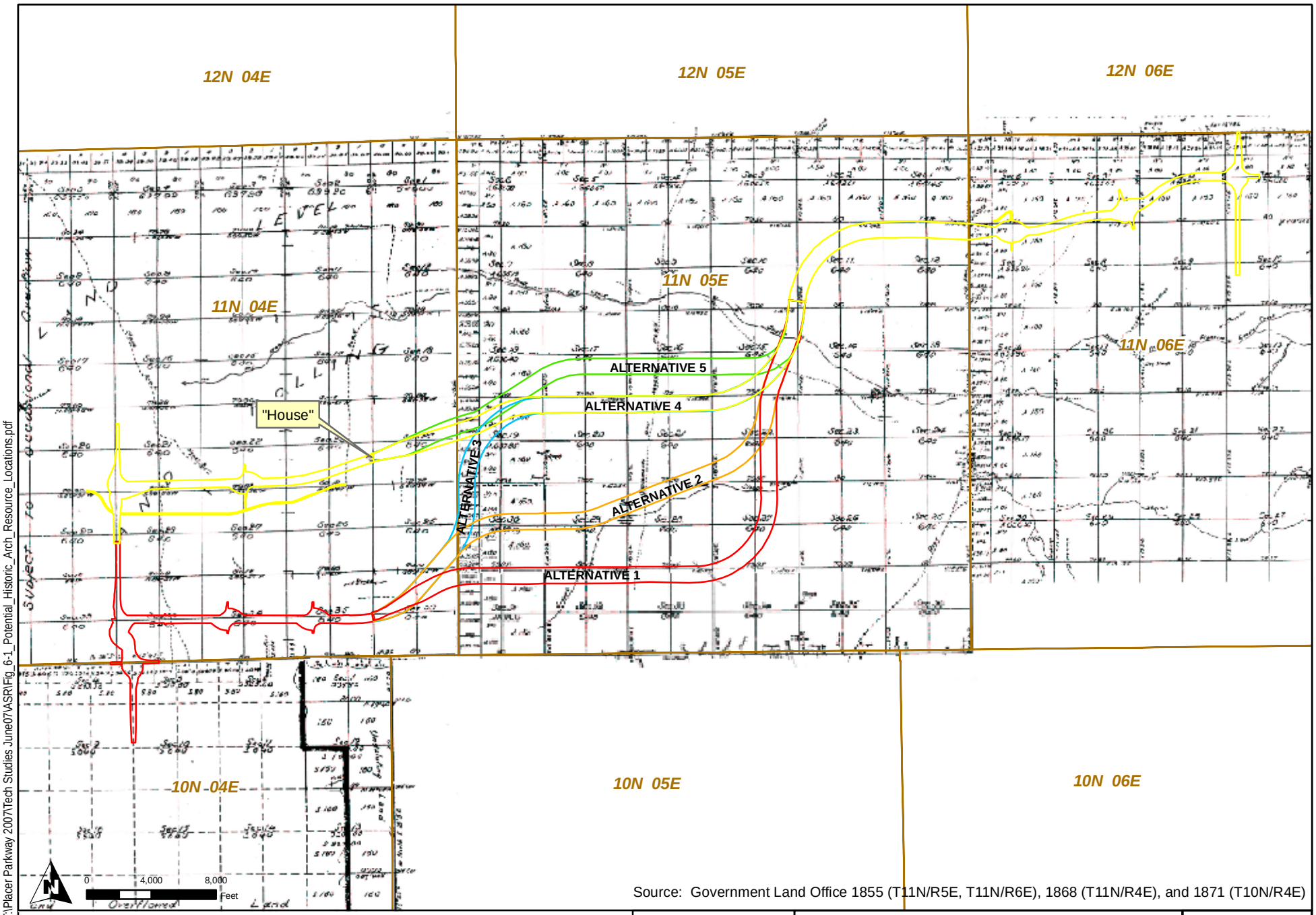
Archaeology APE (The archaeological APE includes private and publicly owned property and reflects the outer limits of the alternative alignment corridors.)

Historic Architecture APE (The historic architecture APE includes private and publicly owned property, and comprises areas which could be subject to potential direct impacts associated with any of the alignment alternatives.)

Access Not Secured, No Survey Conducted

PLACER PARKWAY

Tier 1 EIS/EIR Archaeological Survey Report	Common Alignment	***Figure 5-2*** ***June 2007***



Source: Government Land Office 1855 (T11N/R5E, T11N/R6E), 1868 (T11N/R4E), and 1871 (T10N/R4E)

Township/Range Line
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR Archaeological Survey Report

Potential Historic Archaeological Resource Locations

Figure 6-1

June 2007

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Appendix A
Programmatic Agreement

DEPARTMENT OF TRANSPORTATION
DISTRICT 3 – SACRAMENTO OFFICE
2389 GATEWAY OAKS DRIVE, SUITE 100
SACRAMENTO, CA 95833
PHONE (916) 274-0568
FAX (274) 274-0648
TTY (530) 741-4509

7.11.2006

Flex your power!
Be energy efficient!

July 5, 2006

Gene Fong
Federal Highway Administration
650 Capitol Mall, Suite 4-100
Sacramento, CA 958144-4708
Attn: Gary Sweeten

Dear Mr. Fong

The Federal Highway Administration (FHWA) and California Department of Transportation (Caltrans) are working with the Placer County Transportation Planning Agency (PCTPA) on the Placer Parkway Project. PCTPA proposes to identify and acquire right-of-way for the purpose of preserving a corridor for a future Placer Parkway, an east-west connection between State Route (SR) 65 near Lincoln in Placer County and SR 70/99 in southern Sutter County. Our agencies are working together to produce a Tier 1 Environmental Impact Statement (EIS), pursuant to the National Environmental Policy Act (NEPA) that will evaluate several corridor alternatives and will lead to the selection of one corridor for right-of-way preservation.

As a Federal undertaking, this project also requires compliance with Section 106 of the National Historic Preservation Act (NHPA). Pursuant to 36 CFR 800, the regulations implementing Section 106 of the NHPA, we have prepared a draft Programmatic Agreement that will govern Section 106 compliance responsibilities associated with implementing this undertaking. If FHWA agrees with this proposed PA, please forward the attached documentation to the California State Historic Preservation Officer for his review. Caltrans and PCTPA staff are available to meet with the SHPO to explain the undertaking in more detail if that is helpful.

Should you require any additional project information, please contact Erick Wulf at (916) 274-0563 or erick.wulf@dot.ca.gov or Anmarie Medin at (916) 274-584 or anmarie.medin@dot.ca.gov. Thank you in advance for your assistance in this matter.

Sincerely,

Japtej S Gill

JAPTEJ GILL
Chief, Environmental Planning, S4

c: Stan Tidman, Placer County Transportation Planning Agency

bc: EWulf, AMedin

PROGRAMMATIC AGREEMENT

BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER REGARDING IMPLEMENTATION OF THE PLACER PARKWAY PROJECT, PLACER COUNTY, CALIFORNIA

WHEREAS, the Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans), in cooperation with the Placer County Transportation Planning Agency (PCTPA), propose to identify and acquire right-of-way for the purpose of preserving a corridor for a future Placer Parkway, an east-west connection between State Route (SR) 65 near Lincoln in Placer County and SR 70/99 in southern Sutter County (Undertaking); and,

WHEREAS, the FHWA is preparing a Tier 1 Environmental Impact Statement (EIS), pursuant to the National Environmental Policy Act (NEPA), 42 USC 4321 *et seq,* that will evaluate several corridor alternatives and will lead to the selection of one corridor for right-of-way preservation; and

WHEREAS, given the existing and projected rapid growth in and around the project study area, the FHWA has determined it is vital to identify a corridor as early as feasible so that local jurisdiction planning decisions can consider the future Placer Parkway and before new development reduces corridor options and/or increase right-of-way acquisition costs for the Undertaking; and,

WHEREAS, the FHWA has determined that a phased approach for compliance with Section 106 of the NHPA is appropriate for the Undertaking, such that completion of the identification of historic properties, determinations of specific effects in historic properties, and resolution of any adverse effects will be carried out as part of planning for and prior to the approval of specific Tier 2 undertakings; and,

WHEREAS, the FHWA has consulted with the California State Historic Preservation Officer (SHPO) pursuant to the 1 January 2004 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA), and where the PA so directs, in accordance with 36 CFR Part 800, the regulations that implement Section 106 of the National Historic Preservation Act (NHPA) (16 U.S.C. 470f), regarding the Undertaking's potential effects on historic properties; and,

WHEREAS, following the completion of Tier 1 EIS, the FHWA, as funding becomes available for design and construction, will conduct Tier 2 environmental studies to analyze the environmental impacts of different alignments within the selected corridor in order to determine the specific transportation facility 'footprint' within the corridor , including project-level compliance with the Section 106 process to determine specific impacts to historic properties as

well as opportunities for avoidance, minimization of harm, and appropriate mitigation, if required, for the Undertaking; and,

WHEREAS, the FHWA desires to enter into a Programmatic Agreement (Agreement) at this time in order to establish a framework for conducting Section 106 consultation for Tier 1 and Tier 2; and,

WHEREAS, Caltrans has participated in consultation and has been invited to be a signatory to this Agreement; and

WHEREAS, PCTPA has participated in consultation and has been invited to be a signatory to this Agreement; and

WHEREAS, the Advisory Council on Historic Preservation (ACHP) has been afforded the opportunity to participate in the Section 106 process and has not elected to participate; and,

WHEREAS, Caltrans, on behalf of the FHWA, has initiated consultation with the Shingle Springs Band of Miwok Indians, Todd Valley Miwok-Maidu Cultural Foundation, Maidu Elders Orgainzation, and Enteprise Rancheria of Maidu Indians, as well as with the following federally-recognized Indian Tribes: United Auburn Indian Community (Tribes).

WHEREAS, the FHWA has involved, and will continue to involve, the public and historic interest groups, as stipulated under NEPA and the NHPA in a manner consistent with the PA and Caltrans' public involvement procedures;

NOW, THEREFORE, the FHWA and the SHPO agree that, upon the FHWA's decision to proceed with the Undertaking, the FHWA shall ensure that the Undertaking is implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on historic properties; and further agree that these stipulations shall govern the Undertaking and all of its parts until this Agreement expires or is terminated.

STIPULATIONS

The FHWA will ensure that the following stipulations are implemented:

I. DEFINITIONS

The definitions set forth at 36 CFR § 800.16 are applicable throughout this Agreement.

II. TIER 1 PHASED IDENTIFICATION OF HISTORIC PROPERTIES

A. Area of Potential Effects

1. The Undertaking's area of potential effects (APE) for Tier 1 is situated in southwest Placer County, between Highways 65 and 70, north of Baseline Road and south of Sunset Boulevard West (attachment A to this Agreement).

2. If modifications to the Undertaking, subsequent to the execution of this Agreement, necessitate the revision of the APE, Caltrans will consult with the PCTPA, the FHWA, and the SHPO to facilitate mutual agreement on the subject revisions. If Caltrans, the PCTPA, the FHWA, and the SHPO cannot reach such agreement, then the parties of this Agreement shall resolve the dispute in accordance with stipulation VIII.C below. If Caltrans, the PCTPA, the FHWA, and the SHPO reach mutual agreement on the proposed revisions, then Caltrans will submit a final map of the revisions, consistent with the requirements of stipulations VIII.A and XVI.A of the PA, no later than 30 days following such agreement.

B. Phased Identification of Historic Properties

1. Areas Common to all Alternatives/Corridors: the FHWA shall ensure that PCTPA or its consultants inventory properties within the area(s) common to all Tier 1 corridors according to the following specifications:
   a. Archaeological Properties
      (1) Conduct an inventory of archaeological properties where access has been secured in areas that have not previously been surveyed and those areas deemed by Caltrans PQS in need of resurvey because of the age or condition of the previous survey. Archaeological properties will be identified in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms.
   b. Built Environment Properties
      (1) Conduct a limited inventory of built environment properties within the entire Tier 1 APE. Built environment properties that have the potential to meet NRHP Criterion C will be identified and evaluated in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms. Other built environment properties within the APE that meet the age and integrity criteria will be inventoried and evaluated during Tier 2 studies, as provided for in stipulation III of this Agreement.
2. Areas Unique to Specific Alternatives/Corridors: the FHWA shall ensure that PCTPA or its consultants inventory properties within the area(s) unique to specific Tier 1 alternatives/corridors according to the following specifications:
   a. Archaeological Properties
      (1) Complete a records search for the Tier 1 APE and prepare a predictive model utilizing environmental factors and historic land-use data to assess the archaeological sensitivity of the project corridors including potential for buried resources. Segments of Tier 1 alignments/corridors that are not in common will be inventoried for archaeological properties during Tier 2 studies, as provided for in stipulation III of this Agreement.
   b. Built Environment Properties
      (1) Conduct a limited inventory of built environment properties within the entire Tier 1 APE. Built environment properties that have the potential to meet NRHP Criterion C will be identified and evaluated

in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms. Other built environment properties within the APE that meet the age and integrity criteria will be inventoried and evaluated during Tier 2 studies, as provided for in stipulation III of this Agreement.

3. Tier 1 Reporting and SHPO Consultation
   a. The FHWA shall ensure that PCTPA or its consultants prepare documentation of their findings and determinations pursuant to stipulation XVI of the PA. The reports shall be submitted to Caltrans PQS for review and approval.pursuant to stipulation XVI of the PA.
   b. Eligibility determinations shall be submitted to SHPO pursuant to stipulation VIII.C(5) of the PA.

C. Phased Assessment of Effects

1. The FHWA shall assess the potential for Tier 1 of the Undertaking to effect historic properties in accordance with stipulation X of the PA. As Tier 1 is defined as acquisition of property, the FHWA anticipates there will be no adverse effects during Tier 1. The FHWA shall consult with SHPO on the effect finding pursuant to stipulation X of the PA.

III. TIER 2 PHASED SECTION 106 CONSULTATION

A. Area of Potential Effects: The objective of the Tier 1 EIS is to identify and preserve an approximate 500'- to 1,000'-wide corridor for acquisition. The Tier 1 EIS will focus on broad topics such as general location, mode choice, area-wide air quality and land use, and other environmental issues. Once the corridor is selected, the subsequent Tier 2 environmental review, relying on the work from the Tier 1 EIS, will provide a more detailed analysis of the environmental impacts for the future transportation facility alignment alternatives within the selected corridor. Once a Tier 2 preferred alternative is chosen, the FHWA and PCTPA will delimit an APE for the Tier 2 preferred alternative in accordance with stipulation VIII.A of the PA. If subsequent modifications to the APE are necessary, the FHWA shall follow the procedures of stipulation II.A(2) of this Agreement.

B. Phased Identification and Evaluation.

1. Archaeological Properties
   a. The FHWA shall ensure that PCTPA or its consultants conducts a pedestrian reconnaissance of all lands within the final APE for any Tier 2 preferred alternative. Archaeological properties will be identified and evaluated in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms.
2. Built Environment Properties
   a. The FHWA shall ensure that PCTPA or its consultants conducts an inventory of built environment properties within the final APE for any Tier 2 preferred alternative. Built environment properties will be

evaluated for NRHP eligibility in accordance with stipulation VIII.(B) and (C) of the PA, and documented on appropriate DPR 523 inventory forms.

3. Tier 2 Reporting and SHPO Consultation
   a. The FHWA shall ensure that PCTPA or its consultants prepare documentation of their findings and determinations pursuant to stipulation XVI of the PA. The reports will be submitted to Caltrans PQS for review and approval pursuant to stipulation XVI of the PA.
   b. Eligibility determinations shall be submitted to SHPO pursuant to stipulation VIII.C(5) of the PA.

C. **Assessment of Effects.** The FHWA will assess any Tier 2 preferred alternative for its potential to affect historic properties and will consult with the SHPO pursuant to stipulation IX and X of the PA. Should FHWA find that any Tier 2 preferred alternative will result in an adverse effect, FHWA shall consult with SHPO pursuant to stipulation XI of the PA.

D. **Applicable Requirements.** FHWA will conduct the Section 106 process during Tier 2 in accordance with stipulations of the PA and applicable requirements under Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) and the Section 106 regulations (36 C.F.R. Part 800), including any subsequent amendments thereto. Nothing in this Agreement is intended to supersede or modify any requirement contained in the Section 106 statute or the Section 106 regulations.

E. **Consulting Parties**. During Tier 2, the same party may be designated as a consulting party for more than one alternative. FHWA will ensure comments of all consulting parties are incorporated into the Section 106 consultation process as provided for in all applicable laws.

IV. TIER 2 SECTION 106 COMMITMENTS AND CONCEPTUAL MITIGATION

A. FHWA and PCTPA agree to implement and/or fund the activities listed in this section as part of any Tier 2 environmental studies. Additional commitments may be made, as appropriate, as an outcome of the Section 106 consultation process for any Tier 2 alternative.

B. **Avoidance and Minimization of Impacts**

1. In General. In accordance with the consultation process required under Section 106 and in accordance with other applicable laws, FHWA, PCTPA, and Caltrans will seek ways to avoid, minimize, and mitigate adverse impacts to the environment, including adverse effects to historic properties.
2. Context-Sensitive Solutions. FHWA, PCTPA, and Caltrans will apply the principles of context-sensitive solutions during project development, in accordance with applicable Caltrans policies. In accordance with those principles and where appropriate, FHWA, PCTPA, and Caltrans will develop any Tier 2 alternative with sensitivity to aesthetic values and the historic context, utilizing the services of professionals with experience in areas related to historic preservation.

C. Should implementation of any Tier 2 alternative result in adverse effects to a historic property important solely for its information value (Criterion D), FHWA will ensure a data recovery plan is prepared according to guidance in Attachment 6 of the PA and submitted to the SHPO for review in accordance with stipulation II.C(3) of this Agreement.

D. The FHWA will not authorize the execution of any Undertaking activity that may effect (36 CFR § 800.16(i)) historic properties in the Undertaking's APE prior to the completion of the Section 106 process provided for in this Agreement.

V. NATIVE AMERICAN CONSULTATION

The FHWA has consulted with the Tribes regarding the proposed Undertaking, will continue to consult with the Tribes, and will afford the Tribes, should the Tribe so desire, the further opportunity to more directly and actively participate in the implementation of the Undertaking; Should any specific Tribe desire to participate in this Agreement as herein set forth, the FHWA shall consult with them to reach consensus regarding the manner in which the Tribe may participate in the implementation of this Agreement and the Undertaking, and regarding any time frames or other matters that may govern the nature, scope, and frequency of such participation.

VI. TREATMENT OF HUMAN REMAINS

The Agreement parties agree that human burials and related items discovered during implementation of the terms of this Agreement and of the Undertaking will be treated in accordance with the requirements of § 7050.5(b) of the California Health and Safety Code. If, pursuant to § 7050.5(c) of the Code, the county coroner or medical examiner determines that the human remains are or may be of Native American origin, then the discovery shall be treated in accordance with the provisions of §§ 5097.98(a)-(d) of the California Public Resources Code.

VII. DISCOVERIES AND UNANTICIPATED EFFECTS

If the FHWA determines, after any future construction of the Undertaking has commenced, that the Undertaking will affect a previously unidentified property that may be eligible for the National Register, or affect a known historic property in an unanticipated manner, the FHWA will address the discovery or unanticipated effect in accordance with 36 CFR § 800.13(b)(3). The FHWA at its discretion may hereunder, and pursuant to 36 CFR § 800.13(c), assume any discovered property to be eligible for inclusion in the National Register.

VIII. ADMINISTRATIVE PROVISIONS

A. PROFESSIONAL QUALIFICATIONS AND STANDARDS

1. **Professional Qualifications**. All activities prescribed by stipulations II, III, IV, V, VI, and VII of this Agreement shall be carried out under the authority of the FHWA by or under the direct supervision of a person or persons meeting at a minimum the Secretary of Interior's *Professional Qualifications Standards* (48 FR 44738-39) (PQS) in the appropriate disciplines. However, nothing in this stipulation may be interpreted to preclude the FHWA or any

agent or contractor thereof from using the properly supervised services of persons who do not meet the PQS.

2. **Documentation Standards.** Written documentation of activities prescribed by stipulations II, III, IV, V, VI, and VII of this Agreement shall conform to *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740) as well as to applicable standards and guidelines established by the SHPO.

3. **Curation and Curation Standards.** The FHWA shall ensure that, to the extent permitted under §§ 5097.98 and 5097.991 of the California Public Resources Code, the materials and records resulting from the activities prescribed by this Agreement are curated in accordance with 36 CFR Part 79. The FHWA will ensure that, to the extent permitted by applicable law and regulation, the views of the Most Likely Descendant(s) are taken into consideration when decisions are made about the disposition of other Native American archaeological materials and records.

B. **CONFIDENTIALITY.** The Agreement parties acknowledge that historic properties covered by this Agreement are subject to the provisions of section 304 of the NHPA, and section 6254.10 of the California Government Code (Public Records Act), relating to the disclosure of archaeological site information and, having so acknowledged, will ensure that all actions and documentation prescribed by this Agreement are consistent with said sections.

C. **RESOLVING OBJECTIONS.**

1. Should any Agreement party object to the manner in which the terms of this Agreement are implemented, to any action carried out or proposed with respect to the implementation of the Agreement, or to any documentation prepared in accordance with and subject to the terms of this Agreement, the FHWA shall immediately notify the other parties to this Agreement of those objections, and shall consult with the objecting party and with the other parties for no more than 14 days to resolve the objection. The FHWA shall reasonably determine when this consultation will commence. If the objection is resolved through such consultation, the action subject to dispute may proceed in accordance with the terms of that resolution. If, after initiating such consultation, the FHWA determines that the objection cannot be resolved through consultation, the FHWA shall forward all documentation relevant to the objection, including the FHWA's proposed response to the objection, to the ACHP, with the expectation that the ACHP will, within thirty (30) days after receipt of such documentation, do one of the following:

   a. advise the FHWA that the ACHP concurs in the FHWA's proposed response to the objection, whereupon the FHWA will respond to the objection accordingly. The objection shall thereby be resolved; or,

b. provide the FHWA with recommendations, which the FHWA will take into account in reaching a final decision regarding its response to the objection. The objection shall thereby be resolved; or,

c. notify the FHWA that the objection will be referred for comment, pursuant to 36 CFR § 800.7(c), and proceed to refer the objection and comment. The FHWA shall take the resulting comment into account, in accordance with 36 CFR § 800.7(c)(4) and section 110(1) of the NHPA. The objection shall thereby be resolved.

2. Should the ACHP not exercise one of the foregoing options within 30 days after receipt of all pertinent documentation, the FHWA may assume the ACHP's concurrence in its proposed response to the objection and proceed to implement that response. The objection shall thereby be resolved.

3. The FHWA shall take into account any ACHP recommendation or comment provided in accordance with section C.1 of this stipulation, with reference only to the subject of the objection. The FHWA's responsibility to carry out all actions under this Agreement not the subject to the objection will remain unchanged.

4. At any time during the implementation of the measures stipulated in this Agreement, should an objection pertaining to such implementation be raised by a member of the public, the FHWA shall notify the Agreement parties in writing of the objection and take the objection into consideration. The FHWA shall consult with the objecting party and, if the objecting party so requests, with the other Agreement parties for no more than fifteen (15) days. Within ten (10) days following closure of this consultation period, the FHWA will render a decision regarding the objection and notify all consulting parties hereunder of its decision in writing. The objection will thereby be resolved. In reaching its decision, the FHWA will take into account any comments from the consulting parties regarding the objection, including the objecting party. The FHWA's decision regarding the resolution will be final.

5. The FHWA shall provide all Agreement parties, the ACHP when the ACHP has issued comments hereunder, and any parties that have objected pursuant to section C.4 of this stipulation, with a copy of its final written decision regarding any objection addressed pursuant to this stipulation.

6. The FHWA may authorize any action subject to objection under section C of this stipulation to proceed after the objection has been resolved in accordance with the terms of section C.

D. **AMENDMENTS:** Any Agreement party may propose that this Agreement be amended, whereupon the Agreement parties will consult for no more than 30 days to consider such amendment. The FHWA may extend this consultation period.

The amendment process shall comply with 36 CFR §§ 800.6(c)(1) and 800.6(c)(7). This Agreement may be amended only upon the written agreement of the signatory parties. If it is not amended, this Agreement may be terminated by either signatory party in accordance with section E of this stipulation.

E. TERMINATION

1. If this Agreement is not amended as provided for in section D.1 of stipulation VIII, above, or if either signatory party proposes termination of this Agreement for other reasons, the signatory party proposing termination shall, in writing, notify the other Agreement parties, explain the reasons for proposing termination, and consult with the other Agreement parties for at least 30 days to seek alternatives to termination. Such consultation shall not be required if the FHWA proposes termination because the Undertaking no longer meets the definition set forth at 36 CFR § 800.16(y).

2. Should such consultation result in an agreement on an alternative to termination, then the parties shall proceed in accordance with the terms of that agreement.

3. Should such consultation fail, the signatory party proposing termination may terminate this Agreement by promptly notifying the other Agreement parties in writing. Termination hereunder shall render this Agreement without further force or effect.

4. If this Agreement is terminated hereunder, and if the FHWA determines that the Undertaking will nonetheless proceed, then the FHWA shall either consult in accordance with 36 CFR § 800.6 to develop a new Agreement, or request the comments of the ACHP, pursuant to 36 CFR Part 800.

F. DURATION OF THE AGREEMENT

1. Unless terminated pursuant to section F of stipulation VIII above, or unless it is superseded by an amended Agreement, this Agreement will be in effect following execution by the signatory parties until the FHWA, in consultation with the other Agreement parties, determines that all of its stipulations have been satisfactorily fulfilled. This Agreement will terminate and have no further force or effect on the day that the FHWA notifies the other Agreement parties in writing of its determination that all stipulations of this Agreement have been satisfactorily fulfilled.

2. The terms of this Agreement shall be satisfactorily fulfilled within twenty (20) years following the date of execution by the signatory parties. If the FHWA determines that this requirement cannot be met, the Agreement parties will consult to reconsider its terms. Reconsideration may include the continuation of the Agreement as originally executed, amendment of the Agreement, or termination. In the event of termination, the FHWA will comply with section

F.4 of stipulation VIII, above, if it determines that the Undertaking will proceed notwithstanding termination of this Agreement.

3. If the Undertaking has not been implemented within twenty (20) years following execution of this Agreement by the signatory parties, this Agreement shall automatically terminate and have no further force or effect. In such event, the FHWA shall notify the other Agreement parties in writing and, if it chooses to continue with the Undertaking, shall reinitiate review of the Undertaking in accordance with 36 CFR Part 800.

G. **EFFECTIVE DATE.** This Agreement will take effect on the date that it has been fully executed by the FHWA and the SHPO.

EXECUTION of this Agreement by the FHWA and the SHPO, its transmittal by the FHWA to the ACHP in accordance with 36 CFR § 800.6(b)(1)(iv), and subsequent implementation of its terms, shall evidence, pursuant to 36 CFR § 800.6(c), that this Agreement is an agreement with the ACHP for purposes of section 110(1) of the NHPA, and shall further evidence that the FHWA has taken into account the effects of the Undertaking on historic properties and has afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties.

SIGNATORY PARTIES:
Federal Highway Administration

By _____ Date _____
Gene Fong
Division Administrator

California State Office of Historic Preservation

By _____ Date _____
M. Wayne Donaldson, FAIA
State Historic Preservation Officer

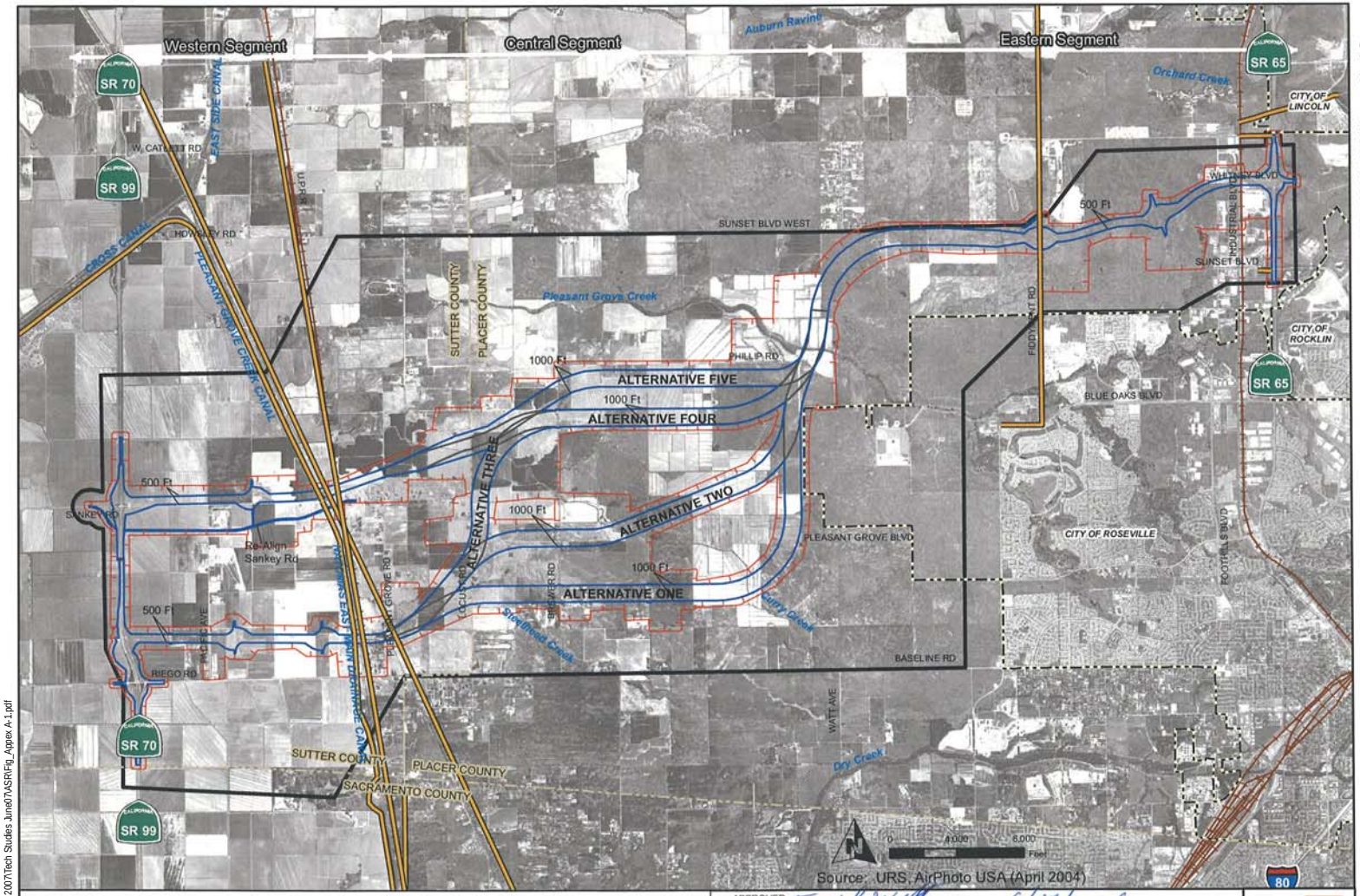
CONCURRING PARTIES:
Placer County Transportation Planning Agency

By _____ Date _____
Celia McAdam, Executive Director

California Department of Transportation

By _____ Date _____
Jody Jones, District 3 Director

Appendix B
Approved APE Map



Alternative
Study Area Boundary
County Boundary
City Boundary
Historical Architectural Resource

Recorded Linear Historic Resource
Recorded Architectural Resource
Recorded Archaeological Site (Surface Point Only)
Identified Bridge from Caltrans Bridge Inventory

Archaeology APE (The archaeological APE includes private and publicly owned property and reflects the outer limits of the alternative alignment corridors.)

Historic Architecture APE (The historic architecture APE includes private and publicly owned property, and comprises areas which could be subject to potential direct impacts associated with any of the alignment alternatives.)

APPROVED

CALTRANS DISTRICT 03, ENVIRONMENTAL BRANCH — DATE 6/19/2006

STEVE PROPST, LOCAL ASSISTANCE ENGINEER — DATE 6/29/06

Tier 1 EIS/EIR

APE: Archaeology and Historic Properties Index Map for Maps 1-4

May 2006

6/15/07 ...vsa/tkt1\Placer Parkway 2007\Tech Studies June07\ASR\Fig_Appex A-1.pdf

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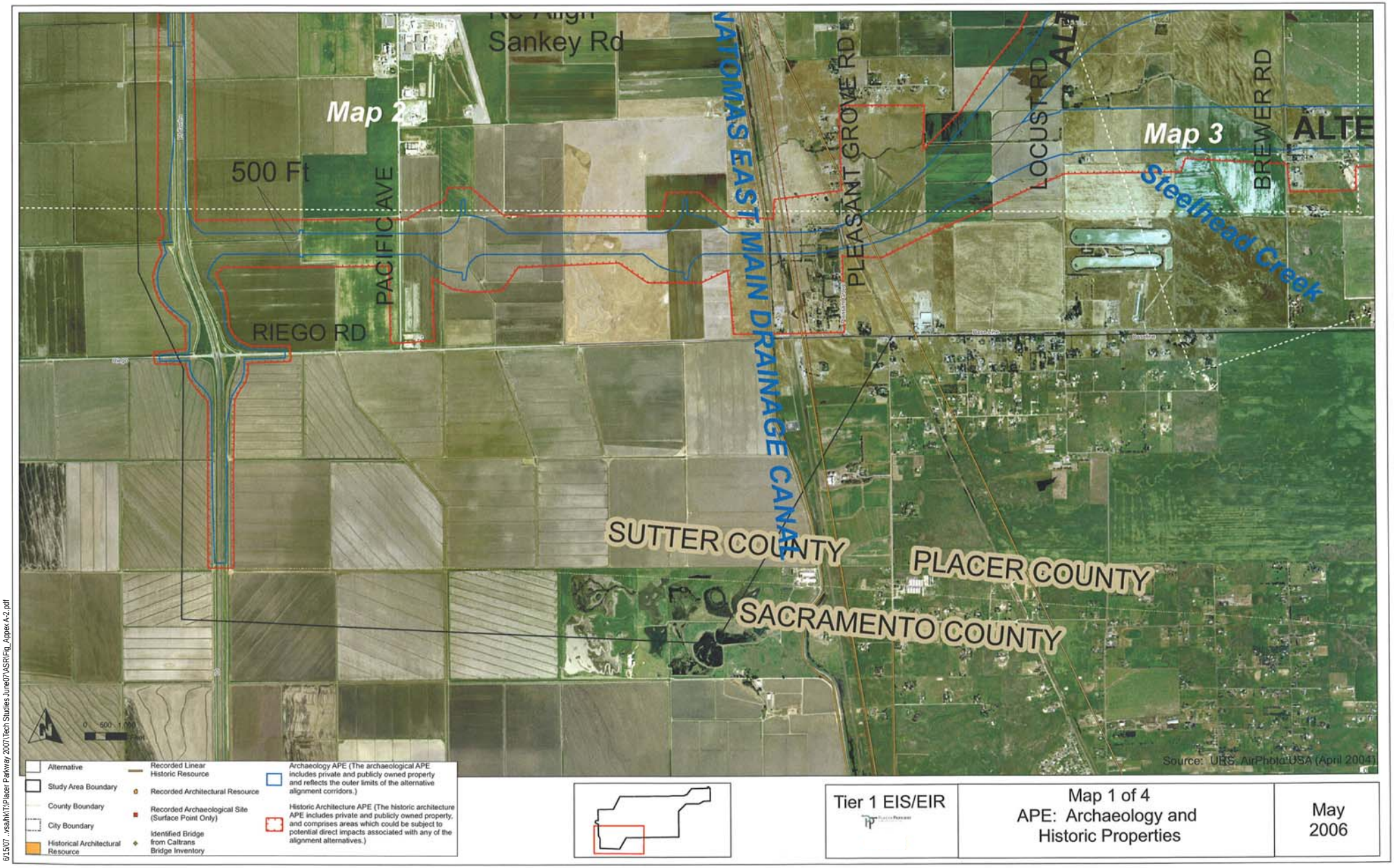

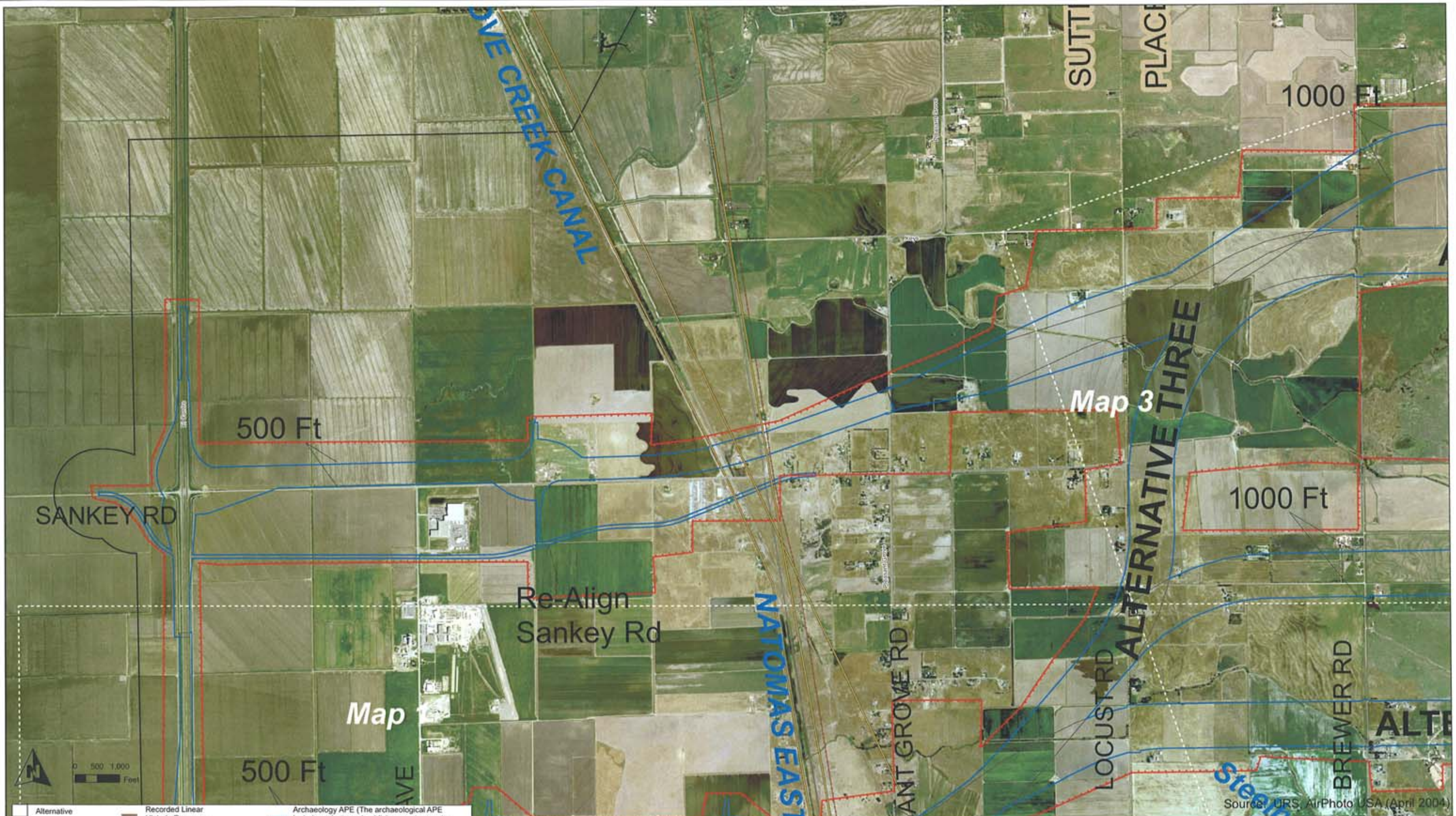

- Alternative
- Study Area Boundary
- County Boundary
- City Boundary
- Historical Architectural Resource
- Recorded Linear Historic Resource
- Recorded Architectural Resource
- Recorded Archaeological Site (Surface Point Only)
- Identified Bridge from Caltrans Bridge Inventory
- Archaeology APE (The archaeological APE includes private and publicly owned property and reflects the outer limits of the alternative alignment corridors.)
- Historic Architecture APE (The historic architecture APE includes private and publicly owned property, and comprises areas which could be subject to potential direct impacts associated with any of the alignment alternatives.)

Tier 1 EIS/EIR	Map 2 of 4 APE: Archaeology and Historic Properties	May 2006

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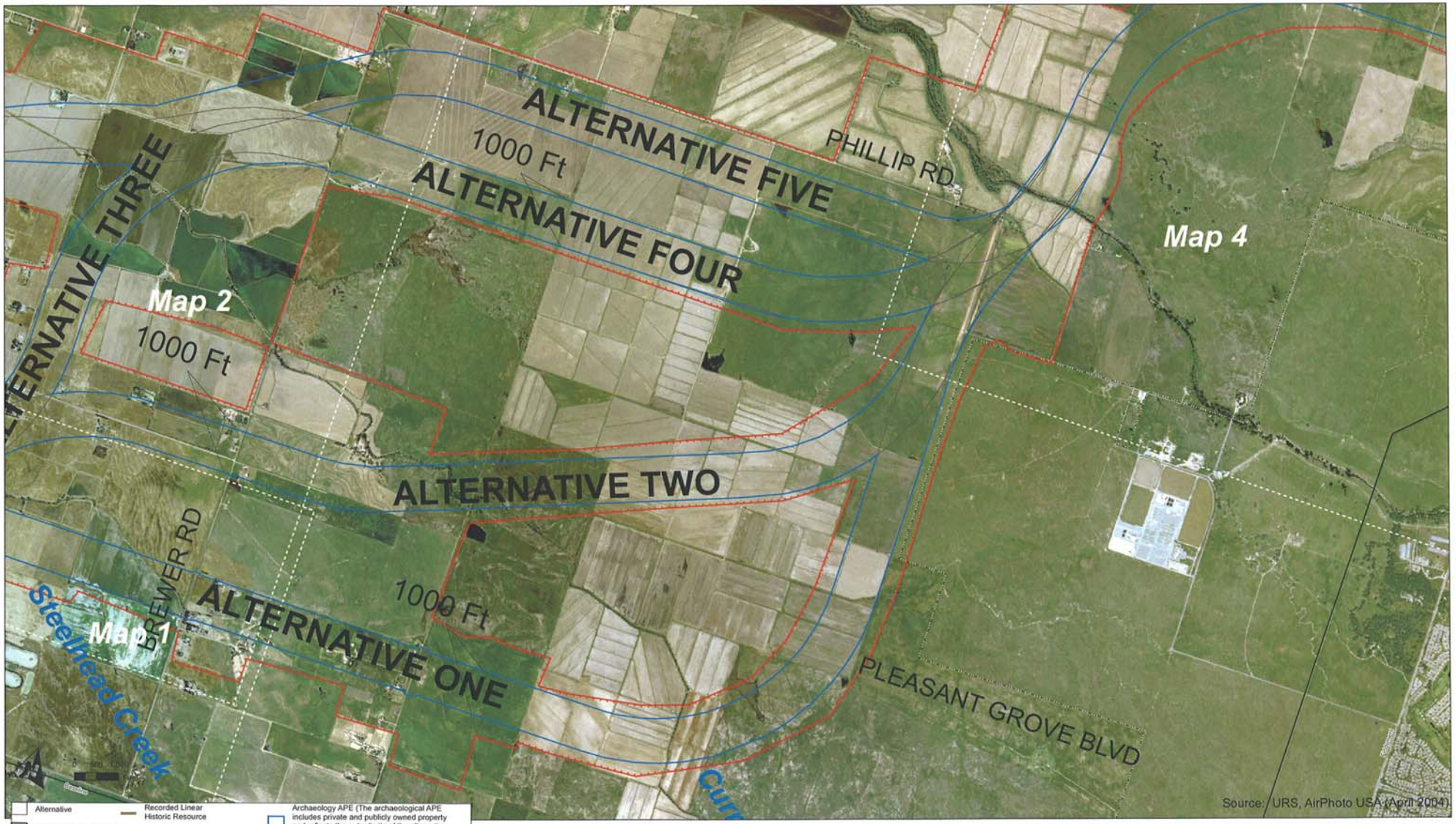

Tier 1 EIS/EIR	Map 3 of 4 APE: Archaeology and Historic Properties	May 2006

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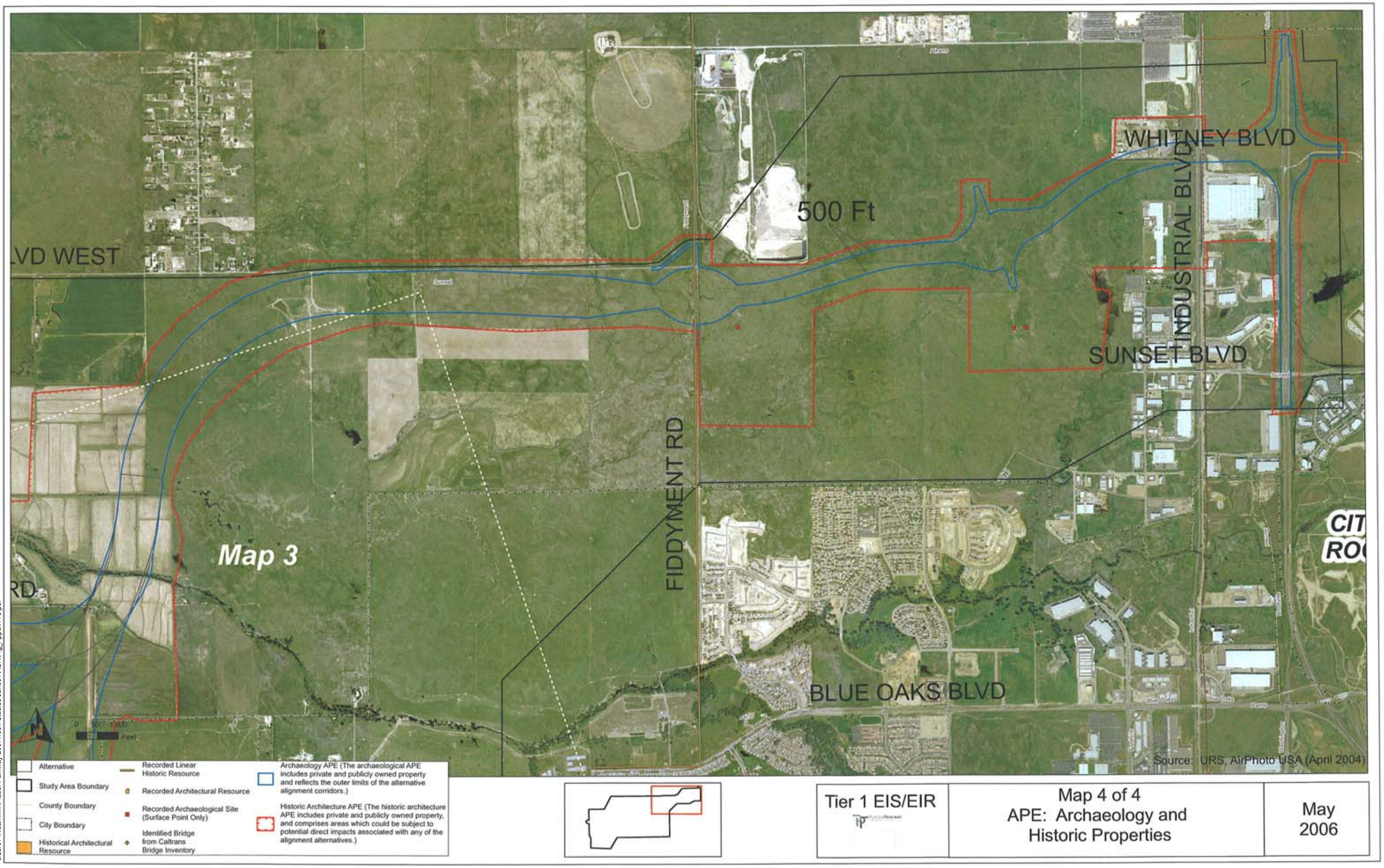

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Appendix C
NAHC Summary of Findings

URS

Debbie Pilas-Treadway
Associate Program Analyst
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

27 May 2003

Dear Ms. Pilas-Treadway,

The Placer County Transportation Planning Agency (PCTPA) has engaged URS Corporation to assist PCTPA in identifying a right-of-way connecting western Placer County and southern Sutter County. This is envisioned as a new 15-mile parkway connecting existing state highways. URS is to identify preliminary alternative alignments and screen them according to technical and environmental criteria; prepare technical studies; prepare a Tier 1 EIS/EIR that will satisfy both Caltrans and FHWA requirements, and provide public outreach support. The environmental review of the project will satisfy both CEQA and NEPA. Our contact with the PCTPA is Mr. Stan Tidman (550 High Street, Suite 107 Auburn, CA 95603). Mr. Tidman can be reached at (530) 823-4033.

Among the tasks to be completed for the initial screening phase of the project are consultation with the Native American Heritage Commission (NAHC) and local Native American groups and individuals. As such, I am requesting any information the NAHC may have regarding properties, features, or materials within the project area that may be of concern to local Native Americans. Attached to this request are two maps. The first is a project map indicating the boundaries of the study area and the second is a map depicting the USGS 7.5' topographic quadrangles in which the study area is located. On this second map, a list of sections, as well as township and range data is included. Any comments you may have regarding this area would be greatly appreciated.

If you have any questions, please feel free to call me directly at (415)-243-3826. Thank you for your cooperation.

Sincerely,

URS

Mark R. Hale
Project Archaeologist

URS Corporation
221 Main Street, Suite 600
San Francisco, CA 94105-1917
Tel: 415.896.5858
Fax: 415.882.9261

STATE OF CALIFORNIA — Gray Davis, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
Fax (916) 657-5390
Web Site www.nahc.ca.gov

June 6, 2003

Mark Hale
URS Corporation
221 Main Street, Suite 600
San Francisco, CA 94105-1917

Sent by Fax: 415-882-9261
No of Pages: 4

RE: Proposed 15 Mile Parkway Connecting Existing Highways; Sacramento, Placer and Sutter Counties.

Dear Mr. Hale:

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend other with specific knowledge. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4038.

Sincerely,

Debbie Pilas-Treadway
Environmental Specialist III

NATIVE AMERICAN CONTACTS
Placer County
June 6, 2003

Rose Enos
15310 Bancroft Road — Maidu
Auburn , CA 95603 — Washoe
(530) 878-2378

United Auburn Indian Community of the Auburn
Jessica Tavares, Chairperson
661 Newcastle Road, Suite 1 — Maidu
Newcastle , CA 95658 — Miwok
916 663-3720
916 663-3727 - Fax

Shingle Springs Band of Miwok Indians
Jeff Murray, Cultural Resources Manager
P.O. Box 1340 — Miwok
Shingle , CA 95682 — Maidu
(530) 676-8010
(530) 676-8033 Fax

United Auburn Indian Community of the Auburn
Sam Starkey
953 Indian Rancheria Road — Maidu
Auburn , CA 95603 — Miwok
(530) 878-2378 - work
(530) 885-2533 - home

Todd Valley Miwok-Maidu Cultural Foundation
Christopher Suehead, Cultural Representative
PO Box 1490 — Miwok
Foresthill , CA 95631 — Maidu
(530) 367-3893 - Voice / Fax
tvmmcf@foothill.net

United Auburn Indian Community of the Auburn
David Keyser
961 Indian Rancheria Road — Maidu
Auburn , CA 95603 — Miwok
(530) 885-8229 - Home
(916) 663-3720 - Work

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regards to the cutural assessmet for the proposed 15 mile parkway connecting existing highways, Placer County.

NATIVE AMERICAN CONTACTS
Sutter County
June 6, 2003

Enterprise Rancheria of Maidu Indians
Harvey Angle, Chairperson
1940 Feather River Blvd., Suite B Maidu
Oroville , CA 95965

(916) 532-9214
(916) 532-1768 FAX

Maidu Elders Organization
Martha Noel
PO Box 206 Maidu
Dobbins , CA 95935

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regards to the cutural assessmet for the proposed 15 mile parkway connecting existing highways, Sutter County.

NATIVE AMERICAN CONTACTS
Sacramento County
June 6, 2003

Rose Enos
15310 Bancroft Road — Maidu
Auburn , CA 95603 — Washoe
(530) 878-2378

United Auburn Indian Community of the Auburn
David Keyser
961 Indian Rancheria Road — Maidu
Auburn , CA 95603 — Miwok
(530) 885-8229 - Home
(916) 663-3720 - Work

Joe Marine
1025 35th Avenue, Apt 9 — Maidu
Sacramento , CA 95822
916 429-7307

United Auburn Indian Community of the Auburn
Jessica Tavares, Chairperson
661 Newcastle Road, Suite 1 — Maidu
Newcastle , CA 95658 — Miwok
916 663-3720
916 663-3727 - Fax

Maidu Elders Organization
Martha Noel
PO Box 206 — Maidu
Dobbins , CA 95935

United Auburn Indian Community of the Auburn
Sam Starkey
953 Indian Rancheria Road — Maidu
Auburn , CA 95603 — Miwok
(530) 878-2378 - work
(530) 885-2533 - home

Shingle Springs Band of Miwok Indians
Jeff Murray, Cultural Resources Manager
P.O. Box 1340 — Miwok
Shingle , CA 95682 — Maidu
(530) 676-8010
(530) 676-8033 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regards to the cutural assessmet for the proposed 15 mile parkway connecting existing highways, Sacramento County.

URS

16 June 2003

Joe Marine
1025 – 35th Avenue, Apt 9
Sacramento, CA 95822

Dear Joe Marine,

The Placer County Transportation Planning Agency (PCTPA) has engaged URS Corporation to assist PCTPA in identifying a right-of-way connecting western Placer County and southern Sutter County. This is envisioned as a new 15-mile parkway connecting existing state highways. URS is to identify preliminary alternative alignments and screen them according to technical and environmental criteria; prepare technical studies; prepare a Tier 1 EIS/EIR that will satisfy both Caltrans and FHWA requirements, and provide public outreach support. The environmental review of the project will satisfy both CEQA and NEPA. Our contact with the PCTPA is Mr. Stan Tidman (550 High Street, Suite 107 Auburn, CA 95603). Mr. Tidman can be reached at (530) 823-4033.

Among the tasks to be completed for the initial screening phase of the project are consultation with the Native American Heritage Commission (NAHC) and local Native American groups and individuals. As such, I am requesting any information you may have regarding properties, features, or materials within the project area that may be of concern to local Native Americans. Attached to this request are two maps. The first is a project map indicating the boundaries of the study area and the second is a map depicting the USGS 7.5' topographic quadrangles in which the study area is located. On this second map, a list of sections, as well as township and range data is included. Any comments you may have regarding this area would be greatly appreciated.

If you have any questions, please feel free to call me directly at (415)-243-3826. Thank you for your cooperation.

Sincerely,

URS

Mark R. Hale
Project Archaeologist

Enclosures

URS Corporation
221 Main Street, Suite 600
San Francisco, CA 94105
Tel: 415.896.5858
Fax: 415.882.9261
www.urscorp.com

URS

16 June 2003

Jessica Tavares
Chairperson
United Auburn Indian Community of the Auburn Rancheria
661 Newcastle Road, Suite 1
Newcastle, Ca 95658

Dear Jessica Tavares,

The Placer County Transportation Planning Agency (PCTPA) has engaged URS Corporation to assist PCTPA in identifying a right-of-way connecting western Placer County and southern Sutter County. This is envisioned as a new 15-mile parkway connecting existing state highways. URS is to identify preliminary alternative alignments and screen them according to technical and environmental criteria; prepare technical studies; prepare a Tier 1 EIS/EIR that will satisfy both Caltrans and FHWA requirements, and provide public outreach support. The environmental review of the project will satisfy both CEQA and NEPA. Our contact with the PCTPA is Mr. Stan Tidman (550 High Street, Suite 107 Auburn, CA 95603). Mr. Tidman can be reached at (530) 823-4033.

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If you have any questions, please feel free to call me directly at (415)-243-3826. Thank you for your cooperation.

Sincerely,

URS

Mark R. Hale
Project Archaeologist

Enclosures

URS Corporation
221 Main Street, Suite 600
San Francisco, CA 94105
Tel: 415.896.5858
Fax: 415.882.9261
www.urscorp.com

URS

16 June 2003

Martha Noel
Maidu Elders Organization
P.O. Box 206
Dobbins, CA 95935

Dear Martha Noel,

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URS

16 June 2003

Harvey Angle
Chairperson
Enterprise Rancheria of Maidu Indians
1940 Feather River Blvd., Suite B
Oroville, CA 95965

Dear Harvey Angle,

The Placer County Transportation Planning Agency (PCTPA) has engaged URS Corporation to assist PCTPA in identifying a right-of-way connecting western Placer County and southern Sutter County. This is envisioned as a new 15-mile parkway connecting existing state highways. URS is to identify preliminary alternative alignments and screen them according to technical and environmental criteria; prepare technical studies; prepare a Tier 1 EIS/EIR that will satisfy both Caltrans and FHWA requirements, and provide public outreach support. The environmental review of the project will satisfy both CEQA and NEPA. Our contact with the PCTPA is Mr. Stan Tidman (550 High Street, Suite 107 Auburn, CA 95603). Mr. Tidman can be reached at (530) 823-4033.

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16 June 2003

Sam Starkey
United Auburn Indian Community of the Auburn Rancheria
953 Indian Rancheria Road
Auburn, CA 95603

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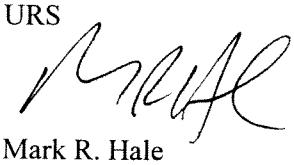

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16 June 2003

David Keyser
United Auburn Indian Community of the Auburn Rancheria
961 Indian Rancheria Road
Auburn, CA 95603

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16 June 2003

Christopher Suehead
Cultural Representative
Todd Valley Miwok-Maidu Cultural Foundation
P.O. Box 1490
Foresthill, CA 95631

Dear Christopher Suehead,

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Rose Enos
15310 Bancroft Road
Auburn, CA 95603

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16 June 2003

Jeff Murray
Cultural Resources Manager
Shingle Springs Band of Miwok Indians
P.O. Box 1340
Shingle, CA 95682

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Project Archaeologist

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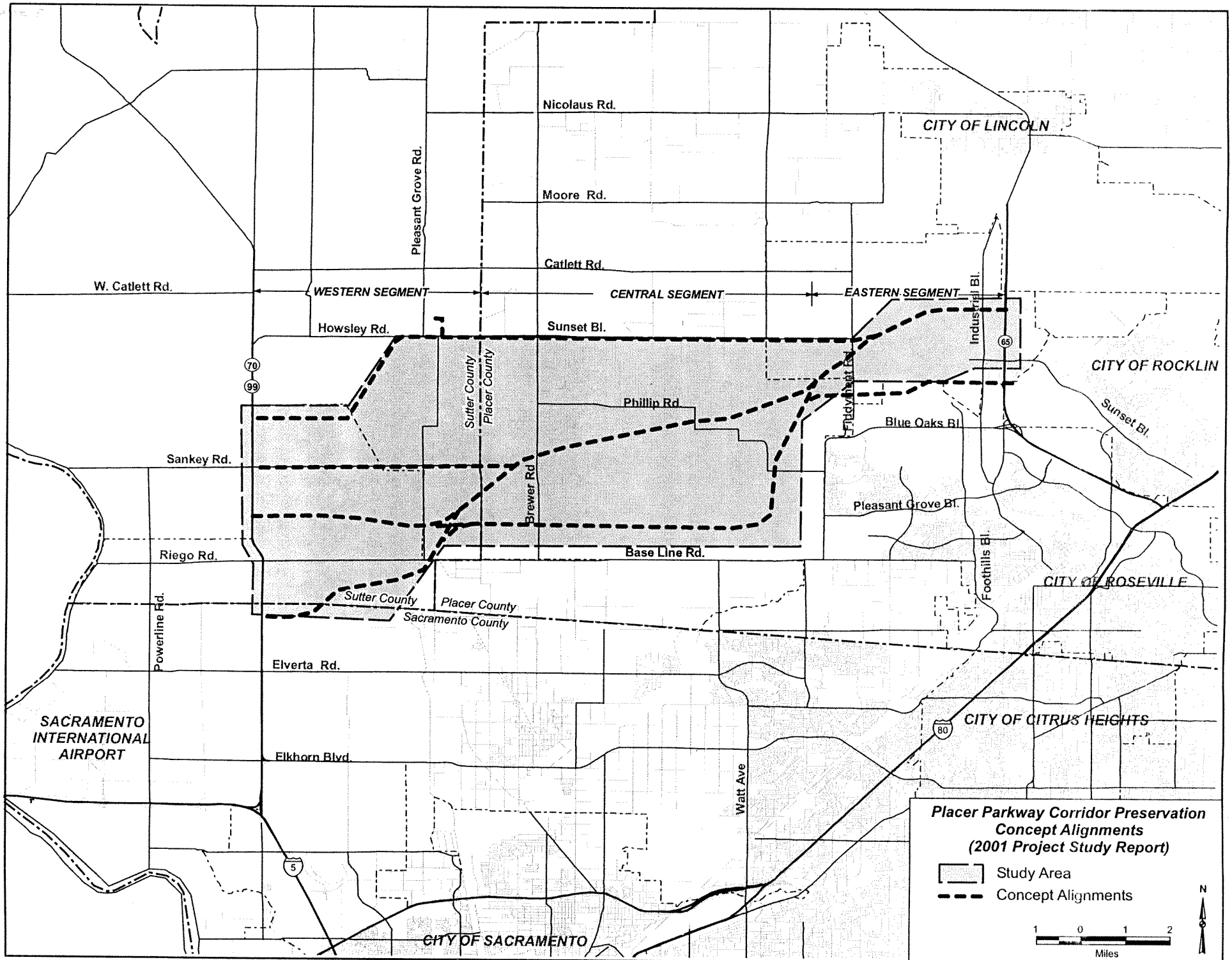
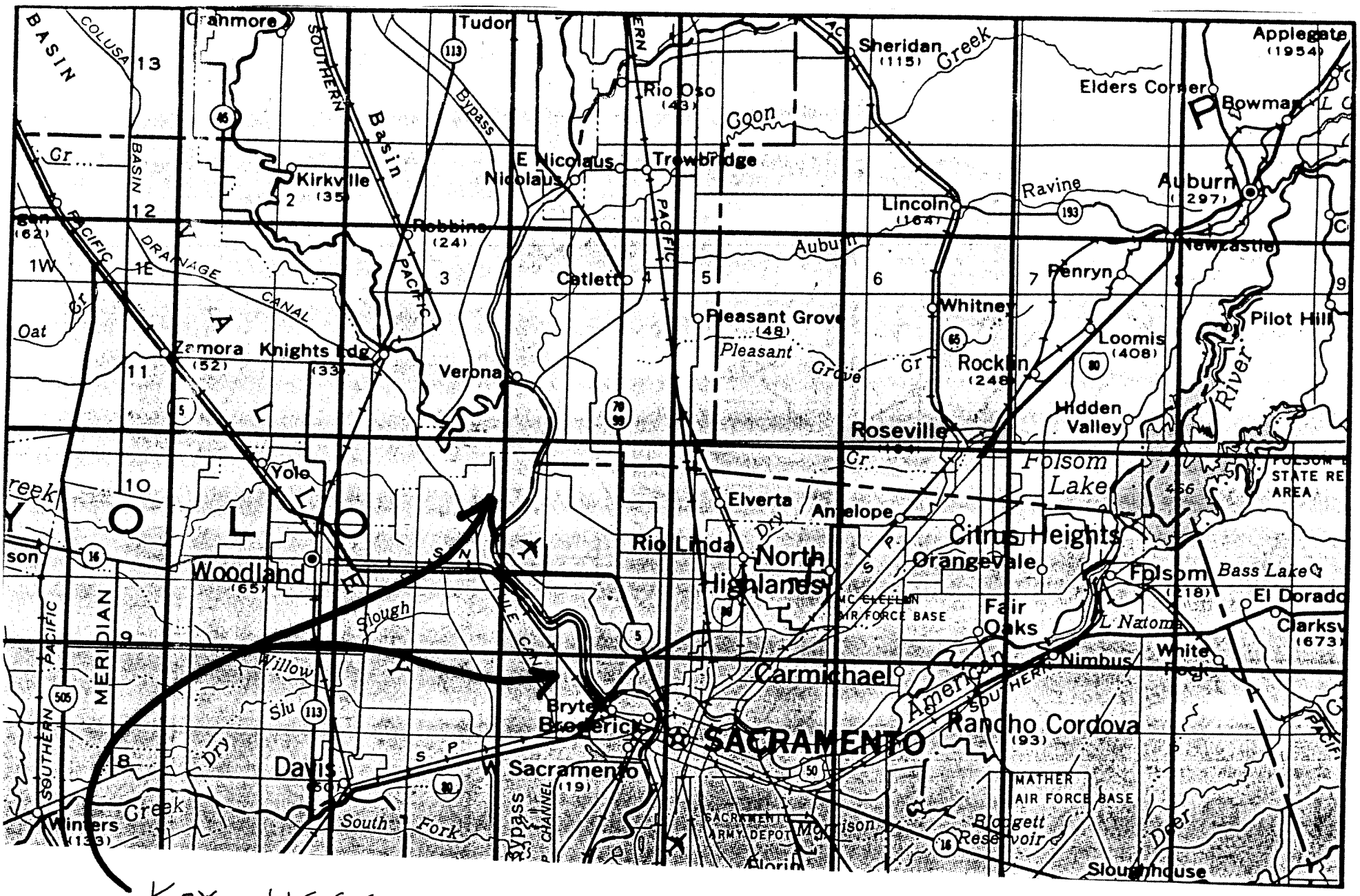
The following maps were included with each of the June 16, 2003 letters to Native American representatives



4/17/03 vsa \28066591 Placer Parkway\pkwy concept aligns.cdr



KEY: USGS 7.5 TOPOGRAPHIC QUADRANGLES FOR PROJECT

VERONA PLEASANT GROVE ROSEVILLE

TAYLOR MONUMENT RIO LINDA

TOWNSHIP AND RANGE DATA:

1) PLEASANT GROVE 7.5
   T10N R4E
   SECTION 1
   T11N R4E
   SECTIONS 11, 12, 13, 14, 23, 24, 25, 26, 35, & 36
   T11N R5E
   SECTIONS 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20
   21, 22, 23, 26, 27, 28, 29, 30, 31, 32, 33, 34, & 35

2) RIO LINDA 7.5
   T10N R4E
   SECTIONS 1 & 2

3) ROSEVILLE 7.5
   T11N R5E
   SECTIONS 12, 13, 24, 25, & 36
   T11N R6E
   SECTIONS 3, 4, 5, 6, 7, 8, 9, 10 & 18

4) TAYLOR MONUMENT 7.5
   T10N R4E
   SECTIONS 2, 3, 4, 9, 10, & 11

5) VERONA 7.5
   T11N R4E
   SECTIONS 10, 11, 14, 15, 16, 17, 20, 21,
   22, 23, 26, 27, 28, 29, 32, 33
   34, & 35.

URS

13 October 2003

Jessica Tavares
Chairperson
United Auburn Indian Community of the Auburn Rancheria
661 Newcastle Road, Suite 1
Newcastle, Ca 95658

Dear Jessica Tavares,

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URS Corporation

for Mark R. Hale
Project Archaeologist

Enclosure: Maps (2)

URS

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URS Corporation
221 Main Street, Suite 600
San Francisco, CA 94105
Tel: 415.896.5858
Fax: 415.882.9261
www.urscorp.com

URS

I apologize for any inconvenience, however, it is important that you be provided ample opportunity to comment, particularly at this very early stage in project planning. If you have any questions, please feel free to call me directly at (415)-243-3826. Thank you for your cooperation.

Sincerely,

URS Corporation

Mark R. Hale
Project Archaeologist

Enclosure: Maps (2)

URS

13 October 2003

Harvey Angle
Chairperson
Enterprise Rancheria of Maidu Indians
1940 Feather River Blvd., Suite B
Oroville, CA 95965

Dear Harvey Angle,

In June 2003, I requested information you may have regarding properties, features, or materials within the Placer Parkway Corridor Preservation Project study area that may be of concern to local Native Americans. I made follow-up calls concerning this request in August 2003.

We have not been able to confirm that you received our earlier materials, and want to be sure that this information did not go astray. We are interested in obtaining the views and concerns of the local Native American community concerning this proposed project. In the event you no longer retain our original request for information, below is found the text from that original request:

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Sincerely,

URS Corporation

for Mark R. Hale
Project Archaeologist

Enclosure: Maps (2)

URS

13 October 2003

Martha Noel
Maidu Elders Organization
P.O. Box 206
Dobbins, CA 95935

Dear Martha Noel,

In June 2003, I requested information you may have regarding properties, features, or materials within the Placer Parkway Corridor Preservation Project study area that may be of concern to local Native Americans. I made follow-up calls concerning this request in August 2003.

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Sincerely,

URS Corporation

for Mark R. Hale
Project Archaeologist

Enclosure: Maps (2)

URS

13 October 2003

Joe Marine
1025 – 35th Avenue, Apt 9
Sacramento, CA 95822

Dear Joe Marine,

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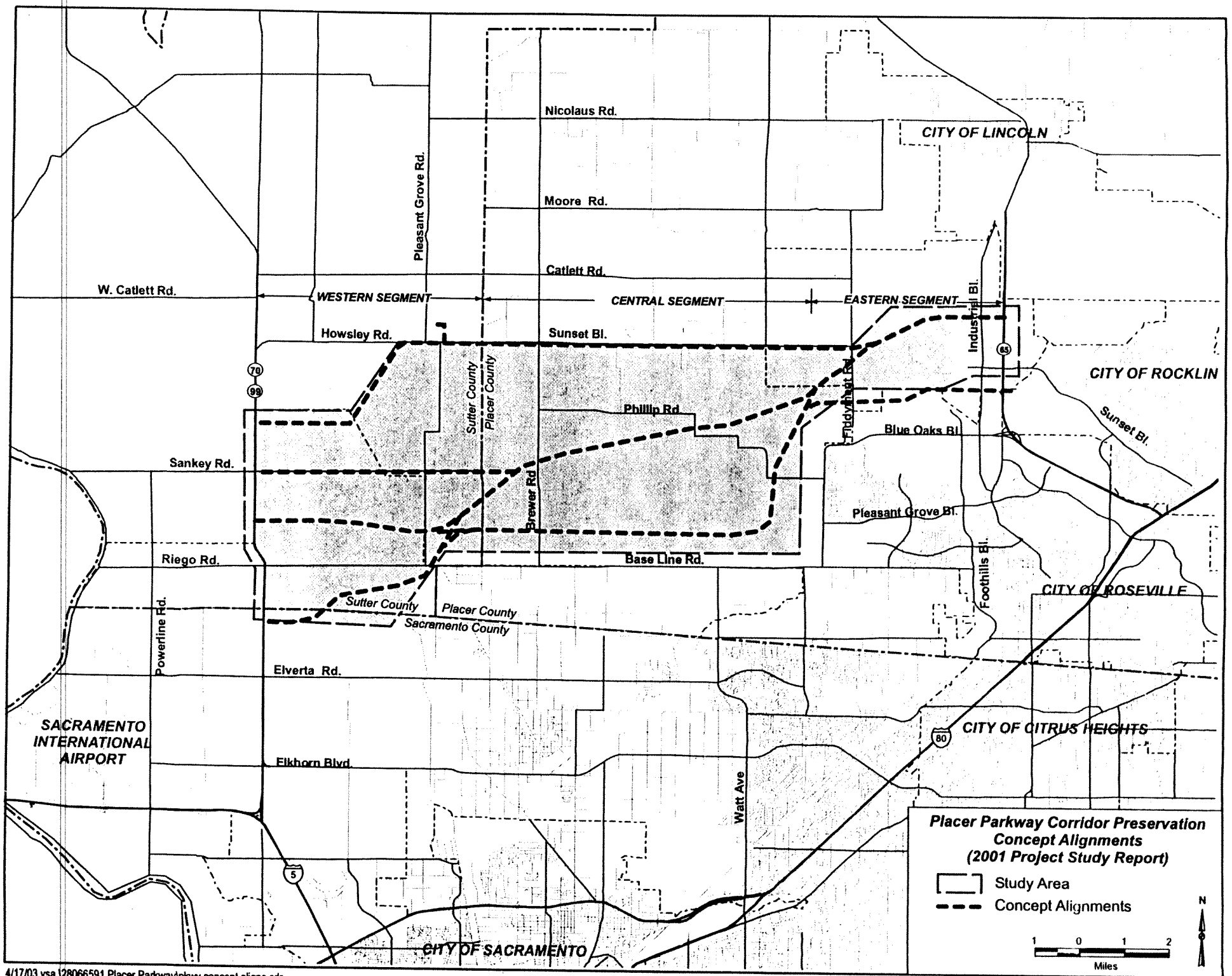
Sincerely,

URS Corporation

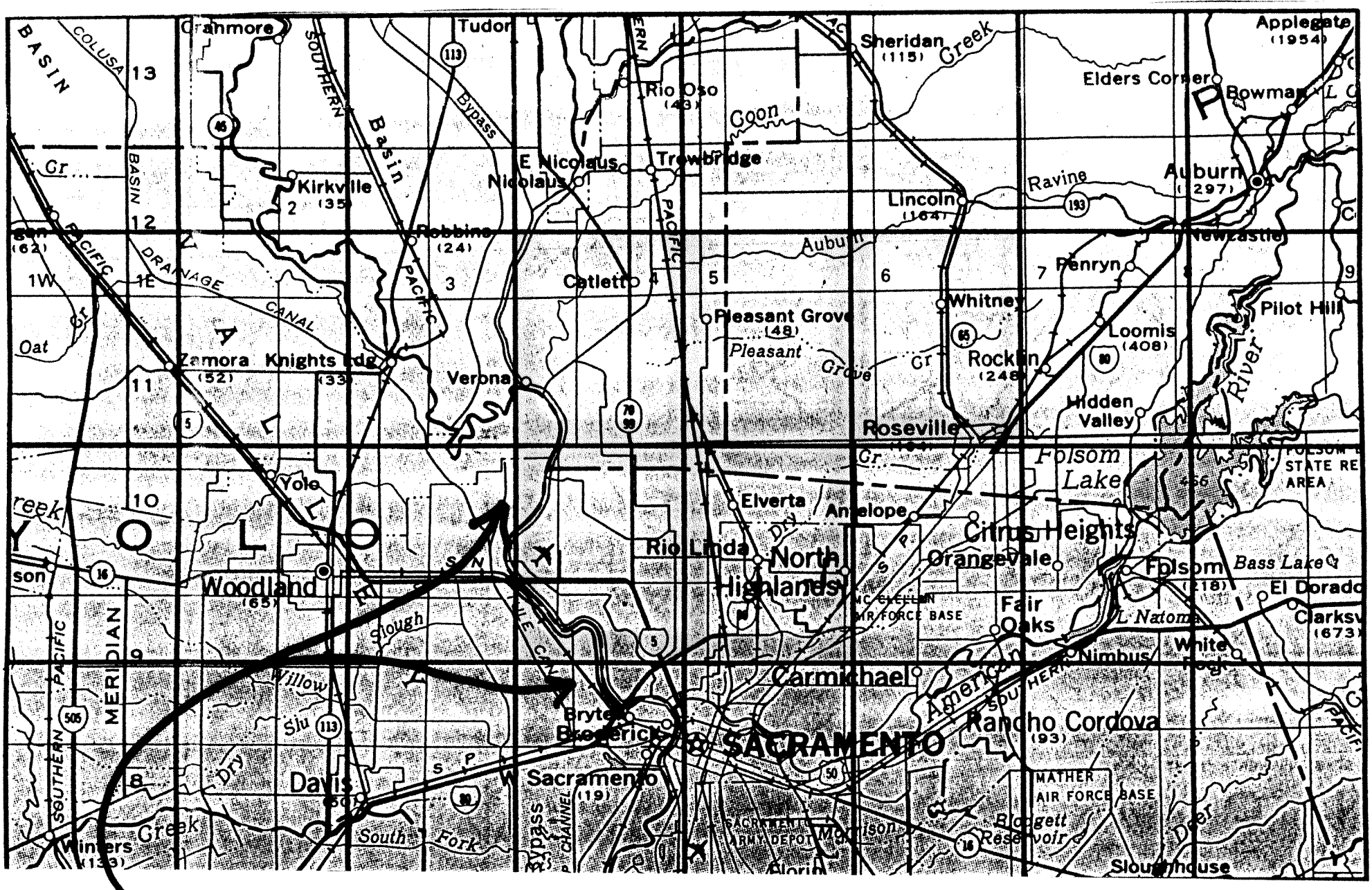
for Mark R. Hale
Project Archaeologist

Enclosure: Maps (2)

The following maps were included with each of the October 13, 2003 letters to Native American representatives



4/17/03 vsa \28066591 Placer Parkway\pkwy concept aligns.cdr



KEY: USGS 7.5 TOPOGRAPHIC QUADRANGLES FOR PROJECT

VERONA PLEASANT GROVE ROSEVILLE

TAYLOR MONUMENT RIO LINDA

TOWNSHIP AND RANGE DATA:

1) PLEASANT GROVE 7.5
   T10N R4E
   SECTION 1
   T11N R4E
   SECTIONS 11, 12, 13, 14, 23, 24, 25, 26, 35, & 36
   T11N R5E
   SECTIONS 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20
   21, 22, 23, 26, 27, 28, 29, 30, 31, 32, 33, 34, & 35

2) RIO LINDA 7.5
   T10N R4E
   SECTIONS 1 & 2

3) ROSEVILLE 7.5
   T11N R5E
   SECTIONS 12, 13, 24, 25, & 36
   T11N R6E
   SECTIONS 3, 4, 5, 6, 7, 8, 9, 10 & 18

4) TAYLOR MONUMENT 7.5
   T10N R4E
   SECTIONS 2, 3, 4, 9, 10, & 11

5) VERONA 7.5
   T11N R4E
   SECTIONS 10, 11, 14, 15, 16, 17, 20, 21,
   22, 23, 26, 27, 28, 29, 32, 33
   34, & 35.

MIWOK
MAIDU

United Auburn Indian Community
of the Auburn Rancheria

JESSICA TAVARES
CHAIRPERSON

DAVID KEYSER
VICE CHAIR

CHRISTINE BEALL
SECRETARY

DOLLY SUEHEAD
TREASURER

MONA CAMP
COUNCIL MEMBER

October 21, 2003

Mark R. Hale
URS Corporation
221 Main Street, Suite 600
San Francisco, California 94105

Subject: Impact to Cultural Resources on Project Site

Dear Mr. Hale,

We recently received a notification indicating that you are proposing a project that has the potential to impact Native American cultural sites. As you may know, under the California Environmental Quality Act and Section 106 of the National Historic Preservation Act, you are required to consult with Indian tribes that may have cultural affiliations or interest in your project. The United Auburn Indian Community is composed of Miwok and Maidu Indians with an ancestral territory encompassing Placer and Nevada Counties, and surrounding areas. We are concerned about projects that may impact our ancient burial grounds and village sites, and sites that have cultural and religious importance to us.

We request that a qualified archaeologist prepare a report documenting a field survey and records search of your project site before the project is approved. We would like to receive a copy of the report upon its completion. We will then review the report and determine if cultural resources of importance to us may be impacted.

Please contact our environmental consultant, Dr. Shelley McGinnis, of Analytical Environmental Services, at (916) 447-3479 if you have any questions regarding this matter.

Sincerely,

Greg Baker
Tribal Administrator

MIWOK
MAIDU

United Auburn Indian Community
of the Auburn Rancheria

JESSICA TAVARES
CHAIRPERSON

DAVID KEYSER
VICE CHAIR

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SECRETARY

DOLLY SUEHEAD
TREASURER

MONA CAMP
COUNCIL MEMBER

November 21, 2003

Mark R. Hale
URS Corporation
221 Main Street, Suite 600
San Francisco, California 94105

Subject: Placer Parkway Corridor Preservation Tier 1 EIS/EIR

Dear Mr. Hale,

This letter is in response to your letter dated November 18, 2003. The United Auburn **Indian Community has designated David Zweig of Analytical Environmental Services as** the tribal representative on all environmental and cultural resource issues. Mr. Zweig **would be pleased to meet with you as a representative of UAIC to discuss the proposed** Placer Parkway Corridor Preservation project.

You may contact Mr. Zweig directly to set up a meeting. He can be reached by phone (916-447-3479) or email (dzweig@analyticalcorp.com).

Sincerely,

Greg Baker
Tribal Administrator

URS

March 2 2006

Rose Enos
15310 Bancroft Road
Auburn, CA 95603

Dear Rose Enos,

In June and again in October of 2003, I sent out letters requesting information you may have regarding properties, features, or materials within the Placer Parkway Corridor Preservation Project study area that may be of concern to local Native Americans. I made telephone calls following the initial request in August 2003.

Although situated within the same study area, the corridor alignments have been revised slightly from those depicted in the original mailings. As such, I felt it prudent to re-solicit the local Native American community concerning this proposed project. In the event you no longer retain our original request for information, below is found the text from that original request:

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Fax: 415.882.9261

URS

Attached to this letter is an aerial photograph depicting the alignments to be analyzed in the above referenced Tier 1 EIS/EIR. I apologize for this re-solicitation, however, it is important that you be provided ample opportunity to comment particularly at this stage in project planning. If you have any questions, please feel free to call me directly at (415)-243-3826. Thank you for your cooperation.

Sincerely,

URS Corporation

Mark R. Hale
Senior Project Archaeologist

Enclosure

URS

March 2 2006

Jeff Murray
Cultural Resources Manager
Shingle Springs Band of Miwok Indians
P.O. Box 1340
Shingle, CA 95682

Dear Jeff Murray,

In June and again in October of 2003, I sent out letters requesting information you may have regarding properties, features, or materials within the Placer Parkway Corridor Preservation Project study area that may be of concern to local Native Americans. I made telephone calls following the initial request in August 2003.

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Sincerely,

URS Corporation

Mark R. Hale
Senior Project Archaeologist

Enclosure

URS

March 2 2006

Christopher Suehead
Cultural Representative
Todd Valley Miwok-Maidu Cultural Foundation
P.O. Box 1490
Foresthill, CA 95631

Dear Christopher Suehead,

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Mark R. Hale
Senior Project Archaeologist

Enclosure

URS

March 2 2006

David Keyser
United Auburn Indian Community of the Auburn Rancheria
961 Indian Rancheria Road
Auburn, CA 95603

Dear David Keyser,

In June and again in October of 2003, I sent out letters requesting information you may have regarding properties, features, or materials within the Placer Parkway Corridor Preservation Project study area that may be of concern to local Native Americans. I made telephone calls following the initial request in August 2003.

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URS Corporation

Mark R. Hale
Senior Project Archaeologist

Enclosure

URS

March 2 2006

Jessica Tavares
Chairperson
United Auburn Indian Community of the Auburn Rancheria
661 Newcastle Road, Suite 1
Newcastle, Ca 95658

Dear Jessica Tavares,

In June and again in October of 2003, I sent out letters requesting information you may have regarding properties, features, or materials within the Placer Parkway Corridor Preservation Project study area that may be of concern to local Native Americans. I made telephone calls following the initial request in August 2003.

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Sincerely,

URS Corporation

Mark R. Hale
Senior Project Archaeologist

Enclosure

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March 2 2006

Sam Starkey
United Auburn Indian Community of the Auburn Rancheria
953 Indian Rancheria Road
Auburn, CA 95603

Dear Sam Starkey,

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Sincerely,

URS Corporation

Mark R. Hale
Senior Project Archaeologist

Enclosure

URS

March 2 2006

Harvey Angle
Chairperson
Enterprise Rancheria of Maidu Indians
1940 Feather River Blvd., Suite B
Oroville, CA 95965

Dear Harvey Angle,

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Sincerely,

URS Corporation

Mark R. Hale
Senior Project Archaeologist

Enclosure

URS

March 2 2006

Martha Noel
Maidu Elders Organization
P.O. Box 206
Dobbins, CA 95935

Dear Martha Noel,

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> The Placer County Transportation Planning Agency (PCTPA) has engaged URS Corporation to assist PCTPA in identifying a right-of-way connecting western Placer County and southern Sutter County. This is envisioned as a new 15-mile parkway connecting existing state highways. URS is to identify preliminary alternative alignments and screen them according to technical and environmental criteria; prepare technical studies; prepare a Tier 1 EIS/EIR that will satisfy both Caltrans and FHWA requirements, and provide public outreach support. The environmental review of the project will satisfy both CEQA and NEPA. Our contact with the PCTPA is Mr. Stan Tidman (550 High Street, Suite 107 Auburn, CA 95603). Mr. Tidman can be reached at (530) 823-4033.
>
> Among the tasks to be completed for the initial screening phase of the project are consultation with the Native American Heritage Commission (NAHC) and local Native American groups and individuals. As such, I am requesting any information you may have regarding properties, features, or materials within the project area that may be of concern to local Native Americans.

URS Corporation
221 Main Street, Suite 600
San Francisco, CA 94105-1917
Tel: 415.896.5858
Fax: 415.882.9261

URS

Attached to this letter is an aerial photograph depicting the alignments to be analyzed in the above referenced Tier 1 EIS/EIR. I apologize for this re-solicitation, however, it is important that you be provided ample opportunity to comment particularly at this stage in project planning. If you have any questions, please feel free to call me directly at (415)-243-3826. Thank you for your cooperation.

Sincerely,

URS Corporation

Mark R. Hale
Senior Project Archaeologist

Enclosure

URS

March 2 2006

Joe Marine
1025 – 35th Avenue, Apt 9
Sacramento, CA 95822

Dear Joe Marine,

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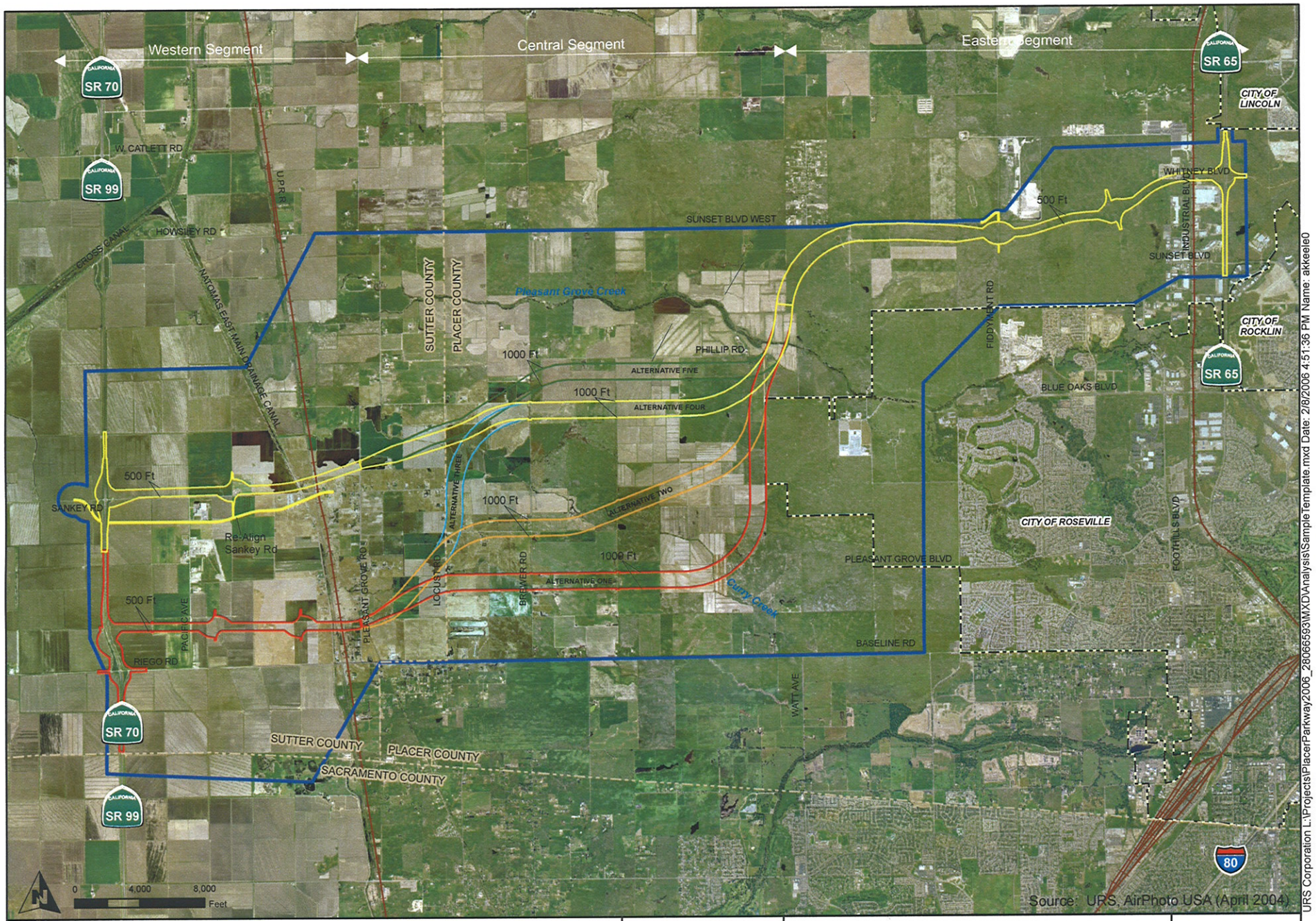
URS Corporation

Mark R. Hale
Senior Project Archaeologist

Enclosure

The following map was included with each of the March 2, 2006 letters to Native American representatives



URS Corporation L:\Projects\PlacerParkway2006_28066593\MXD\Analysis\SampleTemplate.mxd Date: 2/8/2006 4:51:36 PM Name: akkeele0

PLACER PARKWAY
CORRIDOR PRESERVATION

DRAFT
COMMUNITY IMPACT ASSESSMENT

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR

June 29, 2007

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

Caltrans

FHWA

Prepared by
Mara Feeney Associates
and
URS Corporation

for
South Placer Regional Transportation Authority
California Department of Transportation
Federal Highway Administration

The preparation of this report was financed in part through a planning grant from the Federal Highway Administration

DRAFT

COMMUNITY IMPACT ASSESSMENT:

PLACER PARKWAY CORRIDOR PRESERVATION
TIER 1 EIS/PROGRAM EIR

June 2007

Prepared for:

URS Corporation
and
Placer County Transportation Planning Agency

Prepared by:

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COMMUNITY IMPACT ASSESSMENT
PLACER PARKWAY CORRIDOR PRESERVATION
TIER 1 EIS/PROGRAM EIR

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APPENDICES

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

ALS	Advanced Life Support
APN	Assessor's Parcel Number
Caltrans	California Department of Transportation
CDF	California Department of Forestry
CDFG	California Department of Fish and Game
CDP	Census Designated Place
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHP	California Highway Patrol
CIA	Community Impact Assessment
CIP	Capital Improvement Program
CSA	community supported agriculture
CSA	County Service Area
CSP	Creekview Specific Plan
CSU	California State University
DLRP	Division of Land Resource Protection
DOC	Department of Conservation
DOT	U.S. Department of Transportation
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
EMSA	Emergency Medical Services Authority
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FPPA	Farmland Protection Policy Act
FSZ	Farmland Security Zone
GIS	Geographic Information System
HCD	Housing and Community Development Department
HCP	Habitat Conservation Plan
HDM	Highway Design Manual
I-80	Interstate 80
JPA	joint powers authority
LE	Land Evaluation
LESA	Land Evaluation and Site Assessment
LOS	Level of Service
Metro Fire	Sacramento Metropolitan Fire District
MIG	More Iacofano Goltsman, Inc.
MOU	Memorandum of Understanding
MPH	miles per hour
MPO	Metropolitan Planning Organization
MTIP	Metropolitan Transportation Improvement Program
MTP	Metropolitan Transportation Plan
NASS	National Agricultural Statistics Service
NBHCP	Natomas Basin Habitat Conservation Plan
NCCP	Natural Communities Conservation Plan
NEPA	National Environmental Policy Act
NFA	North Fork Associates
NRCS	Natural Resources Conservation Service

OES	Office of Emergency Services
OHP	Office of Historic Preservation
OHW	ordinary high water
PAC	Policy Advisory Committee
PCCP	Placer County Conservation Program
PCTPA	Placer County Transportation Planning Agency
PEAR	Preliminary Environmental Analysis Report
PGWWTP	Pleasant Grove Wastewater Treatment Plant
POP	Problem Oriented Policing
PRSP	Placer Ranch Specific Plan
PSR	Project Study Report
PVSP	Placer Vineyards Specific Plan
RAD	Regional Analysis Division
RD 1000	Reclamation District No. 1000
REP	Roseville Energy Park
RTP	Regional Transportation Plan
RTIP	Regional Transportation Improvement Program
RTPA	regional transportation planning agency
ROW	right-of-way
RUSP	Regional University Specific Plan
SAC	Study Advisory Committee
SACMET	Sacramento Metropolitan Travel Demand Model
SACOG	Sacramento Area Council of Governments
SHOPP	State Highway Operation and Protection Program
SIAP	Sunset Industrial Area Plan
SMUD	Sacramento Municipal Utilities District
SOI	Sphere of Influence
SPRTA	South Placer Regional Transportation Authority
SR	State Route
STIP	State Transportation Improvement Program
SVSP	Sierra Vista Specific Plan
TAC	Technical Advisory Committee
TAZ	traffic analysis zone
TCRP	Traffic Congestion Relief Program
TEA-21	Transportation Efficiency Act for the 21st Century
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VMT	Vehicle Miles Traveled
WAPA	Western Area Power Authority
WRSL	Western Regional Sanitary Landfill
WRSP	West Roseville Specific Plan
WWTP	wastewater treatment plant

COMMUNITY IMPACT ASSESSMENT
PLACER PARKWAY CORRIDOR PRESERVATION TIER 1 EIS/PROGRAM EIR

1.0 INTRODUCTION

1.1 TIER 1 EIS/PROGRAM EIR

The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the South Placer Regional Transportation Authority (SPRTA) propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking State Route (SR) 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1).

The planning for Placer Parkway involves two phases: (1) the present action, selection of a corridor (titled the Placer Parkway Corridor Preservation Project), and (2) the future selection of a precise alignment within the corridor and a decision whether or not to build the Parkway. If a build alternative is selected and pursued after the second phase, the ultimate Placer Parkway project would be constructed and operated. Throughout this document the term "Proposed Action" is used to describe the selection of a corridor to preserve. The document generally uses the term "Parkway" to mean the ultimate roadway, including construction and operation, except where context indicates otherwise.

As stated, the action to be considered based on this Tier 1 analysis involves only the selection of a corridor to preserve, which has limited environmental effects by itself. However, the ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. In order to describe the effects of the ultimate Placer Parkway project to the greatest extent feasible at this early stage, the Tier 1 EIS/EIR also addresses the potential effects of construction and operation of the future roadway. This discussion of the roadway is necessarily limited, however, because only the general concepts of the roadway design and location are known at this time. If a corridor is selected and preserved at Tier 1, a subsequent Tier 2 analysis will evaluate the Parkway itself in detail—the specific roadway "footprint" within the selected corridor, including construction and operation of the roadway.

1.2 CORRIDOR SELECTION AND PRESERVATION

The concept for the Placer Parkway is more than a decade old. Placer County's 1994 General Plan depicts a "plan line" for it. Two planning studies helped to refine the concept:

- DKS Associates, 2000, Placer Parkway Interconnect Study/Conceptual Plan
- DKS Associates, 2001, Project Study Report (Project Development Support) for Placer Parkway

Placer Parkway is cited as a high-priority regional transportation project by the Sacramento Area Council of Governments (SACOG) 2025 Metropolitan Transportation Plan and the 2027 Placer County Regional Transportation Plan. The project vicinity and surrounding area include some of the fastest growing communities in the Sacramento region. A number of large urban development proposals are being considered by Placer and Sutter Counties. New development is expected to add a significant amount of residential, commercial, industrial, and educational uses.

A 2½-year screening and public outreach program that involved local jurisdictions (the Technical Advisory Committee); regional, state, and federal agencies; stakeholder groups that included representatives from planning and public works departments of all affected cities and counties, environmental, business, agricultural, development, and homeowner interests (the Study Advisory

Committee); and elected officials (the Policy Advisory Committee), resulted in the identification of five potential corridors for the Parkway. The Tier 1 Environmental Impact Statement/Program Environmental Impact Report will analyze these five corridor alternatives along with a No-Build Alternative.

Other potential transportation modes such as bus rapid transit may be developed in the corridor in the future, although they are not proposed as part of the current project. The width of the corridor for Placer Parkway is to vary from approximately 500 feet in the Eastern and Western segments to approximately 1,000 feet in the Central Segment. Depending upon the alternative, the corridor's length ranges from a minimum of 14.2 miles to a maximum of 16.2 miles. The selected corridor would contain the roadway, including the median, travel lanes, shoulder, associated access ramps and a no-development buffer zone.

Corridor acquisition may not be completed until after Tier 2, as funding becomes available. Portions of the selected corridor would be preserved as a no-development buffer zone. The buffer would be maintained as a zone where development is either not permitted or is severely restricted. This is intended to restrict access to the proposed interchanges, protect the rural character of agriculturally designated areas in the vicinity of the Parkway as far as possible subject to future development, and to maximize opportunities to incorporate adjacent sensitive areas. It is intended that the buffer would be owned and managed in the future to achieve these objectives. For subsequent Tier 2 (project-level) environmental reviews, the size of this buffer zone could be considered flexible for agriculturally designated land undergoing urban development. In the Tier 2 environmental review, the specific buffer size and location would be determined. This determination would be based on performance standards on a case-by-case basis, depending on the land use needs of future approved development, and taking into account the primary objective of restricting future access to the Parkway.

Project proponents are considering employment of several land management and control mechanisms in order to ensure that the buffer would be effectively maintained as an area where development would either not be permitted, and where construction of any additional access onto the Parkway would not be allowed. These mechanisms could include land use controls, land purchase/leases, general plan amendments, zoning/overlay zoning changes, covenants/deed restrictions, agricultural/conservation easements, urban growth boundaries, etc. "Layering" or using several of these methods would provide more assurance that the buffers would be permanent, or at least more difficult to undo.

1.3 TECHNICAL STUDY OBJECTIVE

This Community Impact Assessment has been prepared to support the Tier 1 Environmental Impact Statement/Program Environmental Impact Report. It presents a Tier 1/Program assessment of potential impacts related to land use, farmland, and social and economic conditions for five corridor alignment alternatives and the No-Build Alternative as described in Chapter 2.

This Community Impact Assessment report was prepared in accordance with the guidance presented in the California Department of Transportation (Caltrans) *Environmental Handbook Volume IV* (1997). The scope of work was modified for purposes of Tier 1/Program analysis by agreement of Caltrans. In addition, the evaluation considered guidance from the FHWA (FHWA, 1999a; FHWA, 1999b).

This report is organized as follows:

Chapter 2: The Proposed Action
Chapter 3: Land Use
Chapter 4: Farmland
Chapter 5: Social Conditions
Chapter 6: Economic Conditions
Chapter 7: Growth Inducement

Chapter 8: References

The four sections on land use, farmland, social conditions and economic conditions each contain the following subsections: Regulatory Setting; Affected Environment; Potential Direct Impacts; Secondary and Indirect Impacts; Cumulative Impacts; Potential Watt Avenue Connection; Avoidance, Minimization and/or Mitigation Strategies; and Analyses to be Undertaken in Tier 2. This report also includes figures and tables, which show the project location, each build alternative, and pertinent technical information prepared to evaluate the build alternatives.

1.4 STUDY AREA DEFINITION

The Community Impact Analysis evaluates the area between SR 65 on the east and SR 70/99 on the west, extending from Sunset Boulevard West and Howsley Road on the north to Baseline and Riego roads on the south, as shown on Figure 1-1. The study area is similar to the study area that was identified in the Placer Parkway Interconnect Study/Conceptual Plan that was completed in January 2000. The study area includes portions of five jurisdictions—the City of Rocklin, the City of Roseville, Placer County, Sutter County, and Sacramento County.

1.5 PROJECT DATABASE AND OTHER DATA SOURCES

Environmental screening for Placer Parkway began with the gathering of existing environmental information for the study area in 2003-2004. Consistent with a Tier 1/Program approach, the emphasis was on use of existing electronic data and recent aerial photographs available from local jurisdictions, regulatory agencies, private parties, and the Internet. Field surveys were not conducted, and detailed new data were not generated. Data were collected for the entire study area in order to address any future modifications to alternative alignments.

The data were entered into URS Corporation's Geographic Information System (GIS). The development of a GIS for this project involved a series of tasks, including collection of spatial data from a variety of sources; importation of that data into ArcGIS software; development of new data from pertinent sources and input from project team members; creation of metadata for each data layer; map and figure creation displaying the data in a useful manner; and input into a GIS analysis program, Community VIZ, operated by Moore Iacofano Goltsman, Inc. (MIG), which created the figures and tables of numeric data for use in impact analyses.

Spatial data were collected from a variety of sources. Aerial photography was obtained from AirPhoto USA. Images of the project area were taken in April 2001, November 2002, and April 2004 for use in the analysis, as well as for the production of base maps. Existing GIS data layers for use in the analyses were gathered from Placer County, Sutter County, Sacramento County, City of Roseville, DKS Associates, North Fork Associates, SACOG, CH2M Hill, Federal Emergency Management Agency (FEMA), U.S. Geological Survey (USGS), U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), and California Department of Conservation.

Local General Plans and other planning documents were consulted in order to identify land use designations and zoning and to establish the project's consistency with local planning goals and policies. The Natural Resources Conservation Service (NRCS) was consulted on the subject of potential farmland impacts and to prepare an inventory of farmlands in the project area. The U.S. Census and other sources of demographic data were used to characterize the study area population. Additional information was derived from field visits, conversations with local planning staff, residents, and business owners, and numerous online sources. Additional information about methods and data sources is provided in subsequent sections of this report, and a complete list of references is provided in Chapter 8.

Throughout this document, the Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report is referred to as the Tier 1 EIS/EIR.

2.0 THE PROPOSED ACTION

The Proposed Action for the Placer Parkway Corridor Preservation Project is to select and preserve a 500- to 1,000-foot-wide corridor in the project study area, within which the future four- or six-lane Placer Parkway may be constructed. The ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction, and operation of the Parkway. Although the action taken at Tier 1 on the Placer Parkway Corridor Preservation Project is limited, the underlying project whose effects are studied in this document is the Placer Parkway. To the extent feasible at this early stage, the Tier 1 EIS/EIR addresses the potential effects of construction and operation of the future roadway.

2.1 THE PROJECT STUDY AREA

The project study area is an area of approximately 33,460 acres located in Placer and Sutter counties, with a small section located in Sacramento County (see Figures 1-1 and 2-1). It extends from SR 70/SR 99 in the west to SR 65 in the east, with the northern boundary extending to Sunset Boulevard West and the southern boundary located adjacent to Baseline and Riego roads. The portion of the study area in Sacramento County is located in the extreme southwest corner of the study area and does not include any of the proposed corridor alignment alternatives.

For the purposes of the analysis the study area is divided into three segments:

- Western Segment: the Western Segment extends from SR 70/99 to Pleasant Grove Road in Sutter County.
- Central Segment: the Central Segment extends from Pleasant Grove Road in Sutter County to approximately 2,300 feet north of Pleasant Grove Creek in Placer County.
- Eastern Segment: the Eastern Segment extends from approximately 2,300 feet north of Pleasant Grove Creek to SR 65 in Placer County.

2.2 CORRIDOR ALTERNATIVES

The following subsections describe the corridor alternatives, which are depicted on Figure 2-1, and are numbered according to location from south to north in the study area.

2.2.1 The No-Build Alternative

Under the No-Build Alternative, the project would not be implemented. A Placer Parkway corridor would not be selected/preserved, and the future Placer Parkway would not be constructed.

2.2.2 Alternative 1 – the Red Alternative

Alternative 1 would extend from SR 70/99 approximately ½ mile north of Riego Road, eastward approximately 1 mile north of Baseline Road to approximately Watt Avenue, proceeding north and transitioning in an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 16.2 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.3 Alternative 2 – the Orange Alternative

Alternative 2 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed northeast, then in a northerly direction south of Pleasant Grove Creek, transitioning to an easterly direction before it reaches Sunset Boulevard West, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.4 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.4 Alternative 3 – the Blue Alternative

Alternative 3 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed north along the Sutter/Placer County Line, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.6 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.5 Alternative 4 – the Yellow Alternative

Alternative 4 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.3 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.2.6 Alternative 5 – the Green Alternative

Alternative 5 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 4,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.2 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.3 PARKWAY DESIGN ASSUMPTIONS

Although the Parkway would be designed and construction-level impacts analyzed during Tier 2, for the purpose of this report and the Tier 1 EIS/Program EIR, several assumptions have been made about potential design and configuration concepts. These assumptions would be subject to further development and refinement, and specific decisions about design of the roadway would be made during the Tier 2 process. For example, the number, location, and design of over-crossings would be determined at the time of final Parkway design, in consultation with local jurisdictions. The following sections outline assumptions for the future roadway.

Preliminary costs estimates for the Parkway range from $600 to $650 million (2005 dollars). This includes costs for right-of-way, design, construction and environmental mitigation for the four- to six-lane facility. The funding situation has spurred interest in exploring other more creative funding options.

These include a county-wide sales tax, more developer contributions, and tolling facilities. The Technical Report and Tier 1 EIS/Program EIR do not make any assumptions about funding sources.

2.3.1 Conceptual Roadway Configuration

The Parkway would be a high-speed, limited access roadway. Depending upon the timing of adjacent urban development proposals and funding, the Parkway may be designed and constructed incrementally in segments. These could be built as a four-lane (interim) roadway until a six-lane segment is warranted, or as the full six-lane facility. A preliminary conceptual cross section (see Figure 2-2) was developed to facilitate the Tier 1/Program evaluation. It illustrates both four-lane (two lanes in both directions) and six-lane (three lanes in both directions) configurations within the 500- to 1,000-foot corridor widths. The roadway would include a central median approximately 100 to 134 feet wide, depending on local conditions and reflecting Caltrans safety guidance. The Parkway would be designed and constructed to Caltrans standards, unless specific design exceptions are granted. For the purposes of the Tier 1 EIS/Program EIR, the Parkway's opening year is assumed to be 2020.

Access would be provided at the western and eastern ends of the Parkway, where existing areas of dense development are already located or planned. Access would be restricted for the 7-mile Parkway Central Segment. The analysis assumes no interchanges in this segment. (A possible future extension of Watt Avenue or another nearby roadway may be considered in the Central Segment as a separate project.)

2.3.2 Conceptual Roadway Elevation

As the study area is comprised of relatively flat terrain, the majority of the future Placer Parkway is assumed to be at-grade. As necessary, bridges would be used to span certain features and improvements such as the Union Pacific Railroad tracks along Industrial Boulevard, Pleasant Grove Creek, the Natomas East Main Drainage Canal, and floodplains. Generally, the approximate height of bridges is expected to range from 10 feet above streams to 30 feet above the railroad. Culverts would be used at smaller creek crossings as appropriate, depending on local conditions and permit requirements. The Pleasant Grove Creek floodplain would be crossed by bridges (one in each direction) supported by abutments located approximately 800 feet on either side of the creek to avoid the riparian habitat associated with the creek.

Within the 100-year floodplain, the roadway would be elevated such that the bottom of any new bridges would be above the 100-year water surface elevation. The roadway support structures and bridges would be designed to minimize environmental impact, not impede stream and flood flows, and allow for the unobstructed passage of potential future streamside uses such as maintenance equipment, bikeways, or trails.

Throughout the project study area, the assumptions for creek and floodplain crossings include typical engineering specifications:

- a maximum bridge span of approximately 150 feet;
- for bridge spans exceeding 150 feet, assume one column, approximately 4 feet in diameter, every 150 feet; and
- all columns placed outside of the ordinary high water (OHW) level.

To maintain existing and future local roadway connectivity (for emergency access, farming operations, and community access), over-crossings would be constructed to convey traffic over the Parkway. These over-crossings would not connect to the Parkway. Parkway access would be via the interchanges described below.

2.3.3 Interchange Concepts

The analysis assumes that the location of interchanges (see Figure 2-1) is as follows.

- SR 70/99 (at ½ mile north of Riego Road or at Sankey Road)
- One or two locations to be determined in southern Sutter County
- Fiddyment Road
- Foothills Boulevard
- SR 65 at Whitney Ranch Parkway

The following discussion outlines concepts and assumptions for the six interchanges that could potentially serve Placer Parkway.

2.3.3.1 Western Segment

Within the Western Segment of the Parkway, a high-speed, freeway-to-freeway type interchange would connect the Parkway with SR 70/99 at one of following potential locations depending on the project alternative (see Section 2.2). Placer Parkway would terminate at SR 70/99.

- **Placer Parkway/SR 70/99 Interchange at North of Riego Road.** This alternative concept uses "braided" ramps to eliminate weaving problems or conflicts with the future SR 70/99 at Riego Road interchange being developed by Sutter County and Caltrans.

- **Placer Parkway/SR 70/99 Interchange at Sankey Road.** Under this alternative concept, the existing two-lane Sankey Road would be realigned to the south of Placer Parkway and the proposed freeway-to-freeway interchange, extending from approximately ¼ mile west of SR 70/99 to approximately ¼ mile east of the Union Pacific railroad tracks. There would be no direct access to SR 70/99 or Placer Parkway from the realigned Sankey Road.

Depending on the final alignment selected, one or two additional interchanges would also be located in south Sutter County. Conceptual locations are identified for purposes of this Tier 1/Program analysis (see Figure 2-1). The actual location of these interchanges would be developed in the Tier 2 phase, based on Sutter County requirements.

2.3.3.2 Central Segment

Within the Central Segment of the Parkway, there would not be any access proposed as part of the project in the 7-mile segment between Fiddyment Road and Pleasant Grove Road. Please see Section 2.4 regarding a potential connection to a future extension of Watt Avenue (Figure 2-3) which could be proposed and constructed by others in the Central Segment; such an interchange is not part of the Placer Parkway.

2.3.3.3 Eastern Segment

Within the Eastern Segment of the Parkway, a signalized high-speed freeway-to-freeway and local access interchange would connect the Parkway to SR 65 at Whitney Ranch Parkway (Figure 2-1). From SR 65 eastward Placer Parkway would terminate and become Whitney Ranch Parkway east of the SR 65 exit ramp intersection. Traffic signals would be provided at the exit ramp terminals. This interchange would be approximately 1 mile north of a planned SR 65/Sunset Boulevard interchange and 1.2 miles south of the existing Twelve Bridges interchange.

As part of this interchange, auxiliary lanes would be required on SR 65 in both directions to enhance traffic operations on the north side of the future SR 65/Sunset Boulevard interchange. The southbound SR 65 exit-ramp at Sunset Boulevard is being designed to accommodate an additional auxiliary lane required for the future Placer Parkway/Whitney Ranch Parkway interchange to minimize the reconstruction of this ramp in the future. Within the Eastern Segment of the Parkway, from SR 65 westward, two interchanges with local roadways would be constructed, one at Foothills Boulevard and one at Fiddyment Road, as depicted on Figure 2-1.

The future interchange on Placer Parkway at Fiddyment Road would be located near the existing intersection of Fiddyment Road and Sunset Boulevard West. To provide acceptable traffic operations, additional distance needs to be provided between the Fiddyment Road/Sunset Boulevard West intersection and the Fiddyment Road/Placer Parkway westbound off-ramp intersection. Therefore, Sunset Boulevard West will need to be realigned to the north as it nears Fiddyment Road.

2.3.4 Landscaping Concept

For the purposes of this environmental analysis, preliminary landscaping concepts have been developed for Placer Parkway. These are entirely conceptual and would be subject to further refinement during the Tier 2 environmental process. It is anticipated that landscaping would be used to reflect local topography and vistas in the study area and complement the varying character of land adjacent to the Parkway corridor. Landscape design would vary within the Parkway's three segments depending on corridor width and type and density of surrounding land uses. Landscaping would be used within the median and the Parkway buffer zone to enhance the aesthetics of the Parkway, and would be used to provide screening and enhance local and long-distance views. Where appropriate, more concentrated plantings would be considered to buffer the Parkway from future adjacent land uses that may be incompatible with the Parkway concept, and to prevent unwanted intrusion into shoulder or median areas. Landscape design would likely include a mix of compatible native and non-native plants that may require some irrigation. Wherever possible, native plant species would be used in line with Caltrans policy. Where possible and depending on availability, feasibility and cost, recycled water would be used for irrigation.

During a future design phase, lighting elements would be designed for safety and would consider the proposed landscaping plan in order to minimize potential aesthetic impacts (e.g., shielding lighting elements, using lower-voltage lighting, and proposing lighting fixtures that conform with the visual character of the area).

2.4 POTENTIAL WATT AVENUE INTERCHANGE

The Placer County General Plan includes a number of new roadways that may be needed in Placer County, according to travel demand forecasts. An extension of Watt Avenue to Placer Parkway (from Baseline Road to a new Blue Oaks Boulevard Extension) is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto the Placer Parkway via a new interchange (see Figure 2-3). A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. It would be subject to independent future environmental analysis and review and is not being fully evaluated within this Technical Report or Tier 1 EIS/Program EIR. However, the connection of Placer Parkway to a potential Watt Avenue extension could affect future travel patterns in the area, including use of the Parkway. Based on direction from previous planning studies, this Technical Study and the Tier 1 EIS/Program EIR will evaluate each corridor alternative with and without a Watt Avenue interchange. This evaluation does not predetermine the construction or alignment of a potential Watt Avenue or nearby roadway extension or the precise locations of any potential interchanges to Placer Parkway.

2.5 AGENCY PERMITS AND APPROVALS

The Placer Parkway Corridor Preservation project would preserve a preferred corridor for a future transportation facility. In the future, permits and approvals would be obtained from appropriate agencies prior to construction of the Parkway. These permits and approvals may include specific design or mitigation requirements that would be incorporated into the project.

2.6 SUBSEQUENT TIER 2 INFORMATION

As noted earlier, the design and construction of Placer Parkway—including its interchanges and over-crossings, and ancillary features such as stream crossings, safety devices, storm water management structures, and similar improvements—would be evaluated in a subsequent Tier 2 environmental review process once a corridor has been identified. The last subsection of each section in this Community Impact Assessment (CIA) provides more detailed information regarding Tier 2 studies.

3.0 LAND USE

3.1 REGULATORY SETTING

The following sections describe the applicable federal, state, and local agency regulatory framework related to evaluation of land use impacts within the study area.

3.1.1 Federal Regulations

3.1.1.1 FHWA

Applicable federal criteria for analyzing the impact that a transportation project has on the existing land uses are provided by FHWA. The FHWA Technical Advisory – Guidance for Preparing and Processing Environmental (National Environmental Policy Act) and Department of Transportation Act-Section 4(f) documents prepared by the U.S. Department of Transportation, FHWA, 1987, states that:

> This discussion [of land use] should identify the current development trends and the State and/or local government plans and policies on land use and growth in the area which will be impacted by the project.

The guidance recommends that the land use discussion assess the consistency of the alternatives with the comprehensive development plans adopted for the area and (if applicable) other plans used in the development of the transportation plan. The secondary social, economic, and environmental impacts of any substantial, foreseeable, induced development should be presented for each alternative, including adverse effects on existing communities. Where possible, the distinction between planned and unplanned growth should be identified.

3.1.2 State Regulations

3.1.2.1 California Environmental Quality Act

The California Environmental Quality Act (CEQA) was adopted in 1970 with the goal of protecting the environment. "It is the intent of the Legislature that all agencies of the state government which regulate activities of private individuals, corporations, and public agencies which are found to affect the quality of the environment, shall regulate such activities so that major consideration is given to preventing environmental damage, while providing a decent home and satisfying living environment for every Californian" (CEQA, Public Resources Code Section 21000(g)).

This legislative intent is met through the preparation of comprehensive, multi-disciplinary analyses of environmental impacts. The analyses must disclose to decision makers and the public the significant impacts to the environment resulting from the proposed activities, and must identify feasible alternatives and mitigation measures that allow for avoidance or lessening of impacts.

CEQA requires that projects be evaluated for possible effects on the environment. For projects determined to have potentially significant impacts on the environment, CEQA requires preparation of an EIR by the "lead agency," which is the public agency that has the principal responsibility for carrying out or approving the project.

3.1.2.2 California Department of Transportation – Community Impact Assessment Guidance

Caltrans generally prepares a CIA for highway projects that are large, complex, and have the potential to adversely affect people, institutions, neighborhoods, communities, organizations, and larger social and economic systems. These issues are sometimes collectively called socioeconomic impacts. The CIA describes

the socioeconomic impacts that the project may have and proposes measures to avoid, minimize, or mitigate those effects. Guidance for preparing CIAs is contained in *Environmental Handbook Volume 4 – Community Impact Assessments* (Caltrans, 1997). This guidance was followed in preparing this CIA.

3.1.3 General Plans and Policies

The Study area is located within two incorporated cities and three counties; the proposed alternatives traverse Placer and Sutter Counties and the Cities of Rocklin and Roseville. State law requires that each of these jurisdictions adopt "a comprehensive, long-term General Plan for [its] physical development." The General Plan is the official city or county policy document regarding the location of housing, business, industry, roads, parks, and other land uses, protection of the public from noise and other environmental hazards, and for the conservation of natural resources. The legislative body of each city (the City Council) and each county (the Board of Supervisors) adopts zoning, subdivision, and other ordinances to regulate land uses and to carry out the policies of its General Plan.

3.1.3.1 Sutter County General Plan

Land use in the portion of the study area that lies within Sutter County is governed by the Sutter County General Plan. The General Plan contains the following policies that may apply to land use and potential transportation project impacts (see Chapter 4 for discussion of agricultural policies):

1.C-6 Low Density Residential and Residential Estate designated parcels which do not meet the minimum acreage requirement, or exceed the maximum acreage requirement, as specified by the land use policies of the General Plan, may be adjusted by lot line adjustment pursuant to §66412(d) of the Government Code under the following conditions:

a. For any adjustment involving parcels that do not meet the minimum parcel size as identified on the General Plan land use diagram, the size of the smallest resultant parcel shall not be smaller than the size of smallest parcel prior to the lot line adjustment; and

b. No parcel meeting the minimum parcel size as identified on the General Plan land use diagram shall be diminished to a size less than the minimum parcel size as identified on the land use diagram.

E-1 New development that may be incompatible with adjacent uses shall be required to provide buffer zones consistent with County standards to reduce anticipated conflicts with existing and future land uses.

3.1.3.2 Placer County General Plan

The Placer County General Plan currently provides for preservation of right-of-way for Placer Parkway. The Plan shows a generalized location for the Parkway on the Circulation Plan Diagram as a "post-2010" urban arterial. The General Plan Land Use/Circulation Diagrams and Standards policy document (pages 28-30) notes that the planned alignments for these roadways are based on travel demand forecasts and anticipated circulation needs for the year 2040. It notes that the purpose of showing these long-term alignments is to preserve right-of-way for future facilities and plan for their ultimate implementation, and that additional alignment studies and environmental review will be required prior to defining precise alignments that minimize impacts and meet circulation objectives.

The General Plan also contains the following policies that are applicable to land use and related to transportation projects:

1.A.3 The County shall distinguish among urban, suburban, and rural areas to identify where development will be accommodated and where public infrastructure and services will be provided. This pattern shall promote the maintenance of separate and distinct communities.

1.A.4 The County shall promote patterns of development that facilitate the efficient and timely provision of urban infrastructure and services.

1.B.1 The County shall promote the concentration of new residential development in higher-density residential areas located along major transportation corridors and transit routes.

1.H.2 The County shall seek to ensure that new development and public works projects do not encourage expansion of urban uses into designated agricultural areas.

1.K.3 The County shall require that new development in rural areas incorporates landscaping that provides a transition between the vegetation in developed areas and adjacent open space or undeveloped areas.

3.A.5 Through-traffic shall be accommodated in a manner that discourages the use of neighborhood roadways, particularly local streets. This through-traffic, including through truck traffic, shall be directed to appropriate routes in order to maintain public safety and local quality of life.

3.1.3.3 Sacramento County General Plan

The Sacramento County General Plan contains the following policies that are applicable to land use and related to transportation projects:

LU-42 Future Agricultural-Residential development shall be limited to existing developed and infill Agricultural-Residential lands designated on the Land Use Diagram and such additional areas adjacent to existing developed lands to act as a buffer to new urban areas or as a buffer at the Urban Service Boundary as are consistent with LU-43.

LU-69 County departments shall coordinate implementation of electric service delivery, air quality, water supply, transportation, drainage/flood control, solid waste disposal/ recycling, and hazardous waste management plans in conjunction with vested public and quasi-public agencies.

LU-72 The County shall coordinate with regional planning agencies setting land use and environmental policies and programs and cooperate in the implementation of programs consistent with General Plan policy.

LU-73 The County shall consult with state and federal regulatory and resource agencies during initial review of development projects to identify potential environmental conflicts and establish, if appropriate, concurrent application processing schedules.

CI-16 Policy: Sacramento County shall implement a program to buffer land uses from each other and transportation system facilities which is effective, aesthetically pleasing, and minimizes the amount of land lost to buffers.

3.1.3.4 City of Roseville General Plan

The City of Roseville General Plan contains the following policies that are applicable to land use and related to transportation projects:

Circulation

C-1 Coordinate with surrounding jurisdictions to achieve compatible functional classifications for roadways that cross the City's boundaries.

C-3 Work with appropriate agencies to develop measures to reduce vehicular travel demand and vehicle miles traveled and meet air quality goals.

Community Form Policies

3. Coordinate and take a lead role, where feasible, with local state, federal and other jurisdictional agencies on regional issues of importance including but not limited to air quality, transportation, water supply, sewage treatment, solid waste disposal and recycling, flood control, hazardous waste management, resource protection and transit.

4. To the extent feasible, coordinate land use policies and public improvements with neighboring jurisdictions.

Growth Management Policy

8. New development proposals to the west of Fiddyment Road within the County/City Memorandum of Understanding Transition Area shall meet the objectives and terms of the Memorandum of Understanding between the City of Roseville and the County of Placer.

Growth Management – Growth Areas Policy

5. Apply the City's adopted Guiding Principles to any new development proposed in and out of City's corporate boundaries, which is not already part of an adopted Specific Plan or within the infill area:

    1. Any development proposal west of Roseville shall, on a stand-alone basis, have an overall neutral or positive fiscal impact on the City's General Fund Services.

    2. Any development proposal west of Roseville shall include logical growth/plan boundaries and an east to west growth pattern.

    3. Any development proposal west of Roseville shall not conflict with the Pleasant Grove Wastewater Treatment Plant and future Power Generation Facility.

    4. Any development proposal west of Roseville shall maintain the integrity of existing neighborhoods and create a sense of place in new neighborhoods.

    5. Any development proposal west of Roseville shall include a plan to ensure fully funding and maintenance of improvements and services at no cost to existing residents (including increased utility rates). A proposal shall not burden/increase the cost, or diminish the supply and reliability of services.

    6. Any development proposal west of Roseville shall aid in regional traffic solutions and in right of way preservation.

    7. Any development proposal west of Roseville shall secure and provide a new source and supply of surface water and should include reduced water demand through the use of recycled water and other off-sets.

8. Any development proposal west of Roseville shall consider development potential within the entire City/County Memorandum of Understanding Transition Area in the design and sizing of infrastructure improvements.

9. Any development proposal west of Roseville shall aid in resolution of regional storm water retention.

10. Any development proposal west of Roseville shall incorporate mechanisms to ensure new schools are available to serve the residents and shall not impact existing schools.

11. Any development proposal west of Roseville shall include a significant interconnected public open space component/conservation plan in coordination with the City of Roseville/U.S. Fish and Wildlife Service Memorandum of Understanding.

12. Any development proposal west of Roseville shall include a public participation component to keep the public informed and solicit feedback throughout the specific plan process.

13. Any development proposal west of Roseville shall provide a "public benefit" to the City and residents.

(The MOU is discussed in Section 3.1.4.3).

3.1.3.5 City of Rocklin General Plan

The City of Rocklin General Plan contains the following policies that are applicable to land use and related to transportation projects:

LU-16 To coordinate planning with neighboring jurisdictions in order to ensure compatible land uses.

LU-61 To continue to participate in the activities of regional entities as deemed appropriate, such as the Highway 65 Joint Powers Authority, SPRTA, PCTPA, SACOG, the Placer County Flood Control and Water Conservation District, and the landfill authority.

LU-62 To consider the effects of land use proposals and decisions on the South Placer subregion jobs/housing balance.

LU-63 To encourage communication between the County and the cities of Roseville, Loomis, Lincoln, and Rocklin to ensure the opportunity to comment on actions having cross-border implications. To address other community interface issues, including land use compatibility, circulation and access, and development standards.

C-11 To encourage improvements to the existing Federal Interstate and State highway system, and the addition of new routes that would benefit the City of Rocklin.

C-23 To require landscaping and tree planting along major new streets, properties abutting highways/freeways and along existing streets as appropriate.

C-24 To minimize the impact of road construction on the natural terrain and the character of existing neighborhoods.

C-26 To design and phase construction of road improvements to minimize disruption to local residents and traffic, to the extent feasible.

3.1.4 Other Plans and Policies

3.1.4.1 Sunset Industrial Area Plan

The Sunset Industrial Area Plan (SIAP) is a community plan that further refines the goals and policies of the Placer County General Plan for the plan area. SIAP was established to improve opportunities for industrial development in the plan area to attract new industries, retain existing industries, and allow them to expand. In addition, the area was planned to provide facilities that would help all area businesses to thrive. The applicable SIAP policies are listed below:

1.A.7 The Sunset Industrial Area Plan Land Use Diagram shall insure that proposed land uses are compatible with existing or planned adjacent uses, including established industrial firms in both the Sunset Industrial Area and in the surrounding cities.

1.A.8 The County shall permit the development of only agricultural, industrial, or similar compatible land uses around Western Placer Waste Management Authority properties. Residential uses around these properties are not considered a compatible use.

1.A.9 The County shall seek to protect the industrial, commercial, professional, and agricultural uses in the Sunset Industrial Area from encroachment by incompatible uses from the surrounding cities and from unincorporated area development.

1.F.1 The County will seek to provide a broad range of public facilities and services to businesses in the Sunset Industrial Area. Improvements to onsite services include the provision of improved fire protection, circulation improvements, and expanded utility services.

1.F.2 When considering land use changes in the vicinity of the Western Regional Sanitary Landfill and the Western Placer Waste Management Authority Material Recovery Facility operation, the County shall consider these solid waste facilities and operations as the dominant land use in the area. In order to protect these facilities and operations from incompatible encroachment, the County has established buffer zone standards described in Table I-6. The intent of this policy is to prohibit the creation of new parcels for residential use within 1 mile of the solid waste facilities and operations; not to prohibit construction of a residence on an existing legal building site within this area.

2.D.2 Preserve right-of-way for a potential extension of Sunset Boulevard as an east-west facility to link western Placer County with Sutter County and Sacramento County.

3.1.4.2 West Roseville Specific Plan

The WRSP, approved in 2004 and located at the eastern edge of the study area, was determined to be consistent with the goals and policies of the City of Roseville General Plan. The WRSP supplemented the General Plan goals and policies by providing specific direction to reflect conditions unique to the project area as referenced in the City's Land Use Element. The WRSP is specific to its plan area and does not contain any broad regional goals and policies. About 95 percent of the WRSP is included in the "Transition Area" described in the next section.

3.1.4.3 Placer County and City of Roseville Memorandum of Understanding

In 1997, the City of Roseville and Placer County entered into a Memorandum of Understanding (MOU) to promote interagency communication and to foster cooperative land use planning. The MOU applies to a "Transition Area" west of Fiddyment Road and north of Baseline Road. The transition area includes land within the City of Roseville's SOI, including approximately 95 percent of the existing WRSP and three other proposed developments described in Section 3.1.4.1. The MOU specifies requirements for processing development proposals within the Transition Area, including provisions for City-County consultation and review, application submittal, mitigation of impacts and minimum development standards. The transition area includes the proposed *Creekview Specific Plan* area and the proposed *Sierra Vista Specific Plan* area, both of which are located within the Eastern Segment of the study area. The land is largely undeveloped, but development applications are currently under review by the City of Roseville. These plans call for development with land uses to include residential neighborhoods, community commercial, business/professional, light industrial, and industrial land uses. Approval by the Placer County Local Agency Formation Commission would be required for city annexation of the Creekview and Sierra Vista specific plan areas.

3.1.4.4 Placer County Conservation Program: Natural Communities Conservation Plan and Habitat Conservation Plan

In June 2000, the Placer County Board of Supervisors adopted the Placer Legacy Open Space and Agricultural Conservation Program. This program initiated an effort by Placer County to find a comprehensive way to meet state and federal requirements for the state and federal Endangered Species Acts as well as for other federal laws related to wetlands. This has led to the current effort by the Placer County Planning Department to prepare a state Natural Communities Conservation Plan (NCCP) and a Federal Habitat Conservation Plan (HCP). The NCCP/HCP, called the Placer County Conservation Program (PCCP), will be developed in three phases. The first phase will cover western Placer County, including the study area. Phase 2 and Phase 3 will include the areas of the Sierra Nevada. SPRTA intends to be a participating agency in the PCCP for the Parkway.

The PCCP for western Placer County is currently under development. While it is currently unknown how the PCCP will ultimately affect land use within the study area, it is expected that some areas will be recommended for long-term conservation.

3.1.4.5 Natomas Basin Habitat Conservation Plan

In November 1997 (and revised in 2003), Sutter County and the City of Sacramento adopted the Natomas Basin Habitat Conservation Plan (NBHCP). The Natomas Basin is located in the southeastern corner of Sutter County and northwestern area of the City of Sacramento and Sacramento County. The plan was conceptualized to allow economic development while promoting biological resource conservation and sustained agriculture. The plan's overarching goal is to preserve, restore, and enhance habitat values in the Natomas Basin, while allowing urban development to proceed. In order to meet this goal, the preparation of the NBHCP had to satisfy the conditions of regulatory programs administered by the USACE, USFWS, and CDFG. Specifically, the NBHCP is a supporting document for the USFWS Section 10(a)(1)(B) and CDFG Section 2081 permit applications. Section 10(a)(1)(B) of the federal Endangered Species Act and Section 2081 of the Fish and Game Code allow incidental take of endangered or threatened species, subject to permit requirements for federal and state listed species, respectively. The NBHCP established a conservation program to mitigate the potential loss of habitat and the incidental takes of protected species that could result from proposed development in the area.

In order to meet the mitigation requirements of the NBHCP, developers who apply for a building permit within the Natomas Basin must pay a mitigation fee to the Natomas Basin Conservancy. The

Conservancy uses the mitigation fees to acquire, restore, and manage lands that will provide habitat for protected species and maintain agriculture in the Natomas Basin. To date, the Conservancy has acquired 25 properties, and is responsible for managing nearly 4,000 acres of land (Natomas Basin Conservancy, 2006).

3.1.4.6 Placer County Transportation Planning Agency-Regional Transportation Plan

PCTPA is the regional transportation planning agency (RTPA) for Placer County jurisdictions (except for that portion of the county within the Tahoe Regional Planning Agency). PCTPA is responsible for preparing the Placer County Regional Transportation Plan (RTP). The RTP is a long-range (20-year) transportation plan for the regional transportation system including the study area. The RTP also contains the adopted goals, policies, programs, and projects to meet regional mobility needs and satisfy federal air quality standards. The 2027 Placer County RTP includes the following Goal and Policy that pertain to the Placer Parkway:

Goal 1. Highways/Streets/Roadways: Maintain and upgrade a safe, efficient, and convenient countrywide roadway system that meets the travel needs of people and goods through and within the region.

Policy 3. Establish a funding/implementation strategy for the Placer Parkway, a connector between State Route 65 and State Routes 70 and 99, including access to the Interstate 5 corridor in northern Sacramento County and the Sacramento International Airport.

PCTPA is also responsible for preparing the Regional Transportation Improvement Program (RTIP). The RTIP contains the list of projects that will be submitted to the SACOG for incorporation into the Metropolitan Transportation Improvement Program (MTIP). In order to receive federal funding for transportation projects, the federally designated Metropolitan Planning Organization (MPO) must make findings of conformity required under the federal Clean Air Act, within federal ozone non-attainment areas. Therefore, in order for the project to receive federal funding for any phase of development, SACOG must find that the project meets federal Clean Air Act conformity requirements and include the project in its MTIP.

3.1.4.7 Sacramento Area Council of Governments–Metropolitan Transportation Plan

SACOG is responsible for preparing the long-range transportation plan in the six-county area that include: Sacramento, Yolo, Yuba, Sutter, Placer, and El Dorado counties. For this region, a long-range regional transportation plan is required to cover at least a 20-year planning horizon and must be updated every 3 years. The long-range plan is called a Metropolitan Transportation Plan (MTP). The MTP provides a regional vision for surface transportation. The plan is constrained by the funding that the region can reasonably be expected to receive from the state and federal government. If a city, county, or public agency within the SACOG region wants to pursue state or federal transportation monies, the project must be preliminarily evaluated and subsequently included in the MTP. SACOG is currently in the process of updating the MTP for 2030 to reflect the adopted SACOG Blueprint pattern of growth and choices for transportation. Placer Parkway is one of the two proposed regional connectors listed in the MTP.

3.1.4.8 Sacramento Area Council of Governments Blueprint

SACOG recently adopted the Preferred Scenario developed through the Blueprint Transportation and Land Use Study. The Preferred Blueprint Scenario establishes a long-range regional vision for how the six-county SACOG region will manage an anticipated doubling of population by the year 2050. Many of the strategies that were discussed by participants in the Blueprint planning process called for the

implementation of what are known as the Blueprint Planning Principles. The Planning Principles include housing options, compact development, transportation choices, mixed land uses, conservation of natural resources, making better use of existing assets, and quality design.

The Preferred Blueprint Scenario depicts a regional growth pattern through the year 2050 in a manner generally consistent with the Blueprint Planning Principles. Placer Parkway is recognized as an element of the Preferred Scenario, and it is shown as part of the assumed future transportation network in the Preferred Scenario. Specific policies of the plan are not applicable to the Parkway as they focus on "smart growth" and other community design issues that are not directly related to this project. It is described here as an important consideration that is being used to guide land use planning decisions within the study area.

3.2 AFFECTED ENVIRONMENT

Land use within the Placer Parkway study area is the responsibility of several local jurisdictions. These jurisdictions include the Cities of Rocklin and Roseville, as well as the Counties of Placer, Sutter and Sacramento. Approximately 35,454 acres of land are within the study area and the average parcel size is slightly more than 125 acres. Review of existing jurisdictional plans, aerial photographs, GIS data, feedback from local residents and public officials at open houses/public meetings, and field visits were used to determine the existing land uses in the vicinity of the study area that are described below. The information collection involved a coordinated effort between PCTPA, the Placer County Department of Agriculture, the Sutter County Department of Agriculture, and the environmental consulting firms: URS Corporation, Mara Feeney and Associates, and North Fork Associates (NFA).

3.2.1 Current Land Use

Approximately 91 percent of the parcels within the study area support various forms of agriculture, including pasture/grazing land (for cattle or sheep), cultivated agriculture (such as rice production), or other ranchland. Table 3-1, below, shows the distribution of current land uses within the study area (see also Figure 3-1 for the corresponding land use map).

Table 3-1
Acreage and Percentage of Land Use in the Study Area

Land Use	Acreage (acres)	Percentage of Study Area (%)
Rice[1]	14,898	42
Pasture/Idle Farmland	9,405	26.5
Other Cultivated Agriculture	4,233	12
Rural Residential	1,167	3.3
Other[2]	4,656	13
Industrial	549	1.5
Wildlife Preserve	289	0.9
Municipal Facilities	257	0.8

Source: North Fork Associates GIS land use database
Notes:
1. Rice was separated from cultivated agriculture because it is the largest land use in the area.
2. "Other" land uses include a plant nursery, a dog kennel, horse ranches, fish ponds, roads, streams, and railroads.

These land uses were determined through aerial photograph interpretation and site visits and calculated using a GIS land use database. In a few instances, the actual land use was indeterminable due to lack of site access or inability to determine the type of cultivated agriculture due the time of the year. Those land uses are included in the Other Cultivated Agriculture categories in Table 3-1. As described in Chapter 2, five corridor alternatives pass through the three study area segments, the Eastern, Central, and Western segments (see Figure 2-1). The paragraphs below describe the existing land use on a segment-by-segment basis (refer to Section 2.1 for segment boundary descriptions).

Western Segment. The Western Segment includes unincorporated portions of Sutter and Sacramento counties and is 10,402.14 acres in size (29.34 percent of the study area). SR 70/99 runs north to south along the western edge of the segment, while major east-to-west arterials include Riego Road, Sankey Road, and Howsley Road. Other infrastructure in this segment includes the Union Pacific Railroad, which runs north to south in the middle of the segment, as well as a fire station near Sankey Road. Water features in this segment include part of Pleasant Grove Creek, the Steelhead Creek portion of the Natomas East Main Drainage Canal, and scattered vernal pool wetland complexes. As in the Central Segment, the majority of land use in this area is cultivated agricultural land in both Sacramento and Sutter counties. This segment also contains industrial/commercial uses within Sutter County, including the Sysco facility along Pacific Avenue near the intersection of Sankey Road, and an industrial park located south of the Sysco facility. As in the Eastern Segment, these industrial facilities are located near a major highway, in this case SR 70/99, which is approximately 1 mile west. There are also areas of rural residential development located near Pleasant Grove Road within this segment. The land use on parcels within Sacramento County is rice production with scattered rural residences.

Central Segment. The Central Segment encompasses parts of unincorporated Placer and Sutter counties and is the largest of the three segments. It includes 15,292.59 acres (43.13 percent of the study area). The major regional arterial roadways include Baseline Road, Riego Road, Sankey Road, and Pleasant Grove Road. The public land uses existing within this segment include the City of Roseville's Reason Farms Retention Basin near Phillip Road, and a small wildlife preserve near the Brewer Road crossing of Curry Creek. Water-related features in this segment include Steelhead Creek, Pleasant Grove Creek, Curry Creek, Dry Creek, a small water ski park/catfish farm near the intersection of Baseline Road and Locust Road, and various vernal pool and wetland complexes located throughout the segment. The predominant land uses in this segment are agricultural with small enclaves of rural residential (specifically near Baseline and Pleasant Grove Roads). In addition, a small industrial wood fabrication facility is located near the rural residential homes close to the intersection of Baseline and Pleasant Grove Roads.

Eastern Segment. The Eastern Segment is 9,754.17 acres in size (27.51 percent of the study area) and includes areas within the City of Rocklin, the City of Roseville, and unincorporated Placer County. SR 65 and several regional arterial roadways such as Sunset Boulevard, Blue Oaks Boulevard, Pleasant Grove Boulevard, and Baseline Road run through portions of this segment. Large regional facilities and infrastructure in this segment include the Western Regional Sanitary Landfill/Materials Recovery Facility, the Pleasant Grove Wastewater Treatment Plant (PGWWTP), the newly constructed Roseville Energy Park (REP), and Sacramento Municipal Utilities District (SMUD)/Western Area Power Authority (WAPA) power lines, as well as Rio Bravo biomass power plant facility and other existing industrial development along Industrial Boulevard in the Sunset Industrial Area. The three largest streams in this segment include Pleasant Grove Creek, Dry Creek, and Curry Creek, and a small segment of Orchard Creek (a tributary of Auburn Ravine) is located in the northeastern corner of the study area. This segment also contains the largest area of vernal pool and wetland complexes, specifically in the area adjacent to the existing PGWWTP. The current land use in the easternmost portion of this segment is a mixture of

industrial and commercial uses near the SR 65 corridor. Public facilities, including the landfill and the PGWWTP, grazing land or idle farmland, cultivated agricultural land, and a few rural residences are located in the western portion of this segment (Figure 3-1).

3.2.2 Land Use Designations and Zoning

Local jurisdictions retain land use planning authority in the study area. A General Plan is a long-term plan to help guide the physical development within a jurisdiction (see Section 3.1.3, General Plans and Policies). Each local jurisdiction adopts zoning ordinances to regulate proposed development consistent with General Plan land use designations. The General Plans and Zoning Ordinances of each jurisdiction that has land within the study area were reviewed to identify existing land use designations and permitted land uses.

3.2.2.1 Existing General Plan Designations

Figure 3-2 displays the existing designated land use within the study area in relation to the corridor alignment alternatives. The figure shows that the corridor alignment alternatives pass through an area that is generally designated for either agricultural or industrial uses.

3.2.2.2 Existing Zoning

Figure 3-3 illustrates the existing zoning within the study area. Table 3-2 displays the acceptable uses within each zoning district as described in the applicable zoning ordinance by jurisdiction.

3.2.3 Developable Land

The purpose of this section is to assess the amount of land that is not already developed within the study area. The FHWA definitions of land types related to the "developable" category are as follows: developed (land with structures on it), undeveloped (farmland, parkland, or other vacant land), and constrained (land that cannot be developed for environmental or other reasons, e.g., floodplains, wetlands, and preserved parks) (FHWA, 1999c). Developable land does not mean that land is necessarily approved for development by a governing body, although it can be, as in the case of the West Roseville Specific Plan area. Thus, for the purposes of this CIA, developable land is considered to be all land that is neither constrained nor developed.

According to the California Housing and Community Development Department (HCD) report, *Raising The Roof: California Housing Development Projections and Constraints, 1997-2020***,** there are 313,996 acres of developable land in Placer County and 362,981 acres of developable land within Sutter County, for a total of 676,977 acres of developable land within the two counties. The study area encompasses approximately 35,454 acres, most of which are developable. The proposed alternative corridors are predominately undeveloped at this time (with the exception of existing infrastructure like roads, canals, and railroads, as well as limited industrial development near the western and eastern termini). The alternative alignments range between 1,600 to 1,900 acres of land that would be acquired for Placer Parkway. A fraction of a percent (0.24 percent to 0.28 percent) of the developable land in the two counties may be utilized for the Parkway project, or between 4.5 and 5.4 percent of all land within the project study area, depending on alternative.

A network of rural roadways provides access to the potentially developable land within the study area. The roadway classifications are as follows:

Table 3-2
Existing Zoning Within Study Area

Zoning	Acceptable Uses
Sutter County	
General Agricultural District (AG)	The AG District is established to provide areas for general farming, low-density uses, open spaces, and by use permit (Section 1500-1412) limited retail service uses which in the opinion of the Planning Commission support the local agricultural industry. Classification may be applied to rural communities where the predominance of land use is of a general agricultural nature and include commercial kennels or stables and warehouses to store agricultural products.
General Industrial District (M-2)	This classification provides areas for a full range of industrial, manufacturing, and related uses to expand the economic base, employment opportunities. Due to potential high-intensity operational characteristics and features, this district should be located away from residential neighborhoods and other potentially sensitive uses. Classification can include petroleum storage and wholesale, canneries, commercial fruit dryers, all uses in M-1 district, and uses permitted in Section 1500-4912 of the Code.
Light Industrial District (M-1)	This classification is intended to provide suitable areas for low-intensity assembly, processing or manufacturing activities, product distribution, and related activities, all of which do not create nuisance or otherwise unacceptable levels of noise, dust, odor, smoke, bright light or vibration in order to provide for the general welfare. Classification can include building supplies/sales, auto body/painting, auto dismantlers, commercial agricultural processing plants and other uses by permit in Section 1500-4612 of the Code.
Public District (P)	Classification is intended to provide public facilities in which parks, governmental, educational, utility, and other community facilities of a public nature are the principal use. Classification can include cemeteries, fire stations, libraries, community theatres, museums, and any other uses permitted in Section 1500-5912 of the Code.
City of Rocklin	
Planned Development Business Professional (PD-BP)	The BP district allows offices for doctors, lawyers, dentists, accountants and similar occupations where the clientele seeks the services of the office proprietor as opposed to the purchase of a product. The PD zone provides the means for greater creativity and flexibility in environmental design than is provided under the strict application of the zoning and subdivision ordinances, while at the same time protecting the public health, safety and welfare and property values. Various land uses may be combined in a planned development zone including combinations of residential, commercial, industrial, utility, institutional, educational, cultural, recreational and other uses, provided the combination of uses results in a balanced and stable environment.
Planning Preserve (PP)	No specific uses or conditions per Title 17 of the City of Rocklin Zoning Code.
Wetland (W)	W district denotes where the 100-year floodplain, protected wetlands, or other waters of the U.S. are located. Development in this area is scrutinized by State and Federal resource agencies; i.e., the U.S. Army Corps of Engineers and the Regional Water Quality Control Board.
City of Roseville	
Attached Housing (R-3)	The R-3, Attached Housing district is intended for multiple-family housing. The types of land use intended for the R-3 zoning district include apartments, condominiums, townhomes, and similar and related compatible uses. Specifically, this designation allows all principally, conditionally, or administratively permitted uses in Section 19.10.020 of the City of Roseville Zoning Ordinance.

Table 3-2
Existing Zoning Within Study Area
(Continued)

Zoning	Acceptable Uses
Attached Housing Development Standards (R3-DS)	Same as above, with the Development Standard (DS) district as an overlay district which allows modification of the specified development standards in general zone districts. The City Council, in approving a zoning reclassification, may combine the DS district with any zone district to establish or modify any or all development standards.
Business Professional (BP)	To provide locations for a wide variety of office uses that are related to and supportive of each other. Specifically, this designation allows all principally, conditionally, or administratively permitted uses in Section 19.12.020 of the City of Roseville Zoning Ordinance.
Community Commercial (CC)	Intended to serve the principal retail shopping needs of the entire community by providing areas for shopping centers, and other retail and service uses. Specifically, this designation allows all principally, conditionally, or administratively permitted uses in Section 19.12.020 of the City of Roseville Zoning Ordinance.
Community Commercial Special Area (CC-SA)	Same as above with the SA overlaying district; therefore, the development standards provided in the West Roseville Specific Plan shall supersede development standards contained in this title for the underlying zone district. If a standard is not addressed within the applicable specific plan or the ordinance reclassifying the property, it shall be governed by the standards established by the underlying zone district (CC).
General Industrial Special Area (M2-SA)	The M2 district is intended to designate areas suitable for a broad range of industrial uses, including manufacturing, assembly, wholesale distribution, and warehousing. The types of uses permitted can include equipment and materials storage yards, commercial laundries, light industrial uses, printing/publishing, and recycling, dismantling, scrap facilities and all principally, conditionally, or administratively permitted uses in Section 19.14.020 of the zoning ordinance with the SA overlay as described above.
Light Industrial Special Area (M1-SA)	The Light Industrial district is intended to designate areas appropriate for light industrial uses, such as manufacturing, processing, assembly, high technology, research and development and storage uses. The use types permitted within the M-1 district do not include outdoor manufacturing but may include limited outdoor storage and the emission of limited amount of visible gasses, particulates, steam, heat, odor, vibration, glare, dust, and noise. These uses may be compatible operating in relatively close proximity to commercial and residential uses. Specifically, this designation allows all principally, conditionally, or administratively permitted uses in Section 19.14.020 of the City of Roseville Zoning Ordinance with the SA overlaying district described above.
Open Space (OS)	Open Space activities within the Wetland Preserve include activities and management of the area to preserve, recreate and enhance natural resource values such as fish and wildlife habitat, rare and endangered plants, erosion control, and floodwater conveyance. Specifically, this designation allows all principally, conditionally, or administratively permitted uses in Section 19.16.020 of the City of Roseville Zoning Ordinance.
Parks and Recreation (PR)	Applied to both public and private recreation facilities. This is intended to be applied to larger parks especially, but may also be applied to smaller neighborhood facilities when it is important, due to the planned facilities or natural features, to designate the site for park and recreation uses. Specifically, this designation allows all principally, conditionally, or administratively permitted uses in Section 19.16.020 of the City of Roseville Zoning Ordinance.
Public Quasi-Public (P/QP)	Applied to land intended for education, religious assembly, governmental offices, municipal corporation yards, water treatment plants, power generating facilities, and other publicly owned facilities. Specifically, this designation allows all principally, conditionally, or administratively permitted uses in Section 19.16.020 of the City of Roseville Zoning Ordinance.
Public Quasi-Public Special Area (P/QP-SA)	Same as above with the SA overlaying district described above.

Table 3-2
Existing Zoning Within Study Area
(Continued)

Zoning	Acceptable Uses
Single Family Residential Development Standards (R1-DS)	Intended for detached, single-family homes and similar and related uses inclusive of halfplexes. Specifically, this designation allows all principally, conditionally, or administratively permitted uses in Section 19.10.020 of the City of Roseville Zoning Ordinance with the DS overlay described above.
Small Lot Residential Development Standards (RS-DS)	Intended to allow attached or detached single-family dwellings, and similar and related compatible uses. Specifically, this designation allows all principally, conditionally, or administratively permitted uses in Section 19.10.020 of the City of Roseville Zoning Ordinance with the DS overlay described above.
Placer County	
Business Park Design Review (BP-Dc)	BP district designates areas appropriate for the development of a mixture of light industrial, office, and commercial land uses in a campus-like setting. Such uses may include high-technology manufacturing and assembly, warehousing, professional offices, research and development, and commercial uses that are primarily for the support of the employees of other businesses in the district and the businesses themselves. The types of industrial and office land uses that will be appropriate in the zone will be those with most of their employee positions at primary wage earner levels, with salaries comparable to the county's median income level. The land uses allowed in the BP zone district are limited to the following in Section 17.02.050 of the Count Code. Site development in the BP district is characterized by careful attention to attractive building design, landscaping, and less site coverage than in other commercial and industrial districts per the Design Review combining district.
Business Park Design Review Flood Hazard (BP-Dc-FH)	Same as BP-Dc listed above with the Flood Hazard combining district. The FH identifies areas where hazards to life or property exist because of the potential for inundation by a one hundred (100) year frequency flood.
Farm Building Site 20-acre min. (F-B-20)	Farm zones provide areas for the conduct of commercial agricultural operations that can also accommodate necessary services to support agricultural uses, together with residential land uses at low population densities. The following land uses are allowed in the F zone as provided by Section 17.06.030 et seq.: animal husbandry, agricultural processing/production, agricultural sales, and others. In addition, the B combining district is to provide for different parcel sizes in new subdivisions than would otherwise be required by an applicable zone district, based upon special characteristics of the site or area to which the combining district is applied, including but not limited to sensitive environmental characteristics, limited resource capacities, and community character. Lastly, this specific zone requires a 20-acre minimum lot size.
Farm Building Site 80-acre min. (F-B-80)	Same as F-B zones listed above with an 80-acre specific parcel size.
Farm Building Site Development Reserve (F-B-DR)	Same as F-B zone listed above. The DR combining district also provides for the future development of limited residential, commercial or industrial uses in areas that are identified by the general plan (or any community plan adopted, in this case the Sunset Industrial Plan Area) for such uses, but which may not be prepared at the time the district is adopted to accommodate the planned levels of full development until additional infrastructure or resources have been provided, or additional population growth has occurred or may require special treatment as provided for in specific or general plans.
Farm Building Site Development Reserve 80-acre min. (F-B-DR-80)	Same as F-B-DR zone listed above with an 80-acre specific parcel size.

Table 3-2
Existing Zoning Within Study Area
(Continued)

Zoning	Acceptable Uses
Farm Building Site Development Reserve Special Purpose (F-B-DR-SP)	Same as F-B-DR zone listed above with a SP combining district. The SP district allows mineral extraction operations, airports, community sewage treatment plants, and waste disposal facilities and was created to identify specific areas in the vicinity of such uses where land use compatibility issues are of particular importance. When applied to a particular parcel of land, the purpose of the district is to require a discretionary review of the proposed use of that land and to restrict the use of that land to uses that are determined to be compatible with the special use in the vicinity.
Farm Building Site Special Purpose 80-acre min. (F-B-SP-80)	Same as F-B-SP listed above with an 80-acre specific parcel size.
Farm Development Reserve 80-acre min. (F-DR-80)	Same as F-DR-80 listed above.
General Commercial Conditional Use Permit Req. (C2-UP)	The C2 zone is intended to provide areas for the continued use, enhancement, and new development of retail, personal service, entertainment, office, and related commercial uses that will attract patrons from all areas of the community and region. The following land uses are allowed in the C2 zone district as provided by Sections 17.06.030 et seq.: All C1 uses, printing/publishing, recycling centers, auto parts/sales, restaurants, retail stores, medical offices, banking institutions, hotels and motels.
Industrial Park (INP)	The industrial park district is for light industrial uses such as manufacturing, assembly, research and development and similar industrial uses, as well as limited commercial and office uses that are compatible and appropriate along with industrial uses.
Industrial Park Design Review (INP-Dc)	Same uses as listed in IN district above with site development in the industrial park characterized by careful attention to attractive building design, landscaping, and less site coverage than in other commercial and industrial districts per the Design Review combining district. The following land uses are allowed in the IN zone district as provided by Section 17.06.030 et seq.: electric generation plants, electronic component production, petroleum refining, weapons manufacturing, leather and textile manufacturing.
Industrial Park Design Review Flood Hazard (INP-Dc-FH)	Same uses as described above with the FH combining district.
Industrial Design Review (IN-Dc)	The industrial district is intended for a wide range of industrial activities including manufacturing, assembly, wholesale distribution, and storage. The following land uses are allowed in the IN zone district as provided by Sections 17.06.030 et seq.: chemical production/manufacturing, clothing manufacturing, metal and glass manufacturing, paper and plastic recycling production and processing plants. Site development in the IN district is characterized by careful attention to attractive building design, landscaping, and less site coverage than in other commercial and industrial districts per the Design Review combining district.
Neighborhood Commercial Design Review Development Reserve (C1-Dc-DR)	The C1 district is intended to provide areas for small-scale, day-to-day convenience shopping and services for residents of the immediate neighborhood. The following land uses are allowed in the C1 zone district as provided by Sections 17.06.030 et seq.: shopping centers, drive through restaurants, nurseries, grocery/liquor stores, and other convenience stores.

Table 3-2
Existing Zoning Within Study Area
(Continued)

Zoning	Acceptable Uses
Open Space (O)	Open space protects important lands within Placer County by limiting allowable land uses to low intensity agricultural and public recreational uses, with structural development being restricted to accessory structures necessary to support the primary allowed uses, and critical public facilities. The following land uses are allowed in the O zone as provided by Sections 17.06.030 et seq., forestry, grazing, equestrian facilities, campgrounds, ski operations, and temporary events.
Residential Agricultural Building Site Development Reserve 10-acre min. (RA-B-DR-10)	The RA zone is to stabilize and protect the rural residential characteristics of the area to which it is applied and to promote and encourage a suitable environment for family life, including agricultural uses. This area also has the B and DR combining districts described above with a minimum lot area requirement of 10 acres.
Sacramento County	
Agricultural 80-acre min. (AG-80)	General Agriculture uses include the cultivation of the soil for the production and harvesting of crops, the care and breeding of livestock, pastureland, horticulture, dairying, beekeeping, viticulture, and the storage and minor repair of agricultural vehicles and equipment used for the processing and transportation of the products grown on the premises. Hog farms, kennels, and feedlots are excluded. All other uses permitted in Section 130-06 of the Code.
Sources: City of Roseville, City of Rocklin, Placer County, Sacramento County, and Sutter County zoning ordinances.	

Table 3-3
Functional Roadway Classification

County	Roadway	Classification
Sutter County	Pleasant Grove Road	Urban Arterial
	Howsley Road	Rural Collector/Urban Arterial
	Riego Road	Urban Arterial
	Sankey Road	Urban Arterial
Placer County	Fiddyment Road	Urban/Suburban Minor Arterial
	Philip Road	Rural Collector
	Brewer Road	Rural Collector
	Locust road	Local Road
	Whitney Ranch Parkway	Rural Arterial
	Sunset Boulevard	Urban/Suburban Minor Arterial
	Blue Oaks Boulevard	Thoroughfare
	Baseline Road	Thoroughfare
Sources: Placer County General Plan, 1994; Sutter County General Plan, 1996.		

Rural collectors currently serve the largely agricultural area within the project study limits, but are not designed to accommodate heavy amounts of traffic, nor maintain higher rates of speed. Arterials are wider than collector roads and are designed to carry heavier volumes of local traffic and connect to regionally significant roadways such as state highways, including SR 70/99 near the western project boundary and SR 65 near the eastern project boundary. These two highways provide local and regional access, as well as linking the study area to the interregional freeways, I-5 and I-80.

3.2.4 Approved and Proposed Major Developments

Agriculture has long been established as the predominant land use in the study area. However, in recent years, the areas immediately to the northeast, east, south, and southwest of the study area have been undergoing rapid change. The cities of Lincoln, Rocklin, and Roseville have been among the fastest growing in the Sacramento region; and Placer County has consistently been among the top growth counties in the state over the last decade (State of California DOF, 2006b). As a result of regional population growth and increased development adjacent to the study area, development pressure on the land within the study area has intensified. The effect of this increased pressure is indicated by the number of recent major approved and proposed developments described below. Approved developments are those that have received entitlements; proposed developments are those that have been formally presented to local jurisdictions and are in the process of undergoing specific planning and environmental review. In the following sections, the approved and proposed developments were not segregated by alternative or by segment since the developments lie in multiple segments and may be within two or more corridor alignment alternatives. Figure 3-4 displays planned and proposed developments within the study area. It should be noted that proposed developments may change prior to their final adoption and/or approval. In addition, other factors cast uncertainty over how development ultimately will proceed in the study area. For example, FEMA is considering a building moratorium in the Natomas Basin due to concern with

flood hazards in that area, and Placer County's Habitat Conservation Plan could result in additional areas being earmarked for conservation in the study area.

3.2.4.1 Approved Major Developments

West Roseville Specific Plan. The West Roseville Specific Plan (WRSP) area in the City of Roseville is adjacent to the project study area, abutting the alignment of Alternatives 1 and 2 in the Eastern Segment. The WRSP was approved by the Roseville City Council in February 2004 and annexed into the city on August 18, 2004. Table 3-4 shows the 14 different land use categories within the WRSP area by acreage.

Table 3-4
West Roseville Specific Plan Land Uses

Land Use Designation	Area (acres)
Low Density Residential (LDR)	1,354.0
Low Density Residential (Age Restricted)	147.0
Medium-High Density Residential	143.0
High Density Residential	110.0
Light Industrial	74.0
Industrial	34.0
Business Professional	19.0
Community Commercial	48.0
Open Space	670.0
Open Space/Paseo	14.0
Public/Quasi Public	148.0
Park	251.0
Pocket Parks	19.0
Right-of-Way (ROW)	128.0
Total	**3,159.0**
Source: City of Roseville (2004b)	

The WRSP is planned primarily as a residential community with an overall mix and intensity of land uses similar to that found in adjacent portions of the city. The project incorporates a mix of commercial and residential uses into its village center concept, which forms the centerpiece of the planned community. Lands to the north, south, and west of the WRSP consist primarily of agricultural and rural residential uses within unincorporated Placer County. To the east, existing and planned neighborhoods are found in the city's Del Webb and North Roseville Specific Plan areas. The PGWWTP and the REP, and other potential intensive public uses, are adjacent to, and partially surrounded by, the central portion of the WRSP. Industrial and light industrial uses are planned within the area adjacent to these uses to ensure compatibility with the adjacent PGWWTP and are intended to provide employment within the WRSP. A 1,000-foot non-residential buffer surrounds the WRSP to the south, east, and west of the PGWTP. The plan area's employment district has regional access via Blue Oaks Boulevard, Pleasant Grove Boulevard, and West Side Drive, and expands the city's job base and industrial economic development potential.

Sunset Industrial Area Plan. The project would bisect the 1997 SIAP area in unincorporated Placer County in the Eastern Segment of the study area. Development within this area is guided by the Placer County General Plan and the SIAP. The 8,883-acre SIAP area is bounded to the north by the City of

Lincoln, to the east by the City of Rocklin, and to the south by the City of Roseville. West of the SIAP lies a large area of agricultural land within Placer County. The stated goal of the SIAP follows:

> *To improve the opportunities for industrial and other employment-based development in the SIAP in order to attract new industries, retain existing industries, to allow existing industries to expand, and to provide the necessary public and private sector services and facilities for all area employers, businesses, and patrons.*

The SIAP uses six land use designations to guide development within the plan area: Business Park, Industrial, General Commercial, Agriculture, Public Facility, and Open Space. No residential land uses are allowed within the plan area; however, the proposed Placer Ranch Specific Plan (discussed below) lies partially within the SIAP and includes a variety of densities of residential land uses and university land uses. According to the SIAP, the plan area is emerging as an important employment base for residents of South Placer County, North Sacramento, and the foothill communities. The economic development activity within the SIAP is recognized as a critical component of the county's future growth, due to the jobs and revenue that the area is expected to generate. The SIAP identifies additions to the transportation/circulation network in the vicinity that are necessary to serve development within the plan area. While it does not identify the proposed Placer Parkway, the plan identifies circulation improvements to improve access from the west. Table 3-5 identifies the land use designations by acreage in the SIAP.

Table 3-5
Proposed Land Uses for
Sunset Industrial Area Plan

Land Use Designation	Area (acres)
Business Park	892.0
Industrial	3,479.0
General Commercial	49.0
Agriculture	3,503.0
Public Facilities	776.0
Open Space	184.0
Total	**8,883.0**
Source: Placer County, 1997	

3.2.4.2 Proposed Major Developments

Placer Ranch Specific Plan. The Placer Ranch Specific Plan (PRSP) proposes the phased development of a mixture of industrial, commercial, office and professional, residential, and a branch campus of California State University (CSU), Sacramento, on approximately 2,213 acres within the boundaries of the SIAP. All corridor alignment alternatives of the proposed Placer Parkway would bisect the PRSP area. The PRSP has common boundaries with the City of Roseville to the south and is bounded to the north by Sunset Boulevard West. The Western Regional Sanitary Landfill (WRSL) is located north of the PRSP on Athens Avenue. The project proposes approximately 980 acres of residential uses (including campus housing), approximately 290 acres for a university accommodating up to 25,000 students, approximately 9,612,000 square feet of industrial, commercial, office and professional land uses, and approximately 360 acres of institutional land uses (educational, parks, and open space). Roadway rights-of-way account for an additional 380 acres within the PRSP area. Table 3-6 shows proposed acreages by land use type in the Draft PRSP. Both the Placer County General Plan and the SIAP include policies that

establish buffer zones around the WRSL to avoid siting of incompatible land uses in close proximity to the landfill and to provide for future landfill expansion. Development of the site would require amendments to the existing land use designations and policies of the Placer County General Plan and SIAP.

Table 3-6
Proposed Land Uses for Placer Ranch Specific Plan

Land Use Designation	Area (acres)
University	290.0
Residential	980.0
Professional/Commercial	203.0
Roadway Rights-of-Way	380.0
Open Space/Parks/Educational	360.0
Total	**2,213.0**
Source: Placer County, 2005	

Sierra Vista Specific Plan. The proposed Sierra Vista Specific Plan (SVSP) area is located within Roseville's Sphere of Influence (SOI) in unincorporated Placer County. Alternative 1 lies west of this proposed plan area. The development application for the SVSP is being processed by the City of Roseville. The proposed SVSP area is comprised of 1,996 acres located south of the WRSP area and north of Baseline Road within the Eastern Segment of the proposed Placer Parkway study area. Although the SVSP is still in the conceptual stages of planning, the preliminary land use plan includes approximately 420 acres of Low Density Residential, 540 acres of Medium Density Residential, and 123 acres of High Density Residential property. Conceptual plans indicate that the project may also include 77 acres of land designated for Commercial uses and 57 acres designated for Office uses.

Creekview Specific Plan. The 530-acre Creekview Specific Plan (CSP) project site is located within the City of Roseville's SOI north of the WRSP area, and in the Eastern Segment of the study area. Placer Parkway would be located west of this proposed plan area. Like the SVSP, the CSP is in the preliminary stages of planning, so detailed land use plans are not available. However, it is expected that the CSP will propose development of residential land uses across most of the site, with limited commercial and professional office land uses near major roadways.

Regional University Specific Plan. The proposed Regional University Specific Plan (RUSP) area is comprised of 1,100 acres of undeveloped agricultural land in Placer County situated between the western boundary of the WRSP area and Brewer Road in the Central Segment of the Placer Parkway study area. Alternative 1 crosses the eastern edge of this plan area and Alternative 2 bisects it diagonally from northeast to southwest. The RUSP project includes the completion of a private university and a new residential community. The university campus would encompass 600 acres of the project site and would serve a maximum of 6,000 students. Forty acres of the university campus would be used for development of a high school to serve 1,200 students. Residential land uses would occupy 365 acres of the site and would include a mixture of low-, medium-, and high-density residential land uses. The remaining 135 acres of land within the RUSP would be designated with a mixture of commercial, parks, school, and open space land use designations. Table 3-7 summarizes the proposed land uses for the site.

Table 3-7
Proposed Land Uses for
Regional University Specific Plan Area

Land Use Designation	Area (±Acres)
University	600.0
Low Density Residential	245.0
Medium Density Residential	80.0
High Density Residential	40.0
Community Commercial	70.0
Neighborhood Commercial	3.0
Parks	31.0
School	11.0
Open Space/Parkway	20.0
Total	**1,100.0**
Source: Placer County Planning Department, 2004	

Development of this project would require an amendment to the Placer County General Plan and Zoning Ordinance, and approval of the RUSP, among other entitlements. The current General Plan designation on the site is Agriculture/Timber (80-acre minimum), and the zoning is Farm (80-acre minimum).

Placer Vineyards Specific Plan. The proposed Placer Vineyards Specific Plan (PVSP) area is located in southwestern Placer County and is bounded to the north by Baseline Road, to the south by the Sacramento-Placer County line, to the west by the Sutter-Placer County line, and to the east by Dry Creek and Walerga Roads. Alternative 1 lies 1 mile north of this plan area. The majority of the 5,230-acre site is currently zoned for agriculture (80-acre minimum lot sizes), and a small portion of the site is zoned Residential Agriculture (10-acre minimum lot sizes). The August 1994 Placer County General Plan identified this area as appropriate for urbanization following adoption and implementation of a comprehensive Specific Plan.

The proposed PVSP includes residential, commercial, public/quasi-public land uses and a Special Planning Area. Table 3-8 shows the land use summary for the PVSP. Approximately 2,377 acres of residential land uses are planned within the urbanized area of the plan. The Special Planning Area comprises 979 acres of existing rural residential development where no land use changes are proposed. The PVSP may also incorporate 161 acres of commercial properties, including a 60-acre site for a regional retail "Power Center." The plan includes more than 1,076 acres of open space, public facilities, and parkland. Lastly, the PVSP proposes 34.5 acres for office space, 140 acres for new schools, and 330 acres for new roadways or improvements to existing roadways.

Table 3-8
Proposed Land Uses for Placer Vineyards Specific Plan

Land Use Designation	Area (±Acres)
Low Density Residential	991.0
Medium Density Residential	1,196.0
High Density Residential	190.0
Commercial Mixed Use-RES	47.0
Commercial	34.0
Commercial Mixed Use-COM	20.0
Office	34.5
Business Park	98.5
Power Center	60.0
Town Center	33.5
Parks	217.0
School	140.0
Open Space/Public/Quasi-Public Facilities	859.5
Major Roads	330.0
Special Planning Area	979.0
Total	**5,230.0**
Source: Placer County Planning Department, 2004	

Measure M. Measure M, a voter-approved advisory measure, directed the Sutter County Board of Supervisors to consider mixed land use development for an approximately 7,500-acre area within south Sutter County. This area is currently dominated by agricultural land uses, but is designated as Industrial/Commercial Reserve according to the Sutter County General Plan Map and contains a large developed industrial park and a 50-acre Sysco distribution and warehouse facility. Measure M language identified the need for a General Plan Amendment and Specific Plan, among other necessary entitlements, to allow for mixed land uses, including commercial/industrial and residential/community facilities. The proposed plan called for a maximum of 2,900 acres of residential land use, a minimum of 3,600 acres of business/industrial, and minimum of 1,000 acres for educational, retail, parks, and community facilities (Table 3-9). A General Plan Amendment covering 7,360 acres is currently being processed by Sutter County and a Specific Plan (Sutter Pointe Specific Plan) application further refining land uses was submitted to the County in summer 2006.

Table 3-9
Proposed Land Uses for Measure M

Land Use Designation	Area (±Acres)
Business/Industrial	3,600.0
Residential	2,900.0
Educational/Commercial/Parks/Community Facilities	1,000.0
Total	**7,500.0**
Source: Sutter County Planning Services, 2006	

It should be noted that recent FEMA decisions have cast some uncertainty over future development in the Natomas Basin, because of the inadequate flood protection in the basin, which lies in both northern Sacramento County and southern Sutter County, including Measure M/the Sutter Pointe Specific Plan.

Curry Creek Community Plan. The Curry Creek Community Plan is in the preliminary stages of conceptual planning at this time, but may include a mix of residential and commercial land uses on a 5,200-acre area of unincorporated Placer County located north of the proposed PVSP area and south of the proposed RUSP area. The final boundaries, size, and number of residential units are currently undetermined.

Reason Farms Environmental Preserve. In 2003, the Roseville City Council approved the acquisition of two parcels of land that total approximately 1,700 acres along Pleasant Grove Creek. These properties were acquired for the purpose of constructing a stormwater retention basin, in addition to providing potential open space and recreational opportunities for the City of Roseville. The Parks and Recreation Department is in the preliminary stages of updating the Master Plan, including refining it for the recreational aspects of the project. The recreational components will be balanced with the considerations for the recreational needs of the city, and the need to properly manage the natural resources within and surrounding the project site.

3.2.4.3 Other Potential Development Areas

In addition to the above formally proposed developments, there are indications of land assembly in the remaining City of Roseville undeveloped Sphere of Influence lands and nearby areas of unincorporated Placer County. Activities of two major land development companies are described below.

Brookfield. Brookfield Communities controls property north of the proposed CSP area, south of Sunset Boulevard West, and northeast of the WRSP area. The property is currently undeveloped and no development is proposed at the present time. Existing land use designations on the property allow for agricultural land uses on 80-acre minimum parcels.

AKT Development. In addition to the RUSP area, AKT Development owns thousands of acres of undeveloped agricultural land within the Central and Eastern segments of the proposed Placer Parkway project (adjacent to and west of the WRSL, including land within the CCCP area). This land is currently in agricultural production, including rice farming. The current Placer County General Plan land use designations for these properties allow for agricultural land uses on 80-acre minimum lot sizes.

3.2.5 Jobs/Housing Balance

The analysis of the "jobs/housing" balance is based on the planning premise of having people live close to where they work so that commute times and traffic congestion decrease, improvements in air quality are realized, and the number of vehicle trips is reduced. Those goals potentially can be realized when sufficient jobs are available locally to balance the employment demands of the community, and when commercial services are convenient to residential areas.

In order to achieve a jobs/housing balance, the local planning jurisdiction must determine the location, intensity, and types of employment and housing that would encourage residents to reduce their vehicle trips and miles traveled and potentially increase the use of alternative transportation methods (i.e., bicycling, car or vanpools, and walking). Planning for a jobs/housing balance requires an evaluation of employment potential, housing demand, new housing production, and the relationship between employment opportunities and housing availability. Other factors such as housing cost and transportation systems must also be evaluated.

Implementation strategies to create a jobs/housing balance include locating higher density housing near employment centers, promoting infill development, and actively recruiting businesses that can benefit from hiring the local workforce. All of the aforementioned strategies have been included in SACOG's Blueprint strategy for "smart growth" in the six-county region. The Roseville City Council officially adopted *Smart Choices for Roseville's Future--Implementation Strategies to Achieve Blueprint Project Objectives* in May 2005. The City of Rocklin does not have any formal standards, procedures or strategies that implement the SACOG Blueprint; however, their Downtown plan focuses on design and densities consistent with the Blueprint Preferred Scenario. Similarly, Placer County has not formally adopted the SACOG Blueprint, but County staff have been directing applicants to use Blueprint growth principles and propose development projects that meet the Blueprint goals.

There are currently relatively few existing employment opportunities in the study area. Areas planned for industrial growth currently exist in the Eastern and Western segments. The majority of the study area is rural and sparsely populated. Agriculture is the predominant land use in the study area, as shown on Figure 3-1, where large parcels typically include a farmstead. Chapters 5 and 6 of this CIA contain further descriptions of housing and jobs in the study area and surrounding region.

3.3 IMPACT ANALYSIS

This section evaluates the potential impacts of the project on the current and projected land use within the study area. The significance criteria listed below will be used to evaluate the potential project impacts. These significance criteria are used to assess potentially significant impacts which may be evaluated in CEQA environmental documents. (The FHWA has not adopted thresholds of significance for purposes of determining impacts under NEPA.)

3.3.1 Significance Criteria

Appendix G of the State CEQA Guidelines, the Community Impact Assessment checklist criteria, and professional judgment were used to determine whether the project would have a significant environmental impact to land use. Potentially significant impacts associated with the proposed action were evaluated using the following significance criteria:

- Physical disruption and conversion of existing land uses;
- Compatibility with adjacent or planned land uses; and
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to a general plan/specific plan goal or policy, general plan designations, or zoning designation).

3.3.2 Approach to Analysis

This evaluation was completed to identify potential conflicts that the project may have on land use within the study area. Three categories of possible impacts were identified: (1) direct land use impacts related to conversion of study area acreage for right-of-way purposes; (2) compatibility of the proposed transportation corridor with existing and planned land uses within the study area; and (3) the potential for the Parkway to conflict with local jurisdictions' adopted plans, policies, and regulations.

The following assumptions were used in the evaluation of potential impacts of the project:

- Direct physical impacts to land in the cities of Roseville and Rocklin, and the County of Sacramento are not anticipated and were not evaluated. None of the corridor alignment alternatives extend into Roseville or Sacramento County. The eastern interchange extends into Rocklin under all alternatives, in an area where an interchange is planned, so

new physical impacts in Rocklin were not evaluated. (Project consistency with policies of the Cities of Rocklin and Roseville, and Sacramento County are, however, evaluated in the following sections).

- Land use and zoning designations are subject to minimum parcel sizes. If an alignment under consideration would divide an existing parcel into two or more portions, one of which would no longer meet the minimum parcel size, then a potentially significant impact would occur.

Commercial, Industrial, and Public Facilities. Minimum parcel sizes for these types of land uses vary widely. The project's effects on commercial, industrial, and public facilities were not considered to adversely affect land use within the study area (Chapters 5 and 6 evaluate direct impacts to existing businesses and municipal facilities within the study area).

Residential. Although residential land uses (e.g., farmsteads) exist within the corridor alignment alternatives, there is no residentially designated or zoned land within the corridor alignment alternatives; therefore, no impacts to residential land uses are discussed in this section (refer to Chapter 5 for analysis of impacts to housing.

Agricultural. Numerous parcels are agriculturally designated/zoned in the study area, as shown on Figures 3-3 and 3-5, where the project could create parcels that no longer meet minimum size requirements. For example, much of the study area is currently designated for agricultural uses with an 80-acre minimum parcel size. If 40 acres of an existing 110-acre parcel were taken for right-of-way, the remainder would no longer be consistent with the zoning ordinance.

Parcels bisected by any particular corridor alignment alternative would be significantly impacted. A bisected parcel is presumed to be significantly impacted because:

- Placer Parkway would have very limited access, particularly in the Central Segment. Depending on the build alternative, there would be five or six interchanges along the entire length of the Parkway. The Parkway would be at grade except for spanning railroad alignments or large water features or floodplains (see Section 2.4). Establishing at grade crossings of the highway to provide access to parcel fragments would be infeasible. Under- or over-crossings would likely add significant cost that may make it infeasible to provide access to both parcel fragments; and

- The no-development buffer associated with the Parkway (either 500 feet or 1,000 feet depending on the segment) could substantially reduce the amount of useable land on the bisected parcels. Consistent with worst-case analysis, the analysis of impacts to land usability considers the impact of the full corridor (including buffer), not just the potential width of paving.

3.3.3 Potential Direct Impacts

The discussion of potential project-related impacts is presented by alternative below and is organized as follows (to reflect significance criteria):

- Physical Disruption or Conversion of Land Use
  - Land Use Conversion
  - Potentially Bisected Parcels

- Compatibility with Adjacent or Planned Land Uses
  - Compatibility with Adjacent Land Use
  - Compatibility with Proposed Land Use

- Consistency with Applicable Land Use Plans, Policies, and Regulations
  - Consistency with Zoning Acreage Requirements
  - Consistency with Applicable General Plan Policies and Other Local Plans

3.3.3.1 No-Build Alternative

Under the No-Build Alternative, land would not be acquired for Placer Parkway and the Parkway would not be constructed. There would not be any impacts on land use.

3.3.3.2 Alternative 1 – the Red Alternative

PHYSICAL DISRUPTION OR CONVERSION OF LAND USE

Land Use Conversion

Construction of the Parkway within the study area would introduce a regional transportation corridor into a predominantly agricultural area. This would result in the conversion of existing land uses to infrastructure-related uses. The land converted from its existing uses, or the potentially affected acreage within Alternative 1 is approximately 1,917.64 acres. As stated in the developable land discussion in Section 3.2.3, there are approximately 35,454 acres of land within the entire study area. Alternative 1 would convert approximately 5.41 percent of land within the study area from its current uses to road and buffer uses. Table 3-10 shows the amount of land that would be converted by segment for Alternative 1.

Table 3-10
Amount of Land Potentially Affected by Alternative 1

Alternative	Western Segment (acres)	Central Segment (acres)	Eastern Segment (acres)	Total Acreage Affected	Percentage of all Land in Study Area (%)
Alternative 1	385.29	902.09	630.26	1,917.64	5.41

Sources: State of California Housing and Community Development Department data (State of California HCD, 2006) and NFA GIS data analysis
Note: Alternative 1 uses the north of Riego Road SR 70/99 interchange

As shown on Figures 3-1 and 3-2, the proposed highway alignment would primarily convert land that is either zoned for agricultural production, is capable of being used for agricultural production, or that is in agricultural production. The conversion of agricultural land and the impacts associated with the loss of agricultural production (as well as recommended mitigation strategies) are discussed in detail in the analysis of farmland impacts in Chapter 4.

Western Segment

Alternative 1 would convert 385.29 acres of land in the Western Segment to transportation corridor use. Conversion of land in the Western Segment would affect large agricultural parcels that are primarily used for rice production at present. Most of this area has been planned for industrial development; however, the industrial development that has occurred to date has been limited. The Sutter Pointe Specific Plan that is currently in development will designate this area for mixed use residential and commercial-industrial development.

Central Segment

Alternative 1 would convert 902.09 acres of land in the Central Segment to transportation corridor use. Land conversion in the Central Segment would affect the largest amount of land due to the 1,000-foot-wide corridor sought for right-of-way acquisition in this area. The conversion of land in Central Segment would affect numerous agriculturally designated parcels, which are used for rice farming, grazing or open space.

Eastern Segment

Alternative 1 would convert 630.28 acres in the Eastern Segment to transportation corridor use. The conversion of land in the Eastern Segment of the study area would directly affect an existing industrial property. Several other undeveloped parcels would be affected by the direct conversion of property in the Eastern Segment. The greatest portion of the proposed alignment in the Eastern Segment is located within the proposed Placer Ranch Specific Plan area and is shown as a future road corridor within the plan area. The undeveloped parcels currently do not have any active agricultural operations (Bryant, 2006).

Potentially Bisected Parcels

Figure 3-6 shows the alternative alignments under study in comparison to the parcel boundaries in Placer and Sutter Counties. Table 3-11 lists the specific parcels that could be potentially bisected as a result of the Alternative by segment and by Assessor's Parcel Number (APN). In addition, the table shows the total acreage of each affected parcel, the amount of acreage affected, and the percentage that could be removed as a result of the project. There would be eleven properties in the Western Segment, eight properties in the Central Segment, and seven properties in the Eastern Segment that would be bisected by Alternative 1. "Bisected" parcels are those that would be split by the alignment, leaving two remnant parcels—one on either side of the corridor—as opposed to parcels that would be affected by a loss of acreage to the corridor but that would retain the unaffected land as a single remnant parcel located on only one side of the new corridor.

COMPATIBILITY WITH ADJACENT OR PLANNED LAND USES

Compatibility with Adjacent Land Uses

The proposed corridor alignment of Alternative 1 would be approximately 500 feet wide in the Western and Eastern segments and approximately 1,000 feet wide in the Central Segment. The corridor width is proposed to be wider than the right-of-way required for the actual transportation facility in order to control access to the facility, create a buffer along the Parkway, and reduce the potential for growth inducement. Construction of the Parkway would not conflict with the existing urban uses in the Eastern and Western segments of the study area. The transportation corridor would be compatible with the industrial and commercial uses in these areas and is expected to advance economic development goals adopted for these areas by improving goods movement between the Sunset Industrial Area near SR 65 and I-80 in the Roseville/Rocklin area to the Sutter County Industrial reserve area near SR 70/99.

Table 3-11
Parcels Bisected by Alternative 1

Segment	Assessors Parcel Number	Parcel Size (acres)	Affected Acreage	Percentage of Parcel Affected (%)
Western	35-250-003	120.10	26.59	22.14
Western	35-250-008	39.46	14.88	37.71
Western	35-250-009	123.30	11.30	9.16
Western	35-250-014	109.79	23.97	21.83
Western	35-250-017	102.79	13.15	12.79
Western	35-260-001	477.84	64.04	13.40
Western	35-260-002	53.35	10.06	18.86
Western	35-260-003	15.70	1.84	11.72
Western	35-260-011	50.14	11.19	22.32
Western	35-260-012	30.45	5.97	19.61
Western	35-340-016	23.32	1.20	5.15
Central	017-100-004-000	232.99	90.65	38.91
Central	017-150-001-000	480.29	143.44	29.87
Central	017-150-026-000	322.71	121.43	37.63
Central	017-130-016-000	81.34	60.52	74.40
Central	017-130-027-000	78.27	59.70	76.27
Central	35-260-008	197.82	80.33	40.61
Central	35-260-014	173.75	25.82	14.86
Central	35-260-013	31.28	1.16	3.71
Eastern	017-020-017-510	626.54	162.99	26.01
Eastern	017-020-018-000	557.30	59.95	10.76
Eastern	017-061-005-000	128.47	9.69	7.54
Eastern	017-061-012-000	266.34	19.33	7.26
Eastern	017-061-047-000	315.45	54.01	17.12
Eastern	017-061-072-000	62.24	8.26	13.28
Eastern	017-061-078-000	63.40	18.72	29.53

Source: Sutter and Placer County Assessor's parcel data, accessed February 2006, in tandem with NFA GIS spatial analysis of Parkway corridor alignment alternatives.

The no-development buffer zone would help preserve the rural character of at least a strip of the agriculturally designated areas within all three segments by preventing development from extending to the roadway's edge. However, except in small portions of the Western Segment and somewhat larger portions of the Central Segment, much of the area through which the Parkway would be constructed would be converted from agricultural uses to more urban or suburban uses under the 2040 development scenario, even without Placer Parkway. PCTPA is working with local land use planning agencies to avoid or minimize impacts on proposed development within the study area. The Parkway could bring greater certainty to future land use planning efforts through the selection of a preferred corridor, so that right-of-way can be acquired to preserve a transportation corridor in which a roadway could be built in the future in conjunction with the construction of other planned projects in the area.

Compatibility with Proposed Land Uses

PCTPA is actively working with local lead agencies to avoid having an adverse effect on planned development within the study area. PCTPA is seeking to avoid impacts by evaluating potential corridor alignments and ultimately selecting a preferred alignment so that right-of-way can be acquired to secure a

highway corridor in conjunction with the construction of planned projects in the area (i.e., the potential developments described in Section 3.2.4). In addition, the project would preserve right-of-way for a regional highway that, upon completion, would reduce existing and anticipated congestion on the local and regional transportation system in southwestern Placer County and south Sutter County. Through its coordinated planning efforts, PCTPA has diminished the potential for conflicts with future development, by initiating communication with all interested parties and stakeholders in the area, so that other parties are aware of the project and can consider the Parkway proposal in relation to other planned development. PCTPA's coordinated effort involved working with its regional planning partners to develop a concept plan for the Placer Parkway, as described in Chapter 1. PCTPA staff continue to be involved in meetings with local jurisdictions pertaining to regional transportation planning and funding, as well as coordination of traffic needs associated with major new development proposals affecting the region.

Nevertheless, there could be substantial impacts on future planned development. For example, the Sutter Pointe Specific Plan area in south Sutter County would be affected by Alternative 1, crossing through areas proposed for commercial and residential development on the conceptual land use plan. In addition, Alternative 1 would impact the Curry Creek Community Plan (CCCP) area where land use planning for this area is in the early stages. Similarly, Alternative 1 would impact the eastern periphery of the RUSP area and the northwestern corner of the Sierra Vista Specific Plan area (currently proposed for low- and medium-density residential development, with community parks and open space). All alternatives would affect the future Brookfield project, as well as the Master Plan for Reason Farms and the Placer Ranch Specific Plan, both of which are in progress. Further analysis will be performed during Tier 2 to determine whether or not there would be any land use compatibility impacts from the Parkway on these proposed uses as plans for them become further developed.

CONSISTENCY WITH APPLICABLE LAND USE PLANS, POLICIES AND REGULATIONS

Consistency with Zoning Minimum Acreage Requirements

Each jurisdiction has adopted zoning regulations to implement its land use policies. Properties potentially affected by Alternative 1 have been evaluated in relation to minimum parcel sizes required in the Placer County and Sutter County Zoning Ordinances and potential project impacts. Table 3-12 identifies the parcels of at least 80 acres in size that could be reduced to less than 80 acres by Alternative 1. Only agriculturally designated land in the study area was analyzed, because this zoning has the only minimum acreage requirements expected to be impacted by the Parkway. There would be no similar impacts in the Eastern or Western segments associated with Alternative 1; however, there are parcels that are already less than 80 acres that are zoned for 80-acre minimum in this area that would be affected (see discussion below). There are two properties in the Central Segment that currently conform to minimum parcel requirements that would no longer be consistent with the Placer County Zoning Ordinance as a result of the Parkway under Alternative 1, as shown in Table 3-13.

Table 3-12
Parcels Larger Than 80 Acres
That Would Be Reduced to Less Than 80 Acres by Alternative 1

Segment	Assessors Parcel Number	Parcel Size (acres)	Acreage Removed	Remaining Acreage	Percentage of Parcel Removed (%)
Central	017-130-016-000	81.34	60.52	20.82	74.40
Central	017-130-064-000	85.46	21.73	63.73	25.43
Source: Placer County Assessor's parcel data, accessed February 2006, in tandem with NFA GIS spatial analysis of Parkway alignments.					

Table 3-13 lists existing parcels that are non-conforming to the minimum parcel size zoning requirement. Since these parcels are smaller than the current minimum acreage requirement, they are already inconsistent with the existing zoning requirements. If agricultural activity is currently being pursued on these sites, a further reduction in size would make them potentially even less viable for continuing agricultural production. There would be one such parcel in the Western Segment, nine parcels in the Central Segment, and four parcels in the Eastern Segment would be affected by Alternative 1. (Agricultural impacts are addressed in Chapter 4.)

There are other agriculturally designated/zoned parcels in the study area that could potentially be physically affected by the Parkway, but they are not listed in Table 3-13, since they would not be in conflict with minimum acreage requirements as a result of the project.

Table 3-13
Parcels Less Than 80 Acres That Would Be Affected by Alternative 1

Segment	Assessors Parcel Number	Land Use Designation	Parcel Size (acres)	Affected Acreage	Remaining Acreage	Percentage of Parcel Affected (%)
Western	35-240-033	Agriculture 80 Ac. Min.	69.48	0.62	68.86	0.89
Central	017-130-027-000	Agriculture 80 Ac. Min.	78.27	59.70	18.57	76.27
Central	017-130-040-000	Agriculture 80 Ac. Min.	19.18	10.32	8.86	53.79
Central	017-130-039-000	Agriculture 80 Ac. Min.	19.31	18.96	0.35	98.19
Central	017-130-038-000	Agriculture 80 Ac. Min.	19.43	10.36	9.07	53.32
Central	017-130-037-000	Agriculture 80 Ac. Min.	19.50	19.28	0.23	98.83
Central	017-130-046-000	Agriculture 80 Ac. Min.	19.80	10.48	9.33	52.93
Central	017-130-047-000	Agriculture 80 Ac. Min.	19.90	19.66	0.24	98.79
Central	017-130-036-000	Agriculture 80 Ac. Min.	39.77	30.26	9.51	76.09
Central	017-130-062-000	Agriculture 80 Ac. Min.	39.93	38.50	1.43	96.42
Central	35-260-015	Agriculture 80 Ac. Min.	5.83	0.94	4.89	16.12
Central	35-260-012	Agriculture 80 Ac. Min.	30.45	0.11	30.34	0.36
Central	35-260-013	Agriculture 80 Ac. Min.	31.28	1.16	30.12	3.71
Central	35-260-006	Agriculture 80 Ac. Min.	33.30	0.89	32.41	2.67
Eastern	017-130-047-000	Agriculture 80 Ac. Min.	19.90	19.68	0.22	98.90
Eastern	017-020-016-510	Agriculture 80 Ac. Min.	9.88	1.52	8.36	15.37
Eastern	017-061-067-000	Public Facility/ Agricultural 80 Ac. Min.	10.49	0.19	10.29	1.82
Eastern	017-020-019-000	Agricultural 80 Ac. Min.	78.17	59.90	18.27	76.62

Source: Sutter and Placer County's Assessor's Parcel Data; GIS databases accessed February 2006

Consistency with Applicable General Plan Policies and Other Local Plans

Refer to Section 3.3.3.8 for a discussion of project consistency with applicable plans and policies, which is the same for all project build alternatives.

3.3.3.3 Alternative 2 – the Orange Alternative

Land Use Conversion

The land that would be converted from existing uses, or the potentially affected acreage within Alternative 2 corridor alignment, is approximately 1,835.31 acres. Therefore, Alternative 2 would convert approximately 5.18 percent of land within the study area from its current uses to a transportation corridor use. Table 3-14 shows the amount of land that would be converted by segment for Alternative 2.

Table 3-14
Amount of Land Potentially Affected by Alternative 2

Alternative	Western Segment (acres)	Central Segment (acres)	Eastern Segment (acres)	Total Acreage Affected	Percentage of all Land in Study Area (%)
Alternative 2	385.29	819.76	630.26	1,835.31	5.18

Sources: State of California Housing and Community Development Department data (State of California HCD, 2006) and NFA GIS data analysis
Note: Alternative 2 uses Riego Road interchange

As under Alternative 1, the proposed alignment for Alternative 2 would primarily convert land that is capable of agricultural production. Land use conversion impacts for the Western, Central, and Eastern Segments under Alternative 2 would be similar to those described for Alternative 1.

Potentially Bisected Parcels

Table 3-15 lists the specific parcels that could be potentially bisected as a result of Alternative 2 by segment and by APN; eleven properties in the Western Segment, ten properties in the Central Segment, and seven properties in the Eastern Segment.

Land Use Compatibility

Compatibility with Adjacent Land Uses. The compatibility of Alternative 2 with adjacent land uses would be similar to that discussed for Alternative 1.

Compatibility with Proposed Land Uses. Compatibility with proposed land uses for Alternative 2 would be similar to that discussed for Alternative 1, except that Alternative 2 would avoid the Sierra Vista Specific Plan area. Alternative 2 has the potential to affect future planning for the CCCP, but instead of bisecting it, as Alternative 1 would do, it would affect only a small portion of the northwestern area. In addition, Alternative 2 would bisect the RUSP area, passing through an area to the east of the proposed university campus that has been proposed for mixed use development. The draft *Regional University Specific Plan Land Use Plan* dated March 15, 2006 indicates that this area is proposed for high-density residential, commercial, park and open space uses.

Consistency with Zoning Minimum Acreage Requirements. Table 3-16 identifies the parcels of at least 80 acres in size that could be reduced to less than 80 acres by Alternative 2. There would be no impacts in the Western or Eastern segments for Alternative 2, and only two properties in the Central Segment that currently conform to minimum acreage requirements would no longer be consistent with the Placer County Zoning Ordinance as a result of this alternative.

Table 3-15
Parcels Bisected by Alternative 2

Segment	Assessors Parcel Number	Parcel Size (acres)	Affected Acreage	Percentage of Parcel Affected (%)
Western	35-250-003	120.10	26.59	22.14
Western	35-250-008	39.46	14.88	37.71
Western	35-250-009	123.30	11.30	9.16
Western	35-250-014	109.79	23.97	21.83
Western	35-250-017	102.79	13.15	12.79
Western	35-260-001	477.84	64.04	13.40
Western	35-260-002	53.35	10.06	18.86
Western	35-260-003	15.70	1.84	11.72
Western	35-260-011	50.14	11.19	22.32
Western	35-260-012	30.45	5.94	19.51
Western	35-340-016	23.32	1.20	5.15
Central	017-100-004-000	232.99	89.53	38.43
Central	017-150-026-000	322.71	111.1	34.43
Central	017-130-025-000	160.3	33.8	21.09
Central	017-130-013-000	280.37	64.75	23.09
Central	017-130-035-000	20.19	15.30	75.78
Central	017-130-009-000	118.6	40.50	34.15
Central	35-170-017	157.49	45.34	28.79
Central	35-260-008	197.82	65.43	33.08
Central	35-260-014	173.75	36.37	20.93
Central	35-260-013	31.28	1.33	4.25
Eastern	017-020-017-510	626.54	163.20	26.05
Eastern	017-020-018-000	557.30	59.95	10.76
Eastern	017-061-005-000	128.47	9.69	7.54
Eastern	017-061-012-000	266.34	19.33	7.26
Eastern	017-061-047-000	315.45	54.01	17.12
Eastern	017-061-072-000	62.24	8.26	13.28
Eastern	017-061-078-000	63.40	18.72	29.53

Source: Sutter and Placer County Assessor's parcel data, accessed in February 2006, in tandem with NFA GIS spatial analysis of Parkway alignments.

Table 3-16
Parcels Larger Than 80 Acres
That Would Be Reduced to Less Than 80 Acres by Alternative 2

Segment	Assessors Parcel Number	Parcel Size (acres)	Acreage Removed	Remaining Acreage	Percentage of Parcel Removed (%)
Central	017-130-050-510	83.05	45.21	37.84	54.43
Central	017-130-009-000	118.60	40.50	78.1	34.15

Source: Placer County Assessor's parcel data, accessed February 2006, in tandem with NFA GIS spatial analysis of Parkway alignments.

Table 3-17 lists existing parcels that are non-conforming to minimum parcel size zoning requirement. Since these parcels are smaller than the current minimum acreage requirement, they are already inconsistent with the existing zoning requirements (see the discussion of non-conforming parcels in the analysis of Alternative 1). Two such parcels in the Western Segment, seventeen parcels in the Central Segment, and three parcels in the Eastern Segment would be affected by Alternative 2.

Table 3-17
Parcels Less Than 80 Acres That Would Be Affected by Alternative 3

Segment	APN	Land Use Designation	Parcel Size (acres)	Affected Acreage	Remaining Area	Percentage (%)
Western	35-260-006	Agriculture 80 Ac. Min.	33.30	0.48	32.82	1.44
Western	35-240-033	Agriculture 80 Ac. Min.	69.48	0.62	68.86	0.89
Central	017-130-029-510	Agriculture 80 Ac. Min.	5.07	5.07	0.00	100.00
Central	35-260-015	Agriculture 80 Ac. Min.	5.83	1.04	4.79	17.84
Central	017-130-048-510	Agriculture 80 Ac. Min.	18.46	0.01	18.45	0.03
Central	017-130-049-510	Agriculture 80 Ac. Min.	19.16	3.78	15.38	19.73
Central	017-130-002-000	Agriculture 80 Ac. Min.	19.17	16.38	2.84	85.45
Central	017-130-003-000	Agriculture 80 Ac. Min.	19.30	14.23	5.07	73.73
Central	017-130-033-000	Agriculture 80 Ac. Min.	19.75	4.50	15.25	22.78
Central	017-130-032-000	Agriculture 80 Ac. Min.	20.15	11.78	8.37	58.47
Central	017-130-034-000	Agriculture 80 Ac. Min.	20.17	0.97	19.19	4.83
Central	017-130-035-000	Agriculture 80 Ac. Min.	20.19	15.30	4.89	75.79
Central	35-260-012	Agriculture 80 Ac. Min.	30.45	0.06	30.39	0.20
Central	35-260-013	Agriculture 80 Ac. Min.	31.28	1.33	29.95	4.25
Central	35-260-006	Agriculture 80 Ac. Min.	33.30	1.19	32.11	3.57
Central	017-130-004-000	Agriculture 80 Ac. Min.	39.53	15.83	23.70	40.05
Central	017-130-011-000	Agriculture 80 Ac. Min.	59.39	19.30	40.09	32.50
Central	017-130-008-000	Agriculture 80 Ac. Min.	59.53	31.49	28.04	52.90
Central	017-130-005-000	Agriculture 80 Ac. Min.	78.91	2.84	76.07	3.60
Eastern	017-020-016-510	Agriculture 80 Ac. Min.	9.88	1.52	8.36	15.37
Eastern	017-061-067-000	Public Facility/ Agricultural 80 Ac. Min.	10.49	0.19	10.29	1.82
Eastern	017-020-019-000	Agricultural 80 Ac. Min.	78.17	59.90	18.27	76.62

Source: Sutter and Placer County's Assessor's Parcel Data; GIS databases accessed February 2006

There are other agriculturally designated/zoned parcels in the study area that could potentially be physically affected by the Parkway, but they are not listed in Table 3-13, since they would not be in conflict with minimum acreage requirements as a result of the project.

3.3.3.4 Alternative 3 – the Blue Alternative

Land Use Conversion

The area of land that would be converted from existing uses by the Alternative 3 alignment is approximately 1,863.56 acres. Therefore, Alternative 3 would convert approximately 5.26 percent of land within the study area from its current uses to transportation corridor uses. Table 3-18 shows the amount of land that would be converted by segment for Alternative 3.

Like Alternative 1, the proposed highway alignment for Alternative 3 would primarily convert land that is capable of agricultural production. The Alternative 1 discussion of land use conversion impacts for the Western, Central, and Eastern segments is applicable to Alternative 3.

Table 3-18
Amount of Land Potentially Affected by Alternative 3

Alternative	Western Segment (acres)	Central Segment (acres)	Eastern Segment (acres)	Total Acreage Affected	Percentage of all Land in Study Area (%)
Alternative 3	385.29	848.01	630.26	1,863.56	5.26

Sources: State of California Housing and Community Development Department data (State of California HCD, 2006) and NFA GIS data analysis
Note: Alternative 3 uses Riego Road interchange

Potentially Bisected Parcels

Table 3-19 lists the specific parcels that would be bisected as a result of Alternative 3, by segment and by APN; eleven properties in the Western Segment, eight properties in the Central Segment, and seven properties in the Eastern Segment.

Land Use Compatibility

Compatibility with Adjacent Land Uses. The compatibility of Alternative 3 with adjacent land uses would be similar to that discussed for Alternative 1.

Compatibility with Proposed Land Uses. Alternative 3 would affect the Sutter Pointe Specific Plan area of south Sutter County, as well as Reason Farms, PRSP, and the Brookfield Property. It would avoid impacts to RUSP, CCCP and the Sierra Vista Specific Plan area.

Consistency with Zoning Minimum Acreage Requirements. Table 3-20 identifies the parcels of at least 80 acres in size that could be reduced to less than 80 acres by Alternative 3, depending on the final location of the roadway within the corridor. There would be no impacts in the Western or Eastern segments for Alternative 3, and only one property in the Central Segment conforming to minimum acreage requirements would no longer be consistent with the Placer County Zoning Ordinance as a result of this alternative.

Table 3-21 lists affected parcels that are non-conforming to minimum parcel size zoning requirement. Since these parcels are smaller than the current minimum acreage requirement, they are already inconsistent with the existing zoning requirements (see Figure 3-3). There would be two such parcels in the Western Segment, twelve parcels in the Central Segment, and two parcels in the Eastern Segment that would be affected by Alternative 3.

Table 3-19
Parcels Bisected by Alternative 3

Segment	Assessors Parcel Number	Total Acreage of Affected Parcel	Affected Acreage	Percentage of Parcel (%)
Western	35-250-003	120.10	26.59	22.14
Western	35-250-008	39.46	14.88	37.71
Western	35-250-009	123.30	11.30	9.16
Western	35-250-014	109.79	23.97	21.83
Western	35-250-017	102.79	13.15	12.79
Western	35-260-001	477.84	64.04	13.40
Western	35-260-002	53.35	10.06	18.86
Western	35-260-003	15.70	1.84	11.72
Western	35-260-011	50.14	11.19	22.32
Western	35-260-012	30.45	5.91	19.41
Western	35-340-016	23.32	1.20	5.15
Central	017-090-053-000	632.90	166.81	26.36
Central	017-100-004-000	232.99	80.94	34.74
Central	017-100-024-000	155.37	65.25	42.00
Central	35-170-017	157.49	49.94	31.71
Central	35-260-008	197.82	65.63	33.18
Central	35-260-013	31.28	1.40	4.48
Central	35-260-014	173.75	36.35	20.92
Central	35-260-015	5.83	1.08	18.52
Eastern	017-020-017-510	626.54	159.66	25.48
Eastern	017-020-018-000	557.30	59.95	10.76
Eastern	017-061-005-000	128.47	9.69	7.54
Eastern	017-061-012-000	266.34	19.33	7.26
Eastern	017-061-047-000	315.45	54.01	17.12
Eastern	017-061-072-000	62.24	8.26	13.28
Eastern	017-061-078-000	63.40	18.72	29.53

Source: Sutter and Placer County Assessor's parcel data, accessed February 2006, in tandem with NFA GIS spatial analysis of Parkway alignments.

Table 3-20
Parcels Larger Than 80 Acres
That Would Be Reduced to Less Than 80 Acres by Alternative 3

Segment	Assessors Parcel Number	Parcel Size (acres)	Acreage Removed	Remaining Acreage	Percentage of Parcel Removed (%)
Central	017-090-021-510	159.38	120.66	38.72	75.71
Source: Placer County Assessor's parcel data, accessed February 2006, in tandem with NFA GIS spatial analysis of Parkway alignments.					

Table 3-21
Parcels Less Than 80 Acres That Would Be Affected by Alternative 3

Segment	APN	Land Use Designation	Parcel Size (acres)	Affected Acreage	Remaining Acreage	Percentage (%)
Western	35-240-033	Agriculture 80 Ac. Min.	69.48	0.62	68.86	0.89
Western	017-020-019-000	Agricultural 80 Ac. Min.	78.17	59.90	18.27	76.62
Central	35-260-015	Agriculture 80 Ac. Min.	5.83	1.08	4.75	18.61
Central	017-130-048-510	Agriculture 80 Ac. Min.	18.46	18.40	0.06	99.70
Central	017-130-049-510	Agriculture 80 Ac. Min.	19.16	4.64	14.52	24.21
Central	017-130-002-000	Agriculture 80 Ac. Min.	19.17	11.35	7.81	59.24
Central	017-130-003-000	Agriculture 80 Ac. Min.	19.30	7.44	11.86	38.53
Central	017-090-034-000	Agriculture 80 Ac. Min.	22.67	0.02	22.65	0.10
Central	35-260-013	Agriculture 80 Ac. Min.	31.28	1.40	29.88	4.48
Central	35-260-006	Agriculture 80 Ac. Min.	33.30	1.19	32.11	3.58
Central	35-170-016	Agriculture 80 Ac. Min.	74.84	0.48	74.36	0.64
Central	017-130-005-000	Agriculture 80 Ac. Min.	78.91	2.04	76.87	2.59
Central	017-100-023-000	Agriculture 80 Ac. Min.	79.32	6.10	73.22	7.69
Central	017-090-023-000	Agriculture 80 Ac. Min.	79.44	0.14	79.31	0.17
Eastern	017-020-016-510	Agriculture 80 Ac. Min.	9.88	1.52	8.36	15.37
Eastern	017-061-067-000	Public Facility/ Agricultural 80 Ac. Min.	10.49	0.19	10.29	1.82
Source: Sutter and Placer County Assessor's Parcel Data; GIS databases accessed February 2006						

There are other agriculturally designated/zoned parcels in the study area that could potentially be physically affected by the Parkway, but they are not listed in Table 3-13, since they would not be in conflict with minimum acreage requirements as a result of the project.

3.3.3.5 Alternative 4 – the Yellow Alternative

Land Use Conversion

The amount of land that would be converted from existing uses (the potentially affected acreage within the Alternative 4 alignment), is approximately 1,627.64 acres. Therefore, Alternative 4 would convert approximately 4.59 percent of land within the study area from its current uses to transportation corridor uses. Table 3-22 below shows the amount of land that would be converted by segment for Alternative 4.

Table 3-22
Amount of Land Potentially Affected by Alternative 4

Alternative	Western Segment (acres)	Central Segment (acres)	Eastern Segment (acres)	Total Acreage Affected	Percentage of all Land in Study Area (%)
Alternative 4	320.73	676.65	630.26	1,627.64	4.59
Sources: State of California Housing and Community Development Department data (State of California HCD, 2006) and NFA GIS data analysis Note: Alternative 4 uses Sankey Road interchange					

Like Alternative 1, the proposed highway alignment for Alternative 4 would primarily convert land that is capable of agricultural production. Land use conversion impacts described for the Western, Central, and Eastern segments for Alternative 4 would be similar to those under Alternative 1.

Potentially Bisected Parcels

Table 3-23 lists the specific parcels that would be bisected as a result of Alternative 4, by segment and by Assessor's Parcel Number. There would be nineteen properties in the Western Segment, four properties in the Central Segment, and seven properties in the Eastern Segment that would be bisected by Alternative 4.

Land Use Compatibility

Compatibility with Adjacent Land Uses. The compatibility of Alternative 4 with adjacent land uses would be similar to that described for Alternative 1.

Compatibility with Proposed Land Uses. Alternative 4 would affect the proposed Sutter Pointe Specific Plan area of south Sutter County. The County is using this northern alignment in the western segment in its current land use planning process for the Sutter Pointe Specific Plan, and the current conceptual land use plan shows a new interchange on Sankey Road, through an area proposed for commercial and industrial land uses, with some medium-density residential uses proposed for the eastern portion of the area. Compatibility with proposed land uses in the central and eastern segments under Alternative 4 would be the same as that described for Alternative 3.

Consistency with Zoning Minimum Acreage Requirements. Table 3-24 identifies the parcels of at least 80 acres in size that would be reduced to less than 80 acres by Alternative 4. These comprise one parcel in the Western Segment and two properties in the Central Segment, which conform to the existing zoning and which would no longer be consistent with the Placer and Sutter County zoning ordinances as a result of this alternative. There would be no impacts of this type in the Eastern Segment.

Table 3-23
Parcels Bisected by Alternative 4

Segment	Assessors Parcel Number	Total Acreage of Affected Parcel	Affected Acreage	Percentage of Parcel Bisected (%)
Western	35-140-033	17.25	7.26	42.09
Western	35-160-006	54.82	14.96	27.29
Western	35-160-008	49.69	9.34	18.80
Western	35-160-009	17.92	2.53	14.12
Western	35-160-034	118.42	23.16	19.56
Western	35-170-004	34.02	0.92	2.70
Western	35-170-029	29.67	1.55	5.22
Western	35-170-045	20.33	1.94	9.54
Western	35-220-012	243.42	14.85	6.10
Western	35-220-016	192.41	4.26	2.21
Western	35-220-025	99.66	9.29	9.32
Western	35-220-026	153.95	8.16	5.30
Western	35-230-021	54.39	2.00	3.68
Western	35-230-031	55.83	5.60	10.03
Western	35-340-013	10.94	1.12	10.24
Western	35-340-014	5.22	0.21	4.02
Western	35-340-015	13.05	0.92	7.05
Western	35-340-016	23.32	0.17	0.73
Western	35-340-024	3.01	1.43	47.51
Central	017-090-053-000	632.90	126.79	20.03
Central	017-100-004-000	232.99	81.04	34.78
Central	017-100-024-000	155.37	65.36	42.06
Central	35-160-043	113.90	47.35	41.57
Eastern	017-020-017-510	626.54	159.75	25.50
Eastern	017-020-018-000	557.30	59.95	10.76
Eastern	017-061-005-000	128.47	9.69	7.54
Eastern	017-061-012-000	266.34	19.33	7.26
Eastern	017-061-047-000	315.45	54.01	17.12
Eastern	017-061-072-000	62.24	8.26	13.28
Eastern	017-061-078-000	63.40	18.72	29.53

Source: Sutter and Placer County Assessor's parcel data in tandem with NFA GIS spatial analysis of Parkway alignments.

Table 3-24
Parcels Larger Than 80 Acres That Would Be Reduced to Less Than 80 Acres by Alternative 4

Segment	Assessors Parcel Number	Parcel Size (acres)	Acreage Removed	Remaining Acreage	Percentage of Parcel Removed (%)
Western	35-160-043	113.90	47.35	41.57	66.55
Central	017-090-021-510	159.38	120.68	75.72	38.7
Central	35-160-050	80.77	26.74	33.11	54.03

Sources: Sutter and Placer County Assessor's parcel data, accessed February 2006, in tandem with NFA GIS spatial analysis of Parkway alignments.

Table 3-25 lists existing parcels that are non-conforming to minimum parcel size zoning requirement. Since these parcels are smaller than the current minimum acreage requirement they are already inconsistent with the existing zoning requirements (refer to the discussion of non-conforming parcels in the analysis of Alternative 1). Nine parcels in the Western Segment, five parcels in the Central Segment, and three parcels in the Eastern Segment would be affected by Alternative 4.

Table 3-25
Parcels Less Than 80 Acres That Would Be Affected by Alternative 4

Segment	APN	Land Use Designation	Parcel Size (acres)	Affected Acreage	Remaining Acreage	Percentage of Parcel Affected (%)
Western	35-230-021	Agriculture 80 Ac. Min.	54.39	2.00	52.39	3.67
Western	35-230-031	Agriculture 80 Ac. Min.	55.83	5.60	50.23	10.03
Western	35-340-013	Agriculture 80 Ac. Min.	10.94	1.12	9.82	10.23
Western	35-160-035	Agriculture 80 Ac. Min.	12.82	5.36	7.46	41.81
Western	35-160-037	Agriculture 80 Ac. Min.	12.88	0.45	12.43	3.47
Western	35-160-036	Agriculture 80 Ac. Min.	12.92	2.83	10.09	21.90
Western	35-140-033	Agriculture 80 Ac. Min.	17.25	7.26	9.99	42.08
Western	35-160-009	Agriculture 80 Ac. Min.	17.92	2.53	15.39	14.14
Western	35-160-008	Agriculture 80 Ac. Min.	49.69	8.71	40.98	17.52
Central	017-090-023-000	Agriculture 80 Ac. Min.	79.44	0.13	79.31	0.16
Central	017-090-034-000	Agriculture 80 Ac. Min.	22.67	0.02	22.65	0.10
Central	017-100-023-000	Agriculture 80 Ac. Min.	79.32	5.93	73.39	7.48
Central	35-160-042	Agriculture 80 Ac. Min.	4.51	1.14	3.37	25.29
Central	35-160-049	Agriculture 80 Ac. Min.	79.87	34.84	45.03	43.62
Eastern	017-020-016-510	Agriculture 80 Ac. Min.	9.88	1.52	8.36	15.37
Eastern	017-061-067-000	Public Facility/ Agricultural 80 Ac. Min.	10.49	0.19	10.29	1.82
Eastern	017-020-019-000	Agricultural 80 Ac. Min.	78.17	59.90	18.27	76.62

Source: Sutter and Placer County's Assessor's Parcel Data; GIS databases accessed February 2006

There are other agriculturally designated/zoned parcels in the study area that could potentially be physically affected by the Parkway, but they are not listed in Table 3-13, since they would not be in conflict with minimum acreage requirements as a result of the project.

3.3.3.6 Alternative 5 – the Green Alternative

Land Use Conversion

The land that would be converted from its existing uses, or the potentially affected acreage within Alternative 5 alignment, is approximately 1,623.47 acres. Therefore, Alternative 5 would convert approximately 4.58 percent of land, which is the smallest footprint of all the five alternatives. Table 3-26 shows the amount of land that would be converted by segment for Alternative 5.

Table 3-26
Amount of Land Potentially Affected by Alternative 5

Alternative	Western Segment (acres)	Central Segment (acres)	Eastern Segment (acres)	Total Acreage Affected	Percentage of all Land in Study Area (%)
Alternative 5	320.73	672.48	630.26	1,623.47	4.58

Sources: State of California Housing and Community Development Department data (State of California HCD, 2006) and NFA GIS data analysis
Note: Alternative 5 uses Sankey Road interchange

Like Alternative 1, the proposed highway alignment for Alternative 5 would primarily convert land that is capable of agricultural production. Land use conversion impacts for the Western, Central, and Eastern segments described for Alternative 5 would be similar to those described for Alternative 1.

Potentially Bisected Parcels

Table 3-27 lists the parcels that would be bisected as a result of Alternative 5, by segment and by APN. Nineteen properties in the Western Segment, nine properties in the Central Segment, and seven properties in the Eastern Segment would be bisected by Alternative 5.

Land Use Compatibility

Compatibility with Adjacent Land Uses. The compatibility of Alternative 5 with adjacent land uses would be similar to that described by segment for Alternative 1.

Compatibility with Proposed Land Uses. The compatibility of Alternative 5 with proposed land uses would be the same as that described for Alternative 4.

Consistency with Zoning Minimum Acreage Requirements. Table 3-28 identifies the parcels of at least 80 acres in size that could be reduced to less than 80 acres by Alternative 5. There would not be any impacts in the Western or Eastern segments. The only parcel impacted is in the Central Segment, and it would no longer be consistent with the Sutter County zoning ordinance as a result of this alternative.

Table 3-29 lists existing parcels that are non-conforming to the minimum parcel size zoning requirement. Since these parcels are smaller than the current minimum acreage requirement, they are already inconsistent with the existing zoning requirements (refer to the discussion of non-conforming parcels in the analysis of Alternative 1). Nine such parcels in the Western Segment, ten parcels in the Central Segment, and three parcels in the Eastern Segment would be affected by Alternative 5.

Table 3-27
Parcels Bisected by Alternative 5

Segment	Assessors Parcel Number	Total Acreage of Affected Parcel	Affected Acreage	Percentage of Parcel (%)
Western	35-140-033	17.25	7.26	42.09
Western	35-160-006	54.82	14.96	27.29
Western	35-160-008	49.69	9.34	18.80
Western	35-160-009	17.92	2.53	14.12
Western	35-160-034	118.42	23.16	19.56
Western	35-170-004	34.02	0.92	2.70
Western	35-170-029	29.67	1.55	5.22
Western	35-170-045	20.33	1.94	9.54
Western	35-220-012	243.42	14.85	6.10
Western	35-220-016	192.41	4.26	2.21
Western	35-220-025	99.66	9.29	9.32
Western	35-220-026	153.95	8.16	5.30
Western	35-230-021	54.39	2.00	3.68
Western	35-230-031	55.83	5.60	10.03
Western	35-340-013	10.94	1.12	10.24
Western	35-340-014	5.22	0.21	4.02
Western	35-340-015	13.05	0.92	7.05
Western	35-340-016	23.32	0.17	0.73
Western	35-340-024	3.01	1.43	47.51
Central	017-090-023-000	79.44	30.43	38.30
Central	017-090-024-000	237.38	90.92	38.30
Central	017-090-051-000	174.41	44.58	25.56
Central	017-090-053-000	632.90	89.74	14.18
Central	017-100-004-000	232.99	75.63	32.46
Central	017-100-023-000	79.32	30.35	38.26
Central	017-100-024-000	155.37	61.14	39.35
Central	35-160-043	113.90	48.22	42.34
Central	35-160-049	79.87	50.64	63.40
Eastern	017-020-017-510	626.54	159.74	25.50
Eastern	017-020-018-000	557.30	59.95	10.76
Eastern	017-061-005-000	128.47	9.69	7.54
Eastern	017-061-012-000	266.34	19.33	7.26
Eastern	017-061-047-000	315.45	54.01	17.12
Eastern	017-061-072-000	62.24	8.26	13.28
Eastern	017-061-078-000	63.40	18.72	29.53

Source: Sutter and Placer County Assessor's parcel data, accessed February 2006, in tandem with NFA GIS spatial analysis of Parkway alignments.

Table 3-28
Agricultural Parcels Larger Than 80 Acres That Would Be Reduced to Less Than 80 Acres by Alternative 5

Segment	Assessors Parcel Number	Parcel Size (acres)	Acreage Removed	Remaining Acreage	Percentage of Parcel Removed (%)
Central	35-160-043	113.90	48.22	65.68	42.34

Source: Sutter County Assessor's parcel data, accessed February 2006, in tandem with NFA GIS spatial analysis of Parkway alignments.

Table 3-29
Agricultural Parcels Less Than 80 Acres That Would Be Affected by Alternative 5

Segment	APN	Land Use Designation	Parcel Size (acres)	Affected Acreage	Remaining Acreage	Percentage of Parcel Affected (%)
Western	35-160-008	Agriculture 80 Ac. Min.	49.69	8.71	40.98	17.52
Western	35-230-021	Agriculture 80 Ac. Min.	54.39	2.00	52.39	3.67
Western	35-230-031	Agriculture 80 Ac. Min.	55.83	5.60	50.23	10.03
Western	35-340-013	Agriculture 80 Ac. Min.	10.94	1.12	9.82	10.23
Western	35-160-035	Agriculture 80 Ac. Min.	12.82	5.36	7.46	41.81
Western	35-160-037	Agriculture 80 Ac. Min.	12.88	0.45	12.43	3.47
Western	35-160-036	Agriculture 80 Ac. Min.	12.92	2.83	10.09	21.90
Western	35-140-033	Agriculture 80 Ac. Min.	17.25	7.26	9.99	42.08
Western	35-160-009	Agriculture 80 Ac. Min.	17.92	2.53	15.39	14.14
Central	017-090-038-000	Agriculture 80 Ac. Min.	19.79	2.59	17.19	13.10
Central	017-090-035-000	Agriculture 80 Ac. Min.	22.57	9.83	12.75	43.53
Central	017-090-034-000	Agriculture 80 Ac. Min.	22.67	9.45	13.22	41.68
Central	017-090-036-000	Agriculture 80 Ac. Min.	23.29	13.62	9.67	58.48
Central	017-090-037-000	Agriculture 80 Ac. Min.	23.77	14.22	9.55	59.82
Central	017-090-004-000	Agriculture 80 Ac. Min.	32.53	0.03	32.50	0.10
Central	35-160-042	Agriculture 80 Ac. Min.	4.51	4.51	0.00	327.48
Central	35-160-014	Agriculture 80 Ac. Min.	58.48	0.04	58.44	0.06
Central	017-100-023-000	Agriculture 80 Ac. Min.	79.32	30.35	48.97	38.26
Central	35-160-049	Agriculture 80 Ac. Min.	79.87	48.92	30.95	61.25
Eastern	017-020-016-510	Agriculture 80 Ac. Min.	9.88	1.52	8.36	15.37
Eastern	017-061-067-000	Public Facility/ Agricultural 80 Ac. Min.	10.49	0.19	10.29	1.82
Eastern	017-020-019-000	Agricultural 80 Ac. Min.	78.17	59.90	18.27	76.62

Source: Sutter and Placer County's Assessor's Parcel Data; GIS databases accessed February 2006

There are other agriculturally designated/zoned parcels in the study area that could potentially be physically affected by the Parkway, but they are not listed in Table 3-13, since they would not be in conflict with minimum acreage requirements as a result of the project.

3.3.3.7 Comparison of Alternatives

Table 3-30 shows the potential impacts on land conversion, total acreage affected, number of parcels bisected, number of remnant parcels that would conflict with existing zoning, and number of pre-existing inconsistent parcels affected by project alternative.

Physical Disruption or Conversion of Land

As Table 3-30 indicates, Alternative 1 would affect the greatest amount of total land acreage, while Alternative 4 would affect the least. Alternative 5 would potentially bisect the most parcels in the study area, while Alternative 1 would bisect the fewest parcels.

Conflict with Applicable Land Use Plans, Policies and Regulations

Alternatives 3 and 5 would create one inconsistent parcel, while Alternatives 1 and 2 would each create two parcels that would be inconsistent with the minimum parcel size requirements under existing zoning. Alternative 3 would affect the fewest parcels that are already inconsistent with the existing zoning, while Alternative 5 would affect the most.

Table 3-30
Comparison of Alternatives' Impacts on Land Use

Potential Effect on Land Use	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Total acreage affected	1,918.43	1,836.78	1,863.56	1,627.64	1,623.47
Number of parcels bisected	22	27	26	30	36
Number of parcels created that conflict with existing zoning	3	1	1	3	1
Number of pre-existing inconsistent parcels affected	17	21	16	17	22

Land use compatibility is not addressed on Table 3-30, because all alternatives would have similar compatibility issues with adjacent land uses. In addition, all of the build alternatives would affect the planning process both for Brookfield, PRSP and the Reason Farms Master Plan update, while Alternative 1 would affect the Sierra Vista Specific Plan area, Alternatives 1 and 2 would also affect the proposed Regional University Specific Plan and the conceptual Curry Creek Community Plan, both of which are in draft form at present. Alternatives 4 and 5 represent the general alignment being considered by Sutter County in its Sutter Pointe Specific Plan planning process. Because there are no adopted plans for these areas at present, the actual effects are not known. Adoption of a Parkway alignment through these developments would, of necessity, affect the development plans, because subsequently the developments would need to accommodate the corridor alignment selected.

Consistency with applicable adopted plans and policies is discussed in the paragraphs below. This discussion is not presented by alternative and by segment, since the applicable General Plan policies are common to all alternatives and consistency determinations would be the same for all alternatives within each segment of the study area.

The General Plan policies listed in Table 3-31 were evaluated to assess the project's potential to conflict with adopted policies of the jurisdictions within the study area. No inconsistencies with the relevant

Table 3-31
Consistency of the Parkway with Existing General Plan Policies

Jurisdiction Plan	Policy Number	Policy	Potential Policy Inconsistencies	Avoidance, Minimization, And Design Standards	Consistency Determinations
Sutter County General Plan	C-6b	No parcel meeting the minimum parcel size as identified on the General Plan land use diagram shall be diminished to a size less than the minimum parcel size as identified on the land use diagram.	Project could create remnant parcels that do not meet minimum size requirements under current zoning.	(To be determined in Tier 2).	Potentially Inconsistent
	E-1	New development that may be incompatible with adjacent uses shall be required to provide buffer zones consistent with county standards to reduce anticipated conflicts with existing and future land uses.	No conflict as proposed	Plans for the project include the purchasing of right-of-way in excess of that required to create an adequate buffer between adjacent land uses and minimize land use conflicts.	Consistent
Placer County General Plan	1.A.3	The County shall distinguish among urban, suburban, and rural areas to identify where development will be accommodated and where public infrastructure and services will be provided. This pattern shall promote the maintenance of separate and distinct communities.	No conflict as proposed	Project proponent has and will continue to coordinate with regional planning agencies to resolve conflicts between the project and future development.	Consistent
	1.A.4	The County shall promote patterns of development that facilitate the efficient and timely provision of urban infrastructure and services.	No conflict as proposed	See response to policy number 1.A.3	Consistent
	1.B.1	The County shall promote the concentration of new residential development in higher-density residential areas located along major transportation corridors and transit routes.	The alternative corridor alignments propose to incorporate a land use buffer between the highway and adjacent land uses.	Decisions regarding future residential land uses are subject approval of the local agencies involved. Plans for the project include the purchasing of right-of-way in excess of that required to create a buffer between adjacent land uses and minimize the project's impacts to adjacent land use.	Consistent
	1.H.2	The County shall seek to ensure that new development and public works projects do not encourage expansion of urban uses into designated agricultural areas.	The alternative corridor alignments may compliment new development proposed for agricultural land in the study area.	See Section 7 for a complete growth inducement analysis including conclusions and potential avoidance, minimization, mitigation, and design measures to diminish the project's potential to expand urban growth within the study area.	N/A-see Section 7.0

Table 3-31 (Continued)
Consistency of the Parkway with Existing General Plan Policies

Jurisdiction Plan	Policy Number	Policy	Potential Policy Inconsistencies	Avoidance, Minimization, And Design Standards	Consistency Determinations
Placer County General Plan (Continued)	1.K.3	The county shall require that new development in rural areas incorporates landscaping that provides a transition between the vegetation in developed areas and adjacent open space or undeveloped areas.	No conflict as proposed	Specific landscape plans will be prepared after the Tier 1 document has been circulated and approved and an alternative selected. The Tier 2 document will evaluate landscaping needs including the incorporation of vegetation to provide a transition between rural and developed areas.	Consistent
	3.A.5	Through-traffic shall be accommodated in a manner that discourages the use of neighborhood roadways, particularly local streets. This through-traffic, including through truck traffic, shall be directed to appropriate routes in order to maintain public safety and local quality of life.	No conflict as proposed	Limited access on Placer Parkway would encourage through-traffic and discourage the use of local streets. The project would construct four or five local roadway interchanges along the approximately 17- to 18-mile-long route (depending on alternative).	Consistent
Sunset Industrial Plan Area	1.A.7	*The Sunset Industrial Area Plan Land Use Diagram* shall insure that proposed land uses are compatible with existing or planned adjacent uses, including established industrial firms in both the Sunset Industrial Area and in the surrounding cities.	No conflict as proposed	The project proponent has and will continue to coordinate with regional planning agencies to resolve conflicts between the project and existing and proposed industrial development. In addition, one of the purposes of the project is to "advance economic development goals in southwestern Placer County and Sutter County." Therefore, the project is envisioned to be compatible with industrial uses.	Consistent
	1.A.8	The county shall permit the development of only agricultural, industrial, or similar compatible uses around the Western Placer Waste Management Authority properties. Residential uses around these properties are not considered a compatible use.	No conflict as proposed	As an infrastructure project, the project is considered compatible use with the Western Regional Sanitary Landfill (WRSL).	Consistent

Table 3-31 (Continued)
Consistency of the Parkway with Existing General Plan Policies

Jurisdiction Plan	Policy Number	Policy	Potential Policy Inconsistencies	Avoidance, Minimization, And Design Standards	Consistency Determinations
Sunset Industrial Plan Area (continued)	1.A.9	The county shall seek to protect the industrial, commercial, professional, and agricultural uses in the Sunset Industrial Area from encroachment by incompatible uses from the surrounding cities and from unincorporated area development.	The Parkway is potentially incompatible with agricultural uses within the SIAP	As stated above, a project objective is to foster economic development. As a result, the Parkway would be compatible with the industrial, commercial, and professional uses in the SIAP. However, the Parkway may not be compatible with agricultural land uses. The only agriculturally designated land within the SIAP affected by this project (Eastern Segment alternative) is undergoing review by Placer County for urban development and amendment to the SIAP. The decisions regarding this agricultural land are anticipated prior to a Record of Decision and certification of the Placer Parkway Tier 1 EIS/EIR. As with other land uses, the PCTPA is proposing to purchase more right-of-way than is required to create a buffer between adjacent land uses and minimize the project's impacts to farmland and other agricultural uses.	Consistent
	1.F-1	The county will seek to provide a broad range of public facilities and services to businesses in the Sunset Industrial Area. Improvements to onsite services include the provision of improved fire protection, circulation improvements, and expanded utility services.	No conflict as proposed	The Parkway would improve circulation within the SIAP.	Consistent
	1.F-2	When considering land use changes in the vicinity of the Western Regional Sanitary Landfill and the Western Placer Waste Management Authority Material Recovery Facility operation, the county shall consider these solid waste facilities and operations as the dominant land use in the area. In order to protect these facilities and operations from incompatible encroachment, the county has established buffer zone standards described in Table I-6. The intent of this policy is to prohibit the creation of new parcels for residential use within 1 mile of the solid waste facilities and operations; not to prohibit construction of a residence on an existing legal building site within this area.	No conflict as proposed	The Parkway is not an applicable use subject to the county's buffer zone standards.	Consistent

Table 3-31 (Continued)
Consistency of the Parkway with Existing General Plan Policies

Jurisdiction Plan	Policy Number	Policy	Potential Policy Inconsistencies	Avoidance, Minimization, And Design Standards	Consistency Determinations
Sacramento County General Plan	LU-42	Future Agricultural-Residential development shall be limited to existing developed and infill Agricultural-Residential lands designated on the Land Use Diagram and such additional areas adjacent to existing developed lands to act as a buffer to new urban areas or as a buffer at the Urban Service Boundary as are consistent with LU-43.	No conflict as proposed	The Parkway would not encroach upon any land in Sacramento County.	Consistent
	LU-69	County departments shall coordinate implementation of electric service delivery, air quality, water supply, transportation, drainage/flood control, solid waste disposal/recycling, and hazardous waste management plans in conjunction with vested public and quasi-public agencies.	No conflict as proposed	PCTPA has and will continue to coordinate with regional planning agencies, including the county, to implement the Placer Parkway.	Consistent
	LU-72	The county shall coordinate with regional planning agencies setting land use and environmental policies and programs and cooperate in the implementation of programs consistent with General Plan policy.	No conflict as proposed	See response to policy number LU-69.	Consistent
	LU-73	The county shall consult with state and federal regulatory and resource agencies during initial review of development projects to identify potential environmental conflicts and establish, if appropriate, concurrent application processing schedules.	No conflict as proposed	PCTPA has and will continue to coordinate with regional planning agencies to resolve any potential environmental conflicts the project may have on the county.	Consistent
	CI-16	Policy: Sacramento County shall implement a program to buffer land uses from each other and transportation system facilities which is effective, aesthetically pleasing, and minimizes the amount of land lost to buffers.	No conflict as proposed	The project includes acquisition of more right-of-way than is necessary to build and maintain the project and to create a buffer between adjacent land uses. Furthermore, project alternatives would not physically affect any land in Sacramento County including land use buffers.	Consistent

Table 3-31 (Continued)
Consistency of the Parkway with Existing General Plan Policies

Jurisdiction Plan	Policy Number	Policy	Potential Policy Inconsistencies	Avoidance, Minimization, And Design Standards	Consistency Determinations
City of Rocklin General Plan	LU-16	To coordinate planning with neighboring jurisdictions in order to ensure compatible land uses.	No conflict as proposed	PCTPA has and will continue to coordinate with regional planning agencies, including the City of Rocklin, to resolve conflicts between the Parkway and land uses within the city.	Consistent
	LU-61	To continue to participate in the activities of regional entities as deemed appropriate, such as the Highway 65 Joint Powers Authority, the South Placer Regional Transportation Authority (SPRTA), Placer County Transportation Planning Agency (PCTPA), the Sacramento Area Council of Governments (SACOG), the Placer County Flood Control and Water Conservation District, and the landfill authority.	No conflict as proposed	PCTPA has and will continue to coordinate with the city of Rocklin.	Consistent
	LU-62	To consider the effects of land use proposals and decisions on the South Placer subregion jobs/housing balance.	No conflict as proposed	The jobs housing balance in the South Placer subregion was analyzed in this CIA. See Sections 3, 5, and 7 of this CIA for more information.	Consistent
	LU-63	To encourage communication between the county and the cities of Roseville, Loomis, Lincoln, and Rocklin to ensure the opportunity to comment on actions having cross-border implications. To address other community interface issues, including land use compatibility, circulation and access, and development standards.	No conflict as proposed	The Parkway has cross-border circulation implications. Therefore, the project sponsor has and will continue to coordinate with regional planning agencies to allow them the opportunity to provide input.	Consistent
	C-11	To encourage improvements to the existing Federal Interstate and State highway system, and the addition of new routes that would benefit the City of Rocklin.	No conflict as proposed	The Parkway would benefit the City of Rocklin by advancing economic development in southwestern Placer County, including the city.	Consistent

Table 3-31 (Continued)
Consistency of the Parkway with Existing General Plan Policies

Jurisdiction Plan	Policy Number	Policy	Potential Policy Inconsistencies	Avoidance, Minimization, And Design Standards	Consistency Determinations
City of Rocklin General Plan (continued)	C-23	To require landscaping and tree planting along major new streets, properties abutting highways/freeways and along existing streets as appropriate.	No conflict as proposed	Specific landscape plans will be prepared after the Tier 1 document has been circulated and approved and an alternative selected. The Tier 2 document will evaluate land-scaping needs, including the incorporation of vegetation to provide a transition between rural and developed areas.	Consistent
	C-24	To minimize the impact of road construction on the natural terrain and the character of existing neighborhoods.	No conflict as proposed	This CIA and other technical studies will be incorporated into the Tier 1 EIS/EIR which will evaluate the Parkway's potential impacts on the physical and human environment. The planned interchange within the City of Rocklin is consistent with current city-approved development plans; impacts to existing neighborhoods are not anticipated.	Consistent
	C–26	To design and phase construction of road improvements to minimize disruption to local residents and traffic, to the extent feasible.	No conflict as proposed	As stated above, the planned interchange within the City of Rocklin is anticipated and consistent with current city-approved development plans.	Consistent
City of Roseville General Plan	Circulation Policy 1	Coordinate with surrounding jurisdictions to achieve compatible functional classifications for roadways that cross the city's boundaries.	No conflict as proposed	PCTPA has and will continue to coordinate with regional planning agencies to have compatible roadway classification systems.	Consistent
	Circulation Policy 3	Work with appropriate agencies to develop measures to reduce vehicular travel demand and vehicle miles traveled and meet air quality goals.	No conflict as proposed	PCTPA has been working with regional planning agencies to assess regional air quality attainment goals.	Consistent
	Community Form Policy 3	Coordinate and take a lead role, where feasible, with local state, federal and other jurisdictional agencies on regional issues of importance including but not limited to air quality, transportation, water supply, sewage treatment, solid waste disposal and recycling, flood control, hazardous waste management, resource protection and transit.	No conflict as proposed	PCTPA has and will continue to coordinate with regional planning agencies to resolve any issues the City may have regarding this regionally significant highway.	Consistent

Table 3-31 (Continued)
Consistency of the Parkway with Existing General Plan Policies

Jurisdiction Plan	Policy Number	Policy	Potential Policy Inconsistencies	Avoidance, Minimization, And Design Standards	Consistency Determinations
City of Roseville General Plan (Continued)	Community Form Policy 4	To the extent feasible, coordinate land use policies and public improvements with neighboring jurisdictions.	No conflict as proposed	PCTPA has and will continue to coordinate with regional planning agencies to resolve conflicts between the existing and proposed land uses in relation to the project.	Consistent
	Growth Management Policy 8	New development proposals to the west of Fiddyment Road within the County/City Memorandum of Understanding Transition Area shall meet the objectives and terms of the Memorandum of Understanding between the City of Roseville and the County of Placer.	No conflicts as proposed	The PCTPA has and will continue to coordinate the review of project-related information with both Placer County and the City of Roseville in a manner conforming to the terms of the MOU.	Consistent
	Growth Management – Growth Areas Policy 5	Apply the City's adopted Guiding Principles to any new development proposed in and out of City's corporate boundaries, which is not already part of an adopted Specific Plan or within the infill area (see Section 3.1.3.4 for complete text of policy).	No conflicts as proposed	The PCTPA has and will continue to coordinate the review of project-related information with both Placer County and the City of Roseville in a manner conforming to the terms of the MOU.	Consistent

adopted plans and policies were identified as a result of this analysis, as potential conflicts can be addressed through the avoidance, minimization, and/or design measures described in the table. (These consistency determinations are preliminary and may change as additional studies are undertaken for Placer Parkway in Tier 2 studies.)

Consistency with Other Local Plans and Policies

Sunset Industrial Area Plan. The project would be consistent with the SIAP.

West Roseville Specific Plan. The WRSP contains policies related to its specific plan area and does not contain any broad regional policies. In addition, all of the proposed alternative alignments are adjacent to but not located in the WRSP area. Since none of the alternative alignments directly affect the WRSP area, the project is considered consistent with the policies contained in the WRSP.

Placer County/City of Roseville MOU. No conflict between the project and this MOU were identified.

MTP/RTP/Blueprint. The Parkway is listed as a high-priority transportation facility in the current MTP to receive state and federal money; therefore, the project is considered consistent with the SACOG MTP, as well as the 2027 Placer County RTP upon which the MTP is based. The proposed MTP (2030) (not yet adopted) reflects SACOG's *Blueprint* preferred land use scenario, so the project would be consistent with the SACOG *Blueprint*.

Placer County Conservation Program: Habitat Conservation Plan and Natural Communities Conservation Plan. An HCP/NCCP is currently being prepared by Placer Legacy called the Placer County Conservation Program (as described in Section 3.1); however, this document is currently in draft form and has not been circulated. It is unknown exactly when and if the plan will be adopted/implemented, how it will affect the project (if at all), and to which specific areas of Placer County the plan will be applicable. At this time, however, it appears that Placer Parkway would further the goals of the PCCP by attempting to limit growth in the region by creating large buffers in the Central Segment of the study area that may aid in preserving some of the existing agricultural land and open space. PCTPA (SPRTA) is considering becoming a participating agency in the PCCP with the Parkway as a covered activity and is working to ensure that Placer Parkway and the PCCP can be implemented without conflict. USCOE/USEPA guidance with relation to the draft PCCP was to ensure no corridor alternatives are located north of Pleasant Grove Creek. This would allow for more conservation/open space opportunities (and less growth inducement) north of the creek while acknowledging more urban development character for the area south of the creek.

Natomas Basin Habitat Conservation Plan. There are currently properties within and around the study area that are protected by the NBHCP (described in Section 3.1). None of these habitat/conservation preserve properties be affected by any of the corridor alignment alternatives or proposed interchanges. There was an HCP property located on the north side of Sankey Road in the Western Segment that would have been affected by Alternatives 4 and 5, but this property, the 242-acre Brennan parcel, was traded for land west of SR 70/99 in the fall of 2006. The proposed no-development buffer zone could help preserve some of the agricultural land along the highway alignments, which would aid in the Conservancy's goal of maintaining agricultural land and sensitive species habitat within the Natomas Basin. Thus, the project would be consistent with the NBHCP, although cumulative impacts associated with planned and proposed development in the area will place additional pressure on the resources protected under the NBHCB.

3.3.4 Secondary and Indirect Impacts

3.3.4.1 No-Build Alternative

Under the No-Build Alternative, land would not be acquired for Placer Parkway and the Parkway would not be constructed. There would not be any secondary or indirect impacts.

3.3.4.2 Alternatives 1 to 5

Secondary and indirect effects of the project on existing land use would be similar for all corridor alignment alternatives. Project implementation could indirectly affect the viability of continued agricultural production on lands affected by or adjacent to the selected corridor alignment. The analysis of farmland impacts is included in Chapter 4 of this CIA. The indirect land use impacts of this project could include potential growth inducement by increasing access into currently undeveloped rural areas of Sutter and Placer counties, as discussed in Chapter 7.

The study area for the analysis of secondary and indirect impacts is shown in Figure 3-7. A detailed discussion of secondary and indirect impacts associated with growth that could occur as a result of the Parkway is included in Chapter 7 of this CIA.

3.3.5 Cumulative Impacts

Analysis of cumulative impacts is required under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that are the focus of cumulative impact analysis. The CEQ's regulations (CEQ, 1987) explicitly state that cumulative impacts must be evaluated along with the direct and indirect effects of each alternative.

CEQA defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, §15355). Stated another way, "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the environmental document together with other projects causing related impacts" (CEQA Guidelines, §15130). Although a project may cause an individually limited or individually minor incremental impact that, by itself, is not significant, the increment may be "cumulatively considerable" and thus significant.

FHWA has requested that cumulative conditions for the analysis of project alternatives in the Tier 1 EIS/EIR for Placer Parkway be based on development levels that are 20 years beyond the projected opening of the Parkway. For planning purposes, PCTPA has identified 2020 as the opening year of the Parkway. Cumulative impacts are therefore being evaluated for the year 2040. This 2040 scenario includes the following projects (see Figure 3-4):

- Full build-out of all residential land in Placer County west of Sierra College Boulevard, including current general plan areas and the following major development proposals in West Placer County:
  - The Creekview and Sierra Vista Specific Plan areas in Roseville's Memorandum of Understanding (MOU) Remainder Area
  - The Sphere of Influence (SOI) expansion areas of Lincoln

  - The Placer Vineyards, Regional University and Community, and Placer Ranch Specific Plans in unincorporated Placer County
  - The Curry Creek Community Plan Area.

- Growth in retail employment in Placer County that balances the growth in residential development by matching SACOG's countywide estimate of about 0.32 employee per dwelling unit from their 2025 forecasts.

- Growth in total employment levels in Placer County that balances the growth in residential development by matching SACOG's 1.3 employees per dwelling unit from their 2025 forecasts.

- Full build-out of the residential development in the proposed South Sutter County Sutter Pointe Specific Plan, along with a non-residential development level that balances the residential development in that area.

- Estimated 2040 developments in all other portions of SACOG's six-county region based on assuming a constant rate for the development growth between 2005 levels and the 2050 Preferred Blueprint scenario for each of SACOG's traffic analysis zones (TAZs).

3.3.5.1 No-Build Alternative

Under the No-Build Alternative, land would not be acquired for Placer Parkway and the Parkway would not be constructed. There would not be any cumulative impacts on land use under the No-Build Alternative.

3.3.5.2 Alternatives 1 Through 5

There would be significant cumulative land use impacts associated with the planned (approved) and proposed (but not yet approved) development projects described above, with or without the Parkway. The potential for the Parkway to contribute to these cumulative land use impacts is addressed in Chapter 7 of this CIA. The creation of buffers along the proposed corridor alignment is expected to help maintain the rural character of at least a strip of the agriculturally designated areas within all three segments by preventing development from extending to the roadway's edge. However, except in small portions of the Western Segment and somewhat larger portions of the Central Segment, much of the area through which the Parkway would be constructed would be converted from agricultural uses to more urban or suburban uses under the 2040 development scenario, even without Placer Parkway. PCTPA is working with local land use planning agencies to avoid or minimize impacts on this future planned development within the study area. The Parkway could bring greater certainty to future land use planning efforts through the selection of a preferred alignment, so that right-of-way can be acquired to preserve a transportation corridor in which a roadway could be built in the future in conjunction with the construction of other planned projects in the area. The Parkway would support the existing and planned general pattern of development in this region. As stated in the project description, the new transportation corridor would serve the cities and unincorporated areas of south Sutter County and southwestern Placer County in an effort to stem anticipated congestion and advance economic goals in the region (as discussed in Chapter 6). The project would contribute to the cumulative effect of improving accessibility between the employment, manufacturing, and distribution centers in the region.

The Parkway is proposed to address transportation requirements associated with the rapid growth that has already occurred and is currently taking place in the study area, as described in Sections 3.2.4 and 5.2.1. Placer Parkway would provide a local and regional transportation facility that would work in conjunction

with the other proposed roadway improvements in the region to improve local and regional transportation systems. A list of these proposed improvements is included in Section 4.5 of the Transportation Technical Report for Placer Parkway (DKS Associates, 2007a).

The Placer Parkway and other roadway improvement projects within the study area would aid in relieving traffic congestion and improve the overall transportation network in south Sutter and southwestern Placer counties. It would thus not be a cumulatively considerable contributor to the significant cumulative land use impacts in 2040 that will occur independently of Placer Parkway. Cumulative impacts to land use would be less than significant (refer to Chapter 7 for growth inducement discussion).

3.3.6 Potential Watt Avenue Interchange

An interchange on Placer Parkway to a potential Watt Avenue roadway extension is included in this land use analysis, since this connection could affect existing and proposed land uses within the study area. All of the potential future Watt Avenue interchanges identified for the purposes of this analysis are located in Placer County and lie within the Central Segment of the study area, located north to south between Phillip Road and Baseline Road and (east to west) between the existing Watt Avenue alignment and Brewer Road. A precise location or alignment has not been identified for this potential interchange, just as a corridor has not been selected for the Placer Parkway. As a result, only preliminary concepts, as shown in Figure 2-3, are available for review and analysis at this time. Any future proposed Watt Avenue interchange with Placer Parkway would be subject to independent environmental review, separate from the analysis completed for the project.

The analysis below focuses on the potential incremental direct impacts that a Watt Avenue interchange could have on land use in the study area. Table 3-32 shows the additional land acreage and parcels that would be potentially affected by the conceptual Watt Avenue interchange.

Table 3-32
Parcels Potentially Affected by Potential Watt Avenue Interchange

Alternative Connection	Assessors Parcel Number	Acreage
Alternative 1 (Option 1)	017-100-021-000	5.5
	017-100-026-000	12.0
Alternative 1 (Option 2)/ Alternative 2	017-150-001-000	15.0
	017-150-011-000	1.5
Alternatives 3/Alternative 4	017-100-024-000	8.5
	017-100-026-000	6.5
Alternative 5	017-100-002-000	1.5
	017-100-024-000	15.0
	017-100-023-000	1.0

Source: Placer County Assessor's parcel data, accessed February 2006, in tandem with NFA GIS analysis of potential connections
Note: calculated acreage accounts for area outside potential Parkway corridor alignment only

3.3.6.1 Alternative 1 (Option 1)

Alternative 1 (Option 1) is the southernmost potential future Watt Avenue interchange. As shown in Figure 3-1, the land in and around the area of this potential future interchange is comprised of rice fields, pasture, or idle farmland. According to the Placer County General Plan and Zoning Ordinance, the

designated land use within and adjacent to the interchange is Agricultural 80-acre minimum, and the corresponding zoning is Farm-Building Site 80-acre minimum (see Table 3-2 for zoning definitions and Figures 3-2 and 3-3 for land use and zoning information).

This interchange would potentially convert an additional 17.5 acres of land on two separate parcels (see Table 3-32) from existing uses to a highway interchange. As stated above, the area within and adjacent to the interchange is currently in or would be suitable for agricultural production. Impacts to farmland from the potential future interchange are analyzed in Section 4.3.3.

No newly bisected parcels would be created as a result of the Watt Avenue interchange. This interchange would take additional acreage from parcels already potentially affected by the Alternative 1 corridor alignment; however, the additional acreage would not create parcels that would be inconsistent with the existing zoning.

The potential future interchange may impact future proposed developments in the study area, including the Curry Creek Community Plan and the Sierra Vista Specific Plan. These two areas are in the preliminary stages of planning at this time and there are not any detailed plans to assess potential conflicts. Therefore, when and if a new Watt Avenue interchange is formally proposed, the project proponents will need to consider effects on these proposed land uses.

3.3.6.2 Alternative 1 (Option 2)/Alternative 2

Another option for a potential future Watt Avenue interchange under Alternative 1 (Option 2) would be similar to the potential future Watt Avenue interchange under Alternative 2. The location would be farther north in the Central Segment of the study area. The land proposed for the new interchange and adjacent to the interchange is comprised of cultivated agriculture and idle farmland. According to the Placer County General Plan and Zoning Ordinance, the designated land use within and adjacent to the interchange is Agricultural 80-acre minimum and the corresponding zoning is Farm-Building Site 80-acre minimum (see Table 3-2 for zoning definitions and Figures 3-2 and 3-3 for land use and zoning information). The area of the interchange that is located within the City of Roseville is designated and zoned for Open Space.

This interchange would potentially convert an additional 16.5 acres of land on two separate parcels from existing uses to a highway interchange. As stated above, the area within and adjacent to the interchange in Placer County is currently in agricultural production or capable of being in agricultural production. Impacts to farmland from the potential future interchange are analyzed in Section 4.3.3.

No newly bisected parcels would be created as a result of the Watt Avenue interchange. This Watt Avenue interchange would take additional acreage from parcels already potentially affected by the Alternative 1 corridor alignment; however, the additional acreage would not create parcels that would be inconsistent with the existing zoning.

The potential future interchange may impact proposed developments in the study area, including the Curry Creek Community Plan and the Regional University Specific Plan. These two areas are in the preliminary stages of planning at this time and there are not any approved plans to assess potential conflicts. Therefore, when and if a new Watt Avenue interchange is formally proposed for study, the project proponents will need to consider any effects on these proposed land uses.

Approximately 5.5 acres of the land that would potentially be affected lie within an existing 267-acre designated Open Space area on the western fringe of the West Roseville Specific Plan area (City of Roseville, 2006f). This area is considered an open space preserve and was created to protect wetland resources, including vernal pools, and grasslands near Curry Creek. Land use within the open space area

is limited to activities allowed under the Section 404 permit per the Clean Water Act, issued by the U.S. Army Corps of Engineers. The potential effects of an urban interchange on the resources present in the preserve are outside the scope of this study. However, in addition to protecting wetlands and grasslands, this area was also envisioned to be a transition between the urban uses of the City of Roseville and the rural agricultural uses in Placer County. Since the planning of the Parkway incorporates design measures to complement rural land uses (e.g., wide buffers), it is expected that the potential future Watt Avenue interchange, if planned in conjunction with the Parkway design, would not affect the use of this land as a buffer between rural and urban uses.

3.3.6.3 Alternative 2

Alternative 2 has the same potential future Watt Avenue interchange as Alternative 1. Potential impacts would therefore be similar to those discussed above under Alternative 1.

3.3.6.4 Alternatives 3 and 4

Alternative 3 and Alternative 4 could have the same potential future Watt Avenue interchange location since their corridor alignments do not vary until a few miles west of the potential interchange. Land in the vicinity of this new interchange is comprised of cultivated or idle farmland. According to the Placer County General Plan and Zoning Ordinance, the designated land use within and adjacent to the interchange is Agricultural 80-acre minimum and the corresponding zoning is Farm-Building Site 80-acre minimum.

This interchange would potentially convert an additional 15 acres of land on two separate parcels (see Table 3-32) from its existing uses to an urban highway interchange. As stated above, the area within and adjacent to the interchange is currently suitable for agricultural production. Impacts to farmland from the potential future interchange are analyzed in Section 4.3.3.

There would not be any newly created bisected parcels as a result of this Watt Avenue interchange. This Watt Avenue interchange would take additional acreage from parcels already potentially affected by the corridor alignments for Alternatives 3 and 4; the additional acreage would not create parcels that would be inconsistent with the existing zoning.

The Alternative 3 or 4 interchanges would not directly affect any proposed developments in the study area.

3.3.6.5 Alternative 5

Alternative 5 includes the northernmost proposed Watt Avenue interchange within the Central Segment. The land in the vicinity of the interchange is comprised of rice fields and idle farmland. The Placer County General Plan and Zoning Ordinance show that the designated land use within and adjacent to the interchange is Agricultural 80-acre minimum and the corresponding zoning is Farm-Building Site 80-acre minimum.

This interchange would potentially convert an additional 17.5 acres of land on three separate parcels (see Table 3-32) from existing uses to a highway interchange. As stated above, the area within and adjacent to the interchange is capable of being in agricultural production. Potential Watt Avenue interchange impacts on farmland are analyzed in Section 4.3.3.

There would not be any newly created bisected parcels as a result of this potential future interchange to the Parkway. Alternative 5 would take additional acreage from parcels already as potentially affected by the Alternative 5 corridor alignment. In this instance, the additional acreage would have the potential to

create a parcel, specifically parcel number 017-100-024-000, which would be inconsistent with the current minimum zoning requirements. The right-of-way required for the Alternative 5 corridor and the potential future Watt Avenue interchange would reduce this parcel, which is currently 155 acres in size, to approximately 78 acres in size, thereby making it inconsistent with the existing zoning. Also, the potential future interchange would remove 31 acres of right-of-way from an existing non-conforming 79-acre parcel (parcel number 017-100-023-000).

Approximately 2 of the acres that would be affected lie within City of Roseville's Reason Farms facility. The Alternative 5 interchange may affect the proposed recreational opportunities, stormwater functions, or habitat preservation areas at Reason Farms, for which a master plan is currently being refined. Therefore, when and if a new Watt Avenue interchange is formally proposed for study, the project proponents will need to consider any affects on these proposed land uses.

3.3.7 Avoidance, Minimization, and/or Mitigation Strategies

3.3.7.1 Land Use Conversion

The alignment selected for Placer Parkway would convert between 1,623 and 1,918 acres to a transportation corridor, but the ultimate roadway would occupy less land, with buffer zones along both sides. Strategies to reduce impacts on individual affected parcels could include providing access between the remnant portions of bisected parcels via frontage roads and overcrossings, crafting agreements with agricultural property owners that would include residual rights provisions to encourage continuation of farming activities in the buffer zone that would not be used for the roadway, or rezoning or purchasing remnant parcels that would no longer be viable for continued use under existing zoning. Any property purchases would comply with the requirements of the Uniform Relocation and Assistance Real Properties Acquisition Act.

Between 26 and 36 parcels would be bisected, depending on which alternative is chosen, and could result in additional land use conversion. Parcels that are bisected are expected to be impacted substantially, and the effects may not be avoidable. During roadway design, impacts to specific parcels may be reduced through appropriate adjustments to the location of the actual roadway within the Parkway corridor alignment or through provision of alternative access to remnant parcels.

3.3.7.2 Land Use Compatibility

Suggested mechanisms to reduce land use compatibility impacts are land purchase/leases that would allow for continued use of the buffer for agricultural purposes, and partnering with local jurisdictions to institute land use controls (if local jurisdictions deem these necessary or desirable), such as general plan amendments, zoning/overlay zoning changes, covenants/deed restrictions, agricultural/conservation easements, and urban growth boundaries. Continued coordination with jurisdictions in the study area to plan for the Parkway and proposed development would reduce the likelihood of land use incompatibility.

3.3.7.3 Consistency with Adopted Plans, Policies, and Regulations

No conflicts with General Plan policies have been identified; therefore, no mitigation is recommended. The creation of remnant parcels that do not conform to zoning ordinance minimum size requirements could be reduced through mechanisms described above, including potential rezoning or purchase of remnant parcels that are too small to remain economically viable for any use.

3.3.8 Analysis To Be Undertaken in Tier 2 Analysis

3.3.8.1 Land Use Conversion/Bisected Parcels

This Tier 1 level of analysis focuses on broad environmental issues. Specific impacts to individual parcels, including those bisected, and the subsequent effect on land use will not be undertaken until a roadway alignment is identified within the selected corridor and the geographic area of impact is narrowed. The information necessary to perform the parcel-specific analysis is expected to be generated during the preparation of the Tier 2 environmental document.

3.3.8.2 Compatibility with Proposed Development

Planning for the Sutter Pointe Specific Plan, Curry Creek, Brookfield, Reason Farms Environmental Preserve, PRSP, and the RUSP planning areas is still in progress. Once a preferred alternative alignment is chosen and these Specific Plans are further developed, more definitive land use compatibility impacts resulting from Placer Parkway can be determined.

4.0 FARMLAND

4.1 REGULATORY SETTING

4.1.1 Pertinent Laws and Legislation

4.1.1.1 Federal Regulations

National Environmental Policy Act

NEPA requires that before taking or approving any federal action that would result in conversion of farmland, the federal agency must examine the effects of the action. This is implemented by using criteria developed pursuant to the Farmland Protection Policy Act (FPPA). If adverse effects are found, the federal agency must consider alternatives to lessen them. This CIA evaluates the effects of the project and documents the differences in impacts to farmlands through the evaluation of five separate alternatives. NEPA and the FPPA do not require a project to be modified solely to avoid or minimize the effects of conversion of farmland to nonagricultural uses.

Farmland Protection Policy Act

According to the NRCS, the FPPA is intended to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. It ensures that, to the extent practicable, federal programs are compatible with state and local units of government, as well as private programs and policies to protect farmland. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency. In this case, the FHWA will be the lead federal agency and would provide planning oversight, design oversight, right-of-way acquisition assistance, and funding for construction. For the purpose of the FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for crop production. In fact, the land can be forest land, pastureland, cropland, or other land, but does not include water bodies or land developed for urban land uses (i.e., residential, commercial, or industrial uses).

In 1981, the NRCS released a new system that was designed to provide objective ratings of the agricultural suitability of land compared to demands for nonagricultural uses of lands; Land Evaluation and Site Assessment (LESA). Soon after it was designed, LESA was adopted as a procedural tool at the federal level for identifying and addressing the potential adverse effects of federal programs (e.g., funding of highway construction) on farmland protection. Typically, staff of the NRCS are involved in performing LESA scoring analyses of individual projects that involve other agencies of the federal government. This score is used as an indicator for the project sponsor to consider alternative sites if the potential adverse impacts on the farmland exceed the recommended allowable level. This process of preparing a LESA requires a system of numerical weights assigned to different characteristics of affected parcels, a description and classification of affected farmlands, as well as early consultation with the NRCS for all proposed alternatives that may affect farmland. Processing of form CPA-106, the Farmland Conversion Impact Rating for Corridor Type Projects, is also necessary. An important consideration is that the FPPA does not require a project be modified solely to avoid or minimize the effects of conversion of farmland to nonagricultural uses, but does require evaluation of other alternatives that could lessen these impacts.

The FPPA 7 CFR, part 658.4(a)(4)(iii)(f) states the following:

> *Numerous states and units of local government are developing and adopting LESA systems to evaluate the productivity of agricultural land and its suitability for conversion to non agricultural use. Therefore state and local units of government may have already performed a evaluation using*

similar criteria to these contained in this rule applicable to federal agencies. USDA recommends that where sites are to be evaluated within a jurisdiction and has been placed on the SCS state conservationist's list as one which meets the purpose of the FPPA in balance with other public policy objectives, federal agencies use that system to make the evaluation.

For the purposes of this project, a consistent LESA rating score for each alternative is not achievable, because the Parkway has direct impacts on farmland across two county lines. Consultation with the NRCS was initiated to begin the LESA process with the NRCS providing the necessary Land Evaluation (LE) scores for each alternative. However, when the NRCS sent the completed forms back they included separate scores by county (Sutter and Placer) using the California LESA system. The NRCS advised the lead agency not to add the scores together from the separate jurisdictions because the LE score is derived from separate soil surveys performed on a county-specific basis. The two soil surveys are not directly compatible nor is there a conversion factor between the two counties. Therefore, while it would be possible to create a LESA score for each portion of each alternative within each county, this tabulation would be misleading because the two scores could not be added together to determine significance for a given alternative. The LESA system was designed to show which alternative(s) may have the least effect on farmland. At this time there are no federally or state approved LESA models that calculate farmland impacts across multiple jurisdictions or when multiple soil surveys are encountered. Therefore, no LESA was completed for the purposes of this analysis.

4.1.1.2 State Regulations

California Environmental Quality Act

CEQA requires that projects be evaluated for their possible effects on the environment. As they relate to agricultural lands, state CEQA Guidelines state that a project that would result in the cancellation of Williamson Act contracts for parcels 100 acres or more is a project considered to be "of statewide, regional, or areawide significance" (CEQA Guidelines Section 15206). Also, Appendix G of the CEQA Guidelines states that a project that would "convert prime agricultural land to non-agricultural use or impair the agricultural productivity, would "normally have a significant effect on the environment." Note that in the second case, there is no acreage threshold for prime farmland conversion that would constitute a significant impact defined by case law or regulation.

The formulation of a California LESA model is the result of Senate Bill 850, which charges the California Resources Agency, in consultation with the Governor's Office of Planning and Research, to develop an amendment to Appendix G of the CEQA Guidelines. Such an amendment is intended "to provide lead agencies with an *optional* methodology to ensure that significant effects on the environment of agricultural land conversions are quantitatively and consistently considered in the environmental review process" (Public Resources Code Section 21095). This legislation authorized the Department of Conservation (DOC) to develop a California LESA Model, which could in turn be adopted as the required amendment to Appendix G of the CEQA Guidelines. The DOC developed the California LESA model in 1997 so that lead agencies may refer to it when assessing impacts to agricultural resources. (No LESA model was used in this analysis, as explained in Section 4.1.1.1 above.)

The California Land Conservation Act–Williamson Act

The Williamson Act provides incentives, through reduced property taxes, to deter the early conversion of agricultural and open space lands. All private land defined by the state as "prime farmland," "other than prime farmland," and "open space land" are eligible for coverage by a Williamson Act contract. Such contracts are administered by the Office of Land Conservation within the DOC. Land other than prime farmland and open space land can be placed under contract if the lands are located in an area designated by a county or city as an agricultural preserve. The DOC estimates that more than half of California's irrigated farmland is protected by the act.

Williamson Act contracts specify that the owners will not convert their land to nonagricultural uses for a period of at least 10 years. At the end of each year within the 10-year contract period, the contract is automatically renewed for an additional year, unless the landowner or the local government moves to terminate the contract. Termination can occur in one of four ways: (1) non-renewal; (2) cancellation; (3) eminent domain; or (4) city annexation under certain circumstances.

Contracted land is assessed for county property tax purposes at its agricultural value rather than its full market value. That is, the value of the land is much lower than normal because it is based upon farming and open space uses as opposed to full market (or speculative) value. Forty-eight of the state's counties, including Placer, Sutter, and Sacramento counties, participate in Williamson Act programs for unincorporated areas. The state of California makes partial payments annually ("subvention entitlements") to local governments for lost local property tax revenues that landowners would otherwise pay if the property was taxed at its market value. Fees are charged to landowners who prematurely cancel Williamson Act contracts, but not if the lands are taken in eminent domain or annexation by a city.

The act prohibits a public agency from acquiring prime farmland covered under the act for the location of a public improvement if there is other land within or outside the preserve on which it is reasonably feasible to locate the public improvement. The law generally exempts existing state highways from this provision, but can apply to new highways or highway corridors.

Government Code Section 51295 states that when a project would condemn or acquire only a portion of a parcel of land subject to a Williamson Act contract, the contract is deemed null and void with respect to that portion only. The remaining land continues to be subject to the contract unless it is adversely affected by the condemnation. In such cases, the contract for the remaining portion may be canceled.

Government Code Section 51291(b) requires an agency to notify the DOC and the local governing body responsible for the administration of the Williamson Act (usually the county planning department) proposed for acquisition for a public improvement project (regardless of whether it is a state or federally funded project, or the amount of total acreage involved). This notification will occur via the process of submitting the Draft EIS/EIR to the DOC for review.

Contract Status Terms and Definitions

Active Contract. The minimum term for a Williamson Act contract is 10 years. Since the term automatically renews on each anniversary date of the contract, the actual term can be indefinite. Active contracts in this report are those that have not been subject to filing for notice of non-renewal, cancellation, public acquisition, or annexation.

Notice of Non-Renewal. Contracts may be terminated at the option of the landowner or local government by initiating the process of term non-renewal. Under this process, the remaining contract term (9 years in the case of an original term of 10 years) is allowed to lapse, with the contract null and void at the end of the term. Property tax rates gradually increase during the non-renewal period, until they reach normal (i.e., non-restricted) levels upon termination of the contract.

Cancellation. Under a set of specifically defined circumstances, a contract may be cancelled without completing the process of term non-renewal. Contract cancellation, however, involves a comprehensive review and approval process, and the payment of fees by the landowner equal to 12 percent of the full market value of the subject property.

Expired. Expired parcels are those parcels that have previously been subject to Williamson Act contract, and have since been removed from the contract through non-renewal, cancellation, or annexation.

Super Williamson Act

Senate Bill 1182, commonly known as the "Super Williamson Act," was signed into law in 1992. This law provides a method for landowners to convert existing Williamson Act contracts to 20-year "Farmland Security Zone'" (FSZ) contracts that provide additional property tax savings of approximately 35 percent. However, this additional tax reduction can only be realized if farmers and ranchers keep their property in the conservation program for at least 20 years. FSZ contracts are comparable to the Williamson Act contracts in that each year another year is added to the agreement unless the landowner or county does not renew the contract. Additionally, SB 1182 prohibits the annexation of land enrolled in a 20-year contract to a city, or a special district that provides non-agricultural services, or for use as a public school site. According to the DOC, more than 806,000 acres statewide are enrolled in this program. Also, the California Farm Bureau Federation states that currently only 19 counties in the state have adopted this FSZ program. There is no Super Williamson Land Act contracted land within the study area, thus it is not discussed in the impacts section of this CIA.

4.1.2 Adopted Goals and Policies

As mentioned in Chapter 3, California state law requires each city and county to adopt a General Plan. The purpose of each jurisdiction's General Plan is to guide the physical development of the land within its boundaries. The study area includes agriculturally designated lands under the jurisdiction of both Sutter and Placer counties. The General Plan policies identified in Table 4-1 were found to be relevant to the evaluation of agricultural resources with respect to the Parkway and are cited as written from their respective General Plan Elements.

Table 4-1
Placer and Sutter County Agricultural Policies

Jurisdiction	Policy Number	Policy
Sutter County General Plan	1.F-1	The County shall require that new development adjacent to agricultural areas be designed to minimize conflicts with adjacent agricultural uses.
	1.F-2	The County shall require that all lands set aside or utilized for mitigation of development in Sutter County or the Natomas Basin demonstrates that its creation and existence will not adversely impact existing and/or future planned agriculture or urban development.
	1.F-3	The County shall continue to implement its Right to Farm Ordinance. (Agricultural Operations Disclosure, Ordinance Code 1013, Chapter 1330 or its successor.)
	1.F-4	The County shall protect agricultural operations from conflicts with non-agricultural uses by requiring buffers between proposed non-agricultural uses and adjacent agricultural operations.
	6.A-1	The County shall preserve agriculturally designated areas for agricultural uses and direct nonagricultural development to areas designated for urban/suburban growth, or rural communities and/or cities.
	6.A-2	The County shall balance the needs of proposed urban and suburban development with the need to preserve agricultural lands.
	6.A-6	Minimum parcel sizes in agriculturally designated areas shall be 20 acres in those areas containing orchard compatible soil and 80 acres in those areas with soils used primarily for row crops, field crops, and range land as shown on the Land Use Diagram. Historical uses and physical boundaries may be considered on a case by base basis. All parcels resulting from subdivisions or parcel maps shall contain the minimum required acreage for land use designation. Homesite parcels, as permitted in Policy 6.A-4, shall not exceed 2 acres unless the Environmental Health program grants a waiver for sewage disposal, in which case the parcel may be allowed for up to 5 acres. Remainder parcels shall meet the minimum parcel size of the agricultural land use designation.

Table 4-1
Placer and Sutter County Agricultural Policies (Continued)

Jurisdiction	Policy Number	Policy
Sutter County General Plan (Continued)	6.A-7	Agriculturally designated parcels (not located in a rural community) which do not meet the minimum acreage requirement, as specified by the land use policies of the General Plan, may be adjusted by lot line adjustment pursuant to §65412(d) of the Government Code under the following conditions as specified in the Zoning Code: Are in conformance with the General Plan policies for home sites; or Are for agricultural support facilities that have been approved by use permit; or Are necessary in order to comply with the requirements of the Sutter County Ordinance Code provision pertaining to Environmental Health, Zoning, or Building regulations for the maintenance or expansion of existing improvements, or d. Are an adjustment between two adjoining lots, one or both of which are less than 20 or 80 acres in area as identified on the General Plan land use diagram.
Placer County General Plan	7.A.1	The County shall protect agriculturally designated areas from conversion to non-agricultural uses.
	7.A.2	The County shall ensure that unincorporated areas within city spheres of influence that are designated for agricultural uses are maintained in large parcel sizes of 10-acre minimums or larger.
	7.A.3	The County shall encourage continued and, where possible, increased agricultural activities on lands suited to agricultural uses.
	7.A.7	The County shall maintain agricultural lands in large parcel sizes to retain viable farming units.
	7.A.12	The County shall actively encourage enrollments of agricultural lands in its Williamson Act program.
	1.H.3	The County will maintain large-parcel agricultural zoning and prohibit the subdivision of agricultural lands into smaller parcels unless such development meets the following conditions: The subdivision is part of a cluster project and such a project is permitted by the applicable zoning; The project will not conflict with adjacent agricultural operations; and The project will not hamper or discourage long-term agricultural operations either on site or on adjacent agricultural lands.
	1.H.4	The County shall allow the conversion of existing agricultural land to urban uses only within community plan areas and within city spheres of influence where designated for urban development on the General Plan Land Use Diagram.
Sunset Industrial Area Plan	1.E.1	The County shall protect agriculturally designated areas from conversion to non-agricultural uses.
	1.E.2	The County shall ensure that unincorporated areas within the city spheres of influence that are designated for agricultural uses are maintained in large parcel sizes of 10-acre minimums or larger.
	1.E.3	The County shall encourage continued and, where possible, increased agricultural activities on lands suited to agricultural uses.
	1.E.4	The County shall maintain agricultural lands in large parcel sizes to retain viable expanded farming units.
Sources: Sutter and Placer County General Plans and Agricultural Elements; Sunset Industrial Area Plan		

4.2 AFFECTED ENVIRONMENT

The majority of the study area is within rural, unincorporated portions of Sutter and Placer counties. Sections of the corridor alignment alternatives are adjacent to the City of Roseville (or within its Sphere of Influence) and Sacramento County. A small portion of the Eastern Segment is within the City of Rocklin.

The farmland impact analysis focuses on impacts to farmland in Sutter and Placer counties only. There are no agriculturally designated lands or agricultural land uses in the cities of Roseville and Rocklin, so there would be no impacts to farmland in either jurisdiction. In addition, no impacts on Sacramento County's agricultural resources are anticipated, as none of the alignment alternatives would physically (directly or indirectly) affect any agricultural or farming operations. The following discussion assesses existing farming operations in southwestern Placer County and southeastern Sutter County, through consideration of the types of cultivated agriculture, crop values, and trends in agriculture.

The information contained in this section draws from several sources, of which the primary source is the *Western Placer Agricultural Study* (NFA, 2003). The study provides an overview of existing agricultural land characteristics, farm ownership and operations, and farm economics in western Placer County. Other sources of information include the Department of Conservation Farmland Mapping and Monitoring Program, crop reports prepared by the Sutter County and Placer County Agricultural Commissions, and consultation with the U.S. Department of Agriculture–NRCS.

4.2.1 Existing Agricultural Activities

4.2.1.1 Sutter County Agricultural Production Values

Agricultural production in southwestern Sutter County consists mainly of large rice growing operations. The county's 2004 Annual Crop Report states that farmers and ranchers produced $299,219,300 in gross agricultural products, down slightly from 2003, when the total gross value of agricultural products reached $307,322,200. Rice, walnuts, peaches, almonds, and tomatoes were the most valuable commodities, accounting for approximately 70 percent of the total gross value in crops for all of Sutter County.

Table 4-2 shows the gross value of the top five crops in 2004 for Sutter County. Table 4-3 displays the gross value of agricultural production for the five-year period between 2000 and 2004.

Table 4-2
Top Five Crops for Sutter County in 2004

Crop/Agricultural Product	Total Value ($)
Rice	111,189,200
Walnuts	38,925,500
Peaches	31,594,800
Almonds	15,082,300
Tomatoes	12,535,600
Total	**209,327,400**
Source: Sutter County Agricultural Commissioner, 2004	

Table 4-3
Five-Year Comparison of Sutter County Agricultural Production

Year	2000	2001	2002	2003	2004
Agricultural Value	$340,176,000	$264,673,000	$291,061,100	$307,322,300	$299,219,300
Source: 2003 Sutter County Annual Crop Report					

Sutter County's economy is strongly tied to and dependent on the agricultural industry. Although the costs to produce agricultural products increased (i.e., labor costs, fuel and electricity costs to run equipment and to process crops), and the prices of the agricultural products have not kept up with inflation, the relative size of the agricultural operations in Sutter County have kept agriculture production as a valuable asset to the county's economic base. According to the 2004 Crop Report, the agricultural industry returned more than $1.05 billion to the county's economy.

4.2.1.2 Placer County Agricultural Production Values

Agricultural production in southwestern Placer County is typified by large rice and field crop operations as well as pasture/grazing land, with a small amount of acreage left fallow. According to the 2003 Annual Crop Report for Placer County, farmers and ranchers produced $73,182,400 in gross agricultural products, down slightly from 2002, when the total gross value of agricultural products reached $76,278,600. Rice, nursery products, cattle/calf operations, timber, and irrigated pasture produced the most valuable commodities and accounted for approximately 69 percent of the total gross value in crops for all of Placer County.

Table 4-4 shows the gross value of the top five crops in 2003 for Placer County. Table 4-5 displays the gross value of agricultural production for the five-year period between 1999 and 2003.

Table 4-4
Top Five Agricultural Operations for Placer County in 2003

Crop/Agricultural Product	Total Value ($)
Rice	15,732,500
Nursery Products	14,046,000
Cattle and Calf Operations	11,407,500
Timber Production[1]	6,763,700
Irrigated Pasture	2,400,000
Total	**50,349,700**
Source: Placer County Agricultural Commissioner, 2003 Note: 1. There is no timber production within the project area.	

Table 4-5
Five-Year Comparison of Placer County Agricultural Production

Year	1999	2000	2001	2002	2003
Agricultural Value	$70,195,421	$68,933,500	$75,036,970	$76,278,600	$73,182,400
Source: Placer County Agricultural Commissioner, 2003					

As Tables 4-2 and 4-3 show, the gross value of agricultural production has fluctuated only slightly (due to factors such as climatic conditions in a given growing season) in recent years. However, the values in these tables do not reflect the net income or costs for all agricultural production. As documented in the *Western Placer Agricultural Study*, the net income to producers has actually declined recently (into negative territory for some commodities). Prices received for agricultural products at the farm level have not kept pace with inflation. As a result, higher prices for inputs have reduced net income substantially. That is, the prices paid for inputs such as fuel, electricity, labor, and water reflect increased prices in local markets, yet the prices received for agricultural products reflect global market conditions that have held down the price received for the agricultural products (NFA, 2003).

4.2.2 Trends in Agricultural Production and Farmland Conversion

4.2.2.1 Sutter County Trends in Agriculture

The agricultural outlook in Sutter County is almost the opposite of that in Placer County. According to the University of California Agricultural Extension March 2005 report, *The Changing Face of Agriculture in the Lower Sacramento Valley*, the agricultural income in Sutter County grew by 100 percent between 1983 and 2003. The latest agricultural Census, in 2003, showed an increase in the size of the average farm from 234 acres in 1992 to an average size of 267 acres in 2003. In addition, there were 505 farms with annual sales at $100,000 or more. This is 36 percent of the 1,391 farms in the county, and is relatively unchanged from the 1997 level of 37 percent.

Market conditions have led to changes in the types of crops being produced in Sutter County. Agricultural production has begun to shift from vegetable crop production to tree crops, due to the lack of profitability over the past several years for the former (UC Agricultural Extension, 2005). Acreage devoted to growing tomatoes is about half that of the previous five-year average and about 25 percent of what it was 10 years ago. Driving forces for this decline include the distance from processing facilities, as well as disease (soil-borne pathogens), and problems associated with Sutter County growing conditions. Similar problems are also affecting the local melon industry.

Tree crops such as peaches, prunes, walnuts, and almonds have shown a modest increase in both acreage and value. That industry has always been important to the local agricultural economy and continues to provide the county with approximately one-third of its total agricultural income. It is likely that the number of acres planted in prunes and peaches will be reduced in response to market conditions, while the number of acres devoted to almonds and walnuts will likely increase.

The value of rice to lower Sacramento Valley economies has continued to rise. The crop value of rice has increased by 100 percent over the past 10 years and there has been a 50 percent increase in acreage devoted to rice in the county. Rice also accounts for nearly one-third of all crop value in the county.

The Sutter–Yuba University of California Agricultural Extension (UC Agricultural Extension, 2005) has forecast that vegetables and agronomic (scientific agriculture) crops will continue to decrease in importance while tree crops occupy more of the landscape. This transition has changed aspects of the local agricultural economy, and the area continues to see positive growth in the agricultural sector. Furthermore, if government policies and other conditions are favorable, rice will continue to be a dominant crop and a strong contributor to local agricultural economies.

4.2.2.2 Placer County Trends in Agricultural Production

According to the Placer County Agricultural Study prepared by the University of California Davis Extension program in 2000, 90 percent of the county's farms are family owned. In addition, the operations that are corporately owned are generally owned by family corporations. According to the

U.S. Department of Agriculture National Agricultural Statistics Service (NASS), the average farm size in Placer County has decreased dramatically in size from approximately 140 acres in 1997 to 91 acres in 2003. Also, the NASS has estimated that only 62 of the 1,438 farms in the county, or 4 percent, earned $100,000 or more in agricultural sales. Additionally, agricultural-related employment has fallen from 5.1 percent in 1970 to 2.6 percent of total employment in Placer County in 2005.

The Placer County Industry Structure Study, prepared by the Sacramento Regional Research Institute (SRRI) (in March 2006), discusses conflicting economic indicators. This report states that in 2004 agriculture comprised only 0.5 percent of the industry composition in Placer County. Yet between 1994 and 2004, agricultural employment grew by 133.3 percent. In addition, this report forecasts agricultural employment to continue to grow by approximately 2.9 percent from 2004 to 2009. Dr. Lyndell Grey, President of the Placer County Economic Development Board, made the following statement at the Placer County Economic Development Board meeting in May 2006 when summarizing the Placer County Industry Structure Study:

> "Agricultural is a small part of the total economic industry in Placer County compared to other industries but it is on the upswing and this comes at a time when two factors would indicate just the opposite:
>
> 1. Agricultural growth is decreasing in the state and in the region, and
>
> 2. In Placer County there is currently a major shift in land from agricultural use to urban housing and manufacturing.
>
> The logical expectation based on these two factors would be for agriculture in Placer County to show a decrease or at the very least remain the same. In fact, the opposite is true."

Even with the decreasing scale of farming (i.e., size of farms) in Placer County, some large-scale producers are beginning to seek opportunities for developing small-scale, intensively farmed enterprises, such as strawberry production, as reflected in agricultural industry specialization, which grew over 100 percent between 1999 and 2004 (SRRI, 2006). Such small-scale operations can market directly to consumers through on-farm sales, community supported agriculture (CSA) subscriptions, and farmers markets. Although Placer County farmers and ranchers produce a variety of agricultural products, the size of the farms in the area and the unlikely ability to expand (due to urban growth pressures) will challenge the ability of these farms to remain viable. Long-time agricultural operators who were consulted during the course of this study (as described in Section 7.2.5) reported increasing conflicts between essential farm operations and urban uses (such as movement of farm equipment on local roadways where commuter traffic is increasing, increased incidences of vandalism, and increased costs for utilities such as water as local demand increases). The declining presence of local agricultural processing centers also adversely affects farm economics.

The future of agriculture in the county will likely depend on efforts by local farmers/ranchers to increase their ability to market commodities locally and diversify their products. Diversification of products could include marketing tourism and recreation opportunities on their properties. Examples include allowing hunting in field crops, farm stays, farm tours, fishing, and operating Christmas tree farms.

4.2.2.3 Sutter County Farmland Conversion

As in Placer County, the pace of urbanization in Sutter County from 1998 to 2000 increased in comparison to the rate of development between 1996 and 1998. In Sutter County, approximately 692 acres were urbanized in the three-year period beginning in 1998, in contrast to the 51 acres during the reporting period from 1996 to 1998. The majority of this development occurred on the fringe of existing

urban development areas near Yuba City and the unincorporated community of Sutter. According to the DOC Division of Land Resource Protection (DLRP), since 1990, 9,333 acres of farmland have gone out of production in Sutter County and 2,354 acres of new urban land have been created (DOC, 2000).

Sutter County will continue to face development pressure in the foreseeable future. Sutter County's 2005 population was 87,342 (SACOG, 2004). Growth projections from the state HCD show a population of 100,437 in 2010 and 116,408 in 2020, while the California Department of Finance projects that the county's population will grow to 161,600 in 2020. This growth will likely lead to a decline in the size of farming operations and increase the subdivision of farm units for urban/suburban development.

The following are examples of farmland and grazing land being urbanized or planned for urbanization in Sutter County:

- New developments were constructed around the unincorporated community of Sutter, including Sweco Products, Inc., and other businesses (15 acres).
- Helena Chemical Company was expanded (15 acres).
- New buildings were constructed on former grazing land at the Sutter Industrial Park (45 acres).
- The Yuba City Calpine Power Plant began operation in 2002 (25 acres).
- The Rio La Paz Golf Club near Nicolaus along the Feather River was developed (140 acres).
- Land was developed in Pleasant Grove for a Teichert facility and Consolidated Dealer Systems Inc. (about 20 acres).
- The Sutter County Board of Supervisors set aside more than 10,500 acres of land near the southeastern border with Placer/Sacramento County for the South Sutter County Industrial/ Commercial Reserve. The County is currently in the process of preparing a specific plan for approximately 7,500 acres, the Sutter Pointe Specific Plan, of the Measure M 10,500-acre reserve.

4.2.2.4 Placer County Farmland Conversion

As indicated by the DOC DLRP, the pace of urbanization from 1998 to 2000 increased significantly in Placer County compared to the period between 1996 and 1998 (DOC, 2002a). The Farmland Mapping and Monitoring Program (FMMP), created and published by the DLRP, maps millions of acres of California's public and private land to produce a major study that includes the evaluation of Farmland Conversion in California Counties, including Placer County.

In Placer County, 3,840 acres of undeveloped land was urbanized during the 2000 mapping cycle compared to 2,607 acres during the 1998 cycle; a 47 percent increase. Between 1998 and 2000, a total of 1,162 acres of farmland, 2,106 acres of grazing land and 572 acres of land classified as "other" (a category that includes wetlands, low-density residential areas, and brush or timberlands unsuitable for grazing) were rezoned to urban uses.

Since the FMMP began tracking changes in 1984, more than 18,000 acres of farmland and grazing land have been converted to urban uses. This growth rate earned the county a top 10 ranking among counties statewide in terms of acreage developed since 1994.

Placer County's agricultural land will continue to face development pressure in the future. Placer County's 2005 population was 301,560 (SACOG, 2004). HCD projects that the county's population will grow to 325,648 by 2010 and to 391,245 by 2020.

Following are examples of agricultural land that have been urbanized in Placer County, although this is not intended to be an all-inclusive list (see Chapter 3 of this report for a more complete list of projected land use/development in Placer County):

- Approximately 900 acres were developed with residential housing at the Del Webb Sun City development in Lincoln Hills.
- Approximately 170 acres were converted into the Turkey Creek golf course in Lincoln.
- Three large areas (127, 135 and 160 acres) were developed for homes and apartments near the intersection of SR 65 and Blue Oaks Boulevard.
- Shopping complexes that include the Galleria Mall and Home Depot were built along the SR 65 corridor in Roseville.
- The West Roseville Specific Plan area, approved and annexed into the City of Roseville, will convert 3,162 acres of agricultural land and open space to urban uses.

4.2.3 Farmland Classifications and Soil Patterns

4.2.3.1 Farmland Classifications

The DOC administers the FMMP, which produces maps and statistical data for California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status. The best quality land is called Prime Farmland, while rural land less suited for crop production is usually categorized as grazing land. The following DOC-defined categories of farmland exist within Placer and Sutter counties and are shown in DOC's most recently published Important Farmlands Map (Figure 4-1).

Prime Farmland is land that has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods. Prime Farmland must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date. It does not include publicly owned lands for which there is an adopted policy preventing agricultural use. Prime Farmland also includes Prime Agricultural Farmland and must meet any of the following qualifications:

- All land which qualifies for rating as Class I or Class II in the Natural Resource Conservation Service land use capability classifications.
- Land which qualifies for rating 80 through 100 in the Storie Index Rating. The Storie Index expresses numerically the relative degree of suitability of a soil for general intensive agriculture as it exists at the time of evaluation. The rating is based on soil characteristics only and is obtained by evaluating such factors as soil depth, surface layer texture, subsoil characteristics, drainage, salts and alkali, and relief.
- Land which supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the U.S. Department of Agriculture.

- Land planted with fruit- or nut-bearing trees, vines, bushes or crops which have a nonbearing period of less than 5 years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than two hundred dollars ($200) per acre.

- Land which has returned from the production of unprocessed agricultural plant products an annual gross value of the previous 5 years. That is land that is planted with fruit- or nut-bearing trees, vines, bushes or crops that is currently being cultivated.

Farmland of Statewide Importance is land with a good combination of physical and chemical characteristics for the production of crops. It must have been used for the production of irrigated crops within the last three years. It does not include publicly owned lands for which there is an adopted policy preventing agricultural use.

Unique Farmland is land which does not meet the criteria for Prime Farmland or Farmland of Statewide Importance, but that is currently used for the production of specific crops having high economic value (as listed in the last three years of *California Agriculture* produced by the California Department of Food and Agriculture). It has the special combination of soil quality, location, growing season and moisture supply needed to produce sustained high quality or high yields of a specific crop when treated and managed according to current farming methods. Examples of such crops may include oranges, olives, avocados, rice, grapes, and cut flowers. It does not include publicly owned lands for which there is an adopted policy preventing agriculture use.

Farmland of Local Importance is either currently producing crops, or has the capability of production. Farmland of Local Importance is land other than Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. This land may be important to the local economy due to its productivity. It does not include publicly owned lands for which there is an adopted policy preventing agricultural use.

Grazing Land is land on which the existing vegetation, whether grown naturally or through management, is suitable for grazing or browsing of livestock. The minimum mapping unit for Grazing Land is 40 acres. (Due to variations in soil quality, smaller units of Grazing Land may appear within larger irrigated pastures.

4.2.3.2 Soils in Southern Sutter County

The NRCS has established a GIS database which identifies soil units for several counties in California, including Sutter County. This GIS database, like the 1980 Placer County Soil Survey, is used as guidance to determine the agricultural potential of the soils within the project area, and aids the NRCS in their evaluation of the potential types of farmland in Sutter County.

Soils classifications for the study area, including southeastern Sutter County, southwestern Placer County and northwestern Sacramento County are shown on Figure 4-2. Soil types serve as partial indicators for growing agricultural products. However, crop production also depends on access to water, slope and aspect, and other local influences, in addition to its soil characteristics. Therefore, the soils shown on Figure 4-2 are for information only and will not be relied upon to assess the Parkway's farmland impacts.

4.2.3.3 Soils in Southwestern Placer County

The NRCS and the University of California Davis, Agricultural Extension Program completed a soil survey of the western portion of Placer County in 1980. This report serves as the framework for determining the agricultural potential of the soils within the project area, and aids the NRCS in their evaluation of the potential for farmland in Placer County.

Soils classifications for the project area, including southwestern Placer County and southeastern Sutter County, are shown on Figure 4-2. The Soil Survey also provides some indication of the varieties of crops that can be grown on each soil type.

4.2.4 Williamson Act Lands

Williamson Act lands comprise a significant portion of both Placer and Sutter counties. This section identifies current and historical trends in Williamson Land Act contract enrollment. Data regarding Williamson Act Land contract status in Placer and Sutter counties was acquired from the NRCS GIS database, the Placer County Planning Department GIS database, and the Sutter County Planning Commission files regarding Williamson Land Act contract status. Further information on the regulatory criteria and legislative framework of the act is discussed in Section 4.1.1.2 of this report.

4.2.4.1 Williamson Act Contracted Land in Sutter County

Unlike Placer County, Sutter County only recently (in January 2001) began participating in the Williamson Act. In 2001, the amount of new enrollments increased by 374,390 acres statewide compared to 2000. This was due to Imperial, Merced, Mono, and Sutter counties beginning to enroll land into Williamson Act contracts for the first time. Collectively, the four counties placed 384,175 acres of land under contract. Table 4-6 below shows the amount of newly enrolled acreage in Sutter County over the past three years and the county's statewide ranking in newly enrolled acreage.

Table 4-6
Sutter County Williamson Act Newly Enrolled Land

Year Enrolled	Acreage	Statewide Ranking
2001	6,802	6
2002	31,844	3
2003	12,620	2
Source: DOC, 2004b		

In 2002, Sutter County quintupled the amount of land enrolled in the act as shown in Table 4-6, followed by a sharp decline of newly enrolled acreage. Statewide, the Williamson Act program grew by 215,699 acres during 2002 and 2003. In comparison, the Williamson Act program grew by 367,317 acres during 2000 and 2001. The amount of newly enrolled counties, including Sutter County, and the sharp spikes in enrollment suggests that new enrollment levels are headed back down to pre-2001 averages. This represents a return to "normal" rates of increase after an enrollment increase spike from the four new counties. To date there has only been one cancellation for 1 acre of land in Sutter County.

4.2.4.2 Williamson Act Contracted Land in Placer County

During the spring of 2000, Placer County compiled a GIS database of Williamson Act contract information that identified each parcel under contract, the parcel size, its existing zoning, the date of enrollment, and the contract status. Conversion of the data into digital maps portraying contract status trends for the period from 1967 to 2000, including the information in the *Western Placer County Agricultural Land Assessment and Agricultural Land Conservation Evaluation Criteria*, confirmed a precipitous increase in the amount of land that was being taken out of Williamson Land Act contract (NFA, 2003).

Enrollment and Non-Renewal Trends

Placer County data indicates that the vast majority of acreage was placed under contract during the first 13 years of the program (1967-1980); acreage figures peaked around 1980 with a significant decline by

the end of the following decade (-17 percent) and a second, less significant decline (-4 percent), during the 1990s (see Table 4-7).

Table 4-7
Placer County Williamson Act Contract Status Trends (Acres)

Status	1967-1970	1971-1980	1981-1990	1991-2000
Active	18,695	53,230	44,058	42,244
New	18,695	39,808	11,342	3,777
Existing	0	13,422	32,718	38,467
Non-Renewal	0	5,273	19,251	3,308
Expired (out)	0	0	6,536	32,262

Source: NFA, 2003.

Table 4-7 appears to substantiate a trend in declining enrollment since non-renewal acreage increased 265 percent during the period between 1980 and 1990 with only a slight increase in non-renewals between 1991 and 2000. (Note: a nine-year non-renewal process accounts for the lag time between notice of non-renewal filing and expired status.)

County records show that no land was removed from Williamson Act until after 1980. Over the next 10 years, 6,536 acres, or 12 percent of the previous decade's acreage, was removed through expired contracts. In addition to non-renewal, more land was removed through cancellation, annexation, or public acquisition. The period between 1991 and 2000 saw the most significant increase in expired contracts. The result was removal of 32,262 acres of land, or 73 percent of the previous decade's land, from the program. This significant drop was largely offset by the amount of new enrollments into the program during the 10-year period, as evidenced by a mere 4 percent decrease in enrolled acres overall.

According to the *Williamson Land Act 2002 Progress Report*, prepared by the California Department of Conservation, over the past decade non-renewal of contracts has been the largest reason for the termination of Williamson Act contracted land. Furthermore, since 1991, more contracted acreage has been terminated through non-renewal than all of the other types of termination combined. Termination methods are discussed in Section 4.2.1.2.

Statewide, an average of 67,813 acres of land has expired annually from 1991 to 2001. In 1999, the greatest amount of land contracts expired, 118,391 acres, while 1993 was the year with the least amount of expired acreage with only 19,242 acres. Placer County ranked among the top ten counties with the greatest amount of non-renewals. In 1999, Placer County ranked 15th in the state for contract non-renewal, while in 2000 and 2001 it ranked 5th in the state with 2,658 acres and 1,306 acres of Williamson Land Act contract non-renewed land, respectively.

As indicated by the *Western Placer County Agricultural Land Assessment and Agricultural Land Conservation Evaluation Criteria* (NFA, 2003), the removal of farmland from Williamson Act protection in Placer County cannot be attributed to any single factor. It appears that it is the cumulative effect of several contributing factors. The aforementioned report provides more detailed information on the following causes of diminished Williamson Act contracted farmland:

- Suburbanization and fringe growth pattern in Placer County and throughout California;
- Federal policy and funding has facilitated the development of highway infrastructure and municipal wastewater treatment plants (WWTPs) to outlying areas—Placer Parkway, SR 65 Bypass, Roseville and Lincoln WWTPs;

- Water availability;
- Age of farmers;
- Regulatory uncertainty;
- Economics of production; and
- Land speculation. "Prime farmland" can be purchased and left unfarmed for two seasons, after which such farmland is no longer considered prime and may be potentially more likely to be developed. The causes mentioned above can also lead to land speculation.

4.3 IMPACT ANALYSIS

4.3.1 Significance Criteria

The significance criteria described below are used to assess potentially significant impacts which may be evaluated in CEQA environmental documents. (The FHWA has not adopted thresholds of significance for purposes of determining impacts under NEPA.)

Based on Appendix G of the CEQA Guidelines and professional judgment, the project could have a significant impact on agriculture if it would:

- Convert substantial amounts of farmland to non-agricultural use; or
- Convert more than 100 acres of Williamson Act contracted land to non-agricultural uses; or
- Conflict with adopted plans or policies pertaining to agriculture.

4.3.2 Approach to Analysis

Impacts on agriculture and farmland within the study area were assessed by tabulating and comparing project alternatives. The DOC maps and statistical data prepared for the FMMP and recent aerial photograph interpretation were used to determine the categories of farmland that exist within the study area as well as to quantify the potential impacts each alternative would have on all types of farmlands.

The amount of Williamson Land Act land that may be affected by the Parkway was quantified, as the intent of the legislation is to deter early conversion of agricultural and open space land, and conversion of contracted land to highway uses would require the premature termination of these contracts resulting in early conversion of land to non-agricultural uses.

The potential disruption of agricultural activities for each of the Build alternatives was considered at a general level of detail. The types and extent of potential impacts to agricultural operations were evaluated in the context of existing and future development within the study area. This analysis does not include evaluation of parcel-specific impacts due to disruption of agricultural activities; however, the conclusions reached in the *West Placer Agricultural Study* (summarized below) provide insight into the potential effects that this project and planned future development within the study area may have on existing agricultural activities.

> *In addition to reducing the inventory of agricultural land, conversion reduces opportunities for remaining operations. Land fragmentation increases conflicts with neighbors, reduces economies of scale, increases traffic on rural roads, and reduces the support services available to farmers and ranchers. While population growth may enhance marketing opportunities for some*

growers, the conversion of surrounding lands generally discourages farmers and ranchers from remaining in or entering the agricultural industry (NFA, 2003, p. 5-4).

4.3.3 Potential Direct Impacts

4.3.3.1 No-Build Alternative

Under the No-Build Alternative, land would not be acquired for Placer Parkway and the Parkway would not be constructed. There would not be any impacts on farmland.

4.3.3.2 Alternative 1 – the Red Alternative

Farmland Conversion

The Parkway would require the acquisition of a substantial amount of right-of-way. The alternatives under evaluation involve land that is designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land, as shown in Figure 3-5.

Table 4-8 shows the amount of important farmland that potentially would be converted by each corridor alignment alternative and segment. As this table shows, Alternative 1 would impact approximately 806.83 acres of farmland within the study area, including 355.60 acres of Farmland of Statewide Importance, Prime Farmland, and Grazing land in the Western Segment; 422.61 acres of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, and Grazing land in the Central Segment; and 28.62 acres of Unique Farmland in the Eastern Segment.

Table 4-8
Important Farmland Potentially Affected by Alternative Alignments

Placer Parkway Segment	Type of Farmland					
	Farmland of Local Importance	Farmland of Statewide Importance	Prime Farmland	Unique Farmland	Grazing Land	Total Farmland
Western Segment – Alternatives 1, 2, and 3	0	280.81	62.88	0	11.91	**355.60**
Western Segment – Alternatives 4 and 5	0	239.10	32.64	0	32.94	**304.68**
Central Segment – Alternative 1	0	141.19	132.19	139.25	9.98	**422.61**
Central Segment – Alternative 2	1.58	183.32	246.72	162.49	11.73	**605.84**
Central Segment – Alternative 3	0	191.96	202.32	174.64	11.96	**580.88**
Central Segment – Alternative 4	0	66.8	128.71	260.6	3.05	**459.16**
Central Segment – Alternative 5	0	79.91	135.45	360.07	.31	**575.74**
Eastern Segment – All Alternatives	0	0	0	28.62	0	**28.62**

Source: Department of Conservation Farmland Mapping and Monitoring Program-2002 data for Placer County and 2004 data for Sutter County; and California Spatial Information Library GIS database.

Williamson Act Conflicts

Sutter County began enrolling in Williamson Act contracts in January 2001, so no long-term trend analysis is available for Williamson Act land in Sutter County. With the exception of pasture/non-native grasslands, most of the producing cropland in western Placer County has been, or is currently, under Williamson Act contracts. Recent enrollment data for Placer County identified in Section 4.2.4.2 shows that new enrollments have not been able to offset expired contracts. This demonstrates that Williamson Act contracts cannot be relied upon as a means of preserving agricultural land; rather other types of binding agreements such as agricultural easements need to be implemented to protect farmland. However, in areas that are moving steadily toward urbanization, Williamson Act contracts serve as a planning tool by slowing the conversion of agricultural land and forcing discussion of land use compatibility issues with developments proposed in proximity to farm operations, such as the project (NFA, 2003). Comparisons of time series aerial photographs and General Plan land use maps indicate the clear loss of farmland in the study area due to urbanization and annexations over the recent decades.

Alternative 1 has the potential to affect two properties that are currently under Williamson Act protection (see Figure 4-3), although cancellation of these two contracts has been proposed as part of the Placer Ranch Specific Plan development process. As shown in Table 4-9, 119.85 acres of land would be affected. Both of the affected properties lie within the Eastern Segment of Alternative 1. The Western and Central Segments of Alternative 1 do not pass through land that is protected by the act.

Table 4-9
Potentially Affected Williamson Act Land (in Acres)

Segments	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Western Segment-Riego Road	0.00	0.00	0.00	0.00	0.00
Western Segment – Sankey Road	0.00	0.00	0.00	0.06	0.06
Central Segment	0.00	123.85	120.71	120.71	120.35
Eastern Segment	119.85	119.85	119.85	119.85	119.85
Total	**119.85**	**243.70**	**240.56**	**240.62**	**240.26**

Source: Department of Conservation Farmland Monitoring and Mapping Program GIS data; Placer County 2002, Sutter County 2004

4.3.3.3 Alternative 2 – the Orange Alternative

Farmland Conversion

As shown in Table 4-8, Alternative 2 would potentially impact 990.06 acres of farmland and have the greatest total amount of farmland impacts within the study area. The Western Segment of Alternative 2 is the same as for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1. A total of 605.84 acres of all the farmland categories would be impacted within the Central Segment. The Eastern Segment of Alternative 2 is the same as for Alternative 1. Therefore, the potential impacts of this segment are the same as discussed for Alternative 1.

Williamson Act Conflicts

Alternative 2 would affect a total of eight parcels and 243.70 total acres of land currently under contract, all within Placer County. The Western Segment of Alternative 2 is the same as for Alternative 1.

Therefore, the potential impacts for this segment are the same as discussed for Alternative 1. In comparison to Alternative 1, Alternative 2 would pass through an additional six parcels in the Central Segment that total 123.85 acres of contracted land (see Figure 4-3 and Table 4-9). The Eastern Segment of Alternative 2 is the same as for Alternative 1. Therefore, the potential impacts of this segment are the same as discussed for Alternative 1.

4.3.3.4 Alternative 3 – the Blue Alternative

Farmland Conversion

Table 4-8 shows that Alternative 3 would impact 965.10 acres of important farmland within the study area. The Western Segment of Alternative 3 is the same as for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1. A total of 580.88 acres of all the farmland categories within the Central Segment would be impacted, except for Farmland of Local Importance. The Eastern Segment of Alternative 3 is the same as for Alternative 1. Therefore, the potential impacts of this segment are the same as discussed for Alternative 1.

Williamson Act Conflicts

Alternative 3 would affect a total of three parcels and 240.56 total acres of land currently under contract, all within Placer County. In comparison to Alternative 1, the Alternative 3 alignment would pass through one parcel in the Central Segment, affecting 120.71 acres of contracted land (see Figure 4-3 and Table 4-9). The Eastern Segment of Alternative 3 is the same as for Alternative 1. Therefore, the potential impacts of this segment are the same as discussed for Alternative 1.

4.3.3.5 Alternative 4 – the Yellow Alternative

Farmland Conversion

As shown in Table 4-8, Alternative 4 would potentially impact the least amount of total farmland at 792.46 acres of farmland within the study area. This includes 304.68 acres of impacts to Farmland of Statewide Importance, Prime Farmland, and Grazing land in the Western Segment, and a total of 459.16 acres of all the farmland categories within the Central Segment except for Farmland of Local Importance. The Eastern Segment of Alternative 4 is the same as for Alternative 1. Therefore, the potential impacts of this segment are the same as discussed for Alternative 1.

Williamson Act Conflicts

Alternative 4 would affect a total of four parcels and 240.62 acres of land currently under contract. The Sankey Road interchange in the Western Segment would potentially impact 0.06 acre of contracted land in Sutter County (see Figure 4-3 and Table 4-9). The Central Segment of Alternative 4 is the same as for Alternative 3. Therefore, the potential impacts for this segment are the same as discussed for Alternative 3.

4.3.3.6 Alternative 5 – the Green Alternative

Farmland Conversion

Table 4-8 shows that Alternative 5 would potentially impact 909.04 acres of farmland within the study area. This includes the same 304.68 acres of impacts to Farmland of Statewide Importance, Prime Farmland, and Grazing land as in Alternative 4 in the Western Segment; a total of 575.74 acres inclusive of all the farmland categories within the Central Segment except for Farmland of Local Importance; and

the same 28.62 acres of Unique Farmland impacts in the Eastern Segment as in all the corridor alignment alternatives.

Williamson Act Conflicts

Alternative 5 would affect a total of four parcels and 240.26 total acres of land currently under contract. The Western Segment of Alternative 5 is the same as for Alternative 4. Therefore, the potential impacts for this segment are the same as discussed for Alternative 4. The Western Segment of Alternative 5 is the same as for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1. Alternative 5 passes through two parcels in the Central Segment, affecting 120.35 acres of contracted land.

4.3.3.7 Comparison of Alternatives

To compare impacts to farmland as a result of the implementation of one of the proposed Alternatives, it is helpful to establish thresholds or significance criteria on which to base the impact analysis. There are currently no specific significance thresholds within the CEQA Guidelines or CEQA Initial Study Checklist (Appendix G sample questions) regarding significance criteria or the establishment of a threshold for a project's potential impacts to Williamson Act contracted land. The CEQA Guidelines address Williamson Act contracted land in the context of determining whether a project is of statewide, regional, or areawide significance. Specifically, the CEQA Guidelines Section 15206(b)(3) states that "*The lead agency shall determine that a proposed project is of statewide, regional, or areawide significance if the project …would result in the cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 (Williamson Act) for any parcel of 100 acres or more.*

Applicable plans and policies created to provide guidance for development on and adjacent to Williamson Act lands in the project study area were reviewed for significance criteria. Neither the *Placer County General Plan* nor *Sunset Industrial Area Plan* were found to contain any policies that address specific impacts to Williamson Act contracted land, or put forth any criteria to determine the impacts. In addition, the Placer County Agricultural Commissioner was contacted to confirm that Placer County has no other criteria or thresholds with which to analyze impacts to Williamson Act land (Turner, 2006). At this time, there is no Williamson Act contracted land within the Sutter County portion of the project study area, and therefore there are no applicable Sutter County policies that apply. (Similarly, there are no specific acreage thresholds for the loss of prime farmland, unique farmland, farmland of statewide importance, or farmland of local importance.)

In the absence of any existing guidelines or policies with which to establish significance thresholds for determination of potential impacts to Williamson Act contracted land, the CEQA 100-acre threshold for assessing a project's potential to be of statewide, regional, or areawide significance was used in evaluating farmland impacts. All of the build alternatives would affect more than 100 acres of Williamson Act contracted land, and therefore all are considered to have significant impact on Williamson Act contracted land. The potential conversion of farmland associated with the alternatives (792.46 to 990.06 acres) is considered "substantial" and therefore significant.

Direct impacts of the build alternatives are summarized in Tables 4-8 and 4-9. The No-Build Alternative is not shown in these tables because no impacts to farmland would be associated with this alternative.

Alternative 1 would potentially affect 806.83 acres of farmland and the least amount of Williamson Act protected property at 119.85 acres.

Alternative 2 would potentially affect the greatest amount of farmland at 990.06. This alternative would also impact the greatest amount of Williamson Act contracted land, 243.70 acres.

Alternative 3 would potentially affect 965.10 acres of farmland and 240.56 acres of Williamson Act land.

Alternative 4 would potentially affect the least amount of farmland at 792.46 acres, and would affect 240.62 acres of Williamson Act land.

Alternative 5 would potentially affect 909.04 acres of farmland and 240.26 acres of Williamson act land.

4.3.3.8 Consistency with Plans and Policies

The policies listed in Table 4-10 were evaluated to assess the project's potential to conflict with adopted policies pertaining to agriculture or farmland within the study area. The consistency analysis of the policies demonstrates that the project may conflict with applicable policies. The potential policy inconsistencies are shown in Table 4-10. Some of the effects can be minimized through the avoidance, minimization, and/or design measures displayed in the table. A discussion of policy consistency is not presented for each alternative and/or segment, since the General Plan policies are common to all alternatives and equivalent effects are expected within each segment.

The Parkway would potentially be inconsistent with several of the analyzed agricultural policies evaluated in Table 4-10. Specifically, the project would be inconsistent with Sutter County agricultural policy number 6.A-1. In addition, the project would be inconsistent with Placer County policies 7.A.1, 7.A.3, 7.A.7, 1.H.3, and 1.H.4. The Parkway would also have inconsistencies with the Sunset Industrial Area Plan policies 1.E.1, 1.E.2, 1.E.3, and 1.E.4. These policies are aimed generally at preserving farmland and agricultural uses in the study area. It should be noted, however, that all farmland in the study area would not be preserved even if the project is not built (Section 4.3.5, Cumulative Impacts, presents more information on this issue.

4.3.4 Secondary and Indirect Impacts

No-Build Alternative

Under the No-Build Alternative, land would not be acquired for Placer Parkway and the Parkway would be constructed. There would not be any secondary or indirect effects on existing farmland.

Alternatives 1 Through 5

The study area for the analysis of secondary and indirect impacts is shown in Figure 3-7. A detailed discussion of secondary and indirect impacts associated with growth is included in Chapter 7 of this CIA. Secondary and indirect effects of the Parkway on the existing farmland would be similar for all build alternatives. The indirect impacts of the Parkway include the disruption of existing agricultural activities, fragmentation of farmland, adverse transportation effects, and the potential loss of agricultural support services. At this time, there is only program level information and no site-specific roadway features are designed. Therefore, the Tier 2 analysis will need to generate the information necessary to perform the farm-unit specific analysis. For example, Section 3.3.3 presents tables that list agriculturally zoned parcels that may be bisected or reduced in size as a result of each corridor alternative (varying from 500 feet to 1,000 feet wide). However, even though a parcel may be zoned for agricultural use, that does not mean that agricultural activities are currently taking place. A farm-unit specific analysis is infeasible at this time due to the size and range of corridor alternatives. As a result, a determination cannot be made at this time as to whether or not impacts to specific farm units or the potential disruption of agricultural activities can be avoided, minimized, or mitigated.

Agricultural Production and Farmland Fragmentation. The fragmentation of agricultural land within the study area could affect remaining farms through parcel size reduction, which consequently reduces the

Table 4-10
Sutter and Placer County Agricultural Policies

Jurisdiction	Policy Number	Policy	Potential Policy Inconsistencies	Avoidance, Minimization, or Standard Design Strategies	Consistency Determinations
Sutter County General Plan	1.F-1	The County shall require that new development adjacent to agricultural areas be designed to minimize conflicts with adjacent agricultural uses.	No conflict as proposed	Plans for the Parkway include the purchasing of right-of-way in excess of the amount required for the roadway to create a buffer between adjacent land uses and minimize land use conflicts. Furthermore, a roadway is not a sensitive land use that may conflict with agricultural operations.	Consistent
	1.F-2	The County shall require that all lands set aside or utilized for mitigation of development in Sutter County or the Natomas Basin demonstrates that its creation and existence will not adversely impact existing and/or future planned agriculture or urban development.	No conflict as proposed	Plans for the Parkway include the purchasing of right-of-way in excess of the amount required for the roadway to create a buffer between adjacent land uses and minimize land use conflicts specifically on agricultural lands. Once a specific roadway alignment is defined in Tier 2, PCTPA will work with the county agricultural commission to develop mitigation that minimizes impacts to the viability of individual farm units (and to identify mitigation lands, if appropriate, that will not harm existing or future agricultural activities in the county). In addition, PCTPA will continue to coordinate with regional planning agencies to resolve conflicts between the Parkway and future development, including urban uses, within the proposed corridor alignments.	Consistent
	1.F-3	The County shall continue to implement its Right to Farm Ordinance. (Agricultural Operations Disclosure, Ordinance Code 1013, Section 1330 or its successor.)	No conflict as proposed	PCTPA has and will continue to coordinate with regional planning agencies to resolve conflicts between the Parkway and future development within the corridor alignment alternatives. In addition, the Parkway is not a sensitive land use, nor is there any associated sensitive land uses proposed with the project that could affect agricultural operations.	Consistent
	1.F-4	The County shall protect agricultural operations from conflicts with non-agricultural uses by requiring buffers between proposed non-agricultural uses and adjacent agricultural operations.	No conflict as proposed	See response to Sutter County General Plan policy number 1.F-1.	Consistent

Table 4-10 (Continued)
Sutter and Placer County Agricultural Policies

Jurisdiction	Policy Number	Policy	Potential Policy Inconsistencies	Avoidance, Minimization, or Standard Design Strategies	Consistency Determinations
Sutter County General Plan (continued)	6.A-1	The County shall preserve agriculturally designated areas for agricultural uses and direct nonagricultural development to areas designated for urban/suburban growth, or rural communities and/or cities.	Placer Parkway corridor alignment alternatives would develop a high-speed highway in a predominantly agriculturally designated area. The current designation of the land within the Sutter Pointe Specific Plan area is primarily agricultural. There are no approved plans for the proposed Sutter Pointe Specific Plan area at this time and it is unclear where the urbanization is planned to occur.	While design options could be selected to minimize impacts to agricultural land stemming from construction of the Parkway, there are no feasible measures to preserve all existing agricultural land in Sutter County within the proposed alignments if Placer Parkway is constructed. Measures to avoid agricultural land and direct the Parkway to urbanizing areas within Sutter County will be reviewed in future analysis.	Potentially Inconsistent
	6.A-2	The County shall balance the needs of proposed urban and suburban development with the need to preserve agricultural lands.	No conflict as proposed	PCTPA has been and will continue to coordinate with regional planning partner agencies to resolve conflicts between the project, agricultural land, and future development within the corridor alignment alternatives.	Consistent

Table 4-10 (Continued)
Sutter and Placer County Agricultural Policies

Jurisdiction	Policy Number	Policy	Potential Policy Inconsistencies	Avoidance, Minimization, or Standard Design Strategies	Consistency Determinations
	6.A-6	Minimum parcel sizes in agriculturally designated areas shall be 20 acres in those areas containing orchard compatible soil and 80 acres in those areas with soils used primarily for row crops, field crops, and range land as shown on the Land Use Diagram. Historical uses and physical boundaries may be considered on a case by base basis. All parcels resulting from subdivisions or parcel maps shall contain the minimum required acreage for land use designation. Homesite parcels, as permitted in Policy 6.A-4, shall not exceed 2 acres unless the Environmental Health program grants a waiver for sewage disposal, in which case the parcel may be allowed for up to 5 acres. Remainder parcels shall meet the minimum parcel size of the agricultural land use designation.	Placer Parkway corridor alignment alternatives could create parcels that are smaller than the General Plan minimum size requiring a lot line adjustment or General Plan Amendment.	Avoid creating parcels smaller than the General Plan designated minimum size to the extent feasible. If unavoidable, the property may require a General Plan Amendment/Rezoning of the property to conform to acreage requirements, or the remainder parcels may be acquired.	Potentially Inconsistent
Sutter County General Plan	6.A-7	Agriculturally designated parcels (not located in a rural community) which do not	Placer Parkway corridor alignment alternatives could	Avoid creating agriculturally designated parcels smaller than the General Plan designated	Potentially Inconsistent

Table 4-10 (Continued)
Sutter and Placer County Agricultural Policies

Jurisdiction	Policy Number	Policy	Potential Policy Inconsistencies	Avoidance, Minimization, or Standard Design Strategies	Consistency Determinations
(continued)		meet the minimum acreage requirement, as specified by the land use policies of the General Plan, may be adjusted by lot line adjustment pursuant to §65412(d) of the Government Code under the following conditions as specified in the Zoning Code: Are in conformance with the General Plan policies for home sites; or Are for agricultural support facilities that have been approved by use permit; or Are necessary in order to comply with the requirements of the Sutter County Ordinance Code provision pertaining to Environmental Health, Zoning, or Building regulations for the maintenance or expansion of existing improvements, or Are an adjustment between two adjoining lots, one, or both of which are less than 20 or 80 acres in area as identified on the General Plan land use diagram.	create parcels that are smaller than the General Plan minimum size requiring a lot line adjustment or General Plan Amendment.	minimum size to the extent feasible. If unavoidable, the property may require a general plan amendment/rezoning of the property to conform to acreage requirements, or the remainder parcels may be acquired.	
Placer County General Plan	7.A.1	The County shall protect agriculturally-designated areas from conversion to non-agricultural uses.	The project would convert agriculturally designated land to a high-speed highway.	Plans for the project include the purchasing of right-of-way in excess of the amount required for the roadway to create a buffer between adjacent land uses and minimize land use conflicts. While design options could be selected to minimize impacts to agricultural land stemming from construction of the Parkway, there are no feasible measures to preserve all existing agricultural land in Sutter County within the proposed alignments if Placer Parkway is constructed. Lack of access, interchange interchanges to the Parkway will assist in reducing conversion of agricultural lands, particularly in the Central Segment. See response to Sutter County General Plan policy number 6.A-1.	Potentially Inconsistent

Table 4-10 (Continued)
Sutter and Placer County Agricultural Policies

Jurisdiction	Policy Number	Policy	Potential Policy Inconsistencies	Avoidance, Minimization, or Standard Design Strategies	Consistency Determinations
Placer County General Plan (continued)	7.A.2	The County shall ensure that unincorporated areas within city spheres of influence that are designated for agricultural uses are maintained in large parcel sizes of 10-acre minimums or larger.	Placer Parkway corridor alignment alternatives could create parcels that are smaller than the agricultural 10-acre minimum within the City of Roseville's Sphere of Influence.	Avoid creating agriculturally designated parcels smaller than the General Plan designated minimum size to the extent feasible. If unavoidable, the property may require a general plan amendment/rezoning of the property to conform to acreage requirements, or the remainder parcels may be acquired.	Potentially Inconsistent
	7.A.3	The County shall encourage continued and, where possible, increased agricultural activities on lands suited to agricultural uses.	The project would convert land in agricultural production and decrease the total amount of available agricultural land in the county.	See response to Placer County General Plan policy number 7.A-1.	Potentially Inconsistent
	7.A.7	The County shall maintain agricultural lands in large parcel sizes to retain viable farming units.	The Parkway would reduce the size of some agricultural operations by bisecting or acquiring a portion of the farm unit for right-of-way purposes. In addition, the project would create smaller parcels which may reduce the viability of the farm unit.	Evaluate the alternatives to determine which would result in the least amount of agricultural land for highway right-of-way. Also, while design options could be selected to minimize impacts to individual farm units and preserve the viability of some farm operations, there are no feasible measures to preserve all existing farm units and retain the viability of all farm units in the study area.	Inconsistent
	1.H.3	The County will maintain large-parcel agricultural zoning and prohibit the subdivision of agricultural lands into smaller parcels unless such development meets the following conditions: The subdivision is part of a cluster project and such a project is permitted by the applicable zoning; The project will not conflict with adjacent agricultural operations; and The project will not hamper or discourage long-term agricultural operations either on site or on adjacent agricultural lands.	The Parkway would reduce the size of some agricultural designated parcels by bisecting or acquiring a portion of the parcel for right-of-way purposes.	See response to Placer County General Plan policy number 7.A.7.	Inconsistent

Table 4-10 (Continued)
Sutter and Placer County Agricultural Policies

Jurisdiction	Policy Number	Policy	Potential Policy Inconsistencies	Avoidance, Minimization, or Standard Design Strategies	Consistency Determinations
Placer County General Plan (continued)	1.H.4	The County shall allow the conversion of existing agricultural land to urban uses only within community plan areas and within city spheres of influence where designated for urban development on the General Plan Land Use Diagram.	The Parkway would convert agricultural land to a high-speed highway outside of existing community plan areas and cities' SOIs.	Evaluate the alternatives to determine which would result in the least amount of agricultural land being converted to urban uses. There are no design measures that could avoid placing any of the alternatives entirely within areas designated for urban development.	Inconsistent
Sunset Industrial Area Plan	1.E.1	The County shall protect agriculturally-designated areas from conversion to non-agricultural uses.	The Parkway would convert agriculturally designated land to a high-speed freeway.	See response to Sutter County General Plan policy number 6.A-1.	Inconsistent
	1.E.2	The County shall ensure that unincorporated areas within the city spheres of influence that are designated for agricultural uses are maintained in large parcel sizes of 10-acre minimums or larger.	Placer Parkway corridor alignment alternatives could create parcels that are smaller than the policies 10-acre minimum within the City of Roseville's Sphere of Influence.	See response to Placer County General Plan policy number 7.A-2.	Potentially Inconsistent
	1.E.3	The County shall encourage continued and, where possible, increased agricultural activities on lands suited to agricultural uses.	The Parkway would convert land in agricultural production and decrease the total amount of available agricultural land in the county.	See response to Sutter County General Plan policy number 6.A-1.	Inconsistent
	1.E.4	The County shall maintain agricultural lands in large parcel sizes to retain viable expanded farming units.	The Parkway would reduce the size of some agricultural operations by bisecting or acquiring a portion of the farm unit for right-of-way purposes. In addition, the project would create smaller parcels which may reduce the viability of the farm unit.	See response to Placer County General Plan policy number 7.A.7.	Inconsistent

Sources: Sutter and Placer County General Plans, Agricultural Elements

amount of land available for agricultural production. This could decrease the ability of a farm to compete in the local market against larger agricultural producers. Also, current land uses that require large contiguous amounts of land, such as rice cultivation and cattle ranching, would be more susceptible to fragmentation than other types of agricultural activities, because large tracts of land are needed to sustain a high enough yield to hold down per-unit production costs.

Transportation Challenges. The project would provide access to large amounts of developable land. As more people inhabit this traditionally agricultural area, agricultural machinery and trucks may have to compete with residential traffic on local roadways. The differences in vehicle speeds and size can create potentially dangerous and frustrating situations for both suburban residents and for agricultural equipment operators. Also, in remote areas within the study area, livestock can be driven from pasture to pasture using public and private roads. However, as traffic increases, livestock producers may need to use trucks and trailers to transport livestock as an added safety measure. As documented by interviews with farmers in the project area (see growth inducement discussion in Chapter 7 of this CIA), some farmers interviewed considered that the Placer Parkway could have a positive effect on agriculture in the short term by taking commuters off local roadways, reducing conflicts with farm equipment and contributing to long-term sustainability of farming in the area.

Agricultural Support Services. For agricultural activities to remain viable, farming supply companies, heavy farm equipment sales and repair facilities, agricultural processing plants, and marketing companies need to be in close proximity to farming/ranching operations. However, for these support services to remain viable they need a customer base, i.e., agricultural producers. As agricultural land is converted to a transportation use within the study area, the Parkway could contribute to a gradual decline in support services as fewer agricultural producers remain in the study area and the economic base and market for agricultural services shrinks, causing agricultural support services to move out of the region. If support services were to close or relocate farther from their existing locales, there would be an additional adverse effect on agricultural producers associated with transportation.

4.3.5 Cumulative Impacts

No-Build Alternative

Under the No-Build Alternative, land for the Parkway would not be acquired and the Parkway would not be constructed. There would not be any cumulative impacts on farmlands under the No-Build Alternative.

Alternatives 1 Through 5

Section 3.3.5 describes the future cumulative development scenario assumed for the purposes of this analysis. Potential adverse impacts on farmlands associated with the Parkway could contribute to cumulative impacts associated with planned and proposed development in the study area (refer to Figure 3-4). The combined effects of farmland conversion and Williamson Act contract cancellation or non-renewal could increase adverse impacts associated with individual projects, through the loss of agricultural resources or support services and increasing conflicts with urban development. All five alternatives would cross the Central Segment in a general east-west direction, potentially intensifying the farmland fragmentation impacts and agricultural viability of farms affected by existing and planned high capacity power lines in the western portion of the Central Segment, since these facilities are generally aligned in a north/south direction and can impede agricultural activities such as rice seeding or crop dusting.

The potential amount of farmland converted and Williamson Act contracted land impacted by the project alternatives are contained in Tables 4-8 and 4-9. Depending on the alternative, the project could impact between 792.46 and 990.06 acres of farmland and between 119.85 and 243.70 acres of Williamson Act contracted land.

The anticipated urban development and roadway projects would convert an additional 5,203 acres of Farmland of Statewide Importance, no new disturbance to Farmland of Local Importance, 1,429 acres of Prime Farmland, 6,687 acres of Unique Farmland, and 250 acres of Grazing land, as shown on Table 4-11. The converted farmland would also include nearly 717 acres of Williamson Act contracted land within Sutter and Placer counties, as shown in Tables 4-11 and 4-12.

Table 4-11
Cumulative Impacts to Farmland (Acres)

Type of Farmland	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Cumulative Projects (excluding Placer Parkway)
Farmland of Local Importance	0	1.58	0	0	0	0
Farmland of Statewide Importance	425.35	464.24	472.77	305.90	319.01	5,203.00
Prime Farmland	195.90	309.46	265.20	161.35	168.09	1,429.00
Unique Farmland	168.69	190.70	174.64	289.22	388.69	6,687.00
Grazing Land	22.28	23.83	23.87	35.99	32.25	250.00
Total of all types of Farmland	**806.83**	**990.06**	**936.48**	**792.46**	**908.04**	**13,569.00**
Total for Cumulative Projects, including Placer Parkway	**14,375.83**	**14,559.06**	**14,505.48**	**14,245.46**	**14,477.04**	**N/A**
Source: URS and NFA GIS database, with NFA data analysis						

Table 4-12
Cumulative Impacts to Williamson Act Land (Acres)

Land	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Cumulative Projects
Williamson Act Land	119.85	243.70	240.56	240.62	240.26	717
Total Including Cumulative Scenario	836.85	960.70	957.56	957.62	957.26	N/A
Source: URS and NFA GIS database, with NFA data analysis						

The cumulative effects of the region's growth is likely to cause continued fragmentation of existing farmland, exacerbate transportation challenges and other conflicts, and decrease the likelihood that agricultural support services could continue to operate in the study area. The project's contribution to these effects would be cumulatively considerable.

Statewide Farmland and Williamson Act Conversion

The California Department of Conservation—Division of Land Resource Protection (DLRP) continually compiles data, monitors, and maps the inventory of farmland and Williamson Act enrolled lands on a

statewide level. The discussion below summarizes the conclusions reached in the DLRP's most recent farmland and Williamson Act reports (Farmland Conversion Reports from 1992 to 2002 and the California Land Conservation Act Status Reports From 1991 through 2006, respectively), and provides a brief analysis of the project's effect on farmlands and Williamson Act land from a statewide perspective.

Farmland Conversion. As shown in Table 4-13, an average of 84,324 acres of agricultural land was taken out of production during each two-year reporting cycle for the ten-year period beginning in 1992 and ending in 2002. There was also a corresponding increase in urbanization of agricultural land, which averaged 70,608 acres over the same ten-year reporting period. Other factors that reduced the amount of farmland included leaving land fallow, ecological restoration projects, rural residential development, and mining operations, which are not reflected in the table but explain the difference between the two values. Additional historical data are available from the DLRP via their website (DLRP, 2007), which contains all of the two-year farmland conversion reports and summary tables from 1992 up to 2002.

Table 4-13
Statewide Farmland Conversion Statistics 1992 through 2002

Land	1992-1994	1994-1996	1996-1998	1998-2000	2000-2002	Total Conversion 1992-2002	Average Change per reporting cycle (acres)
Net Agricultural Land Lost (acres)[1]	51,487	(2,487)[2]	94,292	104,767	173,560	421,619	84,324
Agricultural Land Converted to Urban Uses (acres)	49,555	53,034	67,536	90,165	92,750	353,040	70,608

Sources: Department of Conservation-Division of Land Resource Protection California Farmland Conversion Reports 1992 through 2002 (published biannually beginning in 1994 to 2004).

Notes:
1. Table includes all agricultural land which consists of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Irrigated Farmland, Nonirrigated Farmland, and Grazing Land.

2. Siskiyou County Farmland of Local Importance was reevaluated and revised by the County during the 1996 update. This resulted in large-scale decreases in Grazing Land and Other Land, and a corresponding increase in Farmland of Local Importance which led to a net increase in agricultural land.

As Table 4-8 illustrates, depending on the alternative selected, the project could impact between 792.46 and 990.06 acres of farmland. For the purposes of this analysis, the Placer Parkway facility is considered an urban use even though a portion of the right-of-way would be preserved as open space. If the biannual average amount of agricultural land lost to urbanization in California is approximately 84,324 acres, the project's contribution to the decrease in agricultural land would be between 0.8 percent and 1.2 percent of the biannual loss of agricultural land of one reporting cycle. It is also important to note that the project, as proposed, would be built out over more than two years, which would decrease the project's contribution to the biannual loss of agricultural land.

Williamson Act Conversion. The California Land Conservation Act 2006 Status Report (DOC, 2006) states that, as of January 2005, almost 16.6 million acres of land were enrolled in the Williamson Act statewide. This is an increase over the amount of land enrolled in the program in 1990, which was just below 16 million acres of land. Even though the Williamson Act was signed into law over 30 years ago,

new counties have recently been adopting the program so that now 54 of the state's 58 counties have adopted the Williamson Act and have procedures in place to enroll farmland into the program. According to the Department of Conservation (DOC, 2006), in the last five years alone, Imperial, Merced, Modoc, and Sutter counties have begun enrolling lands into the act. Conversely, agricultural producing areas that have traditionally enrolled lands in the program have allowed the non-renewal of contracts and even cancellations for urban expansion. Riverside, San Joaquin, Sacramento, and Placer counties have seen the sharpest declines in enrollment. Nevertheless, newly enrolled lands have exceeded nonrenewals in eight of the last fifteen years for a net increase in land that is currently under contract, as displayed in Table 14-14.

Table 4-14
Statewide Williamson Act Enrollment Statistics 1990 through 2005

Calendar Year	Total Reported Acreage[1]
1990	15,969,159
1991	15,946,783
1992	15,942,758
1993	15,952,365
1994	15,952,144
1995	15,908,538
1996	15,812,511
1997	15,889,804
1998	15,925,301
1999	15,977,116
2000	15,936,437
2001	16,344,433
2002	16,504,721
2003	16,560,132
2004	16,640,193
2005	16,581,920

Sources: Williamson Act Statewide Enrollment 1990-2003 and California Land Conservation Act 2006 Status Report

Note: 1. Totals include both continuing term and nonrenewal Williamson Act contracted land, as well as a small amount of other enforceably restricted non-Williamson Act acreage.

The amount of Williamson Act contracted land potentially impacted by each of the project Alternatives is listed in Table 4-9, and ranges between 119.85 and 243.70 acres, depending on the project alternative. Based on the amount of enrolled land in 2005, and assuming that there is no further increase or decrease in the amount of land enrolled in the act (i.e., assuming that enrollment becomes static, contrary to the increases seen over the past fifteen years), the project would result in a slight decrease in the amount of land enrolled in the program, between 0.0007 percent and 0.0015 percent of the current statewide total. As shown in Table 4-14, over the fifteen years reported, there has been a statewide trend of increased enrollment in the Williamson Act which is offsetting the non-renewal and/or cancellation of Williamson Act contracts. Nevertheless, since the contract terms are ten years in length, it is difficult to predict what

the future statewide trend will be. The Department of Conservation has not published any predictions of future enrollment with which to base future planning assumptions. This CIA does not attempt to forecast Williamson Act enrollment trends.

4.3.6 Potential Watt Avenue Interchange Impacts

The interchange with Placer Parkway and a potential Watt Avenue roadway extension is included in this farmland analysis since such a future interchange could affect farmland in the study area. There are no precise locations or alignments identified for this potential interchange to the Parkway, with the exception of the conceptual locations shown on Figure 2-3. Any future Watt Avenue extension would be subject to independent and future environmental analysis separate from the Tier 2 analysis to be completed for the Placer Parkway. The direct, indirect, and cumulative impacts on farmland increase with a Watt Avenue interchange to the Parkway. The discussion and table below focuses on the incremental direct impacts that a Watt Avenue interchange could have on important farmland by type.

Farmland Conversion

The potential amount and type of farmland converted by the potential future Watt Avenue interchange are contained in Table 4-15. Depending on the alternative or option selected, the interchange could affect an additional 1.88 acres to 10.95 acres of farmland.

Table 4-15
Watt Avenue Interchange Impacts on Farmland (Acres)

Watt Avenue Interchange	Farmland of Statewide Importance	Farmland of Local Importance	Prime Farmland	Unique Farmland	Grazing Land
Alternative 1 (Option 1)	0	0	0.55	0	1.33
Alternative 1 (Option 2)	0	0	0	10.35	0
Alternative 2 (Option 2)	0	0	0	8.78	0
Alternatives 3 and 4	0	0	0	5.14	0
Alternative 5	0.01	0	0	10.94	0
Source: URS and NFA GIS database, with NFA data analysis					

Williamson Act Conflicts

No Williamson Act protected parcels are in the vicinity of the potential Watt Avenue interchange to the Placer Parkway. Therefore, the Watt Avenue interchange would have no impact on Williamson Act land in the study area and the new interchange would not add to the severity of project impacts to Williamson Act protected parcels.

4.3.7 Avoidance, Minimization, and/or Mitigation Strategies

The project would result in significant adverse impacts to agricultural resources. The following mitigation strategies could be considered to decrease the potential for this project to adversely affect agricultural resources.

Farmland Conversion

Strategy #1. Conversion of farmland to non-farmland uses could be mitigated by preserving an equal amount of agricultural land within the respective counties in those areas that have not been approved or proposed for urban uses (i.e., primarily in the central segment). This would be consistent with Placer County's current policy of requiring 1:1 replacement for agricultural land impacted by proposed projects where feasible. The no-development buffer zone as proposed would meet much of this mitigation goal, since it would preserve agricultural and open space uses outside of the actual roadway alignment, which would vary in width but could be as much as 350 feet wide. The corridor would be approximately 500 feet wide in the portions of the study area that are proposed for urban uses and where continued viability of agricultural uses is unlikely. The corridor would be 1,000 feet wide, however, through the central segment, where continued agricultural use appears most viable. In this portion of the study area, the 350-foot roadway would leave 650 feet of buffer area where agricultural uses potentially could be preserved through mechanisms discussed below. This would exceed the 1:1 replacement goal, reaching almost a 2:1 replacement/preservation ratio if all of the buffer could be preserved for agricultural use, but it is possible that some of the area may not be viable as farmland as a result of parcel splitting or other impacts on particular farm units. This mitigation strategy should be coordinated with the Placer and Sutter County Agricultural Commissioners, particularly in areas where agricultural lands will have been converted to other uses prior to Placer Parkway Tier 2 environmental review, to ensure that a fair share mitigation strategy is promoted. This mitigation strategy would reduce impacts to farmlands.

Strategy #2. Agricultural easements administered by land trusts (examples include Placer Land Trust, Ducks Unlimited, The Nature Conservancy, American Farmland Trust) or other non-profit entities on agricultural parcels should be considered as a means to mitigate for the permanent loss of agricultural land within the Sutter and Placer County region. Another option would be the Agricultural Land Stewardship Program established by the California Farmland Conservancy, administered by the Division of Land Resource Protection under the DOC, which is a grant program that aids in purchasing and/or partially funding agricultural easements. Under this program, any property proposed for easement must meet certain criteria (e.g., location, soil quality, water availability) that make it a priority for the potential easement holder organization to pursue an easement. If the potential easement holder wishes to pursue an easement on the proposed property, the organization would negotiate terms with the landowner, including price (unless the easement is to be donated) and restrictions. If the easement is to be purchased, the potential easement holder may seek grant funding under this program.

If a landowner wishes to establish an agricultural easement and wants the easement to be administered by Placer County, then specific county criteria for evaluating agricultural easements must be followed. Each potential acquisition will be evaluated through a two-tiered approach: a "coarse filter" analysis of GIS data will be followed by an onsite analysis of property characteristics and resources. The Placer County Agricultural Commission undertakes this review and advises the Placer County Board of Supervisors regarding specific easement transactions. The Placer County Agricultural Commission uses the criteria set forth in the *Western Placer County Land Assessment*. The criteria are available on the Placer County Agricultural Commission website (Placer County Agricultural Commissioner, 2006).

Also, as mentioned in Section 3.1.4.4, the PCCP may be finalized and approved prior to right-of-way purchase for the Placer Parkway project. The PCCP is being developed to help protect the diversity of plant and animal communities, including endangered and other special status species. If and when approved, the PCCP would set aside large tracts of contiguous land for conservation purposes. These properties would help to maintain the diversity of flora and fauna in the county, and in most (but not all) cases could help preserve farmland, as well, where proposed preserve areas would serve agricultural purposes as well as maintain a diversified plant and animal community. For instance, the Placer Land Trust purchased a 500-acre property in western Placer County in March 2006, as a conservation easement

to be permanently protected as both grazing land and vernal pool grassland habitat (Placer Land Trust, 2006).

At this time, Sutter County does not have similar established criteria, or a program to review, execute, and administer agricultural easements. The Natomas Basin Habitat Conservation Plan may provide a structure that would be suitable for such mitigation.

Disruption to Agricultural Activities

The following mitigation strategies should be considered during future project planning to diminish the project's potential indirect effects on agricultural activities within the study area.

Strategy #1. The ultimate Placer Parkway design would include a six-lane facility. However, all six lanes may not be necessary when the Parkway is initially constructed and for some years into the future. An interim design of fewer than six lanes is probable, and the project may be built in phases. Therefore, leasing agreements to farm portions of the future right-of-way should be pursued in order to aid in offsetting the early conversion of agricultural land for transportation purposes and to encourage the continuation of agricultural production as long as feasible.

Strategy #2. Where parcels are bisected by a segment of the proposed highway, but enough usable land remains on either side of the highway to be cultivated, access for livestock, machinery, and/or drainage should be constructed where feasible in order to provide access to both portions of the property so that the land is still viable for farming operations. As discussed previously this strategy may add significant costs to the project which could affect mitigation feasibility.

Williamson Act Conflicts

Even though in some instances impacted Williamson Act properties may stay enrolled in the Williamson Act program, there are no feasible avoidance, minimization, mitigation, or design measures that could be implemented to diminish potential impacts on Williamson Act enrolled lands.

Consistency with Plans and Policies

Design options could be selected to minimize potential impacts to agricultural land; however, there are no feasible measures to ensure that the Parkway would be consistent with all of the Sutter and Placer County agricultural policies inherent in the Sutter County General Plan, the Placer County General Plan, and the SIAP.

The project may be inconsistent with Sutter County policies 6.A-1, 6.A-6 and 6.A-7, Placer County policies 7.A.1, 7.A.2, 7.A.3, 7.A.7, 1.H.3, and 1.H.4, as well as Sunset Industrial Plan Area policies 1.E.1, 1.E.2, 1.E.3, and 1.E.4. If the creation of parcels larger than the respective General Plan designated/ Zoning Ordinance minimum size is not feasible, then General Plan Amendments or Zoning Ordinance Amendments for the affected properties should be enacted to make them consistent with ordinance requirements. Alternatively, Sutter and Placer counties could enact a potential zoning overlay district for parcels reduced in size by Placer Parkway that would recognize the special non-conforming nature of these properties. Alternatively, the project proponents could purchase remainder parcels in their entirety so that there would not be a zoning consistency issue altogether.

4.3.8 Analysis to be Undertaken in Tier 2

This Tier 1 level of analysis focuses on broad environmental issues. Analysis of potential impacts to individual farm units and the associated disruption of agricultural activities or viability will not be

undertaken until a specific roadway alignment is identified within the selected corridor and the geographic area of impact is narrowed. The information necessary to perform the farm unit-specific analysis is expected to be generated during the preparation of the Tier 2 environmental document. At that time, individual farms affected by the roadway will be examined to determine how impacts can be reduced; such as, by provision of frontage roads and/or overcrossings to maintain access, merging or trading of remnant parcels to facilitate continued viability of individual farm units, or purchasing non-viable remnant parcels and rezoning them for alternative uses.

5.0 SOCIAL CONDITIONS

5.1 REGULATORY SETTING

5.1.1 Pertinent Laws and Legislation

Both NEPA and CEQA require consideration of social and economic impacts. In addition, other types of legislation influence community impact assessment, including requirements for analysis of environmental justice impacts and impacts to public recreation resources. Local jurisdictions may also adopt goals and policies that address population growth and distribution or quality of life issues related to transportation systems. Relevant laws and guidelines are described below.

5.1.1.1 National Environmental Policy Act

NEPA calls for the integrated use of social sciences to assess the potential impacts of federal projects on the "human environment." Regulations issued by the Council on Environmental Quality for implementing NEPA suggest that the "human environment" should be interpreted comprehensively to include "the natural and physical environment and the relationship of people with that environment" (40 Code of Federal Regulations [CFR] 1508.14). Agencies are directed to assess economic and social effects of projects, whether direct, indirect, or cumulative (40 CFR 1508.8).

5.1.1.2 California Environmental Quality Act

CEQA defines "environment" as physical conditions (including land, air, water, minerals, flora, fauna, noise, and objects of historic or aesthetic significance) that do not include social or economic resources (CEQA Section 21060.5). CEQA does not treat social and economic changes that might result from a project as significant environmental effects, although they may be used to determine that a physical change in the environment might be significant (CEQA Guidelines Sections 15064(e), 15131 and 15360). CEQA requires that environmental documents "Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth. . . .Increases in the population may further tax existing community service facilities so consideration must be given to this impact. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment" (CEQA Guidelines, Section 15126.2(d)).

5.1.1.3 Executive Order 12898 (Environmental Justice)

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" requires each federal agency (or its designee) to take the appropriate and necessary steps to identify and address "disproportionately high and adverse" effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law.

5.1.1.4 Section 4(f)

Section 4(f) of the U.S. Department of Transportation (DOT) Act of 1966 established a new requirement for consideration of park and recreational lands, wildlife and waterfowl refuges, and historic sites in transportation project development. The law, now codified in two places (49 U.S. Code [USC] 303c and 23 USC 138), is implemented by the Federal Highway Administration and Federal Transit Administration through regulations found at 23 CFR 771.135. Section 4(f) applies to all projects that receive funding from

or require approval by an agency of the DOT, including FHWA. Recreation resources protected under Section 4(f) include any formally designated, publicly owned park or recreation area.

Before approving a project that affects a Section 4(f) resource, FHWA must find that there is no prudent and feasible alternative and that the selected alternative minimizes harm to the resource. If there is a prudent and feasible alternative that completely avoids 4(f) resources, it must be selected. If there is no prudent and feasible alternative that avoids 4(f) resources, or if the impacts to the resources are minimal, FHWA has some discretion in selecting the alternative that causes the least harm to 4(f) resources.

FHWA determines whether Section 4(f) applies to a resource, reviews assessments of each alternative's impacts to 4(f) properties, and determines whether the law allows the selection of a particular alternative after consulting with the Department of Interior. For the purpose of this analysis, resources protected by Section 4(f) that could be affected by project alternatives are identified, and potential use of the resource is determined to establish whether the Section 4(f) requirements for detailed evaluation, consultation, and coordination would be triggered.

5.1.1.5 The Uniform Relocation Assistance and Real Property Acquisition Act of 1970

The Uniform Act addresses the need for consistent and equitable treatment of persons displaced from their homes or farms by federally assisted programs. It specifies the due process to be followed in real property acquisitions and relocation of displaced individuals, families, businesses, farms, and nonprofit organizations. It provides for payment of moving expenses, housing rental or purchase supplements, down payment assistance, etc.

5.1.2 Adopted Goals and Policies

5.1.2.1 SACOG Metropolitan Transportation Plan

SACOG's Metropolitan Transportation Plan 2027 contains the following goals:

1. *Overarching Goal: Quality of Life*. Develop a fully-integrated, multi-modal transportation system to serve as a catalyst to enhance the quality of life enjoyed by the current and future residents of the Sacramento region.

2. *Access and Mobility*. Improve access to goods, jobs, services, housing and other destinations; provide mobility for people and goods throughout the region, in a safe, affordable, efficient and convenient manner.

6. *Equity*. Pursue a transportation system that addresses the needs of all people in all parts of the region and assure that impacts of transportation projects don't adversely affect particular communities disproportionately.

5.1.2.2 Sutter County

Sutter County, as part of its most recent General Plan update process, identified a 10,500-acre "Industrial-Commercial Reserve" (I-C Reserve) in the agricultural southern area of the county and decided to allow up to 3,500 acres of industrial and commercial development within that area, as discussed in Chapters 3 and 4. The voter-approved Sutter Pointe Specific Plan, however, will allow mixed use development in this area in the future (if the EIR, General Plan amendment and Specific Plan are approved). Lennar Communities is now planning a master-planned community for this area, which lies mainly east of SR 70/99 in the project study area.

5.1.2.3 Placer County

The Placer County General Plan contains goals and policies aimed at improving the balance between jobs and housing, including the following (Placer County, 1994):

Goal 1.M: To work toward a jobs-housing balance.

Policy 1.M.1. The County shall concentrate most new growth within existing communities, emphasizing infill development, intensified use of existing development, and expanded services, so individual communities become more complete, diverse, and balanced.

Policy 1.M.2. The County shall encourage large residential projects to be phased or timed to occur simultaneously with development that will provide primary wage-earner jobs.

Policy 1.M.3. The County shall encourage the creation of primary wage-earner jobs, or housing which meets projected income levels, in those areas of Placer County where an imbalance between jobs and housing exists.

5.1.2.4 City of Roseville

The City of Roseville's General Plan 2020 (City of Roseville, 2004a) contains numerous goals and policies that address growth management issues, including the following:

Goal 1: The City shall proactively manage and plan for growth.

Goal 2: The City shall encourage a pattern of development that promotes the efficient and timely provision of urban infrastructure and services, and preserves valuable natural and environmental resources.

Goal 3: Growth shall mitigate its impacts through consistency with the General Plan goals and policies and shall provide a positive benefit to the community.

Goal 6: The City shall manage and evaluate growth in a regional context, not in isolation.

Goal 7: Potential population growth in Roseville must be based on the long-term carrying capacities and limits of the roadway system, sewer and water treatment facilities, and electrical utility service, as defined in the Circulation Element and the Public Facilities Element.

Goal 9: Growth should be managed to minimize negative impacts to existing businesses and residents within the City.

Goal 10: Growth should be planned in a way that addresses the appropriate interface between City and County lands.

Goal 12: The City shall use growth management as a tool to maintain the City's identity, community form, and reputation in the region, to maintain high levels of service for residents and to influence projects outside the City's boundaries that have the potential to affect the quality of life and/or services that are provided to residents.

Goal 13: New development to the west of Fiddyment Road shall be consistent with the City's desire to establish an edge along the western boundary of the City that fosters: a physical separation from County lands through a system of connected open space; a well-defined sense of entry to City from west; opportunities for habitat preservation and recreation; and view preservation corridors that provide an aesthetic and recreational resource for residents.

5.1.2.5 Sacramento County

Sacramento County's General Plan articulates an urban growth strategy that attempts to enhance the urban environment through a number of development policies, including orienting new development towards transit use. The Plan encourages infill development and directs limited growth to rural areas, to minimize direct and indirect impacts on the County's fiscal, environmental, and land resources (County of Sacramento, 1993). The North Natomas Community Plan, which will shape growth and development in northern Sacramento County, is currently being developed (County of Sacramento, 2006).

5.2 AFFECTED ENVIRONMENT

This section provides a brief overview of population growth trends and demographic characteristics in the greater Sacramento region and in the three counties that encompass the study area (additional discussion of growth trends and projections is also included in Chapter 7). This section also describes social conditions within the study area, including population distribution, community services and facilities, circulation and access, and recreation resources.

5.2.1 Population Growth and Demographic Characteristics

5.2.1.1 SACOG Region

The study area includes sparsely populated, rural, unincorporated portions of southern Sutter and southwestern Placer counties, as well as a small segment of northern Sacramento County. These three counties are part of the six-county Sacramento Metropolitan Area, one of the fastest growing regions in California. Between 1950 and 2000, California's population more than tripled, but population in the Sacramento region grew by more than 800 percent (SACOG, 2006).

Table 5-1 presents projections of population growth for the SACOG region from 2000 to 2050. The regional population is expected to continue to grow faster than the population of the state or nation during this period, approximately doubling by 2050, to about 4 million residents, with the Roseville-Rocklin-Lincoln area remaining one of the fastest growing areas of the SACOG region.

It is estimated that the SACOG region contained 712,866 households in 2000, and that by 2030 the region will have more than 1.2 million households, increasing to more than 1.4 million households by the year 2050. The average household size is expected to remain relatively stable, as the trend toward smaller households in the aging population is counterbalanced by higher fertility rates in younger households. Median household income is expected to increase almost 85 percent over the 50-year period, from $45,267 in 2000 to $83,481 in 2050, in constant 1999 dollars (Levy and Doche-Boulos, 2005).

Over the 50-year projection period, the percentage of White households is expected to decline steadily, from 65 percent of the population in 2000 to 54 percent in 2030 and 48 percent in 2050. The percentage of Black and Asian households will increase slightly, and the percentage of Hispanic households will increase substantially. (Additional discussion of population growth trends and projections in and around the study area is provided in Chapter 7, the Growth Inducement Analysis).

Table 5-1
Summary of Population, Household, Race and Income Projections for the SACOG Region, 2000, 2030, and 2050

Parameter	2000		2030		2050	
Population	1,948,700		3,232,589		3,952,098	
Households	712,866		1,209,216		1,445,678	
Household Population	1,940,800		3,168,100		3,873,255	
White	1,261,821	65%	1,716,348	54%	1,867,808	48%
Black	147,219	8%	295,928	9%	394,147	10%
Asian	224,525	12%	419,283	13%	544,073	14%
Hispanic	307,234	16%	736,540	23%	1,067,228	28%
Average Household Size	2.66		2.62		2.68	
Median Household Income (1999 $)	$45,267		$65,700		$83,381	

Source: Levy and Doche-Boulos, 2005.

Note: Percentages may not add to 100 percent due to rounding.

5.2.1.2 Study Area

Table 5-2 presents census information on population growth trends in the three study area counties from 1970 to 2000. During this time, the population almost doubled in Sutter and Sacramento counties and it more than tripled in Placer County.

Table 5-2
Population in Study Area Counties, 1970 to 2000

Location	1970	1980	1990	2000
Sutter County	41,935	52,246	64,415	78,930
Placer County	77,306	117,247	172,796	248,399
Sacramento County	631,498	783,381	1,041,219	1,223,499

Source: SACOG, 2004.

Table 5-3 shows projected population growth in the three study area counties for 2020 (approximately when Placer Parkway would be completed) and 2040 (the end of the study period, or after about two decades of Placer Parkway operation). Sacramento County had the largest population in 2000, and Sutter County the lowest. Over the study period, all three counties will see substantial population increases—of approximately 134 percent in Sutter County, 143 percent in Placer County, and 57 percent in Sacramento County. The paragraphs below describe population growth and racial composition in each of the three counties, as well as in the study area specifically.

Table 5-3
Population in Study Area Counties, 2000, 2020, and 2040

Location	Population 2000	Population 2020	Percentage Change 2000-2020 (%)	Population 2040	Percentage Change 2020-2040 (%)	Percentage Change 2000-2040 (%)
Sutter County	79,930	84,400	6.9	84,846	119	134.2
Placer County	248,399	433,540	74.5	603,819	39.3	143.1
Sacramento County	1,223,499	1,484,951	21,4	1,914,444	8.9	56.5

Data Sources: SACOG, 2004; State of California Department of Finance, 2004.

2000 data are from the U.S. Census Bureau; 2020 and 2040 data are based on projected growth data from DKS Associates presented in the Placer Parkway Transportation Technical Report (DKS Associates, 2007a)

Sutter County. Sutter County's 2005 population was estimated to be 87,342 (SACOG, 2004). The five most populated areas of the County include Yuba City—where almost half of all county residents currently live—South Yuba City, Live Oak, Tierra Buena CDP, and Sutter CDP (Census of Population and Housing, 2000). In the portion of Sutter County that lies within the study area, most of the population resides in and around the community of Pleasant Grove.

In 2000, Sutter County's population was 60 percent White, 22 percent Hispanic, and 12 percent Asian. The remainder of the population consisted of 2 percent Pacific Islander and American Indian, 2 percent Black, and 2 percent multiracial. The racial composition is projected to change, so that by 2020 the county will be approximately 43 percent White, 31 percent Hispanic, and 18 percent Asian, with the proportions of other racial groups either increasing slightly or remaining the same. By 2040, the county's population is projected to be 36 percent Hispanic, 33 percent White, 21 percent Asian, 4 percent American Indian and Pacific Islander, 3 percent Black, and 2 percent of two or more races (State of California DOF, 2004).

Placer County. Placer County's 2005 population was estimated to be approximately 301,560 people (SACOG, 2004). The most populated cities include Roseville, Rocklin, Granite Bay, Auburn, North Auburn Census Designated Place (CDP), and the City of Lincoln (Census of Population and Housing, 2000). Roseville, Rocklin, and Lincoln are located adjacent to the study area, to the east and northeast. These three cities have experienced rapid rates of growth over the past few years, due to the relocation of high technology and health care businesses to the area and associated demand for workforce housing.

In 2000, about 84 percent of the residents in Placer County identified as White, and 10 percent as being of Hispanic origin. The remainder of the population consisted of 3 percent Asian, 1 percent Pacific Islander and American Indian, 1 percent Black, and 1 percent multiple races. By 2020, it is expected that the racial composition of the county will be 77 percent White, 12 percent Hispanic, 5 percent Asian, 2 percent Pacific Islander and American Indian, 3 percent Black, and 2 percent identifying with multiple races. In 2040, the racial composition is projected to be 72 percent White, 14 percent Hispanic, 7 percent Asian, 2 percent Pacific Islander and American Indian, 3 percent Black, and 2 percent identifying with more than one race (State of California DOF, 2004). These projections are consistent with those expected in other counties in the SACOG region over the coming decades.

Sacramento County. Sacramento County's 2005 population was estimated at approximately 1.32 million (SACOG, 2004). The major population centers in Sacramento County include the City of Sacramento, the Arden-Arcade CDP, Citrus Heights, Elk Grove CDP, and Rancho Cordova CDP. The racial composition of the County is expected to follow trends similar to other counties in the region,

experiencing a decrease in the proportion of White, and increases in other traditionally minority groups, especially Hispanic. It is estimated that by 2020, 34 percent of the population will be White, 26 percent of the population will be Hispanic, 17 percent will be Asian, and 14 percent of the population will be Black, with remaining ethnicities at lower percentages. By 2040, the racial composition of the county is expected to be 32 percent Hispanic, 25 percent White, 18 percent Asian, 16 percent Black, 6 percent American Indian and Pacific Islander, and 3 percent multiracial (State of California DOF, 2004).

Study Area. The Placer Parkway study area encompasses predominately rural agricultural land and open space. The small portion of the study area that lies within Sacramento County is undeveloped farmland and open space that does not contain any residential population at present. Population distribution in the Placer and Sutter county portions of the study area is described below.

Farmsteads[1] are scattered throughout the study area in Placer and Sutter counties. Five locations in and bordering the study area also have relatively dense concentrations of homes. These areas, which have been identified as "potential communities"[2] for the purpose of this impact analysis, are referred to in this report as Pleasant Grove, Sankey/Pleasant Grove, Riego, Country Acres, and Amoruso Acres. The location of each of these residential areas is shown on Figure 5-1 and described briefly below.

- **Pleasant Grove.** Pleasant Grove is a small community with a range of services including a school, library, general store, post office, and fire station. The boundaries of the Pleasant Grove community are not precise, as it is unincorporated and boundaries depicted on several local maps (e.g., mail delivery area, school district boundaries, county service district boundaries) do not coincide. At the Pleasant Grove scoping meeting held in October 2003, residents living on Sankey Road and along Pleasant Grove Road almost as far south as Riego Road identified themselves as Pleasant Grove residents. For the purpose of this analysis, the concentration of homes in the vicinity of Howsley Road and Pleasant Grove Road (see Figure 5-1) is referred to as the Pleasant Grove community.

- **Sankey/Pleasant Grove.** Sankey/Pleasant Grove is a large, irregularly shaped concentration of rural residential homes in the vicinity of Sankey Road and Pleasant Grove Road. Some of these are homes on 5-acre parcels; others are on smaller lots that appear to have been subdivided in the past and "grandfathered in," as they would not be permitted under existing zoning regulations, which call for a minimum parcel size of 80 acres in agricultural areas. The only community services in this area appear to be a fire station and a plant nursery business that recently closed.

- **Riego.** Riego is a residential community located mainly southeast of the intersection of Pleasant Grove Road and Riego Road. A general store and gas station are located in the southeastern quadrant of the intersection of these two roads. Several other homes clustered around this intersection have also been included in the Riego community, under the assumption that these residents would be more likely to orient themselves to the nearby Riego community and general store than with the Pleasant Grove community facilities farther away.

[1] A "farmstead" is defined as a collection of buildings related to an active agricultural enterprise, of which one or more buildings is used as a residence.

[2] It is important to try to define potential "communities" because CEQA and Caltrans guidance indicate that project impacts could be significant if they "divide or disrupt an established community."

- **Country Acres.** Country Acres is a collection of approximately 28 homes that lie on subdivided parcels on the north side of Baseline Road, in the Central Segment. This rural residential area has no services and is surrounded by agricultural land and open space.

- **Amoruso Acres.** Amoruso Acres is a rural residential community that abuts Sunset Boulevard West, near the northern boundary of the study area, in the Central Segment. It is outside the study area, but lies directly adjacent to it and potentially could be indirectly affected by the northern corridor alignment alternative.

Outside of the areas of relatively dense residential development (the "potential communities") described above, approximately one hundred isolated homes, farmsteads, and businesses scattered throughout the study area. The locations of these were identified from aerial photographs of the study area in 2003, and information obtained from area residents at the Parkway scoping meetings (October 2003) with limited subsequent field verification.

Environmental Justice Considerations. The study area population lives predominately in three census block groups: Placer County Census Tract 213.01, Block Group 2; Placer County Census Tract 213.03, Block Group 1; and Sutter County Census Tract 511, Block Group 4. (There is currently no resident population in the portion of Sacramento County that lies within the study area.) Table 5-4 presents information on race and poverty status for the population in these block groups from the 2000 census. As these data indicate, the population residing in these block groups is neither predominately minority nor predominately low income.

Table 5-4
Race, Ethnicity and Poverty in Study Area Census Block Groups

Location	Percentage White	Percentage Non-White or Other	Percentage Hispanic	Percentage Below Poverty
Sutter County				
CT 511 Block Group 4	82.8%	17.2%	11.5%	18.9%
Placer County				
CT 213.01 Block Group 2	90.5%	9.5%	9.4%	8.6%
CT 213.03 Block Group 1	89.7%	10.3%	7.0%	0.4%
Source: Census of Population and Housing, 2000				

5.2.2 Housing

As Table 5-5 indicates, there were approximately 1.9 million housing units in the SACOG region in 2000, with about one-fourth of all units located in Sacramento County. The number of units is expected to increase by about 50 percent, to 2.8 million, by 2025. Substantial increases in housing stock are anticipated in all three counties; but most notably in Placer County and Sutter County. With proposed developments that include the approved West Roseville Specific Plan and the planned Placer Vineyards Specific Plan, as well as the Sutter Pointe Specific Plan proposed mixed use development in south Sutter County and several major new developments proposals (such as Placer Ranch and Regional University), much of this construction is expected to occur in and around the study area (as shown on Figure 3-4).

Table 5-5
Total Housing Units, SACOG Region and Study Area Counties
2000 and 2025 (Projected)

Location	2000	2025
SACOG Region	1,886,175	2,814,223
Sutter County	29,077	50,096
Placer County	98,730	175,039
Sacramento County	473,211	662,004
Source: SACOG, 2002.		

Much of the demand for housing in Sacramento and surrounding areas in recent years has been driven by employment growth and the relative affordability of housing in the region in comparison to housing prices in the San Francisco Bay Area. In the late 1990s, the Sacramento region added only one dwelling unit for every three new jobs in the region, resulting in higher demand for homes and contributing to rapid increases in home prices.

Building permit data for the Cities of Roseville, Rocklin, and Lincoln indicate that new construction surged in Roseville and Rocklin between 1997 and 2002, then began to taper off, while the number of building permits issued in Lincoln has increased steadily since 1999, as shown on Table 5-6. Single-family homes dominate new construction.

Table 5-6
Residential Building Permits Issued in Roseville, Rocklin and Lincoln, 1995 through 2005

	Roseville			Rocklin			Lincoln		
Year	Single-Family	Multi-Family	Total Units	Single-Family	Multi-Family	Total Units	Single-Family	Multi-Family	Total Units
1995	1,416	0	**1,416**	269	40	**309**	107	88	**195**
1996	1,607	0	**1,607**	422	103	**525**	22	0	**22**
1997	1,688	330	**2,018**	570	372	**942**	80	120	**200**
1998	2,034	440	**2,474**	843	862	**1705**	173	0	**173**
1999	1,204	609	**1,813**	983	229	**1212**	888	120	**1,008**
2000	1,393	1,116	**2,509**	1,036	291	**1327**	1,490	0	**1,490**
2001	1,456	762	**2,218**	1,071	211	**1282**	1,443	2	**1,445**
2002	2,300	914	**3,214**	906	815	**1721**	1,441	0	**1,441**
2003	1,467	474	**1,941**	467	0	**467**	1,803	80	**1,883**
2004	1,015	93	**1,108**	461	52	**513**	2,100	0	**2,100**
2005	826	165	**991**	274	154	**428**	2,689	111	**2,800**
Data Source: Construction Industry Research Board, 2006.									

Of the approximately 128,000 housing units currently planned in the Sacramento region, 65 percent of the units are proposed for the three study area counties, with 30 percent of all units in the region proposed for construction in Placer County (Paquin, 2006).

Prior to 1999, median home prices and housing affordability in the Sacramento region were close to the national average, and considerably better than home prices and affordability in the San Francisco Bay Area. In 1999, the median price of existing homes in the region was $131,500, compared to $132,900 in the nation and $217,300 in California. Between 1999 and 2004, however, home resale prices in the Sacramento region increased by 165 percent, to an average of $347,790 (Levy and Doche-Boulos, 2005).

As shown on Table 5-7, the average price of new homes in the study area also rose sharply during this period, increasing by 61 percent in Sacramento County and by 71 percent in Placer County between 2001 and 2005. Price increases in Roseville, Rocklin and Lincoln were even higher, with the average cost of a new home more than doubling in Lincoln during this period.

Table 5-7
New Home Average Sale Price Trends, 2001 through 2005

Location	Fourth Quarter 2001	Fourth Quarter 2002	Fourth Quarter 2003	Fourth Quarter 2004	Fourth Quarter 2005	Percentage Change 2001-2005 (%)
Sutter County	N/A	N/A	257,604	306,552	346,154	N/A
Placer County	$324,352	$372,746	$445,185	$547,943	$554,967	+71
Roseville	334,167	372,708	451,962	555,655	590,395	+77
Rocklin	304,184	367,923	449,476	518,729	551,231	+81
Lincoln	243,721	289,702	402,369	547,369	547,372	+115
Sacramento County	289,454	323,172	357,165	458,233	464,641	+61

Data Source: The Gregory Group, 2006.
NA = Not available.

Recent data indicate that the residential real estate market in the Sacramento region has been softening slightly since mid-2005, with the inventory of homes for sale increasing and the number of sales declining (Lyon Realty, 2006). While housing prices and the rate of new home sales are expected to stabilize in the near future, demand for new homes in the region is expected to remain strong (SPHERE Institute and Stanford Institute for Economic Policy Research, 2005). This is particularly true of southwestern Placer County and southern Sutter County, because of the strong projected job growth in these areas.

Planned and Proposed Housing Construction

SACOG expects that 80 to 90 percent of all new housing construction in the next two decades will occur at or beyond the urban edge, including in northern Sacramento County and in southwestern Placer County—especially in the communities of Roseville, Rocklin, and Lincoln (SACOG, 2005).

The adopted General Plans for the communities of Roseville, Rocklin, and Lincoln allow for the construction of more homes than are currently built in these communities. Table 5-8 compares the number of dwelling units in these communities in 2004 with the number of dwelling units approved under existing General Plans.

Table 5-8
Comparison of Existing Homes with Buildout Potential in Roseville, Rocklin, and Lincoln

Location	Existing Units (2004)	Total Units Allowed under General Plans
Roseville	40,889	60,039
Rocklin	19,641	28,606
Lincoln	10,478	22,218
Total units	71,008	110,863
Data Source: DKS Associates, 2006.		

In addition, many new housing units have been proposed as part of major new master-planned development projects that have been proposed but not yet approved in and around the study area, including:

- Curry Creek 16,209 units
- Regional University 4,387 units
- Placer Ranch 6,759 units
- Placer Vineyards 14,321 units
- Creekview 2,600 units
- Sierra Vista 10,000 units
- Lincoln SOI expansion 33,720 units
- Sutter Pointe Specific Plan 17,500 units

Land assembly activities in southwestern Placer County indicate a likelihood that there will continue to be proposals for master planned, mixed use development projects in this area in the future.

5.2.3 Community Services

Figure 5-2 shows the location of existing community services within the study area. Most of the community services currently provided in the study area are associated with the Pleasant Grove community, located in the Western Segment. These include a school, library, cemetery, fire station, and post office. The paragraphs below describe other community services provided in and around the study area.

5.2.3.1 Protective and Emergency Services

Regional Providers. The California Department of Forestry (CDF) operates 21 units, 228 CDF fire stations, and contracts with 575 local government fire stations around California. The CDF has 3,800 permanent employees, 1,400 seasonal employees, and 5,600 volunteer firefighters (State of California Department of Forestry and Fire, 2005).

The Valley Division of the California Highway Patrol (CHP) provides highway patrol services to the study region. The Valley Division has 16 area offices, five residential posts, one commercial inspection facility and one transportation management center. It employs 826 uniformed officers and 277 non-uniformed personnel. The area offices closest to the study area are the Auburn Office in Newcastle, the North Sacramento Office in Sacramento, and the Yuba-Sutter Office in Yuba City (California Highway Patrol, 2006).

The Emergency Medical Services Authority (EMSA) operates three trauma centers that serve residents of the study area. They are located at Mercy Hospital in Carmichael, the Sutter Roseville Medical Center in Roseville, and the University of California at Davis Hospital in Sacramento (State of California Emergency Medical Services Authority, 2006).

Sutter County. Sutter County has six fire districts, of which three are Board-governed districts known as County Service Areas (CSAs). The CSA that services the portion of the study area that lies in south Sutter County is known as County Service Area D, which includes the Pleasant Grove Fire Department, headquartered at 3100 Howsley Road in the community of Pleasant Grove (Sutter County, 2006). The Fire Department has an additional fire station located near Pleasant Grove and Sankey roads.

The Sutter County Sheriff's Department provides law enforcement services to the unincorporated areas of Sutter County. The Sheriff's Department office is located at 1077 Civic Center Boulevard in Yuba City (Sutter County Sheriff's Department, 2006).

Placer County. The Placer County Office of Emergency Services (OES), headquartered in Auburn, coordinates countywide disaster response services and manages the County's Emergency Operation Centers. The Placer County Fire Department is administered by the OES. It provides fire protection services and manages the Hazardous Materials Response Program, which has a Roseville team and two interagency teams based in Auburn and Truckee (Placer County, 2006c). There is a County/CDF station on Athens, close to the northeastern portion of the study area.

The cities of Roseville, Rocklin, and Lincoln have independent police and fire departments that provide services within their city limits and can also coordinate with other emergency service providers in the region on a mutual aid basis. The Roseville Fire Department has seven fire stations located throughout the city, and a new fire station is proposed at a location near Pleasant Grove Boulevard and SR 65. All fire stations have paramedic staff and equipment (City of Roseville, 2006a).

Sacramento County. Fire protection services for the portion of the study area that lies in Sacramento County are provided by the Sacramento Metropolitan Fire District (Metro Fire). Metro Fire services 417 square miles and approximately 600,000 people in Sacramento County. The district operates 42 stations and employs 750 uniformed and support personnel. The six stations closest to the study area are Stations #116 and #117 in Elverta, Station #111 in Rio Linda, Stations #41 and #112 in North Highlands, and Station #26 in Antelope. Metro Fire also has ten 24-hour advanced life support (ALS) ambulances and several reserve ambulances (Sacramento Metropolitan Fire District, 2006).

The Sacramento County Sheriff's Department provides law enforcement services in the portion of the study area that lies in Sacramento County. The two closest stations are in the Northwest Division—the McClellan Station in McClellan and the Northwest Service Center in North Highlands. The McClellan Station houses the Northwest Division Administrative Offices, where staff include Detectives, Patrol Deputies, Crime Analysts, and Arson Investigators. The Northwest Service Center includes a Community Resources Supervisor and Specialist, four Problem Oriented Policing (POP) Officers, a School Resource Officer, four Code Enforcement Officers, and a CHP Officer (Sacramento County Sheriff's Department, 2006).

5.2.3.2 Schools

The Pleasant Grove Elementary School, located at 3075 Howsley Road in Pleasant Grove, is the only school facility within the study area. The school is operated by the Pleasant Grove Joint Union Elementary School District, which currently provides K-8 educational services for 176 students (Public Schools, 2005). Most of the students reside locally, but some are bussed or driven to the Pleasant Grove School through an interdistrict program.

Other elementary schools in the surrounding area include Marcum-Illinois Union Elementary School in East Nicolaus, Elverta Elementary School in Elverta, Browns Elementary School in Rio Oso, Coyote Ridge Elementary School in Roseville, Quail Glen Elementary School in Roseville, Oak Hill Elementary School in Antelope, Dudley Elementary School in Antelope, and Blue Oaks Elementary in Roseville (GreatSchools, Inc., 2006). Other middle schools in the vicinity are Alpha Technology in Elverta, Riles Middle School in Roseville, Center Junior High School in Antelope, and Silverado Middle School in Roseville (GreatSchools, Inc., 2006).

Public high schools serving the study area vicinity include East Nicolaus High School in Nicolaus (where graduates of Pleasant Grove Elementary School typically go to high school), Three Rivers High School in Nicolaus, McClellan High School in Antelope, Center High School in Antelope, and Woodcreek High School in Roseville (McMurry, 2006; GreatSchools, Inc., 2006).

Several charter schools also located in the area include South Sutter Charter School in East Nicolaus, Antelope View Charter School in Antelope, Westside Charter School in Rio Linda, Heritage Peak Charter School in Rio Linda, Horizon Instructional Systems in Lincoln, Futures High School in North Highlands, and Creative Interchanges Arts Academy in North Highlands. All the charter schools except Creative Interchanges Arts Academy, Futures High School, and Westside Charter School serve grades K-12. Westside Charter School is for grades 7-8, the Creative Interchanges Arts Academy is for grades K-8, and Futures High School is for grades 7-12 (GreatSchools, Inc., 2006).

Private schools in the area include Antelope Christian Academy (pre K-8) in Antelope, Gates of Learning Center (7-12) in Roseville, St. Lawrence Elementary School (K-8) in North Highlands, Roseville Community School, Inc. (K-5) in Roseville, and Heritage Community Christian School (pre K-5) in Lincoln (GreatSchools, Inc., 2006).

Planned School Facilities

If future planned and proposed housing construction occurs, there will be a need to accommodate many more students in and around the study area in the future. Planned and proposed new school facilities associated with the development areas shown on Figure 3-4 include those described below.

The West Roseville Specific Plan identifies four elementary school sites, one middle school site, and one high school site. Population growth as a result of the WRSP's implementation is expected to generate an estimated 2,288 elementary (K-5) students, 984 middle school (6-8) students, and 1,463 high school (9-12) students (City of Roseville, 2004b).

The Regional University Specific Plan proposes a private university offering both undergraduate and graduate programs that will accommodate approximately 6,000 students and 800 professors and staff. Part of the campus is planned as a potential private high school that would accommodate up to 1,200 students, staff and faculty (Placer County, 2006e).

The Placer Ranch Specific Plan allocates more than 10 percent of its 2,200 acres for a 245-acre satellite campus of the California State University Sacramento. The land use plan also includes sites for two elementary schools and a middle school (Thomson, 2004; Placer County, 2006b).

The Placer Vineyard Specific Plan DEIR indicates that one high school, two middle schools and seven elementary schools are planned for the area, with the sites in each neighborhood serving as co-locations for recreation and schools (Quad Knopf, Inc., 2004).

Additional new school facilities are also being planned for the Sierra Vista and Creekview Specific Plan areas west of Roseville.

5.2.3.3 Libraries

There are no libraries within the study area. The closest one is Sutter County's Pleasant Grove Branch at 3093 Howsley Road, immediately to the west of the study area.

5.2.4 Municipal Facilities and Utilities

Municipal facilities within or near the study area include:

- the Western Placer Waste Management Authority Landfill, located east of Fiddyment Road, between Athens and Sunset Boulevard;
- the City of Roseville's Regional Pleasant Grove Wastewater Treatment Plant, located on Phillip Road;
- the Roseville Energy Park, located immediately north of the Wastewater Treatment Plant; and
- the planned City of Roseville's Reason Farms Stormwater Retention Basin.

These municipal facilities are described in more detail below and their locations are shown on Figure 5-2.

The Western Placer Waste Management Authority Landfill is a 280-acre facility that includes a convention landfill, materials recovery facility, household hazardous waste center and buy-back center (WPWMA, 2006). The facility was planned with a 1-mile buffer zone that would prohibit residential development near the landfill; however, the proposed Placer Ranch development includes plans for mixed use development within the buffer zone. The facility owns an expansion area directly west of Fiddyment Road from the existing landfill, which is planned for use when then existing landfill capacity is reached. This 265-acre property would undergo permitting nearer to its likely use (current estimates range from 2036 to 2045 (Schwall, 2006).

The City of Roseville's Regional Pleasant Grove Wastewater Treatment Plant is operated under a Joint Powers Agreement and provides wastewater treatment services, as well as recycled water for non-potable use such as irrigation, to the north and northwest areas of Roseville. It has a 12 million gallon per day treatment capacity and serves areas of Rocklin and the Sunset Industrial Plan Area, as well as Roseville residents (City of Roseville, 2004c).

The Roseville Energy Park, owned by the City of Roseville, is under construction adjacent to the Wastewater Treatment Plant, north of the West Roseville Specific Plan area but within the City of Roseville's Sphere of Influence. Construction is expected to be completed by 2007. The 12-acre park will house a natural gas-fired electrical energy generating facility that is expected to supply 60 percent of the city's electricity requirements (Roseville Electric, 2003).

In 2003, the City of Roseville purchased approximately 1,700 acres of land along Pleasant Grove Creek for the purpose of constructing a stormwater retention basin. In addition to providing flood protection, this preserve will provide critical habitat protection, preserve agricultural practices in the area, and offer open space and recreation amenities, as described in Section 5.2.5.

Electricity to homes, farms and businesses in the study area is provided by Pacific Gas & Electric Company. Dispersed homes in the study area, including those in the community of Pleasant Grove, have private well and septic systems. Sewer and wastewater treatment services in Roseville and Rocklin are provided by the South Placer Municipal Utility District. Placer County Flood Control and Water Conservation District, Placer County Water Agency, the City of Roseville, and the City of Rocklin provide additional utilities and services to the portions of the Eastern Segment of the study area. The Natomas Central Mutual Water Company has a system of canals providing irrigation water to farms in the

western portion of the study area, and Reclamation District No. 1000 maintains the primary drainage and flood control facilities in this vicinity.

5.2.5 Recreation Resources

No existing public parks or recreation facilities were identified within the study area, although plans for the City of Roseville's Reason Farms Retention Basin include provisions for future recreational uses such as picnicking, hiking, horseback riding and model airplane flying, as shown on Figure 5-3. (The City of Roseville has not yet finalized its master plan for this multi-use facility, but reflects the Placer Parkway concept in its conceptual master plan diagram). Similarly, preliminary land use concepts for RUSP, Sierra Vista Specific Plan, and the Sutter Pointe Specific Plan all include areas that are generally designated for recreational uses, some of which would be affected by proposed corridor alignments if they are adopted, as discussed in Appendix A.

Bikeways had been proposed in the Western Segment of the study area as part of the South Sutter Specific Plan, which was subsequently rescinded. Future bikeways were identified along SR 99, Pleasant Grove Boulevard, Pacific and existing railroad right-of-ways. While the South Sutter Specific Plan is no longer in effect, it is anticipated that Sutter County will continue to push for development of bikeways as part of any proposed development in the area, especially if it includes residential uses (Wilson, 2006).

There are other recreation facilities in the surrounding area, particularly in the western part of Roseville, including a system of bike trails and several new golf courses that have been developed as part of master planned communities. The City of Roseville operates fifty parks and recreation facilities encompassing 1,186 acres of parkland, 3,236 acres of open space, and more than 30 miles of creek frontage (City of Roseville, 2006b). Public parks located closest to the study area include:

- Mahany Regional Park is a 225-acre park located at Woodcreek Oaks and Pleasant Grove Boulevard that includes the Roseville Sports Center, Roseville Aquatics Complex, an all-weather field, batting cages and bike paths (City of Roseville, 2006c).

- Misty Wood Park is a 2-acre neighborhood park with a picnic area, a children's play area, a half court basketball court and open space (City of Roseville, 2006d).

- The School House Park is an 8.7-acre park located within the Del Webb Community, with an outdoor amphitheater, a vernal pool preserve, and historic landmarks (City of Roseville, 2006e).

Other Planned and Proposed Parks

Several of the new master planned communities approved or proposed in and around the study area include provisions for the creation of new park and recreation facilities, as described below.

- The approved West Roseville Specific Plan indicates that approximately 950 acres will be designated for park and open space uses. Of this acreage, 250 acres will be dedicated to neighborhood and citywide parks, while 685 acres will remain open space (City of Roseville, 2004b).

- The Placer Vineyards proposal includes 931 acres of parks and open space. Of these, 260 acres are planned for parks and 711 acres are planned to remain as open space (Placer County, 2006d).

- The proposed land use plan for Placer Ranch currently includes 275 acres of parks, landscape corridors and open space (Placer County, 2006b).

- The proposed Regional University Specific Plan indicates 198 acres of open space and public land, as well as more than 180 acres of open space on the university campus. Approximately 40 acres are planned specifically to be developed as parkland (Placer County, 2006e).

Additional new park and recreation facilities are also being planned for the Sierra Vista and Creekview Specific Plan areas west of Roseville.

5.2.6 Circulation and Access

The study area is served by a relatively simple grid system of rural roadways (described in Section 3.2.3). Two main east-west arterial roads (separated by approximately 4 miles) serve the Eastern and Central segments—Sunset Boulevard West in the north and Baseline Road in the south. These two roads extend into the Western Segment as Howsley Road and Riego Road, respectively, with an additional east-west arterial road, Sankey Road, located between them. The main north-south roadways serving the study area are Fiddyment Road, located near the boundary between the Eastern and Central segments, and Pleasant Grove Road, located approximately 1 mile west of the Placer County/Sutter County border. Other rural collector roadways providing access to farms and homes in the study area include Brewer Road, Phillip Road, and Locust Road.

Two major freeways carry traffic north-south at the outer edges of the study area—SR 65 in the east and SR 70/99 in the west. The Sunset Industrial Area Plan, at the eastern edge of the study area, is accessed by Sunset Boulevard, Whitney Ranch Parkway, and Industrial Boulevard. Most of the existing industrial development in the Western Segment (south Sutter County) is located along Pacific Avenue, which runs between Sankey Road and Riego Road, approximately 1 mile east of SR 70/99.

Impacts of the Parkway build alternatives to specific transportation features are not addressed in Section 5.3 below, because at the Tier 1 phase the precise location and extent of such impacts is not known. Any of the alternatives under consideration would require crossing over railroad tracks and local roads (as well as creeks, irrigation canals and drainage ditches), necessitating construction of overpasses or underpasses to maintain circulation. The locations of such overpasses and underpasses would be determined during Tier 2 roadway design work (see the Transportation Technical Report (DKS Associates, 2007a) for additional discussion of traffic impacts associated with the Parkway).

5.3 IMPACT ANALYSIS

5.3.1 Significance Criteria

Based on pertinent existing laws and regulations, Caltrans impact assessment guidance, and professional judgment, the project would be considered to have significant social impacts if it would:

- disrupt or divide the physical arrangement of an established community;
- displace a large number of people;
- conflict with established recreational, educational, religious or scientific uses of the area;
- disproportionately affect a minority or low income population relative to impacts on the general population of the study area;
- be inconsistent with local adopted goals and policies that pertain to social or economic conditions;
- result in substantial deterioration of park and recreation facilities through increased use;

- substantially affect provision of community services or municipal facilities in the area, by displacing such services or facilities, or disrupting access to them.

5.3.2 Approach to Analysis

Direct impacts to population, community services, municipal facilities and recreation resources in the study area were identified by comparing the footprint of corridor alternatives to aerial photographs and GIS data that included mapping of the locations of homes, farmsteads, community services, and municipal facilities within the study area. For the purposes of this analysis (consistent with "worst-case analysis" principles), it was assumed that if a community resource fell within a corridor alignment it would be affected, even though it may be possible to avoid the resource in the future, when a specific Parkway right-of-way (via Tier 2 review) is identified within the selected corridor. Where disruption or division of an established community would occur, effects on community cohesion or other adverse impacts on the affected neighborhood are considered. Impacts to recreation resources and other resources protected under Section 4(f) of the Department of Transportation Act are addressed in a separate Section 4(f) evaluation included in Appendix A.

5.3.3 Direct Community Impacts

Table 5-9 presents a summary of potential direct impacts to communities, homes or farmsteads, and municipal facilities associated with each of the five alignment alternatives. None of the Build alternatives would directly impact any existing community services, such as schools or fire stations, in the study area. Direct impacts associated with each Build alternative are discussed by segment below. (This section focuses on social impacts and impacts to community facilities and services only; Chapter 6 includes a discussion of business and economic impacts). Recreation impacts are discussed in Section 5.3.3.9.

Table 5-9
Summary of Direct Impacts to Community Resources
Associated with the Five Placer Parkway Alternatives, by Segment

Alignment Alternative	Residential Communities (number)			Residential Communities (acres)			Homes and Farmsteads (number)			Municipal Facilities (acres)		
Segment	**W**	**C**	**E**	**W**	**C**	**E**	**W**	**C**	**E**	**W**	**C**	**E**
1	0	0	0	0	120.6	0	0	3	1	0	95.2	13.3
2	0	0	0	0	0	0	0	3	1	0	95.6	13.3
3	0	0	0	0	0	0	0	2	1	0	87.2	13.3
4	1	0	0	14.7	0	0	4	2	1	0	87.1	13.3
5	1	0	0	14.7	0	0	4	5	1	0	82.7	13.3

Data Source: URS Corporation GIS file data, February 2006.
W = Western Segment
C = Central Segment
E = Eastern Segment

5.3.3.1 No-Build Alternative

Under the No-Build Alternative, land for Placer Parkway would not be acquired and the Parkway would not be constructed. There would not be any impacts on community resources under the No-Build Alternative.

5.3.3.2 Alternative 1 – the Red Alternative

Alternative 1 would affect 120.6 acres of an existing rural residential community, displace four additional isolated homes or farmsteads and encroach upon 108.5 acres of existing municipal facilities. These impacts are described by segment below.

Western Segment. In the Western Segment, Alternative 1 would not directly affect any existing residential communities, would not displace any isolated homes or farmsteads, and would not affect any existing municipal facilities.

Central Segment. In the Central Segment, Alternative 1 would take up to 120.6 acres of County Acres; a rural residential community located on the north side of Baseline Road, in the central portion of this segment. The alignment would not split or divide this community, but it would remove a strip of land along a 1-mile section at the northern edge of this community, removing several rural residential homes. In addition, it would displace three other scattered homes, farmsteads or businesses located north of the Riego community. The alignment would also impact the City of Roseville's Reason Farms retention basin property, encroaching on 95.6 acres of this facility.

Eastern Segment. Alternative 1 in the Eastern Segment would not affect any concentrated residential communities, but it would displace a single farmstead located on the south side of Sunset Boulevard West, southeast of Amoruso Acres. The alignment would also encroach upon approximately 13 acres of the City of Roseville's Reason Farms facility, which straddles the border between the Central and Eastern segments. A future interchange at Fiddyment Road could potentially encroach upon the area immediately west of the existing sanitary landfill that is owned by the Western Placer Waste Management Authority and identified as a future landfill expansion area. Encroachment, if any, would affect approximately 5 to 6 acres of the southeastern corner of this property.

This portion of the property is already constrained by power lines crossing the site diagonally. The encroachment required for realignment of Sunset Boulevard West would reduce the useful life of the landfill expansion area; to what extent is not known and would depend on a variety of technical and operating parameters that would be identified closer to the time the landfill expansion facility would be planned and permitted. The existing landfill is expected to meet waste disposal needs to 2036 or 2045 (Golder Associates, 2005; Schwall, 2006), so it is likely that the expansion area would not be placed into use until after the Parkway interchange is completed, if it is approved.

5.3.3.3 Alternative 2 – the Orange Alternative

Alternative 2 would not disrupt any existing rural residential communities, but it would displace four isolated homes or farmsteads and it would encroach upon approximately 109 acres of a municipal facility, as described by segment below.

Western Segment. The Western Segment of Alternative 2 is the same as Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

Central Segment. Alternative 2 would displace three isolated homes or farmsteads in the Central Segment, in the vicinity of Locust and Brewer Roads. It also would encroach on 95.6 acres of the City of Roseville's Reason Farms facility.

Eastern Segment. The Eastern Segment of Alternative 2 is the same as Alternative 1. Therefore, the potential impacts of this segment are the same as discussed for Alternative 1.

5.3.3.4 Alternative 3 – the Blue Alternative

Alternative 3 would not disrupt any existing rural residential communities, but it would displace three isolated homes or farmsteads and it would encroach upon approximately 100 acres of a municipal facility, as described by segment below.

Western Segment. The Western Segment of Alternative 3 is the same as Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

Central Segment. Alternative 3 would displace two isolated homes or farmsteads in the Central Segment. It also would encroach on 87.2 acres of the City of Roseville's Reason Farms facility.

Eastern Segment. The Eastern Segment of Alternative 3 is the same as Alternative 1. Therefore, the potential impacts of this segment are the same as discussed for Alternative 1.

5.3.3.5 Alternative 4 – the Yellow Alternative

Alternative 4 would directly impact one rural residential community, removing approximately 15 acres from it, reducing the size of several adjacent rural residential properties. In addition, it would remove seven other isolated homes or farmsteads scattered along the alignment, and it would encroach on approximately 100 acres of an existing municipal facility. These impacts are described by segment below.

Western Segment. In the Western Segment, Alternative 4 would directly affect about 15 acres at the northwestern corner of the Sankey-Pleasant Grove community. The re-alignment of Sankey Road would also impact several residences located east of the UPRR tracks in this vicinity. The alignment would not split or divide this community, but it would impact several rural residential properties along its northern edge, near the railroad right-of-way north of Sankey Road. In addition, this alignment would displace four homes or farmsteads that are located along Sankey Road between the railroad right-of-way and Pacific Avenue.

Central Segment. Alternative 4 would displace two isolated homes or farmsteads in the Central Segment. It also would encroach on 87.1 acres of the City of Roseville's Reason Farms facility.

Eastern Segment. The Eastern Segment of Alternative 4 is the same as Alternative 1. Therefore, the potential impacts of this segment are the same as discussed for Alternative 1.

5.3.3.6 Alternative 5 – the Green Alternative

Like Alternative 4, Alternative 5 would impact one rural residential community, removing approximately 15 acres and reducing the size of several adjacent rural residential properties, as well as impacting several homes east of the railroad tracks (through Sankey Road realignment). Alternative 5 would also displace ten other isolated homes or farmsteads scattered along the alignment, and encroach upon approximately 96 acres of an existing municipal facility. These impacts are described by segment below.

Western Segment. The Western Segment of Alternative 5 is the same as Alternative 4. Therefore, the potential impacts of this segment are the same as discussed for Alternative 4.

Central Segment. The Alternative 5 alignment would displace five isolated homes or farmsteads in the Central Segment, in the area south of Pleasant Grove Creek. It also would encroach upon 82.7 acres of the City of Roseville's Reason Farms facility.

Eastern Segment. The Eastern Segment of Alternative 5 is the same as Alternative 1. Therefore, the potential impacts of this segment are the same as discussed for Alternative 1.

5.3.3.7 Comparison of Alternatives

None of the alternative alignments would divide the physical arrangement of an established community or disrupt access to community facilities and services, although Alignments 1, 4, and 5 could potentially disrupt an existing cluster of rural residential homes by removing several of the homes and converting this existing residential use to a transportation corridor use (roadway and buffer). None of the alternatives would disrupt or divide an established community, displace a large number of people; conflict with established recreational, educational, religious or scientific uses of the area; cause substantial deterioration of local park or recreation facilities through increased use; substantially affect provision of community services or municipal facilities; or conflict with local adopted goals and policies.

Alternatives 1, 4, and 5 each would affect a rural residential community in the study area; Country Acres. Alternative 1 would have the greatest impact, on 120.6 acres of the community on the north side of Baseline Road, compared with 14.7 acres in the Sankey-Pleasant Grove area that would be impacted by Alternatives 4 and 5. Each of the alternative alignments would displace several isolated homes or farmsteads, ranging from three (Alternative 3) to ten (Alternative 5). All build alternatives would affect the Reason Farms municipal facility, with impacts ranging from 96.0 acres (Alternative 5) to 108.9 acres (Alternative 2). The City of Roseville is planning for and accommodating the Parkway alignments in their planning process (as discussed in Section 3.3.9), so no disruption is anticipated. No other community facilities or services, such as schools or fire stations, would be directly impacted by any of the alignment alternatives.

Western Segment. In the Western Segment, all alignment alternatives would terminate either at Sankey Road or north of Riego Road. The three alignment alternatives terminating north of Riego Road (Alternatives 1, 2, and 3) would not directly impact any existing residential communities, would not displace any isolated homes or farmsteads, and would not affect any municipal facilities. Alternatives 4 and 5, which terminate at Sankey Road, would directly affect 14.7 acres of the Sankey-Pleasant Grove community. This would not split or divide the community, but would impact several adjacent rural residential properties along the north side of Sankey Road. In addition, Alternatives 4 and 5 would remove another four more isolated homes and farmsteads that are scattered along Sankey Road to the west of the more densely populated area.

Central Segment. The five alternatives follow different routes through the Central Segment, resulting in different community impacts associated with each alternative in this portion of the study area. Alternative 1 would have the greatest impact on existing residential communities, taking 120.6 acres of the rural residential area located north of Baseline Road in the central portion of this segment. The alignment would not split or divide this community, but it would remove a strip of land along a 1-mile section at the northern edge of the rural residential area, removing several homes. All of the alignment alternatives would displace a number of the more isolated homes or farmsteads in the Central Segment, ranging from two (Alternatives 3 and 4) to five (Alternative 5). In addition, all five alternatives would impact the City of Roseville's Reason Farms Retention Basin. The acreage of this facility within the Central Segment that would be affected by each alternative is similar, ranging from 82.7 acres (Alternative 5) to 95.6 acres (Alternative 1).

Eastern Segment. In the Eastern Segment, all build alternatives follow the same route, connecting with SR 65 at Whitney Ranch Parkway, so potential community impacts would not vary by alternative alignment in this segment.

5.3.3.8 Environmental Justice Considerations

Because the population potentially affected by the alternative alignments is neither predominately minority nor predominately low income, none of the project alternatives would cause disproportionate or adverse impacts to a minority or low income population. Therefore, the project would not cause Environmental Justice impacts.

5.3.4 Secondary and Indirect Impacts

No-Build Alternative

Under the No-Build Alternative, land would not be acquired for Placer Parkway and the Parkway would not be constructed. There would not be any secondary and indirect impacts under the No-Build Alternatives.

Alternatives 1 Through 5

The Parkway would cause both beneficial and adverse impacts to the quality of life enjoyed by residents of the study area. A new roadway would bring potentially adverse visual, noise, and air quality impacts to the area, but it could also improve access, reduce travel times and reduce traffic congestion on local roadways used by current and future residents. (As described in Section 5.2.1.2, population is sparse in the study area at present, but it could increase substantially in the future, depending upon anticipated future development and the corridor alignment selected.)

In the Western Segment, the construction of two new potential interchanges along the corridor connecting at SR 70/99 north of Riego Road or one new potential interchange along Sankey Road would improve access to these areas and would accelerate southern Sutter County's change from a rural, agricultural area to a mixed-use new community, as contemplated under the Sutter Pointe Specific Plan. The rural agricultural character of this area will be transformed by the new land uses proposed under Sutter Pointe Specific Plan, with or without Placer Parkway, but the Parkway would contribute to this substantial change in the character of the community. Future residents of the Sutter Pointe Specific Plan area, as well as long-time residents of Riego and the Sankey-Pleasant Grove communities (which straddle the boundary between the Western and Central segments) would have improved access to amenities in Placer County via the interchanges built in the Western Segment. The Parkway would bring noise, visual and air quality impacts that could adversely affect the quality of life of residents whose homes lie close to the new roadway right-of-way.

Because the Parkway is not proposed to have any interchanges in the Central Segment, it would not provide the same level of mobility and access benefits to residents of this area as to residents of the Western and Eastern segments would receive. Quality of life could improve for area residents from the reduction in traffic congestion along local roadways, but visual, noise and air quality impacts would be introduced in the vicinity of the new roadway. Conflicts between farmers and urban commuters in this segment could be reduced by the project, at least in the short term, as through traffic is removed from local roadways onto the Parkway .

Secondary and indirect social impacts in the Eastern Segment of the study area would be similar to those described for the Western Segment. The Parkway would introduce some adverse quality of life impacts (e.g., noise, visual, and air quality changes) to residents whose homes or farms lie in the vicinity of the new roadway; however, it would also improve quality of life by removing through traffic from local roadways and by providing improved access to Sutter County destinations and the northern area of Sacramento. It would also facilitate development of and access to new homes and community amenities being planned for the Placer Ranch Specific Plan area. (Business and economic impacts are addressed in Chapter 6).

5.3.5 Cumulative Impacts

No-Build Alternative

Under the No-Build Alternative, land would not be acquired for Placer Parkway and the Parkway would not be constructed. There would not be any cumulative impacts under the No-Build Alternative.

Alternatives 1 Through 5

Section 3.3.5 describes the future cumulative development scenario that is assumed for the purposes of this analysis. Because of its location with respect to the Sutter Pointe Specific Plan area, the Placer Ranch Specific Plan area in Placer County and other major proposed developments in the region, Placer Parkway would provide a cumulatively considerable contribution to the implementation of planned land use changes that will transform the rural, agricultural character of the Western and Eastern segments of the study area to higher density, mixed use, master-planned communities. Families who have historically farmed in these areas may be displaced through this cumulative urbanization process, but may also benefit from increased land values as population densities increase and land uses intensify. (The cumulative community changes associated with this planned future urbanization of the Western and Eastern segments of the study area may be perceived as positive by some and as adverse by others). Because Placer Parkway would provide no interchanges in the Central Segment, it would not contribute measurably to cumulative impacts to social resources or community facilities and services in this portion of the study area.

5.3.6 Potential Watt Avenue Interchange

A future Watt Avenue interchange would not divide or disrupt any existing communities or concentrations of rural residential homes, nor would it displace any isolated homes or farmsteads. None of the conceptual locations identified on Figure 2-3 would displace any businesses or community services or facilities, except that the Alternative 1, Option 2/Alternative 2 interchange could impinge upon the future Curry Creek Community Plan Area, and the Alternative 5 interchange could impinge upon the City of Roseville's Reason Farms property on the more northerly alignments. This potentially could affect recreation facilities depending upon the final location and design of recreational amenities associated with the Reason Farms master plan in relationship to the interchange.

A future interchange at Watt Avenue, under any of the alternatives, would contribute to indirect, secondary and cumulative community impacts by accelerating the rate of urban development and the loss of family farming and the rural character that currently exists in the Central Segment. New urban development would bring higher population densities, an expanded housing stock, and new community services and amenities, but it would also bring increased traffic congestion, noise, visual and air quality impacts, as well as increased demand on existing community facilities and services.

5.3.7 Avoidance, Minimization, and/or Mitigation Strategies

Alternatives 1, 4, and 5 could disrupt an existing rural residential community by displacing homes and converting a portion of the community to a transportation corridor. Since no vital community services or gathering places would be impacted in either of the two affected areas, it may be possible to mitigate this potentially significant impact and minimize potential adverse effects in these areas by relocating the displaced households within or close to the affected rural residential communities, if they so desire. Since no vital community services or gathering places would be impacted in either of these two areas, no mitigation is required beyond standard provisions of the Uniform Relocation and Real Property Acquisition Assistance Act.

Any households or businesses displaced by the project would receive relocation assistance payments and counseling in accordance with the Federal Uniform Relocation Assistance and Real Properties Acquisition

Policies Act, as amended, to ensure that any displaced residents are relocated to a decent, safe, and sanitary home. All eligible displacees would be entitled to moving expenses and other benefits as provided by the act. All benefits and services would be provided equitably to all relocatees without regard to race, color, religion, age, national origins, or disability as specified under Title VI of the Civil Rights Act of 1964.

During Tier 2, PCTPA should evaluate shifts in the roadway alignment that would reduce residential displacements and consider these, along with other factors (such as engineering feasibility, cost, natural resources impacts, etc.) in selecting the roadway location.

Strategies related to potential reduction in the useful life of the landfill expansion area could include providing compensatory land, providing or participating in programs to reduce generation or increase diversion through new programs or new technologies, or contributing to infrastructure improvements that will eventually be needed to send materials off site. Given the magnitude of the impact and the long lead time available for planning minimization strategies, impacts to the facility are likely to be minor.

PCTPA has been coordinating project planning with local emergency service providers to ensure the Parkway design will accommodate their needs and minimize potential adverse impacts on response times. Similarly, PCTPA has been coordinating planning efforts with the City of Roseville to ensure that the project design is compatible with recreation and other facilities being planned for the Reason Farms Retention Basin. The purpose of the corridor preservation is to establish a general location for the Parkway so that other developments and plans in the general vicinity will be apprised of that location and can avoid locating recreational or wildlife refuge resources where they might conflict with the Parkway.

PCTPA should continue to cooperate and coordinate with local jurisdictions to avoid impacts to future recreation resources and other community facilities and services, by adjusting the locations of these planned facilities so that they would lie outside of the parkway corridor, or possibly within the roadway buffer areas on either side of the future roadway, where impacts to such facilities may be minimized.

5.3.8 Analyses to be Undertaken in Tier 2

Tier 2 analyses will include preparation of a Relocation Impact Report that will identify any homes that would be displaced by the project and identify any special needs that potentially displaced households may have (such as low income status, language barriers, or presence of senior citizen citizens or persons with disabilities or other needs) and recommend any special measures to be taken to address those needs.

The location of utilities such as power lines, water lines, sewer pipes and canals or drainage ditches that could be impacted by the project (e.g., require temporary disruption or permanent relocation) will be identified. (If such work is required during project construction, it would be coordinated with the agencies responsible for managing the affected utilities or services.)

During Tier 2, PCTPA will continue to coordinate project planning with local emergency service providers to address their concerns and minimize any potential to adversely affect response times. Consistent with the Context Sensitive Solutions process, which provides detailed guidance on the development of safe transportation projects that minimize community disruption and environmental impacts, and maximize efficient use of resources (Transportation Research Board, 2002), PCTPA will continue to work with providers during future roadway design phases, taking such measures as incorporating median crossings for use by emergency vehicles only, if necessary, to protect or enhance service response times. PCTPA will continue to coordinate planning efforts with the City of Roseville to ensure that the project design is compatible with recreation and other facilities being planned for the Reason Farms Retention Basin. Similar coordination will occur to confirm that the concurrent planning effort has been successful and there are no Section 4(f) resources used by the Project, or that Section 4(f) evaluations, consultation, and coordination will be completed as required.

6.0 ECONOMIC CONDITIONS

6.1 REGULATORY SETTING

6.1.1 Pertinent Laws and Legislation

NEPA and CEQA requirements for social and economic impact analysis are described in Section 5.2.1. In addition, the provisions of the Uniform Relocation Assistance Act described in Section 5.2.1 apply not only to residential displacements, but also to business displacements that may be caused by federally funded projects.

6.1.2 Adopted Goals and Policies

Adopted local goals and policies that address economic growth and development in the study region are summarized below.

6.1.2.1 Regional Plans

SACOG's Metropolitan Transportation Plan 2027 contains the following plan goals:

Goal No. 5. Economic Vitality. Enhance the economic vitality of our region by efficiently and effectively connecting people to jobs, goods, and services, and by moving goods within our region and beyond with an integrated multi-modal freight system.

Goal No. 8. Funding and Revenue. In order to adequately fund the MTP 2025, develop appropriate, innovative, equitable, and stable funding sources (both short- and long-term) and identify cost-reduction measures.[3]

6.1.2.2 Sutter County

The Sutter County General Plan states that the county exhibits a high unemployment rate characteristic of rural agricultural jurisdictions and that it is increasingly becoming a bedroom community for commuters who are employed outside the county in a variety of professional and related occupations. Goals and policies aimed at economic growth and development include the following:

Goal 1.I: To preserve and promote a healthy and diverse economy to serve the needs of Sutter County residents.

Policy 1.I-1. The County shall work to preserve and expand business and employment opportunities within Sutter County.

Policy 1.I-4. Economic development efforts should attempt to diversify the County's economic base while encouraging retention and expansion of existing businesses and industries.

Goal 6.B. To facilitate preservation, growth and expansion of agricultural industries within Sutter County.

Policy 6.B-1. The County shall support the development of agricultural production, processing and distribution industries within Sutter County.

Policy 6.B-2. The County shall encourage local processing of agricultural products grown in Sutter County and other locations.

Policy 6.B-3. The County shall encourage the continued operation and expansion of existing agricultural industries.

[3] This goal is from the MTP 2027, although it refers to funding the MTP 2025. While portions of the MTP 2027 were updated, not all sections were revised, and many of the goals and policies remained unchanged from the MTP 2025.

There are additional policies contained in the General Plan that are specific to the southern portion of the county and set out considerations for development in the Industrial/Commercial Reserve area:

Policy 9.C-1 The County shall establish an I-C Reserve designation in the South county and will allow up to 3,500 acres of non-residential development consistent with the goals and policies of the General Plan and mitigation measures of the General Plan EIR. Any project proposed within the I-C Reserve which does not cumulatively or individually exceed the 3,500-acre threshold, and which demonstrates consistency with all other elements of the General Plan, may be processed as consistent with the General Plan and will not require a General Plan Amendment (GPA). Projects that individually or cumulatively exceed the 3,500-acre threshold shall require a GPA and conduct an appropriate environmental analysis.

Policy 9.C-3 The County shall require that infrastructure planning be done in a coordinated fashion and project proponents must demonstrate how the development provides sufficient facilities to meet County standards and that the development of the project will not adversely impact future developers in the area.

Policy 9.C-4 The County's existing agricultural 20/80 policies shall apply and be utilized to determine allowable uses and parcel sizes until such time that an application has been approved for industrial and/or commercial uses in the I-C Reserve area.

Policy 9.C-5: The County shall consider development applications in the I-C Reserve area and base its decisions on, but not limited to, information contained in the following: 1 – A Completed Rezone Application identifying all proposed uses on the site; 2 – A Design Review application complying with established design and development standards; 3 – Findings that the project is consistent with applicable General Plan policies and the General Plan EIR mitigation measures; 4 – Findings that the infrastructure is adequately provided for within the project boundaries and is properly coordinated with adjacent lands.

Policy 9.C-5 The County should encourage contiguous development patterns within the I-C Reserve as a priority.

6.1.2.3 Placer County

The Placer County General Plan contains the following goals and policies pertaining to economic development:

Goal 1.N: To maintain a healthy and diverse local economy that meets the present and future employment, shopping, recreational, public safety, and service needs of Placer County residents and to expand the economic base to better serve the needs of residents.

Countywide Policies

1.N.2. The County shall encourage the retention, expansion and development of new businesses, especially those that provide primary wage-earner jobs, by designating adequate land and providing infrastructure in areas where resources and public facilities and services can accommodate employment generators.

1.N.7. The County shall strive to coordinate its economic development efforts with the efforts of cities and other economic development organizations, including local chambers of commerce.

South Placer Policies

1.N.10. The County shall support the development of primary wage earner job opportunities in the South Placer area to provide residents an alternative to commuting to Sacramento.

1.N.12. The County shall seek the establishment of a joint powers authority (JPA) between the county and the cities of Roseville, Rocklin and Lincoln in order to improve the provision of infrastructure in the incorporated and unincorporated areas in and around the Sunset Industrial Area. The JPA is to also develop an economic development strategy with the goal of improving the economic development potential of the region (Placer County, 1994).

6.2 AFFECTED ENVIRONMENT

6.2.1 Regional Overview

The number of jobs in the Sacramento region increased by more than 800 percent between 1950 and 2000, from approximately 100,000 in 1950 to 921,000 in 2000. The total number of jobs in the region is expected grow slightly faster than population over the next 50 years, increasing another 105 percent, to almost 1.9 million jobs by 2050.

The Sacramento region's share of all jobs in California increased from 4.5 percent in 1979 to 5.2 percent in 1990, to 5.5 percent in 1995, and to 5.7 percent in 2000. The region's share of statewide jobs has risen steadily because the region has continued to attract an above average share of the state's new job growth, capturing approximately 8 percent of California's job growth between 1979 and 2000 (Levy and Doche-Boulos, 2005).

After 2000, the region's share of jobs continued to rise, as employment shifted from other areas of California during the economic recession. Between 2000 and 2005, the largest job growth was experienced in the construction sector, followed by the government and health care sectors. The only sectors to lose jobs during this period were Manufacturing and Professional and Business Services (Paquin, 2006).

Government has historically been the strongest employment sector in the Sacramento region, but that has changed in recent years. As land available for development in the San Francisco Bay Area became more scarce and prices escalated, businesses moved to the Sacramento region, diversifying the region's economic base. Jobs in electronics, manufacturing, information services, health care, agriculture, food processing, and tourism have increased rapidly in recent years (SACOG, 2005).

The six-county SACOG region is expected to add 2 to 2.5 percent more jobs annually in the short term (through mid-2007, with the rate of job growth decelerating slightly after that time), with the highest gains expected in the Government sector. Other sectors expected to see substantial job growth include the Manufacturing and Construction sectors, while the Information sector is expected to continue to experience job decreases (SPHERE Institute and Stanford Institute for Economic Policy Research, 2005).

Employment

Table 6-1 displays recent data on the breakdown of employment by sector in the three study area counties. As this table indicates, Sacramento County provides the most employment, with a high concentration of jobs in the Government sector. The region's recent rapid growth is reflected in the concentration of jobs in the Construction sector, as well as in Retail Trade (especially in Placer and Sacramento counties). Many of the new jobs in high technology and health care are concentrated along the I-80 and SR 65

corridors, spurring growth in the Cities of Roseville, Rocklin, and Lincoln. Farm employment represents about 10 percent of all employment in Sutter County, but less than 1 percent in the other two counties.

Table 6-1
Full-Time and Part-Time Employment by Industry, 2003

Area	Sutter County	Placer County	Sacramento County
Total employment	42,471	170,278	759,033
Farm employment	4,346	1,478	3,430
Forestry, fishing, related activities	1,908	547	1,4981
Mining	107	211	488
Utilities	96	494	869
Construction	2,557	21,470	50,469
Manufacturing	2,196	10,400	31,851
Wholesale trade	1,202	3,349	21,312
Retail Trade	6,180	24,019	80,478
Transportation and warehousing	1,317	3,245	14,667
Information	271	3,106	18,942
Finance and insurance	1,246	9,488	46,214
Real estate and rental and leasing	2,017	9,606	26,680
Professional and technical services	1,739	10,661	49,881
Management of companies and enterprises	(D)	1,905	7,160
Administrative and waste services	2,099	9,942	46,071
Educational services	668	2,850	11,976
Health care and social assistance	4,137	13,420	64,324
Arts, entertainment, and recreation	(D)	4,693	12,932
Accommodation and food services	2,356	14,122	45,167
Other services, except public administration	2,633	16,998	42,698
Federal, civilian	171	670	7,476
Military	155	544	3,310
State and local government	3,989	15,784	171,140

Source: Regional Economic Information System, Bureau of Economic Analysis, 2005a, Table CA25 (NAICS), April 2005.
(D) – Not shown to avoid disclosure of confidential information, but the estimates for this item are included in the totals.

Placer County has experienced stronger annual employment growth rates than the state of California, the San Francisco Bay Area or the SACOG region since 1992. In 2004, it was ranked as the fourth county in the nation in year-over-year job growth, at 6.3 percent. Since 1998, the strongest employment gains have been in the Construction sector, which accounted for 13 percent of all employment in 2003 and almost 98 percent of Placer County's employment growth between 1998 and 2003, reflecting population and business growth in the County and increased demand for homes and commercial space. Other employment increases were experienced in Financial Activities and in Educational and Health Services, while manufacturing jobs declined (SRRI, 2004).

Employment Centers in the Study Area

Historically, the study area's economy has been based on agriculture, but in recent years a number of manufacturing businesses have moved into the area, and there are proposals and plans that would bring considerable new job growth to the area. At present, there are several small businesses, such as convenience stores, cafes, and farm supply stores, scattered throughout the study area, but two areas have more intensive industrial/commercial development, with associated concentrations of jobs. These are the

Sunset Industrial Area located near SR 65 in the Eastern Segment and the South Sutter industrial/commercial reserve area located south of Sankey Road in the Western Segment.

Placer County's Sunset Industrial Plan Area includes a variety of industrial and warehousing uses located along Industrial Boulevard, as well as business park developments along SR 65. The polygons representing these clusters of industrial and commercial development, as shown on Figure 6-1, occupy more than 600 acres within the study area.

Businesses in the industrial/commercial reserve area of south Sutter County include the Sysco Foods plant, Holt of California, and JB Construction. A concrete batch plant and several manufacturing businesses are located along Pacific Road. In addition, a cluster of businesses (including warehousing and miscellaneous small retail and service businesses) is located on the south side of Sankey Road, immediately west of the Natomas East Main Drainage Canal.

Other major employment centers that are close to the study area include those in the cities of Roseville, Rocklin and Lincoln. In Roseville, major private employers include Hewlett-Packard, NEC Electronics, Kaiser Medical Center, Union Pacific Railroad, SureWest Communications, Sutter Roseville Medical Center, and Agilent Technologies. Those in the City of Rocklin include Oracle Corporation, Hewlett-Packard, TASQ Technology and the Sierra Community College District. Thunder Valley Casino is the major employer near the City of Lincoln. Other major employers in Lincoln are Solectron Global Services and Sierra Pacific Industries (SRRI, 2004).

The Roseville-Rocklin area is gaining a reputation as a leader in information technology. Hewlett-Packard has approximately 5,500 employees between the main 500-acre Roseville site and the satellite campuses in Rocklin and Lincoln. The Roseville site was established in 1979, making Hewlett-Packard Roseville's largest employer. Operations include research and development and customer support (Placer County, 2006a; Hewlett-Packard Development Company, L.P., 2006).

Employment growth in southwestern Placer County is expected to remain strong. Among the recent proposals for mixed use developments within the study area are two proposals for university campuses—the Regional University and a satellite campus for the California State University at Sacramento to be included in the Placer Ranch Specific Plan area. These two university facilities are expected to provide approximately 9,400 jobs and generate more than 1 billion dollars in economic output annually (Thomson, 2004).

In addition, job growth is expected in the south Sutter County Sutter Pointe Specific Plan area, which lies within the study area. Projected total employment estimates associated with major new development proposals in and around the study area are as follows (DKS Associates, 2006):

- Curry Creek 12,303
- Regional University 1,309
- Placer Ranch 29,372
- Placer Vineyards 11,869
- Creekview 650
- Sierra Vista 4,929
- Lincoln SOI expansion 37,405
- Sutter Pointe Specific Plan 15,022

6.2.2 Labor Force and Unemployment

Table 6-2 presents data on the labor force and unemployment rates in the three study area counties in 2000 and 2005. Sacramento County has the largest labor force, followed by Placer County. Sutter

County has a considerably smaller resident labor force. Unemployment rates have been relatively stable in the three counties. Placer County and Sacramento County have unemployment rates around 4 percent, somewhat better than the statewide unemployment rate of around 5 percent, while Sutter County's unemployment rate is considerably higher, exceeding 9 percent, reflecting its dependence on agriculture.

Table 6-2
Annual Average Labor Force Size and Unemployment Rates, California and Study Area Counties, 2000 and 2005

Area	Labor Force		Unemployment		Rate	
	2000	2005	2000	2005	2000 (%)	2005 (%)
California	16,857,500	17,695,600	833,200	948,700	4.9	5.4
Sutter County	38,000	40,800	3,600	3,800	9.4	9.4
Placer County	131,500	162,300	4,700	6,400	3.6	4.0
Sacramento County	606,000	673,800	26,400	32,400	4.4	4.8

Source: Employment Development Department, Labor Market Information Division, 2006, Report 400c, Monthly Labor Force Data for Counties, 2005.

6.2.3 Income

Median and mean household income in the SACOG region grew faster than the rate of inflation from 1979 to 1999. Median household income in the region grew by 24.7 percent over the two decades, for an average annual growth rate of 1.1 percent, compared with 0.8 percent for the state and the nation during the same time period. Both median and mean household incomes in the SACOG region are expected to continue to rise in the coming decades. Median household income, adjusted for inflation, is projected to increase from $45,267 in 1999 to $58,516 in 2020 and to $83,481 in 2050. Average household income is projected to increase from $58,376 in 1999 to $73,565 in 2020 and $101,135 in 2050 (Levy and Doche-Boulos, 2005).

Table 6-3 presents recent data on the number of employed persons and per capita personal income for the study area counties in 2000 and 2003. Reflecting the size of their respective labor forces, Sacramento County had the highest number of employed persons, followed by Placer County. Per capita income was highest in Placer County—approximately 22 percent higher than per capita income in Sacramento County and 43 percent above per capita income in Sutter County. Table 6-4 presents information on total wage earnings by industry in study area counties for 2004.

Table 6-3
Total Employment and Per Capita Income, California and Study Area Counties, 2000 and 2003

Area	Employment (number of jobs)		Per capita personal Income	
	2000	2003	2000	2003
California	19,626,033	19,746,205	$32,464	$33,415
Sutter County	38,810	42,471	$24,487	$25,606
Placer County	147,756	170,278	$36,419	$36,613
Sacramento County	728,803	759,033	$28,463	$30,129

Source: Regional Economic Information System, Bureau of Economic Analysis, 2005b, Table CA04 County income and employment summary, April 2005

Table 6-4
Total Annual Wage Earnings by Industry, Study Area Counties, 2004

	Industry	Pay	Sutter County	Placer County	Sacramento County
Private	Total, all Industries:	Total Payroll ($1,000)	$610,347	$4,384,034	$16,889,917
		Avg. Weekly Pay	$531	$740	$749
	Goods-Producing:	Total Payroll ($1,000)	$185,557	$1,452,496	$3,499,910
		Avg. Weekly Pay	$521	$983	$894
	Natural Resources and Mining	Total Payroll ($1,000)	$73,107	$16,830	$65,620
		Avg. Weekly Pay	$369	$436	$451
	Construction	Total Payroll ($1,000)	$54,194	$711,348	$1,821,892
		Avg. Weekly Pay	$704	$798	$807
	Manufacturing	Total Payroll ($1,000)	$58,256	$724,318	$1,612,398
		Avg. Weekly Pay	$721	$1,321	$1,067
	Service-Providing:	Total Payroll ($1,000)	$424,791	$2,931,538	$13,390,007
		Avg. Weekly Pay	$536	$659	$719
	Trade, Transportation, and Utilities	Total Payroll ($1,000)	$173,927	$829,740	$3,151,402
		Avg. Weekly Pay	$583	$630	$648
	Information	Total Payroll ($1,000)	$8,912	$150,731	$873,046
		Avg. Weekly Pay	$886	$1,031	$1,023
	Financial Activities	Total Payroll ($1,000)	$32,264	$553,973	$2,287,973
		Avg. Weekly Pay	$611	$1,073	$1,008
	Professional and Business Services	Total Payroll ($1,000)	$59,555	$553,722	$2,936,546
		Avg. Weekly Pay	$611	$746	$823
	Education and Health Services	Total Payroll ($1,000)	$105,288	$505,851	$2,599,584
		Avg. Weekly Pay	$626	$754	$844
	Leisure and Hospitality	Total Payroll ($1,000)	$25,466	$245,008	$773,865
		Avg. Weekly Pay	$225	$284	$310
	Other Services	Total Payroll ($1,000)	$19,373	$92,100	$766,151
		Avg. Weekly Pay	$370	$481	$513
Government	Unclassified	Total Payroll ($1,000)	$6	$413	$1,440
		Avg. Weekly Pay	$53	$322	$484
	Federal Government	Total Payroll ($1,000)	$7,507	$33,013	$480,494
		Avg. Weekly Pay	$840	$924	$1,237
	State Government	Total Payroll ($1,000)	$2,972	$11,626	$5,983,690
		Avg. Weekly Pay	$727	$616	$1,145
	Local Government	Total Payroll ($1,000)	$145,312	$628,154	$2,840,833
		Avg. Weekly Pay	$705	$843	$843

Data Source: Quarterly Census of Employment and Wages (EDD, 2006).

6.2.4 Transportation Facility Funding

Funding for transportation projects is available from federal, state, regional and/or local sources, although in recent years, funding has not kept pace with needs. Budget deficits have restricted the funding available for needed transportation improvements and have delayed implementation of approved projects. Placer County's few "promised" transportation projects (i.e., projects identified as priorities in the RTP and for which future funding is anticipated to be committed when it becomes available) like the Lincoln By-pass and the I-80/Sierra College Boulevard Interchange have been delayed due to lack of funding. Available federal and state funds have been allocated toward breaking the I-80 bottleneck and transit expansions, but local matches are required (PCTPA, 2006; HDR/HLB Decision Economics Inc., 2006).

At the federal level, on August 10, 2005, the President signed into law the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). With guaranteed funding for highways, highway safety, and public transportation totaling $244.1 billion, SAFETEA-LU represents the largest surface transportation investment in history. Some of the SAFETEA-LU funds, approximately $61 million, have been allocated to PCTPA. It builds on the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21). The State of California provides funding through three separate programs: the State Transportation Improvement Program (STIP), the State Highway Operation and Protection Program (SHOPP) and the Traffic Congestion Relief Program (TCRP).

Many local jurisdictions in California now levy development impact fees, so that new development pays for the additional infrastructure that is required to accommodate it. Most of these development fees pay for local road improvements, but financing regional roadway improvements can be more challenging.

In 2002, four local jurisdictions in Placer County—Placer County and the cities of Roseville, Rocklin, and Lincoln—formed the South Placer Regional Transportation Authority (SPRTA), a joint powers authority (JPA). The JPA's purpose is to coordinate planning, design, financing, determining construction timing, and construction for several regional transportation improvements – including the Placer Parkway. One of SPRTA's powers is to collect and implement a regional transportation and air quality mitigation fee on new development. This fee program is expected to generate $55 million for the Placer Parkway.

Funding for planning and environmental work conducted on the project to date has come from a variety of sources, including STIP and SPRTA. Funding for future phases of the project is uncertain. At present, there are many more proposed transportation projects than there are funds available to implement them, and the condition of the federal and state budgets continues to make future funding commitments for transportation infrastructure improvements uncertain. The project sponsors are considering a variety of alternative potential funding mechanisms, including new developer fees, county-wide transportation sales tax, and toll facilities (PCTPA, 2005; PCTPA, 2006). It is assumed that Sutter County would contribute to Parkway costs through development exactions in the Sutter Pointe Specific Plan, and that Placer County would demand similar exactions for projects in and adjacent to the Parkway corridor. It is anticipated that Placer Parkway would be constructed in phases, as individual developers contribute certain interchanges or roadway segments as part of their master-planned developments and/or as funds become available.

One of the first funding challenges to develop the Placer Parkway will be to acquire land that can be used as mitigation. Waiting until the roadway and its Tier 2-level environmental review to be completed will make securing mitigation lands more difficult and expensive. PCTPA has requested that Placer County staff help to secure land to mitigate Parkway impacts through development agreements for Specific Plans in and adjacent to the study area.

6.3 IMPACT ANALYSIS

6.3.1 Significance Criteria

Based on pertinent existing laws and regulations, Caltrans impact assessment guidance and professional judgment, Placer Parkway would be considered to have significant economic impacts if it would:

- disrupt or divide the physical arrangement of a major established business park or employment center;
- displace a large number of businesses and jobs;
- cause substantial loss of local government revenues; or
- be inconsistent with local adopted goals and policies pertaining to economic growth and development.

6.3.2 Approach to Analysis

Direct impacts to businesses and employment in the study area were identified by comparing the footprint of the corridor alignment alternatives to aerial photographs and the GIS database that contained coordinates for the locations of employment centers and individual businesses within the study area. For the purposes of this analysis, it was assumed that if a business fell within a corridor alignment it would be affected, even though it may be possible to avoid the business in the future, when a specific roadway right-of-way is selected within the corridor. Project-related employment and income benefits were estimated using national multipliers developed through FHWA-funded research. Pertinent adopted goals and policies were reviewed to determine consistency or inconsistency with project alternatives.

6.3.3 Direct Economic Impacts

Table 6-5 presents a summary of potential direct impacts to existing employment centers in the study area that would be associated with each of the build alternatives, indicating the potential to disrupt or divide the physical arrangement of a major established business park or employment center, or to displace a large number of jobs—the first and second significance criteria above (the third and fourth criteria are addressed in Sections 6.3.4.2 and 6.3.3.7 below, respectively).

Table 6-5
Summary of Direct Impacts to Employment Centers
Associated with the Project Alternatives

Alignment Alternative	Affected Employment Centers (number)			Affected Employment Centers (acres)		
Segment	**W**	**C**	**E**	**W**	**C**	**E**
1	0	0	1	0	0	19
2	0	0	1	0	0	19
3	0	0	1	0	0	19
4	1	0	1	2	0	19
5	1	0	1	2	0	19
Data Source: Aerial photo and URS Corporation GIS data summary file, February 2006.						

Table 6-6 presents a summary of the acres of farmland that would be lost under each of the build alternatives. Removing farmland from agricultural production would result in loss of revenues from crop sales, which is very roughly estimated based on an average commodity price of $1,000 per acre[4] and assuming all of the lost acres are used for crop production. Potential direct impacts on employment centers and crop values in the study area are described by alternative alignment and by segment below. (Loss of jobs associated with the employment centers cannot be calculated at this time. Losses of agricultural jobs associated with farmland conversion are expected to be minimal, because of the predominance of rice cultivation and cattle ranching in the project study area. These are typically family farming operations that are not dependent upon seasonal or migrant labor, the way vineyard or orchard operations are.)

Table 6-6
Acres of Farmland Potentially Affected by Project Alternatives

Alternative	Western Segment (acres)	Central Segment (acres)	Eastern Segment (acres)	Total Acreage Affected
Alternative 1	356	423	29	808
Alternative 2	356	606	29	991
Alternative 3	356	581	29	966
Alternative 4	305	343	29	677
Alternative 5	305	576	29	910

Source: Department of Conservation Farmland Mapping and Monitoring Program – 2002 data for Placer County and 2004 data for Sutter County; and California Spatial Information Library GIS database.

6.3.3.1 No-Build Alternative

Under the No-Build Alternative, land would not be acquired for Placer Parkway and the Parkway would not be constructed. There would not be any economic impacts under the No-Build Alternative.

6.3.3.2 Alternative 1 – the Red Alternative

Western Segment. Alternative 1 is located outside of the major employment centers in the Western Segment and would not directly impact these resources. The potential value of crops lost as a result of farmland conversion in this segment is estimated at $356,000.

Central Segment. There are no major employment centers currently located in the Central Segment. Alternative 1 would therefore not affect any major employment centers in this segment of the study area. The potential value of crops lost as a result of farmland conversion in this segment is estimated at $423,000.

Eastern Segment. Alternative 1 would impact approximately 19 acres of the existing Rio Bravo biomass power plant property in the Sunset Industrial Area in the vicinity of Industrial Boulevard, potentially displacing jobs and affecting the viability of the businesses on the remnant parcels. The potential value of crops lost as a result of farmland conversion in this segment is estimated at $29,000.

[4] This figure is based on Sutter and Placer County average crop values per harvested acre of rice in 2003 and 2004. In Sutter County, this was $1,085 per acre in 2003 and $740 per acre in 2004 (Sutter County Agricultural Commissioner, 2005). In Placer County, this was $1,360 per acre in 2003 and $843 per acre in 2004 (Placer County Agricultural Commissioner, 2006). (Substantial increases in rice production in 2004 resulted in significantly lower prices per ton, which is why an approximate average price per acre is used conservatively for the purpose of this analysis).

6.3.3.3 Alternative 2 – the Orange Alternative

Western Segment. Alternative 2 is located outside of the major employment centers in the Western Segment and would not directly impact these resources. The value of crops lost as a result of farmland conversion would be the same as Alternative 1.

Central Segment. No major employment centers are identified in the Central Segment. Alternative 2 would therefore not affect any major employment centers in this portion of the study area. The potential value of crops lost as a result of farmland conversion in this segment under Alternative 2 is estimated at $606,000.

Eastern Segment. Direct impacts to employment centers associated with Alternative 2 would be identical to those identified for Alternative 1 in the Eastern Segment. The potential value of crops lost as a result of farmland conversion in this segment is estimated at $356,000, the same as Alternative 1.

6.3.3.4 Alternative 3 – the Blue Alternative

Western Segment. Alternative 3 is located outside of the major employment centers in the Western Segment and would not directly impact these resources. The value of crops lost as a result of farmland conversion would be the same as Alternative 1.

Central Segment. No major employment centers are identified in the Central Segment. Alternative 3 would therefore not affect any major employment centers in this portion of the study area. The potential value of crops lost as a result of farmland conversion in this segment under Alternative 3 is estimated at $581,000.

Eastern Segment. Direct impacts on employment centers associated with Alternative 3 would be identical to those identified for Alternative 1, as would the estimated value of crops lost due to farmland conversion.

6.3.3.5 Alternative 4 – the Yellow Alternative

Western Segment. Alternative 4, which would terminate near Sankey Road, would affect 2 acres of the Sysco property but would not directly affect the building or existing parking facilities. The Sankey Road realignment that would occur under this alternative would affect the complex of small industrial and commercial enterprises located on the south side of Sankey Road just west of the UPRR tracks.

The potential value of crops lost as a result of farmland conversion in this segment from Alternative 4 is estimated at $305,000 annually.

Central Segment. No major employment centers are identified in the Central Segment. Alternative 4 would therefore not affect any major employment centers in this portion of the study area. The potential value of crops lost as a result of farmland conversion in this segment under Alternative 4 is estimated at $343,000.

Eastern Segment. Direct impacts on employment centers associated with Alternative 4 in the Eastern Segment would be identical to those identified for Alternative 1, as would the estimated value of lost crop production.

6.3.3.6 Alternative 5 – the Green Alternative

Western Segment. Alternative 5 would follow the same alignment as Alternative 4 in the Western Segment. It would impact 2 acres of industrial uses on the south side of Sankey Road, but would

probably not displace any businesses because of the small amount of land affected. The value of crops lost as a result of farmland conversion in this segment would be the same as for Alternative 4.

Central Segment. No major employment centers are identified in the Central Segment. Alternative 5 would therefore not affect any major employment centers in this portion of the study area. The potential value of crops lost as a result of farmland conversion in this segment under Alternative 5 is estimated at $576,000.

Eastern Segment. Direct impacts on employment centers associated with Alternative 5 in the Eastern Segment would be identical to those identified for Alternative 1, as would the estimated value of crops lost as a result of farmland conversion.

6.3.3.7 Comparison of Alternatives

All of the build alternatives would directly impact the same employment center in the Eastern Segment, in the Sunset Industrial Area, and would not affect any employment centers in the Central Segment. Alternatives 1, 2, and 3 would not directly impact any employment centers in the Western Segment, while Alternatives 4 and 5 would impact several businesses located on the south side of Sankey Road. The estimated value of crops lost as a result of farmland conversion under the various alternatives would be similar, with estimates ranging from $808,000 (Alternative 1) to $991,000 (Alternative 2). Placer Parkway is included in the RTP and MTP, and its Purpose and Need statement includes a goal of fostering economic growth. The conflict between economic development and farmland preservation is evident in all of the proposed development planned for the region (see Section 4.3.5 for discussion of the cumulative impacts of regional growth on agricultural resources).

Western Segment. In the Western Segment, Alternatives 1, 2, and 3, which would terminate north of Riego Road, would not directly affect any existing businesses or employment centers in the study area. Alternatives 4 and 5, which would terminate near Sankey Road, would impact 2 acres of industrial uses on the south side of Sankey Road, but would probably not displace any businesses because of the small amount of land affected. The estimated value of crops lost as a result of converting farmland to a roadway use is estimated at $356,000 under Alternatives 1, 2, and 3, and at $305,000 under Alternatives 4 and 5.

Central Segment. As no major employment centers are located in the Central Segment, none of the alternative alignments would cause any impacts on these resources. The estimated value of crops lost as a result of farmland conversion would be highest in this segment, ranging from $343,000 (Alternative 4) to $606,000 (Alternative 2).

Eastern Segment. Employment and crop loss impacts associated with all build alternatives would be identical in the Eastern Segment, because they all follow the same alignment in this segment.

Consistency with Adopted Goals and Policies

The No-Build Alternative would be inconsistent with Placer County economic development policy 1.N.2, which states that the county shall encourage the retention, expansion and development of new businesses by providing infrastructure in areas where resources and public facilities and services can accommodate employment generators. The Sunset Industrial Area has been designated as such an area, but development of businesses in this area has been hindered by infrastructural constraints, including local traffic congestion and lack of efficient access to air freight services at the Sacramento International Airport.

All build alternatives would be inconsistent with Sutter County and Placer County policies aimed at preserving and enhancing agricultural activities in the county, such as Sutter County economic development Goal 6.B and related policies aimed at facilitating preservation, growth and expansion of agricultural industries within Sutter County; as well as Placer County General Plan Policy 7.A.3, which states that the county shall encourage continued and increased agricultural activities on lands suited to agricultural uses.

6.3.4 Secondary and Indirect Impacts

No-Build Alternative

Under the No-Build Alternative, land would not be acquired for Placer Parkway and the Parkway would not be constructed. There would not be any secondary and indirect impacts under the No-Build Alternative.

Alternatives 1 Through 5

Because employment and income associated with future roadway construction would not occur in the same time and place as the corridor preservation action, these are addressed as secondary and indirect impacts below. These impacts would not occur within specific segments of the study area as defined for the purposes of this analysis, but would be more regional in nature. Similarly, since fiscal impacts would occur at the time of land acquisition for right-of-way preservation and continue into the future, these are also described as secondary and indirect impacts below.

6.3.4.1 Construction Employment and Income Benefits

Project-related employment and income impacts associated with all of the build alternatives would be similar, but it is not possible to predict where these would occur, because it is not known where the major suppliers or construction contractors would be located or where construction labor would be hired. Direct, indirect, and secondary employment and income benefits would be experienced within Sutter, Placer and Sacramento counties, but many of these benefits could be dispersed throughout the greater Sacramento region, northern California or beyond.

The total estimated cost of construction for Placer Parkway would be more than $600 million, as shown on Table 6-7, which presents the current preliminary estimated costs for right-of-way acquisition, environmental mitigation, engineering, and construction by segment. The current preliminary estimated cost for the Parkway is approximately $611 million for a four-lane facility and $654 million for a six-lane facility. This includes approximately $158 million for right-of-way and environmental costs and approximately $453 million for construction for the four-lane facility, and $160 million for right-of-way and environmental costs and $495 million for construction for the six-lane facility (HDR/HLB Decision Economics, 2006; URS Corporation, 2005).

FHWA estimates transportation infrastructure accounts for 11 percent of the nation's economic activity, and that every dollar invested in the highway system yields $5.60 in economic benefits (FHWA, 1999b). Using the FHWA average multiplier, the $453 construction expenditure would result in approximately $2.5 billion in regional economic benefits. FHWA research has shown that expenditures of capital for highway improvements reduces costs, increases efficiency and expands output of businesses in the region, resulting in increased demand for labor, capital, and materials, generally strengthening the regional economy (FHWA, 1999a).

Table 6-7
Estimated Placer Parkway Total Project Cost
(Preliminary)

Placer Parkway – Four-Lane Facility				
Items	Segment			Complete Corridor
	Western	Central	Eastern	
Right-of-Way/Utilities	$18,700,000	$48,100,000	$48,600,000	$115,400,000
Environmental Mitigation	$5,800,000	$14,200,000	$11,200,000	$31,200,000
Environmental Analysis	$4,250,000	$4,510,000	$2,990,000	$11,800,000
Engineering Design	$10,640,000	$11,270,000	$7,490,000	$29,400,000
Project Segment Construction	$141,800,000	$150,200,000	$99,800,000	$391,800,000
Construction Administration (8%)	$11,340,000	$12,020,000	$7,980,000	$31,400,000
Total	$192,530,000	$240,300,000	$178,060,000	$610,900,000
Placer Parkway – Six-Lane Facility				
Right-of-Way/Utilities	$18,700,000	$48,100,000	$48,600,000	$115,400,000
Environmental Analysis	$4,510,000	$3,630,000	$4,720,000	$12,900,000
Environmental Mitigation	$5,800,000	$14,200,000	$11,200,000	$31,200,000
Engineering Design	$11,270,000	$9,080,000	$11,800,000	$32,200,000
Project Segment Construction	$150,200,000	$121,000,000	$157,300,000	$428,500,000
Construction Administration (8%)	$12,020,000	$9,680,000	$12,580,000	$34,300,000
Total	$202,500,000	$205,690,000	$246,200,000	$654,400,000

Notes: Construction costs are based on October 2005 unit costs. Estimate is based on Alternative 3 alignment with north of Riego Road interchange.
Data Source: HDR/HLB Decision Economics, 2006.

Based on FHWA's estimate that every billion dollars spent in highway construction generates 42,000 jobs, the $453 million spent on constructing a four-lane Placer Parkway would generate an estimated 19,026 jobs. Of these, approximately 8,942 workers would be employed supplying highway construction materials and equipment, 6,469 would work in businesses where construction dollars are spent and 3,615 would work at roadway construction sites (FHWA, 1999b). Regional economic and employment benefits would be about 7 percent higher for a six-lane facility.

It is anticipated that Placer Parkway would be constructed in phases, as individual developers contribute certain interchanges or roadway segments as part of their master-planned developments and as funding becomes available (e.g., four lanes could be constructed initially, with two additional lanes added at a later time).

6.3.4.2 Fiscal Impacts

As reported in Section 3.3 and summarized on Table 6-8, the Parkway would convert almost two thousand acres of land in the study area to a transportation corridor. This would result in the permanent

loss of some current property tax revenues received by local jurisdictions, as taxable land uses are converted to nontaxable highway right-of-way. In addition, farmland that is under Williamson Act contracts that would be converted to the roadway corridor (as shown on Table 4-10) would result in further reductions in local revenues, through the loss of the partial tax reimbursements made to Placer County by the state under that program.

Table 6-8
Amount of Land Potentially Affected by Project Alternatives (Acres)

Alternative	Western Segment	Central Segment	Eastern Segment	Total Acreage Affected
Alternative 1	385	903	630	1,918
Alternative 2	385	821	630	1,837
Alternative 3	385	848	630	1,864
Alternative 4	321	677	630	1,628
Alternative 5	321	672	630	1,623
Source: Department of Conservation Farmland Mapping and Monitoring Program – 2002 data for Placer County and 2004 data for Sutter County; and California Spatial Information Library GIS database.				

Because of the uncertainty about funding sources for construction of Placer Parkway, other local fiscal impacts of roadway construction on regional or local jurisdictions cannot be evaluated at this time. It is likely that the estimated $600 million facility construction cost would be financed using a variety of federal, state, regional, and local funding sources—such as government grants, development mitigation fees and special sales taxes—and possibly even private funding (the toll road option). A special study conducted in 2006 by HDR/HLB Decision Economics, Inc., for SPRTA indicated that constructing the Placer Parkway as a toll road could be a feasible option, especially if there were to be a combination of public and private financing available for the project. The conclusion was based on population projections for the area, projections of household income, anticipated congestion on the local roadway network without the Parkway and estimated travel time savings that would be achieved by using Placer Parkway. Annual operation and maintenance costs for Placer Parkway as a toll road were estimated at approximately $1 million per mile, or approximately $15 million annually in 2005 dollars (HDR/HLB Decision Economics, 2006).

6.3.5 Cumulative Impacts

No-Build Alternative

Under the No-Build Alternative, land would not be acquired for Placer Parkway and the Parkway would not be constructed. There would not be any cumulative impacts under the No-Build Alternative.

Alternatives 1 Through 5

The major development projects proposed for the project area (see Section 3.3.5 and Figure 3-4) and surrounding vicinity (including two new university campuses) will contribute to strengthening and diversifying the local and regional economy (this would be a cumulative economic benefit, not a significant adverse impact). While the proposed development would result in further losses of farm revenues, this would be replaced by other forms of revenue, including employment and sales taxes, as well as higher property tax revenues.

The project would contribute to the cumulative loss of farmland (as discussed in Section 4) and associated revenues from agricultural activities in the study region. The study area contains approximately 35,454 acres of land, most of which are undeveloped. The percentage of the study area as a whole that is estimated to be converted from its present use by the Parkway ranges between and 1,623 and 1,918 acres (4.58 and 5.41 percent of this area, respectively). As shown on Figures 3-1 and 3-2, most of this acreage is either zoned for agricultural production, capable of being used for agricultural production, or in agricultural production. As shown in Table 6-5, the total acres of farmland potentially affected by the Parkway is estimated to range from 677 to 991 acres, with potential loss of crop value estimated from $808,000 to $991,000 (see Section 6.3.3.7). The Parkway could also potentially affect industrial uses on the south side of Sankey Road, but would probably not displace any of these businesses because the effect would be minimal. The Parkway would also affect up to 19 acres of the Rio Bravo biomass power plant property in the Sunset Industrial Area, depending on where the roadway is finally sited. Any affects on the economic viability of these facilities would be fully mitigated.

As shown on Figure 3-4, the potential for development within the study area dwarfs the area that would be used by the selected Parkway alignment. The cumulative developments shown on this figure, and described in Section 3.2.4.1 through 3.2.4.3, would have a major effect on economic losses related to loss of farmland in the study area. Based on the relative proportion of Placer Parkway's farmland conversion as compared to the entire cumulative development scenario, and the Parkway's absolute dollar contribution, this contribution is not cumulatively considerable in the context of expected farmland losses as a whole.

Placer Parkway would contribute to a stronger and more diversified local and regional economy. The project would contribute to the structural change from an agricultural economy to an increasingly diversified economic base and increased property tax revenues, as higher-density urban uses replace farming, especially in the Western and Eastern segments. It would contribute to regional economic strength and to the development of commercial and industrial businesses planned for the Sutter Pointe Specific Plan area, the Sunset Industrial Area, and the proposed Placer Ranch Specific Plan area by improving access to these areas; providing an alternative to SR 65 and I-80 for connecting the Roseville-Rocklin-Lincoln area to the Sacramento airport; and improving LOS on roadway segments.[5]

The Parkway's contribution to the estimated value of crops lost as a result of farmland conversion is not cumulatively considerable and would be more than offset by other forms of revenue such as employment and sales taxes and a higher property tax base from planned and proposed development within the study area that could be accelerated by the Parkway. Because cumulative economic impacts are not significant, and because the Parkway's contribution to cumulative economic impacts are likewise not significant, cumulative economic impacts of the Parkway would be less than significant.

6.3.6 Potential Watt Avenue Interchange

A future interchange at Watt Avenue would improve regional connectivity, which could have a positive effect on some businesses (particularly those providing goods or services to or at locations near intersections along the new Parkway). It could shorten commute distances for some drivers within the region, if they live or work in the vicinity of the future interchange. Because a Watt Avenue intersection would increase traffic volumes substantially, however, it would decrease levels of service on many segments of the new roadway if only four lanes are constructed, potentially reducing the reliability or efficiency of the link between businesses located in the Sunset Industrial Area and the Roseville-Lincoln-

[5] LOS is a qualitative measure of the effect of a number of factors which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operation costs. Levels of Service are designated "A" through "F," from the best to worst, which cover the entire range of traffic operations that might occur. Level of Service "E" describes conditions approaching or at maximum capacity.

Rocklin area and the Sacramento airport and associated regional economic benefits. The levels of service on the Parkway with a six-lane facility and a Watt Avenue interchange are not projected to fall below LOS C, with the expected exception of Alternative 3, which is projected to operate at LOS D in the segment east of Watt Avenue.

6.3.7 Avoidance, Minimization and/or Mitigation Strategies

No significant adverse economic impacts were identified for this Tier 1 project. Individual businesses that would be displaced by the Proposed Action will be identified during the Tier 2 environmental analysis. Any such businesses would receive financial assistance and relocation assistance and other benefits provided under the Uniform Relocation Assistance Act.

Mitigation strategies (for further reducing or avoiding less-than-significant economic impacts) could include reducing the cost of Placer Parkway mitigation by securing mitigation lands early, possibly through developer agreements associated with the major new mixed-use developments proposed for the study area and surrounding vicinity. This strategy would result in purchasing mitigation lands using 2008 dollars, rather than 2020 dollars, and would provide greater certainty that mitigation lands would be available when and if needed, particularly in light of anticipated pressures on mitigation lands due to other planned and proposed major development in the region. During Tier 2, a roadway alternative could be designed that would minimize the taking of or encroachment into existing commercial/industrial facilities in the Western and Eastern Segments. Such considerations could include locating the roadway in a portion of the corridor that would avoid such facilities and/or phasing of median widening (e.g., from the SR 65 interchange to west of the Rio Bravo facility).

6.3.8 Analyses to be Undertaken in Tier 2

Further research to be conducted at the Tier 2 phase will include field research to identify specific businesses that could be displaced by the project, as well as the estimated number of jobs associated both with the displaced businesses and with any farm units that would no longer be economically viable as a result of reductions in size or parcel splitting. A Relocation Impact Report will be prepared to describe the potentially impacted businesses, as well as any special relocation needs they may have, and to evaluate the likely availability of comparable replacement resources in the vicinity. Fiscal impacts on local jurisdictions will be estimated based on revised information about parcels affected, current assessed values, Williamson Act contract status and proposed funding mechanisms for Placer Parkway corridor acquisition and construction.

7.0 GROWTH INDUCEMENT

7.1 REGULATORY FRAMEWORK

The California Environmental Quality Act requires that environmental documents: "Discuss the ways in which the project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth...Increases in the population may further tax existing community service facilities so consideration must be given to this impact. Also discuss the characteristic of some projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment" [CEQA Section 15126.2(d)]. In addition, NEPA requires consideration of the potential indirect project impacts, including those that may occur farther away or later in time, but are still reasonably foreseeable [NEPA Section 1508.8(b)].

Caltrans defines growth inducement as the relationship between a proposed project and growth within the transportation project area (Caltrans, 1997). The Caltrans Environmental Handbook, Volume 4, Community Impact Assessment (June 1997) is the primary guidance document that was used in the preparation of this CIA, including the growth inducement analysis. Just as this analysis was being completed, the Mare Island Accord interagency working group (representing FHWA, U.S. EPA, and Caltrans) released new guidance for assessment of growth-related impacts analyses (Mare Island Accord, 2006). The approach described in the new guidance is more elaborate than, but similar and complementary to, the earlier guidance. Specifically, it recommends a six-step approach for developing a growth-related impact analysis: (1) Review previous project information and decide on the approach/level of effort needed for the analysis; (2) Identify the potential for growth for each alternative; (3) Assess the growth-related effects of each alternative to resources of concern; (4) Consider additional opportunities to avoid and minimize growth-related impacts; (5) Compare the results of the analysis for all alternatives; and (6) Document the process and findings of the analysis. While this section is not structured to reflect these six steps in order, they were substantially completed during the course of this analysis. Step one has been an ongoing process throughout project design, with a commitment made to completing a thorough growth inducement analysis using multiple methodological approaches, as described in Section 7.2. This chapter of the CIA identifies growth inducement potential associated with the project alternatives (Step 2). A summary of the growth inducement findings was prepared and provided to the members of the environmental consulting team so that they could determine the implications of these findings for the resources of concern in the project area, and consider additional opportunities to avoid or minimize impacts (Steps 3 and 4). Results of the analyses have been compared and documented in the appropriate resource technical reports, as well as in the draft EIR/EIS (Steps 5 and 6).

Specific analytical approaches identified in the new guidance include contacting local planning agencies and business development councils for their input, and consulting with experts (such as planners, developers and agency staff). These approaches were used extensively in this CIA, particularly for the growth inducement analysis, as documented in Section 7.3.3.

7.2 METHODOLOGICAL APPROACH

Appendix B contains a summary of recent literature on the role of transportation infrastructure in land use changes or growth and development. As this literature demonstrates, growth and development patterns are shaped by a wide range of social, economic, political, and environmental influences. Many factors interact to encourage or discourage growth at any particular location. These factors are complex and interrelated, and there is no standard or widely accepted methodology for evaluating or quantifying how

any single factor, such as construction of a new transportation facility, contributes to local or regional growth.

Caltrans' guidance on growth inducement analysis acknowledges the difficulty of determining the relationship between transportation and land use accurately, or isolating the influence that transportation improvements have on growth and development, especially because in many instances transportation improvements are planned in cooperation with local and regional governments in response to anticipated, planned, and desired growth. The guidance describes a variety of quantitative and qualitative approaches that have been used on past transportation projects to address growth inducement. The guidance document includes a special appendix on growth inducement methodologies that describes four primary analytical techniques:

- the ***forecast methodology***, which describes the transportation planning and traffic engineering process that was used to determine the size and type of transportation facility proposed;
- ***factor analysis***, which identifies and evaluates the local factors that encourage or constrain growth and development in the study area;
- the ***No Action Alternative***, which focuses on a comparison of the projected growth that would occur with and without the project; and
- use of a ***growth inducement checklist***, which asks a series of questions about the project in relation to population and employment growth and trends in the study area.

The Caltrans guidance refers to the **forecast methodology** as the preferred methodology, because it is typically the most quantitative and least speculative of the analytical techniques reviewed.

With the recent rapid growth that has taken place northeast of the City of Sacramento, growth inducement has been identified by resource agencies and environmental groups as a concern with regard to any new proposed development in the study area and the surrounding vicinity. Because of the importance and relatively high sensitivity of the growth inducement issue for Placer Parkway, it was determined that the growth inducement analysis should be conducted using a number of different methods, employing both quantitative and qualitative analytical tools, to achieve a thorough growth inducement analysis. For this reason, all four of the methodological approaches identified above are employed for this analysis. In addition, input was solicited from planners, realtors, builders, and developers familiar with the study area, so that their expertise and knowledge of the area could be used to better understand growth and development trends in the region.

7.3 IMPACT ANALYSIS

This section evaluates potential growth inducement impacts related to Placer Parkway using three of the four methodologies described above—forecast method, factor analysis, the No-Build Alternative, and the Caltrans Growth Inducement Checklist. It also summarizes the results of informational interviews conducted with local planners, developers and real estate market specialists familiar with the study area. The Growth Inducement Checklist information is presented last, since many of the responses drafted to this list of standard questions are based on information developed or discussed in the sections that precede it.

7.3.1 Forecast Method

The forecast method summarizes the transportation planning process that was used to determine the size of the proposed facility, in order to illustrate the relationship between the project's capacity and the amount of growth expected to occur in the area by 2040, with the objective of distinguishing between growth inducement and the forecasting of traffic demand and transportation needs based on local and regional growth policies, and determined in conjunction with responsible local government agencies.

Placer Parkway planning has been a collaborative process involving representatives of federal, state, regional, and local governments, as well as substantial public involvement, over the past decade. Project planning has been coordinated with diligent and innovative regional and local planning efforts aimed at shaping actual and anticipated growth and development in south Sutter County, southwestern Placer County, and the greater Sacramento region over the next several decades. Project planning has occurred in coordination and communication with such efforts as SACOG's Blueprint transportation and land use visioning process, the Placer Legacy project, local habitat conservation planning efforts, and the preparation of numerous Specific Plans for proposed major new development projects in and around the study area.

As part of its effort to involve affected stakeholders, PCTPA established three specific committees for the Placer Parkway: a PAC, an SAC, and a TAC (as described in Section 1.1). In addition, federal agencies have been involved for endangered and threatened species issues, and through a modified NEPA/404 process for Clean Water Act provisions. These working groups have met regularly throughout the project planning process to help guide project development and identify alternative alignments that would minimize environmental impacts, enhance public safety, and be financially feasible.

Public comments were solicited on the goals and initial concepts for Placer Parkway through a newsletter with mail-in comment card and two public workshops conducted in September 1999. In October 1999, the PAC voted unanimously to recommend to the PCTPA and SACOG Boards that a Route Adoption Study be conducted to identify a feasible alignment for the Parkway. A recommended study area was delineated, and the PAC made several other recommendations regarding making the alignment independent of Baseline and Riego Roads, proposing to design it as a controlled-access highway that would meet Caltrans standards, with interchanges to SR 65 and SR 70/99.

Placer Parkway was first shown as a "plan line" concept in the Placer County General Plan adopted in 1994. The concept for this new regional roadway originated from a perceived need to connect planned development in the vicinities of SR 70/99 and SR 65. The rapidly expanding high technology and service businesses located along the SR 65 corridor and in the Sunset Industrial Area needed better access to the air freight services at the Sacramento airport.

The Conceptual Plan for Placer Parkway, completed in 2000, articulated a number of reasons why a new corridor connecting SR 65 to SR 70/99 should be preserved. These included:

- projections of very strong growth (by both SACOG and the State Department of Finance) for the western Placer County/southern Sutter County/northern Sacramento County sub-regions through 2040;

- associated substantial increase in travel demand on the inter-regional roadway system, resulting in deterioration of travel speeds and travel times on regional and local roadways;

- projections of strong job growth in western Placer County such that total employment in this area would exceed total employment in downtown Sacramento by 2022; and

- growth of high-technology industries in the SR 65 corridor, requiring efficient access to the Sacramento airport to move manufactured goods reliably and rapidly (DKS Associates, 2001).

The Conceptual Plan indicated that Baseline Road and Riego Road, with some improvements, could accommodate a portion of the expected growth in travel demand that would result from population and employment growth in the region, but would be overwhelmed without construction of an alternative east-west travel corridor capable of carrying more traffic at consistently high speeds.

The question of growth inducement has been considered throughout the planning process for Placer Parkway, and concerns related to this issue were addressed in both the 2000 Conceptual Plan and 2001 Project Study Report that were prepared for the project. Both documents contain an adopted goal to avoid growth inducement and protect the rural character of agriculturally designated areas. Policies that were adopted to support this goal include: (1) not allowing access to the roadway in areas designated for agricultural use; (2) creating a 500- to 1,000-foot no-development buffer zone along the Parkway; and (3) using control signage along the corridor.

The 2000 Conceptual Plan for Placer Parkway recommended initial construction of a four-lane limited-access highway, but preservation of sufficient right-of-way for future expansion to six lanes or potential inclusion of a rail line. Throughout the project planning period, however, projections of urban growth in southwestern Placer County and southern Sutter County have continued to increase, making it appear more likely that a six-lane facility would be needed to maintain LOS C conditions in portions of the corridor by 2040. The project's current recommended "sizing" is based on 2040 traffic forecasts developed by SACOG for the study area and the traffic analysis, which indicate that if the Parkway were constructed with four lanes, some segments of all alternative alignments (with or without the Watt Avenue interchange) would operate at LOS E or F in 2040. At six lanes, the Parkway would operate at LOS C or better for all segments of all alignments (refer to Transportation Technical Report). The traffic analysis concluded that all five corridor alignment alternatives (compared to the No-Build Alternative would increase total Vehicle Miles Traveled (VMT) on the affected regional roadway system, but would reduce the amount of VMT on congested roadways in the region. The projected increase in total VMT is attributed to "induced travel demand" (rather than higher density of population or more jobs), whereby people living and working in the region would make more or longer trips, or trips to different destinations than they would under more congested traffic conditions, because traffic congestion can discourage drivers from taking additional or longer trips. For each alternative, the potential Watt Avenue interchange would provide a greater reduction in VMT on the congested local roadways (DKS Associates, 2006).

As the preceding discussion indicates, Placer Parkway project planning to date has been primarily a cooperative and collaborative process aimed at meeting projected travel demand associated with actual and anticipated population and employment growth in the region, rather than an effort aimed at stimulating or facilitating unplanned growth.

7.3.2 Factor Analysis

Within the study area, as in any area, a wide variety of factors influence the direction and pace of development. This section reviews some of the major factors noted in the Caltrans guidance that can work to stimulate or constrain development in a particular area. These include the availability and relative cost of land, local government plans and policies, public attitudes toward growth and development, terrain and existing land use, cost and availability of labor, commute times, accessibility, infrastructure availability (water, sewer, roads), as well as any potential constraints associated with the proposed facility. Because the discussion of these factors is qualitative in nature, the discussion is summarized using a system of plus and minus signs to indicate whether these factors encourage or

discourage growth and development in each segment of the study area (Table 7-2). The paragraphs below provide a discussion that responds to the pertinent questions that are posed in the Caltrans guidance document for each of the factors.

Table 7-1
2040 LOS for Placer Parkway Segments, by Corridor Alignment Alternative

Projected LOS in 2040								
Alternative	**With or Without Future West Avenue Interchange**		**East of SR 70/99**	**East of Pacific St.**	**West of Watt Ave.**	**East of Watt Ave.**	**East of Fiddyment Road**	**West of SR 65**
1	With Option 1	4 lanes	D	E	F	D	D	E
		6 lanes	B	C	D	B	C	C
	With Option 2	4 lanes	C	C	D	D	D	E
		6 lanes	B	B	B	B	C	C
	Without	4 lanes	B	C	C	C	D	E
		6 lanes	B	B	B	B	B	C
2	With	4 lanes	C	D	F	D	D	E
		6 lanes	B	B	C	B	C	C
	Without	4 lanes	C	C	D	D	D	E
		6 lanes	B	B	B	B	C	C
3	With	4 lanes	C	D	F	D	E	F
		6 lanes	B	B	C	B	C	C
	Without	4 lanes	C	C	D	D	D	E
		6 lanes	B	B	B	B	C	C
4	With	4 lanes	D	F	F	D	E	F
		6 lanes	B	C	C	B	C	C
	Without	4 lanes	C	D	D	D	D	E
		6 lanes	B	B	B	B	C	C
5	With	4 lanes	D	E	E	D	D	E
		6 lanes	B	C	C	B	C	C
	Without	4 lanes	C	D	D	D	D	E
		6 lanes	B	B	B	B	C	C

Notes: Shaded cells represent segments that would operate at LOS E or F conditions. Two general locations for a potential interchange on Placer Parkway at the future extension of Watt Avenue were identified with Alternative 1 – a south location, called Option 1, and a north location, called Option 2. See Figure 2-3 for the location of these options.

Table 7-2
Summary Evaluation of Major Growth and Development Factors in the Study Area, by Segment

Development Factors:	Western Segment	Central Segment	Eastern Segment
Availability and Cost of Vacant Land	+	+	+
Local Government Plans and Policies	+	-	+
Public Attitudes toward Growth	+	+/-	+
Terrain and Land Use	+/-	-	+/-
Cost and Availability of Labor	0	0	+
Available Infrastructure	-	-	+
Potential New Roadway Effects:			
Commute Times	+	0	+
Access	+	0 (+ with Watt Avenue Interchange)	+
Proposed Facility Constraints	0	0	0

+ = existing conditions encourage growth and development (Development Factors); project would improve conditions (Potential New Roadway Effects)
- = existing conditions constrain growth and development (Development Factors)
+/- = existing conditions both encourage and constrain growth and development
0 = neutral or not applicable
? = data not available

Cost of Land: Is the cost of land in the affected area high, average, or low (as compared to the county or statewide figures?

An important factor in the rapid rate of growth and development experienced in the Roseville-Rocklin area during the 1990s was the large discrepancy between local land costs and those in the San Francisco Bay Area, as well as in the Sacramento region and the state. As discussed in Chapter 5, this gap in land and housing costs has narrowed considerably over the past decade, as home prices and commercial leasing rates have risen in the Roseville area, similar to the rest of California. Nonetheless, land costs in the study area remain lower than in the San Francisco Bay Area and competitive with those in the greater Sacramento region (SRRI, 2004; Marie Jones Consulting, 2006). In addition, a recent study conducted for the Placer County Conservation Plan found that land values in valley areas of Placer County were substantially lower than in foothills areas of the County. For example, parcels 20 to 40 acres in size were $7,000-10,000 per acre in the valley, compared with $14,000-20,000 per acre in the foothills (Bender Rosenthal Inc., 2004). On Table 7-2, the Western, Central, and Eastern segments are given a plus to indicate relatively good availability of land at competitive prices.

Local Plans and Policies: Do local government plans and policies support or restrict growth in the affected area?

Chapters 3 and 5 describe growth trends and growth management policies that have been adopted by local governments in the study area to support or accommodate future anticipated growth. Local government jurisdictions generally have adopted plans and policies that support orderly growth, as reflected in such mechanisms as the Placer County/City of Roseville Memorandum of Understanding, Lincoln's and Roseville's expansions of Spheres of Influence, and the processing of development applications and preparation of Specific Plans for major new development proposals.

The rate of growth in northern Sacramento County and southwestern Placer County has been so rapid that adopted plans governing land use in particular new-growth areas have been built out much sooner than expected, and "long range" planning efforts meant to address growth needs over a 20-year planning horizon have had to be updated or replaced much sooner than expected (Pease, 2006; Doyel, 2006). As a result, General Plans are being amended and Specific Plans developed in response to particular new development proposals, sometimes at the expense of long-range planning. While SACOG does not have jurisdiction over local land use decisions, it has exerted regional planning leadership through the Blueprint process, which encourages smart growth principles such as higher-density housing development, infill development, and transit-oriented development. The preferred Blueprint scenario, which would result in more growth in southwestern Placer County and southern Sutter County than is currently allowed under adopted plans and policies, is supported by Placer County and the City of Roseville (although other jurisdictions in the region, such as Elk Grove and Lincoln, have not embraced the Blueprint principles).

In the Western Segment, local plans and policies have supported orderly industrial development in south Sutter County in the past, and now the Sutter Pointe Specific Plan for mixed-use development has been prepared. City and county plans and policies in the Eastern Segment also attempt to accommodate anticipated growth in an orderly fashion, so these can also be seen as supportive of development. Local jurisdictions are now in the process of amending General Plans and adopting Specific Plans for major new proposed development projects, including Placer Vineyards, Placer Ranch, Creekview, Sierra Vista, Regional University, Curry Creek, and the Lincoln SOI expansion.

By contrast, local plans and policies are restrictive in the Central Segment, where land is designated and zoned predominately for agricultural use with an 80-acre minimum parcel size. These policies do not support or encourage development, although the collaborative political process described in the next paragraph (as well as general local jurisdiction support for SACOG's Blueprint process described previously in this report) does support and encourage development.

Public Attitudes: Does public opinion as articulated in public meetings, the political process or the media, support or oppose growth in the affected area?

Articulated attitudes toward growth and development in the study area vary. While some civic or environmental organizations and individuals have expressed concern about the rapid rate of population growth in the region (leading to local efforts to support farmland preservation and habitat conservation, as described in Chapters 3 and 4), there are also strong indications of general support for accommodating the growth that has occurred and is projected to continue. In Sutter County, public attitudes toward growth are reflected in the recent passage of Measure M, through which the voters directed county officials to permit mixed-use development in the area of south Sutter County that had been designated for industrial and commercial development. In Placer County, the County Board of Supervisors has directed staff to proceed with consideration of several major new proposals for conversion of agricultural areas to urban mixed-use development that would require General Plan amendments (including the Placer Ranch and Regional University Specific Plans), as well as to begin preparation of a Curry Creek Community Plan (Placer County Planning Department, 2004). In addition, there appears to be general public support for these proposed developments, despite concern for potential impacts on sensitive habitats and farmland. Placer County voters passed Measure H in November 2005, supporting the development of the universities in the region (Gold Country Media, 2006).

Similarly, the City of Roseville's City Council has directed staff to proceed with consideration of the Creekview and Sierra Vista Specific Plans, and the Council has actively encouraged citizen involvement in managing future growth through formation of committees such as the Growth Management Visioning Committee (City of Roseville, 2005). Furthermore, in response to the recent submission of multiple development proposals for projects in southwestern Placer County, Placer County and the Cities of Roseville, Rocklin, and Lincoln have collaborated to develop a "likely" future development scenario (the

Super-Cumulative scenario described in Section 3.3.5.1) for purposes of evaluating cumulative impacts associated with these proposals. This scenario assumes full buildout of all residential land in Placer County west of Sierra College Boulevard by 2025, including current general plan areas, as well as major proposed developments, including Placer Vineyards, the Regional University, and Placer Ranch in the unincorporated County area; Creekview and Sierra Vista Specific Plans in Roseville's MOU Remainder Area; the City of Lincoln's SOI expansion areas; and the Curry Creek Community Plan Area. Placer Parkway is also recognized as a component of this future cumulative development scenario.

Terrain and Land Use: Is the terrain of the affected area suitable for development? Are existing land uses in the affected area conducive to or would they conflict with new residential/retail/office/industrial growth?

The terrain throughout the study area is relatively flat (i.e., no steep slopes) and conducive to development, except in the vicinity of sensitive habitats such as vernal pool complexes and creeks, as well as in the Natomas basin zone, where FEMA flood insurance requirements or flood ratings may constrain development until flood protection is enhanced. In the Western Segment, new residential and commercial development would conflict with the existing agricultural land uses, but the terrain is suitable for development and planning is underway to transform this area into a mixed use, master planned community. In the Central Segment, new residential and commercial development would conflict with the existing agricultural uses. In the Eastern Segment, the terrain is suitable for development. Existing land uses are compatible with new growth in the Sunset Industrial Area, but not in the agricultural areas in the western portion of this segment.

Cost and Labor Pool: Are the cost, availability, and skills of the labor pool in the affected area conducive or restrictive to employment growth?

This question needs to be considered in the context of the greater Sacramento region, as well as with respect to the study area and corridor alignment alternatives, as there is extensive commuting throughout the region. In general, the labor force in this region is competitive in terms of educational attainment or training and cost. As discussed in Chapter 5, very strong employment growth has occurred in the Sacramento region and in the Roseville-Rocklin-Lincoln area in recent years, and this job growth is expected to continue. Roseville now accounts for approximately half of all jobs in Placer County and has become a net importer of workers, i.e., there are many more jobs than employed residents in the city. Many of these new jobs pay relatively well, attracting skilled workers. Furthermore, the proposals for two new university campuses in western Placer County, if approved, will help ensure a skilled labor force in the future. For these reasons, a plus is shown on Table 7-2 for the Eastern Segment. The labor force question is less applicable to the Central and Western segments, where population density is low, the resident population is predominately engaged in agricultural activities, and unemployment rates are higher. Nonetheless, abundant skilled labor is available in adjacent areas of the greater Sacramento region to support employment growth. In addition, much of the growth contemplated for the Sutter Pointe Specific Plan area is mixed-use development that would attract new residents to fill new jobs to be created in that area.

Infrastructure: Is the existing infrastructure (e.g., local roads, water and sewage facilities, schools and community facilities) adequate or inadequate to handle growth? Would the local economy support construction of new facilities?

The existing roadway network in the study area was not planned to accommodate the amount of growth that has occurred and is projected to occur in the region in the future. As a result, traffic congestion has become an increasing problem on some local roadways. Typically, local roadway construction is required as a condition of development approval in the study area, but the construction of roadways within and adjacent to a particular development does not necessarily alleviate deteriorating regional traffic conditions. While projects are being implemented to address problem areas along the regional SR 65 and

I-80 corridors, commuters are using alternative routes on roads such as Baseline Road and Riego Road to avoid bottlenecks on the state and interstate freeway system.

Local government entities typically condition new Specific Plans to require that new roadways be constructed to accommodate increased traffic volumes. Similarly, local government entities typically require new major developments to pay development impact fees or directly provide certain utilities and services as a condition of development approval. Long-range planning efforts to provide water, sewer and energy have been relatively successful. Schools in the Roseville-Rocklin-Lincoln area have received adequate investment and most receive high ratings in comparison with schools statewide (California Department of Education Policy and Evaluation Division, 2006). Much of the recent growth this area has occurred through Specific Plan processes (like the West Roseville Specific Plan) that encourage a master planning approach to meet infrastructure needs, as well as to construct parks, community centers, recreational facilities and other amenities in concert with new residential and commercial space. As a result, infrastructure in the Eastern Segment is more developed to accommodate growth, while infrastructure in the Western and Central segments of the study area is less developed at present. Population density in these areas is low, homes and businesses rely on water services from private wells and septic systems, and there are few schools or parks. As major development projects are planned and approved for these areas in the future, developers will undoubtedly be required to provide basic services and amenities, as is the case in developing areas of the surrounding region, but at the present time the existing infrastructure is not adequate to accommodate substantial growth. While local infrastructure needs may be met through planning and mitigation requirements for specific master planned developments, regional needs also need to be addressed. To some extent, local government entities may be basing development approvals on assumptions that regional infrastructure needs will be met—for example, through funding and implementation of projects identified in the MTP and RTP (including Placer Parkway). While the local economy is relatively strong, there are many competing demands for funding and infrastructure development, making the implementation of desired regional transportation and other infrastructure improvements uncertain.

Commute Time: How would commute times to the affected area be changed by the proposed project?

Recent rapid development northeast of Sacramento has resulted in increased traffic congestion and slower travel times throughout the area. Many drivers are now taking "shortcuts" on roadways that were not designed to carry regional through traffic, in order to avoid the bottlenecks experienced on highways and major arterials. Recent major improvements made or planned to roadways in the region include widening SR 65 between Roseville and Lincoln, construction of the Lincoln (SR 65) by-pass, construction of new SR 65 interchanges at Pleasant Grove Boulevard, Sunset Boulevard, and Twelve Bridges Drive), and improvements at Blue Oaks Boulevard. Nonetheless, many more improvements to the local and regional roadway network are needed to accommodate the projected increase in travel demand associated with anticipated population and employment growth. By providing an alternative regional connector linking the Roseville-Lincoln area to SR 70/99 and the Sacramento airport and relieving traffic congestion on local roadways, Placer Parkway would improve commute conditions and reduce the number of peak hours spent in traffic congestion.

A future Placer Parkway roadway could shorten commute times from SR 65 to downtown Sacramento or the Sacramento Airport vicinity by approximately 15 minutes in peak commute hours, or about 12 minutes during off-peak hours (HDR/HLB Decision Economics, 2006; DKS Associates, 2006). This would shorten trip duration by approximately one-third. Appendix C shows sample travel times from SR 65 to the Sacramento Airport and downtown that were calculated for the evaluation of the PSR alternatives.

Access: How would the proposed facility change access to adjacent land?

The Parkway would improve access to adjacent land in the Western and Eastern segments, where new high-speed interchanges are proposed to connect the new roadway with existing SR 65 at the eastern terminus and SR 70/99 at the western terminus. In addition, new interchanges would be constructed to provide access to adjacent areas in these two segments. By contrast, no interchanges are proposed for the Central Segment, so the new roadway would not affect access to adjacent lands in this segment, unless a interchange with Watt Avenue is constructed by others at some future time.

Constraints: Are there any features on the highway that could constrain the new capacity of the transportation improvement?

Since it is likely that construction of Placer Parkway would happen incrementally (as mentioned in Chapter 6), depending upon funding availability and willingness of adjacent property developers to provide land and/or finance roadway construction, it is possible that portions of the Parkway may not be constructed in the early years of operation, and that the capacity of six-lane portions built to accommodate traffic in rapidly-growing adjacent areas would be constrained by the capacity limitations of four-lane sections constructed in areas that are not experiencing such rapid development. Once the ultimate six-lane facility is completed, the lack of interchanges in the Central Segment would not limit roadway capacity, but could limit its potential use by people living or working in and around that segment, unless a future interchange with Watt Avenue were to be constructed by others, independently of this project.

Other Factors and Uncertainties

Numerous factors are at work encouraging growth and development in the study area, in addition to those reviewed according to Caltrans guidance above. These include continuing net in-migration to California, the proximity of the study area to Sacramento and the Roseville-Rocklin-Lincoln real estate market and job centers, the strength of the state and regional economy, the relatively flat topography of the study area, a temperate climate, ease of land assembly (due to the presence of large parcels of land, versus smaller parcels with many more individual owners involved), open space and vistas, and easy access to Sierra foothill and mountain recreational opportunities. These factors, working together, have created an atmosphere of relatively intense development pressure, especially northeast of Sacramento and throughout the study area.

There are some factors working to discourage growth and development in the study area, including the presence of Williamson Act contracts on agricultural parcels, movements to define habitat conservation areas and agricultural preserves, increasing difficulty in obtaining project entitlements, rising land costs, rising development mitigation fees, rising interest rates, challenges in supplying water and wastewater treatment services, increasing traffic congestion on the local roadway network, and growing FEMA concern about flood risks in the Natomas Basin, which potentially lead to a building moratorium in that area until flood hazard issues are addressed. Similarly, hearings are contemplated for the Placer County Conservation Program in the future, and could result in adoption of a Habitat Conservation Plan that would prohibit development in portions of the study area. Such factors are important considerations for any new proposed development, but to date these obstacles have been overcome for new development projects around the area and have not reduced the relatively intense development pressures that are being experienced in the project vicinity.

As the above discussion indicates, the factors stimulating (rather than constraining) development in the study area are predominately positive (i.e., they encourage rather than discourage development) at present, without the Parkway. The factors favoring or stimulating development in the Eastern Segment are overwhelmingly positive under existing conditions, and the Parkway (by improving access and reducing commute times) would add to these positive factors. Factors at work in the Western Segment

are somewhat more mixed, because of the lack of developed infrastructure and potential conflicts with existing uses, but still predominately positive. The Parkway would improve access and commute times in the Western and Eastern segments. In the Central Segment, there are more development constraints, including existing zoning, the prevalence of agricultural activity, concerns about farmland and habitat conservation and lack of developed infrastructure, resulting in less overwhelming growth pressure. Nonetheless, the availability and relative cost of undeveloped land in proximity to major developing areas makes this area subject to moderate development pressures.

7.3.3 The No-Build Alternative

The purpose of the No-Build Alternative is to attempt to compare the growth patterns that would occur in the study area with and without the project. The MEPLAN model described below was selected as a tool to be used for this analysis, as well as to compare the effects of a northerly vs. southerly alignment on regional growth and development patterns. The decision to supplement the growth inducement analysis with MEPLAN model runs was made in order to add a more quantitative layer to what would otherwise remain a relatively qualitative growth inducement analysis.

MEPLAN is an integrated land use transportation model that forecasts the influence of transportation conditions on local land use development and the impacts of local land use development on transportation conditions. The model was developed by the University of Calgary and UC Davis and has been used for several recent planning and visioning exercises in the Sacramento region, including SACOG's Blueprint project (SACOG, 2004) and the Mineta Foundation Report on transit-oriented transportation and land use scenarios (Johnston et al., 2004). Documentation of the MEPLAN model runs and results is provided in a separate technical report (DKS Associates, 2007b).

Use of the MEPLAN model was discussed with SACOG staff, members of the Project Development Team and federal resource agency representatives (U.S. EPA and U.S. Army Corps of Engineers, who encouraged the use of this model to support the Placer Parkway growth inducement analysis. The general consensus was that the MEPLAN model runs could help clarify differences in the potential distribution of growth in the study area with and without the project, as well as to differentiate the potential for growth inducement among various project alternatives, including options with and without a future Watt Avenue connection.) Details of the effect of the addition of a Watt Avenue interchange on the MEPLAN findings are provided in Section 7.4.

MEPLAN is a detailed and comprehensive model that forecasts the influence of transportation conditions on local land use development and the impacts of local land use development on transportation conditions. Inputs to the model include the local transportation network and information about the supply and location of land available for development. MEPLAN uses an input-output model to determine changes in the demand for land and to forecast which available parcels are most likely to be developed, considering traffic congestion as an important factor influencing builder and consumer location decisions (Abraham, 1998). The model was developed by the University of Calgary and UC Davis and has been used for several recent planning and visioning exercises in the Sacramento region, including SACOG's Blueprint project (SACOG, 2004) and the Mineta Foundation Report on transit-oriented transportation and land use scenarios (Johnston et al., 2004).

There were several reasons for choosing MEPLAN over other simulation models available:

- It has been "vetted" by SACOG and local government entities and is generally accepted by community interests in the project area as a reasonable forecasting tool.
- MEPLAN has been recently calibrated and validated for applications in the SACOG region.

- Land use assumption inputs for southern Sutter County and western Placer County to the MEPLAN model have been recently updated, in collaboration with local governments, as part of SACOG's effort to update the Metropolitan Transportation Plan growth projections.

One potential disadvantage of using the MEPLAN model is that it aggregates subareas of the six-county SACOG region into 73 Regional Analysis Divisions (RADs), compared to the 1,300 Traffic Analysis Zones used in the SACMET traffic analysis model. Thus the entire study area is encompassed in only a few of the MEPLAN RADs, with several additional RADs (representing Roseville, Lincoln and Rocklin) also influencing traffic patterns and growth and development in the study area. For a Tier 1 level analysis predicting land use changes in 2040 under hypothetical project alternatives, however, this gross scale is probably much more appropriate than the very detailed subarea analysis conducted to determine impacts on local roadway networks. Nonetheless, for the purposes of this analysis, several of the study area RADs were subdivided into smaller areas and SACOG land use data was disaggregated to those subareas, in order to provide a better definition of impacts on growth in the study area that might result from a northern alignment vs. a southern alignment for a major new transportation facility constructed within the RAD. This and other refinements that were made to MEPLAN prior to running the model for this impact analysis are described in the technical report cited above.

7.3.3.1 Results of the Analysis

The MEPLAN model predicted 2040 development levels in the project study area and the surrounding region based on five scenarios:

1) No-Build Alternative
2) Alternative 1
3) Alternative 1 with Watt Avenue interchange
4) Alternative 5
5) Alternative 5 with Watt Avenue interchange

For each scenario, the model predicted 2040 changes in households and employment in each of the 96 RADs comprising the project study area and the surrounding region, as shown on Figure 7-1. Figures 7-2 through 7-9 graphically depict the findings of the MEPLAN model runs. Key findings include the following:

- Compared to the No-Build Alternative, the MEPLAN model estimates that about 1,000 to 1,200 additional households would develop by 2040 in the project vicinity with the build alternatives. The amount of residential development in the remainder of the region would decrease by about the same amount.

- The 1,000 to 1,200 additional households represent an increase of about 0.4% in the total number of households in the local project vicinity by 2040, compared with No Build.

- Although Figures 7-2 through 7-9 show that in some rural portions of Yuba, Sutter and Yolo counties the build alternatives would have changes in households compared to the No-Build Alternative, the increase or decrease of 0.5 to 2 percent in these rural areas is a small number of households

- The MEPLAN model estimates that Alternative 1 would have about the same number of households in the local project vicinity as Alternative 5.

- Compared to the No-Build Alternative, the MEPLAN model estimates that about 1,800 to 2,100 additional jobs would exist by 2040 in the local project vicinity with the build

alternatives. The amount of jobs in the remainder of the region would decrease by about the same amount.

- The 1,800 to 2,100 additional jobs represent an increase of about 0.6% to 0.7% in the total number of jobs in the local project vicinity by 2040.

- The MEPLAN model estimates that Alternative 1 would have about 100 more jobs in the local project vicinity than Alternative 5.

- The location of the increase in households is somewhat influenced by the corridor alignment. A comparison between Figures 7-3 and 7-7 indicates that a small number of additional households would locate further north under Alternative 5 compared to Alternative 1. A similar comparison of the increase in jobs as shown on Figures 7-2 and 7-6 indicates less of a difference between Alternatives 1 and 5.

As the model results and figures show, there would be slight differences in the distribution of households and jobs within the project study area and the surrounding region under each scenario, but, overall, these differences are not substantial.

7.3.4 Expert Opinions

Telephone interviews were conducted in March and April 2006 with a number of persons who are actively involved in planning and development issues in and around the study area, or who have been engaged in long-term agricultural activities in the area, to solicit their insights and informed opinions about the factors influencing growth and development in the area. The interviews do not constitute a statistically valid survey or represent all opinions on these topics, but an attempt was made to contact representatives of all affected local jurisdictions and the major development interests active in southwestern Placer County and southern Sutter County, as well as other professionals and area residents familiar with growth trends and real estate development issues. The persons interviewed included the following:

Bob Amarel, Jr.	Former Owner of Reason Farms (now the planned City of Roseville Retention Basin)
Perry Beck	Loomis Town Manager
John Bianchi	Rice Farmer and Land Owner, Sutter County
Eric Bryant	Project Manager, Placer Ranch (proposed Specific Plan)
Rodney Campbell	Community Development Director, City of Lincoln
George M. Carpenter	Project Manager, Lennar Communities (Sutter Pointe Specific Plan)
Loren Clark	Assistant Planning Director, Placer County
Cameron Doyle	Project Manager, Brookfield Land Company (Northern Territories/Metro area of northern Sacramento County)
Ashley Feeney	Associate Planner, City of Sacramento Long Range Planning Section (Natomas Joint Vision annexation area)
Ken Gianotti	Senior Vice President, Stanford Land Company, Rocklin
Mrs. Gaynell Gleason	Cattle Rancher, Placer County
Ed Graves	Consultant (former Economic Development Director for Placer County, retired March 2006)
Julie Hanson	Senior Vice President, KT Communities
Ken Hough	Director of Community Planning and Operations, SACOG

Townley Lazerle	Real Estate Market Consultant, The Whitney Group
Darryl Lauppe	Rice Farmer and Land Owner, South Sutter County
John Norman	General Manager, Brookfield Land Co. (controls area immediately north of Creekview and immediately west of proposed Placer Ranch)
Kathy Pease	Senior Planner, City of Roseville Planning and Redevelopment Department
Steve Pease	Commercial Developer, KMS Development LLC, Roseville
Terry Richardson	City of Rocklin Community Development Director
Cindy Schaer	Senior Entitlement Manager, Richland Communities, Roseville
Surinder Singh	Senior Planner, Sacramento County Planning and Community Development Department
Bill Turpie	Project Leader, Blue Oaks Property Owners (developing plans for Creekview area in Roseville SOI)
Deborah Waterbury	Rice Farmer, Pleasant Grove
Lisa Wilson	Senior Planner, Sutter County Community Services Department, Planning Services Division

Local government representatives were asked to what extent the Placer Parkway proposal influences land use planning in their jurisdiction, and whether or how they thought it might influence development activity or timing in their jurisdiction. They were asked what factors are the most important influences on development in their jurisdiction, and then they were asked to rank the relative importance (on a 1 to 10 scale, with 1 being not important and 10 being very important) of each of a list of 18 factors (see Table 7-3) that potentially could influence (either constrain or stimulate) development, with regard to what was occurring in the jurisdiction they oversaw.

Developers were asked how the Placer Parkway proposal influenced their company's decisions to plan or propose real estate developments in the project vicinity, and whether or not they thought it would affect the timing of entitlements, construction, or buildout of their proposed or planned development projects. They were asked to discuss the major factors influencing their development decisions in the study area or the surrounding vicinity, and then they were asked to rank the same set of 18 factors (on the same 1 to 10 scale), according to their relative importance to their company's strategic planning decisions regarding their development projects in the area.

Interviews with past and present agricultural operators in the project area were conducted to obtain information on their perspectives on regional growth and their outlook on the future of farming in the study area. These interviews, therefore, were more open-ended and informal. They were not asked to rank the 18 factors. Instead, they were asked about the effects of area growth (if any) on their agricultural activities over the past two decades, and they were asked whether they had sold or optioned their land, or had been approached by developers to do so. Some of the information obtained from the agricultural operators is discussed in Chapter 4, and it is also incorporated into the growth inducement analysis.

The paragraphs below summarize the information obtained from the interviewees. First, there is a summary of responses to questions on growth and development that were made by developers, then of responses made by planners. This is followed by an analysis of the results of the development factor ranking exercise. Finally, there is a summary of pertinent remarks and observations about regional growth trends that were made by the farmers, as well as miscellaneous comments made by other interviewees.

Table 7-3
Summary of Average Scores for Development Factors

Development Factors	Developer Opinions	Planner Opinions	Average (all interviewees)
Raw Land Cost	6.1	5.4	6.1
Ease of Land Assembly	4.7	5.0	5.2
Existing Zoning	3.7	5.0	5.2
Williamson Act Contracts	4.4	3.8	4.1
Flat Terrain	5.0	4.8	5.2
Proximity to Existing Development	6.7	7.4	6.9
Local Attitudes toward Development	7.3	7.0	7.6
Local Roadway Traffic Congestion	6.1	7.5	7.1
Development Impact Fees	6.8	5.0	6.2
Environmental Mitigation Requirements	7.9	6.8	7.4
Water Availability	7.3	6.8	7.1
Sewer Availability	6.9	6.3	6.6
Proximity to Parks and Open Space	4.8	5.0	5.0
Proximity to Job Centers	6.6	6.5	6.7
Proximity to Major Highways	7.2	6.8	7.4
Available Financing	5.5	6.6	6.3
Regional Growth Patterns	7.0	6.8	7.1
SACOG Blueprint	6.0	7.1	6.2

Note: 1 on the scale indicated not important; 10 indicated very important.
Source: Interviews conducted by Mara Feeney in March and April 2006

Developer Responses

Nine developers (representing major players in the project study region, including Richland Communities, KT Communities, Placer Ranch, Brookfield Land Company, Blue Oaks Property Owners, Stanford Ranch, KMS Development, Northern Territories, and Lennar Communities) were asked the direct question: "Did the proposal for a Placer Parkway influence your company's decision to plan or propose real estate development in the vicinity?" Findings were as follows:

- All developers commented that Placer Parkway had not been a major consideration in their development proposals.
- Many developers had purchased the land for development many years prior to the inception of the Placer Parkway concept.
- Many projects would complete buildout before the Parkway was scheduled to begin construction.
- In most cases, proposed residential development would be completed before the Parkway came into existence, although buildout of non-residential uses would take longer.

- Some developers said they considered the Parkway a speculative proposal, because no alignment has been selected and funding has not been secured.

- Developers commented that the selection of a final Parkway alignment would be important in facilitating implementation of specific development plans.

- One developer opined that the selected location of Parkway intersections would be a key factor in attracting more commercial development than residential development around those locations

- Most developers felt that urbanization of the study area was inevitable because of its location, with development moving rapidly northward from Sacramento and strongly westward from the Roseville area.

- Most of the developers who commented about potential effects of the Parkway on the region considered that traffic would be affected rather than land use or development.

- Many developers believed the Parkway would be beneficial for the area, because it would improve the region's growing traffic problems and relieve congestion by providing an alternative route for truck traffic and commuters.

- Most developers considered the project would be crucial for economic development as it would accommodate reliance of major businesses on truck transport and serve the need for an alternative to I-80 for accessing Sacramento airport and associated air freight services.

- Many felt that the Parkway would boost non-residential construction but would not influence residential construction patterns or timing.

- Key factors in determining developers' decisions about when and where to develop included:

  – strategic location
  – proximity to the active development markets (Sacramento, Roseville, Rocklin, Lincoln),
  – clarification of urban limit boundaries,
  – Roseville's rules regarding the order of development approvals for its Sphere Of Influence;
  – absorption rates of new construction in nearby areas
  – property owner or client relationships
  – building where people want to live and work.

- Several developers distinguished between development "considerations" and development "constraints." There are many factors regarded as important considerations, such as availability of water, sewer and other infrastructure—but these are issues that can be resolved, not insurmountable problems. Even litigation was taken in stride and assumed in project timelines. Factors such as conflicting zoning and Williamson Act contracts were not seen as serious constraints.

- The only real constraint to development identified by developers was a lack of market demand (which none of the developers saw as an issue in the study region) or some type

of physical or environmental condition (e.g., extreme slope or presence of a water body) that would make construction impossible or infeasible (too expensive to pencil out).

- When asked to rank the importance of eighteen specific development factors (as reported below), Environmental Mitigation Requirements received the highest average score from the developers interviewed. Several noted that development has become more difficult or challenging over the past decade, with the entitlement process taking longer and rising costs such as development fees and provision of infrastructure.

Planner Responses

Eight senior-level planners representing eight jurisdictions or agencies (SACOG, Placer County, Sutter County, Sacramento County, City of Roseville, City of Rocklin, City of Lincoln, and the City of Sacramento) were asked the direct question: "To what extent does the Placer Parkway proposal influence land use planning in your jurisdiction?" Findings were as follow:

- Most planners considered that the Parkway had no influence or very little influence on local land use planning in their jurisdiction.

- One planner commented that while a Parkway could relieve traffic congestion in southwestern Placer County, traffic impact analyses that are being done for new development do not presume this roadway, since it has not been approved.

- Many planners suggested that while the Parkway would influence traffic in the region, they did not consider it would influence land use planning or development patterns, which they considered to be more market-driven.

- One planner noted that whether or not the Parkway is funded and constructed, there would be a similar east-west roadway constructed to serve planned development in the vicinity, and, rather than the Placer Parkway stimulating development activity in the area, the opposite was true—that implementation of the major proposed developments in the area would make it more likely that the Parkway would be funded and built.

- One planner considered that the Parkway would influence land use.

- One planner considered that the Parkway would not influence the types of land uses that would occur in the area, but that it could affect development timing.

The planners were also asked to name the factors they perceived to be most important in influencing development activity and timing in their jurisdictions. The most common response was "market demand," although many mentioned infrastructure availability, including water supply, wastewater treatment and/or transportation facilities. Several mentioned environmental constraints and habitat conservation planning as uncertainties. Others mentioned the designation of urban limits and Spheres of Influence as important factors influencing where development is likely to occur.

Factor Ranking Exercise Results

Table 7-3 summarizes the rankings of the importance of the eighteen development factors that were provided by the persons who were interviewed for this analysis. The first column lists the development factors, the second column presents the average score that was given for each factor by the eight representatives of developer-builder firms. The third column shows the average score given by the eight Planners or Community Development agency staff who were interviewed. The last column presents the

overall average score for each factor that was provided by all who participated in this exercise (including not only developers and planners, but also the real estate market consultant, economic development consultant and town manager[6]).

As this table shows, developers and planners had slightly differing opinions as to which of these factors were the most important. Developers ranked Environmental Mitigation Requirements the highest, followed by Local Attitudes Toward Development and Water Availability. Planners ranked Local Roadway Traffic Congestion the highest, followed by Proximity to Existing Development and SACOG Blueprint.

There was reasonable consistency among interviewees regarding which development factors were the least important: Ease of Land Assembly, Existing Zoning, Williamson Act Contracts, Flat Terrain, and Proximity to Parks and Open Space. While the planners had also ranked Development Impact Fees as not very important (5.0), the developers interviewed gave this factor a higher average score (6.8).

What the Farmers Had to Say

The persons interviewed included four rice farmers and one cattle rancher. Of the five, one had recently sold his land holdings in the area, two had sold development options on some or all of their land, and two had received expressions of interest in their property but had not sold property or development options yet. Three owned land in southwestern Placer County and two in southern Sutter County.

All five of the farmers interviewed expressed deep skepticism about the future of agriculture in the study area. All commented on the intense development pressures being felt in the area, the substantial increase in conflicts between agricultural and urban uses in recent years, and the increasing costs of agricultural production relative to other areas of the state. They viewed developers in the area as extremely influential, and themselves as having neither the money nor the time to stop development. All saw it as a matter of time before agricultural activity would cease in the area, and they were all looking for the right opportunity to transition out of the area and try to exchange their property for agricultural land further up in the foothills. (Several specifically mentioned the "1031 exchange" that reduces capital gains taxes through the simultaneous sale of one property and purchase of another.)

The one person who had already sold his land in the study area said he felt "lucky to get out in time." He noted that the cost of water in the rapidly growing area has become too high to make rice farming viable or competitive any longer. He also noted that the quality of the soil in the area is not good, making it more suitable for urban development than other prime agricultural areas of the state that are under development pressure. He viewed continued urbanization of the study area as inevitable, along with the other four interviewees.

One farmer said he had spent a considerable amount of time at meetings over the past decade, trying to prevent leapfrog development and encourage more orderly development of the area. He felt some success had been achieved in this regard, but in spite of this, farming in the area was becoming more and more difficult and economically marginal.

Examples of conflicts with urban uses were mentioned by all interviewees. Several mentioned the difficulty of moving large farm equipment from one field to another, on roadways that are increasingly filled with commuters in a hurry to get somewhere and frustrated by anything that might slow them down. (Examples of

[6] Some average scores in the last column appear to be skewed disproportionately higher. This is because one of the interview respondents felt that most of the development factors were extremely important, giving more than half of them a score of ten. The other two interviewees who were neither developers nor planners also tended to rank the factors relatively high in comparison to other interviewees.

road rage included gun-waving incidents and reports of automobiles passing a baler, then slamming on the brakes in front of it.) One reported that there was more vandalism as the population grew. Another noted that homeowners protest rice seeding at 6:00 a.m. and that as cities move their urban limit lines outward, farmers find they can no longer get insurance, because their crop dusters would fly too close to homes.

None of the farmers interviewed felt there was a future for long-term agricultural activity in the study area. Reasons listed for the predictable demise of agriculture in the area included the following:

- The quality of the soil is marginal;
- The cost of water keeps going up;
- The cost of gas and diesel keeps going up;
- Commodity prices are uncertain and unstable;
- Rice subsidies are decreasing;
- The conflicts as the population changes, farmers are regularly outvoted;
- Few young people are interested in farming as a way of life; and
- There is no political power to protect farmland.

These agricultural property owners also expressed substantial concerns over the movement to "preserve" farmland. They feared having the remaining agricultural lands designated as permanent open space, which would penalize the remaining farmers by reducing their property values considerably. They also observed that sometimes when property owners in the area sold development options, active farming of the land would cease, resulting in domination of fields by star thistle or other noxious weeds—not the idyllic type of farmland the preservationists imagine preserving.

The universal cynicism of the farmers interviewed was summed up by such comments as:

- "We're surrounded."
- "The whole area is owned or optioned by developers."
- "The writing is on the wall."
- "You just can't farm next to an urban area, period."

The farmers interviewed did not think the project would affect the pace of growth and development in the study area, but they thought it could have a short-term benefit to agriculture by taking commuters off the local roadways, reducing conflicts with farm equipment and perhaps allowing farming to continue a little longer than it would otherwise.

Other Comments

Economic specialists commented that the Parkway would be crucial to economic development in the area, because it would improve access to the Sacramento airport and provide an alternative route to I-80, which is congested and where one accident can cause severe traffic problems.

One long-time landowner in the project study who has been very active in attending meetings pertaining to growth issues in the area commented: "If Placer Parkway is built, it will have no effect on the pace of growth and development. The last thing people worry about is the roads. I can't see development slowing, just because Placer Parkway is not there. The biggest effect on development is open space and environmental requirements these days."

Another long-time landowner in the study area expressed cynicism over the concept of making the Placer Parkway a thoroughfare by not providing access in the central segment. "This is an opportunity, for once, to plan a road before the growth happens. In an election year people want to hear about No Growth—but

get real, the writing is on the wall! We're surrounded by development activities and options. Provide access to the Parkway, or traffic will just get worse."

Many of those interviewed echoed the belief that continued rapid growth and development in the study area was inevitable. They pointed out that most of the land from Roseville to Sutter County is owned or controlled by developers, who have lots of political savvy and apply lots of pressure. With strong population growth expected to continue in California, and with the Sacramento region continuing to capture much of that growth, it appears that the market conditions will remain favorable, even though there has been some softening in new home prices very recently. The farmers who were interviewed all felt that agriculture could not be sustained in the study area much longer. If they had not already sold or optioned their land, they were planning to do so and were looking for the right opportunity to move to another area, where agricultural activity might be more viable and less in conflict with ongoing and planned urban development.

7.3.5 Growth Inducement Checklist

This section lists the eight questions contained in the Growth Inducement Checklist developed for Caltrans and included in Appendix D of the Environmental Handbook Volume 4, Community Impact Assessment (Caltrans, 1997). The questions are answered in accordance with the Caltrans guidance, with a Yes response indicating some potential for a growth inducing impact, but without regard to the level of significance of that impact.

1. a) Will the project attract more residential development or new population into the community or planning area? b) If yes, would it be higher than is projected in the local general plan?

a – *No*. The project would not directly attract more population into the area, e.g., through the construction of new homes or businesses, and it is anticipated that all housing units currently allowed under adopted general plans will be built by 2020, when the Parkway is assumed to open. The cumulative development scenario for 2040 anticipates construction of many additional housing units as proposed by major projects in south Sutter and southwestern Placer County, but these units are being aggressively planned in the absence of any approvals or funding for Placer Parkway, so they cannot be attributed to the project. While the residential development that is anticipated under the 2040 cumulative development scenario is higher than what is currently anticipated under local adopted General Plans, local jurisdictions in Placer County are in the process of amending General Plans and adopting Specific Plans for proposed major projects, including Placer Vineyards, Placer Ranch, Creekview, Sierra Vista, Regional University, Curry Creek and the Lincoln SOI expansion. In Sutter County, the South Sutter Specific Plan, which proposed extensive industrial development in the project area, was later rescinded and has been superseded by voter-approved Sutter Pointe Specific Plan, which promotes a major mixed use commercial and residential development (now in the planning process) in the General Plan-designated Industrial-Commercial Reserve area at the County's southern border and straddling SR 70/99.

2. a) Will the project encourage the development of more acreage of employment generating land uses in the area (such as commercial, industrial or office)? b) If yes, would it be beyond that which is designated in the current local general plan?

a – *Yes*. Most of the planners, developers, real estate market consultants, and economic development specialists interviewed for this project expressed their professional opinion that, while the Parkway project would not influence the pace or direction of housing development, it was likely to have the effect of stimulating non-residential development, resulting in the buildout of planned industrial and commercial uses sooner than would occur otherwise. b – *No and Yes*. The non-residential development that would be encouraged by the Parkway would not exceed the levels contemplated in the Sutter County or Placer

County General Plans, or the Sunset Industrial Area Plan. However, the project could encourage intensification of employment-generating land uses in the vicinity of intersection locations in the Placer Ranch and the Sutter County Sutter Pointe Specific Plans), and land use plans for these areas have not been finalized or adopted yet.

3. a) Will the project lead to the increase of roadway, intersection, sewer, water supply, or drainage capacity? b) If yes, would it be beyond that projected or planned for in the local general plan?

a – *Yes*. The project would increase regional roadway supply and capacity, and it would provide several new interchanges where none exist at present (it would not affect sewer or water infrastructure availability). The new roadway would provide substantial new east-west traffic capacity and would relieve anticipated local roadway network congestion.

b – *Yes and No*. Placer County's General Plan has shown a concept line for Placer Parkway since 1994. The 1997 Sutter County General Plan does not refer to Placer Parkway, although the concept was included in the 2004 South Sutter Specific Plan, which was subsequently rescinded. Plans are being developed for a major east-west thoroughfare to serve the south Sutter Pointe Specific Plan, which will be incorporated into the Specific Plan for that area, whether or not Placer Parkway is approved and funded (Wilson, 2006). The increase in these capacities would occur as a result of the planned and proposed growth identified in the 2040 development scenario, as these projects would be required to provide roads, intersections, sewer and water infrastructure, and retention and detention facilities as part of their entitlement process. Placer Parkway could result in different land uses, or more intensive land uses, in the vicinity of interchanges where land use plans are still being developed and have not yet been approved. If approved, these projects will by definition be included in the General Plans. As described above, such development is not dependent on Placer Parkway.

4. a) Will the project encourage the rezoning or reclassification of lands in the community general plan from agriculture, open space or low density residential to a more intensive land use?

No. With its controlled access, an objective of the proposed transportation facility is to strike a balance among advancing planned job growth along the SR 65 and SR 70/99 corridors, avoiding urban growth inducement in areas not designated for development, and helping to preserve the existing rural character of southwestern Placer and southern Sutter Counties. The areas Placer County has designated as Agricultural Preserve (80-acre minimum lot size) are located for the most part in the Central Segment, where there would be no interchange access provided to Placer Parkway (unless a Watt Avenue interchange is constructed as a separate future project), and there would be a buffer zone associated with the future roadway. The trend toward rezoning and reclassification of agriculture and open space lands in and adjacent to the Western and Eastern Segments has been occurring without an adopted Placer Parkway corridor. The rezoning of low-density residential to more intensive land uses is occurring in the area largely as a result of the SACOG Blueprint process, which some local government entities (such as the City of Roseville) support to promote "smart growth" principles.

5. Is the project not in conformance with the growth related policies, goals or objectives of the local general plan or the area growth management plan? Or is it in conflict with the implementation measures contained in the area's growth management plan?

No. The project is in conformance with local policies, goals and objectives. It is in conformance with SACOG's Blueprint program, and it is shown in the adopted MTP – as a high-priority regional transportation facility serving the region. It is a part of Placer County's Regional Transportation Plan (2027). It is also shown as a future roadway concept in the Placer County General Plan and it is cited in

several Specific Plans that are being prepared for portions of the study area (e.g., Placer Vineyards Revised DEIR). As described in Chapters 3 and 5, most of the jurisdictions in the study area accept growth as inevitable and have been developing strategies to try to accommodate anticipated growth without adversely affecting quality of life.

6. Will the project lead to the intensification of development densities or accelerate the schedule for development or will it facilitate actions by private interests to redevelop properties within two miles of an existing or future major arterial roadway or within four miles of a limited access highway interchange?

Yes and No. The project would not lead to intensification of development densities in areas currently under development or being planned for development, but it could accelerate the rate of development, especially in areas near proposed new interchanges. It is not likely to stimulate redevelopment of properties within two miles of the roadway or four miles of interchanges within the project study period (to 2040), because these areas are predominately undeveloped agricultural land or open space, or have been developed relatively recently with urban uses, or are in the planning stages for mixed use development that should have a constructive life substantially longer than the Placer Parkway project study period (i.e., well beyond 2040).

7. Will the project measurably and significantly decrease home to work commuter travel times to and from or within the project area (more than 10 percent overall reduction or five minutes or more in commute time savings)?

Yes. The transportation impact analysis completed for the evaluation of PSR alternatives indicated that commute time savings for trips from SR 65 to the Sacramento Airport or downtown could range from 9 to 14 minutes, resulting in commute time savings in excess of 30 percent. The traffic analysis conducted for the five alternative alignments indicates that there would be reductions in traffic congestion on many local roadways within the study area. It also indicates that the project would "induce" additional travel demand somewhat, as measured by total Vehicle Miles Traveled, although it would reduce the total number of hours that commuters would experience congested traffic conditions.

8. Is the project directly related to the generation of cumulative effects as defined by CEQA guidelines?

Yes. According to CEQA, "cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts…The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present and reasonably foreseeable probable future projects." Given the rapid recent urban development around the study area and the number of major new development proposals likely to be approved in the near future, the environmental impacts associated with the Placer Parkway project would increase the total universe of impacts to the environment that would result from implementation of all of the recent and foreseeable planned projects, each of which is likely to cause some significant environmental impacts.

The use of the Growth Inducement Checklist indicates that the project has growth inducing potential, because some of the questions were answered "Yes."

7.4 FINDINGS AND CONCLUSIONS

The results of the analytical approaches used above are mixed, and it is difficult to draw any simple conclusion regarding the precise relationship between the project and future growth in the project area.

The factors influencing regional growth are complex, and there is no reliable method known for quantifying the influence of a particular transportation facility such as the Placer Parkway on that growth.

Caltrans guidance encourages drawing one of the following four conclusions regarding the growth inducement potential of a project:

- *Not affect growth* – this conclusion can be made when no growth is expected, or when the project would yield no advantages that would have effects on developers' decisions.

- *Cannot determine effect on growth* – this conclusion can be appropriate when only wild guesses can be made about the likely course of growth: this is sometimes the case in rural areas, but in urban areas the analyst should be able to be more precise.

- *Hasten (or slow) growth, intensify growth, or shift growth from elsewhere in the region* – this kind of conclusion can be made when developers are expected to modify their course of development because of the project; the terms "support growth," "contribute to growth," "facilitate growth," or "respond to growth" are less precise ways of making this conclusion.

- *Induce growth* – this conclusion can be made when a larger amount of development would be expected to occur (area wide) during or after the project's construction than otherwise would have been expected in the foreseeable future.

The first conclusion above is not appropriate for Placer Parkway, since the new transportation facility would yield advantages that could affect developers' decisions. For example, the Placer Ranch and Sutter Pointe Specific Plans are currently being developed and would benefit from the certainty associated with adoption of a specific Placer Parkway corridor.

The second conclusion above is not appropriate for Placer Parkway, since there is clear evidence of likely future growth in the numerous formal proposals for major new master planned developments and SOI expansions, as well as in the pace of land assembly and development option activities in the area.

The third conclusion above could be appropriate, because the project would *hasten growth or contribute to growth* in the region, mainly by facilitating implementation of proposed commercial and industrial development in the western and eastern segments of the study area in the study period, but possibly encouraging additional conversion of farmland and open space to urban uses in the long term.

The fourth conclusion above could also be appropriate, because by hastening growth or contributing to growth, more growth would occur with the project than without it in the foreseeable future (e.g., the project study period to 2040).

The conclusion drawn from this review of growth factors and influences and application of various analytical approaches is that the Placer Parkway project ***would be growth inducing as a component of the rapidly evolving urban matrix in Western Placer County***, because it would help facilitate planned and proposed developments in the region and it is expected to influence the timing of development in the vicinity of its proposed interchange locations, particularly those proposed near vacant land adjacent to rapidly developing areas or areas now proposed for urban development.

Figure 3-7 shows the alternative alignments in relationship to existing city boundaries and Spheres of Influence, developed unincorporated areas, community plan and redevelopment areas, and major development projects that have been proposed and are undergoing environmental review but that have not yet been approved. The figure also indicates development constraints such as existing habitat

conservation areas, 100-year floodplains, and municipal facilities that represent substantial public investment in infrastructure. Based on a review of these features, a study area for secondary and indirect impacts is indicated on Figure 3-7, outlined in dark purple. This area encompasses the entire Transportation Analysis study area as defined for the project (Transportation Technical Report [DKS Associates, 2007a]) and expands it in several ways, including extending it westward to the Sacramento and Feather Rivers (natural features and significant barriers to development). The area was also expanded to the north to encompass all of the City of Lincoln's proposed Sphere of Influence expansion area, as well as to the east to encompass all of the land within the city limits of Roseville and the town limits of Loomis. The paragraphs below discuss the Placer Parkway's potential to induce growth within this area.

The project is not likely to induce growth in the areas of Figure 3-7 that are shown in dark gray, tan, green, or purple shading. The dark gray areas represent existing city limits and approved SOI boundaries. These areas have experienced rapid development in recent decades and are predominately built out or are expected to be predominately built out (except for minor infill opportunities) prior to project construction. Much of the existing development in these urbanized areas occurred prior to the Parkway proposal and planned development continues to occur without regard to plans for a new east-west transportation facility in the region. Similarly, the areas shaded in tan are unincorporated areas that are already developed with urban or rural residential uses and thus are unlikely to undergo substantial redevelopment in the next several decades. The areas shaded in green represent existing conservation areas, which present serious constraints to future development, and the areas shaded in light purple indicate areas where there has been substantial public investment in municipal facilities and utilities.

The project could influence proposed land uses or hasten the construction of some proposed uses (which include future conservation areas) in the areas shaded in light gray on Figure 3-7. This is especially probable in the areas surrounding proposed future interchange locations, such as the Sutter Industrial Reserve/Sutter Pointe Specific Plan in Sutter County and the Placer Ranch Specific Plan area in Placer County. Because the land use plans for these two specific plan areas are still being developed, adoption of a corridor alignment for Placer Parkway could result in proposals for more intensive future land uses in the vicinity of proposed interchanges. The remainder of the Sutter County Industrial Reserve land immediately north of the Sutter Pointe Specific Plan area (approximately 3,000 acres) is also shaded in light gray, because it is currently prohibited from development as part of the Natomas Basin HCP agreements between Sutter and Sacramento counties (Wilson, 2006). Placer Parkway is more likely to influence the timing of commercial and industrial development in the light gray areas that lie within the project study area boundary (the black line), as buildout of planned and proposed residential uses in these areas (as well as in the Placer Vineyards and Riolo Vineyard Specific Plan areas to the south) is anticipated by 2020, but absorption of commercial and industrial space is projected to occur more slowly. Development in the Lincoln SOI expansion area (especially the southern portions closest to the proposed Parkway interchanges) is more likely to be hastened by the project, although development pressure in this area is and will continue to be intense even without the project.

In northern Sacramento County, south of the western terminus of the proposed Parkway, the project is unlikely to influence land use patterns, but could play a minor role in influencing the timing of commercial and industrial development, perhaps especially in the vicinity of the Sacramento International airport. Buildout of residential uses in the North Natomas Unit in the City of Sacramento is expected to occur before 2020, but given the supply of office and industrial space in the greater Sacramento region, buildout of non-residential components is expected to take several decades longer, although this timing is much more likely to be determined by office absorption rates in Sacramento, rather than construction of a new roadway to the north (Mende, 2006). The Natomas Joint Vision Area is still in the early planning stages, but Sutter and Sacramento counties have agreed to retain a one-mile no development zone along the south side of the County boundary, and conceptual plans indicate that a one-mile conservation strip along the east side of the Sacramento River is also being contemplated. The Natomas Joint Vision Area

is unlikely to be influenced much by the project, because the pressure to develop this area (south of the one-mile buffer) is more likely to come from spillover housing demand once the North Natomas Unit residential uses are built out, and also from other urbanization pressures associated with Sacramento's status as a regional job center. In the longer term, improved access provided by a parkway to land in south Sutter and southwestern Placer counties could be a factor in stimulating additional growth and development in areas not currently proposed for development, as shown on Figure 3-7. Most of the white and blue areas shown on the figure are currently in agricultural and open space use. Infrastructure in this area is generally poorly developed, with farms and homes on individual wells and septic systems, and a considerable portion is subject to 100-year flooding from creeks that have generally sensitive riparian habitat areas. As seen in Section 7.3.3, planners and developers identify other constraints, such as political opposition to development and the lack of water and sewer service, as being as important as freeway access. At the same time, however, the existing constraints to development in southwestern Placer County have not necessarily slowed or limited growth in the area to date.

Much of the land that lies north of the Cross Canal and west of the East Side Canal is protected by 80-acre minimum agricultural zoning and Williamson Act contracts, or is potential giant garter snake habitat with active habitat conservation interests involved in developing conservation easements and conservation area expansions. A review of land ownership maps of this area indicates that it remains in agricultural ownership and has not been subject to land assembly by development interests, as is the case in southwestern Placer County, as discussed below.

The areas shown as white Figure 3-7 that lie within the central portion of the project study area could come under more intensive development pressure as a result of the project, although no new interchanges are proposed between Fiddyment Road and Pleasant Grove Road. The area surrounding Sunset Boulevard West already appears to be under considerable development pressure, as many of the parcels in this vicinity are being assembled by development interests either for future development or to preserve as conservation areas as mitigation for environmental impacts associated with other planned development activity in the region. A review of land ownership maps updated to November 2006 indicates that more than half of the land between Phillip Road and Dowd Road (from the county line to the city of Lincoln) is now owned by development interests, and according to a source knowledgeable about development activities in this area, much of the rest of it is optioned or in sale or option negotiations (McCoy, 2006). It is impossible to quantify what effect the proposed new roadway project may be contributing to this land assembly activity. No doubt it has contributed to cumulative development pressures in the area to some extent, but the fact that considerable land assembly activity has occurred prior to route adoption, combined with the fact that no new intersections are proposed in the central segment, would indicate that the influence of the project is limited.

Although growth is anticipated throughout the larger secondary and indirect study area over time (as reflected in SACOG's preferred Blueprint scenario), such development is not currently reflected in adopted general plans and has not been formally proposed by landowners. By providing improved access to adjacent areas, Placer Parkway could be one of many factors that would encourage growth in these areas sooner than this might otherwise occur. Thus, it would be growth inducing.

At the same time, there are indications that Placer Parkway's contribution to regional growth may be limited. These include the following:

- no interchanges are proposed within areas that are not already approved or proposed for development;
- all approved and proposed residential development that has not already been built is projected to be built out prior to 2020, when the Parkway is proposed to open; and,

- real estate market pressures in the area have been and continue to be intense without the Parkway, and local government jurisdictions have been supportive of processing development applications in spite of anticipated regional transportation challenges, making it seem likely that much of the approved and proposed development may occur with or without the Placer Parkway.

Comparison of Alternative Alignments

It is unlikely that the choice of one Placer Parkway alternative over another would substantially change expected patterns of growth and development in the study area and the surrounding region. In the Western Segment, all alignments would provide new access to an area that is currently undeveloped farmland, but that is proposed for mixed use urban development. The three more southerly alignments (Alternatives 1, 2, and 3) would provide two interchanges in the Sutter Pointe Specific Plan area, while the more northerly alignments (Alternatives 4 and 5) would provide only one interchange in this area, approximately one mile further north of the more southerly alignments in the Western Segment. It could be argued that the more southerly alignments would be more growth inducing, because they would provide more interchanges (and more access) than the more northerly alignments, in addition to which the northerly alignments would be further removed from existing urban development. The entire Sutter Pointe Specific Plan area, however, is slated for urban development and is under relatively intense development pressure, so that it is likely to build out relatively quickly, with or without the Placer Parkway project. (Prior to approving this and other proposed developments, local jurisdictions are required to analyze traffic impacts and evaluate feasible mitigation strategies, and either demonstrate that adequate traffic capacity exists, or require mitigation such as traffic system improvements or payment of "fair share" fees to improve regional facilities, or the lead agency must adopt a statement of overriding considerations in order to approve the project.) The roadway alignment would not serve as an urban limit line in either location, although the more northerly route would provide better access to farmland north of the Sutter Pointe Specific Plan area that is not currently planned or proposed for development (although it is earmarked for eventual future development, as part of Sutter County's remaining Industrial-Commercial Reserve area).

It could also perhaps be argued that the provision of a single interchange—as is proposed under Alternatives 4 and 5—would convert less land area to roadway surface, thereby leaving more land available for contemplated urban uses, which could be seen as facilitating more growth than would occur with two interchanges, which would convert more land to roadway uses. On the other hand, long term development and redevelopment efforts would likely result in more intensive land uses closer to the intersections. Given the uncertainties surrounding these predictions, there appears to be no basis for finding that one alignment would be more growth inducing than another in the western segment. Since none of the alternative alignments would include any interchanges in the Central Segment, there would be little difference in growth inducement effects among the alternatives in this segment. In the Eastern Segment, all alternatives would follow an identical alignment, so there would be no differences in growth inducement effects among the alternatives.

Watt Avenue Interchange

A future interchange at Watt Avenue could be growth inducing, because it would provide major new regional access to a portion of the study area that is currently rural and undeveloped. The MEPLAN analysis described in Section 7.3.3 evaluated the effect of a Watt Avenue interchange on potential future development. The model indicated that an interchange at Watt Avenue would increase the number of households in the study area, adding approximately 180 under Alternative 1 and 70 under the Alternative 5. Jobs would also increase, with approximately 200 more jobs under Alternative 1 and 260 under Alternative 5 with an interchange at Watt Avenue. The area around the interchange, however, is

also already subject to intense development pressure, as indicated on Figure 3-4. The area surrounding the southerly option is likely to be substantially built out by the time such an interchange is built. The northerly option could stimulate growth in the area between Phillip Road and the Curry Creek Community/Regional University plan areas—one of the few remaining areas in the eastern half of the central segment that has not been proposed for development yet. Whether a future Watt Avenue interchange would be growth inducing or would be built to meet the needs of existing or planned development would depend upon when it is constructed in relation to entitlements or buildout of specific developments approved for the surrounding area. This would be evaluated in more detail in the separate environmental review process for that project.

7.5 SECONDARY AND INDIRECT IMPACTS ASSOCIATED WITH GROWTH

7.5.1 Introduction and Definitions

Recent FHWA, EPA, and Caltrans guidance on growth inducement (Mare Island Accord, 2006) advises that analysis of potential impacts associated with growth should include an evaluation of the effects of growth on resources of concern. The following discussion presents a qualitative evaluation of potential secondary and indirect impacts of Anticipated Growth (see below for definition) on human and environmental resources in the study area.

The CEQ NEPA regulations define "indirect effects" as those "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems" (40 CFR Section 1508.8(b)). In contrast to indirect effects, "direct effects" are those "which are caused by the action and occur at the same time and place" (40 CFR Section 1508.8(a)). As provided for in the CEQ NEPA regulations, effects and impacts are considered synonymous (40 CFR Section 1508.8(b)). The CEQA Guidelines definition of indirect effects is consistent with the CEQ definition.

A key term used in this section is "Anticipated Growth." This is defined as the growth that is anticipated in the study area as described in the relevant General Plans and adopted regional forecasts, such as the SACOG Blueprint scenario (as detailed in other sections of this Community Impact Assessment), including additional growth that may occur as a result of major new development proposals that have not yet been formally approved. It is possible that this additional growth may accelerate the rate of buildout in the study area, but it is not ultimately expected to result in any greater levels of development than is presented in adopted regional forecasts.

The definition of indirect effects includes a causation factor; that is, to be considered an indirect effect of the project, the effect must be "caused by" the project. There is not a clear answer as to whether the anticipated growth is caused by the Placer Parkway or not. As discussed in Section 7.3, the Parkway "would not directly attract more population into the area," and housing units currently allowed under adopted general plans are expected to be built by the time the Parkway opens. Other development proposals are proceeding in the absence of any approvals or funding for Placer Parkway, so that development cannot be attributed to the project. At the same time, Placer Parkway could accelerate the rate of development, especially in areas near proposed new interchanges. In the longer term, improved access provided by the Parkway could be a factor in stimulating additional growth and development in some of the few remaining areas in the project vicinity that are not currently urbanized, protected (e.g., conservation areas) or proposed for development.

Although the relationship between the Parkway and future growth in the study area is complex and there is no simple conclusion about such growth, this Community Impact Assessment concludes (Section 7.3), that the Placer Parkway project would be growth inducing, because it would help facilitate planned and proposed development in the region and is expected to influence the timing of development in the vicinity of proposed interchanges. Thus, for purposes of this secondary and indirect impacts assessment, Placer Parkway is considered to be a causal factor for growth. It is the effects of that growth that are considered here as secondary or indirect effects of the Parkway, to the extent such effects are reasonably foreseeable.

The discussion discloses a comprehensive range of impacts that could potentially occur; it is not intended to suggest that all such impacts are likely. Furthermore, as discussed above, a number of factors influence growth and no specific portion of the impacts of growth discussed in this section are attributed to the Parkway. The secondary and indirect impacts associated with growth are addressed in the relevant Placer Parkway Tier 1 EIS/EIR Technical Memoranda. Therefore, the impacts noted below are provided in a summary format to avoid extensive duplication. The reader is referred to the analysis of each environmental topic for further details.

7.5.2 No-Build Alternative

If the proposed Placer Parkway were not constructed secondary or indirect impacts as a result of anticipated growth are still expected to occur. Other planned and proposed development in the study area would be expected to be implemented and potential impacts on environmental and human resources associated with these projects would be subject to independent environmental review. Since it is anticipated that much of the projected growth would occur with or without Placer Parkway (see Sections 7.3.1, 7.3.4, and 7.4 of this Community Impact Assessment), however, it is likely that impacts from growth will be similar to those discussed below.

7.5.3 Build Alternatives

Secondary and indirect impacts associated with anticipated growth would be direct impacts of other projects (see Section 3.3.5 and Figures 3-4 and 3-7) not associated with Placer Parkway, and would be required to be analyzed as part of independent environmental review. Although it is not feasible to perform a detailed evaluation of these projects at this stage as specific design details are not known, potential impacts are taken into account in the Placer Parkway 2040 cumulative analysis. This analysis evaluates a 2040 cumulative scenario, presented in Section 3.3.5, which includes full-residential buildout in Placer County west of Sierra College Boulevard, including general plan areas and major developments, and employment and population growth in line with SACOG forecasts. It assumes levels of growth and development will occur at the higher end of a potential feasible range and therefore represents a reasonable maximum development scenario for which cumulative and secondary and indirect impacts have been analyzed.

A discussion of potential impacts on specific environmental resources is presented below.

7.5.3.1 Land Use

Anticipated growth could affect land use in the study area through the conversion of land from agricultural use to commercial, residential, and industrial uses. Such growth would also result in the conversion of existing undeveloped and vacant land to similar uses.

7.5.3.2 Farmland

Agricultural Production and Farmland Fragmentation

- Fragmentation and parcel size reduction could reduce the amount of land available for agricultural production and related effects on certain types of agricultural activities that require larger tracts of land to hold down per-unit production costs.
- Impacts on the ability of a farm to compete in the local market against larger producers could be affected.
- Increase in impervious surfaces in the study area could increase surface water run-off and could increase erosion, adversely affecting productivity of agricultural soils. These effects are expected to be offset by water quality requirements imposed on new development.

Transportation Challenges

- Increase in the number of users of roadways, and agricultural machinery and trucks that would have to compete with residential traffic on local roadways. The differences in vehicle speeds and size can create potentially dangerous and frustrating situations for both suburban residents and for agricultural equipment operators.
- In remote areas within the study area, livestock can be driven from pasture to pasture using public and private roads. However, as traffic increases, livestock producers may need to use trucks and trailers to transport livestock as an added safety measure.

Agricultural Support Services

- Possible effects on agricultural viability due to reductions and changes in support services (in turn impacted by changes in customer base).

7.5.3.3 Socioeconomic and Community Resources

Social Conditions

- Increased population in the study area, resulting in increased demand for and use of community facilities such as schools, hospitals, places of worship, and emergency support services.
- Additional such facilities would be required, and would be expected to be planned for and provided by Sutter and Placer counties or provided by private sources as part of conditions incorporated into approval of new development proposals.
- Change from a predominantly rural, agricultural area to an area comprising a greater density of mixed-use communities and associated infrastructure and facilities.

Economic Conditions

- Generation of employment and fiscal benefits within the study area, as a result of construction employment and income benefits, and also as a result of revenue and taxes

generated and spent by new businesses, employees and residents. These benefits could be applied to the greater Sacramento region, northern California or beyond.

7.5.3.4 Visual Resources

- Conversion of portions of a rural area into a more urban landscape, resulting in a perceived reduction in the visual quality of the existing natural environment.

- Changes in the type of viewer in the study area, and in changes to the viewer exposure to the area (e.g., number, location, and duration of existing viewers).

- Introduction of numerous commuters to the area, who would experience short-duration views of the surrounding landscape from the Parkway, and would also increase the number of residents and workers in the area who would have longer-duration views of the Parkway and the surrounding area.

- Increase in the urban influences in the study area, consequently adding more "grey" than "green" with future growth (i.e., more pavement and structures than natural elements), a secondary impact of bringing in more urbanization to an area now dominated by rural influences.

Additional information on potential visual resources in the study area is provided in the Visual Impact Assessment prepared for the Placer Parkway Tier 1 EIS/EIR.

7.5.3.5 Cultural Resources

- Potential disturbance of both known and as yet unidentified unknown historic properties archaeological sites that may occur in and around the study area. Such resources are generally protected via federal and state regulations, but development could result in adverse impacts to archaeological or historical resources.

Additional information on potential cultural resources in the study area is provided in the Archaeological Survey Report and Historical Resources Evaluation Report prepared for the Placer Parkway Tier 1 EIS/EIR.

7.5.3.6 Traffic/Transportation

- New roadways would be constructed as part of proposed future developments, which would also contribute to traffic pattern changes. Traffic patterns and volumes changes can affect air quality and noise, and these are discussed below in Sections 7.4.3.7 and 7.4.3.8.

- Increase in traffic generated. Changes in traffic patterns, including congestion on some roadway segments (see below).

- Placer Parkway planning to date has been primarily a cooperative and collaborative process aimed at meeting projected travel demand associated with actual and anticipated population and employment growth in the region, rather than an effort aimed at stimulating or facilitating unplanned growth. Thus, traffic generation and traffic congestion relief will be occurring at the same time, as Placer Parkway is intended to alleviate congestion in the study area and will reduce commute times.

Additional information on traffic and transportation in the study area is provided in the Transportation Technical Report prepared for the Placer Parkway Tier 1 EIS/EIR.

7.5.3.7 Air Quality

New traffic patterns and increased traffic volumes could adversely affect air quality, particularly if this results in additional congestion on roads in the study area. Although it is not possible to predict with any certainty where such growth-induced congestion might occur, it is reasonable to assume that pollutant emissions associated with such congestion could adversely affect air quality, although this could be wholly or partially offset by the improved Level of Service, decreased vehicle delay, and reduced congestion afforded by the Parkway.

This could occur in a number of ways:

- Increased risk of adverse health effects on humans residing in areas affected by poor air quality;
- Impacts on pollution-sensitive wildlife species, such as lichens; and
- Contribution to climate change associated with higher levels of atmospheric carbon dioxide generated from vehicle emissions. This could be wholly or partially offset by cleaner future vehicle technology and use of alternative fuels.

Additional information on air quality in the study area is provided in the Air Quality Technical Report prepared for the Placer Parkway Tier 1 EIS/EIR.

7.5.3.8 Noise

Modified traffic patterns could adversely affect noise, particularly if this results in traffic traveling at higher speeds within the study area. Although precise impacts on future receptors cannot be predicted, it is reasonable to assume that both new and existing developments that would be present in the study area in the future could be affected by noise. Impacts could include the following:

- Increase in overall ambient noise in the area;
- Increased risk of reduced quality of life, and associated adverse health effects on residences, business and facilities located in areas affected by increased noise levels;
- Adverse economic impacts on residences adversely affected by noise; and
- Impacts on noise sensitive wildlife, such as birds, mammals, and reptiles. Impacts are also possible on species that are sensitive to noise, and noise-related disturbance at particular stages of their life cycle, such as during nesting and other breeding activities.

Additional information on noise in the study area is provided in the Traffic Noise Analysis Technical Memorandum prepared for the Placer Parkway Tier 1 EIS/EIR.

7.5.3.9 Hydrology and Floodplains

Although it is not possible to predict with any certainty where new impervious surfaces may be created, it is reasonable to assume that impacts associated with reduction in pervious land cover and increased run-

off, either directly associated with the construction of the Parkway or as a result of growth induced by the Parkway, could adversely affect floodplains and hydrology. This could occur in a number of ways:

- Contamination of surface water and groundwater through increased erosion and run-off of pollutants;
- Increased peak flows and runoff volumes cause flooding downstream;
- Declining levels of developable land could place additional pressure for continued floodplain encroachment, with its associated adverse effect on wildlife and increased risk of flooding;
- Impacts on aquatic wildlife as a result of increased sedimentation from erosion and run-off; and
- Impacts on aquatic wildlife as a result of constriction or blockage of natural stream flow associated with stream crossings.

Additional information on hydrology and floodplains in the study area is provided in the Hydrology and Floodplains Technical Memorandum prepared for the Placer Parkway Tier 1 EIS/EIR.

7.5.3.10 Water Quality

Although it is not possible to predict with any certainty where increased run-off will occur, it is reasonable to assume that secondary and indirect impacts associated with reduction in pervious land cover and increased run-off, either from the construction of the parkway or as a result of anticipated growth, could adversely affect water quality. This could occur in a number of ways:

- Increased non-point source water pollution of surface water bodies through increased run-off from new developments;
- Impacts on aquatic flora and fauna as a result of degraded water quality and increased erosion and sedimentation; and
- Additional contamination of surface water bodies associated with new stream crossings required by new developments.

Additional information on hydrology and floodplains in the study area is provided in the Hydrology and Floodplains Technical Memorandum prepared for the Placer Parkway Tier 1 EIS/EIR.

7.5.3.11 Geology, Soils, Seismic and Topography

Anticipated growth would not be expected to have any secondary or indirect impacts on geological, seismic or topographical conditions in the study area. However, new development could affect soils by increasing the amounts of impervious area in the study area, which would increase surface water run-off and which could increase erosion. Increased erosion can impact agriculture by decreasing soil productivity and can also impact biological resources. Potential impacts on water quality associated with erosion are discussed in Section 7.4.3.10.

7.5.3.12 Biological Resources

Although it is not possible to predict with any certainty where secondary or indirect impacts could occur at this stage, it is reasonable to assume that secondary and indirect impacts as a result of anticipated growth could adversely affect biological resources. This could occur in a number of ways:

- Modification of land, including the fallowing of existing rice fields that are currently irrigated by flooding during the growing season or vernal pool complexes that are currently grazed.

- Loss or degradation of habitat for species that benefit from the current land management practices. Examples of affected habitats might include agricultural areas used by foraging Swainson's hawks, greater sandhill cranes, wintering waterfowl, giant garter snakes, and burrowing owls, as well as grazed vernal pool areas occupied by rare plants.

- A decrease in land management activities might also benefit nesting Swainson's hawks and white-tailed kites, the Valley elderberry longhorn beetle, and riparian habitats that are adversely affected by intensive land management activities.

- Adverse affects on the surrounding natural communities and special-status species. Increased noise and lights would likely decrease the value of such habitat for nesting and foraging, causing disturbance and potentially affecting natural breeding cycles and behavior. Increased impervious surfaces would increase stormwater run-off rates and could have adverse impacts on water quality and on water-dependent wildlife.

- Habitat fragmentation and division of larger tracts of habitat into smaller non-contiguous areas as a result of artificial structures such as roads, buildings, and other infrastructure. Fragmentation lowers habitat quality and can affect particular species that require large tracts of habitat or are vulnerable to disturbance from human activities.

- Where anticipated growth results in new crossings of waterbodies and streams, secondary impacts on water quality and aquatic wildlife could occur. Riparian areas associated with creeks are particularly valuable in providing foraging, nesting, and migratory habitat for wildlife species, and could also be adversely impacted, either through direct loss from new development or from the effects of habitat fragmentation.

- Vernal pool complexes would also be susceptible to the effects of fragmentation caused anticipated growth. Development can have effects on the hydrology of vernal pools that are not directly impacted. The coverage of land surfaces with concrete and/or deep ripping of the hardpan layer can affect the amount and quality of water available to the perched water tables characteristic of vernal pool areas. Changes to the perched water table can lead to alterations in the rate, extent, and duration of inundation (water regime) of remaining habitat (USFWS, 1996). Survival of vernal pool branchipods is directly linked to the water regime of their habitat. Roads in or near vernal pool habitat areas can lead to additional impacts through the introduction of chemically laden runoff (i.e., petroleum products).

- Anticipated growth may also produce conditions that are favorable for exotic predators such as bullfrogs and mosquito fish (USFWS, 1996). The U.S. Fish and Wildlife Service typically considers any ground-disturbing activities within 250 feet of a vernal pool to comprise an indirect impact.

Additional information on biological resources in the study area is provided in the Natural Environment Study prepared for the Placer Parkway Tier 1 EIS/EIR.

7.5.3.13 Hazardous Materials

Anticipated Growth could result in the potential disturbance of as yet unknown hazardous sites and potential recognized environmental concerns that may occur in and around the study area. Although it is not possible to predict with any certainty where such sites may be located, it is reasonable to assume that, if not properly investigated and remediated, such disturbance could result in accidental spillage or releases, which could adversely affect human health, soil, air quality, and groundwater or surface water. However, the development review process through state and federal law and regulation is expected to prevent such impacts.

Additional information on hazardous materials in the study area is provided in the Initial Site Assessment prepared for the Placer Parkway Tier 1 EIS/EIR.

7.5.3.14 Energy

Anticipated growth would utilize energy during construction and would consume energy in the form of heating and cooling, lighting, and business operations. Traffic trips associated with such development would also consume energy by increased Vehicle Miles Traveled (VMT) and trip generation, but such impacts could be wholly or partially offset by cleaner future vehicle technology and use of alternative fuels, and by the improved Level of Service, decreased vehicle delay and reduced congestion afforded by the Parkway. Although overall VMT would increase, the Parkway would result in a reduction of VMT on congested arterials and local streets, which would reduce the extra energy used by vehicles in congested conditions.

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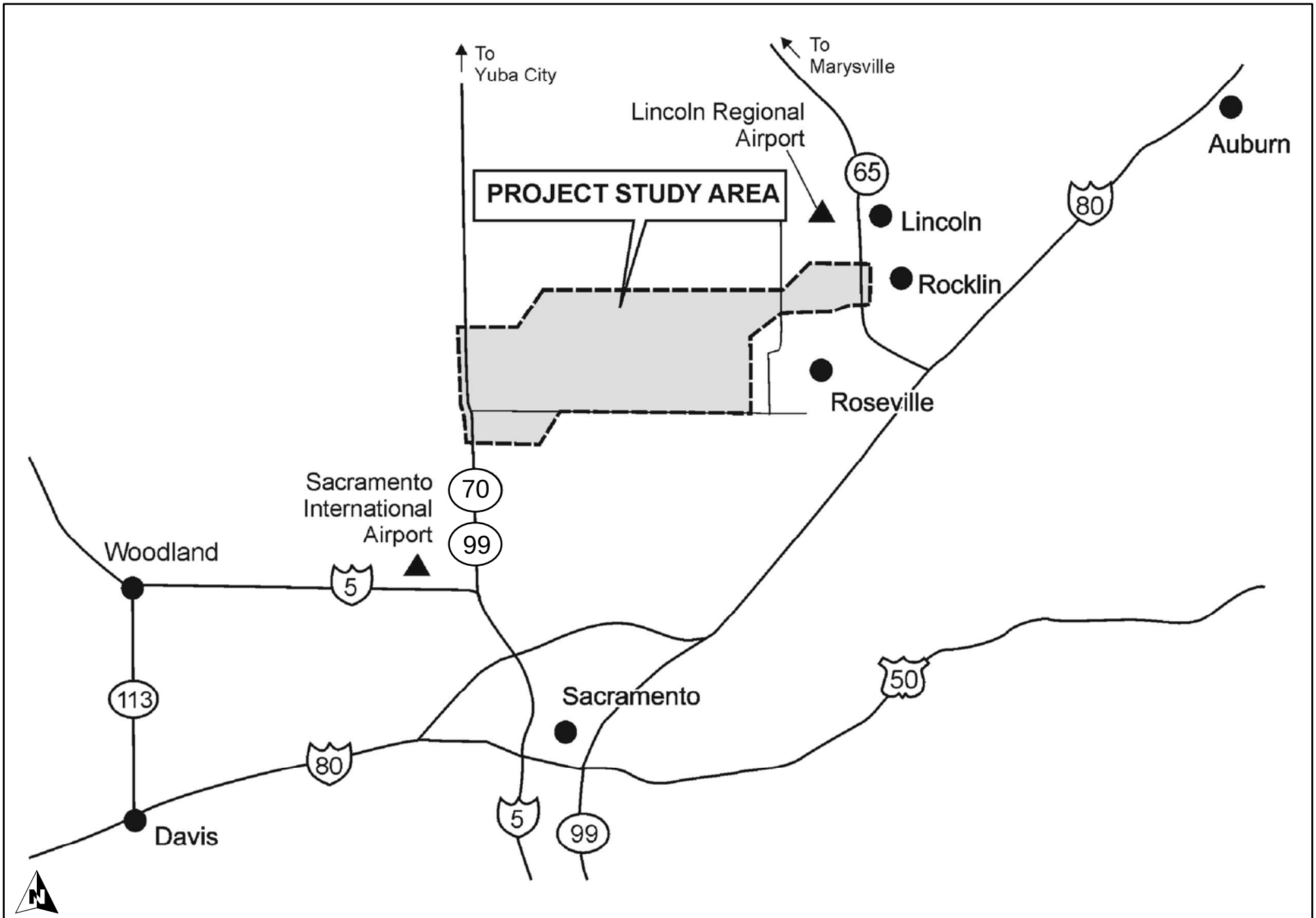
Figures



Tier 1 EIS/EIR
Community Impact
Assessment

Project Location Map

Figure 1-1

June 2007

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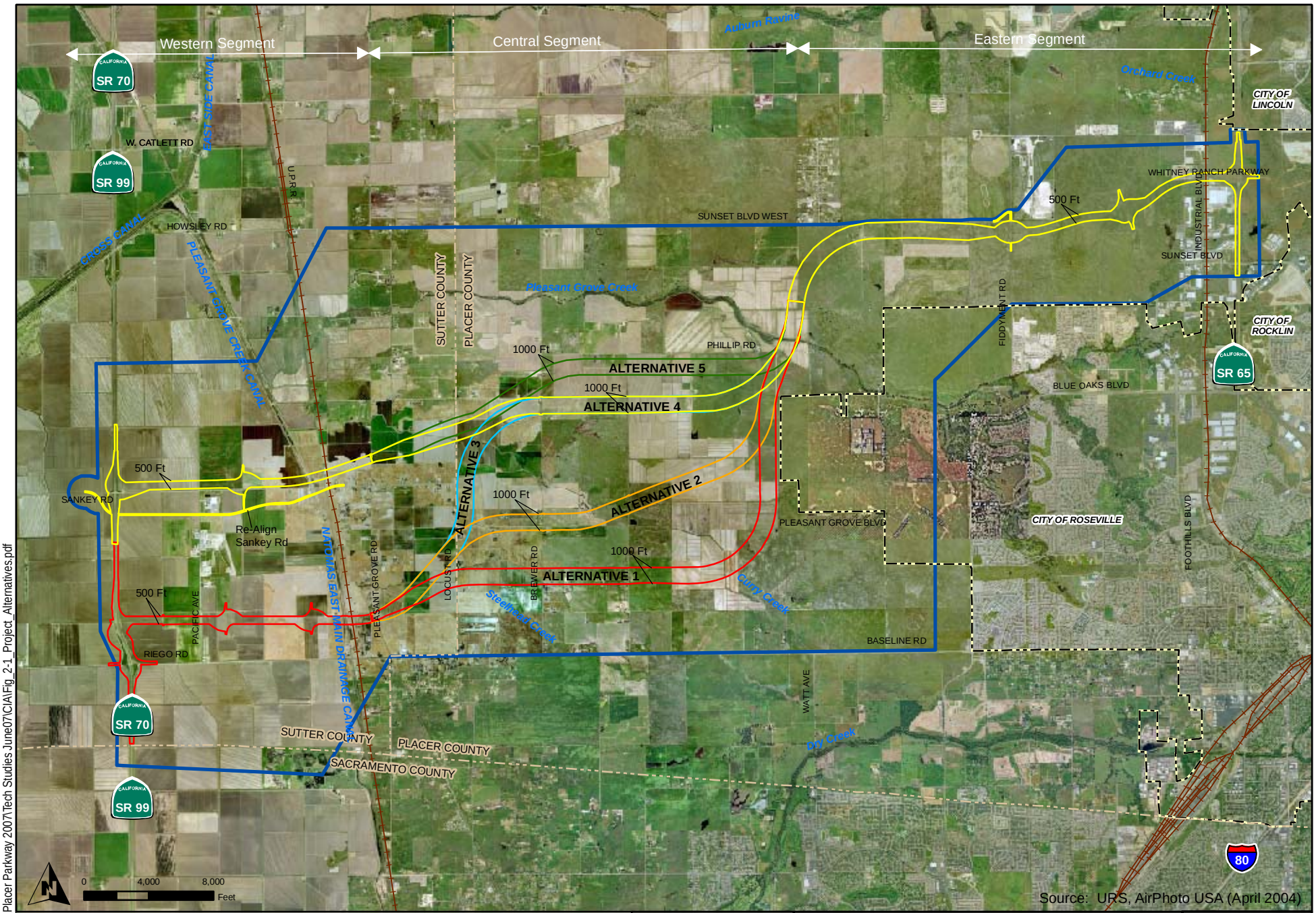

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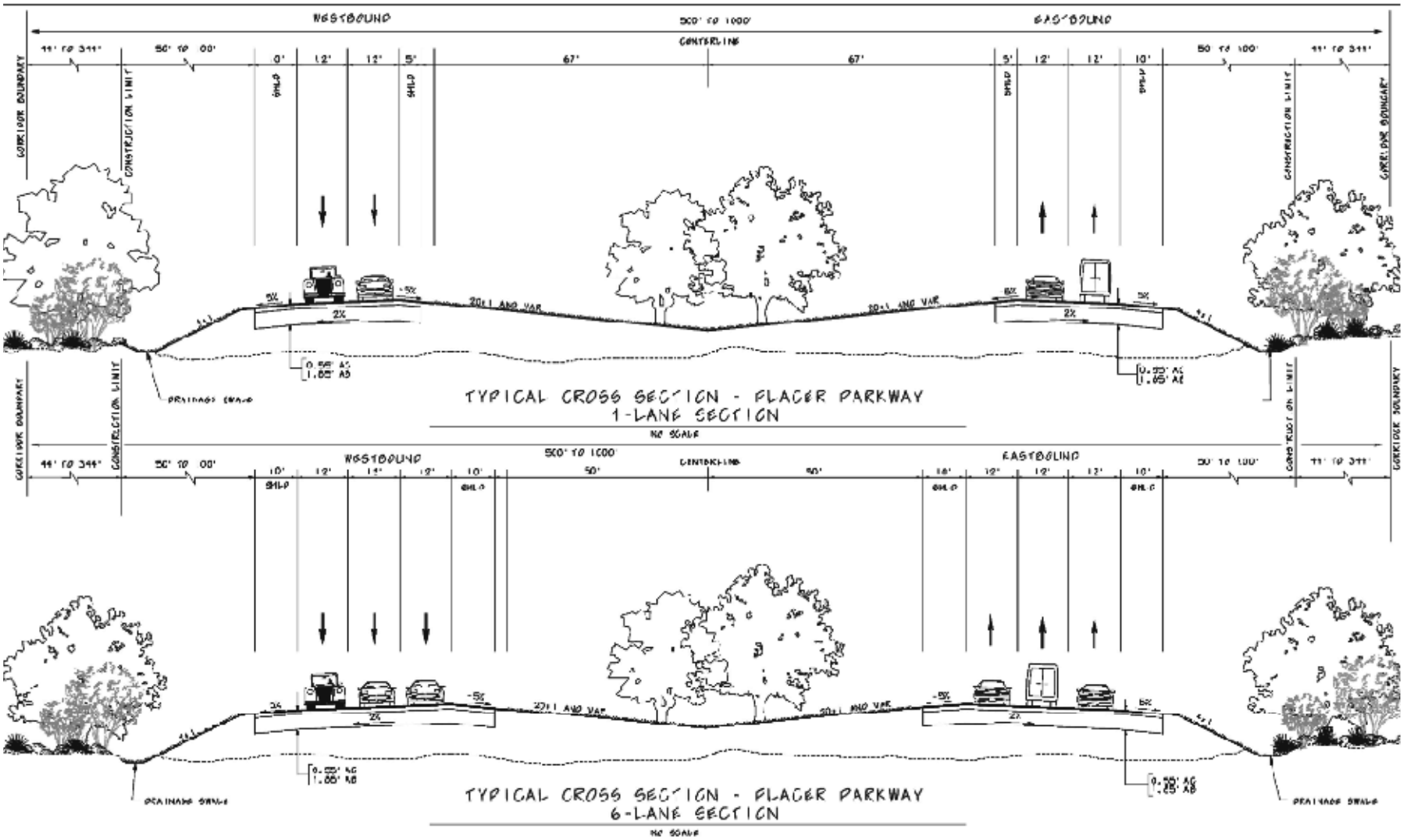

PLACER PARKWAY	TIER 1 EIS/EIR Community Impact Assessment	Typcial Cross Section (Conceptual)	***Figure 2-2*** ***June 2007***

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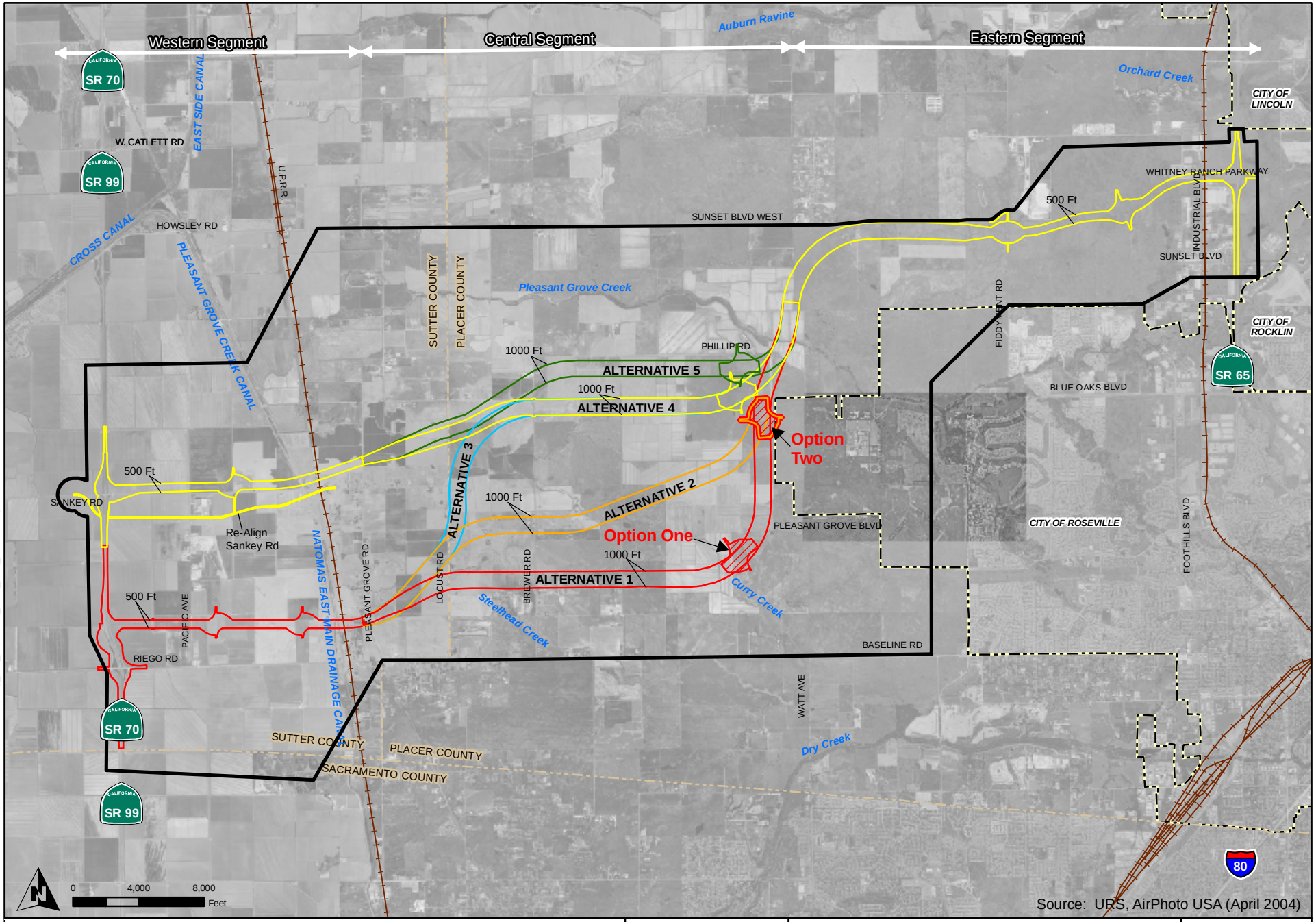
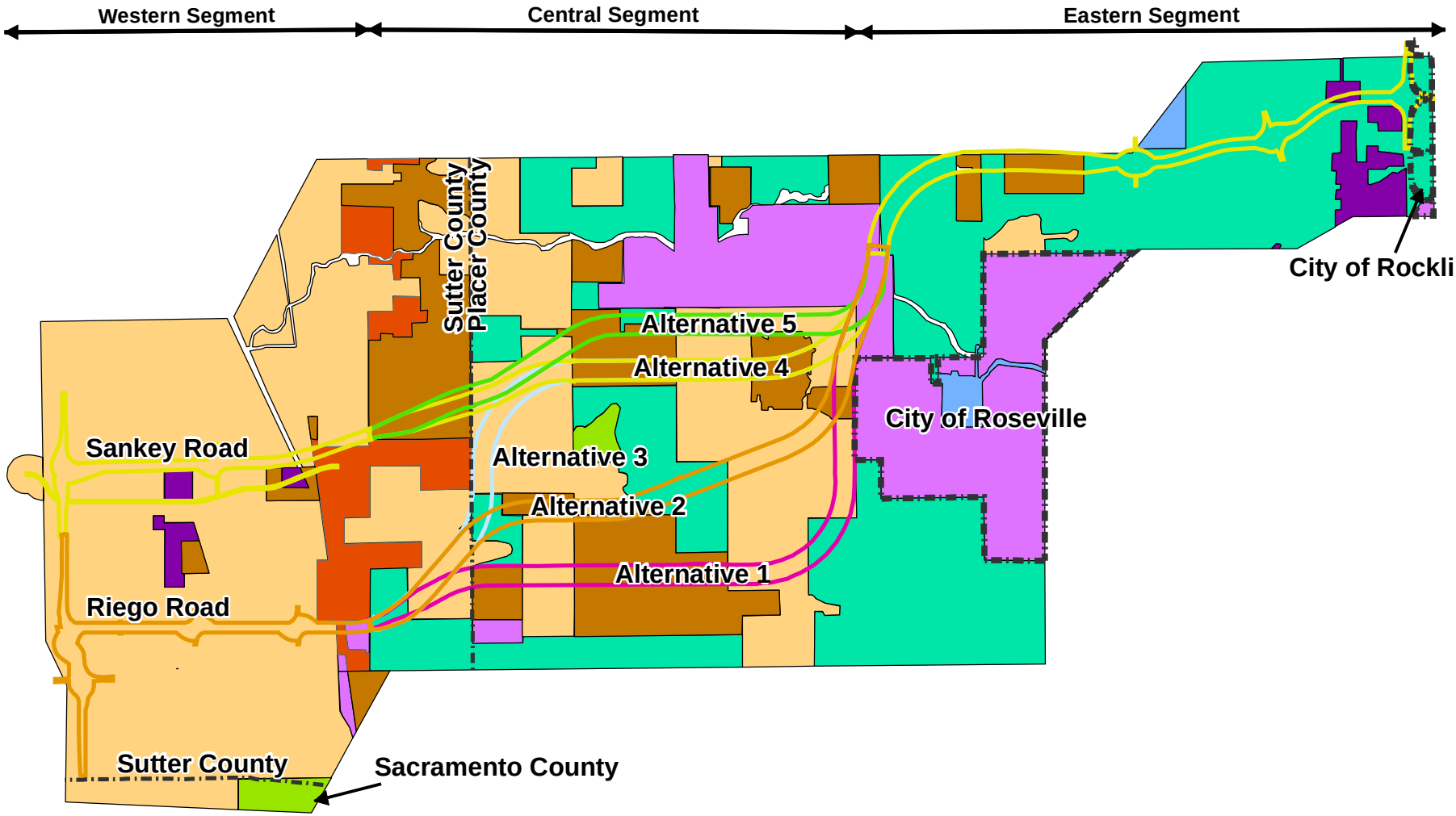


Tier 1 EIS/EIR
Community Impact
Assessment

Potential Watt Avenue Interchange

Figure 2-3

June 2007



Source: North Fork Associates and Mara Feeney Associates

- Industrial
- Other Cultivated Agriculture
- Pasture, Idle Farmland or Semiagriculture
- Municipal Facilities
- Rural Residential
- Wildlife Preserve
- Other
- Rice

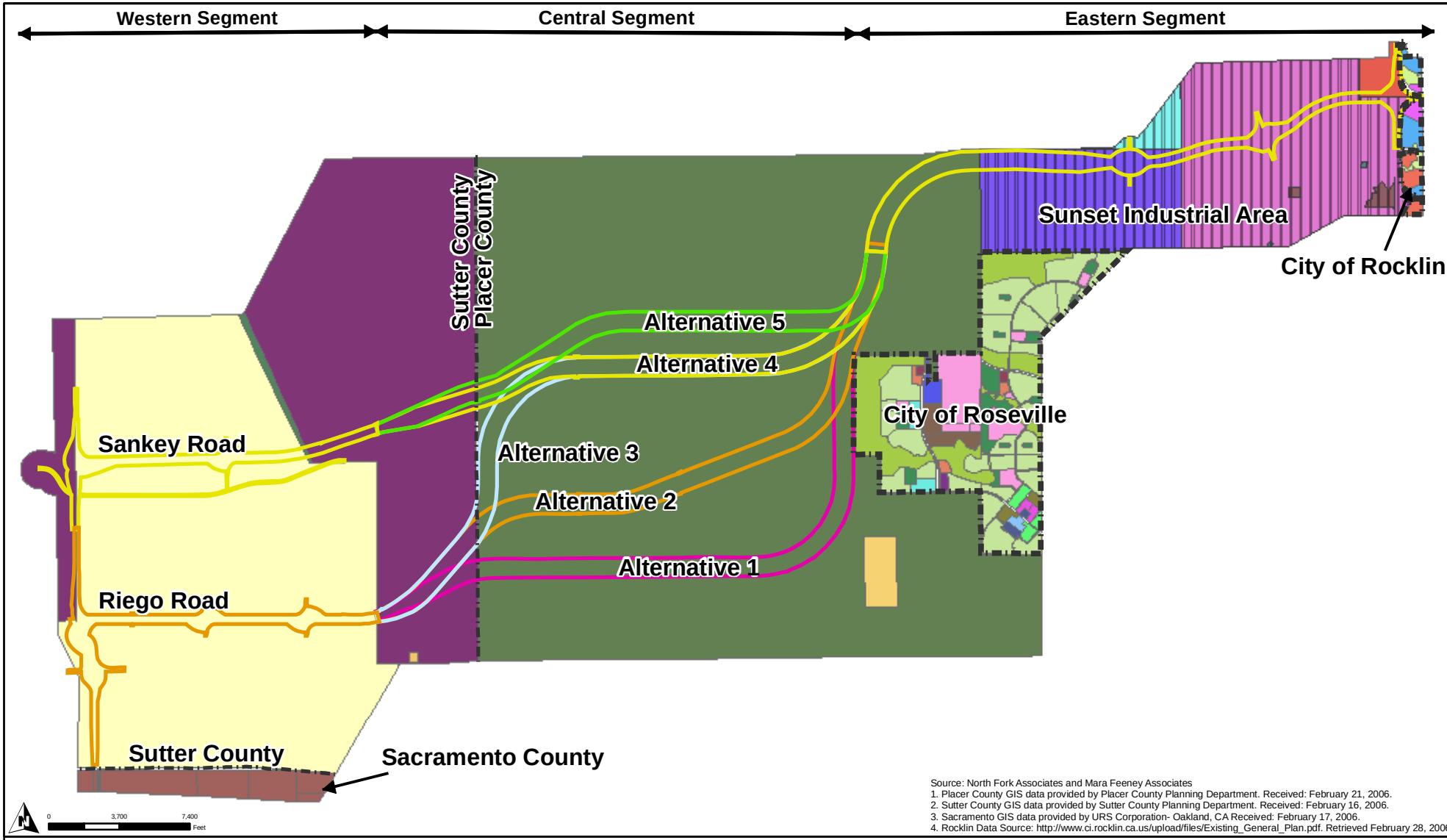
PLACER PARKWAY

TIER 1 EIS/EIR
Community Impact
Assessment

Existing Land Use

Figure 3-1

June 2007



Source: North Fork Associates and Mara Feeney Associates
1. Placer County GIS data provided by Placer County Planning Department. Received: February 21, 2006.
2. Sutter County GIS data provided by Sutter County Planning Department. Received: February 16, 2006.
3. Sacramento GIS data provided by URS Corporation- Oakland, CA Received: February 17, 2006.
4. Rocklin Data Source: http://www.ci.rocklin.ca.us/upload/files/Existing_General_Plan.pdf. Retrieved February 28, 2006.

Placer County
- Agricultural 80 Ac. Min.
- Agriculture 20 Ac. Min.
- Agriculture 80 Ac. Min.
- Business Park
- Commercial
- Industrial
- Public Facility
- Public Facility/Agricultural 80 Ac. Min.

Sacramento County
- Agriculture 40 Ac. Min.

Sutter County
- Agriculture 80 Ac. Min.
- Industrial
- Industrial/Commercial Reserve
- Open Space

City of Rocklin
- Light Industrial
- Professional Office
- Recreation/Conservation
- Retail Commercial

City of Roseville
- Business Professional
- Community Commercial
- Community Commercial/ Village Center
- General Industrial
- High Density Residential
- High Density Residential/Village Center
- Light Industrial
- Low Density Residential
- Medium Density Residential
- Medium Density Residential/Village Center
- Open Space
- Parks and Recreation
- Parks and Recreation/Village Center
- Public/Quasi-Public
- Public/Quasi-Public/Village Center

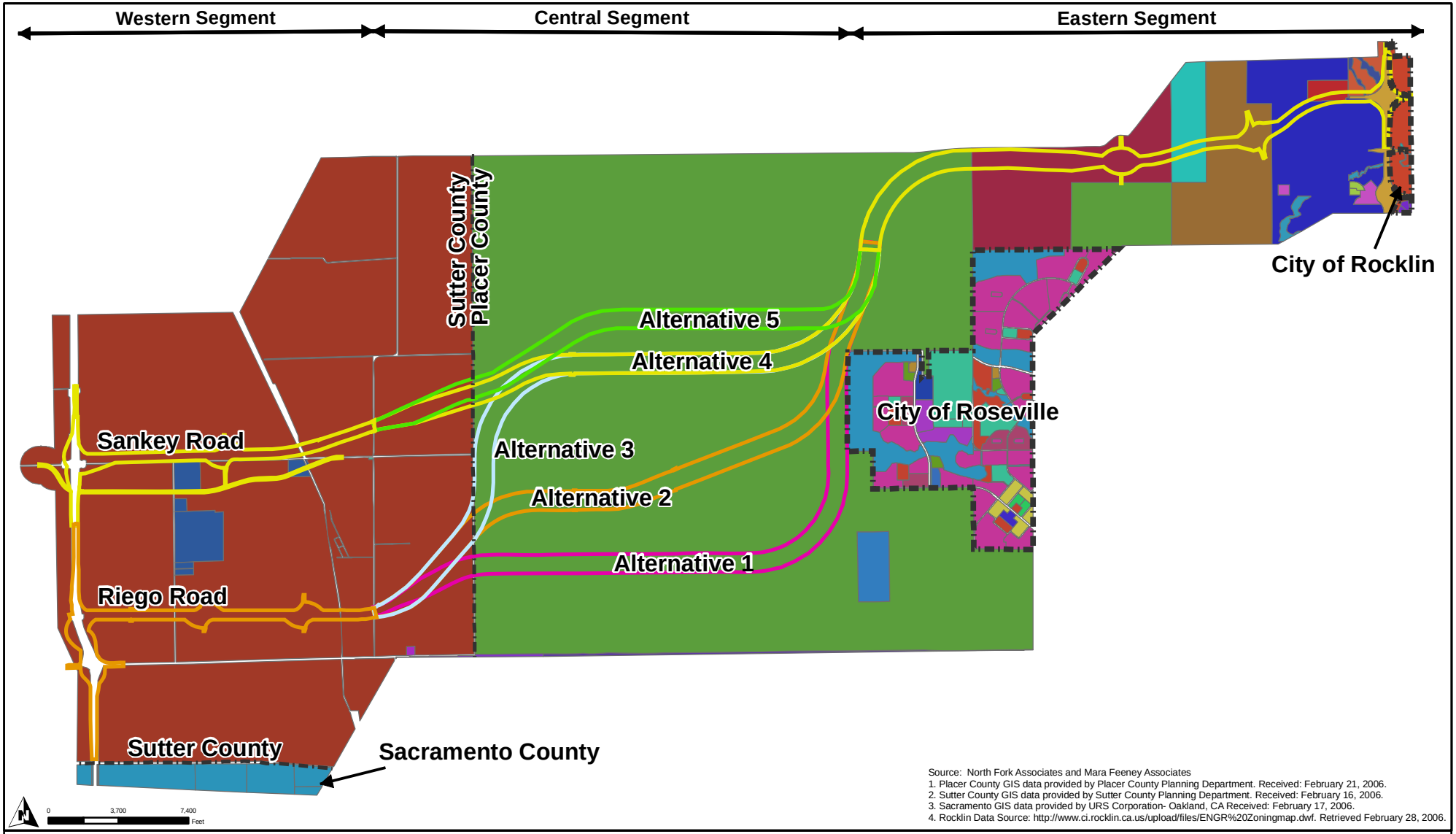
PLACER PARKWAY CORRIDOR PRESERVATION

TIER 1 EIS/EIR
Community Impact Assessment

Existing Designated Land Use

Figure 3-2

June 2007



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3. Sacramento GIS data provided by URS Corporation- Oakland, CA Received: February 17, 2006.
4. Rocklin Data Source: http://www.ci.rocklin.ca.us/upload/files/ENGR%20Zoningmap.dwf. Retrieved February 28, 2006.

Placer County Zoning
- Business Park-Design Review
- Business Park-Design Review-Flood Hazard
- Farm-Building Site 20 AC. MIN.
- Farm-Building Site 80 AC. MIN.
- Farm-Building Site-Development Reserve
- Farm-Building Site-Development Reserve 80 AC. MIN.
- Farm-Building Site-Development Reserve-Special Purpose
- Farm-Building Site-Special Purpose 80 AC. MIN.
- Farm-Development Reserve 80 AC. MIN.
- General Commercial-Conditional Use Permit Required
- Industrial Park
- Industrial Park-Design Review
- Industrial Park-Design Review-Flood Hazard
- Industrial-Design Review
- Neighborhood Commercial-Design Review-Development Reserve
- Open Space
- Residential Agricultural-Building Site-Development Reserve 10 AC. MIN.

City of Rocklin Zoning
- Planned Development Business Professional
- Planning Preserve
- Wetland

City of Roseville Zoning
- Attached Housing
- Attached Housing/Development Standards
- Business Professional
- Community Commercial
- Community Commercial/Special Area
- General Industrial/Special Area
- Light Industrial/Special Area
- Open Space
- Park and Recreation
- Public/Quasi-Public
- Public/Quasi-Public/Special Area
- Single-Family Residential/Development Standards
- Small Lot Residential/Development Standards

Sacramento County Zoning
- Agricultural 80 AC. Min

Sutter County Zoning
- General Agricultural District
- General Industrial District
- Light Industrial District
- Public District

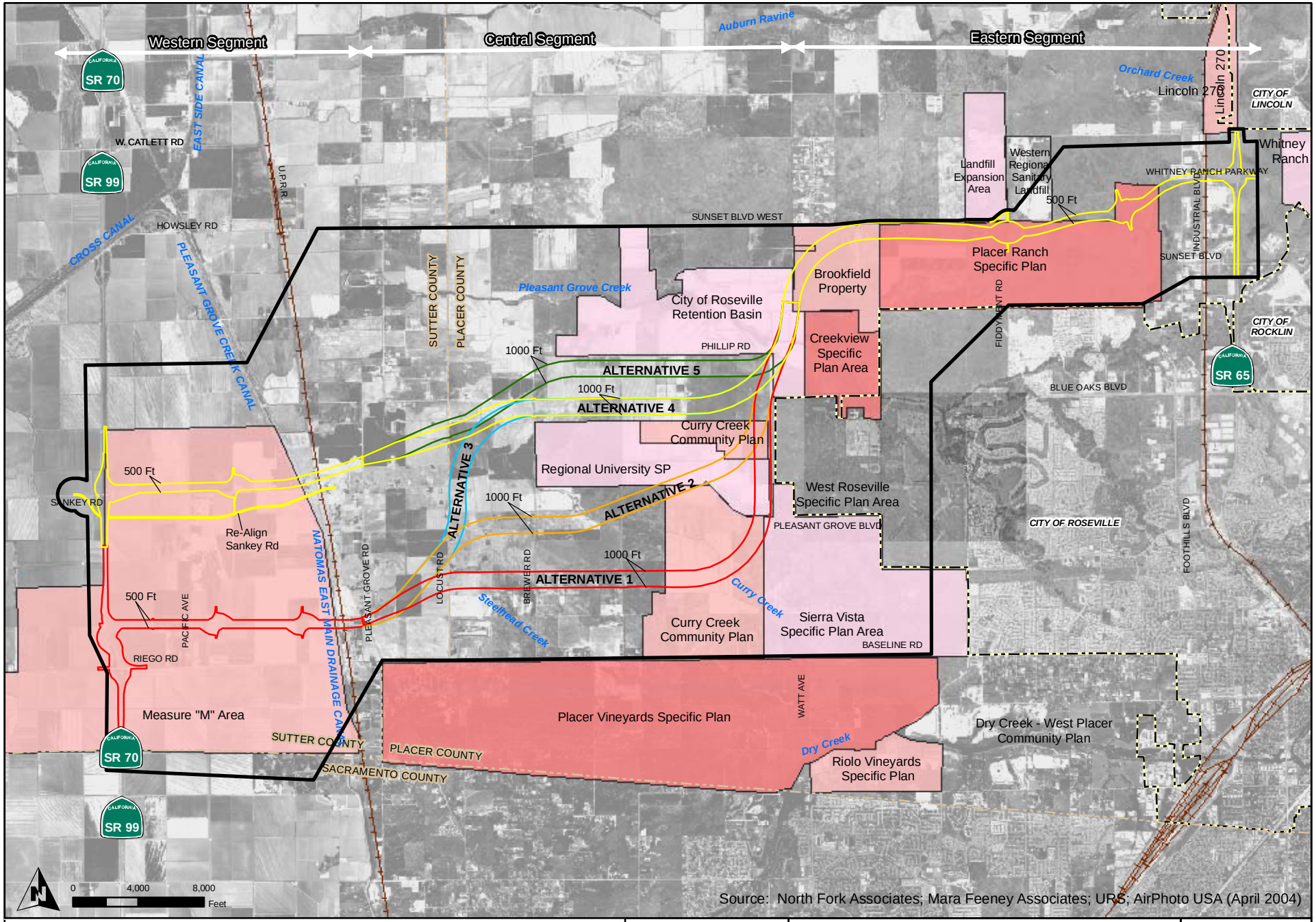
PLACER PARKWAY CORRIDOR PRESERVATION

TIER 1 EIS/EIR
Community Impact Assessment

Existing Zoning

Figure 3-3

June 2007



Study Area Boundary
City Boundary
County Boundary
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Planned/Proposed Development

PLACER PARKWAY

TIER 1 EIS/EIR
Community Impact Assessment

Planned / Proposed Development

Figure 3-4

June 2007

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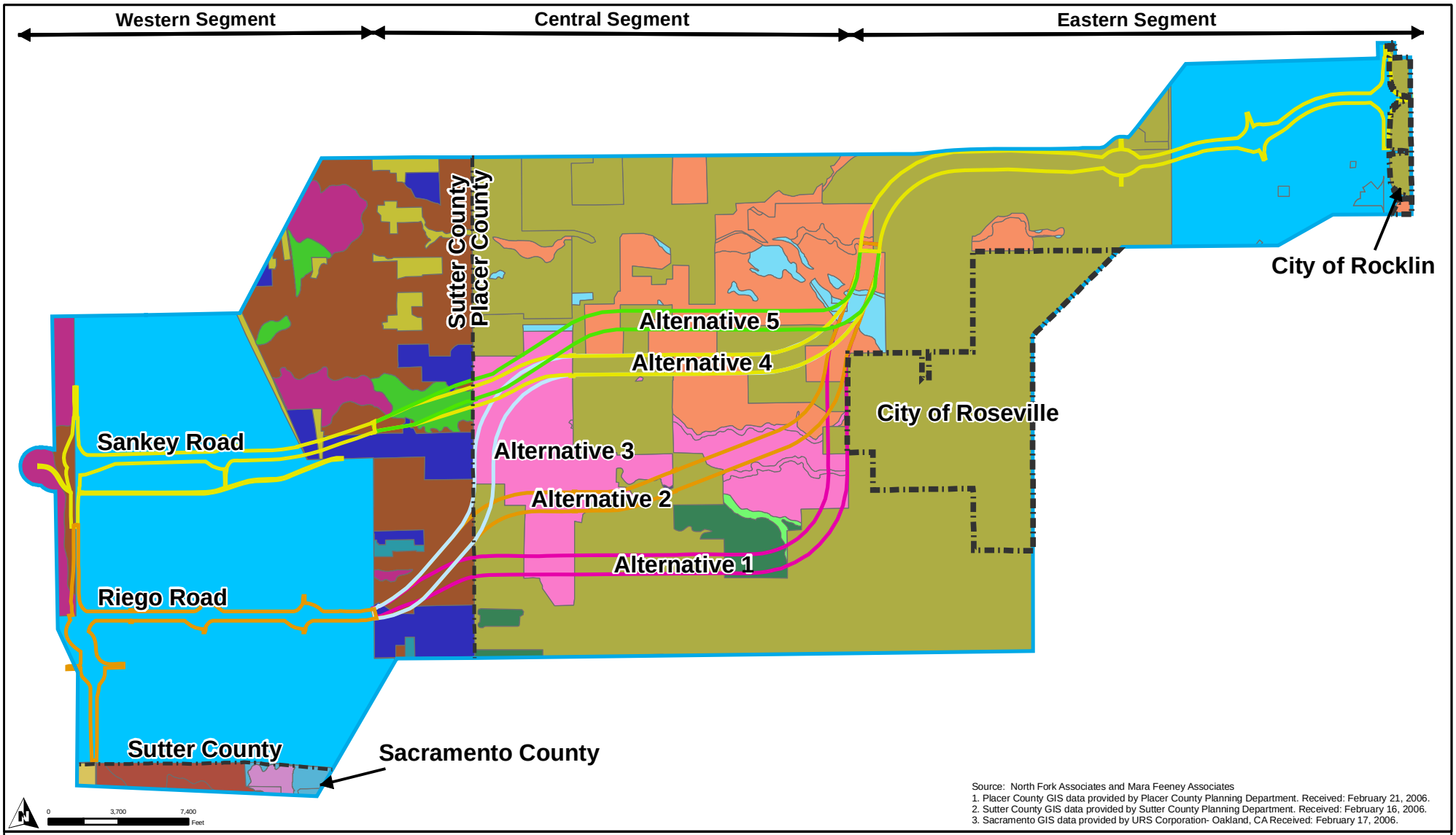

Source: North Fork Associates and Mara Feeney Associates
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2. Sutter County GIS data provided by Sutter County Planning Department. Received: February 16, 2006.
3. Sacramento GIS data provided by URS Corporation- Oakland, CA Received: February 17, 2006.

Placer County Important Farmland
- Farmland of Local Importance
- Farmland of Statewide Importance
- Grazing Land
- Other Land
- Prime Farmland
- Unique Farmland
- Urban AND Built Up Land

Sacramento County Important Farmland
- Farmland of Local Importance
- Farmland of Statewide Importance
- Grazing Land
- Other Land
- Prime Farmland
- Unique Farmland

Sutter County Important Farmland
- Farmland of Statewide Importance
- Grazing Land
- Other Land
- Prime Farmland
- Unique Farmland
- Urban AND Built Up Land

Other
- Non-Agricultural Land

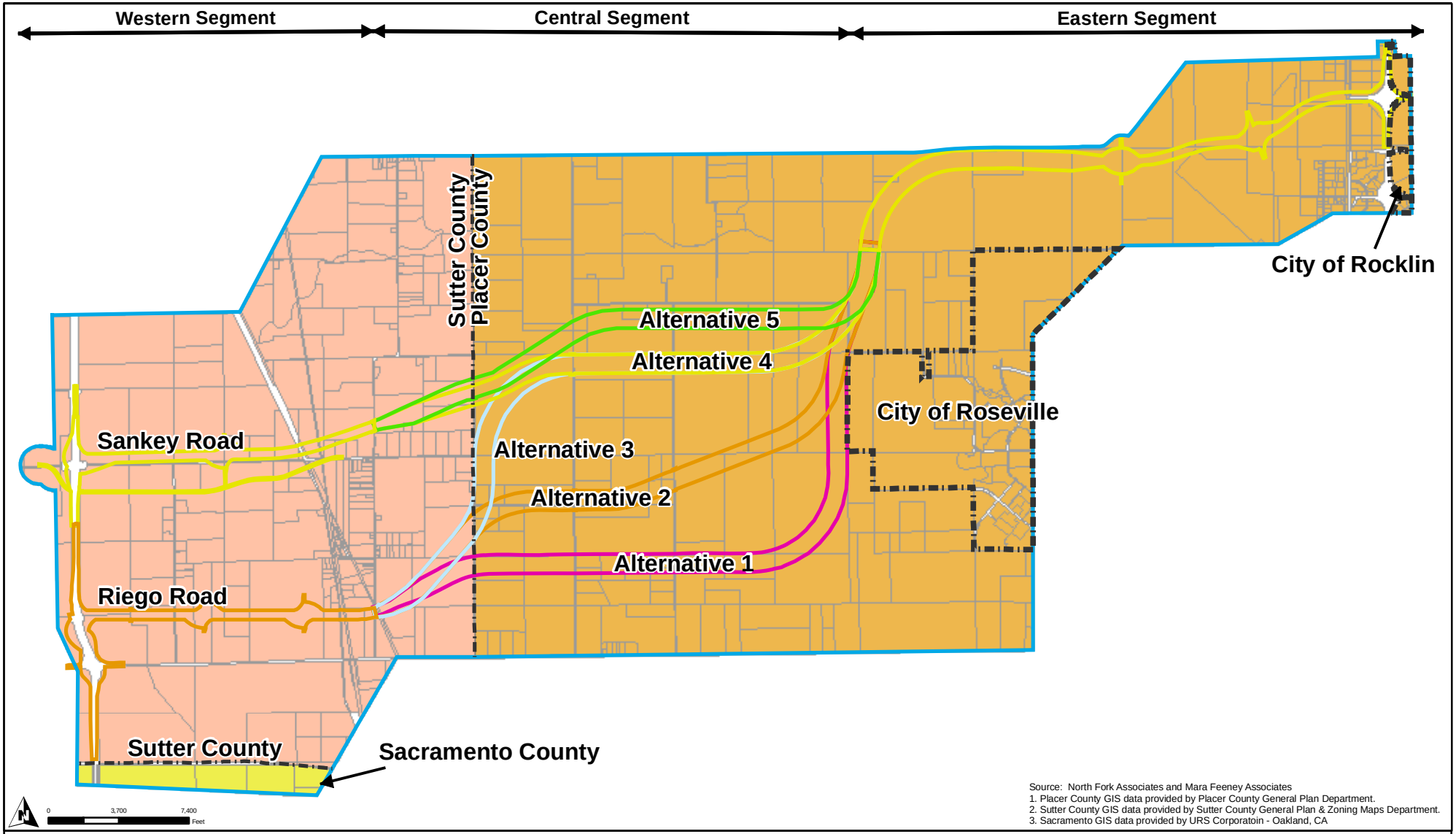
PLACER PARKWAY CORRIDOR PRESERVATION

TIER 1 EIS/EIR
Community Impact Assessment

Important Farmland in Relation to Designated Landuse

Figure 3-5

June 2007



Source: North Fork Associates and Mara Feeney Associates
1. Placer County GIS data provided by Placer County General Plan Department.
2. Sutter County GIS data provided by Sutter County General Plan & Zoning Maps Department.
3. Sacramento GIS data provided by URS Corporatoin - Oakland, CA

PLACER PARKWAY CORRIDOR PRESERVATION

TIER 1 EIS/EIR
Community Impact
Assessment

Parcel Boundaries

Figure 3-6

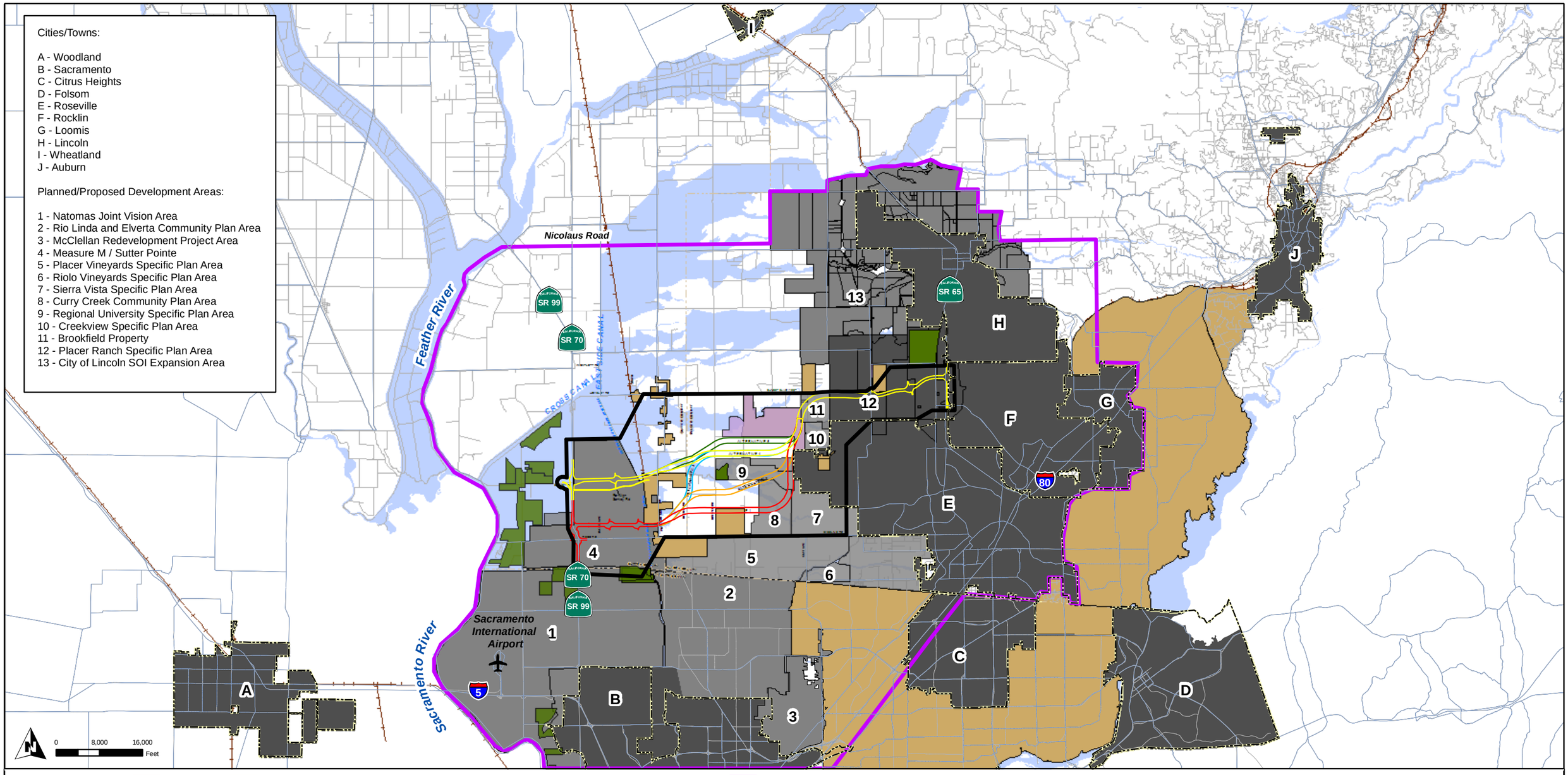
June 2007

Cities/Towns:

A - Woodland
B - Sacramento
C - Citrus Heights
D - Folsom
E - Roseville
F - Rocklin
G - Loomis
H - Lincoln
I - Wheatland
J - Auburn

Planned/Proposed Development Areas:

1 - Natomas Joint Vision Area
2 - Rio Linda and Elverta Community Plan Area
3 - McClellan Redevelopment Project Area
4 - Measure M / Sutter Pointe
5 - Placer Vineyards Specific Plan Area
6 - Riolo Vineyards Specific Plan Area
7 - Sierra Vista Specific Plan Area
8 - Curry Creek Community Plan Area
9 - Regional University Specific Plan Area
10 - Creekview Specific Plan Area
11 - Brookfield Property
12 - Placer Ranch Specific Plan Area
13 - City of Lincoln SOI Expansion Area



County Boundary
Railroads
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Existing and Approved Development
Planned / Proposed Development (including future conservation areas)
Existing Conservation Areas
Developed Unincorporated Areas
Municipal Facilities
Study Area for Secondary and Indirect Impacts
Project Study Area Boundary
100 Year Floodplain Areas

Source: North Fork Associates;Mara Feeney Associates; Sutter County Planning Division; County of Sacramento Planning and Community Development Department; City of Sacramento Development Services Department; Sunset Industrial Area Plan; City of Lincoln Community Development Department; Natomas Basin HCP;Placer County Planning Deptartment; City of Sacramento; City of Roseville

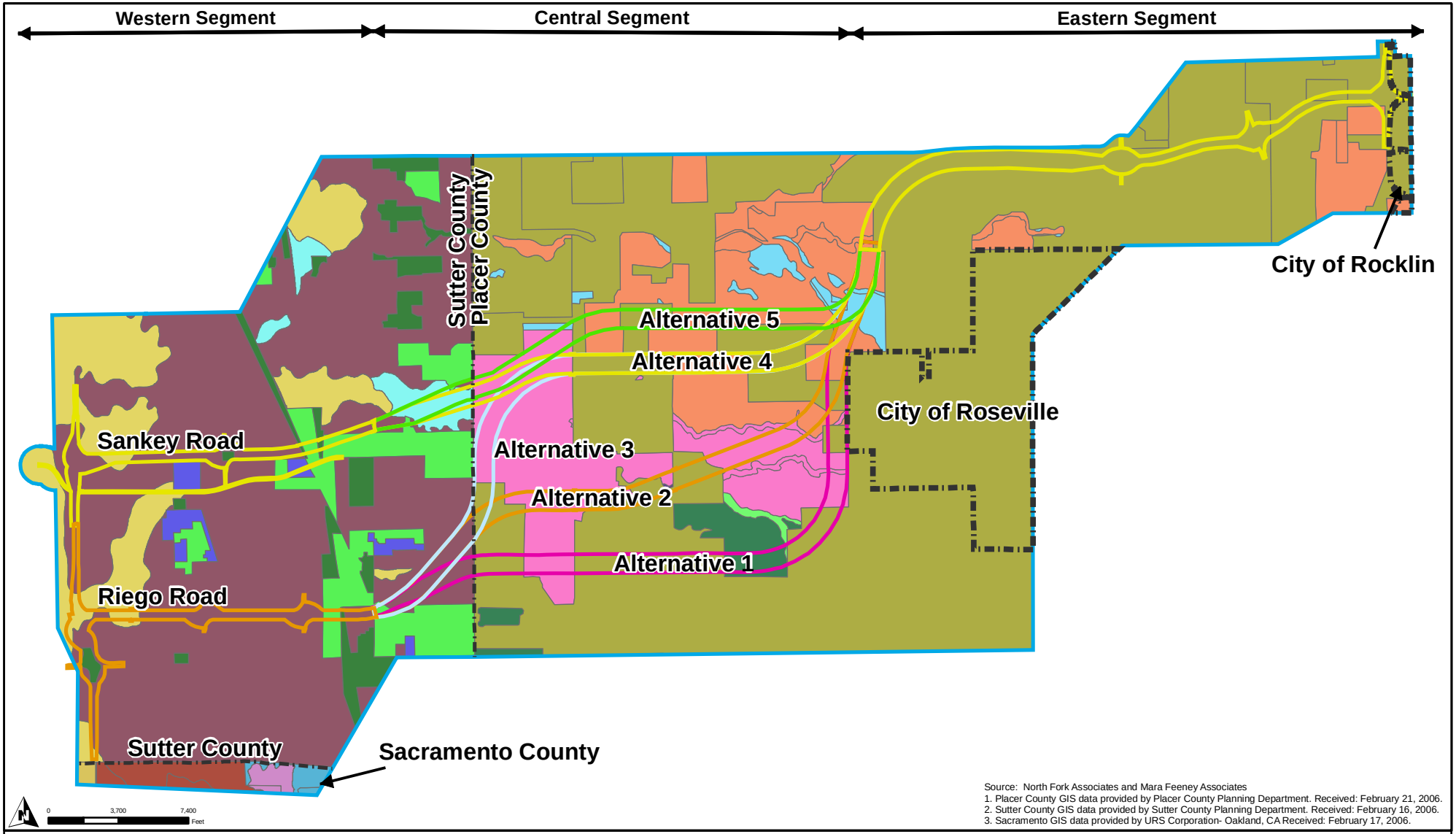
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Community Impact Assessment

Secondary and Indirect Impact Analysis Study Area

Figure 3-7

June 2007



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2. Sutter County GIS data provided by Sutter County Planning Department. Received: February 16, 2006.
3. Sacramento GIS data provided by URS Corporation- Oakland, CA Received: February 17, 2006.

Placer County Important Farmland
- Farmland of Local Importance
- Farmland of Statewide Importance
- Grazing Land
- Other Land
- Prime Farmland
- Unique Farmland
- Urban AND Built Up Land

Sacramento County Important Farmland
- Farmland of Local Importance
- Farmland of Statewide Importance
- Grazing Land
- Other Land
- Prime Farmland
- Unique Farmland

Sutter County Important Farmland
- Farmland of Statewide Importance
- Grazing Land
- Other Land
- Prime Farmland
- Unique Farmland
- Urban AND Built Up Land

PLACER PARKWAY CORRIDOR PRESERVATION

TIER 1 EIS/EIR
Community Impact Assessment

Important Farmland

Figure 4-1

June 2007

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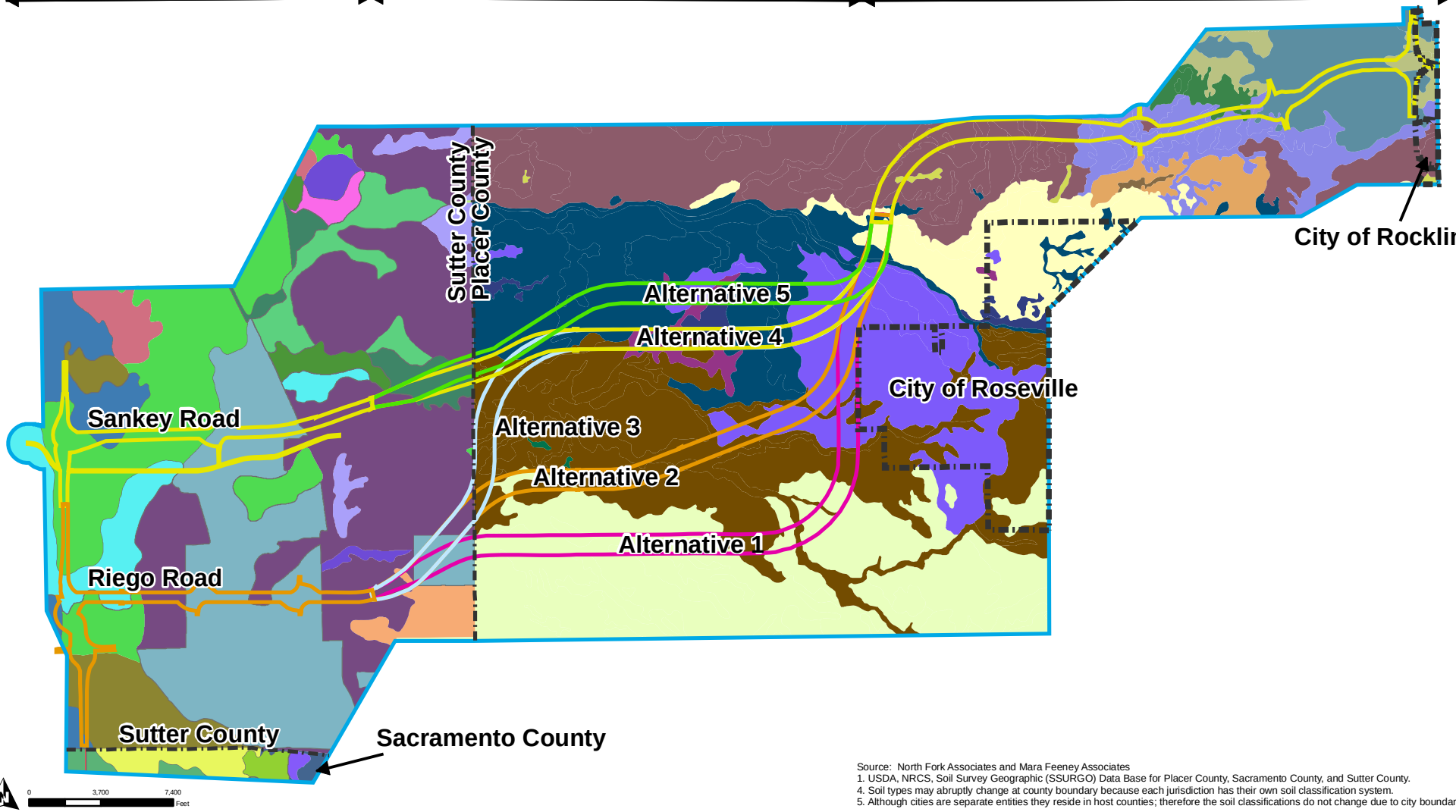


Source: North Fork Associates and Mara Feeney Associates
1. USDA, NRCS, Soil Survey Geographic (SSURGO) Data Base for Placer County, Sacramento County, and Sutter County.
4. Soil types may abruptly change at county boundary because each jurisdiction has their own soil classification system.
5. Although cities are separate entities they reside in host counties; therefore the soil classifications do not change due to city boundaries.

Placer County Soil Types

- 104-ALAMO-FIDDYMENT COMPLEX, 0 TO 5 PERCENT SLOPES
- 140-COMETA SANDY LOAM, 1 TO 5 PERCENT SLOPES
- 141-COMETA-FIDDYMENT COMPLEX, 1 TO 5 PERCENT SLOPES
- 142-COMETA-RAMONA SANDY LOAMS, 1 TO 5 PERCENT SLOPES
- 145-EXCHEQUER-ROCK OUTCROP COMPLEX, 2 TO 30 PERCENT SLOPES
- 146-FIDDYMENT LOAM, 1 TO 8 PERCENT SLOPES
- 147-FIDDYMENT-KASEBERG LOAMS, 2 TO 9 PERCENT SLOPES
- 154-INKS-EXCHEQUER COMPLEX, 2 TO 25 PERCENT SLOPES
- 162-KILAGA LOAM
- 175-RAMONA SANDY LOAM, 2 TO 9 PERCENT SLOPES
- 181-SAN JOAQUIN SANDY LOAM, 1 TO 5 PERCENT SLOPES
- 182-SAN JOAQUIN-COMETA SANDY LOAMS, 1 TO 5 PERCENT SLOPES
- 193-XEROFLUVENTS, OCCASIONALLY FLOODED
- 194-XEROFLUVENTS, FREQUENTLY FLOODED
- 195-XEROFLUVENTS, HARDPAN SUBSTRATUM
- 198-WATER

Sutter County Soil Types

- 104-CAPAY SILTY CLAY, 0 TO 2 PERCENT SLOPES
- 105-CAPAY SILTY CLAY, OCCASSIONALLY FLOODED, 0 TO 2 PRECENT SLOPES
- 109-CAPAY CLAY, HARDPAN SUBSTRATUM, 0 TO 2 PERCENT SLOPES
- 114-CLEAR LAKE CLAY, HARDPAN SUBSTRATUM, 0 TO 2 PERCENT SLOPES
- 123-COMETA LOAM, 0 TO 2 PERCENT SLOPES
- 128-EXETER SANDY LOAM, 0 TO 2 PERCENT SLOPES
- 129-GALT CLAY, 0 TO 2 PERCENT SLOPES
- 130-GALT CLAY, FREQUENTLY FLOODED, 0 TO 2 PERCENT SLOPES
- 137-JACKTONE CLAY, 0 TO 2 PERCENT SLOPES
- 140-MARCUM CLAY LOAM, 0 TO 2 PERCENT SLOPES
- 142-MARCUM CLAY LOAM,OCCASIONALLY FLOODED,0 TO 2 PERCENT SLOPES
- 158-SAN JOAQUIN SANDY LOAM, 0 TO 2 PERCENT SLOPES
- 159-SAN JOAQUIN SANDY LOAM,OCCASIONALLY FLOODED, 0 TO 2 PERCENT SLOPES
- 160-SAN JOAQUIN-ARENTS-DUROCHREPTS COMPLEX, 0 TO 1 PERCENT SLOPES
- 194PL-XEROFLUVENTS, FREQUENTLY FLOODED

Sacramento County Soil Types

- 115-CLEAR LAKE CLAY, HARDPAN SUBSTRATUM, DRAINED, 0 TO 1 PERCENT SLOPES
- 134-DIERSSEN SANDY CLAY LOAM, DRAINED, 0 TO 2 PERCENT SLOPES
- 152-GALT CLAY, 0 TO 2 PERCENT SLOPES
- 161-JACKTONE CLAY, DRAINED, 0 TO 2 PERCENT SLOPES
- 214-SAN JOAQUIN SILT LOAM, 0 TO 3 PERCENT SLOPES
- 24-WATER

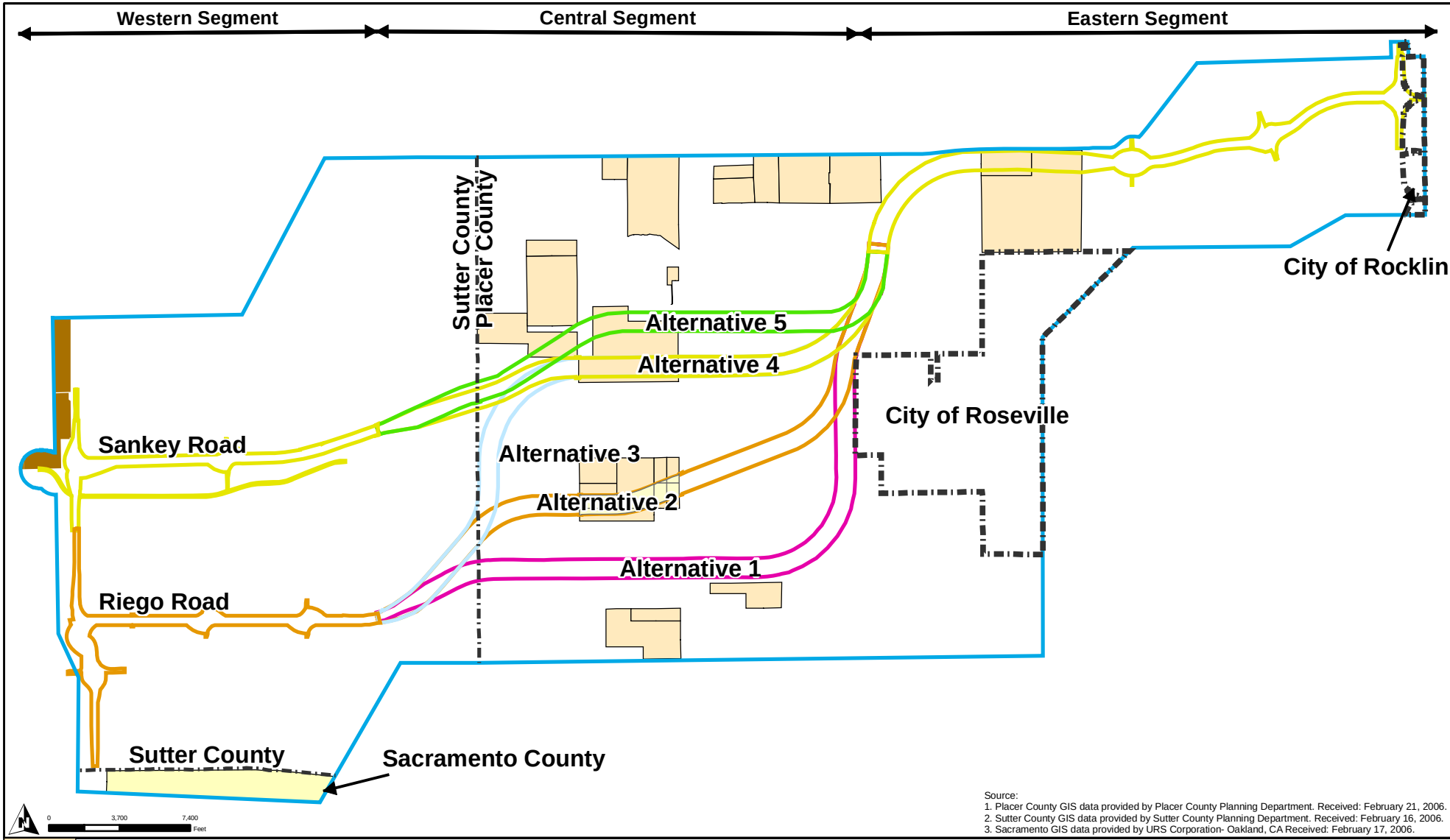
PLACER PARKWAY CORRIDOR PRESERVATION

TIER 1 EIS/EIR
Community Impact Assessment

Soil Types in Sutter, Placer, and Sacramento Counties

Figure 4-2

June 2007



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2. Sutter County GIS data provided by Sutter County Planning Department. Received: February 16, 2006.
3. Sacramento GIS data provided by URS Corporation- Oakland, CA Received: February 17, 2006.

Placer County Williamson Act Land

Sacramento County Williamson Act Land

Sutter County Williamson Act Land

Potentially Affected Williamson Act Land (Acreage)

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Total Impact	119.85	243.70	240.56	240.62	240.26

PLACER PARKWAY CORRIDOR PRESERVATION

TIER 1 EIS/EIR
Community Impact
Assessment

Williamson Act Properties

Figure 4-3

June 2007

URS Corporation L:\Projects\PlacerParkway\2007_280665\MXD\Current Working Documents\Final_Technical_Studies_2006\Community_Impact_Assessment\Fig_4-3_WilliamsonAct.mxd Date: 6/10/2007 7:16:14 PM Name: akkele0

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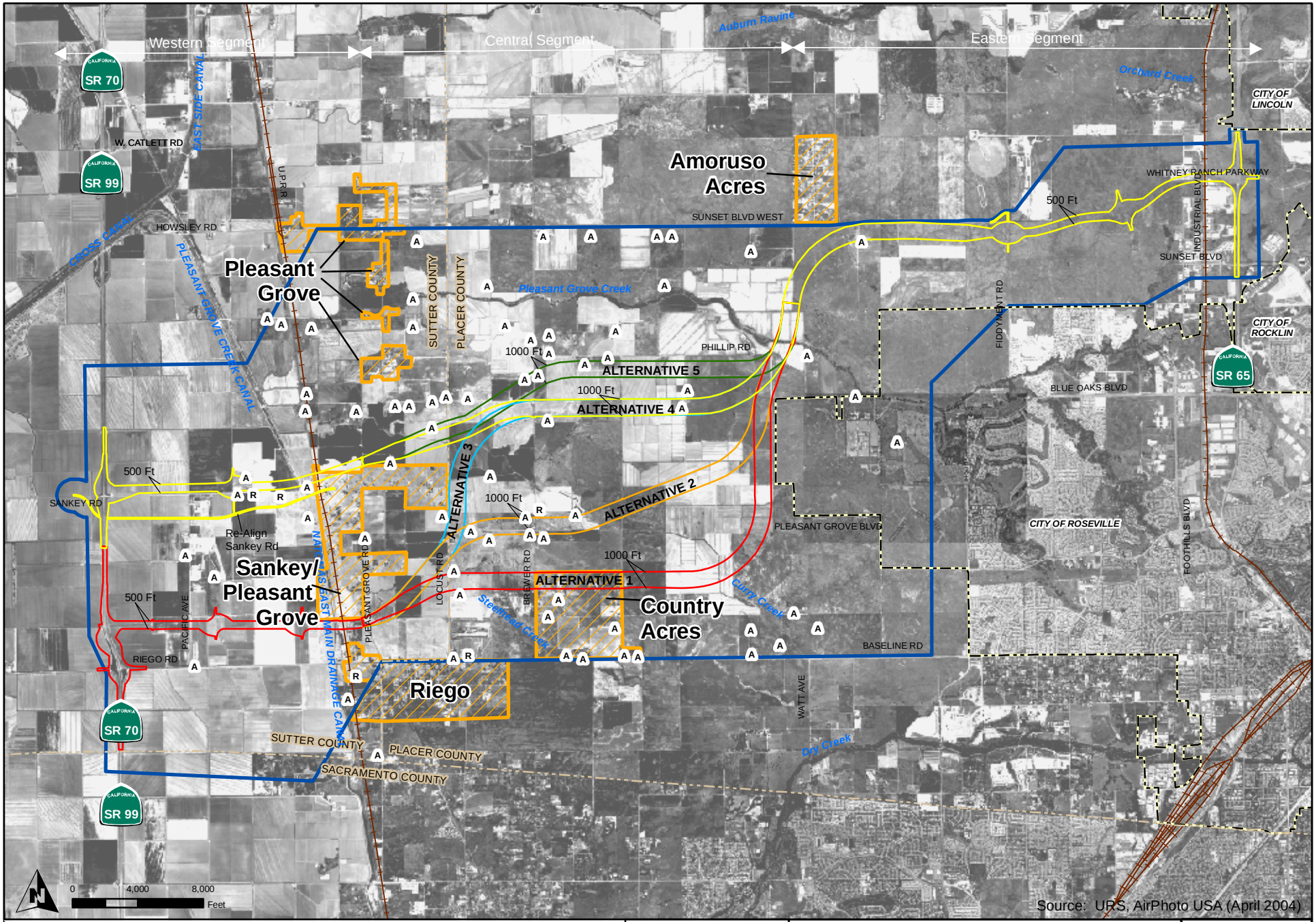


Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary
Potential Community
A Agricultural Bldgs
R Residence

PLACER PARKWAY

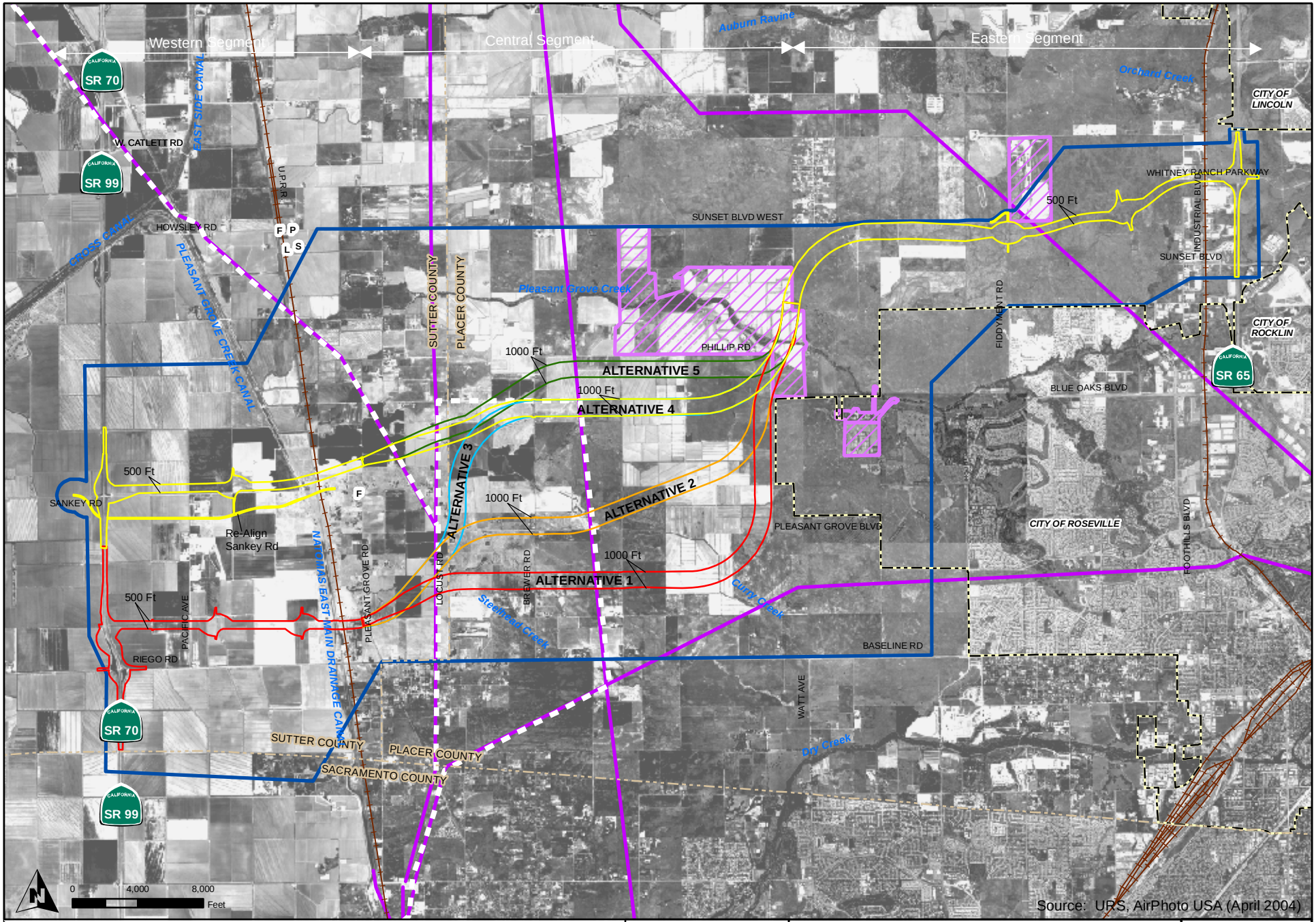
TIER 1 EIS/EIR
Community Impact Assessment

Homes, Farmsteads and Potential Communities

Figure 5-1

June 2007

URS Corporation L:\Projects\PlacerParkway2007_28066595\MXD\Current Working Documents\Final_Technical_Studies_2006\Community_Impact_Assessment\Figure_5-1_Homes_Farmsteads_PotCommunities.mxd Date: 6/10/2007 7:22:58 PM Name: akkeele0



PLACER PARKWAY CORRIDOR PRESERVATION

Community Services and Municipal Facilities

Figure 5-2

June 2007

URS Corporation L:\Projects\PlacerParkway2007_28066595\MXD\Current Working Documents\Final_Technical_Studies_2006\Community_Impact_Assessment\Fig_5-2_Community_Services.mxd Date: 6/10/2007 7:27:22 PM Name: akeefe0

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REASON FARMS ENVIRONMENTAL PRESERVE

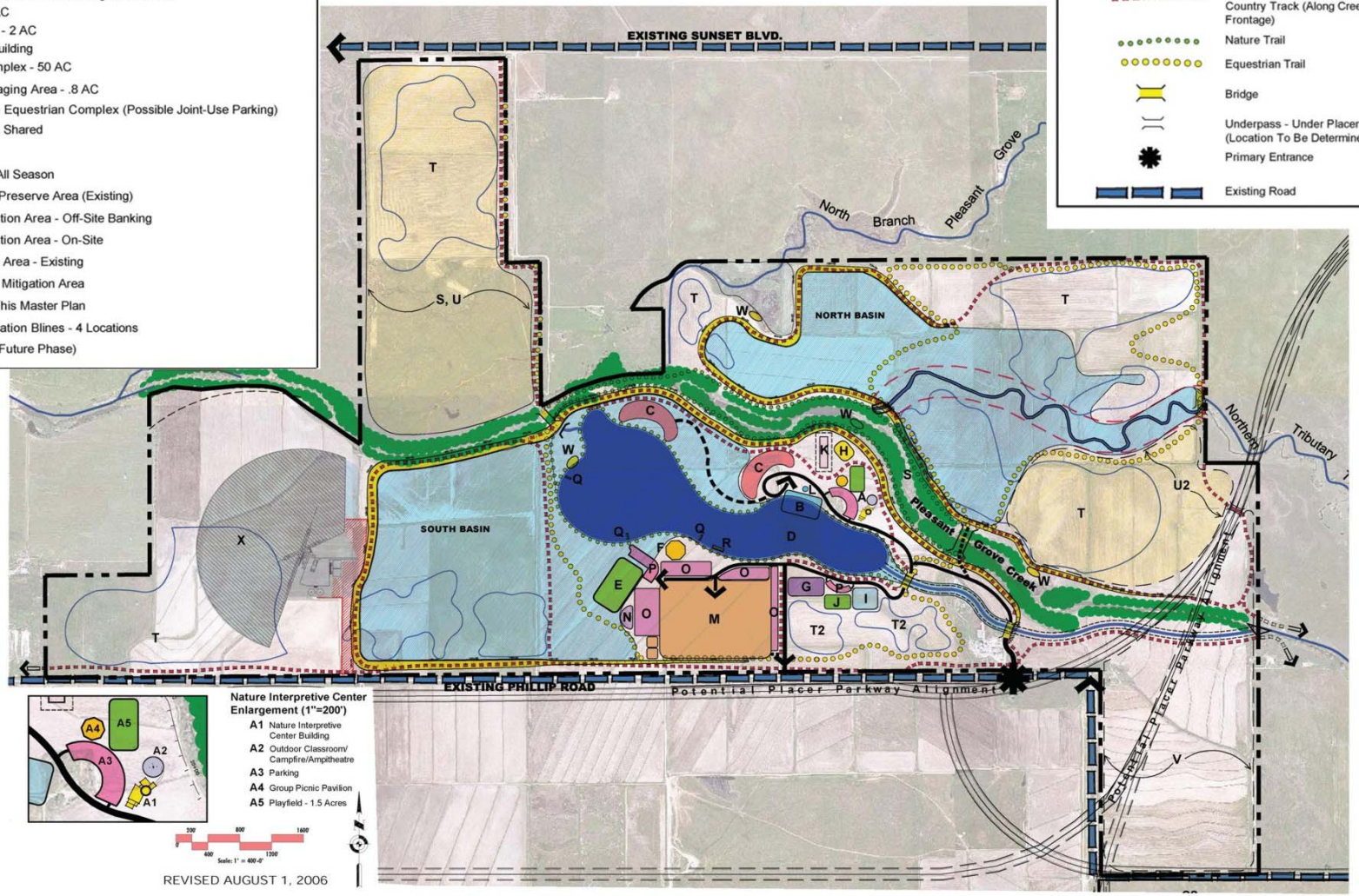
REFINED MASTER PLAN

Project Program Legend

Key	Program Feature/Usage Area
A	Nature Interpretive Center See Enlargement Plan for location of program areas.
B	Marina
C	Group Tent Caming - 4 AC Sites - 2 Locations
D	Rowing/Boating Pond - 64 AC Rowing/Boating Pond - Capacity for Masters Rowing Race Course (1000 Meter)
E	Special Event Area - 5 AC
F	Group Picninc Area - 1 AC
G	Dog Park/Training Area - 2.5 AC
H	Adventure Play Area - 1 AC
I	Mountain Bike/BMX Skills Training Area - 2 AC
J	Playfield - 1.5 AC
K	Archery Range - 2 AC
L	Concessions Building
M	Equestrian Complex - 50 AC
N	Saddle Pals Staging Area - .8 AC
O	Parking Areas - Equestrian Complex (Possible Joint-Use Parking)
P	Parking Areas - Shared
Q	Fishing Pier
R	Boat Launch - All Season
S	Environmental Preserve Area (Existing)
T	Potential Mitigation Area - Off-Site Banking
T2	Potential Mitigation Area - On-Site
U	Hawk Preserve Area - Existing
U2	Potential Hawk Mitigation Area
V	Not A Part Of This Master Plan
W	Wildlife Observation Blines - 4 Locations
X	Model Airfield (Future Phase)

Circulation Legend

- Vehicular Road - Public
- Vehicular Road - Service
- Potential Placer Parkway Alignment (Hwy 99 R.O.W.(Typ.), Hwy 65 R.O.W. (Typ.))
- Bicycle/Pedestrian Trail and Cross Country Track (Along Creek Frontage)
- Nature Trail
- Equestrian Trail
- Bridge
- Underpass - Under Placer Parkway (Location To Be Determined)
- Primary Entrance
- Existing Road



Nature Interpretive Center Enlargement (1"=200')

- A1 Nature Interpretive Center Building
- A2 Outdoor Classroom/ Campfire/Ampitheatre
- A3 Parking
- A4 Group Picnic Pavilion
- A5 Playfield - 1.5 Acres

REVISED AUGUST 1, 2006

Source: City of Roseville Parks and Recreation Department, 2006

PLACER PARKWAY CORRIDOR PRESERVATION	Tier 1 EIS/EIR Community Impact Assessment	Reason Farms Plan	***Figure 5-3*** ***June 2007***

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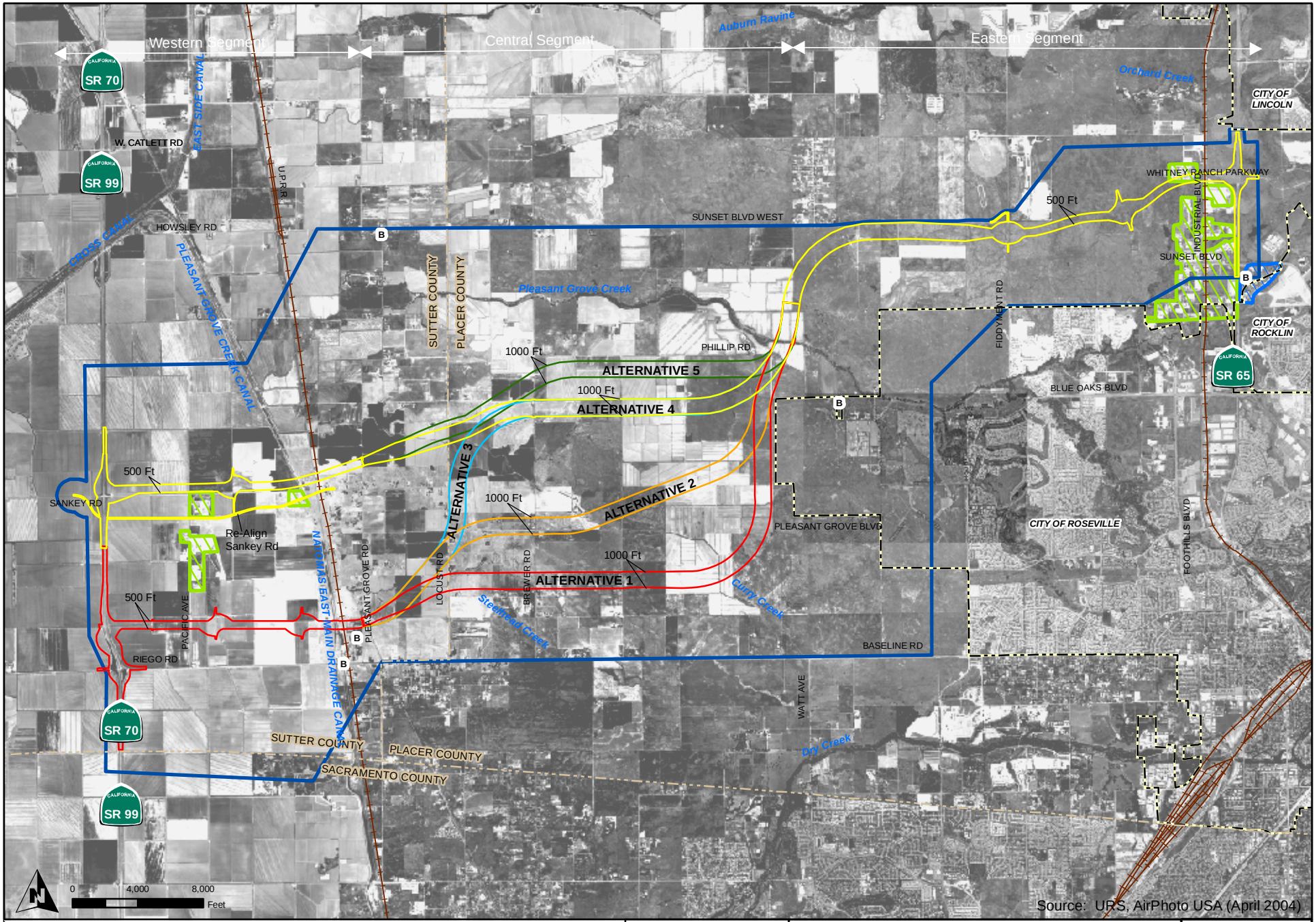

Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary
Industrial Complex
Business Park
B Business

PLACER PARKWAY CORRIDOR PRESERVATION

TIER 1 EIS/EIR
Community Impact
Assessment

Employment Centers and Businesses

Figure 6-1

June 2007

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APPENDIX A
SECTION 4(F) EVALUATION

APPENDIX A

DRAFT

Section 4(f) Evaluation

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR
Placer and Sutter Counties, California

September 2006

***Prepared for*:**

Placer County Transportation Planning Agency
and California Department of Transportation, District 6

***Prepared by*:**

Mara Feeney & Associates
19 B Beaver Street
San Francisco, California

APPENDIX A
SECTION 4(F) EVALUATION

TABLE OF CONTENTS

1.0 Introduction

The purpose of this report is to evaluate potential impacts to resources protected under Section 4(f) of the Department of Transportation Act of 1966, now codified at 49 U.S. Code 303(c), that may be associated with the proposed transportation improvement project referred to as Placer Parkway, located in south Sutter and southwestern Placer counties, California. The project (including location, maps and planning history) is described in detail in Chapters 1 and 2 of the CIA.

2.0 Section 4(f) Applicability

Section 4(f) of the Department of Transportation Act of 1966 declared it "the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites." To this end, Section 4(f) permits the Secretary of Transportation to approve a transportation program or project that would "use" land from a significant publicly owned public park, recreation area, or wildlife or waterfowl refuge, or land from a significant historic site (regardless of ownership), only if there is no "prudent and feasible alternative" to using that land and all possible planning has been done to minimize harm to the park, recreation area, wildlife or waterfowl refuge, or historic site resulting from the use.

In general, a project may "use" land from a 4(f) resource in one of three ways:

1. By permanently incorporating 4(f) land into a transportation facility,
2. By temporarily occupying 4(f) land in a way that is adverse in terms of the statute's preservationist purposes (23 C.F.R. 771.135(p)(7)), or
3. By constructively using 4(f) land; that is, causing proximity impacts to a 4(f) resource so severe that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) are substantially impaired (23 C.F.R. 771.135(p)(2)).

In practical terms, the protections afforded to 4(f) resources by the statute means that unlike NEPA, Section 4(f) requires a substantive result, with a strong bias towards protecting public parks and other 4(f) sites. If a project alternative would avoid 4(f) resources and be prudent and feasible to construct, then it must be selected. If no prudent and feasible avoidance alternative exists, then FHWA must select the alternative that would cause the least overall harm to 4(f) resources. In cases where all project alternatives would cause substantially the same harm to 4(f) resources, FHWA may select any alternative it chooses.

This Draft Section 4(f) Evaluation has been prepared in conjunction with the Tier 1 Draft Environmental Impact Statement for the Placer Parkway Corridor Preservation Project. The FHWA's regulations implementing Section 4(f) recognize that – YELLOW TEXT IS QUOTE

> (o) An analysis required by section 4(f) may involve different levels of detail where the section 4(f) involvement is addressed in a tiered EIS.
>
> (1) When the first-tier, broad-scale EIS is prepared, the detailed information necessary to complete the section 4(f) evaluation may not be available at that stage in the development of the action. In such cases, an evaluation should be made on the potential impacts that a proposed action will have on section 4(f) land and whether those impacts could have a bearing on the decision to be made. A preliminary determination may be made at this time as to whether there are feasible and prudent locations or alternatives for the action to avoid the use of section 4(f) land. This preliminary determination shall consider all possible planning to minimize harm to the extent that the level of detail available at the first-tier EIS stage allows. It is recognized that such planning at this stage will normally be limited to ensuring that opportunities to minimize harm at

subsequent stages in the development process have not been precluded by decisions made at the first-tier stage. This preliminary determination is then incorporated into the first-tier EIS.

(2) A section 4(f) approval made when additional design details are available will include a determination that:

(i) The preliminary section 4(f) determination made pursuant to paragraph (o)(1) of this section is still valid; and

(ii) The criteria of paragraph (a) of this section have been met.

23 CFR 771.135(o).

The following analysis has been undertaken in compliance with this regulatory provision.

3.0 Description of Section 4(f) Property

RD 1000 occupies more than 55,130 acres of land and consists of a historic system of drainage canals, pumps, levees, ditches, pumping plants, and a system of access roads. It is currently managed by the Bureau of Reclamation.

South Sutter County and the greater Sacramento area were historically vulnerable to seasonal flooding events. In the nineteenth century, various attempts were made to address this problem through the construction of levees and installation of river gauges to monitor water levels. In spite of these efforts, agricultural activities in the south Sutter County area in the late nineteenth century were limited to grazing, with some farming on higher ground areas. Early in the twentieth century, the state legislature began a series of new reclamation efforts. In 1911, the legislature created RD 1000, which later became part of the Sacramento Valley Flood Control Project.

The Natomas Consolidated Company used large-scale earth moving and gold-dredging equipment to transform the RD 1000 area into productive agricultural land. Its activities included construction of the Natomas East Main Drainage Canal, parallel to the Western Pacific (now Southern Pacific) railroad tracks, as well as construction of a 60-mile network of roads to provide access to drainage canals for construction and maintenance. The company then subdivided and leased large acreage blocks for wheat and grain crop production, thus establishing a pattern of large-acreage, predominately single crop agricultural land use in the area. The RD 1000 road system provided access to the farm parcels within the district's new subdivisions. The original two-lane dirt roads, which were paved with macadam or concrete during the 1920s and 1930s, generally followed the township and section survey lines and drainage canals to delineate the large, regularly spaced agricultural parcels (JRP Historical Consulting, 2006).

The Office of Historic Preservation (OHP) has concurred that the RD 1000 rural historic landscape historic district is significant within the context of reclamation and flood control activity in the Sacramento Valley during the early twentieth century, because RD 1000 was one of the first large, modern reclamation districts in the state and it was the largest reclamation project in the country at the time of its inception. It provided flood control security and facilitated the creation of large areas of land that could be farmed much more productively. The levees, canals, and road system built by Natomas Consolidated Company helped shape the spatial land use pattern of the district. RD 1000 also served the goals of the region-wide early twentieth century Sacramento Flood Control Project, the result of more than six decades of legislation and technical studies that provided the legal, institutional, and engineering framework to achieve flood control along the Sacramento River. The Sacramento Flood Control Project supported improved navigation along the river, as well as land reclamation for agricultural use and other

development. RD 1000 and its landscape features are considered representative of this important historical trend, including the emergence of modern corporations as land managers and developers in reclamation districts. The historic district's primary contributing features are its drainage system, road system, and large-scale land patterns (JRP Historical Consulting, 2006).

4.0 Potential Impacts on Section 4(f) Property

All of the project corridor alignment alternatives would impact RD 1000 (Figure D-1) in the Western Segment, from SR 70/99 to the drainage canal. The northerly corridor alignment alternatives (Alternatives 4 and 5) would impact 268.3 acres, while the southerly alignments (Alternatives 1, 2, and 3) would impact 363.2 acres of land that lie within the boundaries of this historic district. The roadway ultimately constructed within this corridor, however, would impact considerably less land, since the road surface would occupy a maximum width of 350 feet within the 500-foot corridor in this area. A new roadway would affect landscape features within RD 1000, although this area is part of the Sutter Pointe Specific Plan of Sutter County that has been proposed for urban development. Much of the Sutter Pointe mixed use development that has been proposed for this area is likely to be completed before Placer Parkway construction would begin, as discussed in Chapters 3 and 7 of the CIA. Impacts to specific features such as ditches, canals, and pumping facilities would be identified and mitigated once a specific roadway alignment is selected within the preserved future corridor.

5.0 Avoidance Alternatives

The No-Build Alternative would avoid impacts to RD 1000; however, this alternative would not meet project purpose and need. Minor corridor alignment adjustments would not avoid or minimize impacts to RD 1000, since it extends north to south throughout the western end of the study area (see Figure D-1), and the proposed roadway is an east-west facility. If the Western Segment of the Parkway were to be located to the north of the existing study area, avoiding RD 1000, this would result in a facility of considerably greater length than currently proposed. This would also result in out of direction travel and consequentially a substantial increase in VMT, as the facility would have to connect with SR 70/99 several miles to the north, and because part of the Parkway would be located several miles further away from the areas in south Sutter County it is intended to serve, compared to the existing build alternatives. Extending the corridor along the northern portion of the study area (thus reducing the length of out of direction travel) was examined (URS Corporation and DKS Associates, 2004). This alternative was rejected because it did not sufficiently meet the purpose and need (i.e., it did not attract enough vehicles to reduce local roadway congestion southwest Placer County), and because it would affect numerous vernal pool and wetland areas, which would not likely result in permit approval from the Wildlife Agencies. Also, it would substantially affect prime farmland in Sutter County, an important economic factor in Sutter County. Construction of a longer facility would be considerably more expensive than the Build Alternatives analyzed in this Tier 1 EIS/EIR and would have greater environmental impacts during both construction and operation due to its length and the out of direction travel, including impacts on traffic, visual resources, noise, air quality, and biological resources.

Major corridor alignment alternatives such as tunneling or bridging would be prohibitively expensive and/or technically infeasible, because of the distances involved (approximately 4 miles of the Parkway are currently proposed within RD 1000), and because of its location within a floodplain. An interchange to SR 70/99 would still be required within the district boundaries.. If the facility were to be constructed to the south of RD 1000, it would require a diversion of more than 10 miles in order to avoid the district, which is not feasible in terms of construction costs or in meeting travel demand. . This location would also not provide for any connections to the local roadway network in Sutter County, and so would not contribute to the advancement of economic development in the county, which is one of the major purposes of the Parkway.

During Tier 2 roadway alignment selection and design, coordination and planning can occur to identify and avoid or minimize impacts to specific RD 1000 facilities such as ditches, canals, or pumping equipment in coordination with the Bureau of Reclamation.

6.0 Measures to Minimize Harm

Planning and design efforts of the project to date have incorporated numerous measures to minimize harm to 4(f) resources, including:

- Elimination of alternatives with unacceptably high impacts from further consideration. Such impacts included potential effect on known historic resources, and anticipated impacts on special-status species habitats, wetlands, and conservation areas (see Section 2.5 of this EIS/EIR for additional details);
- Inclusion of buffer areas along the proposed Parkway to help preserve open space and agricultural activities;
- Inclusion of plans to maintain the integrity of existing canals, pumping facilities, ditches and local roadways within RD 1000; and
- Coordination and consultation with local planning agencies to reduce the potential for cumulative impacts to protected resources.

The project alignment alternatives have been designed through a concurrent planning process that has included extensive consultation with appropriate resource agencies and iterative consideration of environmental impacts, including impacts to the facilities and features (such as canals and roadways) that are contributing elements to the RD 1000 historic district. Additional measures to minimize harm to RD 1000 will be identified through coordination and consultation between FHWA/Caltrans and the Bureau of Reclamation, as described below.

7.0 Coordination

FHWA/Caltrans has been coordinating and consulting with the State Historic Preservation Office during preparation of the Historic Resources Evaluation Report and with other resource agencies and local jurisdictions through a consultative planning process aimed at selecting feasible corridor alignment alternatives that minimize environmental impacts and meet project purpose and need. Additional consultation with responsible agencies will occur during and after circulation of the Tier 1 Draft EIS/EIR, including coordination and consultation with the Bureau of Reclamation to obtain their concurrence on findings and to identify additional strategies for avoiding or minimizing potential project impacts on RD 1000 resources.

Letters of concurrence will be sought for inclusion in the final Section 4(f) Evaluation report. The public will have an opportunity to comment on the findings of the Section 4(f) analysis through circulation of the draft environmental document prepared for the project.

8.0 Potential Future 4(f) Resources in the Study Area

Several proposed (but not yet approved or adopted) development plans include provisions for proposed future parks and recreation facilities that could be affected by project corridor alignment alternatives, as described below. While these parks and recreational facilities are not Section 4(f) resources at this time, they would become 4(f) resources once the plans are formally adopted, and the newly designated parks are transferred to public ownership.

Future development in the project study area, including conceptual planning for future parks and recreation facilities, is being planned within a planning context that includes development of the Parkway.

Placer Parkway is noted as a conceptual alignment on numerous major adopted plans, including the Placer County General Plan, the Metropolitan Transportation Plan (MTP) and the Regional Transportation Plan (RTP), as well as SACOG's Preferred 2020 Blueprint Scenario. These planning documents provide notice to other agencies of the plans for a future Placer Parkway. Thus, conceptual planning for the Parkway has preceded conceptual planning for the other resources discussed below. Nonetheless, once they are formally designated, publicly owned recreation facilities or wildlife and waterfowl refuges would become resources that would be protected under the provisions of Section 4(f). Section 4(f) protection would apply to such facilities if they are adopted prior to formal adoption and preservation of a Placer Parkway corridor.

Each identified potential future 4(f) resource is briefly discussed below. The discussion, based on the limited information available, includes, where feasible, the location, status, concurrent planning efforts, and potential for avoidance of the resource.

Reason Farms Retention Basin

Future proposed uses of the City of Roseville's Reason Farms Retention Basin include certain recreational uses such as picnicking, hiking, horseback riding, and model airplane flying. The City of Roseville held public workshops in the spring of 2006 to obtain community input on the concept master plan for the Retention Basin and it is continuing to modify the conceptual plan for the Retention Basin based on input received from the public and from the Park and Recreation Commission. A Final Supplemental EIR on the master plan is expected before the end of 2006 (Morse, 2006).

It is evident that the City of Roseville is considering the Placer Parkway concept in its planning for the Retention Basin, as indicated by the Placer Parkway corridor concept line shown on the current Master Plan (Figure 5-3). PCTPA have been coordinating planning efforts with city staff to ensure that project design is compatible with facilities being planned for the Retention Basin. At this time, recreational uses are generally planned for the central area of the Retention Basin, away from the southeastern area where the Placer Parkway would cross the property. Until the plan is finalized, the location of specific recreation facilities will not be confirmed.

RUSP Area and Sierra Vista Specific Plan

The Alternative 1 alignment would impact the eastern periphery of the proposed RUSP area and the northwestern section of the proposed Sierra Vista Specific Plan area. Both areas propose low- and medium-density residential development, with conceptual community park and open space areas that would be affected by the Alternative 1 corridor alignment. The Alternative 2 corridor alignment would also impact an area of the RUSP that includes proposed conceptual parks and open spaces. Until the plan is finalized and adopted, the location of specific recreation facilities will not be confirmed.

Sutter Pointe

The Sutter Pointe development proposal submitted to Sutter County by the Sutter Pointe Specific Plan Group in August 2006 shows a number of conceptual linear parks and open space facilities. Alternatives 1, 2, and 3 would affect the southern edge of an area indicated as a "Recreational Village" on the conceptual land use plan. The Sankey Road realignment associated with Alternatives 4 and 5 would impact the northern edges of three linear parks in the northern portion of the plan area. Until the plan is finalized, the location of specific recreation facilities will not be confirmed.

Wildlife Refuges Created by PCCP

It is possible that new refuges could be designated through the ongoing efforts of the PCCP, as described in Section 3.1.4.4. However, PCCP is being developed in concert with adopted local and regional plans that include Placer Parkway, and this concurrent planning will reduce conflicts between uses, and reduce the possibility of use of a 4(f) resource. In addition, the process of defining Parkway alternatives has taken into consideration sensitive resources such as vernal pool complexes and riparian habitat, in order to avoid or minimize potential impacts on these resources early in the planning process and to be consistent with resource agency guidance relative to habitat plans. Avoidance of these resources (as well as continued concurrent planning efforts) is likely to minimize potential use of any future-designated wildlife refuge or park.

9.0 References

FHWA (Federal Highway Administration), 2005. Office of Planning, Environment and Realty Project Development and Environmental Review. Section 4(f) Policy Paper. March 1, 2005.

JRP Historical Consulting, LLC, 2006. Revised Draft Historical Resources Evaluation Report: Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR, Placer and Sutter Counties, California. September 2006.

Morse, Mark, Environmental Coordinator, City of Roseville Community Development Department, 2006. Personal communication with Mara Feeney, March 22, 2006.

URS Corporation and DKS Associates, 2004. Technical Memorandum Screening Evaluation of PSR Alternatives.

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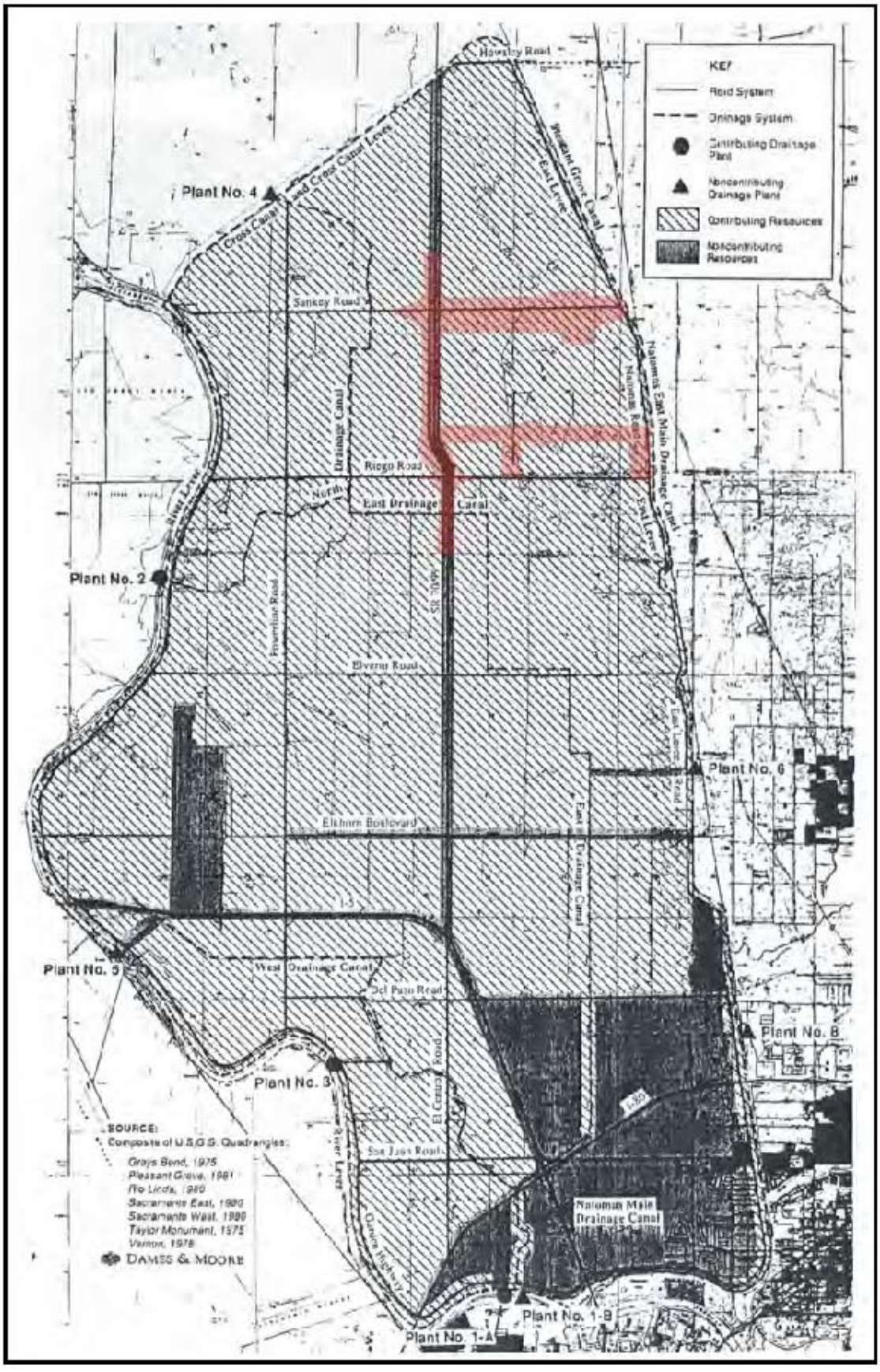

Note:
The project's architectural APE shown in red.

Source: JRP Historical Consulting

PLACER PARKWAY	TIER 1 EIS/EIR Community Impact Assessment	RD 1000 Historic District and Project APE	***Figure A-1*** ***June 2007***

APPENDIX B
LITERATURE REVIEW

APPENDIX B

LITERATURE REVIEW

A literature review was conducted to evaluate the role of transportation infrastructure on land use changes and development or growth. This literature review is summarized below. A wide range of literature was reviewed. Much of the literature on the effect of highways on growth is from guidebooks published by State Departments of Transportation, the Environmental Protection Agency, and the FHWA. A substantial focus of these guidebooks is the methodology, including modeling, to assess growth effects, although some of these also included quantitative analysis and case studies of the effects of transportation improvements on growth and identified other factors that would influence growth. Some recent academic research papers were also reviewed. The literature reviewed includes the following:

Mare Island Accord, 2006. *Guidance for Preparers of Growth-Related, Indirect Impact Analyses*. Interagency Working Group: Federal Highway Administration, U.S. Environmental Protection Agency, and California Department of Transportation. May 2006.

FHWA (Federal Highway Administration) and Urban Land Institute, 2004. *Influence of Transportation Infrastructure on Land Use*, December 6-8, 2004.

FHWA (Federal Highway Administration), 1999. *An Overview, Land Use and Economic Development in Statewide Transportation Planning*, May 1999.

Institute of Transportation Studies, University of California, Irvine, 2002. *New Highways, Induced Travel, and Urban Growth Patterns: A "Before and After" Test*, September 2002.

National Cooperative Highway Research Program, Transportation Research Board, National Research Council, 1998. Land Use Impacts of Transportation: *A Guidebook, Project 8-32(3) Integration of Land Use Planning with Multimodal Transportation Planning*, October 1998.

ODOT (Oregon Department of Transportation) and FHWA (Federal Highway Administration), 2001. *A Guidebook for Evaluating the Indirect Land Use and Growth Impacts of Highway Improvements, Final Report, SPR Project 327*. April 2001.

The Brookings Institution Center on Urban and Metropolitan Policy, 2000. *Do Highways Matter? Evidence and Policy Implications of Highways' Influence on Metropolitan Development*, August 2000.

Transportation Research Board – National Research Council, 2001. *NCHRP (National Cooperative Highway Research Program) Report 456, Guidebook for Assessing the Social and Economic Effects of Transportation Projects.*

Transportation Research Board – National Research Council, 2002. *NCHRP (National Cooperative Highway Research Program) Report 466, Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects.*

Wisconsin DOT (Department of Transportation), 2005. *Indirect and Cumulative Impacts Peer Exchange*. Peer Exchange hosted by the Wisconsin Department of Transportation Bureau of Equity and Environmental Services. August 2005.

General Results and Summary of Literature Review Findings

The sources uniformly commented that there is some relationship between land use and transportation, but because "the dynamics of land use change rely in large part on local and regional economic factors, it is difficult to construct a general framework of analysis that applies to a broad ranges of circumstances" (ODOT and FHWA, 2001, page B-1). Most sources concluded that "State Departments of Transportation influence land development through providing infrastructure and, to a lesser extent, through transportation regulations" and that the most significant impact of transportation on land development was the access provided to land, which "raises its potential for development" (FHWA, 1999, page 11). Another source stated there "is no doubt that new roadway capacity might cause more development to occur" (FHWA and Urban Land Institute, 2004, page 12). At the same time, the following nontransportation factors affect the relationship between transportation and land use: local conditions (great variation in historical development patterns, geography, population mix, political traditions, and economic vitality); the incremental, long-term process of land use change; random events; and flexibility of travel demand (NCHRP, 1998, page 17).

Key findings and conclusions of the studies are highlighted by the following quotes from the studies:

> There is an interdependent relationship between land development and the provision of transportation infrastructure. Transportation services must be available to provide access before land can be developed, but the demand for development also creates a demand for access, which in turn increases requests for improvements to the transportation infrastructure. This interdependence complicates efforts to determine the effect of road improvements on land development, because most road modernization improvements are at least partially in response to growing demand. (ODOT and FHWA, 2001, page B-2)

> The key finding of this literature is that total investments in road infrastructure are sufficiently large in most urban areas that marginal investments for road improvements appear to have little impact on the rate of local economic growth. In *The Effects of State and Local Public Services on Economic Development,* Fisher[7] notes, "Of all the public services examined for an influence on economic development, transportation services, and highway facilities especially, show the most substantial evidence of a relationship. Of the 15 studies reviewed, a positive effect of highway facilities or spending on economic development is reported in 10…[however]…the magnitudes of the estimated effects of highway spending on economic development appear to be quite small" (Fisher, 1997*).* Hence, the road system is generally acknowledged as being very important in terms of the local economy, but the amount of infrastructure affected over relatively short periods is sufficiently small that it shows little impact on the overall level of growth. These studies are necessarily rather crude in their attempts to identify the impact of investment, but the results are consistent with expectations (ODOT and FHWA, 2001).

With the general recognition that there is some influence on development, the sources also universally cited a myriad of other factors that would influence growth. The general circumstances or factors that influence a shift in development related to transportation include:

- Extent and maturity of existing transportation infrastructure.
- Land availability and price.
- State of the regional economy.
- Area vacancy rates.

[7] Fisher, R.C., 1997. The Effects of State and Local Public Services on Economic Development. *New England Economic Review*, March/April, 53-67.

- Location attractiveness.
- Local political/regulatory conditions.
- Land Use Controls.

(NCHRP Report 466, Course Module 7, Step 5, Page 62).

Another source stated that "affordability and other factors may be just as important as, or even more important, than accessibility" (NCHRP, 1998, page 9). And, from a developer's perspective, new roadway capacity "is not the driving factor for development decisions" (FHWA and Urban Land Institute, 2004, page 9). Important factors for a developer in making a development decision include the following: market demand, site suitability, economic feasibility, regulatory environment and capital availability (FHWA and Urban Land Institute, 2004, page 10).

Potential "land use impacts" of a new highway facility are: "redistribution of metropolitan growth to highway corridors, decentralization of population and employment, increased land values and concentration of development around interchanges." These impacts are offset or mitigated by the following factors: "local and regional economic conditions, degree of impact on regional accessibility, congestion levels, local land use policies, and NIMBYism" (NCHRP, 1998, page 19).

Because "transportation is only one of many factors that influence land use decisions" there is "no consistent or predictable relationship between improvements to the transportation system and land use changes." "In addition, transportation is not usually a dominating factor. Modern day transportation improvements can be characterized as a small player in the large, complicated process of land development." (Wisconsin DOT, 2005, Introduction, B.A. Primer on Project-Induced Land Development).

Results of Quantitative Studies

The results of quantitative studies provide more detail on the wide range of factors and influences that highlight the difficulty in making precise predictions about the effects of transportation on land use. Thus, these studies support the general conclusions provided in the section above.

One study found that the land use effects of modern highway projects likely operate over a "very fine geographic scale, rather close to the project …" (The Brookings Institution, 2000, page 7). A later study found that the Orange County California toll roads created an accessibility premium that was reflected in home sale prices (Institute for Transportation Studies, 2002, page 19). That study also found that, in addition to the effect on home values, the toll roads positively influenced employment growth in the vicinity of the facilities. Commercial office and retail, public buildings and industrial location decisions could be influenced by highway expansions (Institute of Transportation Studies, 2002, page 26). But, any residential or non-residential growth that occurs in the vicinity of new or expanded highway systems likely comes at the expense of growth elsewhere in the region. "… the evidence suggests that highways influence land prices, population and employment changes near the projects, and that the land use effects are likely at the expense of losses elsewhere" (The Brookings Institution, 2000, page 4).

The Oregon Department of Transportation funded a "trend analysis of urban development patterns with particular emphasis on the location of state highway corridors" (Oregon Department of Transportation, 2001, Page C-1). The study analyzed aerial photographs to determine changes in urban development in twenty cities that experienced significant rates of urban development from 1970 to 1990, and also used a geographic information system overlay to estimate urbanization rates. The study also found that, in the case of the cities analyzed, "highway capacity increasing projects, which are typically a response to current or anticipated increases in travel demand, did not lead to direct and immediate land development activities (Oregon Department of Transportation, 2001, page C-19). While the study found that "the location of existing highways and capacity increasing highway improvements were somewhat correlated

with urban development patterns" the study also found that "urban development has not clustered along state highway project corridors." (Pages C-18 and C-22). Furthermore, the "correlation between land use change and highway project locations was inconsistently related to city size and city population growth trends" (Oregon Department of Transportation, 2001, page C-22).

Conclusion

In summary, the results of the literature review are that that there is no single cause and effect relationship between a transportation improvement and growth and thus no feasible way to predict such growth inducing effects based on the results of other studies and other transportation improvements. The growth inducing effects of transportation improvements can best be understood in the context of local conditions and factors that influence growth.

APPENDIX C
TRAVEL TIMES (IN MINUTES) FOR PSR ALIGNMENTS
(P.M. PEAK PERIOD EASTBOUND)

APPENDIX C

TRAVEL TIMES (IN MINUTES) FOR PSR ALIGNMENTS (PM PEAK PERIOD EASTBOUND)

Development Scenario	General PSR Alignment	Termini		Watt Avenue Connection?	Between SR 65/Whitney Interchange and Sacramento International Airport			Between SR 65/Whitney Interchange and Downtown Sacramento		
		SR 70/99	SR 65		Via Placer Parkway	Via I-80	Via Baseline-Riego	Via Placer Parkway	Via I-80	Via Baseline-Riego
2025	No Build Alternative					47.7	40.1		42.7	44.4
	North	North of Sankey Road	Whitney Boulevard	No	30.4	46.8	39.4	34.9	41.8	43.9
				Yes	30.5	46.7	39.3	35.0	41.9	43.9
	Central	Sankey Road	Whitney Boulevard	No	29.0	46.5	39.4	33.5	41.6	43.9
				Yes	29.0	46.5	39.3	33.5	41.5	43.8
		North of Riego Road	Whitney Boulevard	No	28.7	46.7	39.4	33.3	41.8	44.0
				Yes	28.7	46.5	39.3	33.3	41.5	43.9
	South	North of Riego Road	Sunset Boulevard	No	32.2	47.0	39.6	36.7	42.1	44.1
				Yes	32.2	46.9	39.3	36.7	42.0	43.8
		South of Riego Road	Sunset Boulevard	No	30.5	46.9	39.7	35.2	41.9	44.3
				Yes	30.9	46.7	39.4	35.6	41.9	44.0
Expanded Development Scenario A	No Build Alternative					50.3	48.2		44.9	53.0
	North	North of Sankey Road	Whitney Boulevard	No	32.1	49.3	46.4	37.2	44.0	51.5
				Yes	32.4	49.0	45.6	37.5	43.7	50.7
	Central	Sankey Road	Whitney Boulevard	No	30.8	48.9	46.5	35.8	43.6	51.6
				Yes	31.4	48.9	45.4	36.7	43.5	50.6
		North of Riego Road	Whitney Boulevard	No	30.4	48.8	46.5	35.6	43.5	51.6
				Yes	31.2	49.0	45.3	36.4	43.7	50.5
	South	North of Riego Road	Sunset Boulevard	No	34.7	49.3	46.6	39.8	43.9	51.7
				Yes	35.7	49.4	44.9	40.8	44.1	50.0
		South of Riego Road	Sunset Boulevard	No	33.9	49.3	46.7	39.1	43.9	51.9
				Yes	34.8	49.4	44.5	40.0	44.0	49.7
Expanded Development Scenario B	No Build Alternative					50.1	45.2		44.7	50.0
	North	North of Sankey Road	Whitney Boulevard	No	32.3	49.1	44.4	37.2	43.8	49.3
				Yes	32.3	49.2	43.8	37.4	44.0	48.9
	Central	Sankey Road	Whitney Boulevard	No	31.1	49.4	45.0	36.2	44.2	50.1
				Yes	31.4	49.1	43.8	36.4	43.9	48.9
		North of Riego Road	Whitney Boulevard	No	30.6	49.0	44.9	35.8	43.8	50.0
				Yes	31.0	48.9	43.7	36.1	43.6	48.8
	South	North of Riego Road	Sunset Boulevard	No	34.5	49.2	44.6	39.5	43.9	49.5
				Yes	35.2	49.4	43.7	40.1	44.1	48.6
		South of Riego Road	Sunset Boulevard	No	33.5	49.1	44.6	38.5	43.8	49.7
				Yes	34.2	49.2	43.3	39.4	43.9	48.4

Source: URS Corporation (in association with DKS Associates), 2004.
Note: PM Peak Period = 3 to 6 p.m.

PLACER PARKWAY
CORRIDOR PRESERVATION

DRAFT
HISTORICAL PROPERTIES SURVEY REPORT

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR

June 29, 2007

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

Caltrans

FHWA

Prepared by

URS Corporation

for
South Placer Regional Transportation Authority
California Department of Transportation
Federal Highway Administration

The preparation of this report was financed in part through a planning grant from the Federal Highway Administration

HISTORICAL PROPERTY SURVEY REPORT

Caltrans District 3
Placer, Sutter, and Sacramento Counties

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR

June 2007

SUMMARY OF FINDINGS

The South Placer Regional Transportation Authority (SPRTA) and the Federal Highway Administration (FHWA), in cooperation with the California Department of Transportation (Caltrans), propose to select and preserve a corridor for the future construction of Placer Parkway—a new east-west roadway linking State Route (SR) 65 and SR 70/99. Tier 1 of the proposed undertaking comprises the selection and acquisition of the corridor in which future construction of the Parkway would occur.

The FHWA is the federal lead agency for the National Environmental Policy Act (NEPA), and SPRTA is the lead agency for the California Environmental Quality Act (CEQA). The project will receive federal funding and is therefore subject to review under the January 2004 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Office (SHPO), and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 PA).

This Historic Properties Survey Report (HPSR) was prepared in accordance with the *Programmatic Agreement Between the Federal Highway Administration and the California State Historic Preservation Officer Regarding Implementation of the Placer Parkway Project, Placer County, California* (Placer Parkway PA), which is expected to be executed in summer, 2007 (Attachment 1). The HPSR summarizes the findings of an Archaeological Survey Report (ASR) (Attachment 2) and Historical Resources Evaluation Report (HRER) (Attachment 3) conducted for the project, requests SHPO concurrence on the determinations of National Register of Historic Places (NRHP) eligibility contained therein, and notifies SHPO of a finding of effect for Tier 1 of the proposed undertaking.

The ASR and the HRER cultural resource identification efforts in the Area of Potential Effects (APE) in accordance with the terms of the Placer Parkway PA and the Section 106 PA. Both studies satisfy the requirements of NEPA and CEQA as they relate to cultural resources.

In accordance with Stipulations II.B.1.a. and 2.a. of the Placer Parkway PA, archaeological studies for the Tier 1 effort included archival research, a pedestrian survey of areas common to all proposed alternatives, and formation of a predictive model to assess archaeological sensitivity. As a result of this effort, no archaeological resources were identified in the common alignment portion of the Placer Parkway APE. The predictive model for the alignment alternatives of the APE ranked the corridors for their relative archaeological sensitivity using environmental factors known to influence past human activity in the project vicinity. This analysis determined that Alternative 1 is the most archaeologically sensitive alignment, followed in descending order by Alternative 3, Alternative 2, Alternative 4, and Alternative 5. Based on this analysis, Alternative 5 is the least sensitive alignment in terms of potential archaeological resources.

In accordance with Stipulations II.B.1.b and 2.b., the HRER for the Tier 1 effort includes an evaluation of historic buildings, structures, and objects within the APE that appear to be potentially eligible for listing in the NRHP under Criterion C.[1] Because the Parkway may not be under construction until 2020, the HRER considered any buildings, structures, or objects within the architectural APE that were constructed in or prior to 1975 as meeting the 50-year age requirement for eligibility. As a result of this effort, no buildings, groups of buildings, or structures within the architectural APE appear to be eligible for the NRHP under Criterion C. Therefore, no building, object, or structure was formally evaluated on a California Department of Parks and Recreation (DPR) 523 form for this effort. One resource within the

[1] To meet Criterion C or 3, a resource must meet one of the following requirements: embody distinctive characteristics of a type, period or method of construction; represent the work of a master; possess high artistic values; represent a significant and distinguishable entity whose components may lack individual distinction.

APE for all alternatives was previously determined eligible for inclusion in the NRHP and is a historical resource under CEQA. In 1994, Reclamation District (RD) 1000 was determined eligible for the NRHP as a rural historic landscape (as a historic district) by a consensus between SHPO and the U.S. Army Corps of Engineers under Criterion A at the state level of significance. The historic property's area of significance is reclamation and its historic context is the reclamation and flood control of the Sacramento River Basin within the Sacramento Flood Control Project during the period between 1911 and 1939. The historic district, including its contributing features, was found to retain historic integrity.[2] The architectural APE for all proposed alternatives encompasses a small portion of the easternmost section of RD 1000.

Tier 1 of the proposed undertaking comprises the acquisition of land only, which does not have the potential to affect identified cultural resources; therefore, a finding of No Historic Properties Affected is appropriate for this undertaking. It is possible, however, that buried archaeological materials remain undetected within the study area, and that built environment resources within the APE meet the other NRHP criteria. Additional research will be conducted during Tier 2 of the proposed undertaking to identify any additional cultural resources within the selected alternative and to determine potential effects of the Parkway.

[2] Dames & Moore, "Final Rural Historic Landscape Report for Reclamation District 1000 for the Cultural Resources Inventory and Evaluations for the America River Watershed Investigation, Sacramento and Sutter Counties, California," submitted to U.S. Army Corps of Engineers, Sacramento District, December 1995.

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LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
AES	Analytical Environmental Services
APE	Area of Potential Effects
APN	Assessor's Parcel Number
ASR	Archaeological Survey Report
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CRHR	California Register of Historic Resources
DPR	Department of Parks and Recreation
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GIS	Geographical Information System
GLO	General Land Office
HPSR	Historic Properties Survey Report
HRER	Historic Resources Evaluation Report
NAHC	Native American Heritage Commission
NCIC	North Central Information Center
NEIC	Northeast Information Center
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
OHP	Office of Historic Preservation
OHW	ordinary high water
PA	Programmatic Agreement
PAC	Policy Advisory Committee
PCTPA	Placer County Transportation Planning Agency
RD 1000	Reclamation District No. 1000
SAC	Study Advisory Committee
SHPO	State Historic Preservation Office
SPRTA	South Placer Regional Transportation Authority
SR	State Route
TAC	Technical Advisory Committee
Tier 1 EIS/EIR	Tier 1 Environmental Impact Statement/Program Environmental Impact Report
URS	URS Corporation
USGS	U.S. Geological Survey

1.0 PROJECT DESCRIPTION

1.1 PROJECT DESCRIPTION AND LOCATION

The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the South Placer Regional Transportation Authority (SPRTA) propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking State Route (SR) 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1).

The planning for Placer Parkway involves two phases: (1) the present action, selection of a corridor (titled the Placer Parkway Corridor Preservation Project), and (2) the future selection of a precise alignment within the corridor and a decision whether or not to build the Parkway. If a build alternative is selected and pursued after the second phase, the ultimate Placer Parkway project would be constructed and operated. Throughout this document the term "Proposed Action" is used to describe the selection of a corridor to preserve. The document generally uses the term "Parkway" to mean the ultimate roadway, including construction and operation, except where context indicates otherwise.

As stated, the action to be considered based on this Tier 1 analysis involves only the selection of a corridor to preserve, which has limited environmental effects by itself. However, the ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. In order to describe the effects of the ultimate Placer Parkway project to the greatest extent feasible at this early stage, the Tier 1 EIS/EIR also addresses the potential effects of construction and operation of the future roadway. This discussion of the roadway is necessarily limited, however, because only the general concepts of the roadway design and location are known at this time. If a corridor is selected and preserved at Tier 1, a subsequent Tier 2 analysis will evaluate the Parkway itself in detail—the specific roadway "footprint" within the selected corridor, including construction and operation of the roadway.

The project study area is an area of approximately 33,460 acres located in Placer and Sutter counties, with a small section located in Sacramento County (see Figures 1-1 and 1-2). The portion of the study area in Sacramento County is located in the extreme southwest corner of the study area and does not include any of the proposed corridor alignment alternatives. It extends from SR 70/99 in the west to SR 65 in the east, with the northern boundary extending to Sunset Boulevard West and the southern boundary located adjacent to Baseline and Riego roads.

For the purposes of the analysis the study area is divided into three segments: western, central, and eastern (see Figure 1-2). The Area of Potential Effect (APE) is delineated on Figure 1-4.

1.2 PHYSICAL IMPACTS OF THE PROJECT

1.2.1 Conceptual Roadway Configuration

The Parkway would be a high-speed, limited access roadway. Depending upon the timing of adjacent urban development proposals and funding, the Parkway may be designed and constructed incrementally in segments. These could be built as a four-lane (interim) roadway until a six-lane segment is warranted, or as the full six-lane facility. A preliminary conceptual cross section (see Figure 1-3) was developed to facilitate the Tier 1/Program evaluation. It illustrates both four-lane (two lanes in both directions) and six-lane (three lanes in both directions) configurations within the 500- to 1,000-foot corridor widths. The roadway would include a central median approximately 100 to 134 feet wide, depending on local conditions and reflecting Caltrans safety guidance. The Parkway would be designed and constructed to Caltrans standards, unless specific design exceptions are granted. For the purposes of the Tier 1 EIS/ Program EIR, the Parkway's opening year is assumed to be 2020.

Access would be provided at the western and eastern ends of the Parkway, where existing areas of dense development are already located or planned. Access would be restricted for the 7-mile Parkway Central Segment. The analysis assumes no interchanges in this segment. (A possible future extension of Watt Avenue or another nearby roadway may be considered in the Central Segment as a separate project.)

1.2.2 Conceptual Roadway Elevation

As the study area is comprised of relatively flat terrain, the majority of the future Placer Parkway is assumed to be at-grade. As necessary, bridges would be used to span certain features and improvements such as the Union Pacific Railroad tracks along Industrial Boulevard, Pleasant Grove Creek, the Natomas East Main Drainage Canal, and floodplains. Generally, the approximate height of bridges is expected to range from 10 feet above streams to 30 feet above the railroad. Culverts would be used at smaller creek crossings as appropriate, depending on local conditions and permit requirements. The Pleasant Grove Creek floodplain would be crossed by bridges (one in each direction) supported by abutments located approximately 800 feet on either side of the creek to avoid the riparian habitat associated with the creek.

Within the 100-year floodplain, the roadway would be elevated such that the bottom of any new bridges would be above the 100-year water surface elevation. The roadway support structures and bridges would be designed to minimize environmental impact, not impede stream and flood flows, and allow for the unobstructed passage of potential future streamside uses such as maintenance equipment, bikeways, or trails.

Throughout the project study area, the assumptions for creek and floodplain crossings include typical engineering specifications:

- a maximum bridge span of approximately 150 feet;
- for bridge spans exceeding 150 feet, assume one column, approximately 4 feet in diameter, every 150 feet; and
- all columns placed outside of the ordinary high water (OHW) level.

To maintain existing and future local roadway connectivity (for emergency access, farming operations, and community access), over-crossings would be constructed to convey traffic over the Parkway. These over-crossings would not connect to the Parkway.

1.2.3 Potential Watt Avenue Interchange

The Placer County General Plan includes a number of new roadways that may be needed in Placer County, according to travel demand forecasts. An extension of Watt Avenue to Placer Parkway (from Baseline Road to a new Blue Oaks Boulevard Extension) is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto the Placer Parkway via a new interchange (see Figure 1-5). A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. It would be subject to independent future environmental analysis and review and is not being fully evaluated within this Technical Report or Tier 1 EIS/Program EIR. However, an interchange between Placer Parkway and a potential Watt Avenue extension could affect future travel patterns in the area, including use of the Parkway. Based on direction from previous planning studies, this Technical Study and the Tier 1 EIS/Program EIR will evaluate each corridor alternative with and without a Watt Avenue interchange. This evaluation does not predetermine the construction or alignment of a potential Watt Avenue or nearby roadway extension or the precise locations of any potential interchanges with Placer Parkway.

2.0 CONSULTING PARTIES AND PUBLIC PARTICIPATION

2.1 ARCHAEOLOGICAL RESOURCES

A request for a review of the Sacred Lands File was sent to the California Native American Heritage Commission (NAHC) on May 27, 2003.

A search of the Sacred Lands File by the staff of the NAHC did not indicate the presence of Native American cultural resources in the immediate study area. A letter from the NAHC reporting these findings as well as providing a list of local Native American individuals and organizations was sent to URS on June 6, 2003, and is included, with responses, within Attachment A.

Other sources of information consulted for the Placer Parkway cultural resources investigations included the Placer County Historical Society, Lincoln Arts and Culture Foundation, Roseville Historical Society, Community Memorial Museum, Placer County Museum, Sutter County Historical Society, and Rocklin Historical Society.

On three occasions (June 16, 2003, October 13, 2003, and March 6, 2006) letters requesting information and comment were sent to the Native American individuals identified on the NAHC contact list for Placer, Sacramento, and Sutter counties. In addition to the letters, telephone calls were made in August of 2003 notifying, when possible, these same individuals about the project. The list provided by the NAHC comprised:

- Harvey Angle, Chairperson, Enterprise Rancheria of Maidu Indians
- Rose Enos
- David Keyser, United Auburn Indian Community of the Auburn Rancheria
- Joe Marine
- Jeff Murray, Cultural Resources Manager Shingle Springs Band of Miwok Indians
- Martha Noel, Maidu Elders Organization
- Sam Starkey, United Auburn Indian Community of the Auburn Rancheria
- Christopher Suehead, Cultural Representative Todd Valley Miwok-Maidu Cultural Foundation
- Jessica Tavares, Chairperson, United Auburn Indian Community of the Auburn Rancheria

On October 21, 2003, a response was received from Greg Baker, Tribal Administrator, United Auburn Indian Community of the Auburn Rancheria (Auburn Rancheria). Mr. Baker requested that a copy of the technical report be provided to the United Auburn Indian Community of the Auburn Rancheria. The letter also instructed URS Corporation to contact Dr. Shelley McGinnis of Analytical Environmental Services (AES). No other responses were received.

Contact with was made Dr. McGinnis and a decision was made to hold a formal meeting between representatives of the Auburn Rancheria, SPRTA, the FHWA, Caltrans, and URS Corporation. This meeting was held on January 9, 2004, and was used to provide the Auburn Rancheria with project specifics including levels of effort for the Tier 1 investigation as well as potential avenues of investigation during Tier 2.

No other comments or concerns were expressed by any other parties contacted.

2.2 HISTORICAL RESOURCES

As mentioned above, staff consulted with local historical societies to solicit information regarding known cultural resources within the project APE. Additionally, extensive public and stakeholder consultation was implemented as part of a comprehensive public participation program under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) (see Section 2.3, below). Further consultation with appropriate individuals and organizations will occur during Tier 2 of the proposed undertaking.

2.3 NEPA AND CEQA PUBLIC INVOLVEMENT EFFORTS

The Tier 1 EIS/Program EIR for Placer Parkway has included a comprehensive Public Participation Program, designed to ensure that community stakeholders, including community interest groups and the public, are aware of the Parkway, and are involved and engaged in the planning process.

The Public Participation Program for the Tier 1 EIS/Program EIR was designed to actively involve project stakeholders in the planning process. Its objectives included obtaining input into the formulation of the range of alternatives and selection of corridor alignment alternatives ensuring that the issues and concerns expressed by members of the public and community interest groups are addressed, continuing ongoing stakeholder consultation throughout the Tier 1 EIS/Program EIR and environmental decision-making process, and coordination with partner agencies and other project proponents in the study area.

The following subsections summarize public participation activities conducted for the Tier 1 EIS/Program EIR. Additional detail is provided in the Placer Parkway Public Participation Methodology Report, available on the PCTPA website.

2.3.1 Participant Groups

The following participant groups were targeted in the public participation program:

Property Owners: The project team ensured that the property owners in the study area were informed about and involved in the planning and environmental review process, including receiving details of public meetings and project-related information at key project milestones.

Key Stakeholders: Key project stakeholders included business and industry, environmental, agricultural, neighborhoods, community, and special interest groups, public agencies, and local jurisdictions. A variety of methods were developed to engage these groups through interviews, meetings, and other outreach activities as described in Section 2.3.2.

Local, State and Federal Agencies: Coordination for the Tier 1 EIS/Program EIR is being carried out with a number of public agencies and organizations, including:

- Federal Highway Administration
- California Department of Transportation
- U.S. Army Corps of Engineers – Sacramento District
- U.S. Environmental Protection Agency – Region IX
- U.S. Fish and Wildlife Service
- California Department of Fish and Game
- Sacramento Area Council of Governments
- Natomas Basin Conservancy

Local Jurisdictions

The following local jurisdictions were directly involved in the planning process:

- Placer County
- Sacramento County
- Sutter County
- City of Lincoln
- Town of Loomis
- City of Rocklin
- City of Roseville
- City of Sacramento

2.3.2 Public Participation Program Methods

Community Stakeholder Interviews

The project team conducted interviews with 30 community stakeholders between May and July 2003 to identify issues, concerns, and potential benefits regarding the proposed project. Interviewees included representatives from public agencies, businesses, the agricultural sector, environmental groups, and local government. Interviews were conducted in person or by telephone. A September 2003 summary report is posted on the Placer County Transportation Planning Agency (PCTPA) website.

The interviews were considered part of the public scoping process and their results helped to focus subsequent public presentations and meetings with local jurisdictions and agencies. In addition to the interviews, written and verbal scoping comments were received from the general public (at public meetings and through newsletters), from meetings with jurisdictions and agencies, from responses to the Notice of Intent/Notice of Preparation, and from the Technical Advisory, Study Advisory, and Policy Advisory Committees established for the project as discussed below.

Advisory Committees

Building on the public outreach programs for the Placer Parkway Interconnect Study Conceptual Plan and the 2001 Project Study Report for Placer Parkway (both prepared by DKS Associates), three advisory committees were re-established: a Study Advisory Committee: a Policy Advisory Committee, and a Technical Advisory Committee.

The Technical Advisory Committee (TAC) was established to advise and assist PCTPA and its consultants with the technical aspects of the project. Membership of the TAC consisted of staff representatives from local jurisdictions and regional, state, and federal agencies. TAC representatives provided knowledge of environmental resources, planning, and transportation. The TAC met eight times from May 2003 to August 2005. Meeting agendas and minutes are available via PCTPA.

The Study Advisory Committee (SAC) was established to assist in the identification of project issues and solutions. Representatives from a wide range of key community interest groups were invited to be members of the SAC, including staff representatives from all local jurisdictions in the study area, staff representatives from regional, state, and federal agencies, representatives from environmental and neighborhood groups, and representatives from business and industry. The SAC met six times from June 2003 to August 2005. Meeting agendas and minutes from SAC meetings are available from PCTPA.

The Policy Advisory Committee (PAC) was established to provide advice and assistance in identifying project issues and solutions. Membership of the PAC consisted of elected officials/ex officials from all

local jurisdictions. The PAC's primary role was to provide the technical staff with policy recommendations related to the needs of various jurisdictions in the project study area. The PAC met four times from September 2003 to August 2005. Meeting agendas and minutes from PAC meetings are available from PCTPA.

2.3.3 Public Meetings and Notices

On September 18, 2003, a Notice of Intent for the project was published in the Federal Register and a Notice of Preparation was submitted to the State Clearinghouse. These documents described the proposed project and solicited agency and public comment on the scope and content of the Tier 1 EIS/Program EIR. Copies of these documents were mailed to 58 federal, state, and local agencies. Twenty comment letters were received and are included in the Tier 1 EIS/Program EIR. The lead agencies considered these comments when determining the appropriate information to include in the Tier 1 EIS/Program EIR.

In October 2003, PCTPA held two scoping meetings (one in Sutter County and one in Placer County) as part of its comprehensive public participation program. The purpose of the meetings was to provide an opportunity for community members, community interest groups, and public agencies to provide input on the overall scope and content of the Tier 1 EIS/Program EIR. These meetings were the first in a series of three rounds of public meetings planned throughout the project. An October 2003 Scoping Meetings and Scoping Process Summary Report is available at PCTPA. A copy is posted on PCTPA's website.

Informational notices for both meetings were mailed to community members in the study area, including businesses, community leaders, agency staff, environmental groups, project advisory committee members, local elected officials, property owners, and the general public. More than 1,300 notices were mailed. Print advertisements were also placed in local newspapers to provide additional information and publicity for the meetings. A press release was distributed to local media outlets (radio, television, and newspapers) in Placer, Sutter, and Sacramento counties, providing an overview of the project and information on the scoping meetings

Approximately 25 people attended the Roseville meeting and approximately 100 people attended the Pleasant Grove meeting. The project team followed up on a number of issues that were raised at the public scoping meetings including comments on meeting format, maps and hand-out materials, study area expansion, and enlarging the notice area. In addition to comments received at these meetings, letters in response to the Notice of Intent and Notice of Preparation were received from agencies, jurisdictions, and members of the public. These letters were considered in the lead agency's determination of the appropriate scope and content of the Tier 1 EIS/Program EIR, and will be included in that document's appendices.

In August 2004, PCTPA held two public meetings (one in Sutter County and one in Placer County) as part of its comprehensive community outreach program. The purpose of the meetings was to obtain feedback from area residents and other community members on four potential corridor alignment alternatives being considered for evaluation in the Tier 1 EIS/Program EIR. These meetings were the second in a series of three rounds of public meetings planned throughout the project. An August 2004 Public Meetings Summary Report is available at PCTPA. A copy is posted on PCTPA's website.

PCTPA also produced newsletters that provided updates on the project. These were distributed to the project mailing list, including property owners, businesses, interested community organizations, public agencies and individuals to inform them about the public. The first two newsletters were developed to coincide with the 2003 scoping and the 2004 public meetings. A third newsletter, in August 2005, provided information on two additional corridor alignment alternatives being considered.

2.3.4 Project Website

A website (www.pctpa.org/placerparkway/index.htm) provided relevant information on the project background, the project description, corridor alternatives, the environmental review process, funding, key milestones of the planning process, a project library with posted project documents, and public meeting dates and materials. The website was linked to PCTPA's existing website. The project website will remain active through the duration of the planning process. Members of the public were able to access information on the website and learn how to stay involved.

The project website expanded outreach and provided an alternative means for dissemination of project-related information.

2.3.5 Public Hearings

PCTPA will hold public hearings in 2007 to obtain public comments on the Tier 1 EIS/Program EIR. The public meetings will be held at two locations, one each in Placer and Sutter counties. Updates on meeting dates and locations will be posted on the project website. Notices for these hearings will be distributed in a variety of ways, including newspapers, Federal Register, news release, newsletter, and website.

3.0 SUMMARY OF IDENTIFICATION EFFORTS

The phased approach for compliance with Section 106 of the National Historic Preservation Act for the proposed undertaking is mandated in the *Programmatic Agreement between the Federal Highway Administration and the California State Historic Preservation Office Regarding Implementation of the Placer Parkway Project, Placer County, California* (Placer Parkway PA).

3.1 ARCHAEOLOGICAL RESOURCES

In accordance with Stipulations II.B.1.a. and 2.a. of the Placer Parkway PA, identification efforts with respect to archaeological resources consisted of background and archival research, contact with the Native American Heritage Commission (NAHC) and local Native American groups and individuals identified by the NAHC, an intensive archaeological pedestrian reconnaissance of the previously unsurveyed portion of the common alignment (Figure 3-1; also see Section 3.1.2 for more details) where access had been secured, and the development and use of a predictive model based on environmental factors to assess the relative archaeological sensitivity of the project alternatives.

3.1.1 Records Search

The archaeological records search included the study area (Figure 1-2) as well as areas within a ¼-mile radius of the study area boundary. Because the archaeological records for Sutter County are housed separately from those in Placer and Sacramento counties, two separate record searches were conducted for the project. The record searches at the North Central Information Center (NCIC) and Northeast Information Center (NEIC) included searches of archaeological site and historic property files, the National and California Registers of Historic Places, the Historic Property Data File for their respective counties, California Historic Landmarks, California Points of Historic Interest, Caltrans Local Bridge Survey, and historic General Land Office Maps.

The records search results were used to develop corridor alignment alternatives routed to avoid and/or minimize potential impacts to various resources including historic and prehistoric archaeological sites. Known archaeological sites identified in the record search, including trinomial numbers, are listed in Attachment A. No previously identified archaeological sites occur within the corridors subject to the current investigation. The corridor alignment alternatives selection process was also used to locate, to the extent possible given other environmental constraints, the corridor alignment alternatives within areas previously subjected to archaeological inventory. A list of previous archaeological inventory studies that include lands bisected by the project is included in Attachment A.

Because the screening process was used to avoid historic and prehistoric archaeological sites, none of these efforts resulted in the identification of archaeological sites within the corridor alignment alternatives.

Since the record search and screening efforts were conducted, three additional studies have been conducted that include tracts of land traversed by the common alignment alternatives (see Figure 3-1). These studies were completed for the Amoruso Property (ECORP, 2006), the Placer Ranch Project (Hale, 2004), Reason Farms Retention Basin (Hale, 2002), and the SR 65 Widening Project (Norton, 1998). Given the recent dates of completion of these surveys, in agreement with Caltrans, the common corridor alignment alternative through these parcels was not re-inventoried for archaeological resources. None of these efforts identified archaeological resources within any of the corridor alignment alternatives.

3.1.2 Field Surveys

In accordance with Stipulation II.B.2.a. of the Placer Parkway PA, only the alignment common to all build alternatives (Figure 3-1) was subject to archaeological pedestrian reconnaissance. The common alignment occurs primarily in the Eastern Segment of the study area, although a small section of common alignment also is found in the eastern extent of the Central Segment. The majority of the common alignment has been previously investigated in the recent past. As depicted on Figure 3-1 the corridor bisects a number of areas currently under environmental review for other development project proposals. Environmental review of these projects has included archaeological investigations, and the results of these investigations have been used in this report to characterize the baseline conditions of the corridor analysis. Further details of these areas are provided in Attachment 2.

The survey corridor, comprised of parcels within the common alignment, was subjected to an archaeological pedestrian reconnaissance following the guidelines proposed by King (1978). Specifically, the previously unsurveyed portions of the common alignment where access had been secured were visually inspected using 20-meter (66-foot) parallel transects.

Because the current undertaking consists only of the preservation of a transportation ROW, the archaeological APE (Figure 1-4) for this Tier 1 investigation consists of the area within the boundaries of the corridor alignment alternatives. Furthermore, because the project has yet to be designed, the APE is currently limited to the ground surface only and there is no vertical APE. An APE encompassing areas that potentially would be disturbed by construction activity, as well as areas that potentially would be used for construction excavation, will be developed and assessed in Tier 2. The remaining portions of the APE outside of the common alignment are comprised of a series of interconnected corridor alternatives. Archaeological issues in these corridors, as agreed upon by the signatories and concurring parties of the Placer Parkway PA, were addressed through the use of environmental factors including length of stream corridor, area above floodplain, and area of farm land to rank the archaeological sensitivity of the project alternatives. The results of the ranking efforts will be used to assist with alternative selection in the Tier 1 EIS/Program EIR.

3.1.3 Predictive Model

As indicated previously, signatories to the Placer Parkway PA agreed that only the common alignment of the Placer Parkway needed to be inventoried for archaeological resources prior to the preparation of the Tier 1 EIS/Program EIR. The portion of the archaeological APE outside of the common alignment consists of the remaining five interconnected corridor alignment alternatives. The Placer Parkway PA outlines that a predictive model would be used to assess the various alternatives for their relative archaeological sensitivity. These data could then be used in the Tier 1 EIS/Program EIR to make conclusions about potential impacts to archaeological resources.

For the current investigation, the predictive model is a geographic information system (GIS)-based application that assesses the relative sensitivity of each alternative corridor based on various, common environmental factors known to influence past human activity in the project vicinity. Further details of the predictive model are provided in Attachment 2.

The environmental factors used in this investigation are those known to influence (either attract or deter) past human activity in the study area based on archaeological evidence, ethnographic data, and historic land-use information. These factors comprised the following:

- proximity to stream courses
- total length in mile of stream course

- acreage of land at or above 33 feet above sea level and in close proximity to an actual or historic floodplain,
- total acreage of farmland

3.1.4 General Land Office Plat Maps

To further assess the historic archaeological sensitivity of the various project corridors, General Land Office (GLO) surveyor's plat maps were also consulted. GLO plat maps provide details of previous land surveys and divisions and depict historic features that may be represented in the archaeological record. Data retrieved from these maps were used to complement the environmental parameters discussed in the previous section. Additional details of GLO plat maps are provided in Attachment 2.

3.1.5 Results of Research

In the area of the common corridor alignment, no prehistoric or historic archaeological materials, evidence of archaeological deposits, or indications of occupation were found on the surface within the APE. It is Caltrans' policy to avoid cultural resources whenever possible. At this time no further archaeological work is necessary within the common corridor alignment. The selected corridor alignment alternative will be subjected to pedestrian archaeological inventory during Tier 2 efforts.

Table 3-1 presents the assessment of archaeological sensitivity for the Parkway alternatives in the remaining portions of the APE outside of the common alignment (Figure 3-1), as generated by the predictive model.

Table 3-1
Predictive Model for Assessment of Archaeological Sensitivity of Project Alternatives (Excluding Common Alignment)

Alignment	Total Miles of Stream Corridor (Ranking)		Total Acreage Above Floodplain (Ranking)		Total Acreage of Farmland (Ranking)	
Alternative 1	3.0099	(1)	950.8	(1)	1,238.4	(1)
Alternative 2	1.2942	(2)	868.8	(3)	1,153.10	(3)
Alternative 3	0.9148	(3)	904.7	(2)	1,188.1	(2)
Alternative 4	0.7720	(4)	782.4	(4)	953.7	(4)
Alternative 5	0.6906	(5)	778.2	(5)	945.0	(5)
Note: 1 = most sensitive 5 = least sensitive						

Alternative 1 contains the greatest length of stream course, the most acreage above floodplain, and the most acreage of farmland. Using the criteria described above, Alternative 1 is the most archaeologically sensitive alignment alternative. Alternative 3 is the next most archaeologically sensitive alignment, ranking second in both total acreage above floodplain and total acreage of farmland and scoring third in total length of stream course. Alternative 2 follows, ranking second total length of stream course and third for both total land above floodplain and total acreage of farmland. Alternative 4 is next, ranking fourth for all identified criteria. Lastly, Alternative 5 ranks fifth for all categories, making it the least sensitive for archaeological resources.

The total length of stream corridor, as described previously, can also provide insight to the potential for a corridor to contain buried archaeological deposits. Based on total stream corridor length, it can be

predicted that Alternative 1 is the corridor most likely to contain buried archaeological resources while Alternative 5 is the least likely (Table 3-1).

The predictive model, as well as previous archaeological surveys and those conducted for this study, indicate that the general archaeological sensitivity of the current archaeological APE for both prehistoric and historic archaeological resources is low. This is based on the fact that while resources have been identified, relatively few archaeological sites have been identified given the total acreage of land subjected to archaeological survey.

The GLO plat maps indicated a number of potential archaeological resources in the vicinity of the Parkway alternatives. The paths of several historic roadways are bisected by the corridor alignment alternatives. Further details of these roadways are presented in Attachment 2. As all alternatives intersect all of these historic roads, or at least can be comfortably inferred to intersect them, as well as bisect a number of not fully plotted ancillary roads, no one corridor alignment alternative is more or less archaeologically sensitive than another, based solely upon the roads intersected along their length.

Besides the aforementioned roads, only one other potential historic archaeological resource was identified from the GLO maps within any of the potential corridor alignment alternatives of the Placer Parkway project. Labeled as a "house" on the GLO plat map for Township T11N/R4E, the potential resource is situated in the southeastern quadrant of Section 23 directly within the path of the corridor alignment alternative common to both Alternatives 4 and 5, where it intersects Sankey Road at its easternmost point. No other information is known about the structure other than it was present by 1868. Air photos of this location reveal that the vicinity is currently under cultivation.

Intact remnants of this structure would likely represent an important cultural resource. However, this section of the study area has not been previously subjected to an intensive archaeological pedestrian reconnaissance. As such, it is unknown whether remnants of this structure occur within the current APE. The potential presence of this structure elevates the archaeological sensitivity of both Alternatives 4 and 5.

Although a potential historic archaeological resource was identified in Alternatives 4 and 5, elevating the archaeological sensitivity of both of these corridor alignment alternatives, given the limitations in the original GLO mapping and the fact that the area has been plowed, this finding does not outweigh the sensitivity of the alternative corridors as described on the previous page.

3.2 HISTORICAL RESOURCES

A search of the records at the Northeast and North Central information centers was conducted in June 2003. The searches included cultural resources site and historic property files, the National Register of Historic Places, California Register of Historical Resources, the Historic Property Data File for their respective counties, California Historic Landmarks, California Points of Historic Interest, Caltrans Local Bridge Survey, and historic General Land Office and U.S. Geological Survey (USGS) maps.

While the Secretary of the Interior sets the standard guidelines for review of potential National Register-eligible buildings, structures, or features that are 50 years of age or older, as construction of the Placer Parkway may not begin until 2020, this age limit has been extended to include resources constructed in 1975 or before. Buildings, structures, and features built after 1975 were not included in the survey. A reconnaissance survey of the historical resources APE was conducted on March 22, 2005 to account in the field for all the buildings, structures, and objects found within the APE that appeared to be built in or before 1975. In accordance with Stipulations II.B.1.a. and 2.a. of the Placer Parkway PA, any properties that appeared to have potential for eligibility under Criterion C of the NRHP would be formally evaluated via the completion of a DPR 523 form. To be eligible for inclusion in the NRHP, a property must have

both significance and integrity. Loss of integrity, if sufficiently great, will overwhelm the historical significance of a resource and render it ineligible. Likewise, a resource can have complete integrity, but if it lacks significance, it must also be considered ineligible.

In order to identify potential historic resources that could be affected by the Parkway, previous historic resource inventory and evaluation surveys and reports were evaluated and research conducted at the California State Library; County Assessor's and Recorder's offices for Placer and Sutter counties; Shields Library at University of California, Davis; and the Bureau of Land Management State Office, Sacramento. In addition, background research was done through the First American Real Estate Solutions commercial database, review of historic and current USGS topographic maps, Caltrans Historic Bridge Inventory, and other documents to confirm dates of construction.

3.2.1 Results of Research

The vast majority of the properties identified in the APE are Ranch-, Minimal Traditional- or Contemporary-style residential structures predominantly built during the 1960s and 1970s. These buildings are of standard twentieth-century styles, types, and methods of construction and are ubiquitous in Northern California and in Sutter and Placer counties.

Of the handful of properties that were built in the first half of the twentieth century, most have been substantially altered by additions, replacement siding or windows, or have suffered severe damage from lack of maintenance and do not appear to retain sufficient integrity to warrant further investigation.

Four resources within the APE were previously determined ineligible for listing and one resource was previously determined eligible for listing in the NHRP and CRHR. Section 4.2 further describes the properties identified in this study.

4.0 PROPERTIES IDENTIFIED

4.1 ARCHAEOLOGICAL RESOURCES

No archaeological resources were identified during the course of this investigation. No archaeological resources were identified in the common alignment portion of the project's APE. The predictive model for the alignment alternatives of the APE ranked the corridors for their relative archaeological sensitivity using environmental factors known to influence past human activity in the project vicinity. This analysis determined that Alternative 1 is the most archaeologically sensitive alignment, followed in descending order by Alternative 3, Alternative 2, Alternative 4, and Alternative 5. Based on this analysis, Alternative 5 is the least sensitive alignment in terms of potential archaeological resources.

It is possible that buried archaeological materials remain undetected within the study area. If such resources are encountered during project implementation, it is Caltrans policy that ground-disturbing activities within the vicinity halt until a qualified archaeologist can evaluate the nature and significance of the find.

Mark R. Hale, URS Senior Project Archaeologist, prepared the Archaeological Survey Report (ASR) (Attachment 2) to document cultural resources identification efforts in the project's APE. Pedestrian archaeological reconnaissance was led by Mr. Hale. Mr. Hale holds a B.A. in Anthropology from the University of California, Berkeley, and has completed his course work, completed his research, and defended his thesis for an M.A. in cultural resources management from Sonoma State University. He has more than 20 years of professional experience in conducting and managing cultural resources investigations. Project oversight was provided by Mr. Brian Hatoff (URS Senior Archaeologist). Mr. Hatoff received both his B.A. and his M.A. in Anthropology from the University of California, Davis; is a Registered Professional Archaeologist, and has more than 30 years of professional experience in California and the Great Basin.

Mr. Mark Hale, who meets the Professionally Qualified Staff Standards in Section 106 PA Attachment 1, as a Lead Archaeological Surveyor or above, has reviewed the project APE and confirmed that the only other properties currently known to be present within the APE meet the criteria for Section 106 PA Attachment 4 (Properties Exempt from Evaluation). Additional investigations will be undertaken at Tier 2 to confirm the potential presence of as yet unknown potentially NRHP- or CRHR-eligible archaeological resources.

4.2 HISTORICAL RESOURCES

Table 4-1 lists the only National Register-eligible property identified in this study: Reclamation District 1000. This historic district was found to be eligible for inclusion in the NRHP under Criterion A (Table 4-1, below). The architectural APE also included two county-owned bridges along South Brewer and Lotus roads in Placer County and two railroads. Caltrans previously identified these bridges (19C0104 and 19C0124) as Category 5 structures (not eligible for listing in the National Register of Historic Places) in the California Historic Bridge Inventory (1986 and updates) (Table 4-2). The Western Pacific Railroad and Sacramento Northern Railroad segments (Table 4-2) within the study area have been previously found to be ineligible for inclusion in the NRHP and therefore required no further study for this project (JRP et al., 1994; JRP, 1995).

Three other properties were also identified that, while they do not appear to be eligible under Criterion C as representative examples of a type, period, or method of construction, or as works of a master, appear to retain sufficient integrity to warrant formal evaluation during the Tier 2 phase of the project. These

Table 4-1
Properties Previously Determined Eligible for Listing in the National Register of Historic Places and Which are Historical Resources Under CEQA

Name	Address	OHP Status Code	Map Ref No.
Reclamation District 1000	Between Western Pacific Railroad and Sacramento River	2D	1

Table 4-2
Properties Previously Determined Ineligible for Listing in the National Register of Historic Places and Which are Not Historical Resources Under CEQA

Name	Address	OHP Status Code	Map Ref No.
Sacramento Northern Railroad Segment	Not applicable	6	2
Western Pacific Railroad Segment	Not applicable	6	3
Bridge 19C0104	Brewer Road, branch of Curry Creek	6	n/a
Bridge 19C0124	Locust Road east of SR 65, Curry Creek	6	n/a

properties are located within the Central Segment of Alternatives 1, 2, and 3. Site-specific research conducted on these properties may produce information that possibly may support eligibility under Criteria A or B. Those resources (Assessor's Parcel Number [APN] 35-260-011, 35-260-014 and 017-130-036) are identified in Attachment 3.

Properties which were determined eligible for listing in the National Register of Historic Places as a result of the current study and are historical resources under CEQA: None.

Properties which were determined ineligible for listing in the National Register of Historic Places as a result of the current study and which are not historical resources under CEQA: None.

Toni Webb of JRP, who meets the Professionally Qualified Staff Standards in Section 106 PA Attachment 1 as an Architectural Historian or above, has determined that the only other properties present within the APE for the Tier 1 studies, including state-owned resources, meet the criteria for Section 106 PA Attachment 4 (Properties Exempt from Evaluation).

5.0 FINDINGS

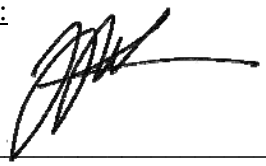
No known archaeological resources exist in within the common areas of the proposed corridor alignment alternatives. Four built environment resources were previously determined ineligible for listing in the NRHP and are not historical resources for the purposes of CEQA: two bridges and two railroad segments. One built environment resource was previously determined eligible for listing in the NRHP and is a historical resource for the purposes of CEQA: Reclamation District 1000.

Tier 1 of the project comprises the acquisition of land to preserve for future construction of the Placer Parkway. Land acquisition, in and of itself, does not create a potential for effect. Under the authority of FHWA, Caltrans has determined a finding of No Historic Properties Affected is appropriate for this undertaking in accordance with Stipulation IX.A. and 36 CFR 800.4(d)(1) of the Section 106 PA.

It is possible, however, that buried archaeological materials remain undetected within the study area, and that built environment resources within the APE meet the other NRHP criteria. Additional research will be conducted during Tier 2 of the proposed undertaking to identify any additional cultural resources within the selected alternative and to determine project effects.

6.0 HPSR PREPARATION AND CALTRANS APPROVAL

Prepared by:



_____ Date: _____
Julie Watson, Senior Project Manager
URS Corporation

_____ Date: _____
Mark Hale, Senior Project Archaeologist
URS Corporation

_____ Date: _____
Toni Webb, Architectural Historian
JRP Historical Consulting

Reviewed by:

_____ Date: _____
Erick Wulf, Associate Environmental Planner – Archaeology
PQS: Co-PI, Prehistoric Archaeology
Caltrans, District 3

Approved by:

_____ Date: _____
Benjamin Tam, Acting Chief
Office of Environmental Management, S4
Caltrans, District 3

7.0 REFERENCES

ECORP Consulting, Inc., 2006. *Cultural Resources Assessment, Amoruso Property, Placer County, California*. May.

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Hale, Mark, 2004. *Placer Ranch: Archaeological Reconnaissance of Approximately 2,000 Acres of the 2,213-Acre Placer Ranch*. URS Corporation.

JRP Historical Consulting Services, Far Western Anthropological Research Group, Inc., and Foothill Resources, Ltd., 1994. *Archaeological Survey Report and Historic Study Report for the State Route 70 Project, Sutter and Yuba Counties, California.* Prepared for Woodward-Clyde Consultants. December 1994.

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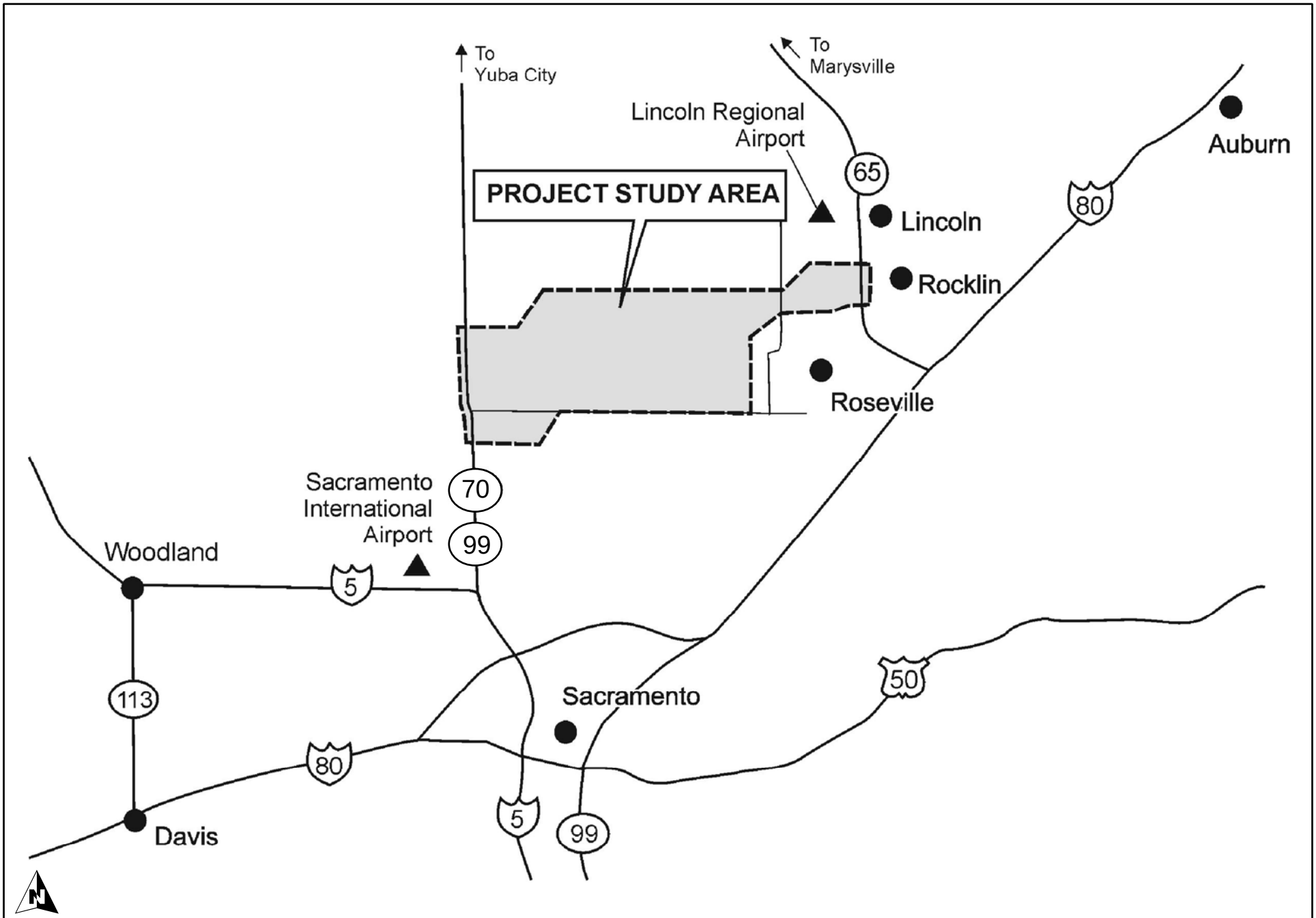
King, Thomas F., 1978. *The Archaeological Survey: Methods and Uses*. USDI, Heritage Conservation and Recreation Service, Washington D.C.

Norton, W.L., 1998. *Historic Property Survey Report and Finding of No Effect for State Route 65 Widening Project, Placer County, California*. Jones & Stokes Associates.

Figures



Tier 1 EIS/EIR
Historical Properties
Survey Report

Project Location Map

Figure 1-1

June 2007

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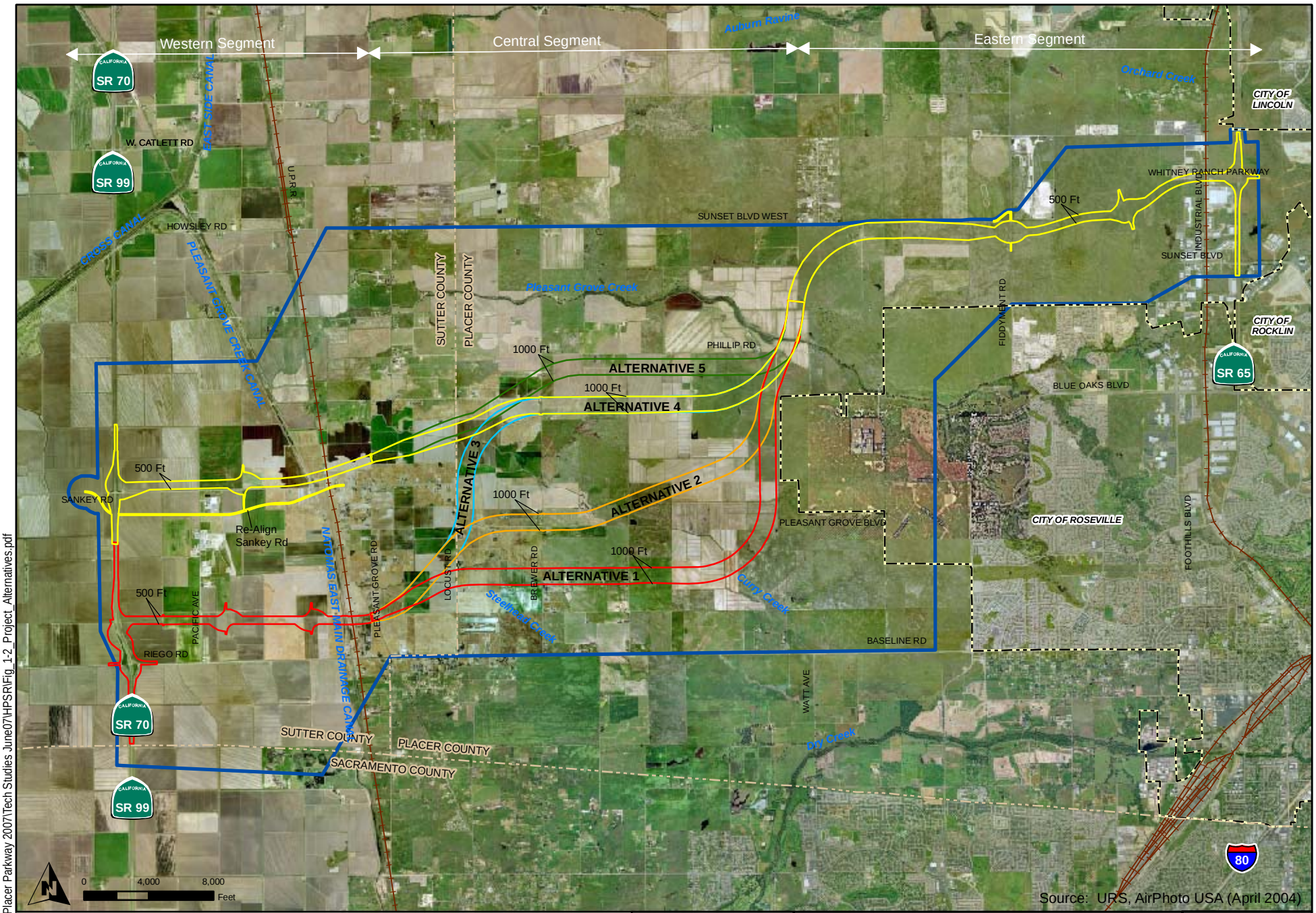
Western Segment
Central Segment
Eastern Segment
Auburn Ravine
Orchard Creek
CITY OF LINCOLN
SR 70
W. CATLETT RD
SR 99
EAST SIDE CANAL
UPRR
WHITNEY RANCH PARKWAY
500 Ft
SUNSET BLVD WEST
INDUSTRIAL BLVD
SUNSET BLVD
HOWSLEY RD
CROSS CANAL
PLEASANT GROVE CREEK CANAL
SUTTER COUNTY
PLACER COUNTY
Pleasant Grove Creek
FIDDYMENT RD
CITY OF ROCKLIN
PHILLIP RD
1000 Ft
ALTERNATIVE 5
1000 Ft
ALTERNATIVE 4
SR 65
BLUE OAKS BLVD
500 Ft
SANKEY RD
ALTERNATIVE 3
1000 Ft
ALTERNATIVE 2
Re-Align
Sankey Rd
PLEASANT GROVE BLVD
CITY OF ROSEVILLE
FOOTHILLS BLVD
NATOMAS EAST MAIN DRAINAGE CANAL
PLEASANT GROVE RD
LOCUST RD
BREWER RD
1000 Ft
ALTERNATIVE 1
Curry Creek
Steelhead Creek
500 Ft
PACIFIC AVE
RIEGO RD
BASELINE RD
WATT AVE
SR 70
SUTTER COUNTY
PLACER COUNTY
SACRAMENTO COUNTY
Dry Creek
SR 99
80
0
4,000
8,000
Feet
Source: URS, AirPhoto USA (April 2004)
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary
PLACER PARKWAY
Tier 1 EIS/EIR
Historical Properties
Survey Report
Project Alternatives
Figure 1-2
June 2007
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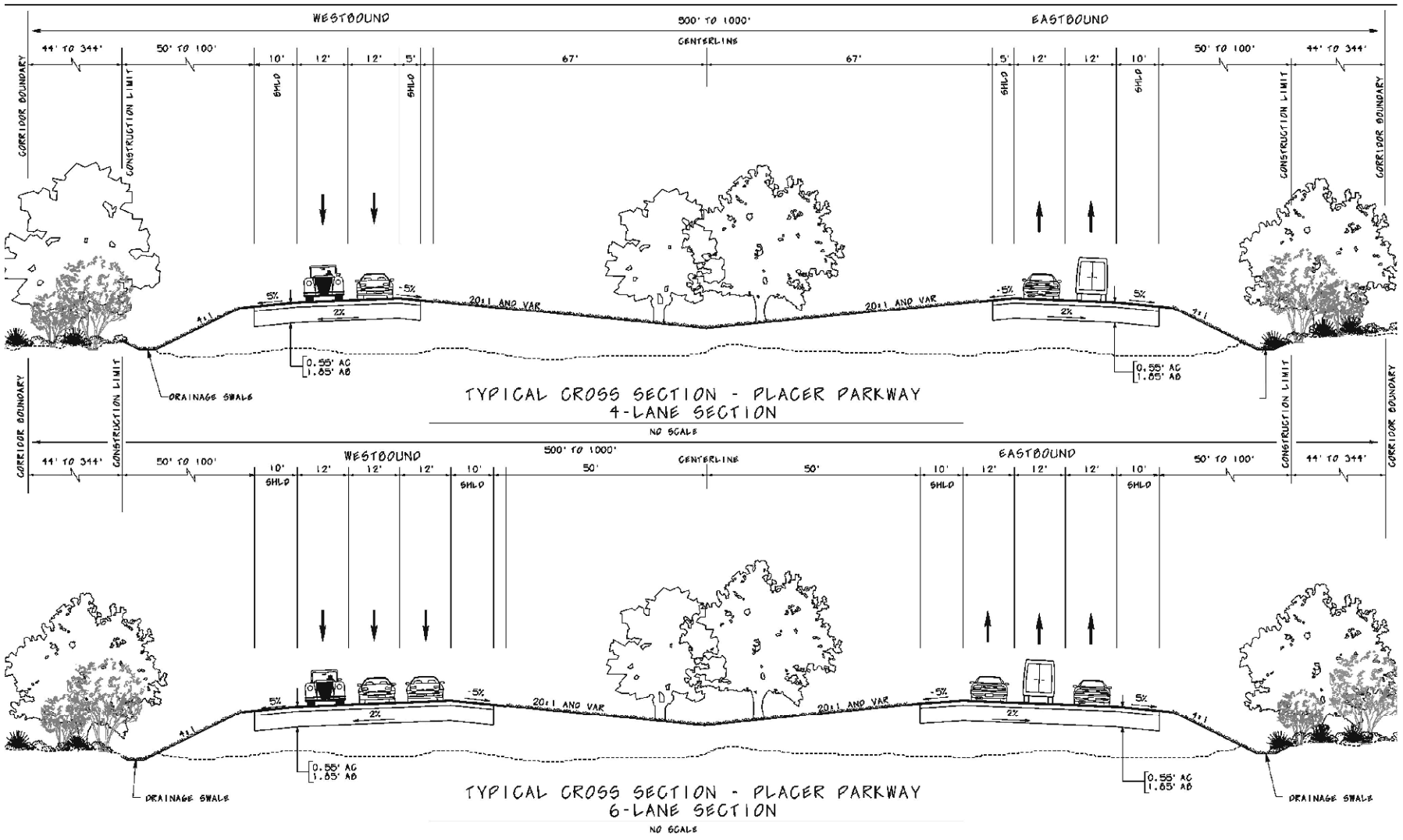

PLACER PARKWAY CORRIDOR PRESERVATION	Tier 1 EIS/EIR Historical Properties Survey Report	Typical Cross Section (Conceptual)	***Figure 1-3*** ***June 2007***

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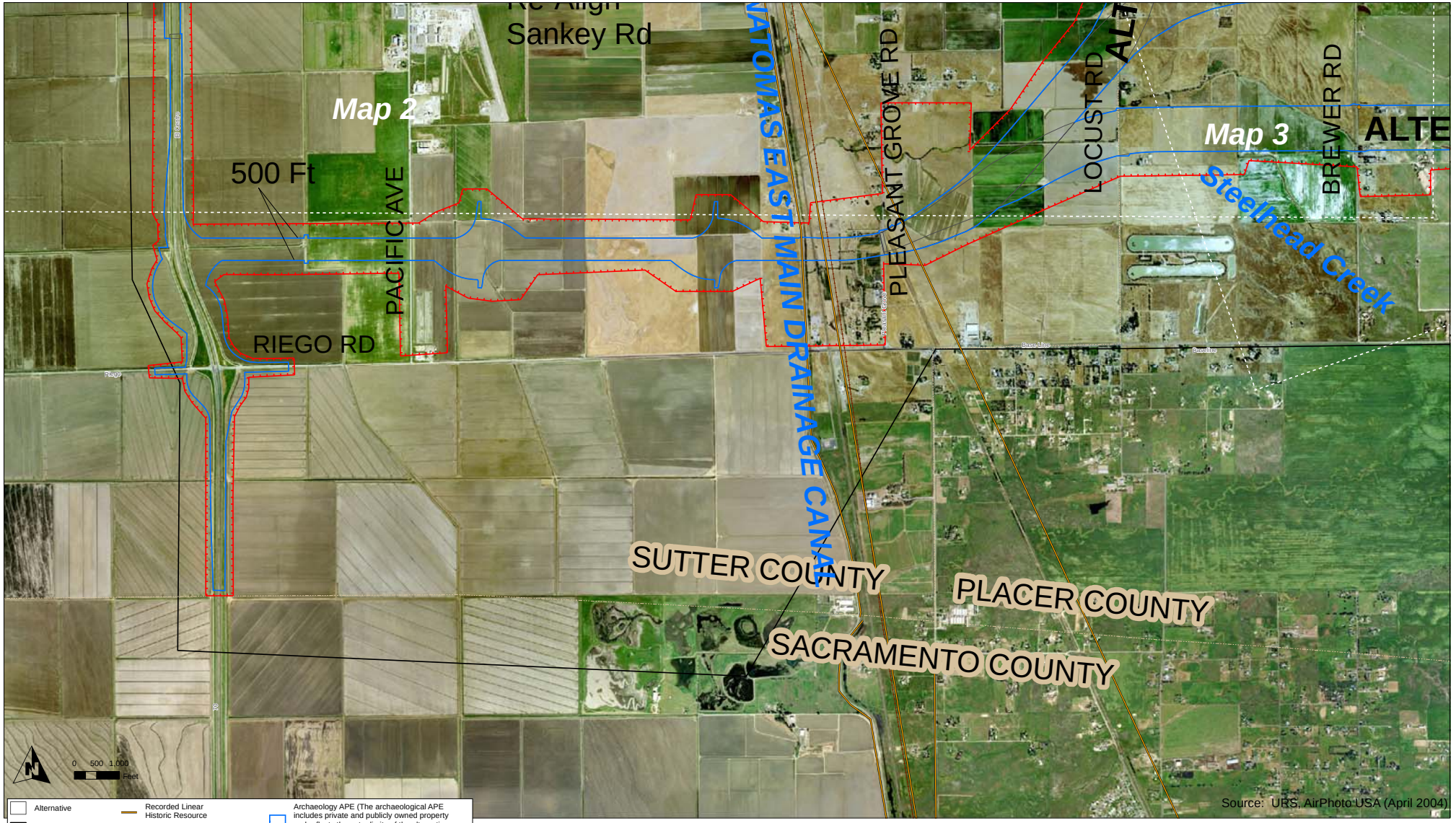

Tier 1 EIS/EIR
Historical Properties
Survey Report

Area of Potential Effect

Figure 1-4 - Sheet 1

June 2007

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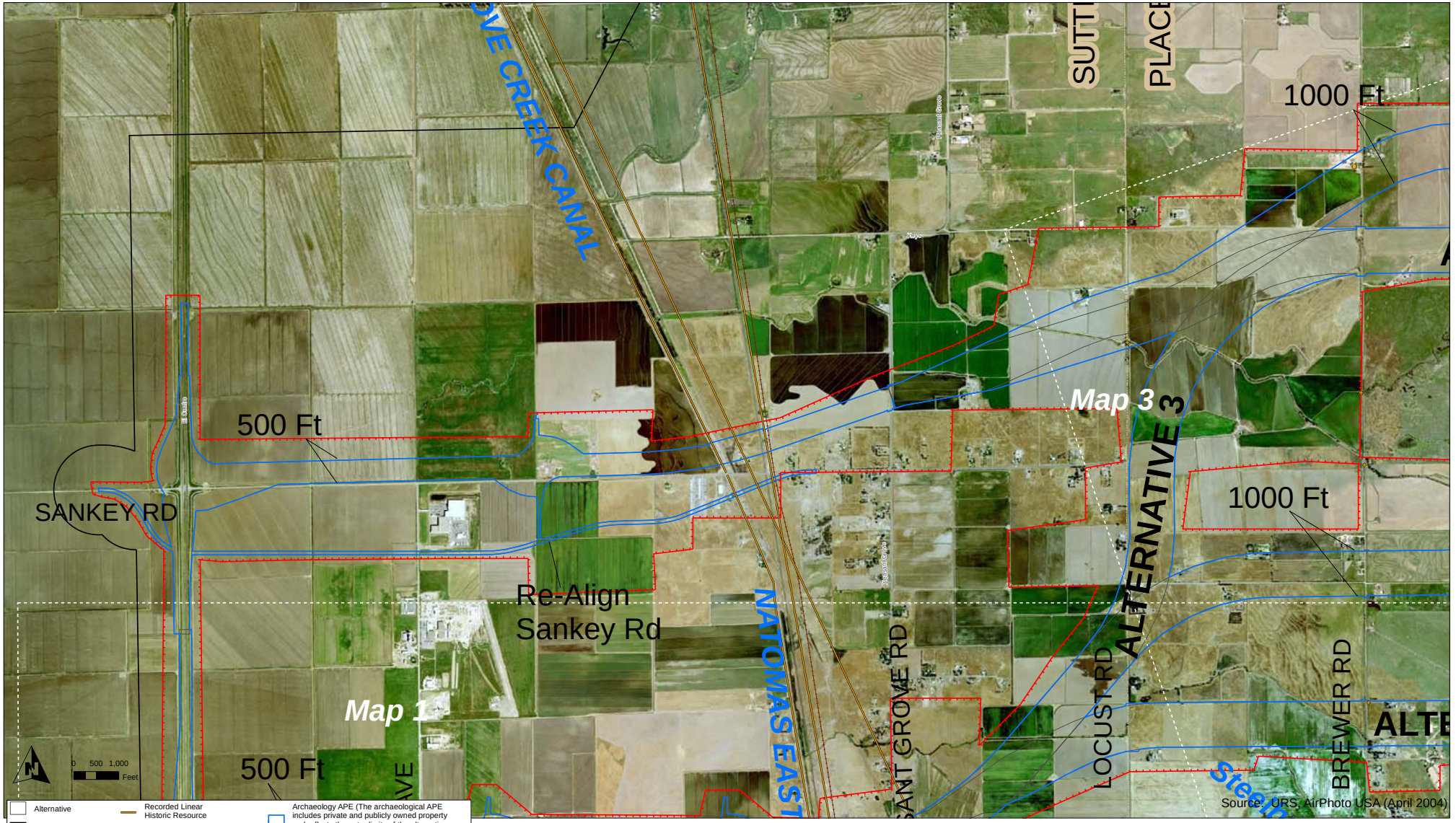
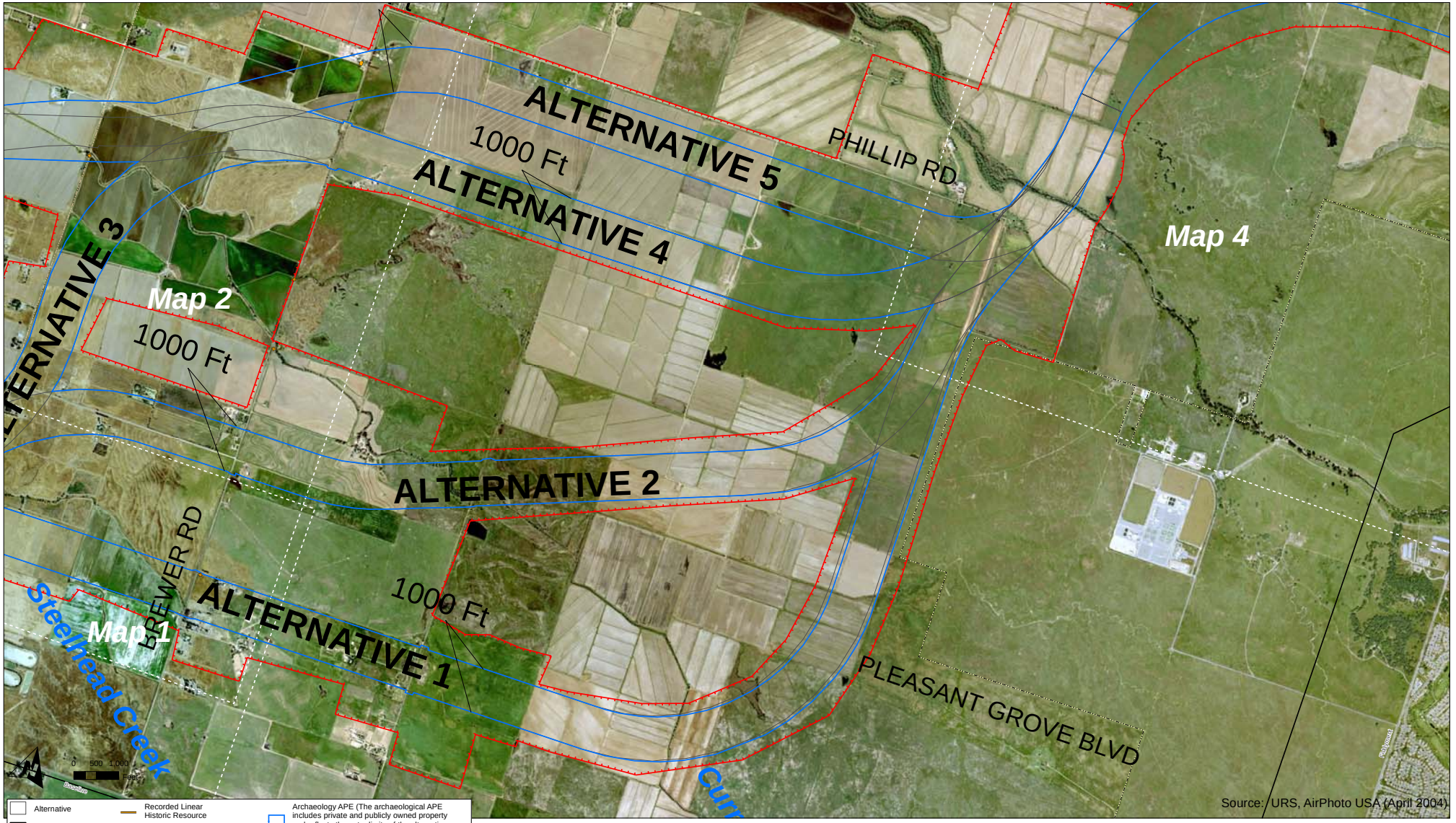


Tier 1 EIS/EIR
Historical Properties
Survey Report

Area of Potential Effect

Figure 1-4 - Sheet 2

June 2007



Tier 1 EIS/EIR
Historical Properties
Survey Report

Area of Potential Effect

Figure 1-4 - Sheet 3

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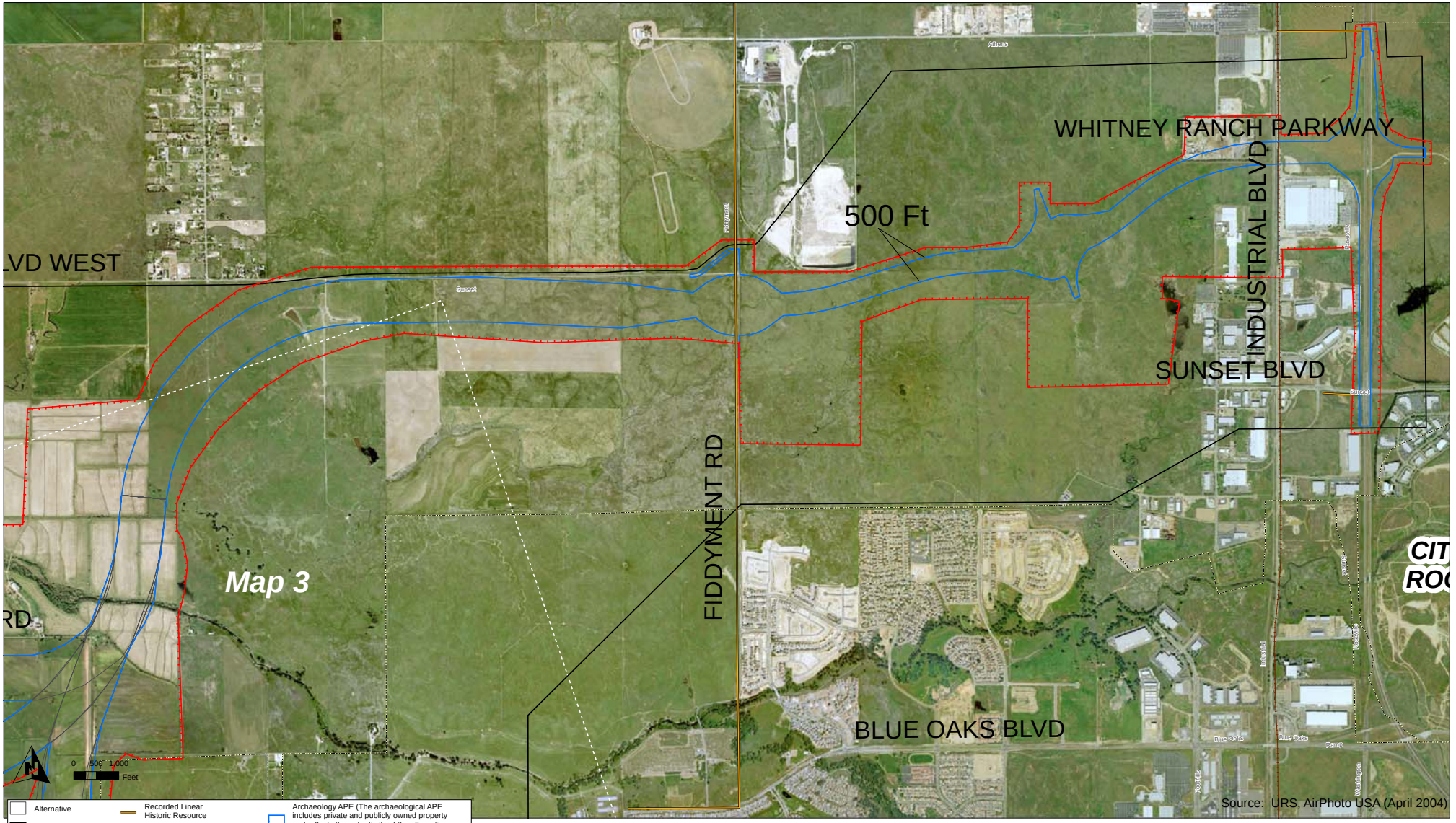

Tier 1 EIS/EIR
Historical Properties
Survey Report

Area of Potential Effect

Figure 1-4 - Sheet 4

June 2007

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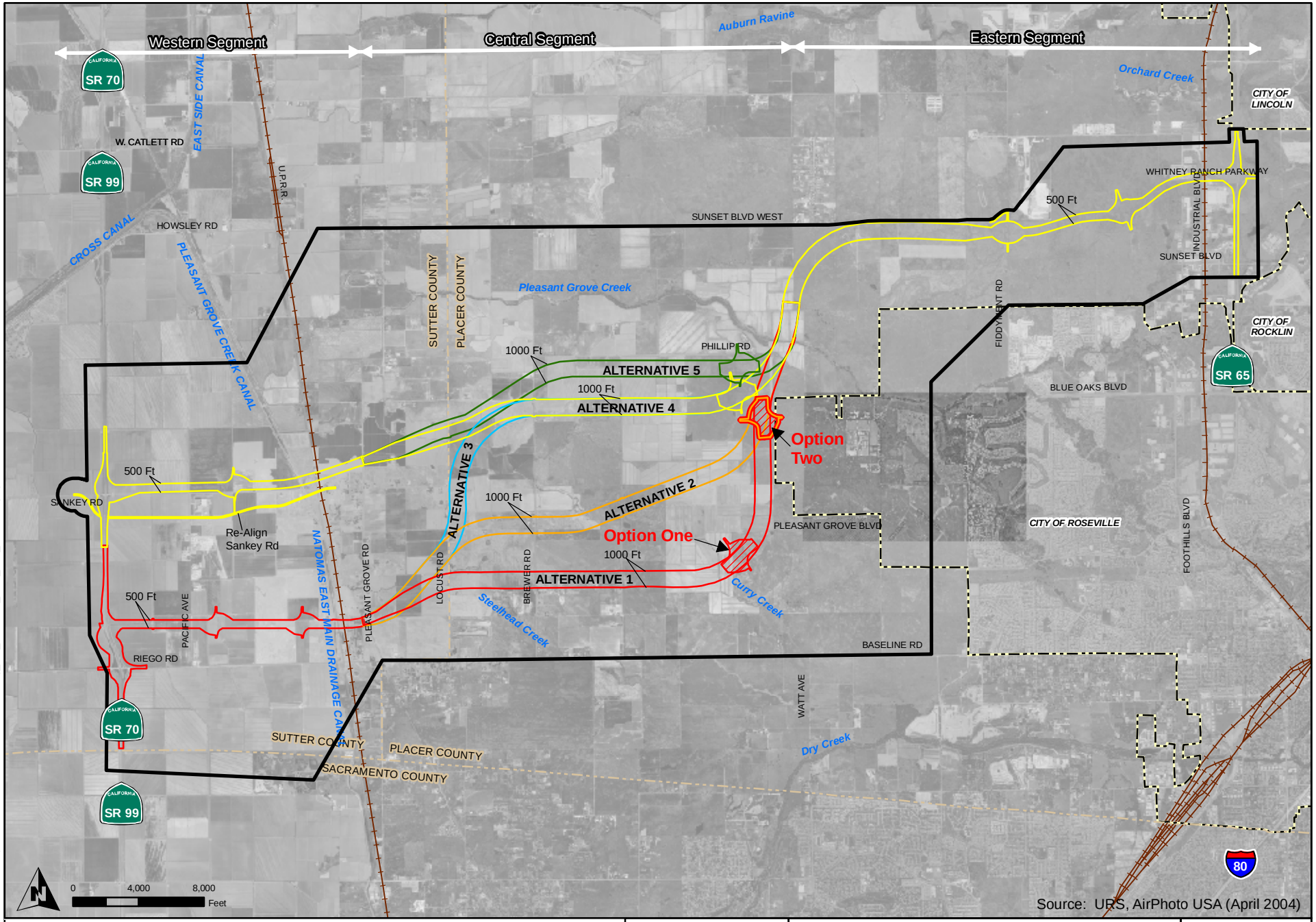
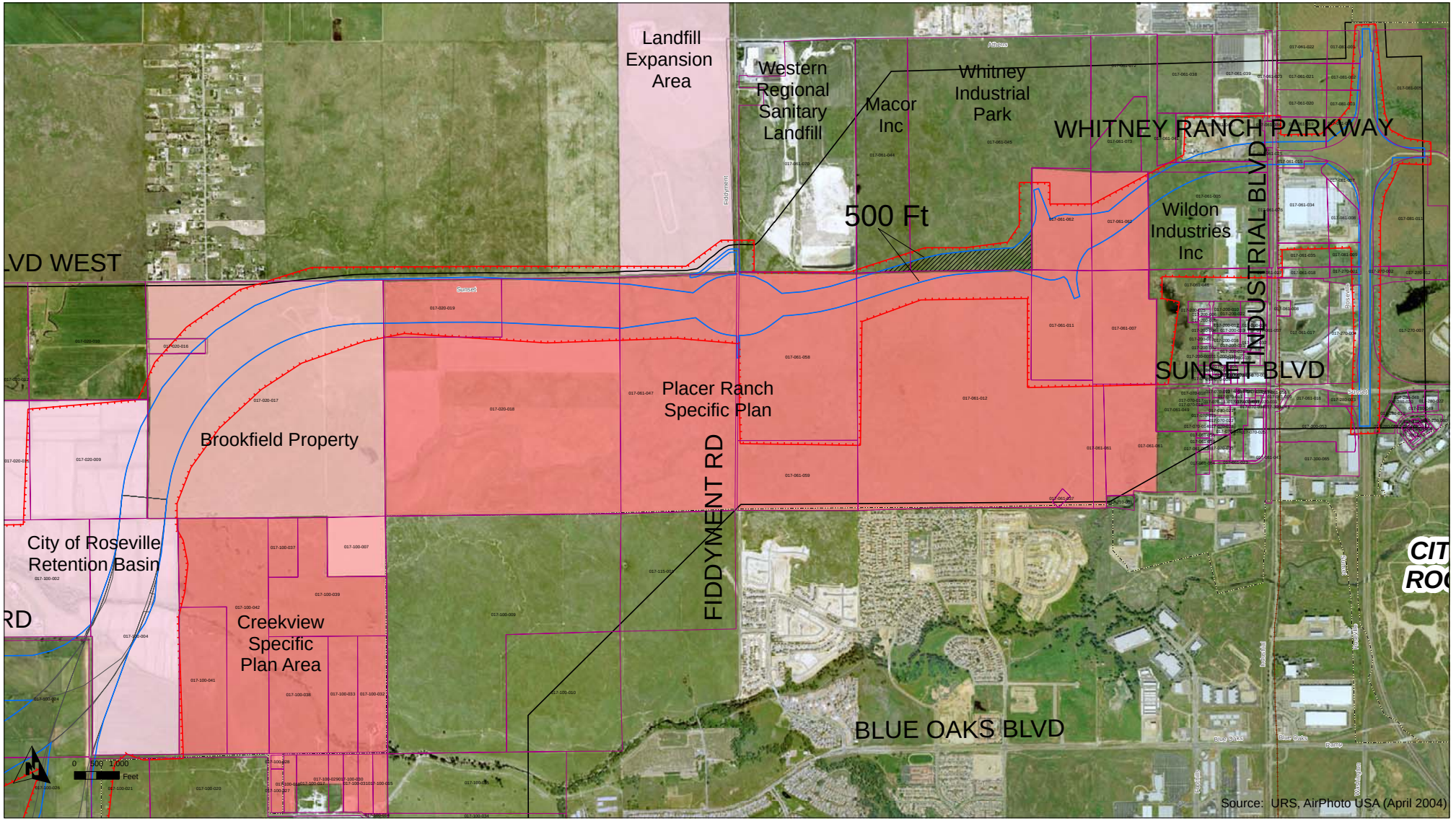


Tier 1 EIS/EIR
Historical Properties
Survey Report

Potential Watt Avenue Interchange

Figure 1-5

June 2007



Study Area Boundary
County Boundary
City Boundary

Archaeology APE (The archaeological APE includes private and publicly owned property and reflects the outer limits of the alternative alignment corridors.)

Historic Architecture APE (The historic architecture APE includes private and publicly owned property, and comprises areas which could be subject to potential direct impacts associated with any of the alignment alternatives.)

Access Not Secured, No Survey Conducted

PLACER PARKWAY

Tier 1 EIS/EIR
Historical Properties
Survey Report

Common Alignment

Figure 3-1

June 2007

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Attachment 1

Placer Parkway Programmatic Agreement

DEPARTMENT OF TRANSPORTATION
DISTRICT 3 – SACRAMENTO OFFICE
2389 GATEWAY OAKS DRIVE, SUITE 100
SACRAMENTO, CA 95833
PHONE (916) 274-0568
FAX (274) 274-0648
TTY (530) 741-4509

7.11.2006

Flex your power!
Be energy efficient!

July 5, 2006

Gene Fong
Federal Highway Administration
650 Capitol Mall, Suite 4-100
Sacramento, CA 958144-4708
Attn: Gary Sweeten

Dear Mr. Fong

The Federal Highway Administration (FHWA) and California Department of Transportation (Caltrans) are working with the Placer County Transportation Planning Agency (PCTPA) on the Placer Parkway Project. PCTPA proposes to identify and acquire right-of-way for the purpose of preserving a corridor for a future Placer Parkway, an east-west connection between State Route (SR) 65 near Lincoln in Placer County and SR 70/99 in southern Sutter County. Our agencies are working together to produce a Tier 1 Environmental Impact Statement (EIS), pursuant to the National Environmental Policy Act (NEPA) that will evaluate several corridor alternatives and will lead to the selection of one corridor for right-of-way preservation.

As a Federal undertaking, this project also requires compliance with Section 106 of the National Historic Preservation Act (NHPA). Pursuant to 36 CFR 800, the regulations implementing Section 106 of the NHPA, we have prepared a draft Programmatic Agreement that will govern Section 106 compliance responsibilities associated with implementing this undertaking. If FHWA agrees with this proposed PA, please forward the attached documentation to the California State Historic Preservation Officer for his review. Caltrans and PCTPA staff are available to meet with the SHPO to explain the undertaking in more detail if that is helpful.

Should you require any additional project information, please contact Erick Wulf at (916) 274-0563 or erick.wulf@dot.ca.gov or Anmarie Medin at (916) 274-584 or anmarie.medin@dot.ca.gov. Thank you in advance for your assistance in this matter.

Sincerely,

Japtej S Gill

JAPTEJ GILL
Chief, Environmental Planning, S4

c: Stan Tidman, Placer County Transportation Planning Agency

bc: EWulf, AMedin

PROGRAMMATIC AGREEMENT

BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER REGARDING IMPLEMENTATION OF THE PLACER PARKWAY PROJECT, PLACER COUNTY, CALIFORNIA

WHEREAS, the Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans), in cooperation with the Placer County Transportation Planning Agency (PCTPA), propose to identify and acquire right-of-way for the purpose of preserving a corridor for a future Placer Parkway, an east-west connection between State Route (SR) 65 near Lincoln in Placer County and SR 70/99 in southern Sutter County (Undertaking); and,

WHEREAS, the FHWA is preparing a Tier 1 Environmental Impact Statement (EIS), pursuant to the National Environmental Policy Act (NEPA), 42 USC 4321 *et seq,* that will evaluate several corridor alternatives and will lead to the selection of one corridor for right-of-way preservation; and

WHEREAS, given the existing and projected rapid growth in and around the project study area, the FHWA has determined it is vital to identify a corridor as early as feasible so that local jurisdiction planning decisions can consider the future Placer Parkway and before new development reduces corridor options and/or increase right-of-way acquisition costs for the Undertaking; and,

WHEREAS, the FHWA has determined that a phased approach for compliance with Section 106 of the NHPA is appropriate for the Undertaking, such that completion of the identification of historic properties, determinations of specific effects in historic properties, and resolution of any adverse effects will be carried out as part of planning for and prior to the approval of specific Tier 2 undertakings; and,

WHEREAS, the FHWA has consulted with the California State Historic Preservation Officer (SHPO) pursuant to the 1 January 2004 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA), and where the PA so directs, in accordance with 36 CFR Part 800, the regulations that implement Section 106 of the National Historic Preservation Act (NHPA) (16 U.S.C. 470f), regarding the Undertaking's potential effects on historic properties; and,

WHEREAS, following the completion of Tier 1 EIS, the FHWA, as funding becomes available for design and construction, will conduct Tier 2 environmental studies to analyze the environmental impacts of different alignments within the selected corridor in order to determine the specific transportation facility 'footprint' within the corridor , including project-level compliance with the Section 106 process to determine specific impacts to historic properties as

well as opportunities for avoidance, minimization of harm, and appropriate mitigation, if required, for the Undertaking; and,

WHEREAS, the FHWA desires to enter into a Programmatic Agreement (Agreement) at this time in order to establish a framework for conducting Section 106 consultation for Tier 1 and Tier 2; and,

WHEREAS, Caltrans has participated in consultation and has been invited to be a signatory to this Agreement; and

WHEREAS, PCTPA has participated in consultation and has been invited to be a signatory to this Agreement; and

WHEREAS, the Advisory Council on Historic Preservation (ACHP) has been afforded the opportunity to participate in the Section 106 process and has not elected to participate; and,

WHEREAS, Caltrans, on behalf of the FHWA, has initiated consultation with the Shingle Springs Band of Miwok Indians, Todd Valley Miwok-Maidu Cultural Foundation, Maidu Elders Orgainzation, and Enteprise Rancheria of Maidu Indians, as well as with the following federally-recognized Indian Tribes: United Auburn Indian Community (Tribes).

WHEREAS, the FHWA has involved, and will continue to involve, the public and historic interest groups, as stipulated under NEPA and the NHPA in a manner consistent with the PA and Caltrans' public involvement procedures;

NOW, THEREFORE, the FHWA and the SHPO agree that, upon the FHWA's decision to proceed with the Undertaking, the FHWA shall ensure that the Undertaking is implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on historic properties; and further agree that these stipulations shall govern the Undertaking and all of its parts until this Agreement expires or is terminated.

STIPULATIONS

The FHWA will ensure that the following stipulations are implemented:

I. DEFINITIONS

The definitions set forth at 36 CFR § 800.16 are applicable throughout this Agreement.

II. TIER 1 PHASED IDENTIFICATION OF HISTORIC PROPERTIES

A. Area of Potential Effects

1. The Undertaking's area of potential effects (APE) for Tier 1 is situated in southwest Placer County, between Highways 65 and 70, north of Baseline Road and south of Sunset Boulevard West (attachment A to this Agreement).

2. If modifications to the Undertaking, subsequent to the execution of this Agreement, necessitate the revision of the APE, Caltrans will consult with the PCTPA, the FHWA, and the SHPO to facilitate mutual agreement on the subject revisions. If Caltrans, the PCTPA, the FHWA, and the SHPO cannot reach such agreement, then the parties of this Agreement shall resolve the dispute in accordance with stipulation VIII.C below. If Caltrans, the PCTPA, the FHWA, and the SHPO reach mutual agreement on the proposed revisions, then Caltrans will submit a final map of the revisions, consistent with the requirements of stipulations VIII.A and XVI.A of the PA, no later than 30 days following such agreement.

B. Phased Identification of Historic Properties

1. Areas Common to all Alternatives/Corridors: the FHWA shall ensure that PCTPA or its consultants inventory properties within the area(s) common to all Tier 1 corridors according to the following specifications:
   a. Archaeological Properties
      (1) Conduct an inventory of archaeological properties where access has been secured in areas that have not previously been surveyed and those areas deemed by Caltrans PQS in need of resurvey because of the age or condition of the previous survey. Archaeological properties will be identified in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms.
   b. Built Environment Properties
      (1) Conduct a limited inventory of built environment properties within the entire Tier 1 APE. Built environment properties that have the potential to meet NRHP Criterion C will be identified and evaluated in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms. Other built environment properties within the APE that meet the age and integrity criteria will be inventoried and evaluated during Tier 2 studies, as provided for in stipulation III of this Agreement.
2. Areas Unique to Specific Alternatives/Corridors: the FHWA shall ensure that PCTPA or its consultants inventory properties within the area(s) unique to specific Tier 1 alternatives/corridors according to the following specifications:
   a. Archaeological Properties
      (1) Complete a records search for the Tier 1 APE and prepare a predictive model utilizing environmental factors and historic land-use data to assess the archaeological sensitivity of the project corridors including potential for buried resources. Segments of Tier 1 alignments/corridors that are not in common will be inventoried for archaeological properties during Tier 2 studies, as provided for in stipulation III of this Agreement.
   b. Built Environment Properties
      (1) Conduct a limited inventory of built environment properties within the entire Tier 1 APE. Built environment properties that have the potential to meet NRHP Criterion C will be identified and evaluated

in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms. Other built environment properties within the APE that meet the age and integrity criteria will be inventoried and evaluated during Tier 2 studies, as provided for in stipulation III of this Agreement.

3. Tier 1 Reporting and SHPO Consultation
   a. The FHWA shall ensure that PCTPA or its consultants prepare documentation of their findings and determinations pursuant to stipulation XVI of the PA. The reports shall be submitted to Caltrans PQS for review and approval.pursuant to stipulation XVI of the PA.
   b. Eligibility determinations shall be submitted to SHPO pursuant to stipulation VIII.C(5) of the PA.

C. Phased Assessment of Effects

1. The FHWA shall assess the potential for Tier 1 of the Undertaking to effect historic properties in accordance with stipulation X of the PA. As Tier 1 is defined as acquisition of property, the FHWA anticipates there will be no adverse effects during Tier 1. The FHWA shall consult with SHPO on the effect finding pursuant to stipulation X of the PA.

III. TIER 2 PHASED SECTION 106 CONSULTATION

A. Area of Potential Effects: The objective of the Tier 1 EIS is to identify and preserve an approximate 500'- to 1,000'-wide corridor for acquisition. The Tier 1 EIS will focus on broad topics such as general location, mode choice, area-wide air quality and land use, and other environmental issues. Once the corridor is selected, the subsequent Tier 2 environmental review, relying on the work from the Tier 1 EIS, will provide a more detailed analysis of the environmental impacts for the future transportation facility alignment alternatives within the selected corridor. Once a Tier 2 preferred alternative is chosen, the FHWA and PCTPA will delimit an APE for the Tier 2 preferred alternative in accordance with stipulation VIII.A of the PA. If subsequent modifications to the APE are necessary, the FHWA shall follow the procedures of stipulation II.A(2) of this Agreement.

B. Phased Identification and Evaluation.

1. Archaeological Properties
   a. The FHWA shall ensure that PCTPA or its consultants conducts a pedestrian reconnaissance of all lands within the final APE for any Tier 2 preferred alternative. Archaeological properties will be identified and evaluated in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms.
2. Built Environment Properties
   a. The FHWA shall ensure that PCTPA or its consultants conducts an inventory of built environment properties within the final APE for any Tier 2 preferred alternative. Built environment properties will be

evaluated for NRHP eligibility in accordance with stipulation VIII.(B) and (C) of the PA, and documented on appropriate DPR 523 inventory forms.

3. Tier 2 Reporting and SHPO Consultation
   a. The FHWA shall ensure that PCTPA or its consultants prepare documentation of their findings and determinations pursuant to stipulation XVI of the PA. The reports will be submitted to Caltrans PQS for review and approval pursuant to stipulation XVI of the PA.
   b. Eligibility determinations shall be submitted to SHPO pursuant to stipulation VIII.C(5) of the PA.

C. **Assessment of Effects.** The FHWA will assess any Tier 2 preferred alternative for its potential to affect historic properties and will consult with the SHPO pursuant to stipulation IX and X of the PA. Should FHWA find that any Tier 2 preferred alternative will result in an adverse effect, FHWA shall consult with SHPO pursuant to stipulation XI of the PA.

D. **Applicable Requirements.** FHWA will conduct the Section 106 process during Tier 2 in accordance with stipulations of the PA and applicable requirements under Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) and the Section 106 regulations (36 C.F.R. Part 800), including any subsequent amendments thereto. Nothing in this Agreement is intended to supersede or modify any requirement contained in the Section 106 statute or the Section 106 regulations.

E. **Consulting Parties**. During Tier 2, the same party may be designated as a consulting party for more than one alternative. FHWA will ensure comments of all consulting parties are incorporated into the Section 106 consultation process as provided for in all applicable laws.

IV. TIER 2 SECTION 106 COMMITMENTS AND CONCEPTUAL MITIGATION

A. FHWA and PCTPA agree to implement and/or fund the activities listed in this section as part of any Tier 2 environmental studies. Additional commitments may be made, as appropriate, as an outcome of the Section 106 consultation process for any Tier 2 alternative.

B. **Avoidance and Minimization of Impacts**

1. In General. In accordance with the consultation process required under Section 106 and in accordance with other applicable laws, FHWA, PCTPA, and Caltrans will seek ways to avoid, minimize, and mitigate adverse impacts to the environment, including adverse effects to historic properties.
2. Context-Sensitive Solutions. FHWA, PCTPA, and Caltrans will apply the principles of context-sensitive solutions during project development, in accordance with applicable Caltrans policies. In accordance with those principles and where appropriate, FHWA, PCTPA, and Caltrans will develop any Tier 2 alternative with sensitivity to aesthetic values and the historic context, utilizing the services of professionals with experience in areas related to historic preservation.

C. Should implementation of any Tier 2 alternative result in adverse effects to a historic property important solely for its information value (Criterion D), FHWA will ensure a data recovery plan is prepared according to guidance in Attachment 6 of the PA and submitted to the SHPO for review in accordance with stipulation II.C(3) of this Agreement.

D. The FHWA will not authorize the execution of any Undertaking activity that may effect (36 CFR § 800.16(i)) historic properties in the Undertaking's APE prior to the completion of the Section 106 process provided for in this Agreement.

V. NATIVE AMERICAN CONSULTATION

The FHWA has consulted with the Tribes regarding the proposed Undertaking, will continue to consult with the Tribes, and will afford the Tribes, should the Tribe so desire, the further opportunity to more directly and actively participate in the implementation of the Undertaking; Should any specific Tribe desire to participate in this Agreement as herein set forth, the FHWA shall consult with them to reach consensus regarding the manner in which the Tribe may participate in the implementation of this Agreement and the Undertaking, and regarding any time frames or other matters that may govern the nature, scope, and frequency of such participation.

VI. TREATMENT OF HUMAN REMAINS

The Agreement parties agree that human burials and related items discovered during implementation of the terms of this Agreement and of the Undertaking will be treated in accordance with the requirements of § 7050.5(b) of the California Health and Safety Code. If, pursuant to § 7050.5(c) of the Code, the county coroner or medical examiner determines that the human remains are or may be of Native American origin, then the discovery shall be treated in accordance with the provisions of §§ 5097.98(a)-(d) of the California Public Resources Code.

VII. DISCOVERIES AND UNANTICIPATED EFFECTS

If the FHWA determines, after any future construction of the Undertaking has commenced, that the Undertaking will affect a previously unidentified property that may be eligible for the National Register, or affect a known historic property in an unanticipated manner, the FHWA will address the discovery or unanticipated effect in accordance with 36 CFR § 800.13(b)(3). The FHWA at its discretion may hereunder, and pursuant to 36 CFR § 800.13(c), assume any discovered property to be eligible for inclusion in the National Register.

VIII. ADMINISTRATIVE PROVISIONS

A. PROFESSIONAL QUALIFICATIONS AND STANDARDS

1. **Professional Qualifications**. All activities prescribed by stipulations II, III, IV, V, VI, and VII of this Agreement shall be carried out under the authority of the FHWA by or under the direct supervision of a person or persons meeting at a minimum the Secretary of Interior's *Professional Qualifications Standards* (48 FR 44738-39) (PQS) in the appropriate disciplines. However, nothing in this stipulation may be interpreted to preclude the FHWA or any

agent or contractor thereof from using the properly supervised services of persons who do not meet the PQS.

2. **Documentation Standards.** Written documentation of activities prescribed by stipulations II, III, IV, V, VI, and VII of this Agreement shall conform to *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740) as well as to applicable standards and guidelines established by the SHPO.

3. **Curation and Curation Standards.** The FHWA shall ensure that, to the extent permitted under §§ 5097.98 and 5097.991 of the California Public Resources Code, the materials and records resulting from the activities prescribed by this Agreement are curated in accordance with 36 CFR Part 79. The FHWA will ensure that, to the extent permitted by applicable law and regulation, the views of the Most Likely Descendant(s) are taken into consideration when decisions are made about the disposition of other Native American archaeological materials and records.

B. **CONFIDENTIALITY.** The Agreement parties acknowledge that historic properties covered by this Agreement are subject to the provisions of section 304 of the NHPA, and section 6254.10 of the California Government Code (Public Records Act), relating to the disclosure of archaeological site information and, having so acknowledged, will ensure that all actions and documentation prescribed by this Agreement are consistent with said sections.

C. **RESOLVING OBJECTIONS.**

1. Should any Agreement party object to the manner in which the terms of this Agreement are implemented, to any action carried out or proposed with respect to the implementation of the Agreement, or to any documentation prepared in accordance with and subject to the terms of this Agreement, the FHWA shall immediately notify the other parties to this Agreement of those objections, and shall consult with the objecting party and with the other parties for no more than 14 days to resolve the objection. The FHWA shall reasonably determine when this consultation will commence. If the objection is resolved through such consultation, the action subject to dispute may proceed in accordance with the terms of that resolution. If, after initiating such consultation, the FHWA determines that the objection cannot be resolved through consultation, the FHWA shall forward all documentation relevant to the objection, including the FHWA's proposed response to the objection, to the ACHP, with the expectation that the ACHP will, within thirty (30) days after receipt of such documentation, do one of the following:

   a. advise the FHWA that the ACHP concurs in the FHWA's proposed response to the objection, whereupon the FHWA will respond to the objection accordingly. The objection shall thereby be resolved; or,

b. provide the FHWA with recommendations, which the FHWA will take into account in reaching a final decision regarding its response to the objection. The objection shall thereby be resolved; or,

c. notify the FHWA that the objection will be referred for comment, pursuant to 36 CFR § 800.7(c), and proceed to refer the objection and comment. The FHWA shall take the resulting comment into account, in accordance with 36 CFR § 800.7(c)(4) and section 110(1) of the NHPA. The objection shall thereby be resolved.

2. Should the ACHP not exercise one of the foregoing options within 30 days after receipt of all pertinent documentation, the FHWA may assume the ACHP's concurrence in its proposed response to the objection and proceed to implement that response. The objection shall thereby be resolved.

3. The FHWA shall take into account any ACHP recommendation or comment provided in accordance with section C.1 of this stipulation, with reference only to the subject of the objection. The FHWA's responsibility to carry out all actions under this Agreement not the subject to the objection will remain unchanged.

4. At any time during the implementation of the measures stipulated in this Agreement, should an objection pertaining to such implementation be raised by a member of the public, the FHWA shall notify the Agreement parties in writing of the objection and take the objection into consideration. The FHWA shall consult with the objecting party and, if the objecting party so requests, with the other Agreement parties for no more than fifteen (15) days. Within ten (10) days following closure of this consultation period, the FHWA will render a decision regarding the objection and notify all consulting parties hereunder of its decision in writing. The objection will thereby be resolved. In reaching its decision, the FHWA will take into account any comments from the consulting parties regarding the objection, including the objecting party. The FHWA's decision regarding the resolution will be final.

5. The FHWA shall provide all Agreement parties, the ACHP when the ACHP has issued comments hereunder, and any parties that have objected pursuant to section C.4 of this stipulation, with a copy of its final written decision regarding any objection addressed pursuant to this stipulation.

6. The FHWA may authorize any action subject to objection under section C of this stipulation to proceed after the objection has been resolved in accordance with the terms of section C.

D. **AMENDMENTS:** Any Agreement party may propose that this Agreement be amended, whereupon the Agreement parties will consult for no more than 30 days to consider such amendment. The FHWA may extend this consultation period.

The amendment process shall comply with 36 CFR §§ 800.6(c)(1) and 800.6(c)(7). This Agreement may be amended only upon the written agreement of the signatory parties. If it is not amended, this Agreement may be terminated by either signatory party in accordance with section E of this stipulation.

E. TERMINATION

1. If this Agreement is not amended as provided for in section D.1 of stipulation VIII, above, or if either signatory party proposes termination of this Agreement for other reasons, the signatory party proposing termination shall, in writing, notify the other Agreement parties, explain the reasons for proposing termination, and consult with the other Agreement parties for at least 30 days to seek alternatives to termination. Such consultation shall not be required if the FHWA proposes termination because the Undertaking no longer meets the definition set forth at 36 CFR § 800.16(y).

2. Should such consultation result in an agreement on an alternative to termination, then the parties shall proceed in accordance with the terms of that agreement.

3. Should such consultation fail, the signatory party proposing termination may terminate this Agreement by promptly notifying the other Agreement parties in writing. Termination hereunder shall render this Agreement without further force or effect.

4. If this Agreement is terminated hereunder, and if the FHWA determines that the Undertaking will nonetheless proceed, then the FHWA shall either consult in accordance with 36 CFR § 800.6 to develop a new Agreement, or request the comments of the ACHP, pursuant to 36 CFR Part 800.

F. DURATION OF THE AGREEMENT

1. Unless terminated pursuant to section F of stipulation VIII above, or unless it is superseded by an amended Agreement, this Agreement will be in effect following execution by the signatory parties until the FHWA, in consultation with the other Agreement parties, determines that all of its stipulations have been satisfactorily fulfilled. This Agreement will terminate and have no further force or effect on the day that the FHWA notifies the other Agreement parties in writing of its determination that all stipulations of this Agreement have been satisfactorily fulfilled.

2. The terms of this Agreement shall be satisfactorily fulfilled within twenty (20) years following the date of execution by the signatory parties. If the FHWA determines that this requirement cannot be met, the Agreement parties will consult to reconsider its terms. Reconsideration may include the continuation of the Agreement as originally executed, amendment of the Agreement, or termination. In the event of termination, the FHWA will comply with section

F.4 of stipulation VIII, above, if it determines that the Undertaking will proceed notwithstanding termination of this Agreement.

3. If the Undertaking has not been implemented within twenty (20) years following execution of this Agreement by the signatory parties, this Agreement shall automatically terminate and have no further force or effect. In such event, the FHWA shall notify the other Agreement parties in writing and, if it chooses to continue with the Undertaking, shall reinitiate review of the Undertaking in accordance with 36 CFR Part 800.

G. **EFFECTIVE DATE.** This Agreement will take effect on the date that it has been fully executed by the FHWA and the SHPO.

EXECUTION of this Agreement by the FHWA and the SHPO, its transmittal by the FHWA to the ACHP in accordance with 36 CFR § 800.6(b)(1)(iv), and subsequent implementation of its terms, shall evidence, pursuant to 36 CFR § 800.6(c), that this Agreement is an agreement with the ACHP for purposes of section 110(1) of the NHPA, and shall further evidence that the FHWA has taken into account the effects of the Undertaking on historic properties and has afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties.

SIGNATORY PARTIES:
Federal Highway Administration

By _____ Date _____
Gene Fong
Division Administrator

California State Office of Historic Preservation

By _____ Date _____
M. Wayne Donaldson, FAIA
State Historic Preservation Officer

CONCURRING PARTIES:
Placer County Transportation Planning Agency

By _____ Date _____
Celia McAdam, Executive Director

California Department of Transportation

By _____ Date _____
Jody Jones, District 3 Director

Attachment 2

Archaeological Survey Report

PLACER PARKWAY
CORRIDOR PRESERVATION

DRAFT
ARCHAEOLOGICAL SURVEY REPORT
Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR

June 29, 2007

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

Caltrans

FHWA

Prepared by

URS Corporation

for
South Placer Regional Transportation Authority
California Department of Transportation
Federal Highway Administration

The preparation of this report was financed in part through a planning grant from the Federal Highway Administration

Draft

ARCHAEOLOGICAL SURVEY REPORT

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR
Placer and Sutter Counties, California

Prepared by:

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June 2007

SUMMARY OF FINDINGS

The Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans), in conjunction with the South Placer Regional Transportation Authority (SPRTA), propose to identify and preserve or acquire right-of-way for a future Placer Parkway, which would link State Route (SR) 65 in Placer County to SR 70/99 in Sutter County (Maps 1 and 2). The FHWA is the federal lead agency for the National Environmental Policy Act (NEPA), and SPRTA is the lead agency for the California Environmental Quality Act (CEQA). The project is using federal funding and is therefore subject to review under the January 2004 *Programmatic Agreement (PA) (Appendix A) among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 PA).

This report documents the results of an archaeological resources investigation conducted for the Parkway Corridor Preservation project (Placer Parkway), the proposed preservation of a transportation right-of-way (ROW) through Sutter and Placer Counties, California (Figure 1-1). SPRTA and FHWA propose to preserve the ROW for a new or upgraded east-west connector between SR 65 and SR 70/99 serving cities and unincorporated areas across south Sutter County and southwestern Placer County.

URS Corporation (URS) prepared this Archaeological Survey Report (ASR) to document archaeological resource identification efforts in the Area of Potential Effects (APE) in accordance with applicable sections of the National Historic Preservation Act (NHPA) and the implementing regulations of the Advisory Council on Historic Preservation (ACHP).

As outlined in the Programmatic Agreement for the Parkway project, the ASR investigation consisted of background and archival research, contact with the Native American Heritage Commission (NAHC) and members of the local Native American community as identified by the NAHC, intensive pedestrian reconnaissance of the common alignment of the Parkway corridor alternative alignments, and the development of a predictive model to assess the relative archaeological sensitivity of the project alternatives.

No archaeological resources were identified in the common alignment portion of the Parkway project's APE. The predictive model for the alignment alternatives of the APE ranked the corridors for their relative archaeological sensitivity using environmental factors known to influence past human activity in the study area. This analysis determined that Alternative 1 is the most archaeologically sensitive alignment, followed in descending order by Alternative 3, Alternative 2, Alternative 4, and Alternative 5. Based on this analysis, Alternative 5 is the least sensitive alignment in terms of potential archaeological resources.

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AES	Analytical Environmental Services
APE	Area of Potential Effects
ASR	Archaeological Survey Report
Caltrans	California Department of Transportation
CCRR	California Central Railroad
CCTS	Central California Taxonomic System
CDC	California Department of Conservation
CDFG	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CHRIS	California Historical Resources information System
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GIS	Geographical Information System
NAHC	Native American Heritage Commission
NCIC	North Central information center
NEIC	Northeast Information Center
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
OHP	Office of Historic Preservation
PA	Programmatic Agreement
PCTPA	Placer County Transportation Planning Authority
RD 1000	Reclamation District No. 1000
ROW	right-of-way
SACOG	Sacramento Area Council of Governments
SJC	Sacramento Junior College
SPRTA	South Placer Regional Transportation Authority
Tier 1 EIS/EIR	Tier 1 Environmental Impact Statement/Program Environmental Impact Report
UC	University of California
URS	URS Corporation
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

ARCHAEOLOGICAL SURVEY REPORT
PLACER PARKWAY CORRIDOR PRESERVATION
TIER 1 EIS/PROGRAM EIR

1.0 INTRODUCTION

1.1 TIER 1 EIS/PROGRAM EIR

The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the South Placer Regional Transportation Authority (SPRTA) propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking State Route (SR) 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1).

The planning for Placer Parkway involves two phases: (1) the present action, selection of a corridor (titled the Placer Parkway Corridor Preservation Project), and (2) the future selection of a precise alignment within the corridor and a decision whether or not to build the Parkway. If a build alternative is selected and pursued after the second phase, the ultimate Placer Parkway project would be constructed and operated. Throughout this document the term "Proposed Action" is used to describe the selection of a corridor to preserve. The document generally uses the term "Parkway" to mean the ultimate roadway, including construction and operation, except where context indicates otherwise.

As stated, the action to be considered based on this Tier 1 analysis involves only the selection of a corridor to preserve, which has limited environmental effects by itself. However, the ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. In order to describe the effects of the ultimate Placer Parkway project to the greatest extent feasible at this early stage, the Tier 1 EIS/EIR also addresses the potential effects of construction and operation of the future roadway. This discussion of the roadway is necessarily limited, however, because only the general concepts of the roadway design and location are known at this time. If a corridor is selected and preserved at Tier 1, a subsequent Tier 2 analysis will evaluate the Parkway itself in detail—the specific roadway "footprint" within the selected corridor, including construction and operation of the roadway.

1.2 CORRIDOR SELECTION AND PRESERVATION

The concept for the Parkway is over a decade old. Placer County's 1994 General Plan depicts a "plan line" for it. Two planning studies helped to refine the concept:

- DKS Associates, 2000, Placer Parkway Interconnect Study/Conceptual Plan
- DKS Associates, 2001, Project Study Report (Project Development Support) for Placer Parkway

Placer Parkway is cited as a high-priority regional transportation project by the Sacramento Area Council of Governments (SACOG) 2025 Metropolitan Transportation Plan and the 2027 Placer County Regional Transportation Plan. The project vicinity and surrounding area include some of the fastest growing communities in the Sacramento region. A number of large urban development proposals are being considered by Placer and Sutter counties. New development is expected to add a significant amount of residential, commercial, industrial, and educational uses.

A 2½-year screening and public outreach program that involved local jurisdictions (the Technical Advisory Committee); regional, state, and federal agencies; stakeholder groups that included

representatives from planning and public works departments of all affected cities and counties, environmental, business, agricultural, development, and homeowner interests (the Study Advisory Committee); and elected officials (the Policy Advisory Committee), resulted in the identification of five potential corridors for the Parkway. The Tier 1 Environmental Impact Statement/Program Environmental Impact Report will analyze these five corridor alternatives along with a No-Build Alternative.

Other potential transportation modes such as bus rapid transit may be developed in the corridor in the future, although they are not proposed as part of the current project. The width of the corridor for Placer Parkway is to vary from approximately 500 feet in the Eastern and Western segments to approximately 1,000 feet in the Central Segment. Depending upon the alternative, the corridor's length ranges from a minimum of 14.2 miles to a maximum of 16.2 miles. The selected corridor would contain the roadway, including the median, travel lanes, shoulder, associated access ramps and a no-development buffer zone.

Corridor acquisition may not be completed until after Tier 2, as funding becomes available. Portions of the selected corridor would be preserved as a no-development buffer zone. The buffer would be maintained as a zone where development is either not permitted or is severely restricted. This is intended to restrict access to the proposed interchanges, protect the rural character of agriculturally designated areas in the vicinity of the Parkway as far as possible subject to future development, and to maximize opportunities to incorporate adjacent sensitive areas. It is intended that the buffer would be owned and managed in the future to achieve these objectives. For subsequent Tier 2 (project-level) environmental reviews, the size of this buffer zone could be considered flexible for agriculturally designated land undergoing urban development. In the Tier 2 environmental review, the specific buffer size and location would be determined. This determination would be based on performance standards on a case-by-case basis, depending on the land use needs of future approved development, and taking into account the primary objective of restricting future access to the Parkway.

Project proponents are considering employment of several land management and control mechanisms in order to ensure that the buffer would be effectively maintained as an area where development would either not be permitted, and where construction of any additional access onto the Parkway would not be allowed. These mechanisms could include land use controls, land purchase/leases, general plan amendments, zoning/overlay zoning changes, covenants/deed restrictions, agricultural/conservation easements, urban growth boundaries, etc. "Layering" or using several of these methods would provide more assurance that the buffers would be permanent, or at least more difficult to undo.

1.3 TECHNICAL STUDY OBJECTIVE

This Archaeological Survey Report has been prepared to support the Environmental Impact Statement/ Program Environmental Impact Report. It presents a Tier 1/Program level assessment of potential impacts related to archaeological resources for five corridor alternatives and the No-Build Alternative as described in Chapter 2.

The scope of work performed for this report is based on the Caltrans Local Assistance Procedures Manual (Caltrans, 2006), as modified for purposes of Tier 1/Program analysis by agreement of Caltrans and the Caltrans Environmental Handbook (Caltrans, 2004) on preparing an archaeological survey. In addition, the evaluation considered guidance from the Federal Highway Administration (FHWA), Environmental Checklists for Draft and Final Environmental Documents (FHWA, 1998a; FHWA, 1998b).

This report is organized as follows:

Chapter 2 The Proposed Action
Chapter 3 Sources Consulted
Chapter 4 Background

Chapter 5 Inventory Methods
Chapter 6 Study Findings and Conclusions
Chapter 7 References

This report also includes figures and tables, which show the project location, each build alternative, and pertinent technical information prepared to evaluate the build alternatives.

Throughout this document, the Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report is referred to as the Tier 1 EIS/EIR.

2.0 THE PROPOSED ACTION

The Proposed Action for the Placer Parkway Corridor Preservation Project is to select and preserve a 500- to 1,000-foot-wide corridor in the project study area, within which the future four- or six-lane Placer Parkway may be constructed. The ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction, and operation of the Parkway. Although the action taken at Tier 1 on the Parkway Corridor Preservation Project is limited, the underlying project whose effects are studied in this document is the Parkway. To the extent feasible at this early stage, the Tier 1 EIS/EIR addresses the potential effects of construction and operation of the future roadway.

2.1 THE PROJECT STUDY AREA

The project study area is an area of approximately 33,460 acres located in Placer and Sutter counties, with a small section located in Sacramento County (see Figures 1-1 and 2-1). The portion of the study area in Sacramento County is located in the extreme southwestern corner of the study area and does not include any of the proposed corridor alignment alternatives. It extends from SR 70/SR 99 in the west to SR 65 in the east, with the northern boundary extending to Sunset Boulevard West and the southern boundary located adjacent to Baseline and Riego roads.

For the purposes of the analysis the study area is divided into three segments:

- Western Segment: the Western Segment extends from SR 70/99 to Pleasant Grove Road in Sutter County.
- Central Segment: the Central Segment extends from Pleasant Grove Road in Sutter County to approximately 2,300 feet north of Pleasant Grove Creek in Placer County.
- Eastern Segment: the Eastern Segment extends from approximately 2,300 feet north of Pleasant Grove Creek to SR 65 in Placer County.

2.2 CORRIDOR ALTERNATIVES

The following subsections describe the corridor alternatives, which are depicted on Figure 2-1, and are numbered according to location from south to north in the study area.

2.2.1 The No-Build Alternative

Under the No-Build Alternative, the project would not be implemented. A Placer Parkway corridor would not be selected/preserved, and the future Placer Parkway would not be constructed.

2.2.2 Alternative 1 – the Red Alternative

Alternative 1 would extend from SR 70/99 approximately ½ mile north of Riego Road, eastward approximately 1 mile north of Baseline Road to approximately Watt Avenue, proceeding north and transitioning in an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 16.2 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.3 Alternative 2 – the Orange Alternative

Alternative 2 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed northeast, then in a northerly direction

south of Pleasant Grove Creek, transitioning to an easterly direction before it reaches Sunset Boulevard West, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.4 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.4 Alternative 3 – the Blue Alternative

Alternative 3 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed north along the Sutter/Placer County Line, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.6 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.5 Alternative 4 – the Yellow Alternative

Alternative 4 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.3 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.2.6 Alternative 5 – the Green Alternative

Alternative 5 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 4,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.2 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.3 PARKWAY DESIGN ASSUMPTIONS

Although the Parkway would be designed and construction-level impacts analyzed during Tier 2, for the purpose of this report and the Tier 1 EIS/Program EIR, several assumptions have been made about potential design and configuration concepts. These assumptions would be subject to further development and refinement, and specific decisions about design of the roadway would be made during the Tier 2 process. For example, the number, location, and design of over-crossings would be determined at the time of final Parkway design, in consultation with local jurisdictions. The following sections outline assumptions for the future roadway.

Preliminary costs estimates for the Parkway range from $600 to $650 million (2005 dollars). This includes costs for right-of-way, design, construction, and environmental mitigation for the four- to six-lane facility. The funding situation has spurred interest in exploring other more creative funding options. These include a county-wide sales tax, more developer contributions, and tolling facilities. The Technical Report and Tier 1 EIS/Program EIR do not make any assumptions about funding sources.

2.3.1 Conceptual Roadway Configuration

The Parkway would be a high-speed, limited access roadway. Depending upon the timing of adjacent urban development proposals and funding, the Parkway may be designed and constructed incrementally in segments. These could be built as a four-lane (interim) roadway until a six-lane segment is warranted, or as the full six-lane facility. A preliminary conceptual cross section (see Figure 2-2) was developed to facilitate the Tier 1/Program evaluation. It illustrates both four-lane (two lanes in both directions) and six-lane (three lanes in both directions) configurations within the 500- to 1,000-foot corridor widths. The roadway would include a central median approximately 100 to 134 feet wide, depending on local conditions and reflecting Caltrans safety guidance. The Parkway would be designed and constructed to Caltrans standards, unless specific design exceptions are granted. For the purposes of the Tier 1 EIS/ Program EIR, the Parkway's opening year is assumed to be 2020.

Access would be provided at the western and eastern ends of the Parkway, where existing areas of dense development are already located or planned. Access would be restricted for the 7-mile Parkway Central Segment. The analysis assumes no interchanges in this segment. (A possible future extension of Watt Avenue or another nearby roadway may be considered in the Central Segment as a separate project.)

2.3.2 Conceptual Roadway Elevation

As the study area is comprised of relatively flat terrain, the majority of the future Placer Parkway is assumed to be at-grade. As necessary, bridges would be used to span certain features and improvements such as the Union Pacific Railroad tracks along Industrial Boulevard, Pleasant Grove Creek, the Natomas East Main Drainage Canal, and floodplains. Generally, the approximate height of bridges is expected to range from 10 feet above streams to 30 feet above the railroad. Culverts would be used at smaller creek crossings as appropriate, depending on local conditions and permit requirements. The Pleasant Grove Creek floodplain would be crossed by bridges (one in each direction) supported by abutments located approximately 800 feet on either side of the creek to avoid the riparian habitat associated with the creek.

Within the 100-year floodplain, the roadway would be elevated such that the bottom of any new bridges would be above the 100-year water surface elevation. The roadway support structures and bridges would be designed to minimize environmental impact, not impede stream and flood flows, and allow for the unobstructed passage of potential future streamside uses such as maintenance equipment, bikeways or trails.

Throughout the project study area, the assumptions for creek and floodplain crossings include typical engineering specifications:

- a maximum bridge span of approximately 150 feet;
- for bridge spans exceeding 150 feet, assume one column, approximately 4 feet in diameter, every 150 feet; and
- all columns placed outside of the ordinary high water (OHW) level.

To maintain existing and future local roadway connectivity (for emergency access, farming operations, and community access), over-crossings would be constructed to convey traffic over the Parkway. These over-crossings would not connect to the Parkway. Parkway access would be via the interchanges described below.

2.3.3 Interchange Concepts

The analysis assumes that the location of interchanges (see Figure 2-1) is as follows.

- SR 70/99 (at ½ mile north of Riego Road or at Sankey Road)

- One or two locations to be determined in southern Sutter County
- Fiddyment Road
- Foothills Boulevard
- SR 65 at Whitney Ranch Parkway

The following discussion outlines concepts and assumptions for the six interchanges that could potentially serve the Parkway.

2.3.3.1 Western Segment

Within the Western Segment of the Parkway, a high-speed, freeway-to-freeway type interchange would connect the Parkway with SR 70/99 at one of following potential locations depending on the project alternative (see Section 2.2). Placer Parkway would terminate at SR 70/99.

- **Placer Parkway/SR 70/99 Interchange at North of Riego Road.** This alternative concept uses "braided" ramps to eliminate weaving problems or conflicts with the future SR 70/99 at Riego Road interchange being developed by Sutter County and Caltrans.

- **Placer Parkway/SR 70/99 Interchange at Sankey Road.** Under this alternative concept, the existing two-lane Sankey Road would be realigned to the south of Placer Parkway and the proposed freeway-to-freeway interchange, extending from approximately ¼ mile west of SR 70/99 to approximately ¼ mile east of the Union Pacific railroad tracks. There would be no direct access to SR 70/99 or Placer Parkway from the realigned Sankey Road.

Depending on the final alignment selected, one or two additional interchanges would also be located in south Sutter County. Conceptual locations are identified for purposes of this Tier 1/Program analysis (see Figure 2-1). The actual location of these interchanges would be developed in the Tier 2 phase, based on Sutter County requirements.

2.3.3.2 Central Segment

Within the Central Segment of the Parkway, there would not be any access proposed as part of the Project in the 7-mile segment between Fiddyment Road and Pleasant Grove Road. Please see Section 2.4 regarding a potential connection to a future extension of Watt Avenue (Figure 2-3) which could be proposed and constructed by others in the Central Segment; such an interchange is not part of the Parkway.

2.3.3.3 Eastern Segment

Within the Eastern Segment of the Parkway, a signalized high-speed freeway-to-freeway and local access interchange would connect the Parkway to SR 65 at Whitney Ranch Parkway (Figure 2-1). From SR 65 eastward Placer Parkway would terminate and become Whitney Ranch Parkway east of the SR 65 exit ramp intersection. Traffic signals would be provided at the exit ramp terminals. This interchange would be approximately 1 mile north of a planned SR 65/Sunset Boulevard interchange and 1.2 miles south of the existing Twelve Bridges interchange.

As part of this interchange, auxiliary lanes would be required on SR 65 in both directions to enhance traffic operations on the north side of the future SR 65/Sunset Boulevard interchange. The southbound SR 65 exit-ramp at Sunset Boulevard is being designed to accommodate an additional auxiliary lane required for the future Placer Parkway/Whitney Ranch Parkway interchange to minimize the reconstruction of this ramp in the future. Within the Eastern Segment of the Parkway, from SR 65

westward, two interchanges with local roadways would be constructed, one at Foothills Boulevard and one at Fiddyment Road, as depicted on Figure 2-1.

The future interchange on Placer Parkway at Fiddyment Road would be located near the existing intersection of Fiddyment Road and Sunset Boulevard West. To provide acceptable traffic operations, additional distance needs to be provided between the Fiddyment Road/Sunset Boulevard West intersection and the Fiddyment Road/Placer Parkway westbound off-ramp intersection. Therefore, Sunset Boulevard West will need to be realigned to the north as it nears Fiddyment Road.

2.3.4 Landscaping Concept

For the purposes of this environmental analysis, preliminary landscaping concepts have been developed for Placer Parkway. These are entirely conceptual and would be subject to further refinement during the Tier 2 environmental process. It is anticipated that landscaping would be used to reflect local topography and vistas in the study area and complement the varying character of land adjacent to the Parkway corridor. Landscape design would vary within the Parkway's three segments depending on corridor width and type and density of surrounding land uses. Landscaping would be used within the median and the Parkway buffer zone to enhance the aesthetics of the Parkway, and would be used to provide screening and enhance local and long-distance views. Where appropriate, more concentrated plantings would be considered to buffer the Parkway from future adjacent land uses that may be incompatible with the Parkway concept, and to prevent unwanted intrusion into shoulder or median areas. Landscape design would likely include a mix of compatible native and non-native plants that may require some irrigation. Where possible and depending on availability, feasibility and cost, recycled water would be used for irrigation.

During a future design phase, lighting elements would be designed for safety and would consider the proposed landscaping plan in order to minimize potential aesthetic impacts (e.g., shielding lighting elements, using lower-voltage lighting, and proposing lighting fixtures that conform with the visual character of the area).

2.4 POTENTIAL WATT AVENUE INTERCHANGE

The Placer County General Plan includes a number of new roadways that may be needed in Placer County, according to travel demand forecasts. An extension of Watt Avenue to Placer Parkway (from Baseline Road to a new Blue Oaks Boulevard Extension) is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto the Parkway via a new interchange (see Figure 2-3). A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. It would be subject to independent future environmental analysis and review and is not being fully evaluated within this Technical Report or Tier 1 EIS/Program EIR. However, the connection of Placer Parkway to a potential Watt Avenue interchange could affect future travel patterns in the area, including use of the Parkway. Based on direction from previous planning studies, this Technical Study and the Tier 1 EIS/Program EIR will evaluate each corridor alternative with and without a Watt Avenue interchange. This evaluation does not predetermine the construction or alignment of a potential Watt Avenue or nearby roadway extension or the precise locations of any potential interchanges with Placer Parkway.

2.5 AGENCY PERMITS AND APPROVALS

The Proposed Action would preserve a preferred corridor for a future transportation facility. In the future, permits and approvals would be obtained from appropriate agencies prior to construction of the Parkway. These permits and approvals may include specific design or mitigation requirements that would be incorporated into the project.

2.6 SUBSEQUENT TIER 2 INFORMATION

As noted earlier, the design and construction of Placer Parkway — including its interchanges and over-crossings, and ancillary features such as stream crossings, safety devices, stormwater management structures, and similar improvements — would be evaluated in a subsequent Tier 2 environmental review process, once a corridor has been identified.

3.0 SOURCES CONSULTED

3.1 SUMMARY OF METHODS AND RESULTS

The study area for Placer Parkway encompasses a total area of 35,443.31 acres within Sutter and Placer counties, California (Figure 2-1). The study area encapsulates all of the original alignment alternatives from which the current corridor and alternatives were derived. The total acreage of the current alternative corridors combined is 3,987.65 acres.

The archaeological records search for the initial Parkway screening exercise was conducted in June 2003 and included the entire study area as well as areas within a ¼-mile radius of the study area boundary. Because the archaeological records for Sutter County are housed separately from those in Placer and Sacramento counties, two separate record searches were conducted for the project. For Sutter County, a record search request was submitted to the Northeast Information Center (NEIC) of the California Historical Resources Information System (CHRIS). The record search was conducted by the staff of the NEIC (File #D03-28) and was delivered to URS on June 30, 2003. A similar request was sent to the North Central Information Center (NCIC) of the CHRIS for the Placer and Sacramento County components of the project. The record search was conducted by the staff of the NCIC (File No. PLA-03-57/SAC-03-44) and delivered to URS on June 12, 2003.

The record searches at the NCIC and NEIC included searches of archaeological site and historic property files, the National and California Registers of Historic Places, the Historic Property Data File for their respective counties, California Historic Landmarks, California Points of Historic Interest, Caltrans Local Bridge Survey, and historic General Land Office Maps.

The records search results were used to develop corridor alignment alternatives routed to avoid and/or minimize potential impacts to various resources including historic and prehistoric archaeological sites. As such, no previously identified archaeological sites occur within the corridors subject to the current investigation. The corridor alignment alternatives selection process was also used to locate, to the extent possible given other environmental constraints, the corridor alignment alternatives within areas previously subjected to archaeological inventory. Previous archaeological inventory studies that include lands bisected by the project include:

- Cultural Resources Unlimited, 1992. *A Cultural Resources Study for Sutter Bay Project, Sutter County, California*.
- Cultural Resources Unlimited, 1994. *A Cultural Resources Study for the Twelve Bridges/State Route 65 Interchange and Freeway Widening, Placer County, California*.
- Cultural Resources Unlimited, 1994. *A Preliminary Cultural Resources Review for the Twelve Bridges/SR 65 Interchange and Widening, Placer County, California*.
- Dames & Moore, 1994. *Archeological Inventory Report – Natomas Locality, Cultural Resources Inventory and Evaluation for the American River Watershed Investigation, El Dorado, Placer, Sacramento, and Sutter Counties, California*.
- Derr, Eleanor, 1997. *Bill Graham Presents Placer County Amphitheater: Cultural Resource Survey Report.* Cultural Resources Unlimited Prepared for Environmental Science Associates.

- Ebasco Environmental, 1992. *Cultural Resources Survey of the Sacramento Energy Project Sacramento County, California*.
- ECORP Consulting Inc., 2001. *Cultural Resources Assessment of the Sunset-Athens Connector Placer County, California*.
- Egherman, R. and B. Hatoff, 2000. *Roseville Energy Facilities Cultural Resources. Appendix J-1*. URS Corporation.
- Foster, John and Daniel Foster, 1983. *An Archaeological Reconnaissance of the Placer Industrial Park and Whitney Business Park, Placer County California*.
- Hale, Mark, 2002. *Archaeological Reconnaissance of the 1,329-Acre Reason Farms, for the City of Roseville, Placer County, California*. URS Corporation.
- Jensen, Peter, 2000. *Archaeological Inventory Survey Auburn Rancheria Gamin Project's Proposed Access Road and Sewer Lien Construction Project, near Lincoln, Placer County, California*. Jensen & Associates.
- Jones & Stokes, 2000. *Archaeological Survey Report for 3301 Industrial Avenue, Rocklin, Placer County, California*.
- Lindstrom, Susan, 1991. *A Cultural Resource Surface Survey of the Stanford Ranch West Project Involving 690 Acres Between Roseville and Lincoln California, Placer County. Prepared for CSW Planning Associates*.
- Mainery, James, 2001. *Cultural Resources Investigation of the Westpark/Fiddyment Ranch and Live Oak Enterprises/Signature Property Development Project, Placer County, California*. PAR Environmental Services, Inc.
- McGowan Seldner, Dana, 1985. *Archeological Survey of the Proposed Western Regional Sanitary Landfill Expansion Placer County, California*. Foundation of California State University, Sacramento.
- Norton, W.L., 1998. *Historic Property Survey Report and Finding of No Effect for State Route 65 Widening Project, Placer County, California*. Jones & Stokes Associates.
- PAR Environmental Services, Inc., 2002. *Cultural Resources Inventory of Highway 65 Self Storage Project, Placer County, California*.
- Pastron, Allen, 1989. *An Archaeological Surface Reconnaissance of the Stanford Ranch West Property, Placer County, California*. Archeo-Tec.
- Peak & Associates, 1986a. *Cultural Resource Assessment of the CEMO Industrial Park, Placer County, California*.
- Peak & Associates, 1986b. *Cultural Resource Assessment of the Sunset Motor Sport Park, Placer County, California*.
- Weigel, Lawrence, 1982. *First Addendum Archaeological Survey Report for the Proposed Roseville Bypass Project*. California Department of Transportation

- Wesson, A. and B. Hatoff, 2001. *Roseville Energy Facilities Cultural Resources. Appendix J-1*. URS Corporation.

- Wiant, Wayne, 1982. *Archaeological Reconnaissance of the Proposed Roseville Bypass Project*. California Department of Transportation.

Because the screening process was used to avoid historic and prehistoric archaeological sites, none of these efforts resulted in the identification of archaeological sites within the corridor alignment alternatives.

Since the record search and screening efforts were conducted, three additional studies have been conducted that include tracts of land traversed by the common alignment alternatives (see Section 5.2). These studies were completed for the Amoruso Property (ECORP, 2006), the Placer Ranch Project (Hale, 2004), Reason Farms Retention Basin (URS, 2002), and the SR 65 Widening Project (Norton, 1998). Given the recent dates of completion of these surveys, in agreement with Caltrans, the common corridor alignment alternative through these parcels was not re-inventoried for archaeological resources. None of these efforts identified archaeological resources within any of the project alignment alternatives.

This section briefly describes the known archaeological sites identified in the record search for the Tier 1 Archaeological Survey Report.

CA-PLA-136

Unfortunately, the site record for CA-Pla-136 on file at the NCIC is difficult to read due to the poor quality of the reproduction (the whereabouts of the original is unknown). It appears that the site was identified in April of 1960, and at the time of recordation contained a milling slab (i.e., metate) and possibly two handstones (i.e., manos).

CA-PLA-137

URS Corporation recorded this site with historic resources in 2001. The site was originally recorded by Mott in 1961. A subsequent attempt to relocate this resource by URS Corporation in the location plotted on the master maps at the NCIC has proved unsuccessful. Heavy grass cover obscured native soils during the survey. Surface vegetation was scraped back in several locations within the area mapped as Locus B, revealing dark-colored sand, but no cultural material. The original site form indicates that artifacts including a metate and several manos and pestles had been unearthed due to plowing on both the northern and southern sides of Pleasant Grove Creek.

CA-PLA-138H

Derr describes CA-PLA-138H as a prehistoric site with fragments of ground stone (bowl mortar), pestle fragments, mano fragments, a possible chopper, some core tools, and flakes (two obsidian, too small to date/source) as well as fire-fractured rock. The 515-meter by 60-meter site area (at an elevation of 90 to 95 feet) was slated for development as of 1999, when it was recorded (it was previously recorded in 1994). Note: although identified in the record search, this site is outside of the Parkway study area.

CA-PLA-147

CA-PLA-147, recorded in 1999 by Derr, is described as a site with a scatter of prehistoric artifactual materials. Artifactual materials observed include preform mano, metate, and complete mano, located in the northern, central, and western portions of the site, as well as flaked fragments of basalt and slate, located in the northwestern area. Remarks on the site record state that the 35-meter by 50-meter site was

thought to have been intensively used during prehistoric times, and there is a possibility that at a greater depth, burials may be present. Currently, there are signs of disturbance, and artifacts that were previously identified are missing.

CA-PLA-429

Recorded by Peak and Associates in 1994, CA-PLA-429 is described as an area with two prehistoric artifacts located on the surface: one bifacially shaped mano fragment, and one basalt debitage fragment. The site was originally recorded in 1981 when Foothill found two chopping tools, basalt flakes, and fire-cracked rocks (one shaped pestle midsection, one percussion-flaked cobble tool). Note: although identified in the record search, this site is outside of the Parkway study area.

CA-PLA-730H

Peak and Associates recorded this site in 1989. The historic site is described as part of the foundation for the old Pleasant Grove School. The foundation is made of unmodified rough rocks in a rectangular shape. The cornerstone on the northeast is missing. In addition to the foundation, the site also contains a depression, 3 feet by 4 feet, which may have been a privy pit. The privy pit is located 7 feet from the foundation.

CA-PLA-944H

Dan Osanna recorded CA-PLA-944H in 1999. The site is 110 feet by 140 feet, with an elevation of 87 feet. The site contains a concrete barn foundation (in the middle of a cultivated field) comprised of four parallel foundation walls. The foundation walls are 92 feet long. Approximately 90 feet from the barn foundation is a small well casing and pumphouse foundation. The pumphouse foundation is shaped in a "U," and the 1-foot-diameter well casing is surrounded by a concrete foundation (4 feet on each side). Additional elements identified include barbed wire fragments, metal strapping, and tin sheeting.

CA-PLA-945H

Recorded by Dan Osanna and Ric Windmiller in 1999, the 110-foot by 65-foot site has an elevation of 84 feet, and is located in a plowed field next to Baseline Road. The site consists of a scatter of historic trash. Artifacts include ceramic fragments glazed brown, bottle fragments of clear glass, and earthenware fragments of white ironstone. The age of the historic trash is estimated to be between 1848 and 1914.

CA-PLA-968H

Recorded by PAR in 2001, the historic site contains a depression (reportedly the site of a well) with fragments of a windmill. In addition, there are fragments of white improved earthenware, glass, and metal. Farther away (approximately 490 meters) there are fragments of three windmills (may be related to the site). The age of the resources is circa late 1930s. The site is 92 feet above mean sea level and is 145 feet by 100 feet. The site has a low degree of integrity, because 95 percent of the windmill remains have been removed and the well has collapsed.

CA-PLA-969H

Discovered in 2001 by PAR, the resources present on the 77-meter by 43-meter site, with an elevation of 100 feet, are as follows: a set of concrete footings (66 set in six rows); a water spigot with adjoining concrete foundation, and a structure foundation (three sections) and an in situ piece of machinery. The resources are historic, circa 1953. The site is located on a working ranch (formerly a turkey ranch) and has been disturbed by livestock activity.

CA-PLA-974H

Derr recorded this site in 1991, encompassing an area 22 feet by 17 feet at an elevation of 140 feet. The site contains historic artifacts; namely, an animal feeding station with feed troughs (though the troughs are unconfirmed). The troughs appear to be moved, and one cement trough is broken. There is also a well, and electrical power source, mostly likely for a pump. The record notes that the site does not appear to be disturbed. Note: although identified in the record search, this site is outside of the Parkway study area.

CA-PLA-975H

The site was recorded by Derr in 1991, and is stated to be historic. The 5-foot by 5-foot site has an elevation of 145 feet. Artifacts on the site include an iron pipe (upright in soil) that is 10 inches in diameter, located within a depression. The record states this is probably a well that extends approximately 16 feet deep and 28 inches above ground. There is no water inside. The metal is ¼-inch-thick and has vertical breaks/slits in various locations. The site appears undisturbed. Note: although identified in the record search, this site is outside of the Parkway study area.

CA-PLA-977H

CA-PLA-977H, recorded in 1995 by PAR, is described as a historic farm complex with the following elements: a residential foundation (wood remnants and rusted stove); concrete foundation (three-sided) with pieces of lumber and siding/roofing (metal); a fallen windmill (metal) with troughs, concrete footings and pads; and a concrete pad with wood posts, lumber, and siding/roofing (metal). The 863-foot by 250-foot site has an elevation of 108 feet and is bisected by a barbed wire fence and wood post. The historic site is dated between 1880 and 1945. The site has been impacted by livestock, target shooting, and damage from the wind.

CA-PLA-I086H

Recorded in 1989 by Kosta & Ruskin, this historic site is 40 meters by 30 meters with an elevation of 115 feet, and contains mixed scatter surrounding two leaved willows. The artifacts stated in the record are as follows: fencing (barbed wire); tractor leaf-spring; porcelain doll hand and arm; fragments of glass bottles, ceramics, handpainted porcelain, unglazed stoneware, and earthenware; a variety of metal (nails, stakes, chain link, buttons); and roofing slate.

CA-PLA-I087H

Kosta & Ruskin recorded this historic site in 1989. The 20-meter by 30-meter site, with an elevation of 125 feet, consists of a historic water well with a small scatter of mixed historic fragments. The artifacts include fragments of an aqua culinary bottle (gothic style), shards of bottles (alcohol beverage types); square nails; and fragments of white earthenware vessels. The site has been disturbed by plowing.

CA-PLA-1104

CA-PLA-l104, recorded in 1989 by Kosta & Ruskin is described as a scatter of groundstone/lithic and associated discoloration of soil on a 58-meter by 56-meter site with an elevation of 100 feet. This discoloration may result from the presence of subsurface midden deposits. The prehistoric artifacts are as follows: groundstone mano, groundstone fragment, andesite flake (primary), projectile point fragment (mid-section), primary flake (silica cemented conglomerate composed of small siliceous gravels), and primary flake (fine-grained quartzite).

CA-PLA-1126H

Recorded by Derr in 1999, CA-PLA-1126H is a historic site located on a ranch. The historic site contains a house (known to exist in the 1940s), driveway, well, and small barn, along with a larger barn and related foundations. The foundations are all that remains; there are several small piles of broken foundation from the house. Note: although identified in the record search, this site is outside of the Parkway study area.

P-31-001215

PAR Environmental Services, Inc., recorded the site in 2001. The historic site has foundation and structure pads dating from the 1930s. The site has an imbedded post (the top is missing), metal fragments scattered, two can lids, burnt wood fragments, as well as clear and aqua-colored glass bottle fragments. The base of a clear bottle has an angular "G" over a "C" embossed on it, which is stated in the record to be the maker's mark.

P-31-001216

PAR recorded this site in 2001, which is comprised of privy pits and trash scatters, in a farm's dump, adjacent to a dirt road. The site has a shallow, water-filled area, where fenceposts and bales of barbed wire have been tossed. There are approximately 150 fenceposts and five types of barbed wire (both modern and historic types). In addition, there is part of a windmill (made of pipes) nearby. Approximately 100 meters north are scattered auto tires (about 10) and a metal wheel rim. Approximately 200 meters north are additional barbed wire bales. South of the site (approximately 200 meters) is an oil drum.

P-31-001217

Recorded in 2001 by PAR, the site has a scatter of debris along the drainage bed of the Pleasant Grove Creek. Historic artifacts were observed among modem pieces of debris, snagged by nearby trees. The artifacts are fragments and are listed as follows: solarized bottle glass (one), olive glass bottle (one), bright green bottle glass (one), aqua glass bottle (multiple), clear glass bottle (multiple), porcelain (one), and white improved earthenware (10+).

P-31-001218

Recorded by PAR in 2001, P-31-001218 is a site with three historic windmill components, comprised of fragments of a wooden beam with steel or iron braces or clamps. The other fragments include large metal supports (mostly pipe and L-shaped beams). South of the metal fragments are the remains of a section of fence that ran east-west. The three windmill components are located close to a dirt road, and may be related to the Fiddyment 2 site (nearby).

REF 3

The site was recorded in 2002 by URS Corporation. The site is comprised of a concrete structural foundation and several pieces of abandoned farm machinery and equipment. The foundation is situated to the south of a grove of black locusts and a single elm and approximately 220 feet south on an unmarked dirt road. Portions of the concrete foundation are intact at its northern and southern perimeters. The portion of the foundation at the southwestern comer is 2.5 feet in height and 4 inches thick, and is capped at its northernmost edge by a piece of wood with round nails. The portion of foundation marking the northern perimeter is 30 feet in length. Concrete debris is scattered just beyond the northern boundary of the foundation. Post-field research indicates the age of the resources range from 1882 to 1931.

Although a number of archaeological resources have been identified in the larger study area as evidenced in the record search data provided above, the general archaeological sensitivity of the current archaeological APE for both prehistoric and historic archaeological resources is low. This supposition is based on the fact that while resources have been identified, relatively few archaeological sites have been identified given the total acreage of land subjected to archaeological survey.

Furthermore, given that the current project APE (see Section 5.1 and also Appendix B) was designed to both avoid known archaeological resources as well as maximize, to the extent possible given other environmental constraints, the placement of the corridors within lands previously subjected to archaeological inventory efforts, the likelihood of archaeological resources within the current APE is reduced.

3.2 SUMMARY OF OTHERS WHO WERE CONSULTED

A request for a review of the Sacred Lands File was sent to the Native American Heritage Commission (NAHC) on May 27, 2003.

A search of the Sacred Lands File by the staff of the NAHC did not indicate the presence of Native American cultural resources in the immediate study area. A letter from the NAHC reporting these findings as well as providing a list of local Native American individuals and organizations was sent to URS on June 6, 2003, and is included, with responses, as Appendix C.

Other sources of information consulted for the Parkway cultural resources investigations included the Placer County Historical Society, Lincoln Arts and Culture Foundation, Roseville Historical Society, Community Memorial Museum, Placer County Museum, Sutter County Historical Society, and Rocklin Historical Society.

3.3 SUMMARY OF NATIVE AMERICAN CONSULTATION

On three occasions (June 16, 2003, October 13, 2003, and March 6, 2006) letters requesting information and comment were sent to the Native American individuals identified on the NAHC contact list for Placer, Sacramento, and Sutter counties. In addition to the letters, telephone calls were made in August of 2003 notifying, when possible, these same individuals about the project. The list provided by the NAHC comprised:

- Harvey Angle, Chairperson, Enterprise Rancheria of Maidu Indians
- Rose Enos
- David Keyser, United Auburn Indian Community of the Auburn Rancheria
- Joe Marine
- Jeff Murray, Cultural Resources Manager Shingle Springs Band of Miwok Indians
- Martha Noel, Maidu Elders Organization
- Sam Starkey, United Auburn Indian Community of the Auburn Rancheria
- Christopher Suehead, Cultural Representative Todd Valley Miwok-Maidu Cultural Foundation
- Jessica Tavares, Chairperson, United Auburn Indian Community of the Auburn Rancheria

On October 21, 2003 a response was received from Greg Baker, Tribal Administrator, United Auburn Indian Community of the Auburn Rancheria (Auburn Rancheria). Mr. Baker requested that a copy of the technical report be provided to the United Auburn Indian Community of the Auburn Rancheria. The

letter also instructed URS Corporation to contact Dr. Shelley McGinnis of Analytical Environmental Services (AES). No other responses were received.

Contact with was made Dr. McGinnis and a decision was made to hold a formal meeting between representatives of the Auburn Rancheria, South Placer Regional Transportation Authority (SPRTA), the Federal Highway Administration (FHWA), Caltrans, and URS Corporation. This meeting was held on January 9, 2004 and was used to provide the Auburn Rancheria with project specifics including levels of effort for the Tier 1 investigation as well as potential avenues of investigation during Tier 2.

4.0 BACKGROUND

4.1 ENVIRONMENTAL SETTING

The study area is comprised of 35,443.31 acres of an irregular shape, bounded by SR 65 near Rocklin on the east and SR 70/99 in the west (Figure 1-1). Baseline Road is adjacent to part of the southern boundary and Sunset Boulevard along the north. The majority of the study area is located in western Placer County. A substantial area is in eastern Sutter County, and a small portion is in northern Sacramento County.

The Sacramento Valley through which the current project passes can be characterized as a low-elevation flatland bisected by river channels, creeks, and sloughs. The region cannot, however, be described as topographically featureless. Four types of topography are recognized within the Sacramento Valley: (1) low hills and dissected alluvial uplands; (2) low alluvial plains and fans; (3) floodplains and natural levees; and (4) flood basins.

The westernmost portion of the study area is located within a 100- or 500-year floodplain and is predominately in rice cultivation, which results in areas that are submerged in shallow water during all or part of the year. The central portion of the study area is comprised of a patchwork of seasonally flooded habitat and drier annual grasslands/agricultural areas, which are either dry-farmed, irrigated for crops, or used for livestock grazing. As the study area approaches the foothills of the Sierra-Nevada Mountains in the eastern portion of the study area, habitat is almost entirely comprised of grassland, some of it cultivated. Scattered throughout the entire study are various wetlands and vernal pool complexes.

The following habitat types are present in the project study area:

Cultivated Rice Fields and Other Seasonally Flooded Habitat. Rice fields in the study area have frequently been leveled and terraced to facilitate seasonal inundation necessary to cultivate rice. Fields are typically inundated during the growing season from late May to early August. Some fields may be flooded again during the winter months to attract waterfowl. Native vegetation is typically excluded from cultivated rice fields. Many species of migratory waterfowl may congregate in rice fields during the winter, depending on flooding cycles and management practices. Such species include snow goose (*Chen caerulescens*), greater white-fronted goose (*Anser albifrons*), northern shoveler (*Anas clypeata*), and bufflehead (*Bucephala albeola*). The habitat also supports giant garter snake (*Thamnophis gigas*), a federal and state-listed threatened species, and ruddy duck (*Oxyura jamaicensis*).

Other Agricultural Habitats. Non-irrigated pasture and/or irrigated croplands comprise the majority of other agricultural habitats in the study area. These may include a mix of perennial grasses and legumes that may be used for grazing of livestock, or seed-producing grasses such as barley, rye and wheat that are planted in the fall and harvested in the spring. Many species of birds and rodents have adapted to use these habitats, and as a result larger birds of prey (hawks, falcons) also use these areas for hunting.

Annual Grassland. Annual grassland is comprised of upland areas that have not been previously cultivated. Typical species include ryegrass (*Lolium* sp.), barley (*Hordeum* sp.), ripgut brome (*Bromus diandrus*), and filaree (*Erodium* sp.). Grassland provides habitat for wildlife species such as western meadowlark (*Sturnella neglecta*), red-tailed hawk (*Buteo jamaicensis*), killdeer (*Charadrius vociferous*), western fence lizard (*Sceloporus occidentalis*), voles (*Microtus* sp.), deer mice (*Peromyscus maniculatus*), coyote (*Canis latrans*), and other species. Annual grasslands are often associated with vernal pools, as discussed below.

Vernal Pools and Other Seasonal Wetlands. Vernal pool complexes are areas that contain vernal pools of varying sizes and densities. They are seasonal flooded depressions that are underlain with a subsurface

layer that limits water infiltration. The seasonal ponding and drying associated with vernal pools supports a unique community of plants and animals. Vernal pool vegetation is dominated by species such as coyote thistle (*Eryngium vaseyi*), popcorn flower (*Plagiobothrys stipitatus*), downingia (*Downingia pusilla*), quaking grass (*Briza minor*) and buttercup (*Ranunculus bonariensis*). Invertebrates, including listed vernal pool fairy shrimp (*Branchinecta lynchi*) and vernal pool tadpole shrimp (*Lepidurus packardi*) may occupy vernal pools and other seasonal wetlands in the project study area.

Two types of vernal pools occur in Placer County: northern hardpan vernal pools, and northern volcanic mudflow vernal pools (Brussard, 1999). The average pool size of northern volcanic mudflow types is typically small (<100 m^2), the pools are irregularly spaced and do not form large pool complexes. These pools have characteristically shallow soils, <30 cm deep, and are underlain by impervious mudflow welded tuff. They have a "flashy hydrology," filling and refilling many times over the wet season. Northern hardpan pools are typically found in complexes in areas of hummocky ground on old terraces above the recent river floodplains and below the foothills. These pools are often larger than northern volcanic mudflow pool, and can be more than 1 acre. They have a less flashy hydrology, with pools remaining filled longer than volcanic mudflow vernal pools.

Seasonal and/or Perennial Stream. These habitats are contained within the ordinary high water mark of seasonal or perennial streams, creeks, or rivers. There are four such stream systems in the study area: Pleasant Grove Creek, Orchard Creek, Curry Creek, and Steelback Creek. Each of these creeks has multiple branches and/or tributaries. In places, stream features have been converted to channelized irrigation ditches, which is common in areas developed for agricultural purposes. Channel conditions within the study area are generally degraded.

Prior to development within the watershed, Pleasant Grove Creek and its tributaries were seasonal streams, however, summer flows are now maintained by irrigation runoff. Pleasant Grove Creek has the largest drainage network within the study area. It originates in the far Eastern Segment of the study area and flows westward, where it terminates in the Pleasant Grove Creek Drainage Canal. Sections of Pleasant Grove Creek in the Central Segment are surrounded by well developed riparian forest, as described in the Riparian Woodland section, below. Fish species likely to occur in Pleasant Grove Creek include California roach (*Lavinia symmetricus*), Sacramento sucker (*Catostomus occidentalis*) smallmouth bass (*Micropterus dolomieui*) and spotted bass (*Micropterus punctulatus*).

Orchard Creek, a tributary to Auburn Ravine, is located in the northeastern corner of the study area. It flows westward under Fiddyment Road north of the study area and then joins Auburn Ravine. Curry Creek has several tributaries that originate in the southeastern corner of the study area and flow to the west; the creek intersects the Pleasant Grove Creek Drainage Canal, and terminates in the Western Segment of the study area. Recent field observations indicate that at least some areas of Curry Creek and its tributaries have been channelized and embanked to the edge of the channel and that there is a lot of fine sediment depositing in the channel.

A fourth stream system, Steelhead Creek, exists south of Curry Creek. It originates near the southern edge of the study area and terminates into the Natomas East Main Drainage Canal.

Riparian Woodland. Riparian woodland borders most of the central part of Pleasant Grove Creek. Less developed (fewer large trees) riparian areas occur adjacent to tributaries of Pleasant Grove Creek and limited areas of Curry Creek. Typical woody species include Goodding's willow (*Salix gooddingii*), Fremont cottonwood (*Populus fremontii*), and valley oak (*Quercus lobata*). Large trees in or adjacent to riparian areas are considered habitat for state listed Swainson's hawk. Understory riparian vegetation containing elderberry bushes (*Sambucus* species) is considered habitat for federally threatened Valley elderberry longhorn beetles (*Desmocerus californicus dimorphus*). The well-developed riparian woodland supports a high diversity of resident and migratory bird species, such as scrub jay (*Aphelocoma*

coerulescens), black-crowned night heron (*Nycticorax nycticorax*), ruby-crowned kinglet (*Regulus calendula*), Wilson's warbler (*Wilsonia pusilla*), Lincoln's sparrow (*Melospiza lincolnii*), great horned owl (*Bubo virginianus*), and Bullock's oriole (*Icterus bullockii*).

Wetlands. Freshwater marsh habitats are characterized by saturated or periodically flooded soils that support some combination of rushes (*Juncus* spp.), sedges (*Cyperus* spp.), cattail (*Typha* spp.) and bulrush (*Scirpus* spp.). Bird species such as mallard (*Anas platyrhynchos*), American widgeon (*Anas americana*) and red-winged blackbirds (*Agelaius pheoniceus*) can be found in freshwater marsh habitat throughout the study area.

4.2 CULTURAL SETTING

4.2.1 Ethnography

The study area is within the ethnographic territory of the Nisenan, one of three Maiduan speaking tribelets inhabiting the northeastern half of the Sacramento Valley and the adjoining western slopes of the Sierra Nevada. Also known as the Southern Maidu, the Nisenan inhabited the five named villages in the general vicinity of the project area: *Pichiku* near present day Roseville; *Bamuma* near present day Lincoln and *Wollok; Leuch;* and *Wishuna* along the eastern edge of the Sacramento River (Wilson and Towne, 1978: Figure 1).

Ethnographic data on the Nisenan have been presented within several original works specifically focused upon them (Beals, 1933; Faye, 1923; Gifford, 1927; Kroeber, 1929; Littlejohn, 1928; Ritter and Schulz, 1972; Uldall and Shipley, 1966); however, the primary reference is found within Kroeber's (1925) overview of California Indians. A synthesis of Nisenan ethnography has been written by Wilson and Towne (1978), who also compiled a bibliography devoted to general Maidu ethnography (1972). An early account of Nisenan life is found within Powers' (1877) study of California Indians.

The Nisenan were the southernmost of three groups (Konkow, Nisenan, and Maidu) who spoke a Maiduan language. Maiduan is one of California's four Penutian languages, the others being Wintuan, Utian, and Yokutsan. Ethnographic groups speaking non-Maiduan Penutian languages within California include the Wintu, Nomlaki, and Patwin (Wintuan), the Costanoan and the Miwok (Utian), and the Yokuts (Yokutsan) (Shipley, 1978:82-85).

The Nisenan specifically inhabited the area within the American, Bear, Yuba, and lower Feather River watersheds. The region is bordered by the Sierran Crest on the east and by the Sacramento River on the west. The northern boundary is ill-defined due to linguistic and cultural similarities between the Nisenan and their northern neighbors, the Konkow. The southern boundary is also vaguely defined, being situated somewhere between the American and Cosumnes Rivers (Kroeber, 1925; Levy, 1978; Riddell, 1978; Wilson and Towne, 1978).

As stated above, within the general vicinity of the study area, the Nisenan inhabited a village near Roseville (*Pichiku*), another near Lincoln (*Bamuma*) and three along the eastern edge of the Sacramento River (*Wollok*, *Leuchi*, and *Wishuna*). It is unknown whether these were permanent settlements, although references describe them as "major villages" (Wilson and Towne, 1978, Figure 1). Nisenan villages varied considerably in size, with a large village containing from 40 to 50 houses and more than 500 people. A typical settlement within the lowland areas of the Nisenan territory would be situated upon natural rises along the major rivers and streams (Kroeber, 1925:395; Powers, 1877:316; Wilson and Towne, 1978:388). Structures occurring within major villages would include brush shelters, sweat house(s), acorn granaries, a dance house, as well as the above mentioned houses (Kroeber, 1925:407-409; Wilson and Towne, 1978:388-389).

The principal subsistence activities of the Nisenan were hunting, fishing, and the gathering of wild plants. Subsistence practices relied upon a large variety of food sources, rather than being dependent on a limited number of staples. Typical of California groups, acorns from various species of oak were eaten, as were the nuts from bull and sugar pine, and buckeye. Other plants consumed included wild fruits and berries, various seeds, roots, and bulbs. Most animal species were eaten with the exception of canine species, grizzly bears, vultures, amphibians, and reptiles (Kroeber, 1925:409-411; Wilson and Towne, 1978:389-390).

The Nisenan were organized similarly to many California Indians in that a certain territory was identified as belonging to a group and that group recognized themselves as a unit (i.e., tribelet). Several affiliated villages may have occurred within the tribelet territory. Each village, and often a group of allied villages, had a headman, whose duty was to advise the members of the community. No larger levels of political organization occurred beyond these village affiliations (Kroeber, 1925:396-398; Wilson and Towne, 1978:393).

Warfare, though rare, did occur. Fighting is known to have occurred between Nisenan tribelets as well as with non-Nisenan peoples. Generally, conflict occurred following trespass or similar territorial violations. An example of inter-tribelet conflict involved Nisenan from the Roseville area in the 1820s. Evidently, men from the Auburn/Nevada City area were killed in the Roseville vicinity. The hatred and distrust between these peoples lasted for several years, as evidenced by the report that the Nisenan attributed an epidemic in 1833 to bad air, sent to the valley by revengeful hill dwelling shamans (Wilson and Towne, 1978:388 citing Payen, 1961:23; Wilson, 1957-1963).

The Nisenan were affected little by the Spanish and Mexican incursions into California's interior (Wilson and Towne, 1978:396). They were, however, greatly impacted by the above mentioned epidemic, which ravaged parts of California during the 1830s. Believed to have been brought by fur trappers, this pestilence often killed the population of entire villages. It is estimated that 75 percent of the population died as a result of the epidemic, with many of the survivors retreating to mountain locations (Cook, 1955).

The Nisenan who survived the epidemic were among the California groups most affected by the Gold Rush of 1849. It was within Nisenan territory that John Marshall discovered gold at Coloma in 1848. Soon afterwards, hoards of fortune seekers descended upon Nisenan and adjoining territories. Within a short span of time, the lands of the Nisenan were overrun and the wholesale killing of Nisenan by whites began (Chartkoff and Chartkoff, 1984:279-282; Powers, 1877:317; Wilson and Towne, 1978:396).

In the early 1870s the Nisenan adopted the religious cults that swept through much of northern California following the inception of the Ghost Dance by the Paviotso near Walker Lake, Nevada in 1868. Unlike northwestern California, where the cults persisted well into the twentieth century, the Nisenan abandoned the movement in the 1890s (Du Bois, 1939; Kroeber, 1932).

4.2.2 Prehistory

The study area lies directly adjacent to one of the most intensively archaeologically studied areas in California, the Sacramento/San Joaquin River Delta and adjoining sections of the Sacramento and San Joaquin Valleys. Beginning in the last decade of the nineteenth century, avocational archaeologists recovered thousands of artifacts from numerous sites in the Delta vicinity. A general synthesis of these early works is found in Schenk and Dawson (1929).

The next series of excavations in the general region were conducted by student crews from Sacramento Junior College (SJC). Beginning in 1931, various sites adjacent to the Cosumnes River and Deer Creek confluence were excavated. Joined a few years later by crews from the University of California (UC), the

SJC archaeologists continued their excavations within the Delta region. These efforts culminated in the milestone works of Lillard and Purves (1936) and Lillard, Heizer, and Fenenga (1939), both of which identified a sequence of cultural change within the Delta and adjacent vicinities.

The cultural sequence identified by Lillard and his colleagues (1936; 1939) contained three cultural periods (Early, Intermediate/Transitional, Late), which were based upon changes observed within the mortuary patterns and grave furniture recovered from their sample of sites. Lillard, Heizer, and Fenenga (1939) believed that the sequence represented a single cultural progression, the Early Period evolving into the Transitional Period, the Transitional Period evolving into the Late Period.

As more archaeological work was conducted within central California during the 1940s and 1950s, the cultural sequence developed by Lillard and his colleagues (1936; 1939) was refined and expanded to accommodate the additional data. The most significant of these revisions was Beardsley's (1954) Temporal and Areal Relationships in Central California Archaeology, in which the Central California Taxonomic System (CCTS) was formally developed.

As archaeologists in central California attempted to incorporate their data into the CCTS, the limitations of Beardsley's system became apparent. Alterations to the CCTS began appearing in the literature of the discipline, with the doctoral dissertation of Fredrickson (1973) being of the most consequence.

After many debates and numerous revisions, the cultural sequence for the central California region, first defined by Lillard and his colleagues (1936; 1939), currently stands as follows:

4.2.2.1 Windmiller Pattern (ca. 3000 B.C. – 500 B.C.)

The artifact assemblage characteristic of this cultural manifestation includes a variety of flaked stone, ground stone, baked clay, and shell items reflecting exploitation of diverse subsistence resources and acquisition of materials from distant geographic areas through trade. The burial pattern of Windmiller cemeteries and grave plots is unique in that virtually all of the interments are ventrally extended, with the head oriented to the west. The primary exception to this burial pattern is that aged females were buried in a flexed position. Social stratification can be inferred from the burial practices of Windmiller peoples. Males appear to generally have higher status than females, as evidenced in their deeper and artifactually richer graves. Social status may have been at least partially inherited, for some female, child, and infant burials contained elaborate grave furniture, while others lacked such wealth (Moratto, 1984:201-207).

4.2.2.2 Berkeley Pattern (ca. 500 B.C. – A.D. 500)

The Berkeley Pattern represents a gradual shift in adaptation and material culture that appears to have originated within the San Francisco Bay region. The subsistence practices of Berkeley peoples differs from that of the Windmiller peoples in that the use of acorns for food seems to have increased dramatically. The reliance on acorns is evidenced in the increase in mortars and pestles recovered from Berkeley Pattern sites. Other differences in material culture include the occurrence of an extensive bone tool kit, unique knapping techniques, and certain types of shell beads and pendants within Berkeley Pattern sites. Burial practices of Berkeley peoples also differed from those of Windmiller Pattern sites. No longer were corpses placed into graves extended towards the west. Instead, Berkeley Pattern burials are flexed with variable orientation (Moratto, 1984:207-211).

4.2.2.3 Augustine Pattern (ca. A.D. 500 – A.D. 1880)

The Augustine Pattern reflects local innovation in technology, as well as the incorporation of new developments with traits of the Berkeley Pattern. The artifact assemblages of Augustine Pattern sites indicate an increased reliance on hunting, gathering, and fishing. Acorns appear to have become

particularly important. Many burials continue to be flexed, however, cremation becomes the mortuary practice for high-status burials. Extensive trade networks developed to accommodate the resource and social needs of the burgeoning populations (Moratto, 1984:211-214).

4.2.3 History

Although it was not until after the discovery of gold at Sutter's Mill in 1848 that Euro-American people began entering the region en masse, the general area was visited by non-native peoples prior to that year. Gabriel Moraga, under the flag of Spain, led an expedition from Mission San Jose up to the Cosumnes and Feather Rivers in 1808. In 1813, Jose Arguello reached the Cosumnes River, where he battled a band of hostile Miwok. Narciso Duran and Luis Arguello left San Francisco in 1817 and passed through the region on their expedition. Arguello is credited with naming the Feather River, his El Rio de Las Plumas (Beck and Haase, 1974; McGowan, 1961).

Following the Spanish entrance, this region of California was visited by American trappers looking for new areas to exploit. Beck and Haase (1974) indicate that Jedediah Smith, Joseph Walker, and Ewing Young passed through the region on their journeys through California.

Captain John Sutter was granted his roughly 1,000 square mile "New Helvetia" ranch near present day Sacramento in 1839. It was from Sutter's Mill, near present day Coloma, that John Marshall discovered gold in 1848. Soon afterwards the famous gold rush began and the region became quickly populated with prospectors, entrepreneurs, and others seeking easy fortunes (Bean, 1977; Lavender, 1972; McGowan, 1961).

Local histories following on from Marshall's gold discovery for Placer and Sutter counties and Reclamation District 1000 are presented below.

4.2.3.1 Sutter County Portion of the APE

One of the smaller counties in the state, Sutter County is situated in the heart of the Sacramento and Feather River valleys. Settlement patterns in the southernmost portion of Sutter County followed a similar development pattern as southwestern Placer County. As unsuccessful miners staked out homesteads and started farming the region's grasslands, small hamlets were established in the outer regions of the county (Yuba City and Marysville, 2006).

One such community in the vicinity of the study area was Pleasant Grove, located 20 miles southeast of Yuba City. Initially known as Gouge Eye, the town of Pleasant Grove developed in the late 1860s around Charles Bishop's general store, at the present day intersection of Howsley and Pleasant Grove roads. When the post office was constructed in 1867, Gouge Eye was renamed Pleasant Grove Creek, which was later shortened to its present name in 1875. The town grew quickly in the early years, and by the late 1880s included shoemaker, doctor, town hall, barber, fraternal organizations like the Pleasant Grove Odd Fellows, a hotel, salon, blacksmiths, and general store. Early settlers included Ephraim Johnson, who purchased a 240-acre farm in 1878 just south of Pleasant Grove (south of the present day intersection of Pleasant Valley and Sankey roads and outside of the architectural APE) where he constructed a residence. Over the years he added 440 acres to his property, farming wheat, oats and barley on this land as well as more than 3,000 acres of leased land. By the mid 1880s, the town included a population of 100 people living on large farms. Grain, primarily wheat, and livestock formed the principal crops during this period, which continued into the first half of the twentieth century, while rice became an important crop in later years. Unlike the fruit regions of the county to the north and southeast, the area within the APE remained rooted in the production of grain throughout the twentieth century (Wagner, 2006; Crawford and Hurd, 1935; Lowe et al., 1990:59).

4.2.3.2 Placer County Portion of the APE

Placer County was created in 1851 from portions of Sutter and Yuba counties, two of California's original counties. Bordered by Sacramento County to the south, Lake Tahoe to the east, and Bear River to the north, many of the county's communities owe their origins to the gold rush. Nevertheless, in the southwestern portion of the county, or "the valley," gold was never found in any quantity, so beginning in the 1850s, former miners staked out homesteads and started farming the region's undulating grasslands (Davis, 1975:11,15; 1964). Even with gold mining as the major industry in the county through the 1880s, in the area around Roseville and Lincoln, farming continued to be the economic mainstay, along with timber harvesting. Bypassed by gold prospectors on their way to the goldfields, local farmers quickly built up large land holdings in the area (Abeloe, 1966:265).

One of the first areas to be settled in the vicinity of the study area was the Dry Creek District, which extends east, south and west of present-day Roseville, followed by Pleasant Grove District (located northwest of Roseville, extending west to Sutter County) where Stephen A. Boutwell, William Dunlap and others acquired large tracts of land (Davis, 1975:19; 1964:1-2). Local farmers quickly built up large land holdings along the various creeks that flow west into the American Basin. Called the "plains" by early prospectors on their way to the goldfields, early settlers came to the area in the 1850s. The region was eventually named the Pleasant Grove District after the creek which passed through. The Fiddyment family also settled in this district in 1856 when Elizabeth Jane Fiddyment and her young son, Walter F. Fiddyment Jr., joined her family on their large farm. Mrs. Fiddyment went on to become a large landholder, reportedly owning more than 13,000 acres in Placer County, while her son turned to raising sheep and cattle. The Fiddyment family maintained a strong presence in the region, expanding their holdings and improving their ranch complexes. Walter eventually became one of the largest grain and stock ranchers in the county, while his sons and grandsons went into the poultry business on the family land (Davis, 2002:10; U.S. Census Bureau, 1870; PAR Environmental Services, Inc., 2001; EIP Associates, 2004:4.8-3 through 4.8-6).

To the northeast of the Fiddyments, a New England farmer, George Whitney, settled on 180 acres about 3 miles northeast of present-day Rocklin in 1857. In this unoccupied and open land he established the Spring Valley Ranch, also known as the Whitney Ranch, where he successfully bred sheep. Between 1861 and 1873 he acquired numerous parcels of land, some under the Pre-emption Law of 1841, some former homesteaded lands purchased outright, and some from the Southern Pacific Railroad, ranging in size from 40 to 2,000 acres. The Whitney Ranch grew to encompass more than 20,000 acres of land in the Sacramento Valley, 2,000 acres of land at the confluence of the Feather and Sacramento Rivers (in Sutter County), 15,000 acres of private land within Tahoe National Forest, and grazing rights for sheep on 50,000 acres of railroad and government land. In addition to stock raising, the Whitney Ranch also produced wheat, with 1,200 acres in production in 1872. After 1875, Whitney's son, Joel Parker Whitney, began cultivating all available grain land on the ranch, eventually planting more than 8,000 acres of wheat. The ranch exported its grain crops and livestock from Whitney Station (located near the present day intersection of Sunset and Industrial boulevards), 3 miles west of the Whitney Ranch (Thompson and West, 1882:246-47; Donaldson, 1958:C2-3).

The construction and development of the railroad industry in the 1860s and 1870s played a significant role in the development of the region. The construction of the California Central Railroad (CCRR), an 18½-mile line that would linkup the cities of Marysville and Sacramento by means of a connection with Sacramento Valley Railroad, and later the Central Pacific Railroad, which was absorbed into Southern Pacific railway system, led to the establishment of Lincoln and Roseville (Tuturo, 2004:262-263; Lardener and Brock, 1924:1043; Thompson and West, 1882:273; Hart, 1978:363; Davis, 1975:29). Agriculture remained first in the region's economy into the twentieth century, with Roseville eventually becoming the shipping and trading center for southern Placer County. Despite this, the area's population remained low,

even after the construction of the state highway (LRN 3) from Sacramento (through Roseville) to Lincoln in 1909 (Caltrans, no date; California Highway Commission, 1922:201; Department of Public Works, California Highway Commission, 1922).

While agricultural production continues to be an important land use in southwestern Placer County, the region began undergoing extensive development following World War II as the accelerated growth rate in the greater Sacramento metropolitan area began impacting surrounding communities. The completion of SR 65 in the westernmost portion of the APE in 1971, and the growth of Lincoln, Roseville and Rocklin that began in the 1960s, has impacted the rural character of western Placer County. Suburban housing and commercial developments just south of the project area and industrial development dating from the late 1960s along Industrial Boulevard occupy much of the land that was once open range. Since 1980 new employment centers have been established in an emerging area of high-tech companies locating along the SR 65 corridor, and many new commercial and residential developments have been constructed.

4.2.3.3 Reclamation District 1000

In the forty-year period from 1870 to 1910, Sutter, Placer and other mid-valley counties remained sparsely populated and some actually declined in population. A completely new pattern emerged between 1910 and 1930 as large numbers of new settlers came to the Sacramento Valley, many attracted by improved flood control systems, irrigation, and the promising development of fruit and nut orchards. Unlike wheat farming or dairying, orchard culture provided a viable family income from relatively small parcels of land. Agrarian visionaries foresaw vast parts of the region populated with small prosperous farms living on 10- to 20-acre farms. Through reclamation and irrigation of the Sacramento Valley during the late nineteenth and early twentieth centuries, the number of people and individual farms expanded tremendously in the fruit growing regions of Sutter and Yuba counties during this period (McGowan, 1961:1; Jelinek, 1924:55-58, 61-63).

With the influx of population in Sutter County in the late nineteenth century, the state sought to control seasonal flooding while promoting agriculture in the American Basin. Great strides had already been made with construction of a series of levees, river gauges to monitor water levels and the establishment reclamation districts. The region had been devastated by major floods in 1861-1862 and again in 1875, and while the government had severely restricted hydraulic mining in the mid 1880s, the region was still vulnerable to damage from mining debris and flooding. Use of much of the land in the southernmost portion of the county was limited to seasonal grazing and some farming on higher ground, and for fishing and hunting (USGS, 1892, 1910a, 1910b; Dames & Moore, 1995:40-41; Gordon, 1988:68-70). New reclamation efforts in the first decade of the twentieth century spurred the state legislature to create Reclamation District No. 1000 (RD 1000) in 1911. It later became part of the Sacramento Valley Flood Control Project. Located in northeastern Sacramento and southern Sutter counties, this district consisted of an area of approximately 55,130 acres, located east of the Sacramento River and extending to the Western Pacific Railroad tracks (currently part of the Southern Pacific). It included drainage canals, pumps, levees, ditches, pumping plants and a system of roads. After drainage and construction of levees, the Natomas Consolidated Company land surveyed and subdivided the land.

Part of the construction included the Natomas East Main Drainage Canal, which is crossed by the western ends of all of the project's alternatives reaching SR 70/99. To promote RD 1000 by demonstrating land productivity, Natomas Consolidated leased large acreage blocks for wheat and grain crop production, thus establishing a pattern of large acreage, single-crop land use. The company also built a 60-mile network of roads across RD 1000 to provide access to drainage canals for construction and maintenance, as well as to serve farm roads to parcels within the district's various subdivisions. This network was originally comprised of dirt roads (roughly two lanes wide) that the Natomas Company graded. Most of these roads were paved with macadam or concrete during the 1920s and 1930s. They generally followed the township

and section survey lines and the drainage canals to form large regularly spaced grids in the landscape (Dames & Moore, 1995:29-32, 40-41, 62, and 99; Bonte, 1931:181 and 183; USGS, 1994, 1953a; Commissioner of Public Works, 1905; House Document Number 81, 1911). Despite these improvement efforts, selling land in the district was a slow process into the 1940s (Dames & Moore, 1995:14).

5.0 INVENTORY METHODS

5.1 INTRODUCTION

Because the current undertaking consists only of the preservation of a transportation ROW, the archaeological APE for this Tier 1 investigation consists of the area within the boundaries of the corridor alignment alternatives. Furthermore, because the project has yet to be designed, the APE is currently limited to the ground surface only and there is no vertical APE. An APE encompassing areas that potentially would be disturbed by construction activity, as well as areas that potentially would be used for construction excavation, will be developed and assessed in Tier 2.

The APE for the project is depicted on Figure 5-1 (sheets 1 through 4). The approved APE is provided in Appendix B.

In accordance with stipulation of the Parkway PA (Appendix A), only the alignment common to all build alternatives (Figure 5-2) was subject to archaeological pedestrian reconnaissance. The common alignment occurs primarily in the Eastern Segment of the study area, although a small section of common alignment also is found in the eastern extent of the Central Segment.

As depicted in Figure 2-1, the remaining portions of the APE are comprised of a series of interconnected corridor alternatives. Archaeological issues in these corridors, as agreed upon by the signatories and concurring parties of the PA, were addressed through the use of environmental factors including length of stream corridor, area above floodplain, and area of farm land to rank the archaeological sensitivity of the project alternatives. The results of the ranking efforts would then be used in the Tier 1 EIS/EIR.

The ASR study consisted of background and archival research, contact with the Native American Heritage Commission (NAHC) and local Native American groups and individuals identified by the NAHC, an intensive archaeological pedestrian reconnaissance of the previously unsurveyed portion of the common alignment where access had been secured, and the development and use of a predictive model based on environmental factors to assess the relative archaeological sensitivity of the project alternatives.

The majority of the common alignment has been previously investigated in the recent past. As depicted on Figure 5-2, the corridor bisects a number of areas currently under environmental review for other development project proposals. Environmental review of these projects has included archaeological investigations, and the results of these investigations have been used in this report to characterize the baseline conditions of the corridor analysis.

Mark R. Hale, URS Senior Project Archaeologist, prepared this Archaeological Survey Report (ASR) to document cultural resources identification efforts in the project's Area of Potential Effect (APE). Pedestrian archaeological reconnaissance was led by URS Senior Project Archaeologist Mr. Hale. Mr. Hale holds a B.A. in Anthropology from the University of California, Berkeley, and has completed his course work, completed his research, and defended his thesis for an M.A. in cultural resources management from Sonoma State University. He has more than 20 years of professional experience in conducting and managing cultural resources. Project oversight was provided by Mr. Brian Hatoff (URS Senior Archaeologist). Mr. Hatoff received both his B.A. and his M.A. in Anthropology from the University of California, Davis; is a Registered Professional Archaeologist, and has more than 30 years of professional experience in California and the Great Basin.

5.2 COMMON ALIGNMENT

As mentioned above, an agreement between FHWA, OHP, Caltrans, and SPRTA states that only the "common alignment" of the Parkway need be physically inventoried for archaeological resources for

preparation of the Tier 1 EIS/EIR. The common alignment occurs primarily in the Eastern Segment of the study area; however, a portion also occurs in the eastern portion of the Central Segment (Figure 5-2).

Given the recent dates of archaeological surveys on several parcels through which the common alternative passes, with Caltrans approval, some parcels were not reinventoried for archaeological resources. These parcels are:

- Amoruso Property (Brookfield) (ECORP Consulting 2006)
- Placer Ranch (Hale, 2004)
- Reason Farms Retention Basin (Hale, 2002)
- SR 65 Widening Project (Norton, 1998)

Prior to the initiation of field efforts, letters requesting access were sent to relevant landowners. Figure 5-2 identifies the parcels found within the common alignment. Landowners did not respond to request for access to conduct surveys on two properties: Macor Incorporated Property APN.017-061-044 and Whitney Industrial Park APN.017-061-045. It should be noted, however, that although access to these two parcels has not been secured for the current effort, the majority of both had been previously inventoried with negative results (Derr, 1997; McGowan Seldner, 1985). Furthermore, based on past surveys within the immediate vicinity of these parcels (see Section 3.0), the overall archaeological sensitivity of these parcels is low. This supposition is based on the fact that intensive archaeological surveys have for the most part proved negative.

The survey corridor, comprised of parcels within the common alignment, was subjected to an archaeological pedestrian reconnaissance following the guidelines proposed by King (1978). Specifically, the previously unsurveyed portions of the common alignment where access had been secured were visually inspected using 20-meter (66-foot) parallel transects.

In general, ground visibility within the surveyed are of the common alignment was poor. At the time of the survey, dense growth of grasses obscured the ground surface. To help alleviate the situation, in areas where non-agricultural vegetation obscured the ground surface, approximately 20 cm by 20 cm patches were occasionally cleared with hand tools or footwear to increase ground visibility. Attention was focused on potential vernal pools and alongside minor drainages, rodent burrow spoils, vehicle tracks, recently graded exposures, and erosion gullies. Recently excavated and graded areas adjacent to the survey area were also inspected (i.e., Sunset Boulevard extension).

5.3 ALTERNATIVES

5.3.1 Predictive Model

As indicated previously, signatories to the PA agreed that only the common alignment of the Parkway needed to be inventoried for archaeological resources prior to the preparation of the Tier 1 EIS/EIR. The portion of the archaeological APE outside of the common alignment consists of the remaining five interconnected corridor alignment alternatives described in Chapter 2. The draft PA outlines that a predictive model would be used to assess the various alternatives for their relative archaeological sensitivity. These data could then be used in the Tier 1 EIS/EIR to make conclusions about potential impacts to archaeological resources.

For the current investigation, the predictive model is a GIS-based application that assesses the relative sensitivity of each alternative corridor based on various, common environmental factors known to influence past human activity in the project vicinity. This is based on the assumption (see Bettinger, 1977) that:

> "… culture systems are adaptations to their environments, and, as such, their subsistence and settlement patterns are structured to fit the existing patterns of regional resource distribution."

Although some, including Bettinger, have used such models to predict site locations and/or densities within a given area with varying levels of success, this was not attempted herein for it is believed that there is insufficient data at this time to make more than general statements of archaeological sensitivity for the current APE. In fact, Bettinger warns that:

> "Predicting the density of archaeological sites is a difficult proposition at best. Frequently the information necessary for the proper computations is unavailable, requiring more assumptions than are desirable" (Bettinger, 1977:222).

It should also be noted that the corridor chosen for preservation would ultimately be subjected to intensive pedestrian reconnaissance during Tier 2.

The environmental factors used in this investigation are those known to influence (either attract or deter) past human activity in the study area based on archaeological evidence, ethnographic data, and historic land-use information.

As the project's corridor alignment alternatives are located in relatively close proximity to each other, the environmental setting does not differ significantly between alternatives. For this reason many commonly used environmental factors such as slope and exposure cannot effectively differentiate between alignments. Further complicating matters is the fact that environmental conditions in the study area were significantly altered in the twentieth century. Vast tracts were reclaimed, stream courses altered, and wetlands were drained to create valuable farmland. Riparian vegetation was removed in order to increase sunlight to farmlands. As such, it should be noted herein, that the modeling in this report was based on available data. It should also be noted that environmental factors were not ranked and calculations were not adjusted based on the corridors' lengths.

Given the basic human need for water, within the Sacramento Valley as elsewhere in the world, both prehistoric and historic settlement tended to intensify around perennial water sources. Besides providing direct sustenance to human populations, water also provides sustenance to both plant and animal resources used by human populations.

The majority of previously recorded prehistoric sites within the region are situated along the perennial watercourses that flow toward the Sacramento and American Rivers (as well as along these two major waterways). Prior to the construction of the levees and diversion canals that were constructed in the early part of the twentieth century, local hydrology was well suited to support a myriad of floral and faunal species important to the diet of prehistoric populations and the ethnographic Nisenan. Many previously investigated archaeological sites in the region, including those where only surface observations were possible, have produced faunal remains from riparian-adapted species. Similarly, baked clay net weights with impressions of tule wrapping have been noted in site collections, providing evidence for use of this plant by native populations. The presence of bone and antler fishhooks, harpoon toggles, fish spears, and net weights of stone and clay among sites in the region also attest to the importance of water–based resources.

Early historic populations likewise tended to focus settlement near perennial waterways. In fact, many early historic homesteads were placed atop prehistoric deposits as evidenced by numerous multi-component archaeological deposits as well as the non-native vegetation including palm, olive, black walnut, English walnut, plum, peach, apricot, apple, pomegranate, and various citrus often noted on archaeological site forms from the region.

Given the above circumstances, proximity to stream courses clearly elevates sensitivity in the study area. The total length in miles of existing stream course within each corridor alignment alternative was thus one factor used to assess the archaeological sensitivity of the project alternatives. A similar approach of using length of stream corridor (converted to "fish miles") was used in the landmark study by Baumhoff (1963) to analyze prehistoric settlement. It should be noted, however, that there is currently no evidence that any of the streams bisecting the current APE historically supported runs of anadromous fish (GANDA, 2006).

Proximity to perennial stream courses can also provide insight into the issue of buried archaeological resources (i.e., those with no surface manifestation). Buried archaeological resources are of concern as it is well recognized that natural cycles of soil erosion and deposition have buried archaeological resources, often deeply (Meyer and Rosenthal, 1997; Rosenthal and Meyer, 2004a, 2004b). Implementation of a project with ground-disturbing activities could inadvertently expose such a resource, possibly resulting in both unanticipated impacts and project delays.

Assessment of the potential for the current project to encounter buried archaeological deposits is somewhat problematic given that the project has not yet been designed. As described previously, the project consists of selecting and preserving a corridor for the future Placer Parkway. During Tier 2, when specific project components can be analyzed, the issue of buried archaeological resources can be addressed more intensively.

For this Tier 1 analysis, the total length of stream course is also used to rank the likelihood of each alternative to contain buried archaeological resources. As indicated by Rosenthal (2005) distance to water has proven to be an important predictor of archaeological site locations throughout central California" and as such, it is adjacent to areas of surface water that they focus their geoarchaeological investigations. For this study, it is assumed that the greater the total length of stream corridor within an alternative, the greater the potential for the presence of buried archaeological resources as well as those exhibiting surface manifestations.

Although other water-oriented environmental features, including wetlands, vernal pools, and riparian habitat, may have once drawn both prehistoric and historic populations, for purposes of the current analysis it was determined that the current altered distribution in the region prevented the meaningful use of such features as determinants of archaeological sensitivity.

Although the presence of water is a natural draw for both prehistoric and historic populations, this can also present an obstacle to settlement in areas where the risk of flooding is high. The majority of previously recorded prehistoric and pre-reclamation-era historic archaeological sites in the region are situated above historic floodplains including such areas as natural levees along the watercourses, upon "high spots" within natural floodplains, and in the uplands above the floodplains. This pattern is apparently driven by the human preference for inhabiting high, dry ground located in close proximity to water.

As current reclamation, irrigation, and flood control efforts have drastically altered the natural flood patterns, the use of current flood mapping data (e.g., 100-, 200-, and 500-year floods) is of limited value. For example, most prehistoric and pre-reclamation historic archaeological sites would have received little impact from flooding prior to the construction of dams and levees on the Sacramento and American Rivers and their respective tributaries. Today, however, seasonal flooding routinely inundates many sites. In this region, this is perhaps most evident in the large number of sites recorded along Dry Creek near Roseville. These sites become flooded when water backs up because it is restricted through the Natomas East Main Drainage Canal.

As a means to identify pre-reclamation floodplains, historic sources were consulted. Pre-reclamation reports and maps (Commission of Engineers, 1904; Commissioner of Public Works, 1895; Hall, 1887)

reveal that the margin of the floodplain prior to the reclamation and flood control projects of the historic and modern eras was located at approximately 30 feet above mean sea level. Based on available GIS-ready FEMA topographic data, an elevation of 33 feet (i.e., 10 meters) above mean sea was determined to be the approximate break between floodplain and non-floodplain. The total amount of acreage at or above this elevation was used for the assessment of general archaeological sensitivity of the alternative corridors

As much of the study area was converted to agricultural use following the reclamation efforts of the early twentieth century, it was determined that identifying those areas potentially most attractive to agricultural pursuits would be an appropriate avenue of investigation. As developed land was avoided during the screening process, however, the project alternatives are comprised nearly entirely of agricultural lands, including both dry and irrigated farming, and grazing. Although grazing has and continues to occur in the study area it is a much less intensive agricultural pursuit than the raising of crops (farming), which is more likely to remain physically evident over time.

The California Department of Conservation (CDC) has classified soils in terms of their desirability as farmland. Several categories are recognized and mapped, including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance. In addition to these, both Grazing and Urban Built-up lands are also mapped. Using these available data, total acreage of farmland was tabulated to assess the archaeological sensitivity of the project alternatives.

Environmental data were entered into URS' Geographical Information System (GIS) using ArcGIS 8.3 software, which consists of the following modules: ArcMap, ArcCatalog, and ArcToolbox. The development of a GIS for the project involved a series of tasks, including collection of spatial data from a variety of sources; importation of that data into ArcGIS 8.3; projection of the data into Stateplane Feet NAD 83 Zone II; development of new data from pertinent existing data or input from project team members; creation of metadata for each data layer; map and figure creation displaying the data in a useful manner; data version control and maintenance; and input into an analysis program called Community VIZ by Moore, Iacofano Goltsmith (MIG) and URS Corporation. URS created the figures and numeric data presented below.

Spatial data were collected from a variety of sources. Aerial photography was obtained from AIRPHOTO USA. Images of the project area were taken in April 2001 and again in November 2002. The color images have a 2-foot pixel ground sample distance. The 2002 images are used as the base for most maps. Several existing GIS data layers were gathered from Placer County, Sutter County, Sacramento County, City of Roseville, DKS Associates, North Fork Associates, Sacramento Area Council of Governments (SACOG), CH2M Hill, Federal Emergency Management Agency (FEMA), United State Geological Survey (USGS), U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), California Historical Resources Information System, and California Department of Conservation. Project team members created some data by aerial photograph interpretation, input from resource specialists, or through analyzing existing data.

Based on the data collected and displayed on maps created through GIS, total land areas were determined (in acres or length) for the environmental factors described above. Specifically, the total length of stream course, the total amount of land above historic floodplain (i.e., equal to or greater than 10-meter [33-foot] elevation), and the total amount of farmland were the environmental factors used to differentiate the archaeological sensitivity of the various corridors.

5.3.2 General Land Office Plat Maps

To further assess the historic archaeological sensitivity of the various project corridors, General Land Office surveyor's plat maps were also consulted. The United States Public Land Survey (USPLS) system

was established in 1785 with the Geographer of the United States as the director. This began the system of subdividing land areas into regular parcels, generally Townships comprised of 36 sections, each section being one square mile. Divisions of these parcels, often 160-acre quarter sections, could then be sold to provide income for the Federal treasury. In May of 1796 the post of Surveyor General was established, who was given the power to deputize surveyors to carry out land surveys. In April of 1812 the General Land Office (GLO) was established within the Department of the Treasury and in 1849 the GLO was reassigned to the Department of the Interior.

In the latter half of the nineteenth century, the GLO was responsible for surveying the largely unsettled lands of the western United States in response of an ever-increasing number of homesteaders. Having the lands surveyed made it easier to locate and legally describe the homesteaded parcels.

The value of GLO plat maps is that they depict historic features that may be represented in the archaeological record. Data retrieved from these maps is used here to complement the environmental parameters discussed in the previous section. It should be noted that although GLO plat maps are valuable tools, their accuracy is somewhat limited. According to the Iowa State University GLO Project "modern surveyors describe the GLO survey as one with low accuracy and lack of precision" (http://www.glo.gis.iastate.edu/pinfo/info_faq.html#21). The web site goes on to say that "probably the most important reason that the surveys were not as concerned with accuracy as surveys are today is because the price of land was low ... Low land prices did not warrant any delay in the survey procedure."

It should also be pointed out that GLO surveyors were only required to survey (i.e., follow) section lines. As such, the surveyors tended to only plot the features they encountered along the section line being followed. This is perhaps most evident in the case for minor roadways where only the section of road crossing the section line is plotted. Although the complete course of some, more major roadways are depicted on GLO maps, this may be simply a case of "plotting" the alignment by drawing a line to connect the sections of road actually encountered (i.e., a case of connecting the dots).

As a means to identify potential historic archaeological resources and thus assess the archaeological sensitivity of the project alternatives, the GLO plat maps (USDI 1855a, 1855b, 1868, 1871) were pieced together to form one map. The Parkway alignments were then overlaid on the composite GLO plat map. Although the accuracy of the GLO maps is limited, by using the section grid lines as reference points a satisfactory overlay can be produced and the location of potential historic archaeological resources identified.

6.0 STUDY FINDINGS AND CONCLUSIONS

As a means to determine the potential effects of the project on archaeological resources, a number of tasks were completed. As previously discussed, these comprised archival research, Native American consultation, a pedestrian reconnaissance of the common corridor alignment alternatives, and the development and use of a predictive model to determine the general archaeological sensitivity of the five corridor alignment alternatives. Because the screening process was used to avoid archaeological sites, no previously recorded historic or prehistoric archaeological sites occur within the APE for the project.

6.1 COMMON CORRIDOR ALIGNMENT ALTERNATIVES

An archaeological survey of previously unsurveyed portions of the common corridor alignment alternative was conducted on June 2-3, 2006. All areas within the archeological APE were subjected to intensive pedestrian survey using transects spaced no more than 20 meters (66 feet) apart.

Prehistoric sites in the general vicinity typically are manifested by darkened midden soils, often with some amount of shell, ground-stone artifacts, fire-affected rock, animal bone, and chips and tools of obsidian and/or cryptocrystalline silicates. Historic–era sites range from remnants of late nineteenth and early twentieth century homesteads including structural remains, trash deposits, privies and cisterns to mid-twentieth century refuse scatters. No prehistoric or historic archaeological materials, evidence of archaeological deposits, or indications of occupation were found on the surface within the APE.

It is Caltrans' policy to avoid cultural resources whenever possible. At this time no further archaeological work is necessary within the common corridor alignment alternatives. The selected corridor alignment alternative will be subjected to pedestrian archaeological inventory during Tier 2 efforts.

6.2 REMAINING CORRIDOR ALTERNATIVE ALIGNMENTS

6.2.1 Predictive Model

Using environmental factors known to both attract and deter past human settlement in the project vicinity, the relative archaeological sensitivity of the remaining corridor alignment alternatives was determined. Specifically, the total length of stream course, the total amount of land above the historic floodplain (i.e., at or above an elevation of 10 meters [33 feet] above msl), and the total amount of farmland were the environmental factors used to determine the archaeological sensitivity of the various corridors.

As depicted in Figure 2-1, each alternative shares some portion of its length with other alternatives. Rather than present the calculations for the portions of each alternative by segment, for ease of analysis and presentation, the data for each alternative have been collapsed and tabulated together (Table 6-1). Data for the Eastern Segment are not included in these calculations, as it comprises the common alignment that was subjected to archaeological pedestrian reconnaissance as described previously.

As can be seen in Table 6-1, Alternative 1 contains the greatest length of stream course, the most acreage above floodplain, and the most acreage of farmland. Using the criteria described above, Alternative 1 is the most archaeologically sensitive alignment alternative. Alternative 3 is the next most archaeologically sensitive alignment, ranking second in both total acreage above floodplain and total acreage of farmland and scoring third in total length of stream course. Alternative 2 follows, ranking second total length of stream course and third for both total land above floodplain and total acreage of farmland. Alternative 4 is next, ranking fourth for all identified criteria. Lastly, Alternative 5 ranks fifth for all categories, making it the least sensitive for archaeological resources.

Table 6-1
Predictive Model for Assessment of Archaeological Sensitivity of Project Alternatives (Excluding Common Alignment)

Alignment	Total Miles of Stream Corridor (Ranking)		Total Acreage Above Floodplain (Ranking)		Total Acreage of Farmland (Ranking)	
Alternative 1	3.0099	(1)	950.8	(1)	1238.4	(1)
Alternative 2	1.2942	(2)	868.8	(3)	1153.10	(3)
Alternative 3	0.9148	(3)	904.7	(2)	1188.1	(2)
Alternative 4	0.7720	(4)	782.4	(4)	953.7	(4)
Alternative 5	0.6906	(5)	778.2	(5)	945.0	(5)
Note: 1 = most sensitive 5 = least sensitive						

The total length of stream corridor, as described previously, can also provide insight to the potential for a corridor to contain buried archaeological deposits. Based on total stream corridor length, it can be predicted that Alternative 1 is the most likely corridor to contain buried archaeological resources while Alternative 5 is the least likely (Table 6-1).

As stated previously, the general archaeological sensitivity of the current archaeological APE for both prehistoric and historic archaeological resources is low. This is based on the fact that while resources have been identified, relatively few archaeological sites have been identified given the total acreage of land subjected to archaeological survey.

6.2.2 General Land Office Plat Maps

The current Placer Parkway project area is situated in lands contained within four Townships, specifically T10N/R4E, T11N/R4E, T11N/R5E, and T11N/R6E. These Townships were mapped by the GLO in 1855 (T11N/R5E, T11N/R6E), 1868 (T11N/R4E), and 1871 (T10N/R4E).

As can be seen on Figure 6-1, the common corridor alignment of Placer Parkway is situated in the northwestern corner of T11N/R6E and passes into the northeastern corner of T11N/R5E in a westerly direction before turning southward towards what is labeled on the plat map as Dry Creek (today's Pleasant Grove Creek). South of the Pleasant Grove Creek crossing (labeled on GLO map as Dry Creek), the corridor begins dividing into the five project alternatives. It is from this point southwestward that the current exercise is focused. The various historic features intercepted by Placer Parkway corridor alignment alternatives are discussed below.

It should be noted herein that various mapping inaccuracies, as discussed in Section 5.2.2, are depicted on Figure 6-1. Perhaps the clearest is along the section line separating Townships T11N/R4E and T11N/R5E. As is quite apparent, the course of Dry Creek and the unnamed road paralleling the north side of the stream on one map do not align with the same features on the adjacent map. A discrepancy of approximately one-quarter mile exists between how these features were mapped on their respective GLO plat maps. Other incongruities include the lack of a connection between the course of Pleasant Grove/Dry Creek between Townships T11N/R5E and T11N/R6E; the course of Slough/Dry Slough, also between Townships T11N/R5E and T11N/R6E; and the numerous sections of road plotted as sections of dashed lines that have neither a beginning nor an end and do not appear to connect to anything. These small sections of road, all occurring in the immediate vicinity of a section line, are prime examples of the surveyor only plotting what was encountered along the section line being followed.

6.2.2.1 Roads

As can be seen on Figure 6-1, the paths of several historic roadways are bisected by the corridor alignment alternatives. Although the common alignment is not part of the sensitivity exercise, it can be seen on Figure 6-1 that the corridor bisects an unnamed road in the northwestern corner of Section 8 of T11N/R6E, as well as another, less fully plotted and also unnamed road in Section 7 of T11N/R6E, and Section 12 of T11N/R5E.

A northwest-to-southeast–trending roadway is intersected by all corridor alignment alternatives as they begin branching out south of Dry Creek in Section 15 of T11N/R5E. This unnamed roadway parallels the south side of Dry Creek, appearing to cross the stream in Section 9 of T11N/R5E). It thus appears that this unnamed road may have crossed Dry Creek at the same location as the Sacramento and Nevada Road discussed below.

Further west, within the central section of the project area, all the alternative corridors also bisect the course of the Sacramento and Nevada Road. The course of the Sacramento and Nevada Road is nearly due north/south across the project area. According to Hoover et al. (1990:259), the Sacramento and Nevada Road was used by freight teams traversing the Sacramento Valley. With the building of the California Central Railroad through this area in the 1860s, staging and teaming along the Sacramento and Nevada Road, as well as elsewhere in the valley, became unnecessary.

Within Township T11N/R4E, another "Road" is plotted in the project area. As depicted, this north-south–trending road appears to go no further south than the northeastern corner of Section 26. This is likely an omission of the GLO surveyor as discussed in Section 5.2.2, as just barely visible in the northeast corner of Section 2 of T10N/R4E is the Marysville Road. It is possible that the Marysville Road extending northward from the GLO plat map of T10N/R4E is the same as the "Road" discussed above. If these sections of plotted road connect, as inferred here, all corridor alternative alignments of the Parkway intersect this potential resource.

What is labeled as a Stage Road is bisected by all of the alternative alignments in the western end of the project area in Township T11N/R4E. Running north to south where the corridor alignment alternatives bisect its path, this Stage Road begins turning to the northwest at the border between Sections 16 and 21. A branch of this unnamed Stage Road extends southeastward, perhaps connecting with the aforementioned Marysville Road.

A number of smaller, unnamed, and not fully plotted road segments occur within or immediately adjacent to various project alternatives. For example, Alternative 1 bisects a small section of road in Sections 33 and 34 of T11N/R5E. Although only a small section of this unnamed road is depicted, it is clearly on a course to intersect the Sacramento and Nevada Road near the course of Alternative 2. Other similar, only partially plotted road segments are depicted in Sections 21 and 22 of T11N/R4E, Sections 24 and 25 of T11N/R4E, Sections 27 and 34 of T11N/R4E, and Sections 35 and 36 of T11N/R4E.

As all alternatives intersect all of the major roads, or at least can be comfortably inferred to intersect them, as well as bisect a number of not fully plotted ancillary roads, no one corridor alternative alignment is more or less archaeologically sensitive then another, based solely upon the roads intersected along their length.

6.2.2.2 "House"

Besides the aforementioned roads, only one other potential historic archaeological resource was identified from the GLO maps within any of the potential corridor alignment alternatives of the Parkway project. Labeled as a "house" on the GLO plat map for Township T11N/R4E, the potential resource is situated in

the southeast quadrant of Section 23 directly within the path of the corridor alignment alternative common to both Alternatives 4 and 5, where it intersects Sankey Road at its easternmost point. No other information is known about the structure other than it was present by 1868. Air photos of this location reveal that the vicinity is currently under cultivation.

Intact remnants of this structure would likely represent an important cultural resource. Unfortunately, this section of the project area has not been previously subjected to an intensive archaeological pedestrian reconnaissance. As such, it is unknown whether remnants of this structure occur within the current APE. The potential presence of this structure elevates the archaeological sensitivity of both Alternatives 4 and 5.

Although a potential historic archaeological resource was identified in Alternatives 4 and 5, elevating the archaeological sensitivity of both of these corridor alignment alternatives, given the limitations in the original GLO mapping and the fact that the area has been plowed, this finding does not outweigh the sensitivity of the alternative corridors as determined in Section 6.2.1.

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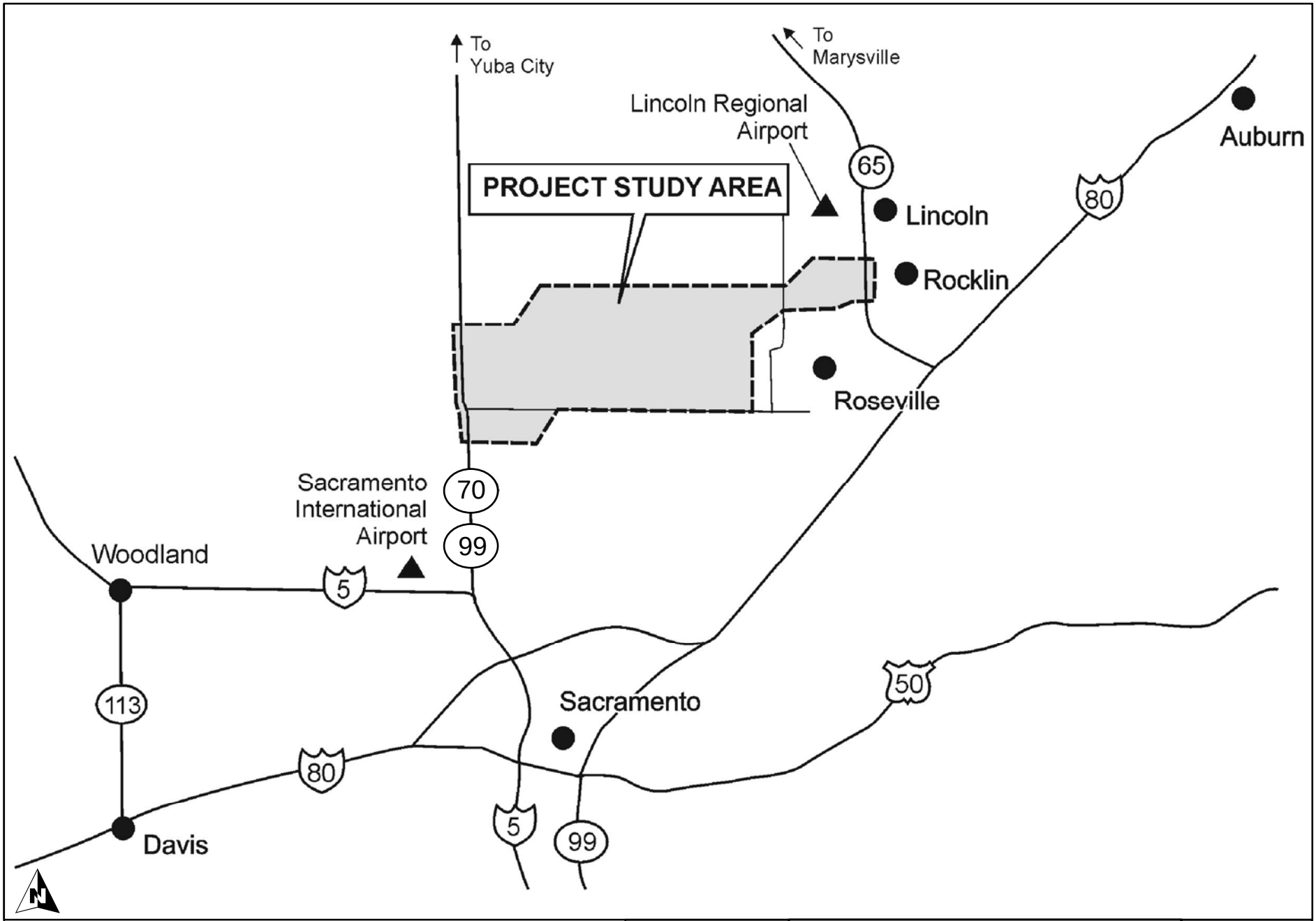
Figures



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PLACER PARKWAY

Tier 1 EIS/EIR
Archaeological
Survey Report

Project Location

Figure 1-1

June 2007

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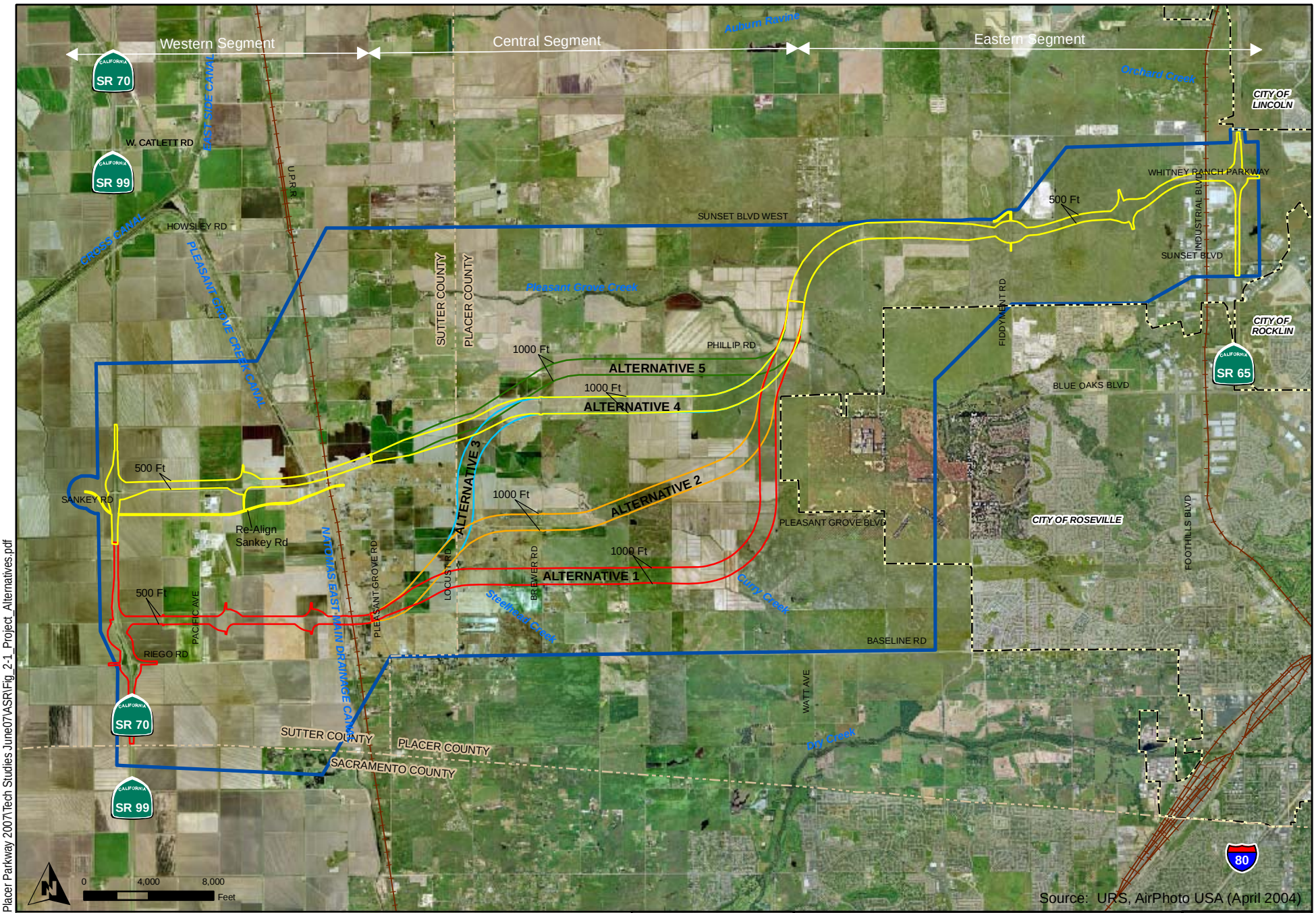
Western Segment
Central Segment
Eastern Segment
SR 70
SR 99
SR 65
SR 80
W. CATLETT RD
HOWSLEY RD
SANKEY RD
RIEGO RD
SUNSET BLVD WEST
SUNSET BLVD
WHITNEY RANCH PARKWAY
PHILLIP RD
BLUE OAKS BLVD
PLEASANT GROVE BLVD
BASELINE RD
FIDDYMENT RD
INDUSTRIAL BLVD
FOOTHILLS BLVD
WATT AVE
PACIFIC AVE
PLEASANT GROVE RD
LOCUST RD
BREWER RD
SUTTER COUNTY
PLACER COUNTY
SACRAMENTO COUNTY
CITY OF LINCOLN
CITY OF ROCKLIN
CITY OF ROSEVILLE
Auburn Ravine
Orchard Creek
Pleasant Grove Creek
Curry Creek
Steelhead Creek
Dry Creek
EAST SIDE CANAL
CROSS CANAL
PLEASANT GROVE CREEK CANAL
NATOMAS EAST MAIN DRAINAGE CANAL
ALTERNATIVE 1
ALTERNATIVE 2
ALTERNATIVE 3
ALTERNATIVE 4
ALTERNATIVE 5
500 Ft
1000 Ft
Re-Align Sankey Rd
0
4,000
8,000
Feet
Source: URS, AirPhoto USA (April 2004)
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary
PLACER PARKWAY
Tier 1 EIS/EIR
Archaeological Survey Report
Project Alternatives
Figure 2-1
June 2007
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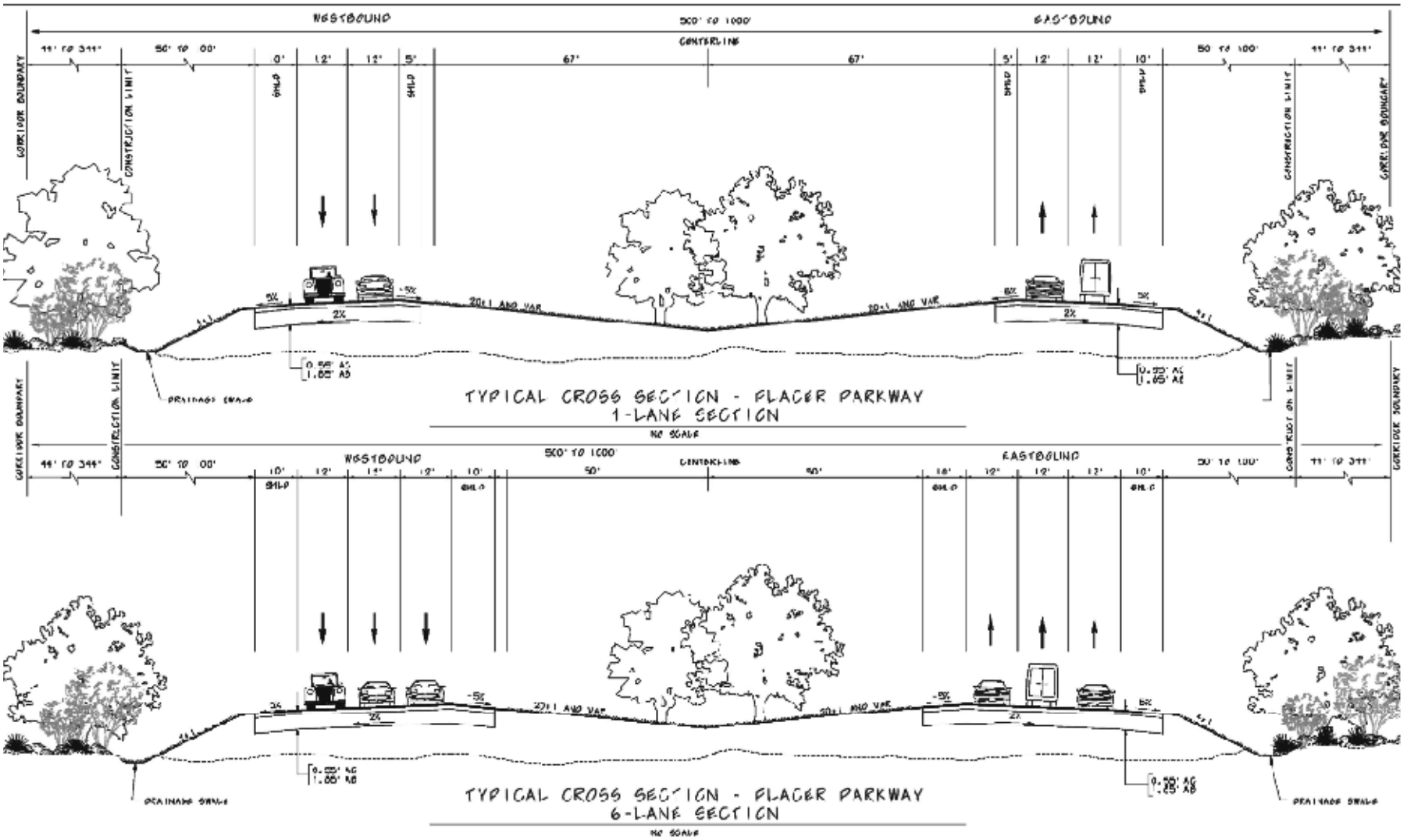

PLACER PARKWAY

Tier 1 EIS/EIR
Archaeological
Survey Report

Typcial Cross Section
(Conceptual)

Figure 2-2

June 2007

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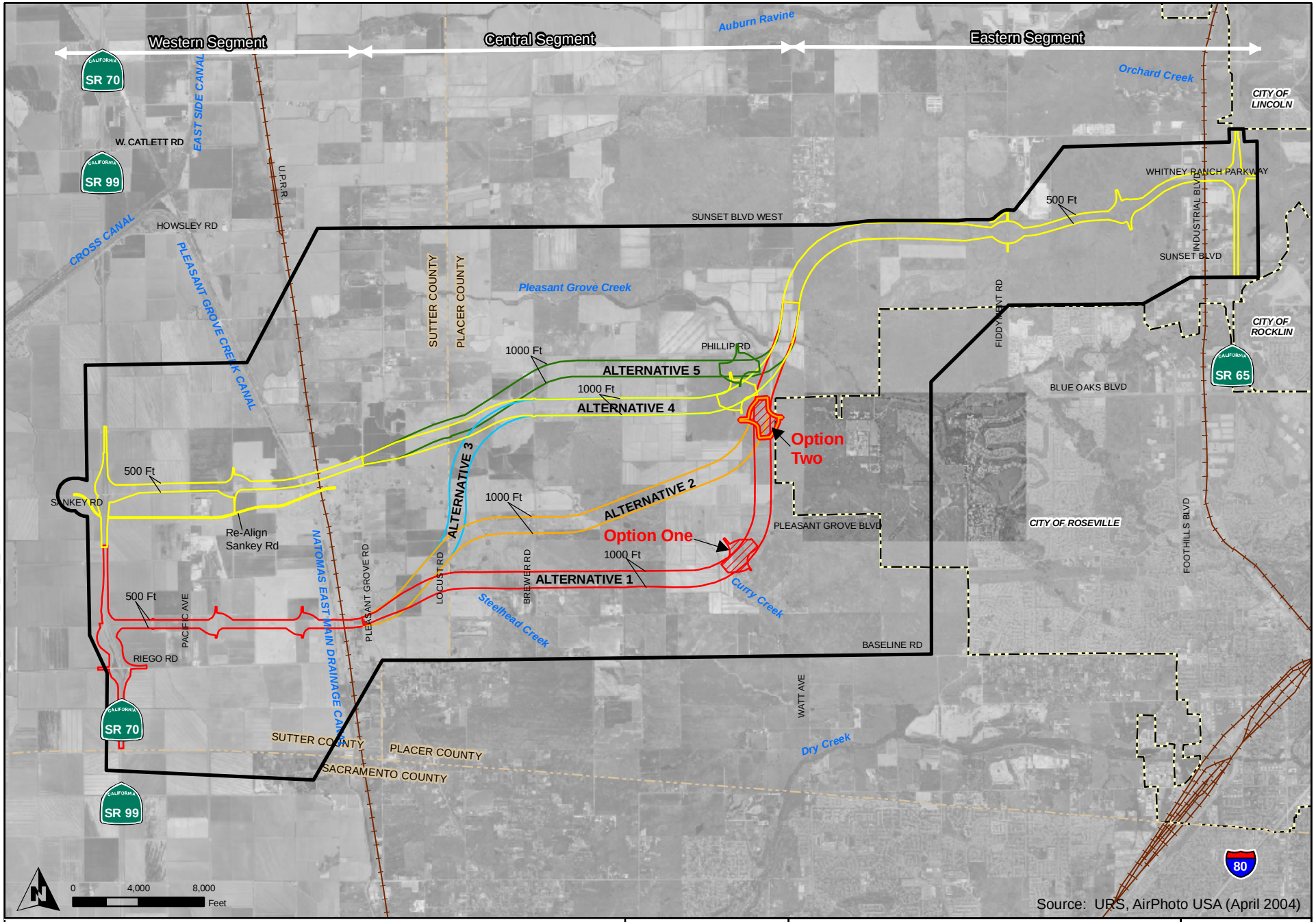

Tier 1 EIS/EIR
Archaeological
Survey Report

Potential Watt Avenue Interchange

Figure 2-3

June 2007

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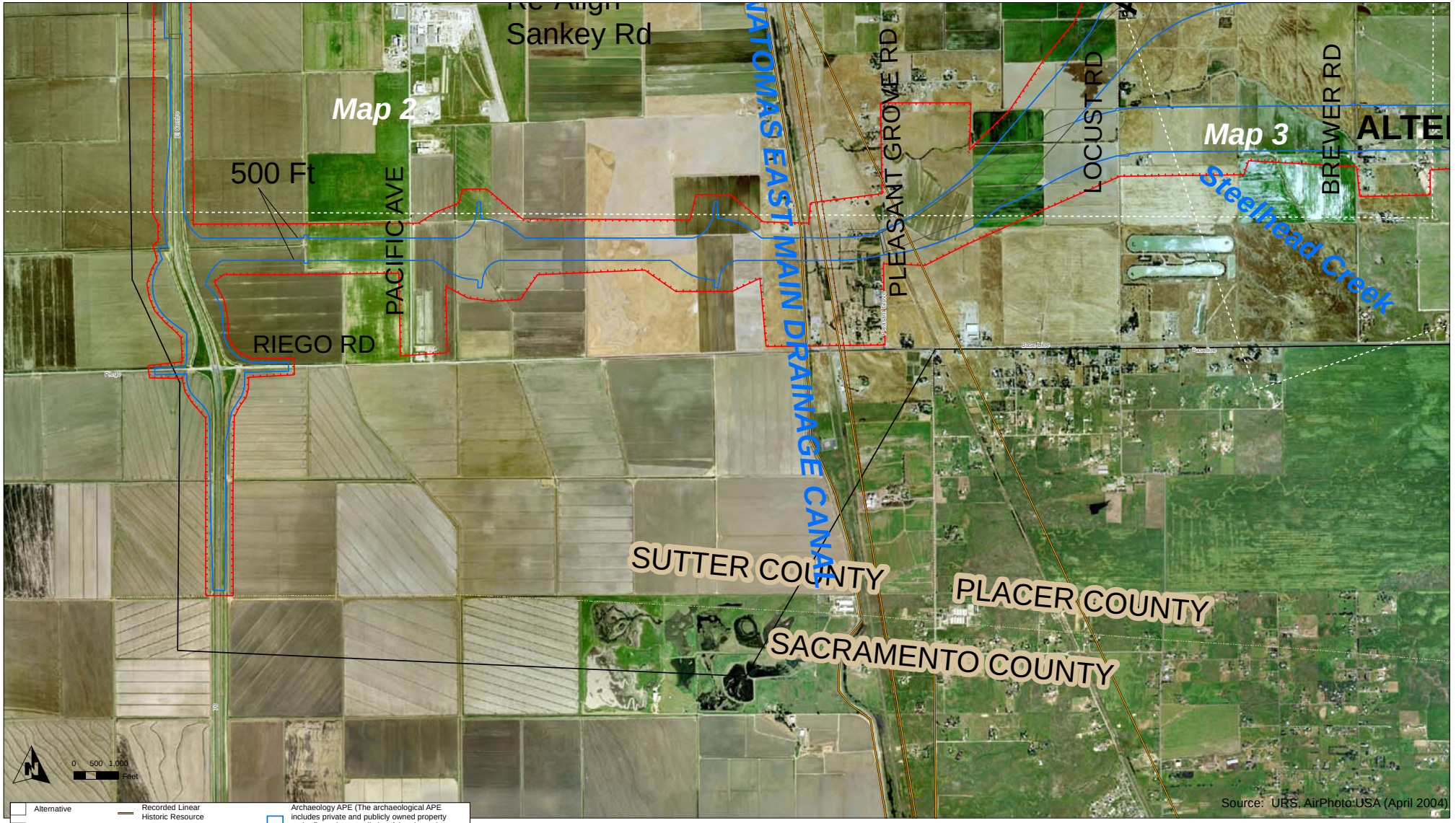
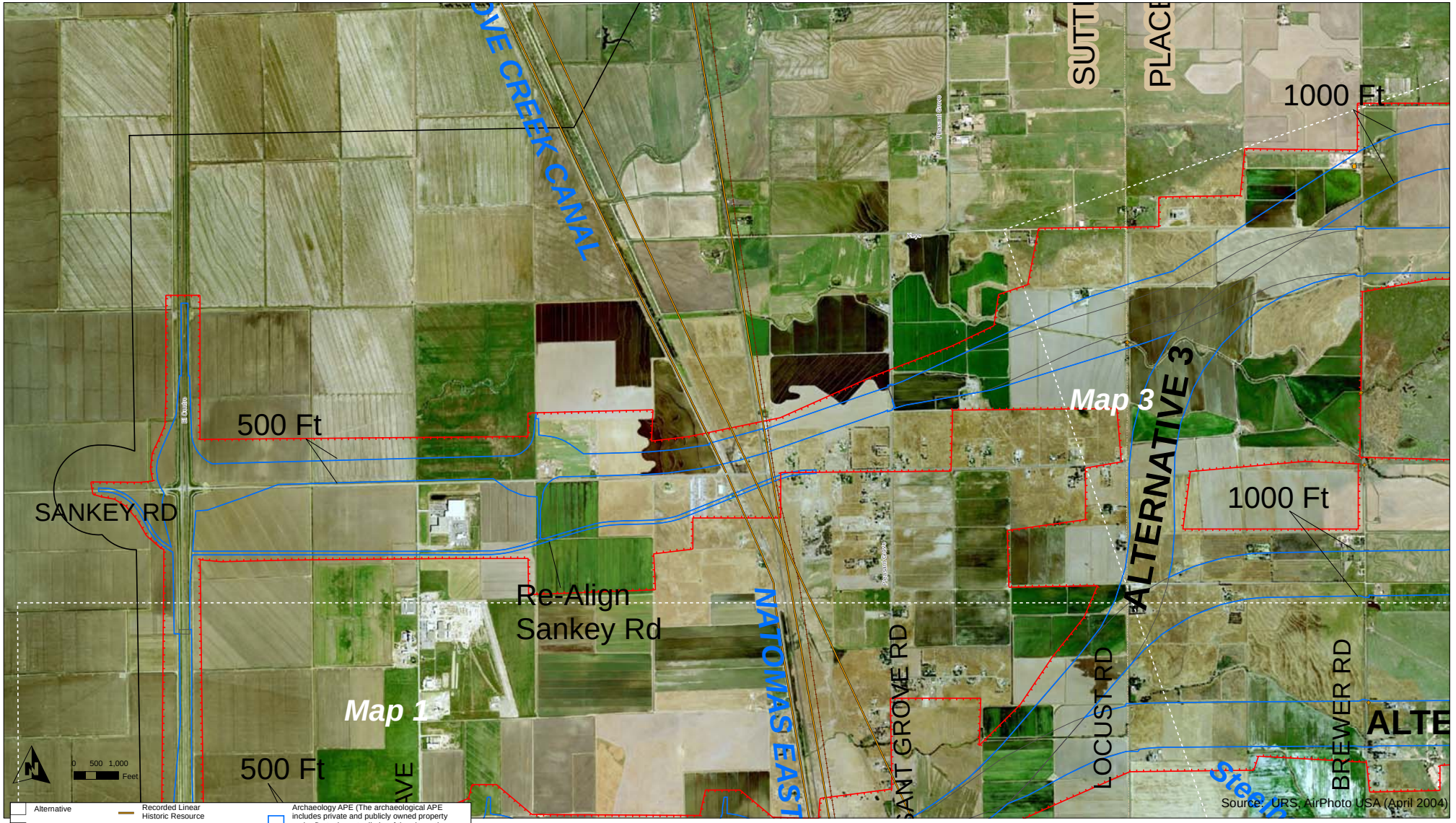


Tier 1 EIS/EIR Archaeological Survey Report

Area of Potential Effect

Figure 5-1 - Sheet 1

June 2007

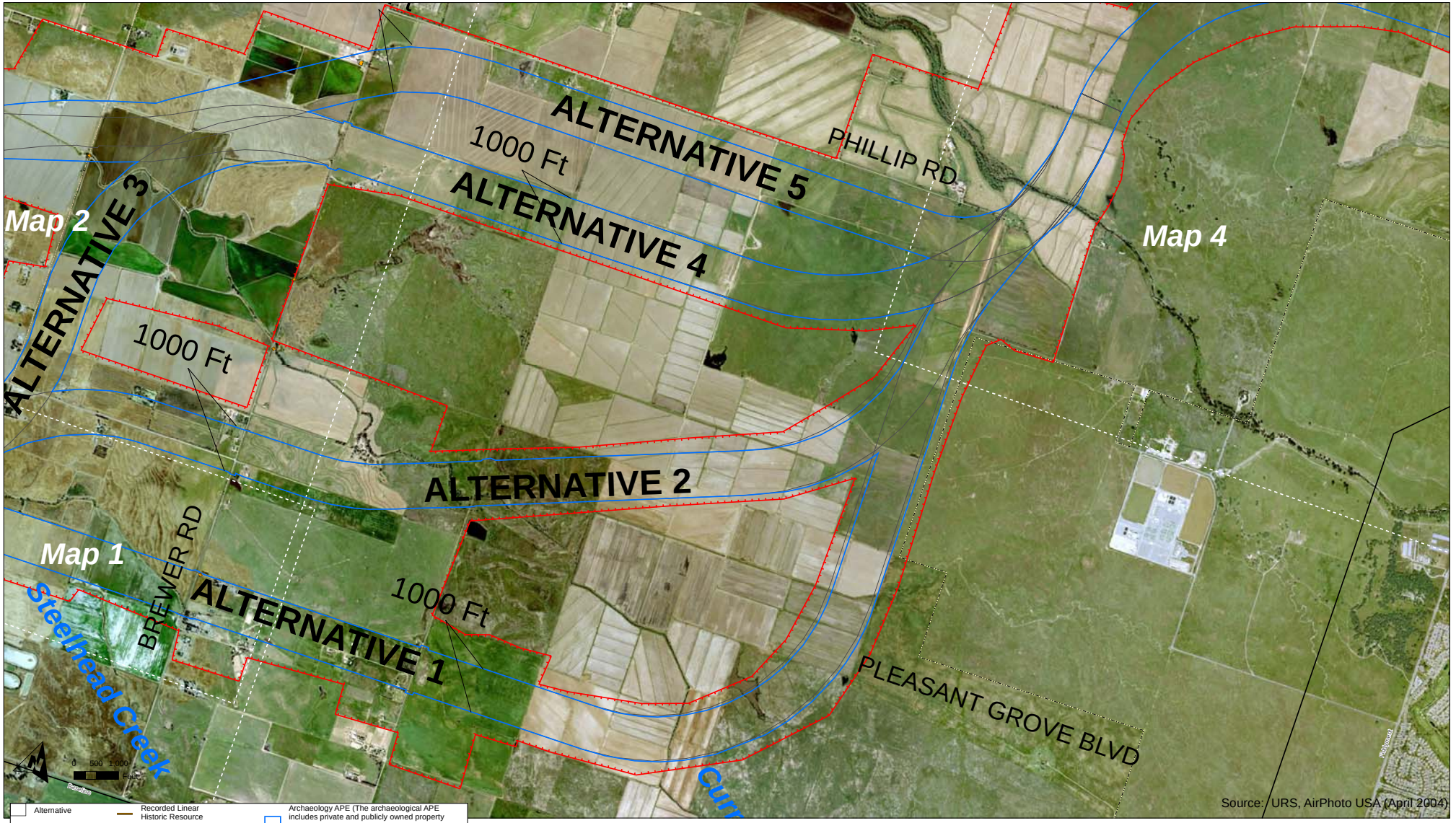


Tier 1 EIS/EIR Archaeological Survey Report

Area of Potential Effect

Figure 5-1 - Sheet 2

June 2007

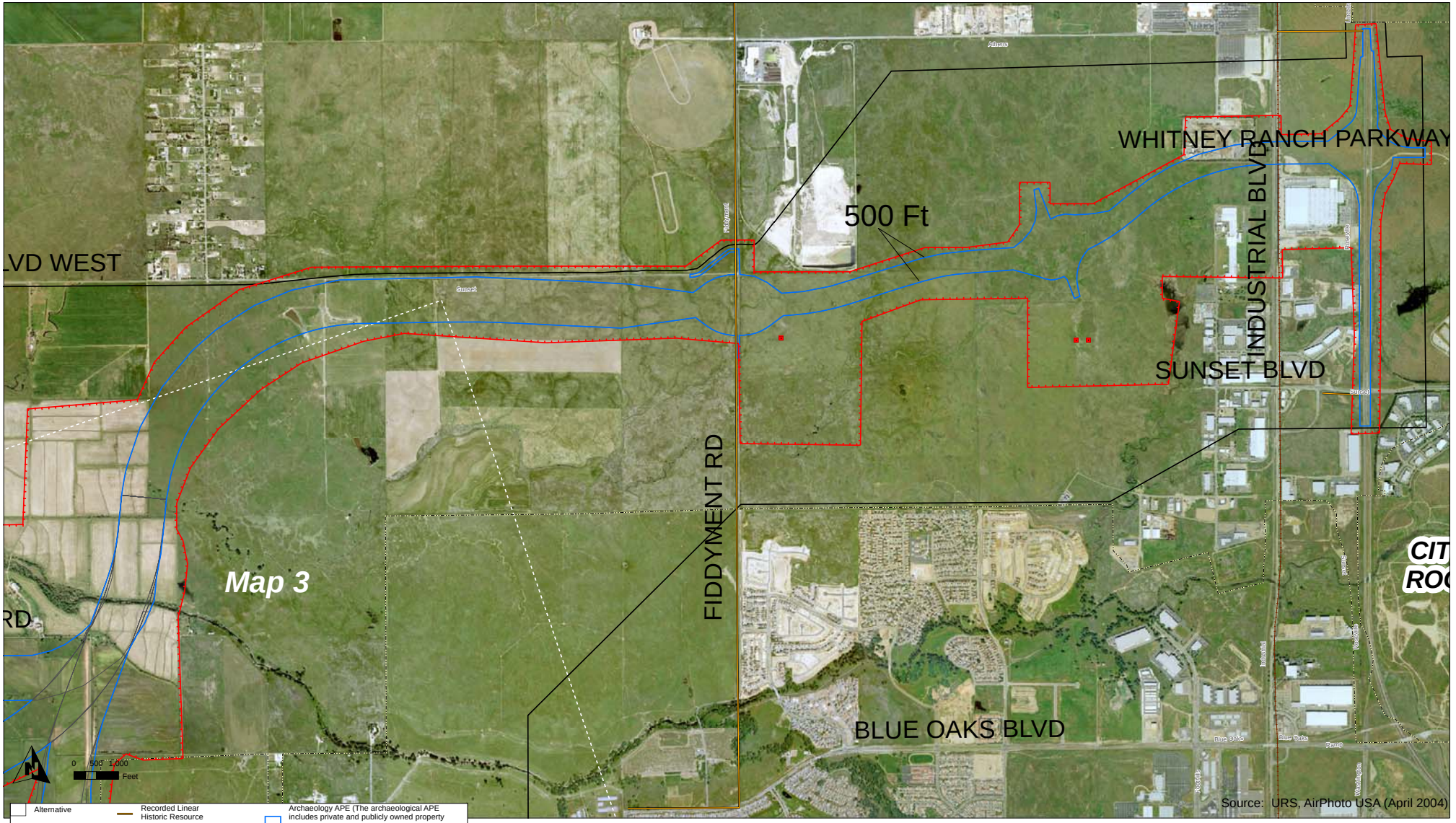


Tier 1 EIS/EIR
Archaeological
Survey Report

Area of Potential Effect

Figure 5-1 - Sheet 3

June 2007



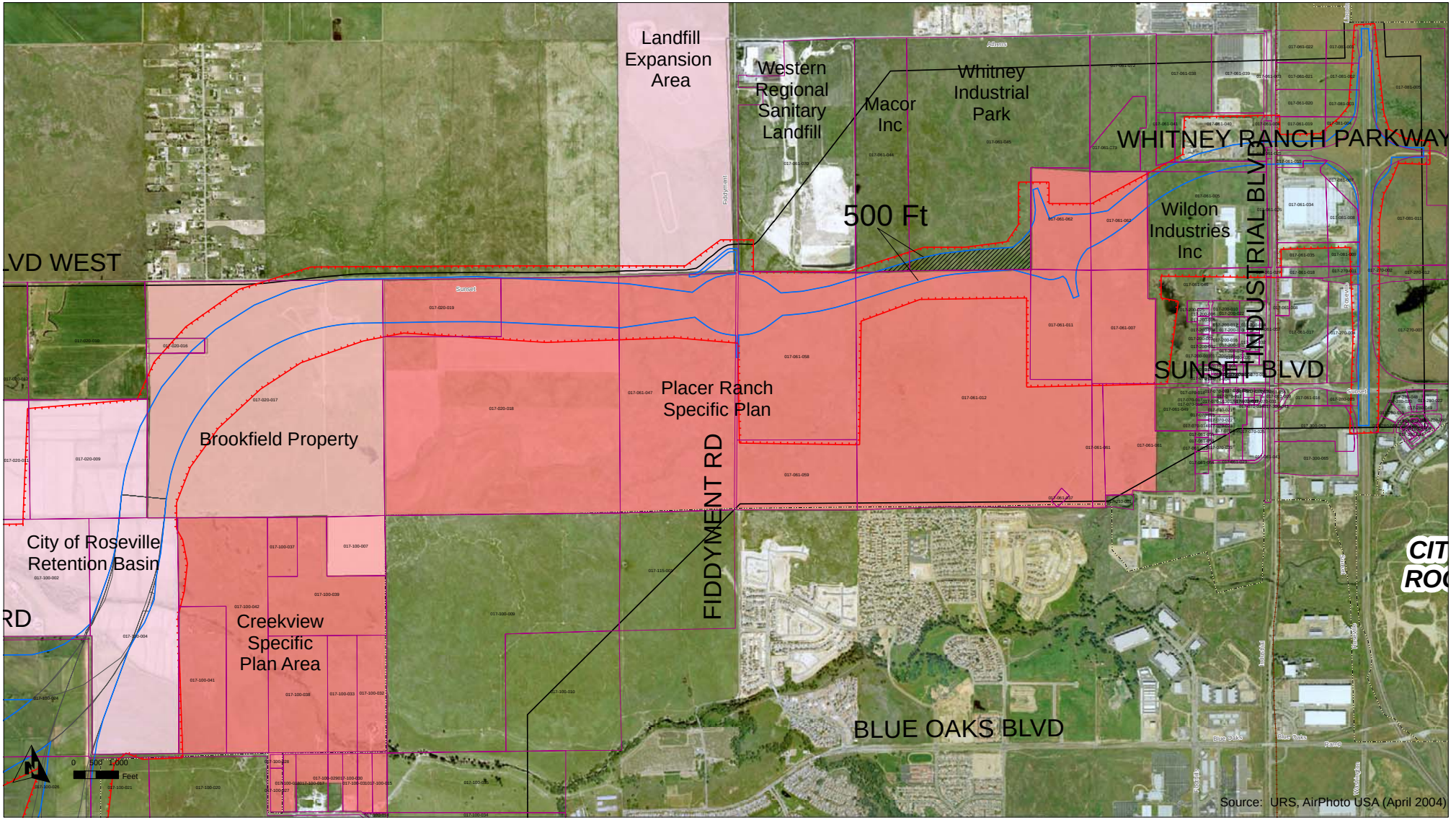
- Alternative
- Study Area Boundary
- County Boundary
- City Boundary
- Recorded Linear Historic Resource
- Recorded Architectural Resource
- Recorded Archaeological Site (Surface Point Only)
- Identified Bridge from Caltrans Bridge Inventory
- Archaeology APE (The archaeological APE includes private and publicly owned property and reflects the outer limits of the alternative alignment corridors.)
- Historic Architecture APE (The historic architecture APE includes private and publicly owned property, and comprises areas which could be subject to potential direct impacts associated with any of the alignment alternatives.)

Tier 1 EIS/EIR Archaeological Survey Report

Area of Potential Effect

Figure 5-1 - Sheet 4

June 2007



Study Area Boundary
County Boundary
City Boundary

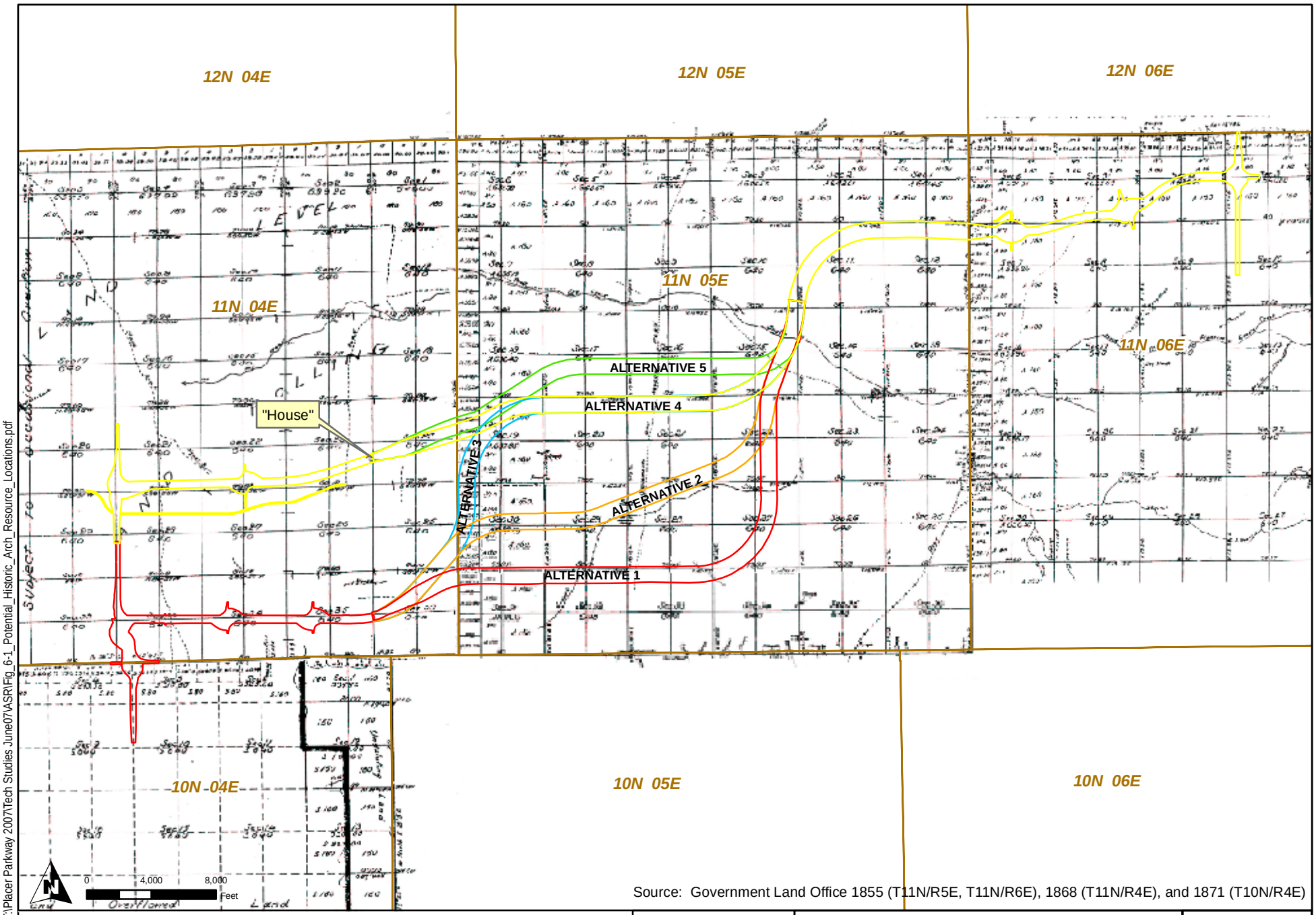
Archaeology APE (The archaeological APE includes private and publicly owned property and reflects the outer limits of the alternative alignment corridors.)

Historic Architecture APE (The historic architecture APE includes private and publicly owned property, and comprises areas which could be subject to potential direct impacts associated with any of the alignment alternatives.)

Access Not Secured, No Survey Conducted

PLACER PARKWAY

Tier 1 EIS/EIR Archaeological Survey Report	Common Alignment	***Figure 5-2*** ***June 2007***



Source: Government Land Office 1855 (T11N/R5E, T11N/R6E), 1868 (T11N/R4E), and 1871 (T10N/R4E)

Township/Range Line
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR Archaeological Survey Report

Potential Historic Archaeological Resource Locations

Figure 6-1

June 2007

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Appendix A
Programmatic Agreement

DEPARTMENT OF TRANSPORTATION
DISTRICT 3 – SACRAMENTO OFFICE
2389 GATEWAY OAKS DRIVE, SUITE 100
SACRAMENTO, CA 95833
PHONE (916) 274-0568
FAX (274) 274-0648
TTY (530) 741-4509

7.11.2006

Flex your power!
Be energy efficient!

July 5, 2006

Gene Fong
Federal Highway Administration
650 Capitol Mall, Suite 4-100
Sacramento, CA 958144-4708
Attn: Gary Sweeten

Dear Mr. Fong

The Federal Highway Administration (FHWA) and California Department of Transportation (Caltrans) are working with the Placer County Transportation Planning Agency (PCTPA) on the Placer Parkway Project. PCTPA proposes to identify and acquire right-of-way for the purpose of preserving a corridor for a future Placer Parkway, an east-west connection between State Route (SR) 65 near Lincoln in Placer County and SR 70/99 in southern Sutter County. Our agencies are working together to produce a Tier 1 Environmental Impact Statement (EIS), pursuant to the National Environmental Policy Act (NEPA) that will evaluate several corridor alternatives and will lead to the selection of one corridor for right-of-way preservation.

As a Federal undertaking, this project also requires compliance with Section 106 of the National Historic Preservation Act (NHPA). Pursuant to 36 CFR 800, the regulations implementing Section 106 of the NHPA, we have prepared a draft Programmatic Agreement that will govern Section 106 compliance responsibilities associated with implementing this undertaking. If FHWA agrees with this proposed PA, please forward the attached documentation to the California State Historic Preservation Officer for his review. Caltrans and PCTPA staff are available to meet with the SHPO to explain the undertaking in more detail if that is helpful.

Should you require any additional project information, please contact Erick Wulf at (916) 274-0563 or erick.wulf@dot.ca.gov or Anmarie Medin at (916) 274-584 or anmarie.medin@dot.ca.gov. Thank you in advance for your assistance in this matter.

Sincerely,

Japtej S Gill

JAPTEJ GILL
Chief, Environmental Planning, S4

c: Stan Tidman, Placer County Transportation Planning Agency

bc: EWulf, AMedin

PROGRAMMATIC AGREEMENT

BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER REGARDING IMPLEMENTATION OF THE PLACER PARKWAY PROJECT, PLACER COUNTY, CALIFORNIA

WHEREAS, the Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans), in cooperation with the Placer County Transportation Planning Agency (PCTPA), propose to identify and acquire right-of-way for the purpose of preserving a corridor for a future Placer Parkway, an east-west connection between State Route (SR) 65 near Lincoln in Placer County and SR 70/99 in southern Sutter County (Undertaking); and,

WHEREAS, the FHWA is preparing a Tier 1 Environmental Impact Statement (EIS), pursuant to the National Environmental Policy Act (NEPA), 42 USC 4321 *et seq,* that will evaluate several corridor alternatives and will lead to the selection of one corridor for right-of-way preservation; and

WHEREAS, given the existing and projected rapid growth in and around the project study area, the FHWA has determined it is vital to identify a corridor as early as feasible so that local jurisdiction planning decisions can consider the future Placer Parkway and before new development reduces corridor options and/or increase right-of-way acquisition costs for the Undertaking; and,

WHEREAS, the FHWA has determined that a phased approach for compliance with Section 106 of the NHPA is appropriate for the Undertaking, such that completion of the identification of historic properties, determinations of specific effects in historic properties, and resolution of any adverse effects will be carried out as part of planning for and prior to the approval of specific Tier 2 undertakings; and,

WHEREAS, the FHWA has consulted with the California State Historic Preservation Officer (SHPO) pursuant to the 1 January 2004 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA), and where the PA so directs, in accordance with 36 CFR Part 800, the regulations that implement Section 106 of the National Historic Preservation Act (NHPA) (16 U.S.C. 470f), regarding the Undertaking's potential effects on historic properties; and,

WHEREAS, following the completion of Tier 1 EIS, the FHWA, as funding becomes available for design and construction, will conduct Tier 2 environmental studies to analyze the environmental impacts of different alignments within the selected corridor in order to determine the specific transportation facility 'footprint' within the corridor , including project-level compliance with the Section 106 process to determine specific impacts to historic properties as

well as opportunities for avoidance, minimization of harm, and appropriate mitigation, if required, for the Undertaking; and,

WHEREAS, the FHWA desires to enter into a Programmatic Agreement (Agreement) at this time in order to establish a framework for conducting Section 106 consultation for Tier 1 and Tier 2; and,

WHEREAS, Caltrans has participated in consultation and has been invited to be a signatory to this Agreement; and

WHEREAS, PCTPA has participated in consultation and has been invited to be a signatory to this Agreement; and

WHEREAS, the Advisory Council on Historic Preservation (ACHP) has been afforded the opportunity to participate in the Section 106 process and has not elected to participate; and,

WHEREAS, Caltrans, on behalf of the FHWA, has initiated consultation with the Shingle Springs Band of Miwok Indians, Todd Valley Miwok-Maidu Cultural Foundation, Maidu Elders Orgainzation, and Enteprise Rancheria of Maidu Indians, as well as with the following federally-recognized Indian Tribes: United Auburn Indian Community (Tribes).

WHEREAS, the FHWA has involved, and will continue to involve, the public and historic interest groups, as stipulated under NEPA and the NHPA in a manner consistent with the PA and Caltrans' public involvement procedures;

NOW, THEREFORE, the FHWA and the SHPO agree that, upon the FHWA's decision to proceed with the Undertaking, the FHWA shall ensure that the Undertaking is implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on historic properties; and further agree that these stipulations shall govern the Undertaking and all of its parts until this Agreement expires or is terminated.

STIPULATIONS

The FHWA will ensure that the following stipulations are implemented:

I. DEFINITIONS

The definitions set forth at 36 CFR § 800.16 are applicable throughout this Agreement.

II. TIER 1 PHASED IDENTIFICATION OF HISTORIC PROPERTIES

A. Area of Potential Effects

1. The Undertaking's area of potential effects (APE) for Tier 1 is situated in southwest Placer County, between Highways 65 and 70, north of Baseline Road and south of Sunset Boulevard West (attachment A to this Agreement).

2. If modifications to the Undertaking, subsequent to the execution of this Agreement, necessitate the revision of the APE, Caltrans will consult with the PCTPA, the FHWA, and the SHPO to facilitate mutual agreement on the subject revisions. If Caltrans, the PCTPA, the FHWA, and the SHPO cannot reach such agreement, then the parties of this Agreement shall resolve the dispute in accordance with stipulation VIII.C below. If Caltrans, the PCTPA, the FHWA, and the SHPO reach mutual agreement on the proposed revisions, then Caltrans will submit a final map of the revisions, consistent with the requirements of stipulations VIII.A and XVI.A of the PA, no later than 30 days following such agreement.

B. Phased Identification of Historic Properties

1. Areas Common to all Alternatives/Corridors: the FHWA shall ensure that PCTPA or its consultants inventory properties within the area(s) common to all Tier 1 corridors according to the following specifications:
   a. Archaeological Properties
      (1) Conduct an inventory of archaeological properties where access has been secured in areas that have not previously been surveyed and those areas deemed by Caltrans PQS in need of resurvey because of the age or condition of the previous survey. Archaeological properties will be identified in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms.
   b. Built Environment Properties
      (1) Conduct a limited inventory of built environment properties within the entire Tier 1 APE. Built environment properties that have the potential to meet NRHP Criterion C will be identified and evaluated in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms. Other built environment properties within the APE that meet the age and integrity criteria will be inventoried and evaluated during Tier 2 studies, as provided for in stipulation III of this Agreement.
2. Areas Unique to Specific Alternatives/Corridors: the FHWA shall ensure that PCTPA or its consultants inventory properties within the area(s) unique to specific Tier 1 alternatives/corridors according to the following specifications:
   a. Archaeological Properties
      (1) Complete a records search for the Tier 1 APE and prepare a predictive model utilizing environmental factors and historic land-use data to assess the archaeological sensitivity of the project corridors including potential for buried resources. Segments of Tier 1 alignments/corridors that are not in common will be inventoried for archaeological properties during Tier 2 studies, as provided for in stipulation III of this Agreement.
   b. Built Environment Properties
      (1) Conduct a limited inventory of built environment properties within the entire Tier 1 APE. Built environment properties that have the potential to meet NRHP Criterion C will be identified and evaluated

in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms. Other built environment properties within the APE that meet the age and integrity criteria will be inventoried and evaluated during Tier 2 studies, as provided for in stipulation III of this Agreement.

3. Tier 1 Reporting and SHPO Consultation
   a. The FHWA shall ensure that PCTPA or its consultants prepare documentation of their findings and determinations pursuant to stipulation XVI of the PA. The reports shall be submitted to Caltrans PQS for review and approval.pursuant to stipulation XVI of the PA.
   b. Eligibility determinations shall be submitted to SHPO pursuant to stipulation VIII.C(5) of the PA.

C. Phased Assessment of Effects

1. The FHWA shall assess the potential for Tier 1 of the Undertaking to effect historic properties in accordance with stipulation X of the PA. As Tier 1 is defined as acquisition of property, the FHWA anticipates there will be no adverse effects during Tier 1. The FHWA shall consult with SHPO on the effect finding pursuant to stipulation X of the PA.

III. TIER 2 PHASED SECTION 106 CONSULTATION

A. Area of Potential Effects: The objective of the Tier 1 EIS is to identify and preserve an approximate 500'- to 1,000'-wide corridor for acquisition. The Tier 1 EIS will focus on broad topics such as general location, mode choice, area-wide air quality and land use, and other environmental issues. Once the corridor is selected, the subsequent Tier 2 environmental review, relying on the work from the Tier 1 EIS, will provide a more detailed analysis of the environmental impacts for the future transportation facility alignment alternatives within the selected corridor. Once a Tier 2 preferred alternative is chosen, the FHWA and PCTPA will delimit an APE for the Tier 2 preferred alternative in accordance with stipulation VIII.A of the PA. If subsequent modifications to the APE are necessary, the FHWA shall follow the procedures of stipulation II.A(2) of this Agreement.

B. Phased Identification and Evaluation.

1. Archaeological Properties
   a. The FHWA shall ensure that PCTPA or its consultants conducts a pedestrian reconnaissance of all lands within the final APE for any Tier 2 preferred alternative. Archaeological properties will be identified and evaluated in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms.
2. Built Environment Properties
   a. The FHWA shall ensure that PCTPA or its consultants conducts an inventory of built environment properties within the final APE for any Tier 2 preferred alternative. Built environment properties will be

evaluated for NRHP eligibility in accordance with stipulation VIII.(B) and (C) of the PA, and documented on appropriate DPR 523 inventory forms.

3. Tier 2 Reporting and SHPO Consultation
   a. The FHWA shall ensure that PCTPA or its consultants prepare documentation of their findings and determinations pursuant to stipulation XVI of the PA. The reports will be submitted to Caltrans PQS for review and approval pursuant to stipulation XVI of the PA.
   b. Eligibility determinations shall be submitted to SHPO pursuant to stipulation VIII.C(5) of the PA.

C. **Assessment of Effects.** The FHWA will assess any Tier 2 preferred alternative for its potential to affect historic properties and will consult with the SHPO pursuant to stipulation IX and X of the PA. Should FHWA find that any Tier 2 preferred alternative will result in an adverse effect, FHWA shall consult with SHPO pursuant to stipulation XI of the PA.

D. **Applicable Requirements.** FHWA will conduct the Section 106 process during Tier 2 in accordance with stipulations of the PA and applicable requirements under Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) and the Section 106 regulations (36 C.F.R. Part 800), including any subsequent amendments thereto. Nothing in this Agreement is intended to supersede or modify any requirement contained in the Section 106 statute or the Section 106 regulations.

E. **Consulting Parties**. During Tier 2, the same party may be designated as a consulting party for more than one alternative. FHWA will ensure comments of all consulting parties are incorporated into the Section 106 consultation process as provided for in all applicable laws.

IV. TIER 2 SECTION 106 COMMITMENTS AND CONCEPTUAL MITIGATION

A. FHWA and PCTPA agree to implement and/or fund the activities listed in this section as part of any Tier 2 environmental studies. Additional commitments may be made, as appropriate, as an outcome of the Section 106 consultation process for any Tier 2 alternative.

B. **Avoidance and Minimization of Impacts**

1. In General. In accordance with the consultation process required under Section 106 and in accordance with other applicable laws, FHWA, PCTPA, and Caltrans will seek ways to avoid, minimize, and mitigate adverse impacts to the environment, including adverse effects to historic properties.
2. Context-Sensitive Solutions. FHWA, PCTPA, and Caltrans will apply the principles of context-sensitive solutions during project development, in accordance with applicable Caltrans policies. In accordance with those principles and where appropriate, FHWA, PCTPA, and Caltrans will develop any Tier 2 alternative with sensitivity to aesthetic values and the historic context, utilizing the services of professionals with experience in areas related to historic preservation.

C. Should implementation of any Tier 2 alternative result in adverse effects to a historic property important solely for its information value (Criterion D), FHWA will ensure a data recovery plan is prepared according to guidance in Attachment 6 of the PA and submitted to the SHPO for review in accordance with stipulation II.C(3) of this Agreement.

D. The FHWA will not authorize the execution of any Undertaking activity that may effect (36 CFR § 800.16(i)) historic properties in the Undertaking's APE prior to the completion of the Section 106 process provided for in this Agreement.

V. NATIVE AMERICAN CONSULTATION

The FHWA has consulted with the Tribes regarding the proposed Undertaking, will continue to consult with the Tribes, and will afford the Tribes, should the Tribe so desire, the further opportunity to more directly and actively participate in the implementation of the Undertaking; Should any specific Tribe desire to participate in this Agreement as herein set forth, the FHWA shall consult with them to reach consensus regarding the manner in which the Tribe may participate in the implementation of this Agreement and the Undertaking, and regarding any time frames or other matters that may govern the nature, scope, and frequency of such participation.

VI. TREATMENT OF HUMAN REMAINS

The Agreement parties agree that human burials and related items discovered during implementation of the terms of this Agreement and of the Undertaking will be treated in accordance with the requirements of § 7050.5(b) of the California Health and Safety Code. If, pursuant to § 7050.5(c) of the Code, the county coroner or medical examiner determines that the human remains are or may be of Native American origin, then the discovery shall be treated in accordance with the provisions of §§ 5097.98(a)-(d) of the California Public Resources Code.

VII. DISCOVERIES AND UNANTICIPATED EFFECTS

If the FHWA determines, after any future construction of the Undertaking has commenced, that the Undertaking will affect a previously unidentified property that may be eligible for the National Register, or affect a known historic property in an unanticipated manner, the FHWA will address the discovery or unanticipated effect in accordance with 36 CFR § 800.13(b)(3). The FHWA at its discretion may hereunder, and pursuant to 36 CFR § 800.13(c), assume any discovered property to be eligible for inclusion in the National Register.

VIII. ADMINISTRATIVE PROVISIONS

A. PROFESSIONAL QUALIFICATIONS AND STANDARDS

1. **Professional Qualifications**. All activities prescribed by stipulations II, III, IV, V, VI, and VII of this Agreement shall be carried out under the authority of the FHWA by or under the direct supervision of a person or persons meeting at a minimum the Secretary of Interior's *Professional Qualifications Standards* (48 FR 44738-39) (PQS) in the appropriate disciplines. However, nothing in this stipulation may be interpreted to preclude the FHWA or any

agent or contractor thereof from using the properly supervised services of persons who do not meet the PQS.

2. **Documentation Standards.** Written documentation of activities prescribed by stipulations II, III, IV, V, VI, and VII of this Agreement shall conform to *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740) as well as to applicable standards and guidelines established by the SHPO.

3. **Curation and Curation Standards.** The FHWA shall ensure that, to the extent permitted under §§ 5097.98 and 5097.991 of the California Public Resources Code, the materials and records resulting from the activities prescribed by this Agreement are curated in accordance with 36 CFR Part 79. The FHWA will ensure that, to the extent permitted by applicable law and regulation, the views of the Most Likely Descendant(s) are taken into consideration when decisions are made about the disposition of other Native American archaeological materials and records.

B. **CONFIDENTIALITY.** The Agreement parties acknowledge that historic properties covered by this Agreement are subject to the provisions of section 304 of the NHPA, and section 6254.10 of the California Government Code (Public Records Act), relating to the disclosure of archaeological site information and, having so acknowledged, will ensure that all actions and documentation prescribed by this Agreement are consistent with said sections.

C. **RESOLVING OBJECTIONS.**

1. Should any Agreement party object to the manner in which the terms of this Agreement are implemented, to any action carried out or proposed with respect to the implementation of the Agreement, or to any documentation prepared in accordance with and subject to the terms of this Agreement, the FHWA shall immediately notify the other parties to this Agreement of those objections, and shall consult with the objecting party and with the other parties for no more than 14 days to resolve the objection. The FHWA shall reasonably determine when this consultation will commence. If the objection is resolved through such consultation, the action subject to dispute may proceed in accordance with the terms of that resolution. If, after initiating such consultation, the FHWA determines that the objection cannot be resolved through consultation, the FHWA shall forward all documentation relevant to the objection, including the FHWA's proposed response to the objection, to the ACHP, with the expectation that the ACHP will, within thirty (30) days after receipt of such documentation, do one of the following:

   a. advise the FHWA that the ACHP concurs in the FHWA's proposed response to the objection, whereupon the FHWA will respond to the objection accordingly. The objection shall thereby be resolved; or,

b. provide the FHWA with recommendations, which the FHWA will take into account in reaching a final decision regarding its response to the objection. The objection shall thereby be resolved; or,

c. notify the FHWA that the objection will be referred for comment, pursuant to 36 CFR § 800.7(c), and proceed to refer the objection and comment. The FHWA shall take the resulting comment into account, in accordance with 36 CFR § 800.7(c)(4) and section 110(1) of the NHPA. The objection shall thereby be resolved.

2. Should the ACHP not exercise one of the foregoing options within 30 days after receipt of all pertinent documentation, the FHWA may assume the ACHP's concurrence in its proposed response to the objection and proceed to implement that response. The objection shall thereby be resolved.

3. The FHWA shall take into account any ACHP recommendation or comment provided in accordance with section C.1 of this stipulation, with reference only to the subject of the objection. The FHWA's responsibility to carry out all actions under this Agreement not the subject to the objection will remain unchanged.

4. At any time during the implementation of the measures stipulated in this Agreement, should an objection pertaining to such implementation be raised by a member of the public, the FHWA shall notify the Agreement parties in writing of the objection and take the objection into consideration. The FHWA shall consult with the objecting party and, if the objecting party so requests, with the other Agreement parties for no more than fifteen (15) days. Within ten (10) days following closure of this consultation period, the FHWA will render a decision regarding the objection and notify all consulting parties hereunder of its decision in writing. The objection will thereby be resolved. In reaching its decision, the FHWA will take into account any comments from the consulting parties regarding the objection, including the objecting party. The FHWA's decision regarding the resolution will be final.

5. The FHWA shall provide all Agreement parties, the ACHP when the ACHP has issued comments hereunder, and any parties that have objected pursuant to section C.4 of this stipulation, with a copy of its final written decision regarding any objection addressed pursuant to this stipulation.

6. The FHWA may authorize any action subject to objection under section C of this stipulation to proceed after the objection has been resolved in accordance with the terms of section C.

D. **AMENDMENTS:** Any Agreement party may propose that this Agreement be amended, whereupon the Agreement parties will consult for no more than 30 days to consider such amendment. The FHWA may extend this consultation period.

The amendment process shall comply with 36 CFR §§ 800.6(c)(1) and 800.6(c)(7). This Agreement may be amended only upon the written agreement of the signatory parties. If it is not amended, this Agreement may be terminated by either signatory party in accordance with section E of this stipulation.

E. TERMINATION

1. If this Agreement is not amended as provided for in section D.1 of stipulation VIII, above, or if either signatory party proposes termination of this Agreement for other reasons, the signatory party proposing termination shall, in writing, notify the other Agreement parties, explain the reasons for proposing termination, and consult with the other Agreement parties for at least 30 days to seek alternatives to termination. Such consultation shall not be required if the FHWA proposes termination because the Undertaking no longer meets the definition set forth at 36 CFR § 800.16(y).

2. Should such consultation result in an agreement on an alternative to termination, then the parties shall proceed in accordance with the terms of that agreement.

3. Should such consultation fail, the signatory party proposing termination may terminate this Agreement by promptly notifying the other Agreement parties in writing. Termination hereunder shall render this Agreement without further force or effect.

4. If this Agreement is terminated hereunder, and if the FHWA determines that the Undertaking will nonetheless proceed, then the FHWA shall either consult in accordance with 36 CFR § 800.6 to develop a new Agreement, or request the comments of the ACHP, pursuant to 36 CFR Part 800.

F. DURATION OF THE AGREEMENT

1. Unless terminated pursuant to section F of stipulation VIII above, or unless it is superseded by an amended Agreement, this Agreement will be in effect following execution by the signatory parties until the FHWA, in consultation with the other Agreement parties, determines that all of its stipulations have been satisfactorily fulfilled. This Agreement will terminate and have no further force or effect on the day that the FHWA notifies the other Agreement parties in writing of its determination that all stipulations of this Agreement have been satisfactorily fulfilled.

2. The terms of this Agreement shall be satisfactorily fulfilled within twenty (20) years following the date of execution by the signatory parties. If the FHWA determines that this requirement cannot be met, the Agreement parties will consult to reconsider its terms. Reconsideration may include the continuation of the Agreement as originally executed, amendment of the Agreement, or termination. In the event of termination, the FHWA will comply with section

F.4 of stipulation VIII, above, if it determines that the Undertaking will proceed notwithstanding termination of this Agreement.

3. If the Undertaking has not been implemented within twenty (20) years following execution of this Agreement by the signatory parties, this Agreement shall automatically terminate and have no further force or effect. In such event, the FHWA shall notify the other Agreement parties in writing and, if it chooses to continue with the Undertaking, shall reinitiate review of the Undertaking in accordance with 36 CFR Part 800.

G. **EFFECTIVE DATE.** This Agreement will take effect on the date that it has been fully executed by the FHWA and the SHPO.

EXECUTION of this Agreement by the FHWA and the SHPO, its transmittal by the FHWA to the ACHP in accordance with 36 CFR § 800.6(b)(1)(iv), and subsequent implementation of its terms, shall evidence, pursuant to 36 CFR § 800.6(c), that this Agreement is an agreement with the ACHP for purposes of section 110(1) of the NHPA, and shall further evidence that the FHWA has taken into account the effects of the Undertaking on historic properties and has afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties.

SIGNATORY PARTIES:
Federal Highway Administration

By _____ Date _____
Gene Fong
Division Administrator

California State Office of Historic Preservation

By _____ Date _____
M. Wayne Donaldson, FAIA
State Historic Preservation Officer

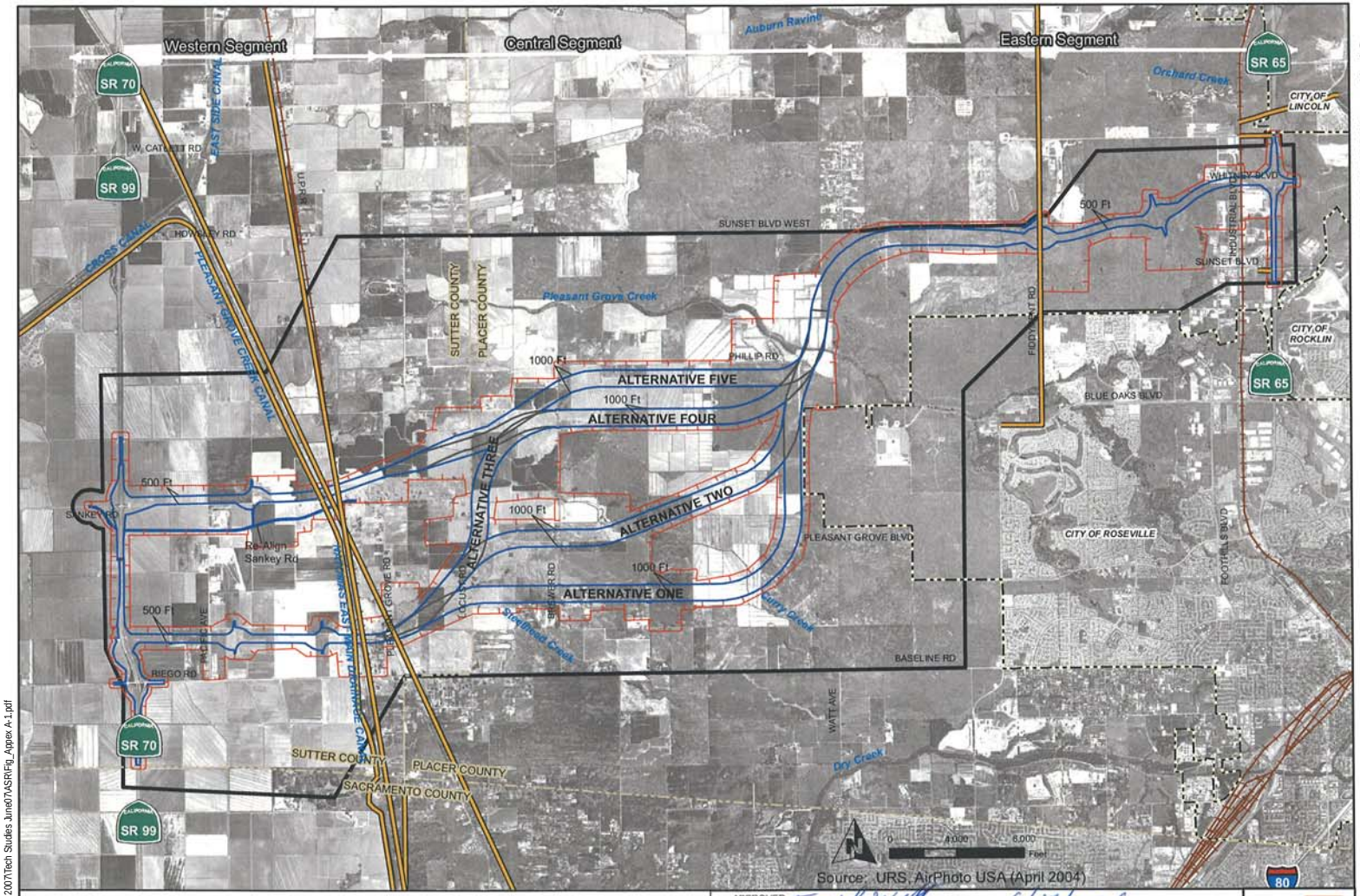
CONCURRING PARTIES:
Placer County Transportation Planning Agency

By _____ Date _____
Celia McAdam, Executive Director

California Department of Transportation

By _____ Date _____
Jody Jones, District 3 Director

Appendix B
Approved APE Map



Alternative
Study Area Boundary
County Boundary
City Boundary
Historical Architectural Resource

Recorded Linear Historic Resource
Recorded Architectural Resource
Recorded Archaeological Site (Surface Point Only)
Identified Bridge from Caltrans Bridge Inventory

Archaeology APE (The archaeological APE includes private and publicly owned property and reflects the outer limits of the alternative alignment corridors.)

Historic Architecture APE (The historic architecture APE includes private and publicly owned property, and comprises areas which could be subject to potential direct impacts associated with any of the alignment alternatives.)

APPROVED

CALTRANS DISTRICT 03, ENVIRONMENTAL BRANCH — DATE 6/19/2006

STEVE PROPST, LOCAL ASSISTANCE ENGINEER — DATE 6/29/06

Tier 1 EIS/EIR

APE: Archaeology and Historic Properties Index Map for Maps 1-4

May 2006

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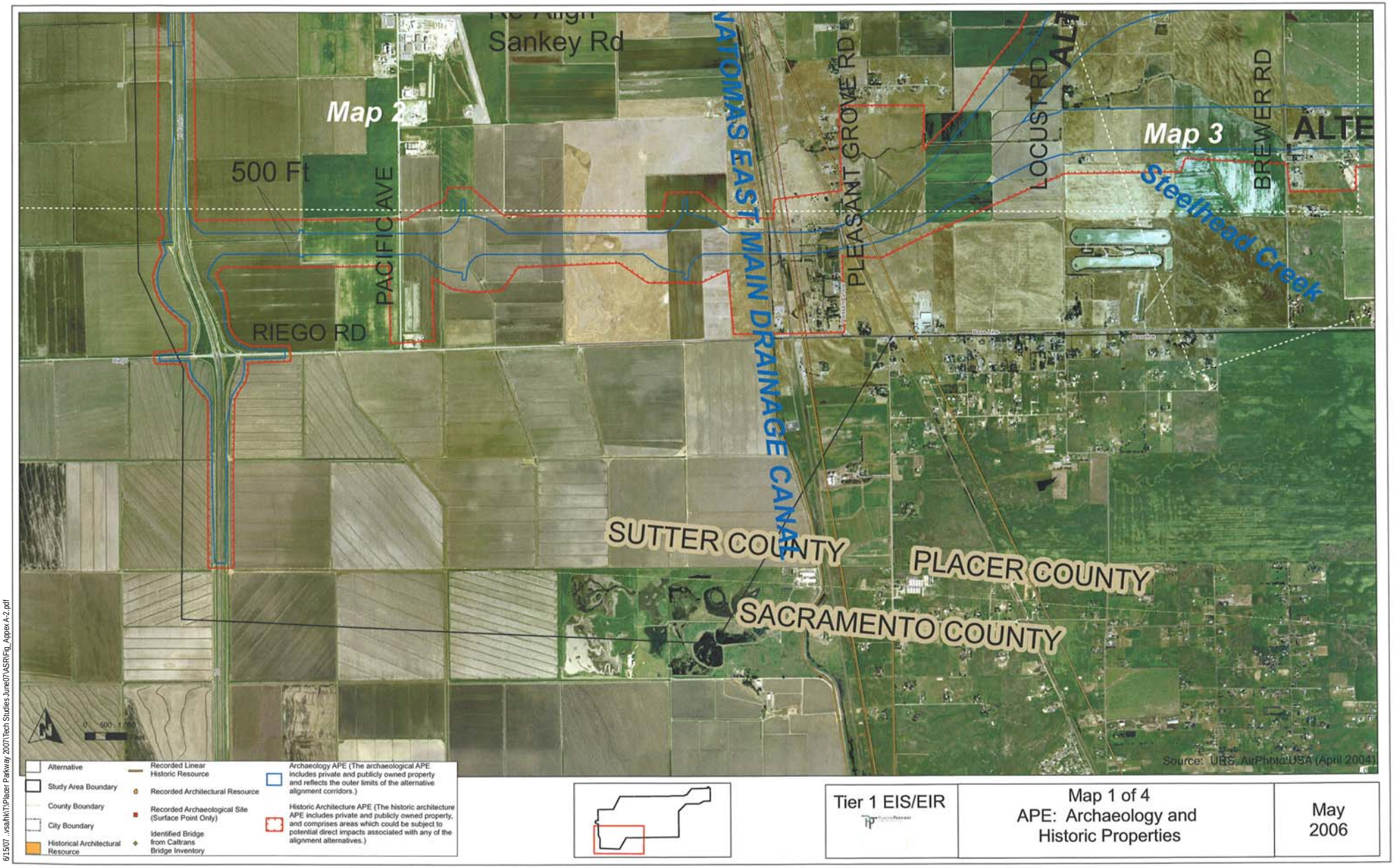

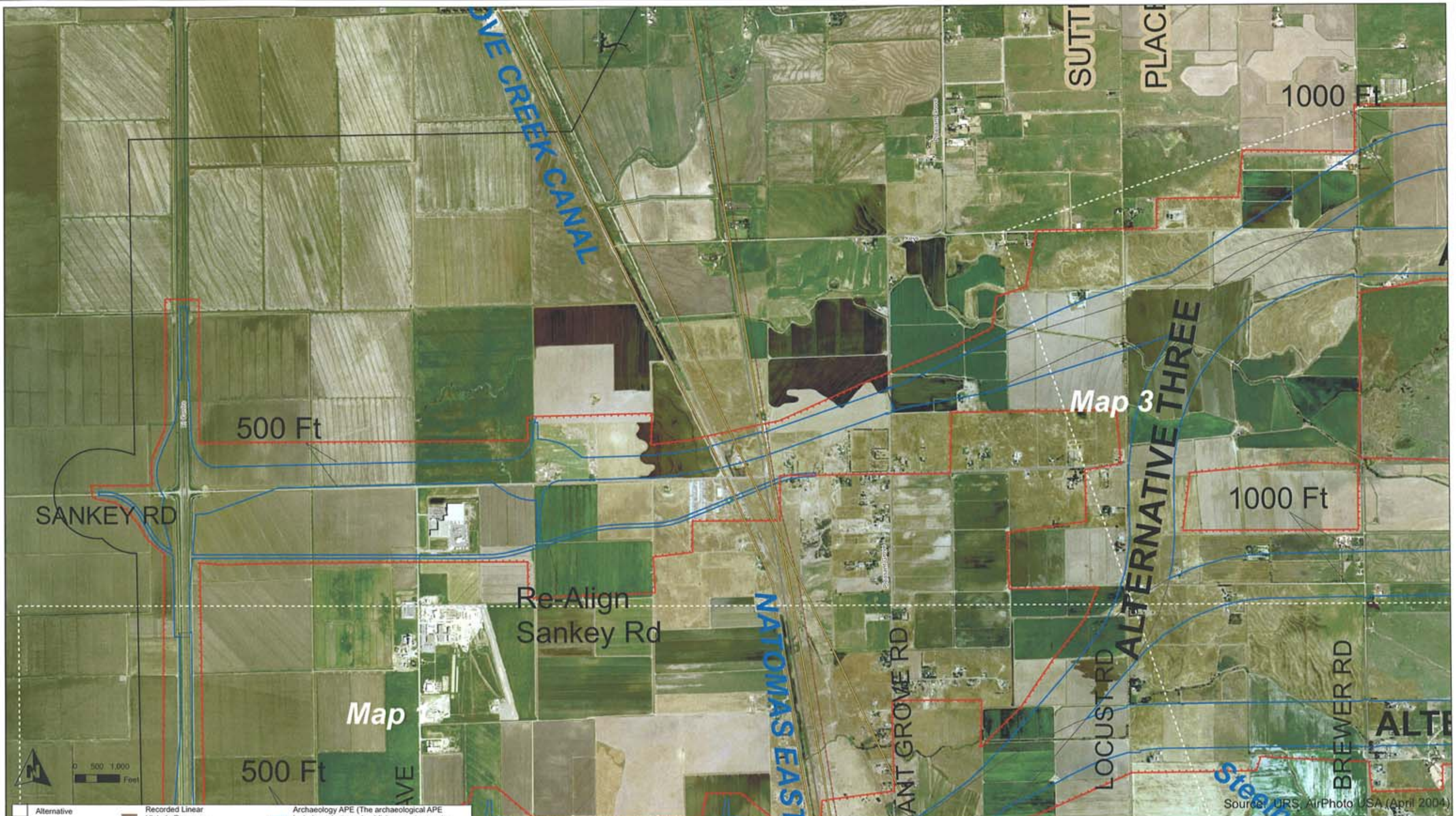

Alternative	Recorded Linear Historic Resource
Study Area Boundary	Recorded Architectural Resource
County Boundary	Recorded Archaeological Site (Surface Point Only)
City Boundary	Identified Bridge from Caltrans Bridge Inventory
Historical Architectural Resource	

Archaeology APE (The archaeological APE includes private and publicly owned property and reflects the outer limits of the alternative alignment corridors.)

Historic Architecture APE (The historic architecture APE includes private and publicly owned property, and comprises areas which could be subject to potential direct impacts associated with any of the alignment alternatives.)

Tier 1 EIS/EIR	Map 2 of 4 APE: Archaeology and Historic Properties	May 2006

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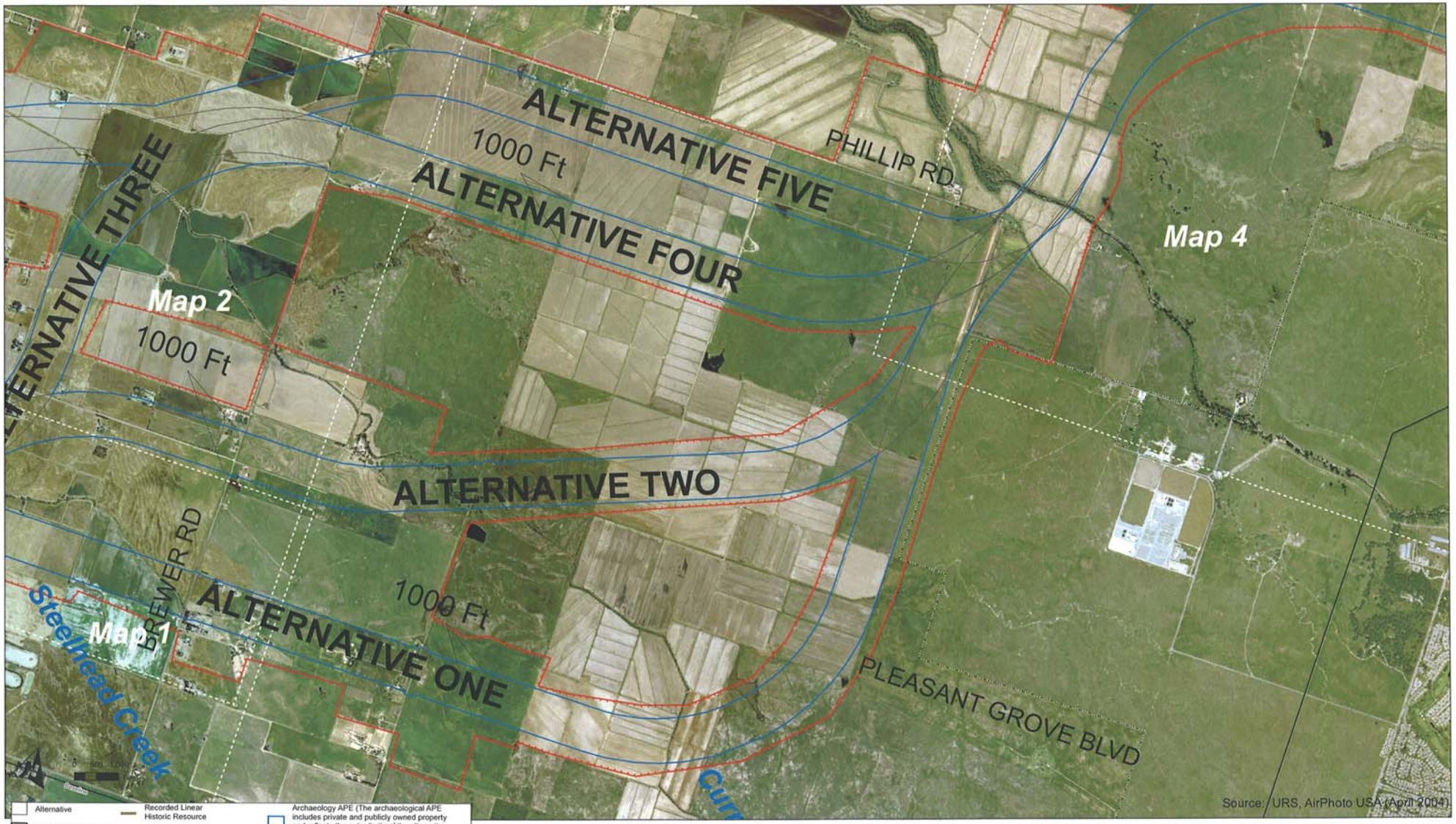

Tier 1 EIS/EIR	Map 3 of 4 APE: Archaeology and Historic Properties	May 2006

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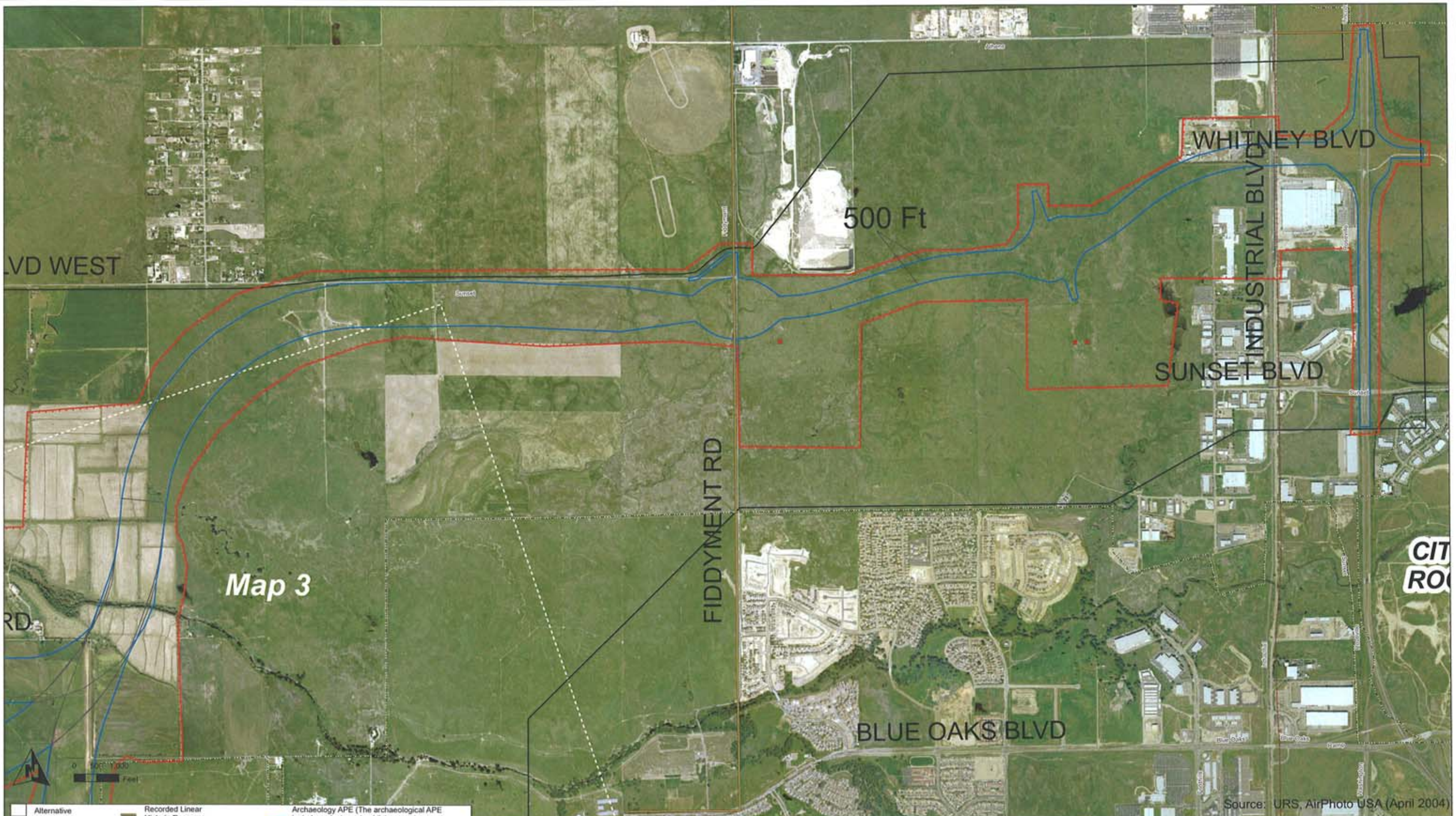

Alternative
Study Area Boundary
County Boundary
City Boundary
Historical Architectural Resource
Recorded Linear Historic Resource
Recorded Architectural Resource
Recorded Archaeological Site (Surface Point Only)
Identified Bridge from Caltrans Bridge Inventory
Archaeology APE (The archaeological APE includes private and publicly owned property and reflects the outer limits of the alternative alignment corridors.)
Historic Architecture APE (The historic architecture APE includes private and publicly owned property, and comprises areas which could be subject to potential direct impacts associated with any of the alignment alternatives.)

Tier 1 EIS/EIR	Map 4 of 4 APE: Archaeology and Historic Properties	May 2006

URS Corporation L:\Projects\PlacerParkway2006_28066593\MXD\Current Working Documents\Resource_Maps\APE_APS_Cultural_Resources_Tiles.mxd Date: 3/27/2006 6:37:36 PM Name: akkeele0

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Appendix C
NAHC Summary of Findings

URS

Debbie Pilas-Treadway
Associate Program Analyst
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

27 May 2003

Dear Ms. Pilas-Treadway,

The Placer County Transportation Planning Agency (PCTPA) has engaged URS Corporation to assist PCTPA in identifying a right-of-way connecting western Placer County and southern Sutter County. This is envisioned as a new 15-mile parkway connecting existing state highways. URS is to identify preliminary alternative alignments and screen them according to technical and environmental criteria; prepare technical studies; prepare a Tier 1 EIS/EIR that will satisfy both Caltrans and FHWA requirements, and provide public outreach support. The environmental review of the project will satisfy both CEQA and NEPA. Our contact with the PCTPA is Mr. Stan Tidman (550 High Street, Suite 107 Auburn, CA 95603). Mr. Tidman can be reached at (530) 823-4033.

Among the tasks to be completed for the initial screening phase of the project are consultation with the Native American Heritage Commission (NAHC) and local Native American groups and individuals. As such, I am requesting any information the NAHC may have regarding properties, features, or materials within the project area that may be of concern to local Native Americans. Attached to this request are two maps. The first is a project map indicating the boundaries of the study area and the second is a map depicting the USGS 7.5' topographic quadrangles in which the study area is located. On this second map, a list of sections, as well as township and range data is included. Any comments you may have regarding this area would be greatly appreciated.

If you have any questions, please feel free to call me directly at (415)-243-3826. Thank you for your cooperation.

Sincerely,

URS

Mark R. Hale
Project Archaeologist

URS Corporation
221 Main Street, Suite 600
San Francisco, CA 94105-1917
Tel: 415.896.5858
Fax: 415.882.9261

STATE OF CALIFORNIA — Gray Davis, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
Fax (916) 657-5390
Web Site www.nahc.ca.gov

June 6, 2003

Mark Hale
URS Corporation
221 Main Street, Suite 600
San Francisco, CA 94105-1917

Sent by Fax: 415-882-9261
No of Pages: 4

RE: Proposed 15 Mile Parkway Connecting Existing Highways; Sacramento, Placer and Sutter Counties.

Dear Mr. Hale:

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend other with specific knowledge. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4038.

Sincerely,

Debbie Pilas-Treadway
Environmental Specialist III

NATIVE AMERICAN CONTACTS
Placer County
June 6, 2003

Rose Enos
15310 Bancroft Road — Maidu
Auburn , CA 95603 — Washoe
(530) 878-2378

United Auburn Indian Community of the Auburn
Jessica Tavares, Chairperson
661 Newcastle Road, Suite 1 — Maidu
Newcastle , CA 95658 — Miwok
916 663-3720
916 663-3727 - Fax

Shingle Springs Band of Miwok Indians
Jeff Murray, Cultural Resources Manager
P.O. Box 1340 — Miwok
Shingle , CA 95682 — Maidu
(530) 676-8010
(530) 676-8033 Fax

United Auburn Indian Community of the Auburn
Sam Starkey
953 Indian Rancheria Road — Maidu
Auburn , CA 95603 — Miwok
(530) 878-2378 - work
(530) 885-2533 - home

Todd Valley Miwok-Maidu Cultural Foundation
Christopher Suehead, Cultural Representative
PO Box 1490 — Miwok
Foresthill , CA 95631 — Maidu
(530) 367-3893 - Voice / Fax
tvmmcf@foothill.net

United Auburn Indian Community of the Auburn
David Keyser
961 Indian Rancheria Road — Maidu
Auburn , CA 95603 — Miwok
(530) 885-8229 - Home
(916) 663-3720 - Work

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regards to the cutural assessmet for the proposed 15 mile parkway connecting existing highways, Placer County.

NATIVE AMERICAN CONTACTS
Sutter County
June 6, 2003

Enterprise Rancheria of Maidu Indians
Harvey Angle, Chairperson
1940 Feather River Blvd., Suite B Maidu
Oroville , CA 95965

(916) 532-9214
(916) 532-1768 FAX

Maidu Elders Organization
Martha Noel
PO Box 206 Maidu
Dobbins , CA 95935

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regards to the cutural assessmet for the proposed 15 mile parkway connecting existing highways, Sutter County.

NATIVE AMERICAN CONTACTS
Sacramento County
June 6, 2003

Rose Enos
15310 Bancroft Road — Maidu
Auburn , CA 95603 — Washoe
(530) 878-2378

United Auburn Indian Community of the Auburn
David Keyser
961 Indian Rancheria Road — Maidu
Auburn , CA 95603 — Miwok
(530) 885-8229 - Home
(916) 663-3720 - Work

Joe Marine
1025 35th Avenue, Apt 9 — Maidu
Sacramento , CA 95822
916 429-7307

United Auburn Indian Community of the Auburn
Jessica Tavares, Chairperson
661 Newcastle Road, Suite 1 — Maidu
Newcastle , CA 95658 — Miwok
916 663-3720
916 663-3727 - Fax

Maidu Elders Organization
Martha Noel
PO Box 206 — Maidu
Dobbins , CA 95935

United Auburn Indian Community of the Auburn
Sam Starkey
953 Indian Rancheria Road — Maidu
Auburn , CA 95603 — Miwok
(530) 878-2378 - work
(530) 885-2533 - home

Shingle Springs Band of Miwok Indians
Jeff Murray, Cultural Resources Manager
P.O. Box 1340 — Miwok
Shingle , CA 95682 — Maidu
(530) 676-8010
(530) 676-8033 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regards to the cutural assessmet for the proposed 15 mile parkway connecting existing highways, Sacramento County.

URS

16 June 2003

Joe Marine
1025 – 35th Avenue, Apt 9
Sacramento, CA 95822

Dear Joe Marine,

The Placer County Transportation Planning Agency (PCTPA) has engaged URS Corporation to assist PCTPA in identifying a right-of-way connecting western Placer County and southern Sutter County. This is envisioned as a new 15-mile parkway connecting existing state highways. URS is to identify preliminary alternative alignments and screen them according to technical and environmental criteria; prepare technical studies; prepare a Tier 1 EIS/EIR that will satisfy both Caltrans and FHWA requirements, and provide public outreach support. The environmental review of the project will satisfy both CEQA and NEPA. Our contact with the PCTPA is Mr. Stan Tidman (550 High Street, Suite 107 Auburn, CA 95603). Mr. Tidman can be reached at (530) 823-4033.

Among the tasks to be completed for the initial screening phase of the project are consultation with the Native American Heritage Commission (NAHC) and local Native American groups and individuals. As such, I am requesting any information you may have regarding properties, features, or materials within the project area that may be of concern to local Native Americans. Attached to this request are two maps. The first is a project map indicating the boundaries of the study area and the second is a map depicting the USGS 7.5' topographic quadrangles in which the study area is located. On this second map, a list of sections, as well as township and range data is included. Any comments you may have regarding this area would be greatly appreciated.

If you have any questions, please feel free to call me directly at (415)-243-3826. Thank you for your cooperation.

Sincerely,

URS

Mark R. Hale
Project Archaeologist

Enclosures

URS Corporation
221 Main Street, Suite 600
San Francisco, CA 94105
Tel: 415.896.5858
Fax: 415.882.9261
www.urscorp.com

URS

16 June 2003

Jessica Tavares
Chairperson
United Auburn Indian Community of the Auburn Rancheria
661 Newcastle Road, Suite 1
Newcastle, Ca 95658

Dear Jessica Tavares,

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If you have any questions, please feel free to call me directly at (415)-243-3826. Thank you for your cooperation.

Sincerely,

URS

Mark R. Hale
Project Archaeologist

Enclosures

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221 Main Street, Suite 600
San Francisco, CA 94105
Tel: 415.896.5858
Fax: 415.882.9261
www.urscorp.com

URS

16 June 2003

Martha Noel
Maidu Elders Organization
P.O. Box 206
Dobbins, CA 95935

Dear Martha Noel,

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URS

16 June 2003

Harvey Angle
Chairperson
Enterprise Rancheria of Maidu Indians
1940 Feather River Blvd., Suite B
Oroville, CA 95965

Dear Harvey Angle,

The Placer County Transportation Planning Agency (PCTPA) has engaged URS Corporation to assist PCTPA in identifying a right-of-way connecting western Placer County and southern Sutter County. This is envisioned as a new 15-mile parkway connecting existing state highways. URS is to identify preliminary alternative alignments and screen them according to technical and environmental criteria; prepare technical studies; prepare a Tier 1 EIS/EIR that will satisfy both Caltrans and FHWA requirements, and provide public outreach support. The environmental review of the project will satisfy both CEQA and NEPA. Our contact with the PCTPA is Mr. Stan Tidman (550 High Street, Suite 107 Auburn, CA 95603). Mr. Tidman can be reached at (530) 823-4033.

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16 June 2003

Sam Starkey
United Auburn Indian Community of the Auburn Rancheria
953 Indian Rancheria Road
Auburn, CA 95603

Dear Sam Starkey,

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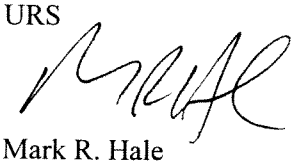

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16 June 2003

David Keyser
United Auburn Indian Community of the Auburn Rancheria
961 Indian Rancheria Road
Auburn, CA 95603

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16 June 2003

Christopher Suehead
Cultural Representative
Todd Valley Miwok-Maidu Cultural Foundation
P.O. Box 1490
Foresthill, CA 95631

Dear Christopher Suehead,

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Rose Enos
15310 Bancroft Road
Auburn, CA 95603

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16 June 2003

Jeff Murray
Cultural Resources Manager
Shingle Springs Band of Miwok Indians
P.O. Box 1340
Shingle, CA 95682

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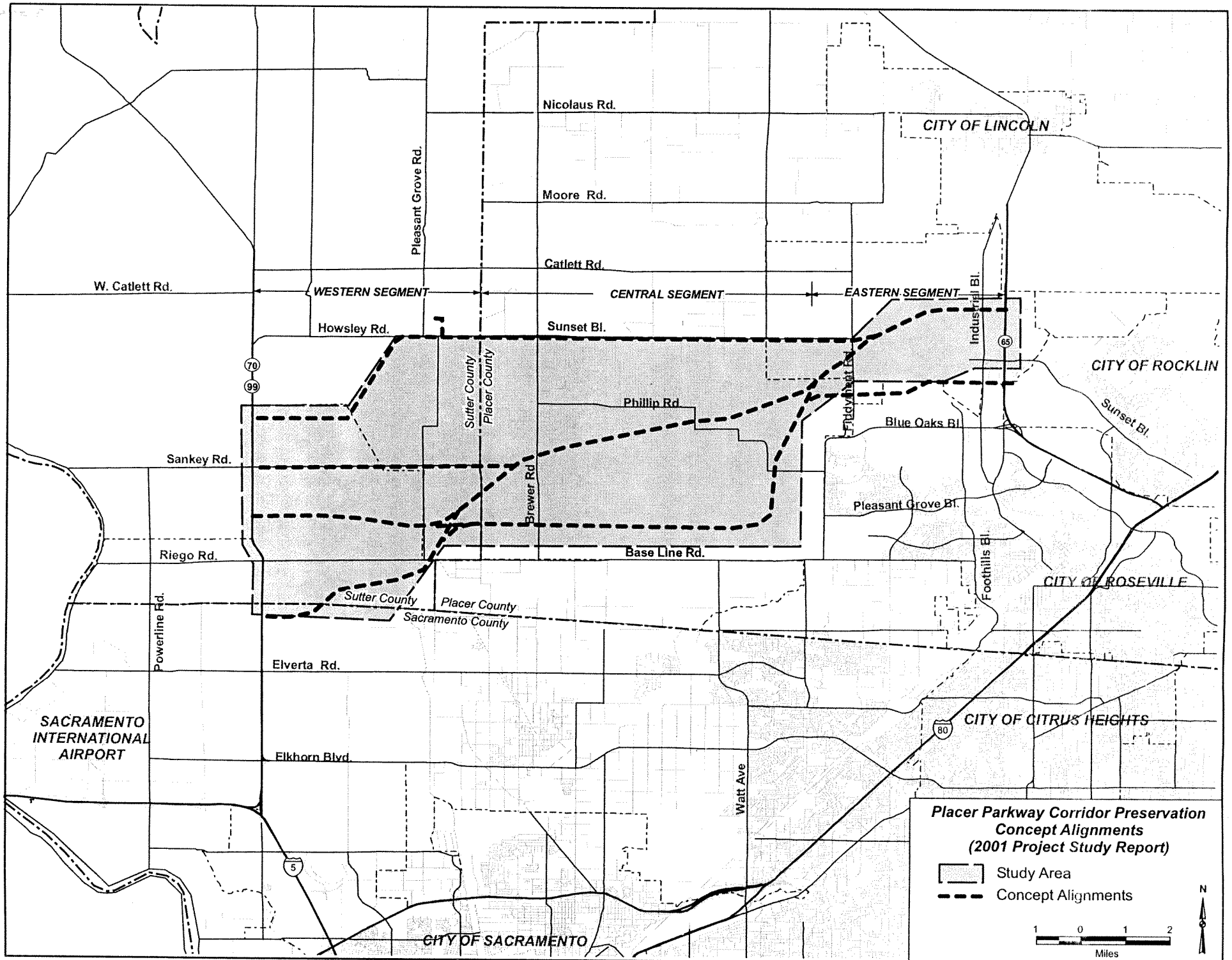
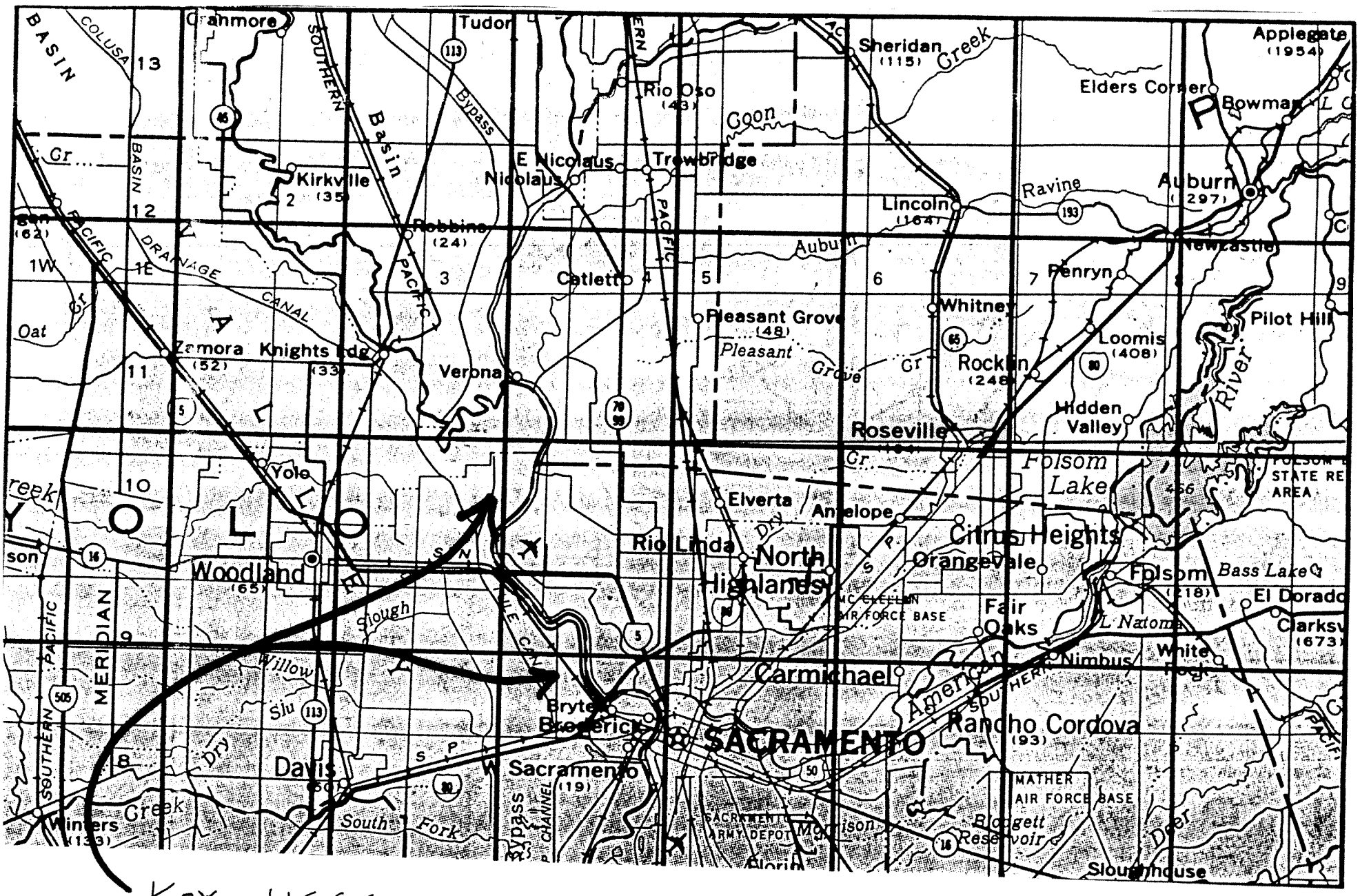
The following maps were included with each of the June 16, 2003 letters to Native American representatives



4/17/03 vsa \28066591 Placer Parkway\pkwy concept aligns.cdr



KEY: USGS 7.5 TOPOGRAPHIC QUADRANGLES FOR PROJECT

VERONA PLEASANT GROVE ROSEVILLE

TAYLOR MONUMENT RIO LINDA

TOWNSHIP AND RANGE DATA:

1) PLEASANT GROVE 7.5
   T10N R4E
   SECTION 1
   T11N R4E
   SECTIONS 11, 12, 13, 14, 23, 24, 25, 26, 35, & 36
   T11N R5E
   SECTIONS 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20
   21, 22, 23, 26, 27, 28, 29, 30, 31, 32, 33, 34, & 35

2) RIO LINDA 7.5
   T10N R4E
   SECTIONS 1 & 2

3) ROSEVILLE 7.5
   T11N R5E
   SECTIONS 12, 13, 24, 25, & 36
   T11N R6E
   SECTIONS 3, 4, 5, 6, 7, 8, 9, 10 & 18

4) TAYLOR MONUMENT 7.5
   T10N R4E
   SECTIONS 2, 3, 4, 9, 10, & 11

5) VERONA 7.5
   T11N R4E
   SECTIONS 10, 11, 14, 15, 16, 17, 20, 21,
   22, 23, 26, 27, 28, 29, 32, 33
   34, & 35.

URS

13 October 2003

Jessica Tavares
Chairperson
United Auburn Indian Community of the Auburn Rancheria
661 Newcastle Road, Suite 1
Newcastle, Ca 95658

Dear Jessica Tavares,

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Sincerely,

URS Corporation

for Mark R. Hale
Project Archaeologist

Enclosure: Maps (2)

URS

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URS Corporation
221 Main Street, Suite 600
San Francisco, CA 94105
Tel: 415.896.5858
Fax: 415.882.9261
www.urscorp.com

URS

I apologize for any inconvenience, however, it is important that you be provided ample opportunity to comment, particularly at this very early stage in project planning. If you have any questions, please feel free to call me directly at (415)-243-3826. Thank you for your cooperation.

Sincerely,

URS Corporation

Mark R. Hale
Project Archaeologist

Enclosure: Maps (2)

URS

13 October 2003

Harvey Angle
Chairperson
Enterprise Rancheria of Maidu Indians
1940 Feather River Blvd., Suite B
Oroville, CA 95965

Dear Harvey Angle,

In June 2003, I requested information you may have regarding properties, features, or materials within the Placer Parkway Corridor Preservation Project study area that may be of concern to local Native Americans. I made follow-up calls concerning this request in August 2003.

We have not been able to confirm that you received our earlier materials, and want to be sure that this information did not go astray. We are interested in obtaining the views and concerns of the local Native American community concerning this proposed project. In the event you no longer retain our original request for information, below is found the text from that original request:

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Sincerely,

URS Corporation

for Mark R. Hale
Project Archaeologist

Enclosure: Maps (2)

URS

13 October 2003

Martha Noel
Maidu Elders Organization
P.O. Box 206
Dobbins, CA 95935

Dear Martha Noel,

In June 2003, I requested information you may have regarding properties, features, or materials within the Placer Parkway Corridor Preservation Project study area that may be of concern to local Native Americans. I made follow-up calls concerning this request in August 2003.

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Sincerely,

URS Corporation

for Mark R. Hale
Project Archaeologist

Enclosure: Maps (2)

URS

13 October 2003

Joe Marine
1025 – 35th Avenue, Apt 9
Sacramento, CA 95822

Dear Joe Marine,

In June 2003, I requested information you may have regarding properties, features, or materials within the Placer Parkway Corridor Preservation Project study area that may be of concern to local Native Americans. I made follow-up calls concerning this request in August 2003.

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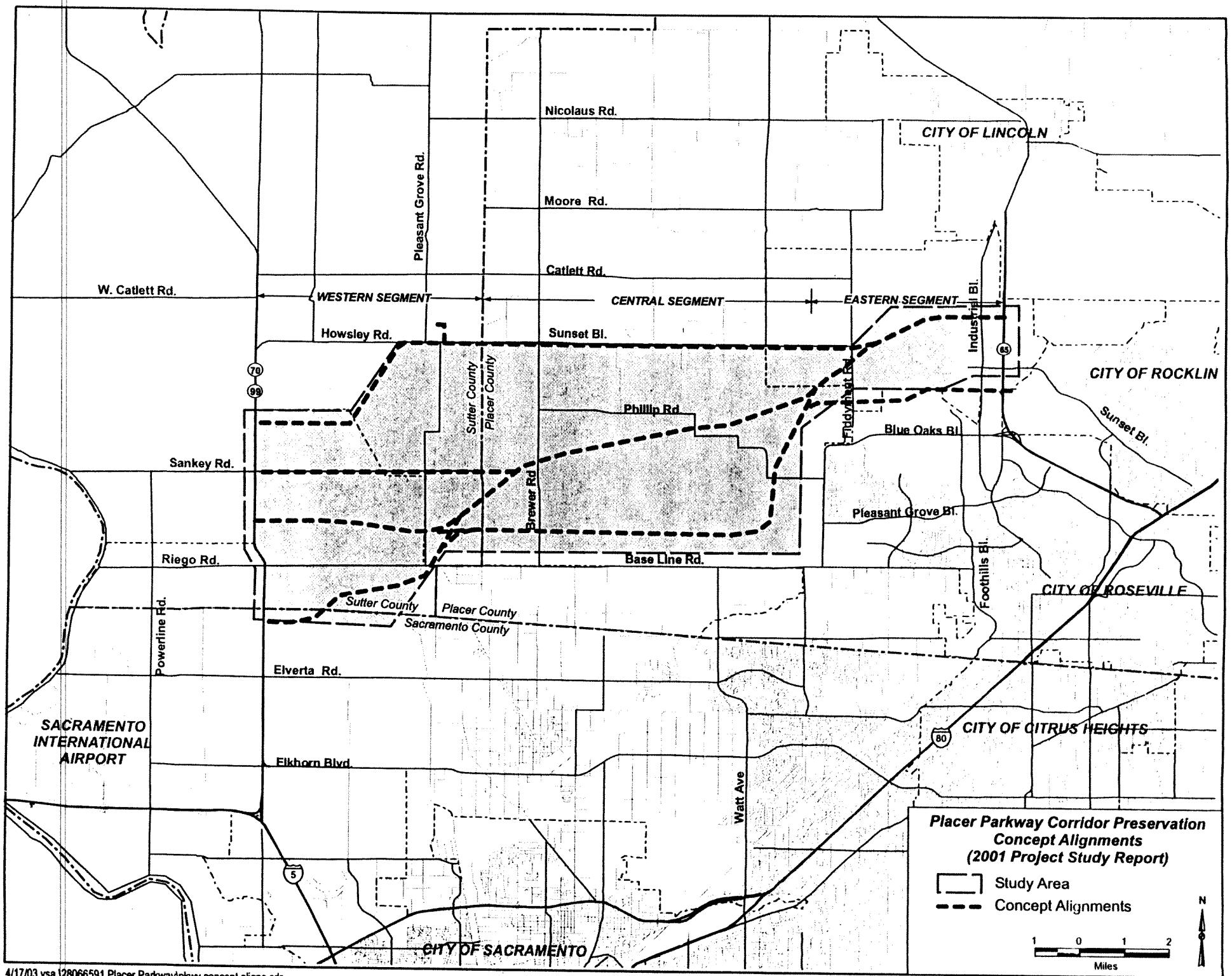
Sincerely,

URS Corporation

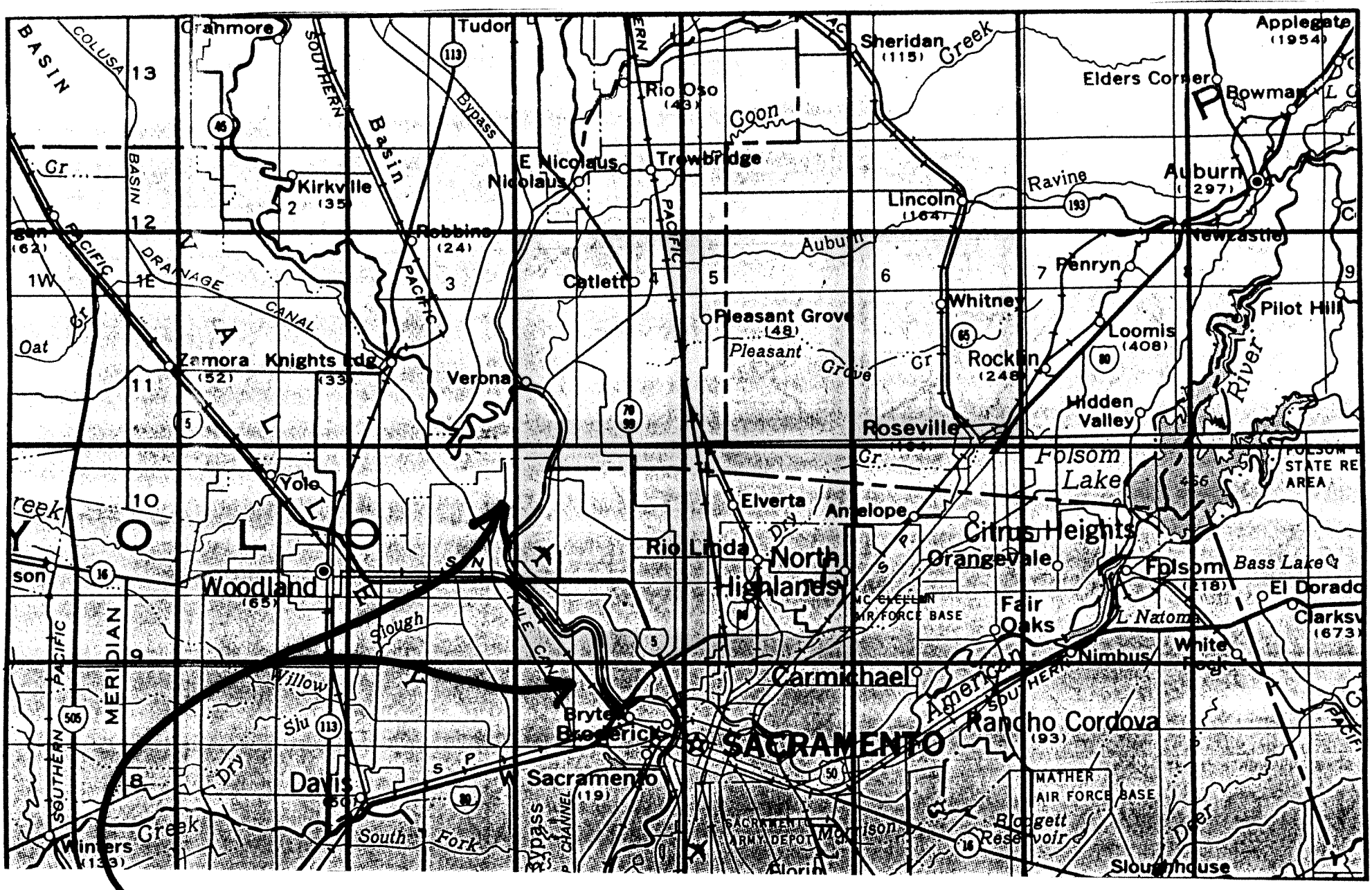
for Mark R. Hale
Project Archaeologist

Enclosure: Maps (2)

The following maps were included with each of the October 13, 2003 letters to Native American representatives



4/17/03 vsa \28066591 Placer Parkway\pkwy concept aligns.cdr



KEY: USGS 7.5 TOPOGRAPHIC QUADRANGLES FOR PROJECT

VERONA PLEASANT GROVE ROSEVILLE

TAYLOR MONUMENT RIO LINDA

TOWNSHIP AND RANGE DATA:

1) PLEASANT GROVE 7.5
   T10N R4E
   SECTION 1
   T11N R4E
   SECTIONS 11, 12, 13, 14, 23, 24, 25, 26, 35, & 36
   T11N R5E
   SECTIONS 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20
   21, 22, 23, 26, 27, 28, 29, 30, 31, 32, 33, 34, & 35

2) RIO LINDA 7.5
   T10N R4E
   SECTIONS 1 & 2

3) ROSEVILLE 7.5
   T11N R5E
   SECTIONS 12, 13, 24, 25, & 36
   T11N R6E
   SECTIONS 3, 4, 5, 6, 7, 8, 9, 10 & 18

4) TAYLOR MONUMENT 7.5
   T10N R4E
   SECTIONS 2, 3, 4, 9, 10, & 11

5) VERONA 7.5
   T11N R4E
   SECTIONS 10, 11, 14, 15, 16, 17, 20, 21,
   22, 23, 26, 27, 28, 29, 32, 33
   34, & 35.

MIWOK
MAIDU

United Auburn Indian Community
of the Auburn Rancheria

JESSICA TAVARES
CHAIRPERSON

DAVID KEYSER
VICE CHAIR

CHRISTINE BEALL
SECRETARY

DOLLY SUEHEAD
TREASURER

MONA CAMP
COUNCIL MEMBER

October 21, 2003

Mark R. Hale
URS Corporation
221 Main Street, Suite 600
San Francisco, California 94105

Subject: Impact to Cultural Resources on Project Site

Dear Mr. Hale,

We recently received a notification indicating that you are proposing a project that has the potential to impact Native American cultural sites. As you may know, under the California Environmental Quality Act and Section 106 of the National Historic Preservation Act, you are required to consult with Indian tribes that may have cultural affiliations or interest in your project. The United Auburn Indian Community is composed of Miwok and Maidu Indians with an ancestral territory encompassing Placer and Nevada Counties, and surrounding areas. We are concerned about projects that may impact our ancient burial grounds and village sites, and sites that have cultural and religious importance to us.

We request that a qualified archaeologist prepare a report documenting a field survey and records search of your project site before the project is approved. We would like to receive a copy of the report upon its completion. We will then review the report and determine if cultural resources of importance to us may be impacted.

Please contact our environmental consultant, Dr. Shelley McGinnis, of Analytical Environmental Services, at (916) 447-3479 if you have any questions regarding this matter.

Sincerely,

Greg Baker
Tribal Administrator

MIWOK
MAIDU

United Auburn Indian Community
of the Auburn Rancheria

JESSICA TAVARES
CHAIRPERSON

DAVID KEYSER
VICE CHAIR

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SECRETARY

DOLLY SUEHEAD
TREASURER

MONA CAMP
COUNCIL MEMBER

November 21, 2003

Mark R. Hale
URS Corporation
221 Main Street, Suite 600
San Francisco, California 94105

Subject: Placer Parkway Corridor Preservation Tier 1 EIS/EIR

Dear Mr. Hale,

This letter is in response to your letter dated November 18, 2003. The United Auburn **Indian Community has designated David Zweig of Analytical Environmental Services as** the tribal representative on all environmental and cultural resource issues. Mr. Zweig **would be pleased to meet with you as a representative of UAIC to discuss the proposed** Placer Parkway Corridor Preservation project.

You may contact Mr. Zweig directly to set up a meeting. He can be reached by phone (916-447-3479) or email (dzweig@analyticalcorp.com).

Sincerely,

Greg Baker
Tribal Administrator

URS

March 2 2006

Rose Enos
15310 Bancroft Road
Auburn, CA 95603

Dear Rose Enos,

In June and again in October of 2003, I sent out letters requesting information you may have regarding properties, features, or materials within the Placer Parkway Corridor Preservation Project study area that may be of concern to local Native Americans. I made telephone calls following the initial request in August 2003.

Although situated within the same study area, the corridor alignments have been revised slightly from those depicted in the original mailings. As such, I felt it prudent to re-solicit the local Native American community concerning this proposed project. In the event you no longer retain our original request for information, below is found the text from that original request:

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Fax: 415.882.9261

URS

Attached to this letter is an aerial photograph depicting the alignments to be analyzed in the above referenced Tier 1 EIS/EIR. I apologize for this re-solicitation, however, it is important that you be provided ample opportunity to comment particularly at this stage in project planning. If you have any questions, please feel free to call me directly at (415)-243-3826. Thank you for your cooperation.

Sincerely,

URS Corporation

Mark R. Hale
Senior Project Archaeologist

Enclosure

URS

March 2 2006

Jeff Murray
Cultural Resources Manager
Shingle Springs Band of Miwok Indians
P.O. Box 1340
Shingle, CA 95682

Dear Jeff Murray,

In June and again in October of 2003, I sent out letters requesting information you may have regarding properties, features, or materials within the Placer Parkway Corridor Preservation Project study area that may be of concern to local Native Americans. I made telephone calls following the initial request in August 2003.

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Sincerely,

URS Corporation

Mark R. Hale
Senior Project Archaeologist

Enclosure

URS

March 2 2006

Christopher Suehead
Cultural Representative
Todd Valley Miwok-Maidu Cultural Foundation
P.O. Box 1490
Foresthill, CA 95631

Dear Christopher Suehead,

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Mark R. Hale
Senior Project Archaeologist

Enclosure

URS

March 2 2006

David Keyser
United Auburn Indian Community of the Auburn Rancheria
961 Indian Rancheria Road
Auburn, CA 95603

Dear David Keyser,

In June and again in October of 2003, I sent out letters requesting information you may have regarding properties, features, or materials within the Placer Parkway Corridor Preservation Project study area that may be of concern to local Native Americans. I made telephone calls following the initial request in August 2003.

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URS Corporation

Mark R. Hale
Senior Project Archaeologist

Enclosure

URS

March 2 2006

Jessica Tavares
Chairperson
United Auburn Indian Community of the Auburn Rancheria
661 Newcastle Road, Suite 1
Newcastle, Ca 95658

Dear Jessica Tavares,

In June and again in October of 2003, I sent out letters requesting information you may have regarding properties, features, or materials within the Placer Parkway Corridor Preservation Project study area that may be of concern to local Native Americans. I made telephone calls following the initial request in August 2003.

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Sincerely,

URS Corporation

Mark R. Hale
Senior Project Archaeologist

Enclosure

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March 2 2006

Sam Starkey
United Auburn Indian Community of the Auburn Rancheria
953 Indian Rancheria Road
Auburn, CA 95603

Dear Sam Starkey,

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Sincerely,

URS Corporation

Mark R. Hale
Senior Project Archaeologist

Enclosure

URS

March 2 2006

Harvey Angle
Chairperson
Enterprise Rancheria of Maidu Indians
1940 Feather River Blvd., Suite B
Oroville, CA 95965

Dear Harvey Angle,

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Sincerely,

URS Corporation

Mark R. Hale
Senior Project Archaeologist

Enclosure

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March 2 2006

Martha Noel
Maidu Elders Organization
P.O. Box 206
Dobbins, CA 95935

Dear Martha Noel,

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> The Placer County Transportation Planning Agency (PCTPA) has engaged URS Corporation to assist PCTPA in identifying a right-of-way connecting western Placer County and southern Sutter County. This is envisioned as a new 15-mile parkway connecting existing state highways. URS is to identify preliminary alternative alignments and screen them according to technical and environmental criteria; prepare technical studies; prepare a Tier 1 EIS/EIR that will satisfy both Caltrans and FHWA requirements, and provide public outreach support. The environmental review of the project will satisfy both CEQA and NEPA. Our contact with the PCTPA is Mr. Stan Tidman (550 High Street, Suite 107 Auburn, CA 95603). Mr. Tidman can be reached at (530) 823-4033.
>
> Among the tasks to be completed for the initial screening phase of the project are consultation with the Native American Heritage Commission (NAHC) and local Native American groups and individuals. As such, I am requesting any information you may have regarding properties, features, or materials within the project area that may be of concern to local Native Americans.

URS Corporation
221 Main Street, Suite 600
San Francisco, CA 94105-1917
Tel: 415.896.5858
Fax: 415.882.9261

URS

Attached to this letter is an aerial photograph depicting the alignments to be analyzed in the above referenced Tier 1 EIS/EIR. I apologize for this re-solicitation, however, it is important that you be provided ample opportunity to comment particularly at this stage in project planning. If you have any questions, please feel free to call me directly at (415)-243-3826. Thank you for your cooperation.

Sincerely,

URS Corporation

Mark R. Hale
Senior Project Archaeologist

Enclosure

URS

March 2 2006

Joe Marine
1025 – 35th Avenue, Apt 9
Sacramento, CA 95822

Dear Joe Marine,

In June and again in October of 2003, I sent out letters requesting information you may have regarding properties, features, or materials within the Placer Parkway Corridor Preservation Project study area that may be of concern to local Native Americans. I made telephone calls following the initial request in August 2003.

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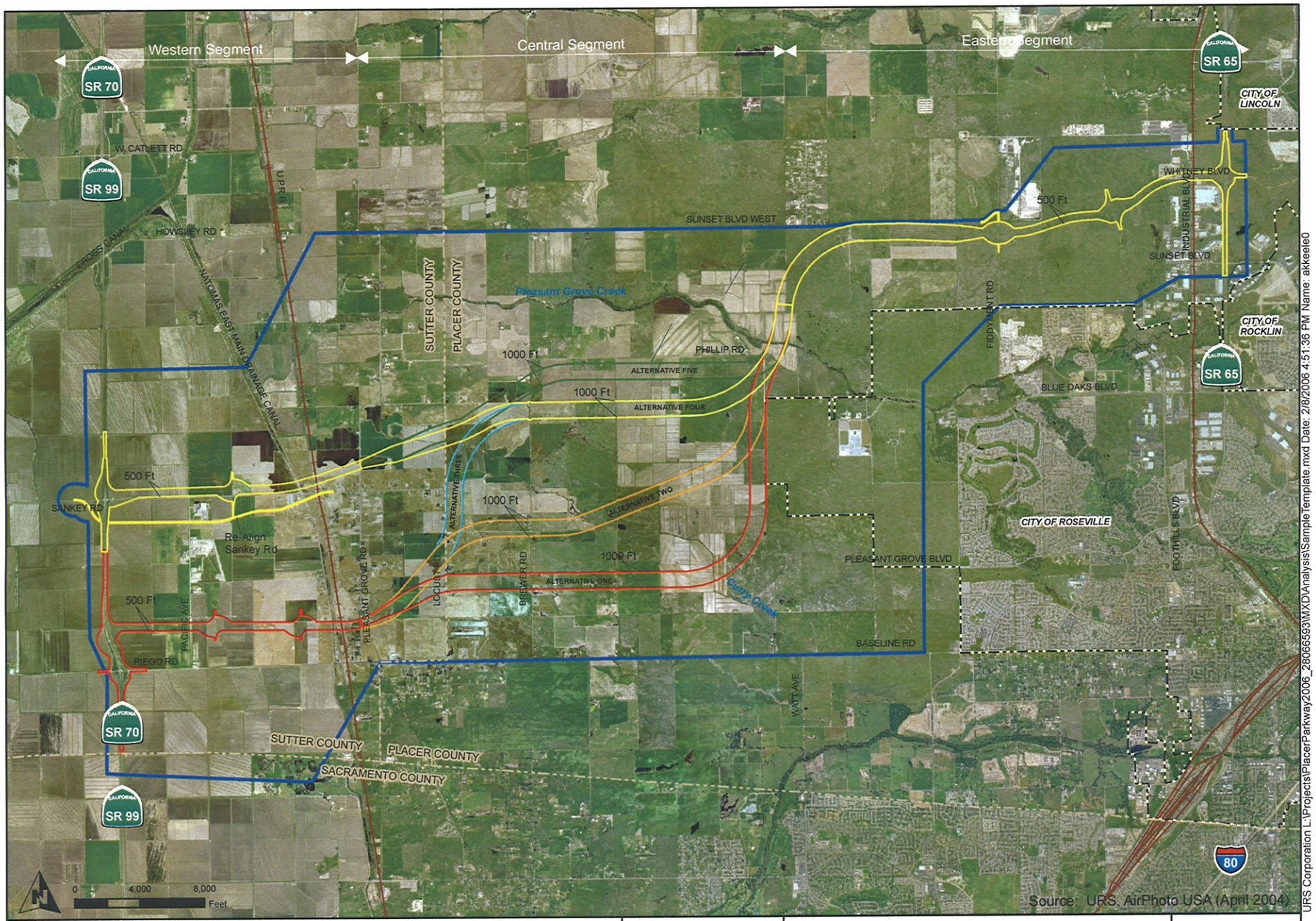
Sincerely,

URS Corporation

Mark R. Hale
Senior Project Archaeologist

Enclosure

The following map was included with each of the March 2, 2006 letters to Native American representatives



URS Corporation L:\Projects\PlacerParkway2006_28066593\MXD\Analysis\SampleTemplate.mxd Date: 2/8/2006 4:51:36 PM Name: akkeele0

Attachment 3

Historical Resources Evaluation Report

PLACER PARKWAY
CORRIDOR PRESERVATION

DRAFT
HISTORICAL RESOURCES EVALUATION REPORT

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR

June 29, 2007

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

Caltrans

FHWA

Prepared by

JRP Historical Consulting
for
URS Corporation

for
South Placer Regional Transportation Authority
California Department of Transportation
Federal Highway Administration

The preparation of this report was financed in part through a planning grant from the Federal Highway Administration

Draft

HISTORICAL RESOURCES EVALUATION REPORT

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR
Placer and Sutter Counties, California

Prepared by:

Toni Webb: _____

Architectural Historian
JRP Historical Consulting, LLC
1490 Drew Avenue, Suite 110
Davis, California 95616

Approved by:

Gail St. John: _____

PQS: Principal Architectural Historian
Caltrans District 3
Office of Environmental Management, M2
703 B Street
Marysville, California 95901

June 2007

SUMMARY OF FINDINGS

The Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans), in conjunction with the South Placer Regional Transportation Authority (SPRTA), propose to identify and preserve or acquire right-of-way for a future Placer Parkway, which would link State Route (SR) 65 in Placer County to SR 70/99 in Sutter County (Maps 1 and 2 in Appendix A). The FHWA is the federal lead agency for the National Environmental Policy Act (NEPA), and SPRTA is the lead agency for the California Environmental Quality Act (CEQA). The project is using federal funding and is therefore subject to review under the January 2004 *Programmatic Agreement (PA) (Appendix B) among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 (NHPA). The Section 106 PA is FHWA's approach for taking into account the effects of the Federal Aid Transportation Program on historic properties in California and for meeting compliance with Section 106 of the NHPA (36 CFR 800).

JRP Historical Consulting prepared this Historical Resources Evaluation Report (HRER) to evaluate historic buildings, structures, and objects within the Area of Potential Effect (APE) for the proposed project entitled "Placer Parkway Corridor Preservation Tier 1 Project, Placer and Sutter Counties, California" (Map 3 in Appendix A). This study provides a limited inventory and evaluation of buildings, structures, and objects in the APE that appear to be potentially eligible for listing in the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR) under Criterion C or 3.[1] The purpose of this document is to comply with applicable sections of the National Historic Preservation Act (NHPA) and the implementing regulations of the Advisory Council on Historic Preservation (ACHP) as these pertain to federally funded undertakings and their impacts on historic properties, as well as comply with CEQA as it applies to historic, built environment resources. Additionally, this information will assist the FHWA in determining which alternative(s) might trigger the need for compliance with Section 4(f) of the National Transportation Act. Additional research will be conducted during Tier 2 to identify properties eligible under the other NRHP and CRHR criteria.

Because of the long lead time for this project, JRP was asked to consider any buildings, structures or objects within the architectural APE that were constructed in or prior to 1975 as meeting the 50 year age requirement for eligibility. JRP found *no buildings, groups of buildings, or structures*, within the architectural (built environment) APE that appear to be potentially eligible for the NRHP, or CRHR, under Criterion C. Therefore, no building, object, or structure was formally evaluated on a California Department of Parks and Recreation (DPR) 523 form for this project. However, research did identify one resource within the architectural APE that was previously evaluated and found to be eligible for inclusion in the NRHP. In 1994 Reclamation District (RD) 1000 was determined eligible for the NRHP as a rural historic landscape (as a historic district) by a consensus between SHPO (State Historic Preservation Office, also known as the California Office of Historic Preservation or OHP) and the U.S. Army Corps of Engineers under Criterion A (1) at the state level of significance. The historic property's area of significance is reclamation and its historic context is the reclamation and flood control of the Sacramento River Basin within the Sacramento Flood Control Project during the period between 1911 and 1939. The historic district, including its contributing features, was found to retain historic integrity.[2] In addition,

[1] To meet Criterion C or 3, a resource must meet one of the following requirements: embody distinctive characteristics of a type, period or method of construction; represent the work of a master; possess high artistic values; represent a significant and distinguishable entity whose components may lack individual distinction.

[2] Dames & Moore, "Final Rural Historic Landscape Report for Reclamation District 1000 for the Cultural Resources Inventory and Evaluations for the America River Watershed Investigation, Sacramento and Sutter Counties, California," submitted to U.S. Army Corps of Engineers, Sacramento District, December 1995.

two county bridges (Bridge Nos. 19C0104 and 19C0124) and two railroad segments (Western Pacific and Sacramento Northern railroads) located within the architectural APE have been previously found to be not eligible for listing in the NRHP and thus required no further study for this project. These railroads, Map Reference Nos. 2 and 3, respectively, and bridges are shown on Map 3. The architectural APE encompasses a small portion of the easternmost section of RD 1000.

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LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
Caltrans	California Department of Transportation
CCRR	California Central Railroad
CEQA	California Environmental Quality Act
CRHR	California Register of Historical Resources
DPR	Department of Parks and Recreation
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
FHWA	Federal Highway Administration
HRER	Historical Resources Evaluation Report
JRP	JRP Historical Consulting
NEPA	National Environmental Policy Act
NRHP	National Register of Historic Places
OHP	Office of Historic Preservation
PA	Programmatic Agreement
RD 1000	Reclamation District No. 1000
SACOG	Sacramento Area Council of Governments
SHPO	State Historic Preservation Office
SPRTA	South Placer Regional Transportation Authority
Tier 1 EIS/EIR	Tier 1 Environmental Impact Statement/Program Environmental Impact Report
URS	URS Corporation
USGS	U.S. Geological Survey

HISTORICAL RESOURCES EVALUATION REPORT
PLACER PARKWAY CORRIDOR PRESERVATION TIER 1 EIS/PROGRAM EIR

1.0 INTRODUCTION

1.1 TIER 1 EIS/PROGRAM EIR

The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the South Placer Regional Transportation Authority (SPRTA) propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking State Route (SR) 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1).

The planning for Placer Parkway involves two phases: (1) the present action, selection of a corridor (titled the Placer Parkway Corridor Preservation Project), and (2) the future selection of a precise alignment within the corridor and a decision whether or not to build the Parkway. If a build alternative is selected and pursued after the second phase, the ultimate Placer Parkway project would be constructed and operated. Throughout this document the term "Proposed Action" is used to describe the selection of a corridor to preserve. The document generally uses the term "Parkway" to mean the ultimate roadway, including construction and operation, except where context indicates otherwise.

As stated, the action to be considered based on this Tier 1 analysis involves only the selection of a corridor to preserve, which has limited environmental effects by itself. However, the ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. In order to describe the effects of the ultimate Placer Parkway project to the greatest extent feasible at this early stage, the Tier 1 EIS/EIR also addresses the potential effects of construction and operation of the future roadway. This discussion of the roadway is necessarily limited, however, because only the general concepts of the roadway design and location are known at this time. If a corridor is selected and preserved at Tier 1, a subsequent Tier 2 analysis will evaluate the Parkway itself in detail—the specific roadway "footprint" within the selected corridor, including construction and operation of the roadway.

1.2 CORRIDOR SELECTION AND PRESERVATION

The concept for the Placer Parkway is more than a decade old. Placer County's 1994 General Plan depicts a "plan line" for it. Two planning studies helped to refine the concept:

- DKS Associates, 2000, Placer Parkway Interconnect Study/Conceptual Plan
- DKS Associates, 2001, Project Study Report (Project Development Support) for Placer Parkway

Placer Parkway is cited as a high-priority regional transportation project by the Sacramento Area Council of Governments (SACOG) 2025 Metropolitan Transportation Plan and the 2027 Placer County Regional Transportation Plan. The project vicinity and surrounding area include some of the fastest growing communities in the Sacramento region. A number of large urban development proposals are being considered by Placer and Sutter Counties. New development is expected to add a significant amount of residential, commercial, industrial, and educational uses.

A 2½-year screening and public outreach program that involved local jurisdictions (the Technical Advisory Committee); regional, state, and federal agencies; stakeholder groups that included representatives from planning and public works departments of all affected cities and counties,

environmental, business, agricultural, development, and homeowner interests (the Study Advisory Committee); and elected officials (the Policy Advisory Committee), resulted in the identification of five potential corridors for the Parkway. The Tier 1 Environmental Impact Statement/Program Environmental Impact Report will analyze these five corridor alternatives along with a No-Build Alternative.

Other potential transportation modes such as bus rapid transit may be developed in the corridor in the future, although they are not proposed as part of the current project. The width of the corridor for Placer Parkway is to vary from approximately 500 feet in the Eastern and Western segments to approximately 1,000 feet in the Central Segment. Depending upon the alternative, the corridor's length ranges from a minimum of 14.2 miles to a maximum of 16.2 miles. The selected corridor would contain the roadway, including the median, travel lanes, shoulder, associated access ramps, and a no-development buffer zone.

Corridor acquisition may not be completed until after Tier 2, as funding becomes available. Portions of the selected corridor would be preserved as a no-development buffer zone. The buffer would be maintained as a zone where development is either not permitted or is severely restricted. This is intended to restrict access to the proposed interchanges, protect the rural character of agriculturally designated areas in the vicinity of the Parkway as far as possible subject to future development, and to maximize opportunities to incorporate adjacent sensitive areas. It is intended that the buffer would be owned and managed in the future to achieve these objectives. For subsequent Tier 2 (project-level) environmental reviews, the size of this buffer zone could be considered flexible for agriculturally designated land undergoing urban development. In the Tier 2 environmental review, the specific buffer size and location would be determined. This determination would be based on performance standards on a case-by-case basis, depending on the land use needs of future approved development, and taking into account the primary objective of restricting future access to the Parkway.

Project proponents are considering employment of several land management and control mechanisms in order to ensure that the buffer would be effectively maintained as an area where development would either not be permitted, and where construction of any additional access onto the Parkway would not be allowed. These mechanisms could include land use controls, land purchase/leases, general plan amendments, zoning/overlay zoning changes, covenants/deed restrictions, agricultural/conservation easements, urban growth boundaries, etc. "Layering" or using several of these methods would provide more assurance that the buffers would be permanent, or at least more difficult to undo.

1.3 TECHNICAL STUDY OBJECTIVE

This Historical Resources Evaluation Report has been prepared to support the Tier 1 Environmental Impact Statement/Program Environmental Impact Report. It presents a Tier 1/Program level assessment of potential impacts related to Historical Resources for five corridor alternatives and the No-Build Alternative as described in Chapter 2. The scope of work performed for this report is based on the Caltrans Local Assistance Procedures Manual (Caltrans, 2006), as modified for purposes of Tier 1/ Program analysis by agreement of Caltrans and the Caltrans Environmental Handbook (Caltrans, 2004) on preparing a Historic Resources Evaluation Report. In addition, the evaluation considered guidance from the Federal Highway Administration (FHWA), Environmental Checklists for Draft and Final Environmental Documents (FHWA, 1998a; FHWA, 1998b).

This report is organized as follows:

Chapter 7 Preparer's Qualifications

This report also includes figures and tables, which show the project location, each build alternative, and pertinent technical information prepared to evaluate the build alternatives.

Throughout this document, the Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report is referred to as the Tier 1 EIS/EIR.

2.0 THE PROPOSED ACTION

The Proposed Action for the Placer Parkway Corridor Preservation Project is to select and preserve a 500- to 1,000-foot-wide corridor in the study area, within which the future four- or six-lane Placer Parkway may be constructed. The ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction, and operation of the Parkway. Although the action taken at Tier 1 on the Placer Parkway Corridor Preservation Project is limited, the underlying project whose effects are studied in this document is the Placer Parkway. To the extent feasible at this early stage, the Tier 1 EIS/EIR addresses the potential effects of construction and operation of the future roadway.

2.1 THE PROJECT STUDY AREA

The study area is an area of approximately 33,460 acres located in Sutter and Placer counties, with a small section located in Sacramento County (see Figures 1-1 and 2-1). The portion of the study area in Sacramento County is located in the extreme southwestern corner of the study area and does not include any of the proposed corridor alignment alternatives. It extends from SR 70/SR 99 in the west to SR 65 in the east, with the northern boundary extending to Sunset Boulevard West and the southern boundary located adjacent to Baseline and Riego Roads.

For the purposes of the analysis the study area is divided into three segments:

- Western Segment: the Western Segment extends from SR 70/99 to Pleasant Grove Road in Sutter County.
- Central Segment: the Central Segment extends from Pleasant Grove Road in Sutter County to approximately 2,300 feet north of Pleasant Grove Creek in Placer County.
- Eastern Segment: the Eastern Segment extends from approximately 2,300 feet north of Pleasant Grove Creek to SR 65 in Placer County.

2.2 CORRIDOR ALTERNATIVES

The following subsections describe the corridor alternatives, which are depicted on Figure 2-1, and are numbered according to location from south to north in the study area.

2.2.1 The No-Build Alternative

Under the No-Build Alternative, the project would not be implemented. A Placer Parkway corridor would not be selected/preserved, and the future Placer Parkway would not be constructed.

2.2.2 Alternative 1 – the Red Alternative

Alternative 1 would extend from SR 70/99 approximately ½ mile north of Riego Road, eastward approximately 1 mile north of Baseline Road to approximately Watt Avenue, proceeding north and transitioning in an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 16.2 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.3 Alternative 2 – the Orange Alternative

Alternative 2 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed northeast, then in a northerly direction south of Pleasant Grove Creek, transitioning to an easterly direction before it reaches Sunset Boulevard West, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.4 miles long. This alternative would include six interchanges, as described in Section 2.3.3 below.

2.2.4 Alternative 3 – the Blue Alternative

Alternative 3 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed north along the Sutter/Placer County Line, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.6 miles long. This alternative would include six interchanges, as described in Section 2.3.3 below.

2.2.5 Alternative 4 – the Yellow Alternative

Alternative 4 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.3 miles long. This alternative would include five interchanges, as described in Section 2.3.3 below.

2.2.6 Alternative 5 – the Green Alternative

Alternative 5 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 4,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.2 miles long. This alternative would include five interchanges, as described in Section 2.3.3 below.

2.3 PARKWAY DESIGN ASSUMPTIONS

Although the Parkway would be designed and construction-level impacts analyzed during Tier 2, for the purpose of this report and the Tier 1 EIS/Program EIR, several assumptions have been made about potential design and configuration concepts. These assumptions would be subject to further development and refinement, and specific decisions about design of the roadway would be made during the Tier 2 process. For example, the number, location, and design of over-crossings would be determined at the time of final Parkway design, in consultation with local jurisdictions. The following sections outline assumptions for the future roadway.

Preliminary costs estimates for the Parkway range from $600 to $650 million (2005 dollars). This includes costs for right-of-way, design, construction, and environmental mitigation for the four- to six-lane facility. The funding situation has spurred interest in exploring other more creative funding options. These include a county-wide sales tax, more developer contributions, and tolling facilities. The Technical Report and Tier 1 EIS/Program EIR do not make any assumptions about funding sources.

2.3.1 Conceptual Roadway Configuration

The Parkway would be a high-speed, limited access roadway. Depending upon the timing of adjacent urban development proposals and funding, the Parkway may be designed and constructed incrementally in segments. These could be built as a four-lane (interim) roadway until a six-lane segment is warranted, or as the full six-lane facility. A preliminary conceptual cross section (see Figure 2-2) was developed to facilitate the Tier 1/Program evaluation. It illustrates both four-lane (two lanes in both directions) and six-lane (three lanes in both directions) configurations within the 500- to 1,000-foot corridor widths. The roadway would include a central median approximately 100 to 134 feet wide, depending on local conditions and reflecting Caltrans safety guidance. The Parkway would be designed and constructed to Caltrans standards, unless specific design exceptions are granted. For the purposes of the Tier 1 EIS/Program EIR, the Parkway's opening year is assumed to be 2020.

Access would be provided at the western and eastern ends of the Parkway, where existing areas of dense development are already located or planned. Access would be restricted for the 7-mile Parkway Central Segment. The analysis assumes no interchanges in this segment. (A possible future extension of Watt Avenue or another nearby roadway may be considered in the Central Segment as a separate project.)

2.3.2 Conceptual Roadway Elevation

As the study area is comprised of relatively flat terrain, the majority of the future Placer Parkway is assumed to be at-grade. As necessary, bridges would be used to span certain features and improvements such as the Union Pacific Railroad tracks along Industrial Boulevard, Pleasant Grove Creek, the Natomas East Main Drainage Canal, and floodplains. Generally, the approximate height of bridges is expected to range from 10 feet above streams to 30 feet above the railroad. Culverts would be used at smaller creek crossings as appropriate, depending on local conditions and permit requirements. The Pleasant Grove Creek floodplain would be crossed by bridges (one in each direction) supported by abutments located approximately 800 feet on either side of the creek to avoid the riparian habitat associated with the creek.

Within the 100-year floodplain, the roadway would be elevated such that the bottom of any new bridges would be above the 100-year water surface elevation. The roadway support structures and bridges would be designed to minimize environmental impact, not impede stream and flood flows, and allow for the unobstructed passage of potential future streamside uses such as maintenance equipment, bikeways or trails.

Throughout the study area, the assumptions for creek and floodplain crossings include typical engineering specifications:

- a maximum bridge span of approximately 150 feet;
- for bridge spans exceeding 150 feet, assume one column, approximately 4 feet in diameter, every 150 feet; and
- all columns placed outside of the ordinary high water (OHW) level.

To maintain existing and future local roadway connectivity (for emergency access, farming operations, and community access), over-crossings would be constructed to convey traffic over the Parkway. These over-crossings would not connect to the Parkway. Parkway access would be via the interchanges described below.

2.3.3 Interchange Concepts

The analysis assumes that the location of interchanges (see Figure 2-1) is as follows.

- SR 70/99 (at ½ mile north of Riego Road or at Sankey Road)
- One or two locations to be determined in southern Sutter County
- Fiddyment Road
- Foothills Boulevard
- SR 65 at Whitney Ranch Parkway

The following discussion outlines concepts and assumptions for the six interchanges that could potentially serve Placer Parkway.

2.3.3.1 Western Segment

Within the Western Segment of the Parkway, a high-speed, freeway-to-freeway type interchange would connect the Parkway with SR 70/99 at one of following potential locations depending on the project alternative (see Section 2.2). Placer Parkway would terminate at SR 70/99.

- **Placer Parkway/SR 70/99 Interchange at North of Riego Road.** This alternative concept uses "braided" ramps to eliminate weaving problems or conflicts with the future SR 70/99 at Riego Road interchange being developed by Sutter County and Caltrans.

- **Placer Parkway/SR 70/99 Interchange at Sankey Road.** Under this alternative concept, the existing two-lane Sankey Road would be realigned to the south of Placer Parkway and the proposed freeway-to-freeway interchange, extending from approximately ¼ mile west of SR 70/99 to approximately ¼ mile east of the Union Pacific railroad tracks. There would be no direct access to SR 70/99 or Placer Parkway from the realigned Sankey Road.

Depending on the final alignment selected, one or two additional interchanges would also be located in south Sutter County. Conceptual locations are identified for purposes of this Tier 1/Program analysis (see Figure 2-1). The actual location of these interchanges would be developed in the Tier 2 phase, based on Sutter County requirements.

2.3.3.2 Central Segment

Within the Central Segment of the Parkway, there would not be any access proposed as part of the Project in the 7-mile segment between Fiddyment Road and Pleasant Grove Road. Please see Section 2.4 regarding a potential connection to a future extension of Watt Avenue (Figure 2-3) which could be proposed and constructed by others in the Central Segment; such an interchange is not part of the Placer Parkway.

2.3.3.3 Eastern Segment

Within the Eastern Segment of the Parkway, a signalized high-speed freeway-to-freeway and local access interchange would connect the Parkway to SR 65 at Whitney Ranch Parkway (Figure 2-1). From SR 65 eastward Placer Parkway would terminate and become Whitney Ranch Parkway east of the SR 65 exit ramp intersection. Traffic signals would be provided at the exit ramp terminals. This interchange would be approximately 1 mile north of a planned SR 65/Sunset Boulevard interchange and 1.2 miles south of the existing Twelve Bridges interchange.

As part of this interchange, auxiliary lanes would be required on SR 65 in both directions to enhance traffic operations on the north side of the future SR 65/Sunset Boulevard interchange. The southbound SR 65 exit-ramp at Sunset Boulevard is being designed to accommodate an additional auxiliary lane required for the future Placer Parkway/Whitney Ranch Parkway interchange to minimize the reconstruction of this ramp in the future. Within the Eastern Segment of the Parkway, from SR 65

westward, two interchanges with local roadways would be constructed, one at Foothills Boulevard and one at Fiddyment Road, as depicted on Figure 2-1.

The future interchange on Placer Parkway at Fiddyment Road would be located near the existing intersection of Fiddyment Road and Sunset Boulevard West. To provide acceptable traffic operations, additional distance needs to be provided between the Fiddyment Road/Sunset Boulevard West intersection and the Fiddyment Road/Placer Parkway westbound off-ramp intersection. Therefore, Sunset Boulevard West will need to be realigned to the north as it nears Fiddyment Road.

2.3.4 Landscaping Concept

For the purposes of this environmental analysis, preliminary landscaping concepts have been developed for Placer Parkway. These are entirely conceptual and would be subject to further refinement during the Tier 2 environmental process. It is anticipated that landscaping would be used to reflect local topography and vistas in the study area and complement the varying character of land adjacent to the Parkway corridor. Landscape design would vary within the Parkway's three segments depending on corridor width and type and density of surrounding land uses. Landscaping would be used within the median and the Parkway buffer zone to enhance the aesthetics of the Parkway, and would be used to provide screening and enhance local and long-distance views. Where appropriate, more concentrated plantings would be considered to buffer the Parkway from future adjacent land uses that may be incompatible with the Parkway concept, and to prevent unwanted intrusion into shoulder or median areas. Landscape design would likely include a mix of compatible native and non-native plants that may require some irrigation. Where possible and depending on availability, feasibility and cost, recycled water would be used for irrigation.

During a future design phase, lighting elements would be designed for safety and would consider the proposed landscaping plan in order to minimize potential aesthetic impacts (e.g., shielding lighting elements, using lower-voltage lighting, and proposing lighting fixtures that conform with the visual character of the area).

2.4 POTENTIAL WATT AVENUE INTERCHANGE

The Placer County General Plan includes a number of new roadways that may be needed in Placer County, according to travel demand forecasts. An extension of Watt Avenue to Placer Parkway (from Baseline Road to a new Blue Oaks Boulevard Extension) is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto the Placer Parkway via a new interchange (see Figure 2-3). A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. It would be subject to independent future environmental analysis and review and is not being fully evaluated within this Technical Report or Tier 1 EIS/Program EIR. However, the connection of Placer Parkway to a potential Watt Avenue extension could affect future travel patterns in the area, including use of the Parkway. Based on direction from previous planning studies, this Technical Study and the Tier 1 EIS/Program EIR will evaluate each corridor alternative with and without a Watt Avenue interchange. This evaluation does not predetermine the construction or alignment of a potential Watt Avenue or nearby roadway extension or the precise locations of any potential interchanges with Placer Parkway.

2.5 AGENCY PERMITS AND APPROVALS

The Proposed Action would preserve a preferred corridor for a future transportation facility. In the future, permits and approvals would be obtained from appropriate agencies prior to construction of the Parkway. These permits and approvals may include specific design or mitigation requirements that would be incorporated into the project.

2.6 SUBSEQUENT TIER 2 INFORMATION

As noted earlier, the design and construction of Placer Parkway—including its interchanges and over-crossings, and ancillary features such as stream crossings, safety devices, stormwater management structures, and similar improvements—would be evaluated in a subsequent Tier 2 environmental review process once a corridor has been identified.

3.0 RESEARCH AND FIELD METHODS

JRP Historical Consulting (JRP) developed the Area of Potential Effects (APE) for the architectural survey for the "Tier 1: Placer Parkway Corridor Preservation, Placer and Sutter Counties, California" in December 2005 and May 2006 in consultation with URS Corporation (URS) and the California Department of Transportation (Caltrans). Consistent with Caltrans policies and general cultural resource practices to include the area directly affected by construction, the architectural (built environment) APE generally runs either with or one parcel beyond the proposed archaeological APE. Where the project bisects a parcel, the boundary is generally drawn to include the whole parcel; however, where the architectural (built environment) APE intersects large, vacant agricultural parcels where there is little potential for effects, the proposed architectural APE is generally aligned with the right of way. Only those resources located within the architectural APE line were included in the survey. The architectural (built environment) APE is shown on Map 3 (Index and Sheets 1-4) in Appendix A.

URS conducted a search of the records at the Northeast and North Central information centers in June 2003. The searches included cultural resources site and historic property files, the National Register of Historic Places, California Register of Historical Resources, the Historic Property Data File for their respective counties, California Historic Landmarks, California Points of Historic Interest, Caltrans Local Bridge Survey, and historic General Land Office and USGS maps.

While the Secretary of Interior sets the standard guidelines for review of potential National Register eligible buildings, structures, or features that are 50 years of age or older, this age limit has been extended to include resources constructed in 1975 or before to account for lead-time between preparation of environmental documentation and potential Placer Parkway construction in the selected corridor. JRP therefore treated any property constructed in or before 1975 as meeting the 50-year age requirement for eligibility in the NRHP. Buildings, structures, and features built after 1975 were not included in the survey. Once the APE was defined, JRP staff conducted a reconnaissance survey of the area on March 22, 2005 to account in the field for all the buildings, structures, and objects found within the architectural (built environment) APE that appeared to be built in or before 1975. JRP performed a thorough field survey on April 19, 2005, inspecting those resources that met the 50-year age requirement for this project and analyzing the resources for potential eligibility under Criterion C. Only those properties that appeared to have potential for eligibility under Criterion C would require formal evaluation and completion of a DPR 523 form. To be eligible for inclusion in the NRHP a property must have both significance and integrity to be considered eligible for listing on the National Register. Loss of integrity, if sufficiently great, will overwhelm the historical significance of a resource and render it ineligible. Likewise, a resource can have complete integrity, but if it lacks significance, it must also be considered ineligible. Integrity played a key factor in determining potential eligibility under Criterion C for this project.

JRP examined previous historic resource inventory and evaluation surveys and reports and conducted research at the California State Library; County Assessor's and Recorder's offices for Placer and Sutter counties; Shields Library at University of California, Davis; and the Bureau of Land Management State Office, Sacramento. In addition, background research was done through First American Real Estate Solutions commercial database, review of historic and current USGS topographic maps, Caltrans Historic Bridge Inventory (Appendix B), and other documents to confirm dates of construction.

4.0 HISTORIC OVERVIEW

The project area is located in southeastern Sutter County and southwestern Placer County, immediately north of the northernmost boundary of Sacramento County. The study's architectural APE stretches east from SR 65 (between the cities of Roseville and Lincoln) in Placer County, westward taking a southwesterly approach across the sparsely populated, unincorporated land of western Placer County into southern Sutter County and ending at SR 70/99. The vast majority of the architectural APE includes vacant, undulating agricultural lands crisscrossed by drainages and tributaries of Pleasant Grove and Curry (Steelhead) creeks. The study area developed as a rural, agricultural region beginning in the 1850s, a character that continues to this day. The following overview provides broad historical background regarding the regional and local history.

4.1 SUTTER COUNTY PORTION OF THE APE

The area now encompassed by Sutter County was explored and settled by Spain and Mexico, and later by pioneers from the United States, prior to California statehood. One of the smaller counties in the state, Sutter County is situated in the heart of the Sacramento and Feather river valleys. Settlement patterns in the southernmost portion of the county followed a similar development pattern as southwestern Placer County. John Sutter received the New Helvetia land grant from the Mexican government in 1841 where he established Hock Farm along the Feather River on this grant, south of present day Yuba City, and used it as a cattle ranch during the 1840s. Over the next decade, the small population in what became Sutter County was restricted to the region around and north of Hock Farm. With the discovery of gold and the establishment of Yuba City in 1849 and the incorporation of Marysville in February 1851, the population of the county began to rise. As unsuccessful miners staked out homesteads and started farming the region's grasslands, small hamlets were established in the outer regions of the county.[3]

One such community in the vicinity of the project area was Pleasant Grove, located twenty miles southeast of Yuba City. Initially known as Gouge Eye, the town of Pleasant Grove developed in the late 1860s around Charles Bishop's general store, at the present day intersection of Howsley and Pleasant Grove roads. When the post office was constructed in 1867, Gouge Eye was renamed Pleasant Grove Creek, which was later shortened to its present name in 1875. The town grew quickly in the early years, and by the late 1880s included a shoemaker, doctor, town hall, barber, fraternal organizations like the Pleasant Grove Odd Fellows, a hotel, salon, blacksmiths, and general store. Early settlers included Ephraim Johnson, who purchased a 240-acre farm in 1878 just south of Pleasant Grove (south of the present day intersection of Pleasant Valley and Sankey roads and outside of the architectural APE) where he constructed a residence. Over the years he added 440 acres to his property, farming wheat, oats and barley on this land as well as more than 3,000 acres of leased land. By the mid 1880s, the town included a population of 100 people living on large farms. Grain, primarily wheat, and livestock formed the principal crops during this period, which continued into the first half of the twentieth century, while rice became an important crop in later years. Unlike the fruit regions of the county to the north and southeast, the area within the architectural APE remained rooted in the production of grain throughout the twentieth century.[4]

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[3] "History and Statistics," online at http://www.yubacity.net/documents/Budget_FY_05_06_Chapt_23.pdf, accessed May 18, 2006; "City of Marysville - Marysville's Golden History," online at www.marysville.ca.us/, accessed May 18, 2006.

[4] Phydelia Murphy Wagner, "A Brief History of Pleasant Grove," Sutter County History, online at http://www.rootsweb.com/~casutter/history/pleasant_grove.htm, accessed April 19, 2006; L.A. Crawford and E.B. Hurd, *Type of Farming Areas, Sacramento River Valley, 1930* (1935); Jacqueline Lowe, Julie Stark and Danae McDougal-Steward, *Worth Keeping: An Architectural History of Sutter and Yuba* Counties, California (Yuba City, California: Community Memorial Museum of Sutter County, 1990) 59.

4.2 PLACER COUNTY PORTION OF THE APE

Placer County was created in 1851 from portions of Sutter and Yuba Counties, two of California's original counties. Bordered by Sacramento County to the south, Lake Tahoe to the east, and Bear River to the north, many of the county's communities owe their birth to the gold rush.[5] Nevertheless, in the southwestern portion of the county, or "the valley," gold was never found in any quantity, so beginning in the 1850s, former miners staked out homesteads and started farming the region's undulating grasslands.[6] Even with gold mining as the major industry in the county through the 1880s, in the area around Roseville and Lincoln, farming continued to be the economic mainstay, along with timber harvesting. Bypassed by gold prospectors on their way to the goldfields, local farmers quickly built up large land holdings in the area.[7]

One of the first areas to be settled in the vicinity of the study area was the Dry Creek District, which extends east, south and west of present-day Roseville, followed by Pleasant Grove District (located northwest of Roseville, extending west to Sutter County) where Stephen A. Boutwell, William Dunlap and others acquired large tracts of land.[8] Local farmers quickly built up large land holdings along the various creeks that flow west into the American Basin. Called the "plains" by early prospectors on their way to the goldfields, early settlers came to the area in the 1850s. The region was eventually named the Pleasant Grove District after the creek which passed through. The Fiddyment family also settled in this district in 1856 when Elizabeth Jane Fiddyment and her young son, Walter F. Fiddyment Jr., joined her family on their large farm. Mrs. Fiddyment went on to become a large landholder, reportedly owning more than 13,000 acres in Placer County, while her son turned to raising sheep and cattle. The Fiddyment family maintained a strong presence in the region, expanding their holdings and improving their ranch complexes. Walter eventually became one of the largest grain and stock ranchers in the county, while his sons and grandsons went into the poultry business on the family land.[9] To the northeast of the Fiddyments, a New England farmer, George Whitney, settled on 180 acres about three miles northeast of present-day Rocklin in 1857. In this unoccupied and open land he established the Spring Valley Ranch, also known as the Whitney Ranch, where he successfully bred sheep. Between 1861 and 1873 he acquired numerous parcels of land, some under the Pre-emption Law of 1841, some former homesteaded lands purchased outright, and some from the Southern Pacific Railroad, ranging in size from 40 to 2,000 acres. The Whitney Ranch grew to encompass more than 20,000 acres of land in the Sacramento Valley, 2,000 acres of land at the confluence of the Feather and Sacramento rivers (in Sutter County), 15,000 acres of private land within Tahoe National Forest, and grazing rights for sheep on 50,000 acres of railroad and government land. In addition to stock raising, the Whitney Ranch also produced wheat, with 1,200 acres in production in 1872. After 1875, Whitney's son, Joel Parker Whitney, began cultivating all available grain land on the ranch, eventually planting more than 8,000 acres of wheat. The ranch

[5] JRP Historical Consulting, "Historic Resources Inventory and Evaluation Report, Roseville AFC, Placer County, California," (June 2001) prepared for URS Corporation. Owen Coy, *California County Boundaries* (Fresno: Valley Publishers, 1973), 200-203.

[6] Leonard M. Davis, *Roseville Yesterday and Today* (Roseville: Roseville Community Projects Inc., 1975), 11, 15. In this work, Davis uses excerpts from his book, *From Trail to Rail! Being a History of the City of Roseville California 1864-1909* (Roseville, CA: Roseville Community Projects: 1964).

[7] William N. Abeloe, *Historic Spots in California* (Stanford, CA: Stanford University Press, 1966), 265.

[8] Davis, Trail to Rail!, 1-2; Davis, *Roseville Yesterday and Today*, 19

[9] Leonard M. Davis, *Milestones and Memories 1850-2000: The Story of Roseville, California* (Roseville, CA: Roseville Arts Center, 2002), 10; U.S. Census Bureau, MSS Population Schedule, Township No. 9, Placer County, 1870; PAR Environmental Services, Inc., Department of Parks and Recreation Form, Fiddyment Turkey Farm Complex (February 27, 2001); EIP Associates, *West Roseville Specific Plan and Sphere of Influence Amendment Area EIR* (January 2004) 4.8-3 through 4.8-6.

exported its grain crops and livestock from Whitney Station (located near the present day intersection of Sunset and Industrial boulevards), three miles west of the Whitney Ranch.[10]

The construction and development of the railroad industry in the 1860s and 1870s played a significant role in the development of the region. The construction of the California Central Railroad (CCRR), an 18½-mile line that would linkup the cities of Marysville and Sacramento by means of a connection with Sacramento Valley Railroad, and later the Central Pacific Railroad, which was absorbed into Southern Pacific railway system, led to the establishment of Lincoln and Roseville.[11] Agriculture remained first in the region's economy into the twentieth century, with Roseville eventually becoming the shipping and trading center for southern Placer County. Despite this, the area's population remained low, even after the construction of the state highway (LRN 3) from Sacramento (through Roseville) to Lincoln in 1909.[12]

While agricultural production continues to be an important land use in southwestern Placer County, the region began undergoing extensive development following World War II as the accelerated growth rate in the greater Sacramento metropolitan area began impacting surrounding communities. The completion of SR 65 in the westernmost portion of the APE in 1971, and the growth of Lincoln, Roseville and Rocklin that began in the 1960s, has impacted the rural character of western Placer County. Suburban housing and commercial developments just south of the project area and industrial development dating from the late 1960s along Industrial Boulevard occupy much of the land that was once open range.

4.3 RECLAMATION DISTRICT 1000

In the forty-year period from 1870 to 1910, Sutter, Placer and other mid-valley counties remained sparsely populated and some actually declined in population. A completely new pattern emerged between 1910 and 1930 as large numbers of new settlers came to the Sacramento Valley, many attracted by improved flood control systems, irrigation, and the promising development of fruit and nut orchards. Unlike wheat farming or dairying, orchard culture provided a viable family income from relatively small parcels of land. Agrarian visionaries foresaw vast parts of the region populated with small prosperous farms living on ten to twenty-acre farms. Through reclamation and irrigation of the Sacramento Valley during the late nineteenth and early twentieth centuries, the number of people and individual farms expanded tremendously in the fruit growing regions of Sutter and Yuba counties during this period.[13]

With the influx of population in Sutter County in the late nineteenth century, the state sought to control seasonal flooding while promoting agriculture in the American Basin. Great strides had already been made with construction of a series of levees, river gauges to monitor water levels, and the establishment of reclamation districts. The region had been devastated by major floods in 1861-1862 and again in 1875, and while the government had severely restricted hydraulic mining in the mid 1880s, the region was still vulnerable to damage from mining debris and flooding. Use of much of the land in the southernmost

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[10] Thompson and West, *History of Placer County* (Oakland: Thompson and West: 1882) 246-47; Don Donaldson, "Mausoleum, Stables Mark Remains of Once Huge, Rich Placer Ranch," *The Sacramento Bee*, October 23, 1958, C 2-3.

[11] Norman E. Tuturo, *The Governor: The Life and Legacy of Leland Stanford* (Spokane, Washington: Arthur H. Clark Company, June 2004) 262-263; W.B. Lardener and M.J. Brock, *History of Placer and Nevada Counties California* (Los Angeles: Historic Record Company, 1924) 1043; Thompson and West, *History of Placer County, California* (Oakland: Thompson and West, 1882) 273; James D. Hart, *A Companion to California* (New York: Oxford University Press, 1978) 363; Davis, *Roseville Yesterday and Today*¸ 29.

[12] Caltrans Route Adoption Maps and Highway Files, Caltrans Transportation Library, Sacramento; California Highway Commission, *Part II: Report of the California Highway Commission, to Accompany the First Biennial Report of the Department of Public Works* (Sacramento: GPO, November 1, 1922) 201; Department of Public Works, California Highway Commission, *Road Map of the State of California* (Sacramento: GPO, 1922).

[13] Joseph A. McGowan, *History of the Sacramento Valley, Volume II,* (New York and West Palm Beach: Lewis Historical Publishing Company, 1961), 1; Lawrence J. Jelinek, "Harvest Empire: A History of California Agriculture," *Golden State Series* (San Francisco: Boyd & Fraser Publishing Company, 1924), 55-58, 61-63.

portion of the county was limited to seasonal grazing and some farming on higher ground, and for fishing and hunting.[14] New reclamation efforts in the first decade of the twentieth century spurred the state legislature to create Reclamation District (RD) No. 1000 Rural Historic District (RD 1000) in 1911 (Figure 4-1). It later became part of the Sacramento Valley Flood Control Project. Located in northeastern Sacramento and southern Sutter counties, it consisted of 55,130 acres from the Sacramento River east to the Western Pacific Railroad (currently part of the Southern Pacific) tracks and included drainage canals, pumps, levees, ditches, pumping plants and a system of roads. After drainage and construction of levees, the Natomas Consolidated Company surveyed and subdivided the land. Part of the construction included the Natomas East Main Drainage Canal, which is crossed by the western ends of all of the project alternatives reaching SR 70/99. To promote RD 1000 by demonstrating land productivity, Natomas Consolidated leased large acreage blocks for wheat and grain crop production, thus establishing a pattern of large acreage, single-crop land use. The company also built a 60-mile network of roads across RD 1000 to provide access to drainage canals for construction and maintenance, as well as to serve farm roads to parcels within the district's various subdivisions. This network was originally comprised of dirt roads (roughly two lanes wide) that the Natomas Company graded. Most of these roads were paved with macadam or concrete during the 1920s and 1930s. They generally followed the township and section survey lines and the drainage canals to form large regularly-spaced grids in the landscape.[15] Despite these improvement efforts, selling land in the district was a slow process into the late 1940s.[16]

The California State Historic Preservation Office (SHPO) concurred that RD 1000 is significant within the context of reclamation and flood control within the Sacramento Valley during the early twentieth century. It noted that RD 1000 was one of the first large modern reclamation districts in the state and was the largest reclamation project in the country at the time of its initial construction. It provided flood control and also created large areas of productive agricultural land. The Natomas Company built and developed RD 1000's drainage system, including its levees, canals, and pumps, as well as its road system, and these features provided the framework for the spatial land pattern of the district. RD 1000 also served the goals of the region-wide early twentieth century Sacramento Flood Control Project, which was a product of more than 60 years of legislation and technical studies that provided the legal, institutional, and engineering framework to achieve flood control along the Sacramento River. The Sacramento Flood Control Project also supported improved navigation along the river and reclamation of land for productive agricultural uses and development. RD 1000 and its landscape features were considered representative of this important historical trend. OHP agreed that RD 1000 represented the emergence of modern corporations as land owners and developers of reclamation districts, and is representative of the use of large-scale land-moving gold dredging machinery employed for the transformation of the landscape into productive agricultural land. The historic district's primary contributing features are elements of the district's drainage system, road system, and large-scale land patterns, some of which pass through the project's architectural APE. SHPO considered them significant as manifestations of the early twentieth century reclamation and flood control efforts in the Sacramento Valley.[17]

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[14] USGS, *Sacramento* 1892, *Vernon* 1910, and *Pleasant Grove Quadrangle* 1910; Dames & Moore, "Final Rural Historic Landscape Report . . .," 40-41; Marjorie Gordon, *Changes in Harmony: An Illustrated History of Yuba and Sutter Counties* (Northridge, California: Windsor Publications, Inc., 1988) 68-70.

[15] Dames & Moore, "Final Rural Historic Landscape Report . . .," 29-32, 40-41, 62, and 99; Harmon S. Bonte, State of California, Department of Public Works, Division of Water Resources, *Bulletin No. 37: Financial and General Data Pertaining to Irrigation, Reclamation and Other Public Districts in California,* (Sacramento: California State Printing Office, 1931) 181 and 183; USGS, *Verona,* 1994; *Annual Report of the Commissioner of Public Works,* (Sacramento: 1905); House Document Number 81, 62nd Congress, 1st Session, *Flood Control Sacramento and San Joaquin Rivers,* 1911; USGS, *Pleasant Grove,* 1953.

[16] Dames & Moore, "Final Rural Historic Landscape Report . . .," 14.

[17] Dames & Moore, "Final Rural Historic Landscape Report for Reclamation District 1000 . . .," iv, 6-14, and 58-61.

4.4 CONCLUSION

Little change occurred in the study area during the second half of the twentieth century. Despite the construction of SR 70 and SR 65 around 1970, the region's growth was restricted to residential construction on large agricultural tracts. While commercial and industrial development in the northeastern portion (north of Roseville) of the architectural APE began in the late 1960s and continues today around Industrial Boulevard and SR 65, in the majority of the project area agriculture continues to dominate the landscape. Only in recent decades have residential subdivisions begun spreading west from Roseville and north from Sacramento County.

5.0 FINDINGS AND CONCLUSIONS

5.1 FINDINGS

The vast majority of the survey population identified for this study, those buildings, structures and objects that were constructed in or before 1975, are Ranch-, Minimal Traditional- or Contemporary-style residential structures predominantly built during the 1960s and 1970s. Figure 5-1 shows a typical post-1960 residence located on Phillip Road. These buildings are of standard twentieth century styles, types, and methods or construction and are ubiquitous in Northern California and in Sutter and Placer counties.

Of the handful of properties that were built in the first half of the twentieth century, most have been substantially altered by additions, replacement siding or windows, or have suffered severe damage from lack of maintenance and do not appear to retain sufficient integrity to warrant further investigation. Table 5-1 lists the only National Register-eligible property identified as a property in this study. The architectural APE also included two county-owned bridges along South Brewer and Lotus roads in Placer County and two railroads. Caltrans previously identified these bridges (19C0104 and 19C0124) as Category 5 structures (not eligible for listing in the National Register of Historic Places) in the California Historic Bridge Inventory (1986 and updates) (Table 5-2). The Western Pacific Railroad and Sacramento Northern Railroad segments (Table 5-2) within the project area have been previously found to be ineligible for inclusion in the NRHP and therefore required no further study for this project.[18]

Table 5-1
Properties Previously Determined Eligible for Listing in the National Register of Historic Places and Which are Historical Resources Under CEQA

Name	Address	OHP Status Code	Map Ref No.
Reclamation District 1000	Between Western Pacific Railroad and Sacramento River	2D	1

Table 5-2
Properties Previously Determined Ineligible for Listing in the National Register of Historic Places and Which are Not Historical Resources Under CEQA

Name	Address	OHP Status Code	Map Ref No.
Sacramento Northern Railroad Segment	Not applicable	6	2
Western Pacific Railroad Segment	Not applicable	6	3
Bridge 19C0104	Brewer Road, branch of Curry Creek	6	n/a
Bridge 19C0124	Locust Road east of SR 65, Curry Creek	6	n/a

[18] JRP Historical Consulting Services, Far Western Anthropological Research Group, Inc., and Foothill Resources, Ltd., "Archaeological Survey Report and Historic Study Report for the State Route 70 Project, Sutter and Yuba Counties, California," prepared for Woodward-Clyde Consultants, December 1994; JRP Historical Consulting Services, "Addendum Historic Architectural Survey Report and Historic Evaluation Report, State Route 70 Expressway/Freeway Project in Sutter and Yuba Counties, California," Volume I, prepared for Caltrans District 3, June 1995.

The following properties were determined eligible for listing in the National Register of Historic Places as a result of the current study and are historical resources under CEQA: None.

The following properties were determined ineligible for listing in the National Register of Historic Places as a result of the current study and which are not historical resources under CEQA: None.

Toni Webb of JRP, who meets the Professionally Qualified Staff Standards in Section 106 PA Attachment 1 as an Architectural Historian or above, has determined that the only other properties present within the architectural (built environment) APE for the Tier 1 studies, including state-owned resources, meet the criteria for Section 106 PA Attachment 4 (Properties Exempt from Evaluation).

5.2 CONCLUSIONS

Research completed for this phase of the project did identify one resource, RD 1000, within the architectural (built environment) APE that was previously evaluated and found to be eligible for inclusion in the NRHP at the state level of significance under Criterion A. Additionally, JRP identified three other properties that, while they do not appear to be eligible under Criterion C as representative examples of a type, period, or method of construction, or as works of a master, appear to retain sufficient integrity to warrant formal evaluation during the Tier 2 phase of the project. Site-specific research conducted on these properties may produce information that possibly may support eligibility under Criteria A or B. Those resources (APN 35-260-011, 35-260-014 and 017-130-036) are identified on Map 3, Sheets 1 and 3, in Appendix A.

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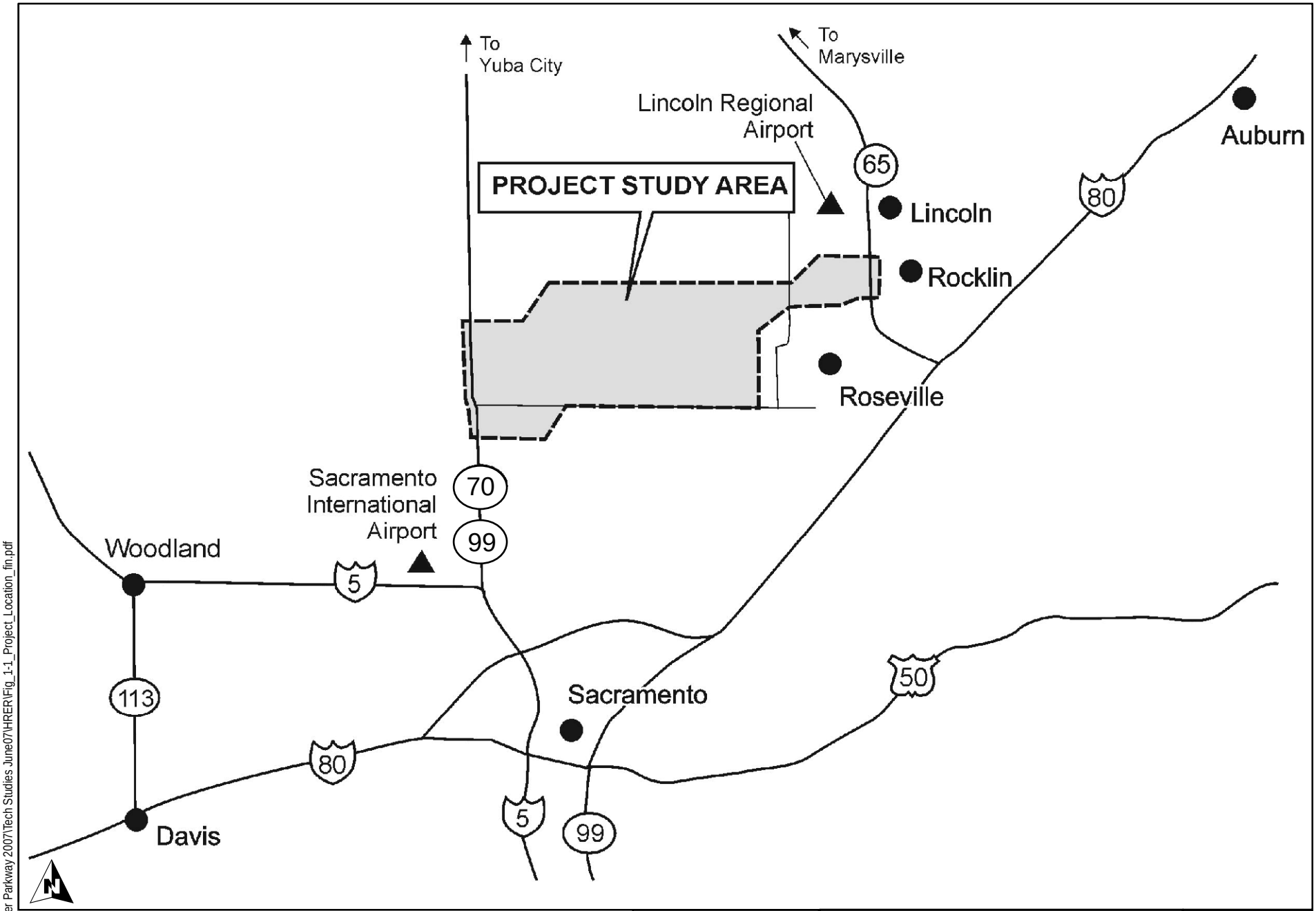
7.0 PREPARERS' QUALIFICATIONS

This project was conducted under the general direction of Rand Herbert (M.A.T. in History, University of California, Davis), a principal at JRP with more than 25 years experience conducting these types of studies. Mr. Herbert qualifies as a historian/architectural historian under the United States Secretary of the Interior's Professional Qualification Standards (as defined in 36 CFR Part 61).

JRP architectural historian Toni Webb was the project manager/lead historian for the project. Ms. Webb conducted research and field recordation, and prepared the contextual statement. Ms. Webb received a B.F.A. in Historic Preservation from the Savannah College of Art and Design and has more than 6 years of experience in public history and historic preservation. Based on her level of experience and education, Ms. Webb qualifies as an architectural historian under the Secretary of the Interior's Professional Qualification Standards (as defined in 36 CFR Part 61).

Research Assistant Steven J. Melvin (B.A. in History, University of Minnesota, Certificate in Public History, California State University, Chico; and is currently pursuing an M.A. in Public History from California State University, Sacramento) assisted with the research and preparation of the contextual statement.

Figures



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Miles

PLACER PARKWAY

Tier 1 EIS/EIR
Historical Resources
Evaluation Report

Project Location

Figure 1-1

June 2007

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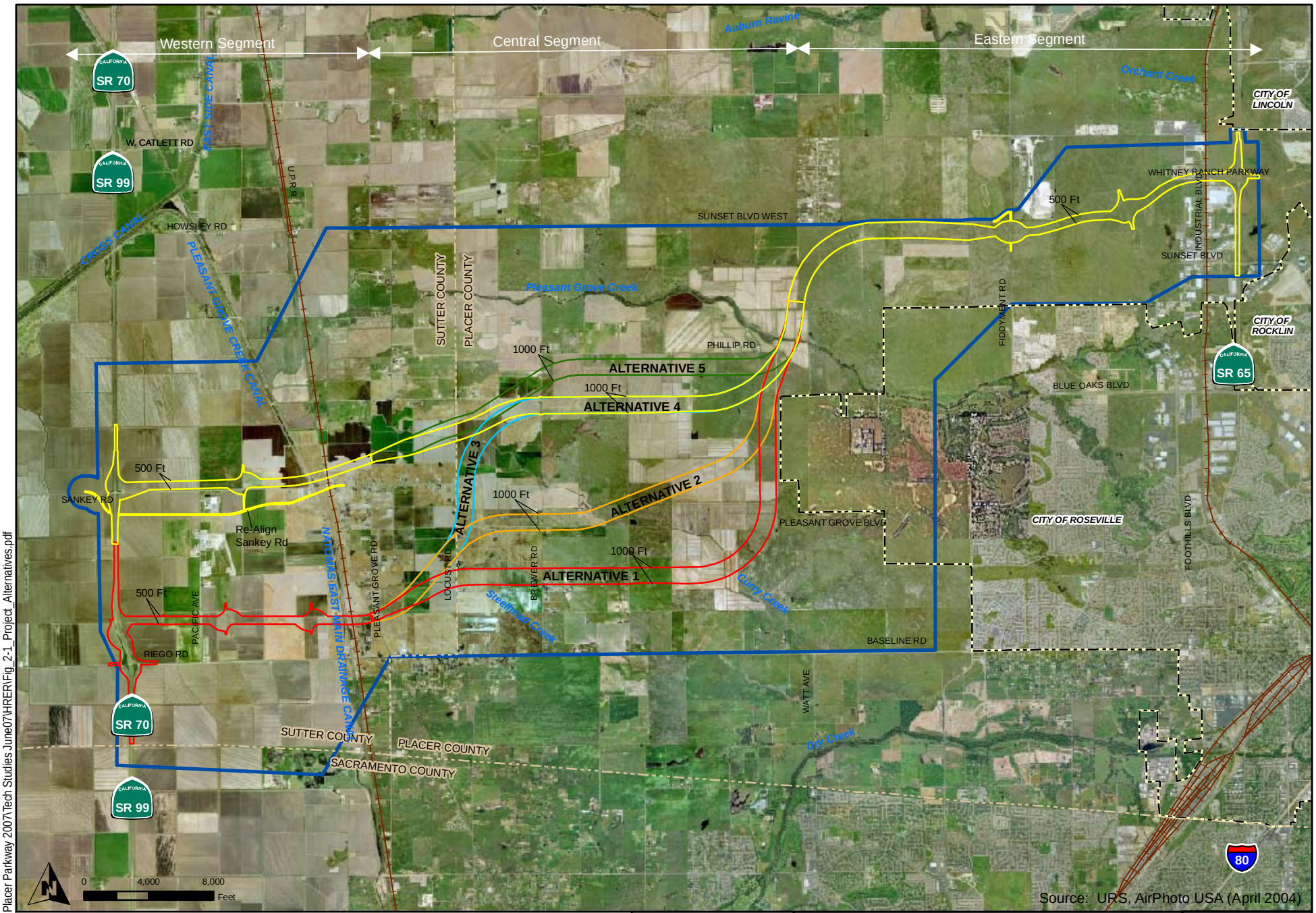
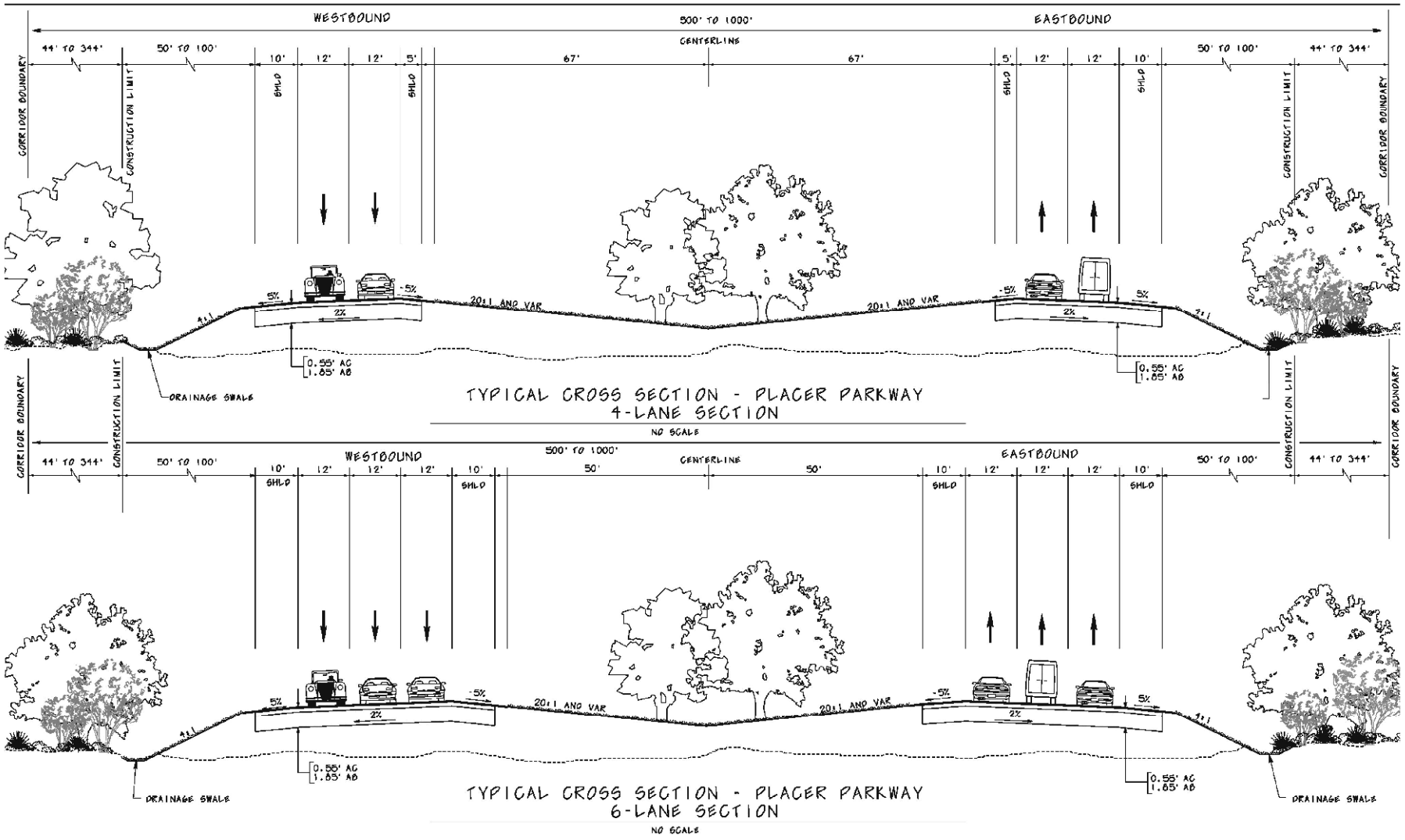
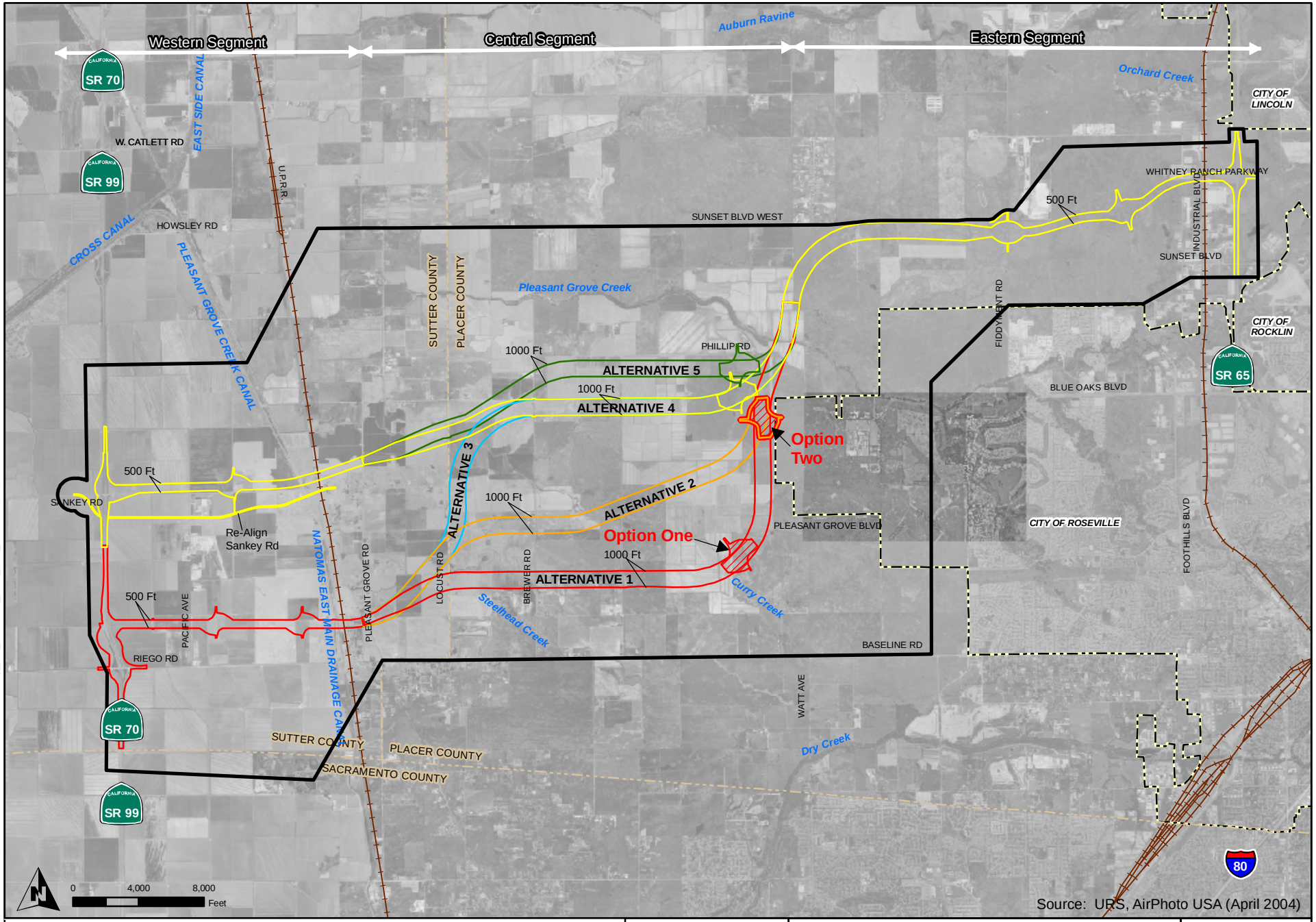
URS Corporation L:\Projects\PlacerParkway2006_28066593WXD\Current Working Documents\Hydrology\TechMemo\Fig_1-1_Project_Location.mxd Date: 5/23/2006 12:45:03 PM Name: akkeele0


Western Segment
Central Segment
Eastern Segment
Auburn Ravine
Orchard Creek
CITY OF LINCOLN
SR 70
W. CATLETT RD
SR 99
EAST SIDE CANAL
UPRR
WHITNEY RANCH PARKWAY
500 Ft
SUNSET BLVD WEST
INDUSTRIAL BLVD
SUNSET BLVD
CROSS CANAL
HOWSLEY RD
PLEASANT GROVE CREEK CANAL
SUTTER COUNTY
PLACER COUNTY
Pleasant Grove Creek
FIDDYMENT RD
CITY OF ROCKLIN
PHILLIP RD
1000 Ft
ALTERNATIVE 5
ALTERNATIVE 4
SR 65
BLUE OAKS BLVD
500 Ft
SANKEY RD
ALTERNATIVE 3
1000 Ft
ALTERNATIVE 2
Re-Align
Sankey Rd
PLEASANT GROVE BLVD
CITY OF ROSEVILLE
FOOTHILLS BLVD
NATOMAS EAST MAIN DRAINAGE CANAL
PLEASANT GROVE RD
LOCUST RD
BREWER RD
1000 Ft
ALTERNATIVE 1
Curry Creek
Steelhead Creek
500 Ft
PACIFIC AVE
RIEGO RD
BASELINE RD
WATT AVE
SR 70
SUTTER COUNTY
PLACER COUNTY
SACRAMENTO COUNTY
Dry Creek
SR 99
80
0
4,000
8,000
Feet
Source: URS, AirPhoto USA (April 2004)
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary
PLACER PARKWAY
Tier 1 EIS/EIR
Historical Resources
Evaluation Report
Project Alternatives
Figure 2-1
June 2007
6/15/07 ..vsa/hkT:\Placer Parkway 2007\Tech Studies June07\HRER\Fig_2-1_Project_Alternatives.pdf
URS Corporation L:\Projects\PlacerParkway\2007_28066595\MXD\Current Working Documents\Final_Technical_Studies_2006\HPSR\Fig_1-2_Project_Alternatives.mxd Date: 4/19/2007 3:01:13 PM Name: akeele0



PLACER PARKWAY CORRIDOR PRESERVATION	Tier 1 EIS/EIR Historical Resources Evaluation Report	Typical Cross Section (Conceptual)	***Figure 2-2*** ***June 2007***

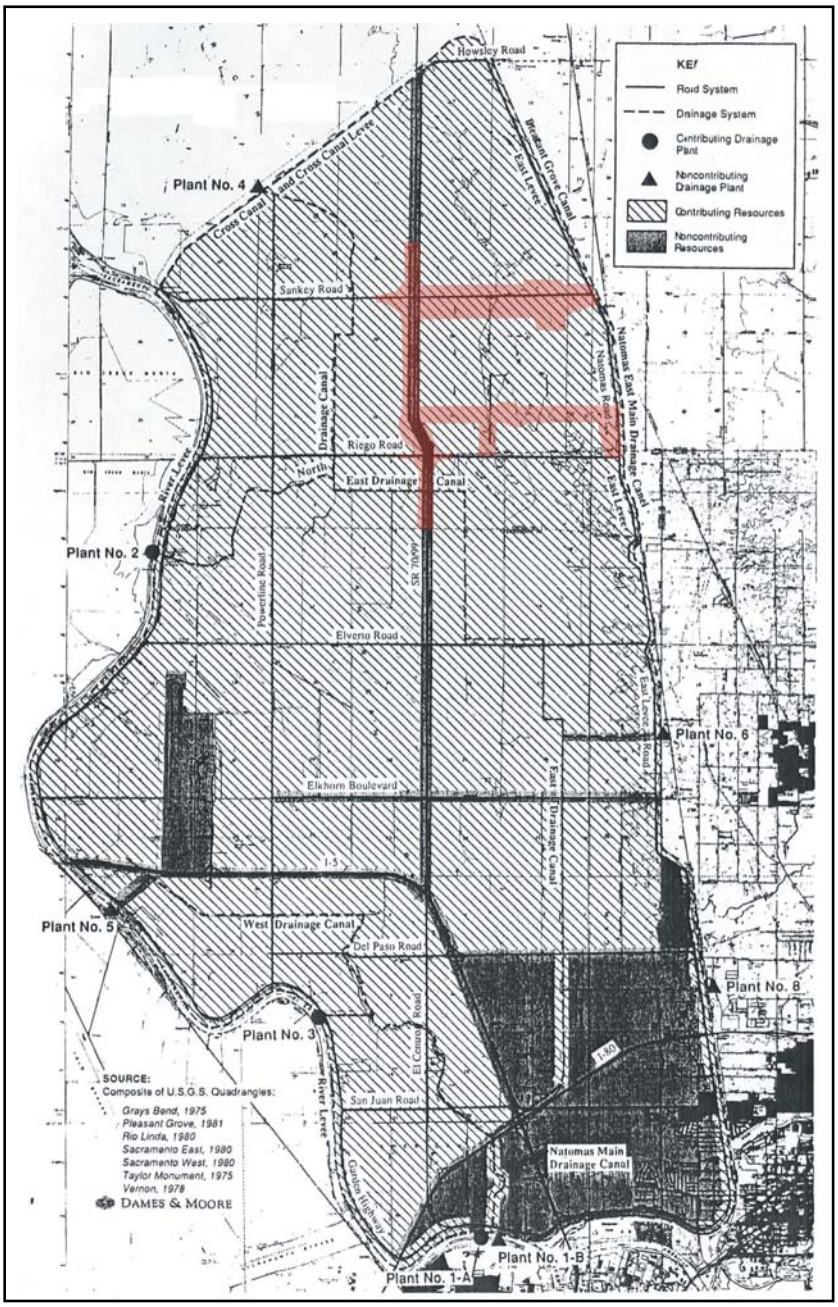


Tier 1 EIS/EIR
Historical Resources Evaluation Report

Potential Watt Avenue Interchange

Figure 2-3

June 2007



Note:
The project's architectural APE shown in red.

PLACER PARKWAY	Tier 1 EIS/EIR Historical Resources Evaluation Report	RD 1000 Historic District and Project APE	***Figure 4-1*** ***June 2007***

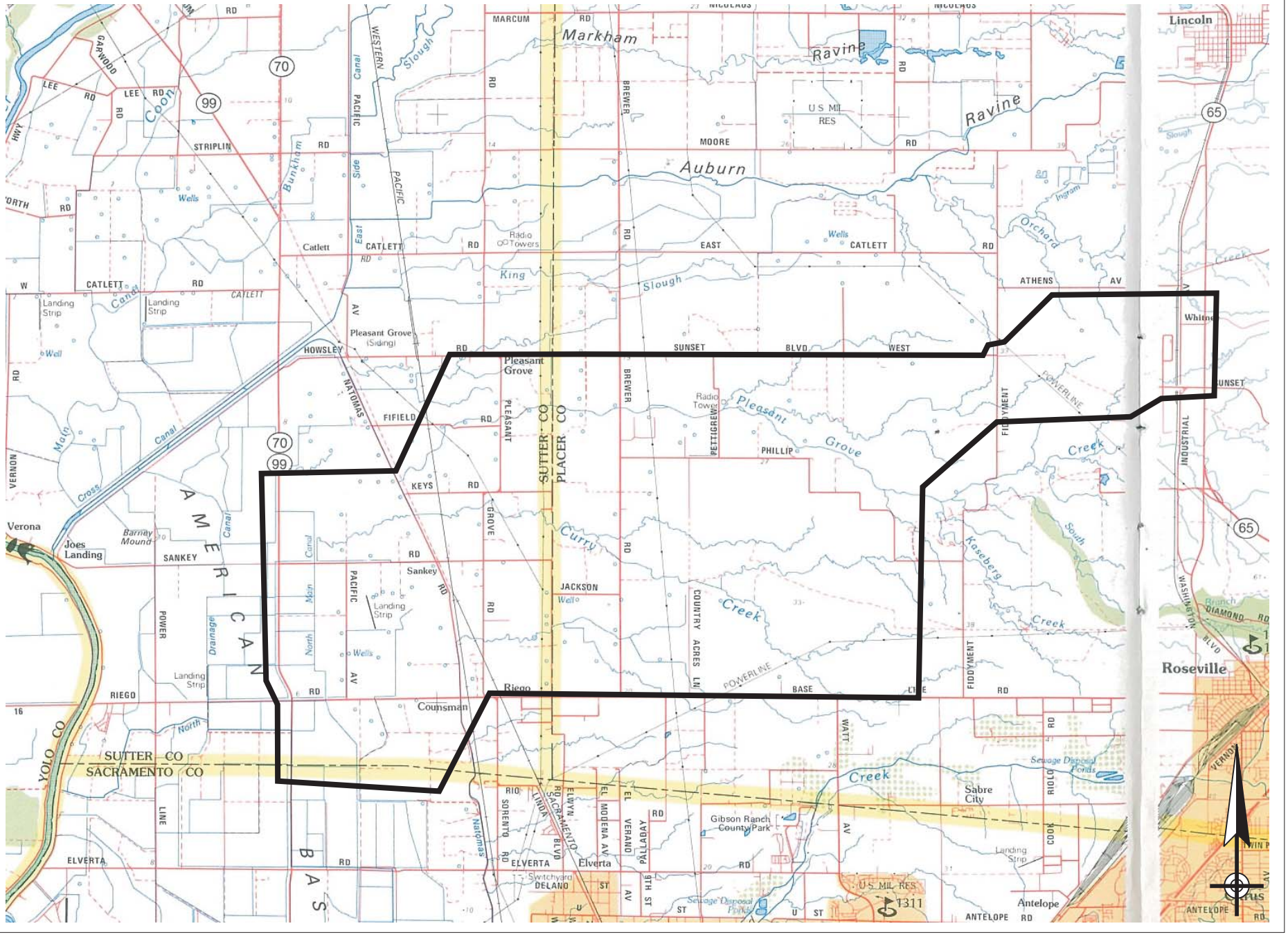
PLACER PARKWAY CORRIDOR PRESERVATION	Tier 1 EIS/EIR Historical Resources Evaluation Report	Typical Post-1960 Residence in APE	***Figure 5-1*** ***June 2007***

6/14/07 ..\K\T\Placer Parkway 2007\Tech Studies June07\HRER\Fig_5-1_typ res.pdf

Appendix A
Maps

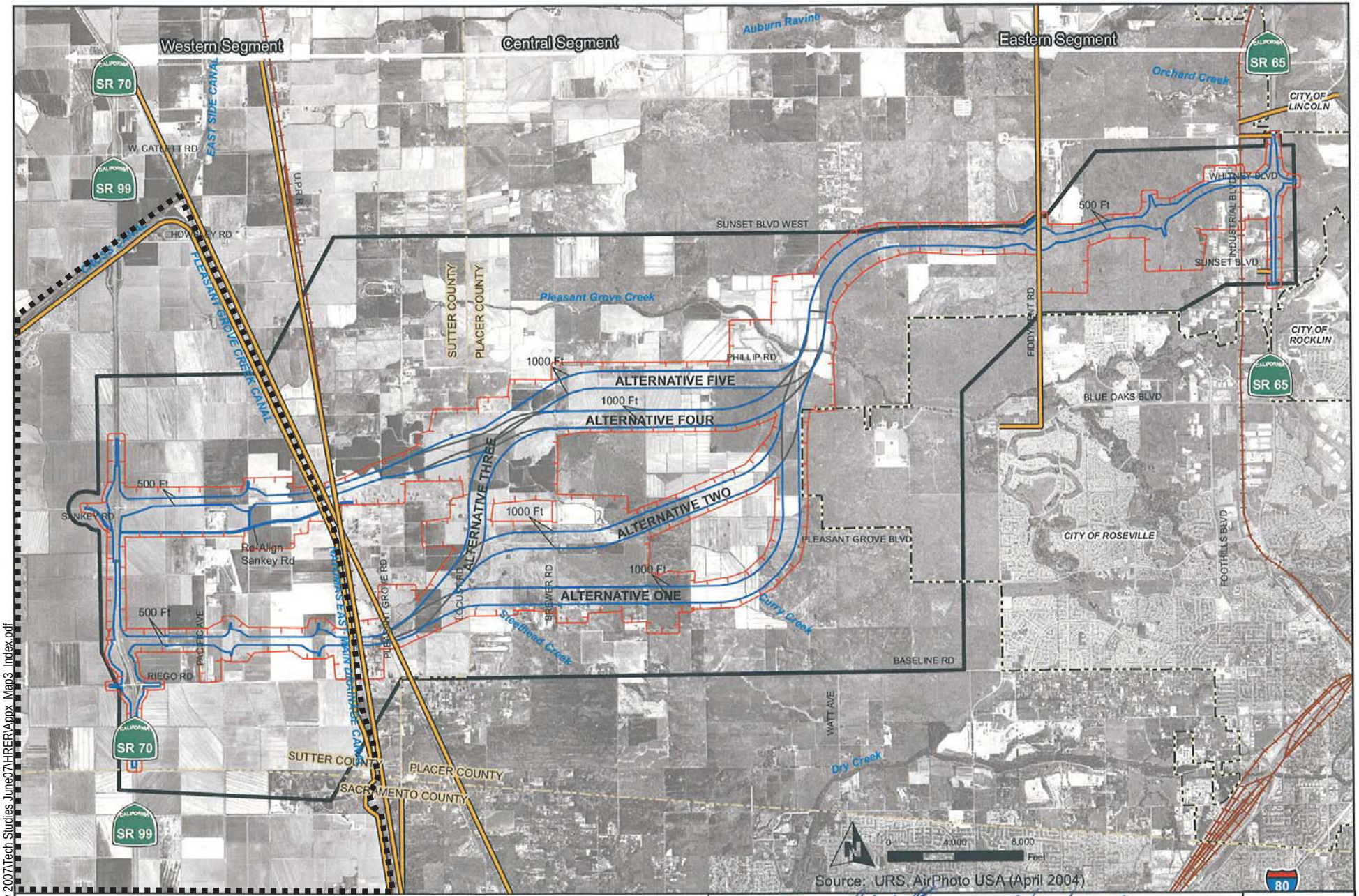
MAP 1

Project Location in California



MAP 2

Project Vicinity



- Alternative
- Study Area Boundary
- County Boundary
- City Boundary
- Historical Architectural Resource
- Recorded Linear Historic Resource
- Recorded Architectural Resource
- Recorded Archaeological Site (Surface Point Only)
- Identified Bridge from Caltrans Bridge Inventory
- Archaeology APE (The archaeological APE includes private and publicly owned property and reflects the outer limits of the alternative alignment corridors.)
- Historic Architecture APE (The historic architecture APE includes private and publicly owned property, and comprises areas which could be subject to potential direct impacts associated with any of the alignment alternatives.)
- Reclamation District 1000

APPROVED
CALTRANS DISTRICT 03, ENVIRONMENTAL BRANCH — DATE 6/19/2006
STEVE PROPST, LOCAL ASSISTANCE ENGINEER — DATE 6/29/06

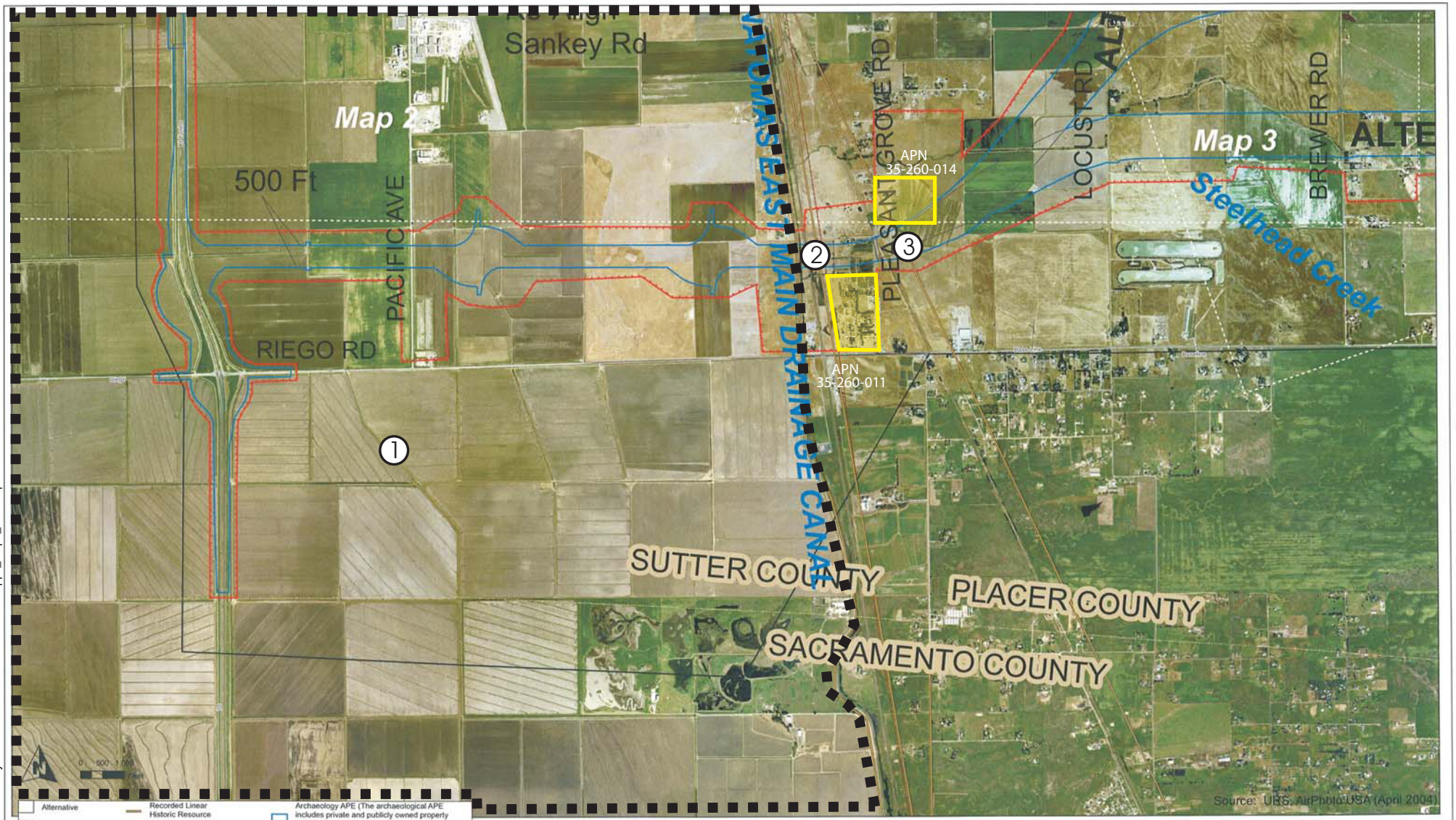
Tier 1 EIS/EIR

MAP 3
Index
APE: Archaeology and Historic Properties

May 2006

6/19/07 .rkT:\Placer Parkway 2007\Tech Studies June07\HRER\Appx Map3 Index.pdf

URS Corporation L:\Projects\PlacerParkway2006_28066593\MXD\Current Working Documents\Resource_Maps\APE_APS_Cultural_Resources.mxd Date: 3/27/2006 6:37:36 PM Name: akkeele0



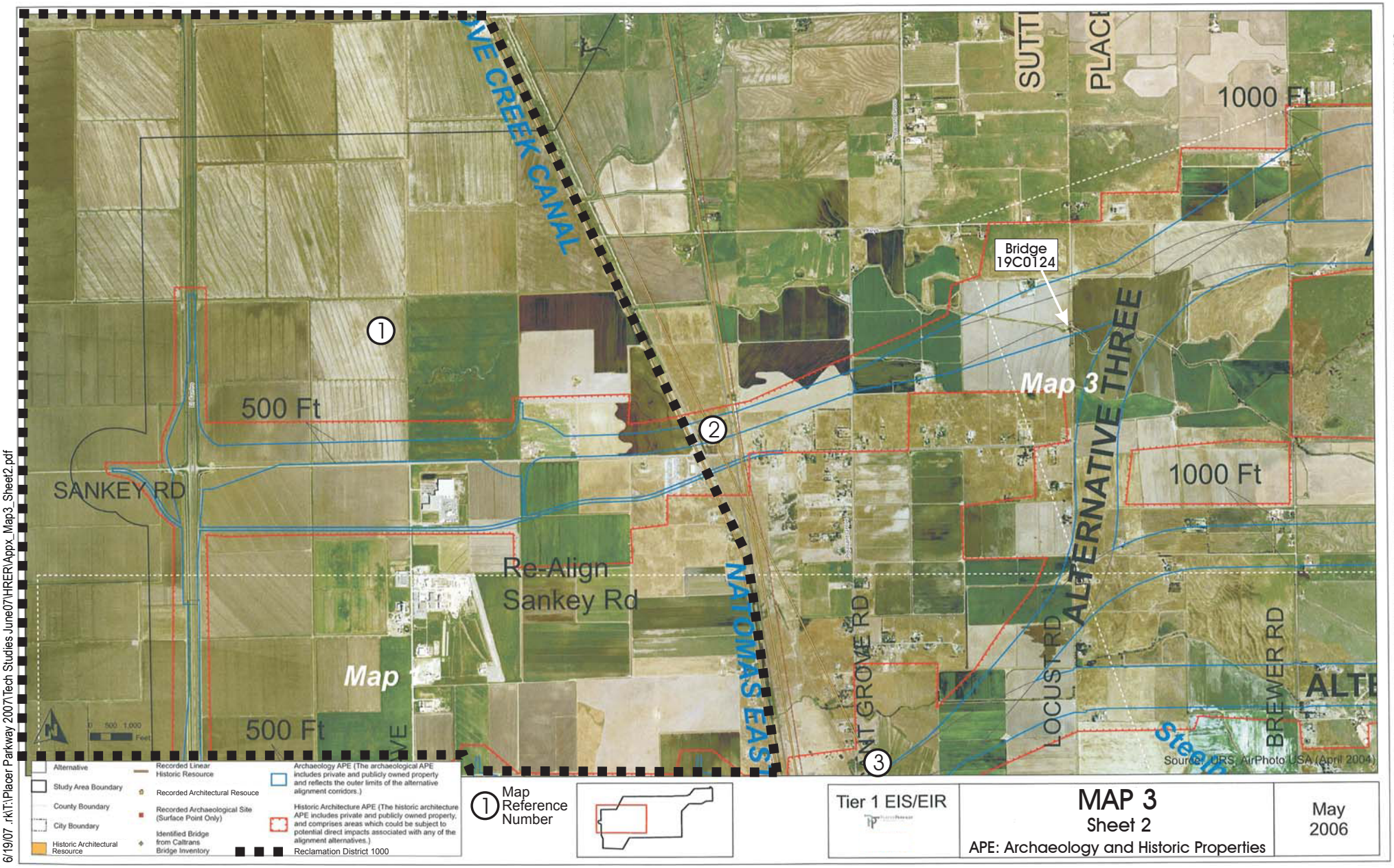
1 Map Reference Number

Tier 1 EIS/EIR

MAP 3
Sheet 1
APE: Archaeology and Historic Properties

May 2006

NOTE: Properties highlighted in yellow do not appear to be potentially eligible under Criterion C, but in white may require additional research for potential eligiblity under Criterion A and B at a later date.



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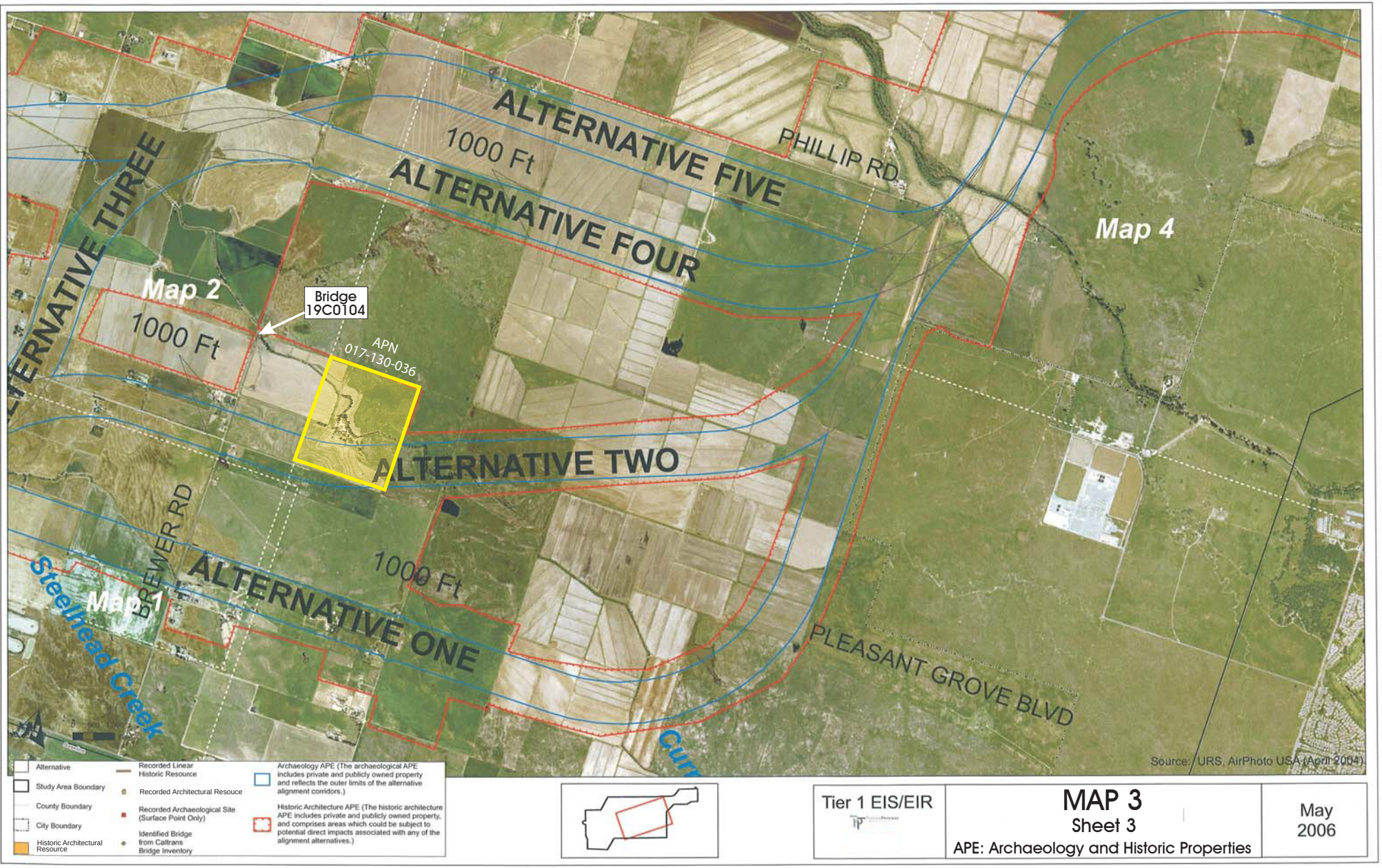
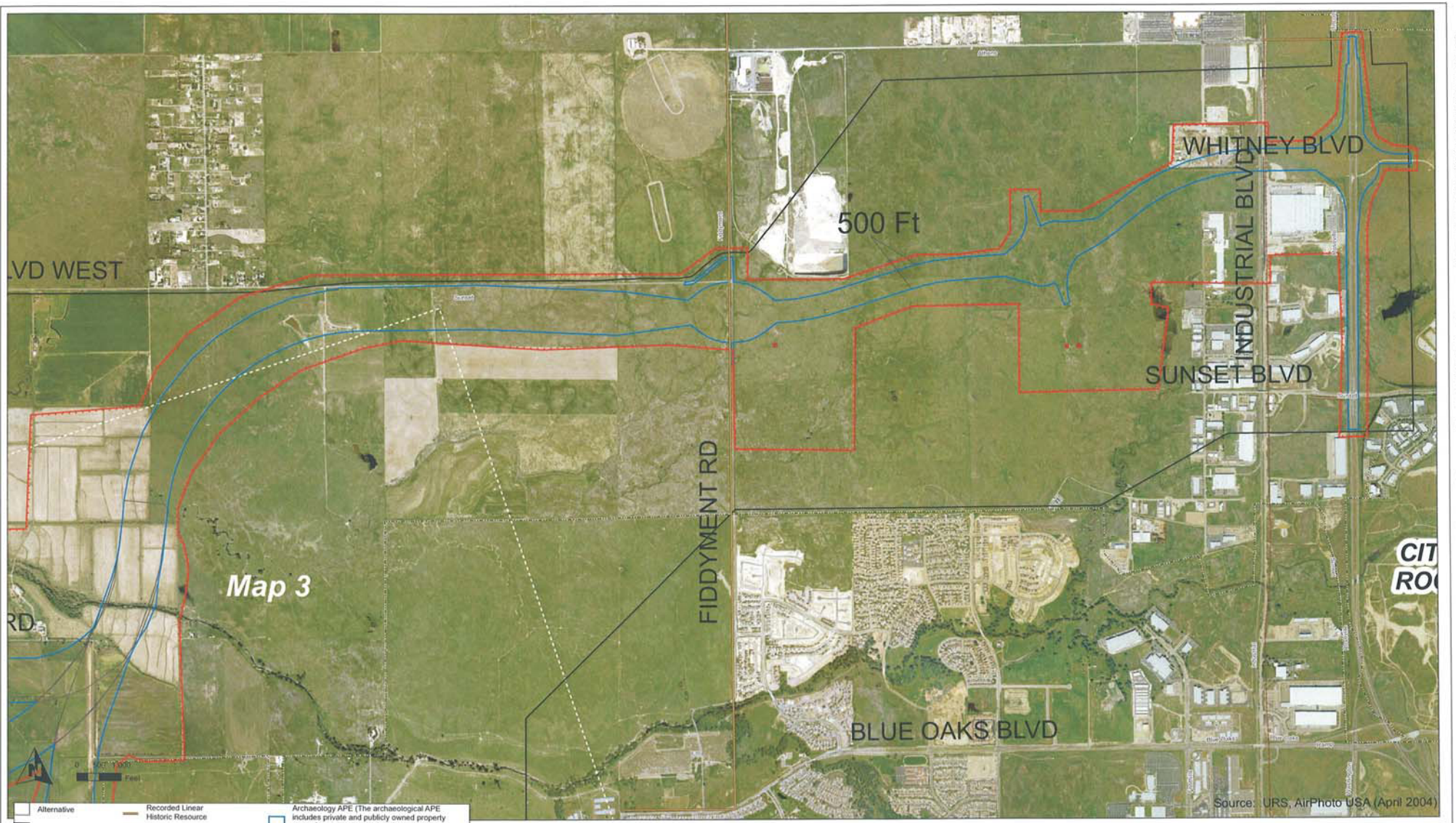


Tier 1 EIS/EIR

MAP 3
Sheet 3
APE: Archaeology and Historic Properties

May 2006

NOTE: Properties highlighted in yellow do not appear to be potentially eligible under Criterion C, but in white may require additional research for potential eligiblity under Criterion A and B at a later date.



Tier 1 EIS/EIR

MAP 3

Sheet 4

APE: Archaeology and Historic Properties

May 2006

Appendix B
Programmatic Agreement

DEPARTMENT OF TRANSPORTATION
DISTRICT 3 – SACRAMENTO OFFICE
2389 GATEWAY OAKS DRIVE, SUITE 100
SACRAMENTO, CA 95833
PHONE (916) 274-0568
FAX (274) 274-0648
TTY (530) 741-4509

7.11.2006

Flex your power!
Be energy efficient!

July 5, 2006

Gene Fong
Federal Highway Administration
650 Capitol Mall, Suite 4-100
Sacramento, CA 958144-4708
Attn: Gary Sweeten

Dear Mr. Fong

The Federal Highway Administration (FHWA) and California Department of Transportation (Caltrans) are working with the Placer County Transportation Planning Agency (PCTPA) on the Placer Parkway Project. PCTPA proposes to identify and acquire right-of-way for the purpose of preserving a corridor for a future Placer Parkway, an east-west connection between State Route (SR) 65 near Lincoln in Placer County and SR 70/99 in southern Sutter County. Our agencies are working together to produce a Tier 1 Environmental Impact Statement (EIS), pursuant to the National Environmental Policy Act (NEPA) that will evaluate several corridor alternatives and will lead to the selection of one corridor for right-of-way preservation.

As a Federal undertaking, this project also requires compliance with Section 106 of the National Historic Preservation Act (NHPA). Pursuant to 36 CFR 800, the regulations implementing Section 106 of the NHPA, we have prepared a draft Programmatic Agreement that will govern Section 106 compliance responsibilities associated with implementing this undertaking. If FHWA agrees with this proposed PA, please forward the attached documentation to the California State Historic Preservation Officer for his review. Caltrans and PCTPA staff are available to meet with the SHPO to explain the undertaking in more detail if that is helpful.

Should you require any additional project information, please contact Erick Wulf at (916) 274-0563 or erick.wulf@dot.ca.gov or Anmarie Medin at (916) 274-584 or anmarie.medin@dot.ca.gov. Thank you in advance for your assistance in this matter.

Sincerely,

Japtej S Gill

JAPTEJ GILL
Chief, Environmental Planning, S4

c: Stan Tidman, Placer County Transportation Planning Agency

bc: EWulf, AMedin

PROGRAMMATIC AGREEMENT

BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER REGARDING IMPLEMENTATION OF THE PLACER PARKWAY PROJECT, PLACER COUNTY, CALIFORNIA

WHEREAS, the Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans), in cooperation with the Placer County Transportation Planning Agency (PCTPA), propose to identify and acquire right-of-way for the purpose of preserving a corridor for a future Placer Parkway, an east-west connection between State Route (SR) 65 near Lincoln in Placer County and SR 70/99 in southern Sutter County (Undertaking); and,

WHEREAS, the FHWA is preparing a Tier 1 Environmental Impact Statement (EIS), pursuant to the National Environmental Policy Act (NEPA), 42 USC 4321 *et seq,* that will evaluate several corridor alternatives and will lead to the selection of one corridor for right-of-way preservation; and

WHEREAS, given the existing and projected rapid growth in and around the project study area, the FHWA has determined it is vital to identify a corridor as early as feasible so that local jurisdiction planning decisions can consider the future Placer Parkway and before new development reduces corridor options and/or increase right-of-way acquisition costs for the Undertaking; and,

WHEREAS, the FHWA has determined that a phased approach for compliance with Section 106 of the NHPA is appropriate for the Undertaking, such that completion of the identification of historic properties, determinations of specific effects in historic properties, and resolution of any adverse effects will be carried out as part of planning for and prior to the approval of specific Tier 2 undertakings; and,

WHEREAS, the FHWA has consulted with the California State Historic Preservation Officer (SHPO) pursuant to the 1 January 2004 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA), and where the PA so directs, in accordance with 36 CFR Part 800, the regulations that implement Section 106 of the National Historic Preservation Act (NHPA) (16 U.S.C. 470f), regarding the Undertaking's potential effects on historic properties; and,

WHEREAS, following the completion of Tier 1 EIS, the FHWA, as funding becomes available for design and construction, will conduct Tier 2 environmental studies to analyze the environmental impacts of different alignments within the selected corridor in order to determine the specific transportation facility 'footprint' within the corridor , including project-level compliance with the Section 106 process to determine specific impacts to historic properties as

well as opportunities for avoidance, minimization of harm, and appropriate mitigation, if required, for the Undertaking; and,

WHEREAS, the FHWA desires to enter into a Programmatic Agreement (Agreement) at this time in order to establish a framework for conducting Section 106 consultation for Tier 1 and Tier 2; and,

WHEREAS, Caltrans has participated in consultation and has been invited to be a signatory to this Agreement; and

WHEREAS, PCTPA has participated in consultation and has been invited to be a signatory to this Agreement; and

WHEREAS, the Advisory Council on Historic Preservation (ACHP) has been afforded the opportunity to participate in the Section 106 process and has not elected to participate; and,

WHEREAS, Caltrans, on behalf of the FHWA, has initiated consultation with the Shingle Springs Band of Miwok Indians, Todd Valley Miwok-Maidu Cultural Foundation, Maidu Elders Orgainzation, and Enteprise Rancheria of Maidu Indians, as well as with the following federally-recognized Indian Tribes: United Auburn Indian Community (Tribes).

WHEREAS, the FHWA has involved, and will continue to involve, the public and historic interest groups, as stipulated under NEPA and the NHPA in a manner consistent with the PA and Caltrans' public involvement procedures;

NOW, THEREFORE, the FHWA and the SHPO agree that, upon the FHWA's decision to proceed with the Undertaking, the FHWA shall ensure that the Undertaking is implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on historic properties; and further agree that these stipulations shall govern the Undertaking and all of its parts until this Agreement expires or is terminated.

STIPULATIONS

The FHWA will ensure that the following stipulations are implemented:

I. DEFINITIONS

The definitions set forth at 36 CFR § 800.16 are applicable throughout this Agreement.

II. TIER 1 PHASED IDENTIFICATION OF HISTORIC PROPERTIES

A. Area of Potential Effects

1. The Undertaking's area of potential effects (APE) for Tier 1 is situated in southwest Placer County, between Highways 65 and 70, north of Baseline Road and south of Sunset Boulevard West (attachment A to this Agreement).

2. If modifications to the Undertaking, subsequent to the execution of this Agreement, necessitate the revision of the APE, Caltrans will consult with the PCTPA, the FHWA, and the SHPO to facilitate mutual agreement on the subject revisions. If Caltrans, the PCTPA, the FHWA, and the SHPO cannot reach such agreement, then the parties of this Agreement shall resolve the dispute in accordance with stipulation VIII.C below. If Caltrans, the PCTPA, the FHWA, and the SHPO reach mutual agreement on the proposed revisions, then Caltrans will submit a final map of the revisions, consistent with the requirements of stipulations VIII.A and XVI.A of the PA, no later than 30 days following such agreement.

B. Phased Identification of Historic Properties

1. Areas Common to all Alternatives/Corridors: the FHWA shall ensure that PCTPA or its consultants inventory properties within the area(s) common to all Tier 1 corridors according to the following specifications:
   a. Archaeological Properties
      (1) Conduct an inventory of archaeological properties where access has been secured in areas that have not previously been surveyed and those areas deemed by Caltrans PQS in need of resurvey because of the age or condition of the previous survey. Archaeological properties will be identified in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms.
   b. Built Environment Properties
      (1) Conduct a limited inventory of built environment properties within the entire Tier 1 APE. Built environment properties that have the potential to meet NRHP Criterion C will be identified and evaluated in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms. Other built environment properties within the APE that meet the age and integrity criteria will be inventoried and evaluated during Tier 2 studies, as provided for in stipulation III of this Agreement.
2. Areas Unique to Specific Alternatives/Corridors: the FHWA shall ensure that PCTPA or its consultants inventory properties within the area(s) unique to specific Tier 1 alternatives/corridors according to the following specifications:
   a. Archaeological Properties
      (1) Complete a records search for the Tier 1 APE and prepare a predictive model utilizing environmental factors and historic land-use data to assess the archaeological sensitivity of the project corridors including potential for buried resources. Segments of Tier 1 alignments/corridors that are not in common will be inventoried for archaeological properties during Tier 2 studies, as provided for in stipulation III of this Agreement.
   b. Built Environment Properties
      (1) Conduct a limited inventory of built environment properties within the entire Tier 1 APE. Built environment properties that have the potential to meet NRHP Criterion C will be identified and evaluated

in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms. Other built environment properties within the APE that meet the age and integrity criteria will be inventoried and evaluated during Tier 2 studies, as provided for in stipulation III of this Agreement.

3. Tier 1 Reporting and SHPO Consultation
   a. The FHWA shall ensure that PCTPA or its consultants prepare documentation of their findings and determinations pursuant to stipulation XVI of the PA. The reports shall be submitted to Caltrans PQS for review and approval.pursuant to stipulation XVI of the PA.
   b. Eligibility determinations shall be submitted to SHPO pursuant to stipulation VIII.C(5) of the PA.

C. Phased Assessment of Effects

1. The FHWA shall assess the potential for Tier 1 of the Undertaking to effect historic properties in accordance with stipulation X of the PA. As Tier 1 is defined as acquisition of property, the FHWA anticipates there will be no adverse effects during Tier 1. The FHWA shall consult with SHPO on the effect finding pursuant to stipulation X of the PA.

III. TIER 2 PHASED SECTION 106 CONSULTATION

A. Area of Potential Effects: The objective of the Tier 1 EIS is to identify and preserve an approximate 500'- to 1,000'-wide corridor for acquisition. The Tier 1 EIS will focus on broad topics such as general location, mode choice, area-wide air quality and land use, and other environmental issues. Once the corridor is selected, the subsequent Tier 2 environmental review, relying on the work from the Tier 1 EIS, will provide a more detailed analysis of the environmental impacts for the future transportation facility alignment alternatives within the selected corridor. Once a Tier 2 preferred alternative is chosen, the FHWA and PCTPA will delimit an APE for the Tier 2 preferred alternative in accordance with stipulation VIII.A of the PA. If subsequent modifications to the APE are necessary, the FHWA shall follow the procedures of stipulation II.A(2) of this Agreement.

B. Phased Identification and Evaluation.

1. Archaeological Properties
   a. The FHWA shall ensure that PCTPA or its consultants conducts a pedestrian reconnaissance of all lands within the final APE for any Tier 2 preferred alternative. Archaeological properties will be identified and evaluated in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms.
2. Built Environment Properties
   a. The FHWA shall ensure that PCTPA or its consultants conducts an inventory of built environment properties within the final APE for any Tier 2 preferred alternative. Built environment properties will be

evaluated for NRHP eligibility in accordance with stipulation VIII.(B) and (C) of the PA, and documented on appropriate DPR 523 inventory forms.

3. Tier 2 Reporting and SHPO Consultation
   a. The FHWA shall ensure that PCTPA or its consultants prepare documentation of their findings and determinations pursuant to stipulation XVI of the PA. The reports will be submitted to Caltrans PQS for review and approval pursuant to stipulation XVI of the PA.
   b. Eligibility determinations shall be submitted to SHPO pursuant to stipulation VIII.C(5) of the PA.

C. **Assessment of Effects.** The FHWA will assess any Tier 2 preferred alternative for its potential to affect historic properties and will consult with the SHPO pursuant to stipulation IX and X of the PA. Should FHWA find that any Tier 2 preferred alternative will result in an adverse effect, FHWA shall consult with SHPO pursuant to stipulation XI of the PA.

D. **Applicable Requirements.** FHWA will conduct the Section 106 process during Tier 2 in accordance with stipulations of the PA and applicable requirements under Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) and the Section 106 regulations (36 C.F.R. Part 800), including any subsequent amendments thereto. Nothing in this Agreement is intended to supersede or modify any requirement contained in the Section 106 statute or the Section 106 regulations.

E. **Consulting Parties**. During Tier 2, the same party may be designated as a consulting party for more than one alternative. FHWA will ensure comments of all consulting parties are incorporated into the Section 106 consultation process as provided for in all applicable laws.

IV. TIER 2 SECTION 106 COMMITMENTS AND CONCEPTUAL MITIGATION

A. FHWA and PCTPA agree to implement and/or fund the activities listed in this section as part of any Tier 2 environmental studies. Additional commitments may be made, as appropriate, as an outcome of the Section 106 consultation process for any Tier 2 alternative.

B. **Avoidance and Minimization of Impacts**

1. In General. In accordance with the consultation process required under Section 106 and in accordance with other applicable laws, FHWA, PCTPA, and Caltrans will seek ways to avoid, minimize, and mitigate adverse impacts to the environment, including adverse effects to historic properties.
2. Context-Sensitive Solutions. FHWA, PCTPA, and Caltrans will apply the principles of context-sensitive solutions during project development, in accordance with applicable Caltrans policies. In accordance with those principles and where appropriate, FHWA, PCTPA, and Caltrans will develop any Tier 2 alternative with sensitivity to aesthetic values and the historic context, utilizing the services of professionals with experience in areas related to historic preservation.

C. Should implementation of any Tier 2 alternative result in adverse effects to a historic property important solely for its information value (Criterion D), FHWA will ensure a data recovery plan is prepared according to guidance in Attachment 6 of the PA and submitted to the SHPO for review in accordance with stipulation II.C(3) of this Agreement.

D. The FHWA will not authorize the execution of any Undertaking activity that may effect (36 CFR § 800.16(i)) historic properties in the Undertaking's APE prior to the completion of the Section 106 process provided for in this Agreement.

V. NATIVE AMERICAN CONSULTATION

The FHWA has consulted with the Tribes regarding the proposed Undertaking, will continue to consult with the Tribes, and will afford the Tribes, should the Tribe so desire, the further opportunity to more directly and actively participate in the implementation of the Undertaking; Should any specific Tribe desire to participate in this Agreement as herein set forth, the FHWA shall consult with them to reach consensus regarding the manner in which the Tribe may participate in the implementation of this Agreement and the Undertaking, and regarding any time frames or other matters that may govern the nature, scope, and frequency of such participation.

VI. TREATMENT OF HUMAN REMAINS

The Agreement parties agree that human burials and related items discovered during implementation of the terms of this Agreement and of the Undertaking will be treated in accordance with the requirements of § 7050.5(b) of the California Health and Safety Code. If, pursuant to § 7050.5(c) of the Code, the county coroner or medical examiner determines that the human remains are or may be of Native American origin, then the discovery shall be treated in accordance with the provisions of §§ 5097.98(a)-(d) of the California Public Resources Code.

VII. DISCOVERIES AND UNANTICIPATED EFFECTS

If the FHWA determines, after any future construction of the Undertaking has commenced, that the Undertaking will affect a previously unidentified property that may be eligible for the National Register, or affect a known historic property in an unanticipated manner, the FHWA will address the discovery or unanticipated effect in accordance with 36 CFR § 800.13(b)(3). The FHWA at its discretion may hereunder, and pursuant to 36 CFR § 800.13(c), assume any discovered property to be eligible for inclusion in the National Register.

VIII. ADMINISTRATIVE PROVISIONS

A. PROFESSIONAL QUALIFICATIONS AND STANDARDS

1. **Professional Qualifications**. All activities prescribed by stipulations II, III, IV, V, VI, and VII of this Agreement shall be carried out under the authority of the FHWA by or under the direct supervision of a person or persons meeting at a minimum the Secretary of Interior's *Professional Qualifications Standards* (48 FR 44738-39) (PQS) in the appropriate disciplines. However, nothing in this stipulation may be interpreted to preclude the FHWA or any

agent or contractor thereof from using the properly supervised services of persons who do not meet the PQS.

2. **Documentation Standards.** Written documentation of activities prescribed by stipulations II, III, IV, V, VI, and VII of this Agreement shall conform to *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740) as well as to applicable standards and guidelines established by the SHPO.

3. **Curation and Curation Standards.** The FHWA shall ensure that, to the extent permitted under §§ 5097.98 and 5097.991 of the California Public Resources Code, the materials and records resulting from the activities prescribed by this Agreement are curated in accordance with 36 CFR Part 79. The FHWA will ensure that, to the extent permitted by applicable law and regulation, the views of the Most Likely Descendant(s) are taken into consideration when decisions are made about the disposition of other Native American archaeological materials and records.

B. **CONFIDENTIALITY.** The Agreement parties acknowledge that historic properties covered by this Agreement are subject to the provisions of section 304 of the NHPA, and section 6254.10 of the California Government Code (Public Records Act), relating to the disclosure of archaeological site information and, having so acknowledged, will ensure that all actions and documentation prescribed by this Agreement are consistent with said sections.

C. **RESOLVING OBJECTIONS.**

1. Should any Agreement party object to the manner in which the terms of this Agreement are implemented, to any action carried out or proposed with respect to the implementation of the Agreement, or to any documentation prepared in accordance with and subject to the terms of this Agreement, the FHWA shall immediately notify the other parties to this Agreement of those objections, and shall consult with the objecting party and with the other parties for no more than 14 days to resolve the objection. The FHWA shall reasonably determine when this consultation will commence. If the objection is resolved through such consultation, the action subject to dispute may proceed in accordance with the terms of that resolution. If, after initiating such consultation, the FHWA determines that the objection cannot be resolved through consultation, the FHWA shall forward all documentation relevant to the objection, including the FHWA's proposed response to the objection, to the ACHP, with the expectation that the ACHP will, within thirty (30) days after receipt of such documentation, do one of the following:

   a. advise the FHWA that the ACHP concurs in the FHWA's proposed response to the objection, whereupon the FHWA will respond to the objection accordingly. The objection shall thereby be resolved; or,

b. provide the FHWA with recommendations, which the FHWA will take into account in reaching a final decision regarding its response to the objection. The objection shall thereby be resolved; or,

c. notify the FHWA that the objection will be referred for comment, pursuant to 36 CFR § 800.7(c), and proceed to refer the objection and comment. The FHWA shall take the resulting comment into account, in accordance with 36 CFR § 800.7(c)(4) and section 110(1) of the NHPA. The objection shall thereby be resolved.

2. Should the ACHP not exercise one of the foregoing options within 30 days after receipt of all pertinent documentation, the FHWA may assume the ACHP's concurrence in its proposed response to the objection and proceed to implement that response. The objection shall thereby be resolved.

3. The FHWA shall take into account any ACHP recommendation or comment provided in accordance with section C.1 of this stipulation, with reference only to the subject of the objection. The FHWA's responsibility to carry out all actions under this Agreement not the subject to the objection will remain unchanged.

4. At any time during the implementation of the measures stipulated in this Agreement, should an objection pertaining to such implementation be raised by a member of the public, the FHWA shall notify the Agreement parties in writing of the objection and take the objection into consideration. The FHWA shall consult with the objecting party and, if the objecting party so requests, with the other Agreement parties for no more than fifteen (15) days. Within ten (10) days following closure of this consultation period, the FHWA will render a decision regarding the objection and notify all consulting parties hereunder of its decision in writing. The objection will thereby be resolved. In reaching its decision, the FHWA will take into account any comments from the consulting parties regarding the objection, including the objecting party. The FHWA's decision regarding the resolution will be final.

5. The FHWA shall provide all Agreement parties, the ACHP when the ACHP has issued comments hereunder, and any parties that have objected pursuant to section C.4 of this stipulation, with a copy of its final written decision regarding any objection addressed pursuant to this stipulation.

6. The FHWA may authorize any action subject to objection under section C of this stipulation to proceed after the objection has been resolved in accordance with the terms of section C.

D. **AMENDMENTS:** Any Agreement party may propose that this Agreement be amended, whereupon the Agreement parties will consult for no more than 30 days to consider such amendment. The FHWA may extend this consultation period.

The amendment process shall comply with 36 CFR §§ 800.6(c)(1) and 800.6(c)(7). This Agreement may be amended only upon the written agreement of the signatory parties. If it is not amended, this Agreement may be terminated by either signatory party in accordance with section E of this stipulation.

E. TERMINATION

1. If this Agreement is not amended as provided for in section D.1 of stipulation VIII, above, or if either signatory party proposes termination of this Agreement for other reasons, the signatory party proposing termination shall, in writing, notify the other Agreement parties, explain the reasons for proposing termination, and consult with the other Agreement parties for at least 30 days to seek alternatives to termination. Such consultation shall not be required if the FHWA proposes termination because the Undertaking no longer meets the definition set forth at 36 CFR § 800.16(y).

2. Should such consultation result in an agreement on an alternative to termination, then the parties shall proceed in accordance with the terms of that agreement.

3. Should such consultation fail, the signatory party proposing termination may terminate this Agreement by promptly notifying the other Agreement parties in writing. Termination hereunder shall render this Agreement without further force or effect.

4. If this Agreement is terminated hereunder, and if the FHWA determines that the Undertaking will nonetheless proceed, then the FHWA shall either consult in accordance with 36 CFR § 800.6 to develop a new Agreement, or request the comments of the ACHP, pursuant to 36 CFR Part 800.

F. DURATION OF THE AGREEMENT

1. Unless terminated pursuant to section F of stipulation VIII above, or unless it is superseded by an amended Agreement, this Agreement will be in effect following execution by the signatory parties until the FHWA, in consultation with the other Agreement parties, determines that all of its stipulations have been satisfactorily fulfilled. This Agreement will terminate and have no further force or effect on the day that the FHWA notifies the other Agreement parties in writing of its determination that all stipulations of this Agreement have been satisfactorily fulfilled.

2. The terms of this Agreement shall be satisfactorily fulfilled within twenty (20) years following the date of execution by the signatory parties. If the FHWA determines that this requirement cannot be met, the Agreement parties will consult to reconsider its terms. Reconsideration may include the continuation of the Agreement as originally executed, amendment of the Agreement, or termination. In the event of termination, the FHWA will comply with section

F.4 of stipulation VIII, above, if it determines that the Undertaking will proceed notwithstanding termination of this Agreement.

3. If the Undertaking has not been implemented within twenty (20) years following execution of this Agreement by the signatory parties, this Agreement shall automatically terminate and have no further force or effect. In such event, the FHWA shall notify the other Agreement parties in writing and, if it chooses to continue with the Undertaking, shall reinitiate review of the Undertaking in accordance with 36 CFR Part 800.

G. **EFFECTIVE DATE.** This Agreement will take effect on the date that it has been fully executed by the FHWA and the SHPO.

EXECUTION of this Agreement by the FHWA and the SHPO, its transmittal by the FHWA to the ACHP in accordance with 36 CFR § 800.6(b)(1)(iv), and subsequent implementation of its terms, shall evidence, pursuant to 36 CFR § 800.6(c), that this Agreement is an agreement with the ACHP for purposes of section 110(1) of the NHPA, and shall further evidence that the FHWA has taken into account the effects of the Undertaking on historic properties and has afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties.

SIGNATORY PARTIES:
Federal Highway Administration

By _____ Date _____
Gene Fong
Division Administrator

California State Office of Historic Preservation

By _____ Date _____
M. Wayne Donaldson, FAIA
State Historic Preservation Officer

CONCURRING PARTIES:
Placer County Transportation Planning Agency

By _____ Date _____
Celia McAdam, Executive Director

California Department of Transportation

By _____ Date _____
Jody Jones, District 3 Director

Appendix C
Historic Bridge Inventory

Structure Maintenance & Investigations

Historical Significance - Local Agency Bridges

District 03

Placer County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
19C0001	NORTH FORK AMERICAN RIVER	0.3 MI NE OF SH 49	5: Not eligible for NRHP	1955	
19C0002	NORTH FORK AMERICAN RIVER	1.5 MI W SHIRTTAIL CAN.RD	2: Eligible for NRHP	1930	
19C0004	AUBURN RAVINE	0.6 MI N/O S.H. 193	5: Not eligible for NRHP	1990	
19C0006	SECRET RAVINE	6.2 MI N OF SACTO CO.LINE	5: Not eligible for NRHP	1964	
19C0010	DRY CREEK	BTWN OAK ST & PARK DR	5: Not eligible for NRHP	1987	
19C0011	DRY CREEK	0.4 MI N P.F.E. RD	5: Not eligible for NRHP	1954	
19C0015	APPLEGATE ROAD UP	0.5 MI S OF BURGAN RD	5: Not eligible for NRHP	1927	
19C0016	APPLEGATE ROAD UP	BOOLE RD	5: Not eligible for NRHP	1909	
19C0017	APPLEGATE ROAD UP	3.5 MI S CODY LANE	5: Not eligible for NRHP	1927	
19C0020	ANTELOPE CREEK	JUST WEST OF SH 80	5: Not eligible for NRHP	1989	
19C0021	SOUTH YUBA RIVER	NEAR HAMPSHIRE ROCKS RD	5: Not eligible for NRHP	1963	
19C0023	PIPELINE OVERCROSSING	0.3 MI NORTH OF S.H. 174	5: Not eligible for NRHP		
19C0024	CANYON WAY UP	0.2 MI N INT WEIMAR X RD	5: Not eligible for NRHP	1931	
19C0025	SOUTH YUBA RIVER	NORTH OF YUBA DRIVE	5: Not eligible for NRHP	1929	
19C0026	SQUAW CREEK	0.6 MI E/O HWY 89	5: Not eligible for NRHP	1958	
19C0027	MAGRA ROAD OH	ADJACENT TO I-80	5: Not eligible for NRHP	1928	
19C0028	CASA LOMA ROAD UP	ADJACENT TO I-80	5: Not eligible for NRHP	1932	
19C0032	SOUTH YUBA RIVER	JUST NORTH OF I-80	5: Not eligible for NRHP	1925	
19C0033	DRY CREEK	NEAR CLINTON AVE	5: Not eligible for NRHP	1950	
19C0034	AUBURN RAVINE	NEAR CHILI HILL RD	5: Not eligible for NRHP	1905	1950
19C0035	AUBURN RAVINE	BTWN MILLERTON & STONE RD	5: Not eligible for NRHP	1930	1970
19C0036	AUBURN RAVINE	JUNCT WITH OPHIR RD	5: Not eligible for NRHP	1940	1970
19C0037	CROTHER ROAD OH	NEAR BURGAN RD	5: Not eligible for NRHP	1973	
19C0039	SOUTH FORK DRY CREEK	2.0 MI E OF RTE 49	5: Not eligible for NRHP	1966	
19C0040	BEAR RIVER CANAL	1.2 MI N OF I-80	5: Not eligible for NRHP	1935	1965
19C0041	SOUTH YUBA RIVER	1.7 MI E OF CISCO	5: Not eligible for NRHP	1929	
19C0042	SOUTH YUBA RIVER	2.3 MI E OF CISCO	5: Not eligible for NRHP	1929	
19C0046	PLEASANT GROVE CREEK	0.7 MI S PLACER BLVD	5: Not eligible for NRHP	1950	
19C0047	PLACER BLVD OH	AT INDUSTRIAL BLVD	5: Not eligible for NRHP	1966	
19C0048	ROCK CREEK	0.5 MI N ATHENS AVE	5: Not eligible for NRHP	1950	
19C0049	DRY CREEK	0.35 MI E OF VERNON ST	5: Not eligible for NRHP	1972	
19C0051	MINERS RAVINE	1.1 MI N DOUGLAS BLVD	5: Not eligible for NRHP	1930	1981
19C0052	MINERS RAVINE	2.1 MI N DOUGLAS BLVD	5: Not eligible for NRHP	1950	1981
19C0053	PG&E OH FLUME	10.6 MI SACTO CO LINE	5: Not eligible for NRHP	1931	
19C0054	MINERS RAVINE	2.7 MI N OF CO LINE	5: Not eligible for NRHP	1964	
19C0055	SECRET RAVINE	0.9 MI E TAYLOR BLVD	5: Not eligible for NRHP	1970	
19C0056	ANTELOPE CREEK	0.15 MI E SIERRA COLL RD	5: Not eligible for NRHP	1970	
19C0058	SUNSET BLVD OH	NEAR PACIFIC ST.	5: Not eligible for NRHP	1961	
19C0059	EAST NICOLAUS DISTRIBUTION CANAL	1.5 MI WEST OF DOWD RD	5: Not eligible for NRHP	1963	
19C0060	NORTH FORK AMERICAN RIVER	EAST OF I-80	5: Not eligible for NRHP	1972	
19C0061	BOWMAN ROAD OH	0.1 MI SOUTH OF 19C-62	5: Not eligible for NRHP	1949	
19C0062	BOWMAN ROAD OH	0.1 MI NORTH OF 19C-61	5: Not eligible for NRHP	1949	
19C0063	PLEASANT GROVE CREEK	3.5 MI N/O 2ND BASE LN RD	5: Not eligible for NRHP	1976	

Structure Maintenance & Investigations

Historical Significance - Local Agency Bridges

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Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
19C0066	WISE CANAL	0.4 MI E OF S.H. 49	5: Not eligible for NRHP	1975	2004
19C0067	SIERRA BOULEVARD OH	ROSEVILLE ST & LINCOLN ST	2: Eligible for NRHP	1929	
19C0069	ROCK CREEK	0.5 MI N OF E CATLETT	5: Not eligible for NRHP	1977	
19C0071	NORTH FORK AMERICAN RIVER	9 MI S SODA SPRINGS	5: Not eligible for NRHP	1900	
19C0072	SECRET RAVINE	0.3 MI E OF I-80	5: Not eligible for NRHP	1983	
19C0073	WOOLEY CREEK	4.0 MI NORTH OF I-80	5: Not eligible for NRHP	1950	
19C0074	WISE CANAL	NE HWY 49	5: Not eligible for NRHP		
19C0075	AUBURN RAVINE	NEAR AUBURN RAVINE RD	5: Not eligible for NRHP	1980	1987
19C0076	WISE CANAL	JUST EAST HWY 49	5: Not eligible for NRHP		1983
19C0077	CLOSED ROADWAY	NEAR SACRAMENTO ST.	5: Not eligible for NRHP	1970	
19C0078	RIOSA ROAD CANAL	1.4 MI E SUTTER CO LINE	5: Not eligible for NRHP		
19C0079	NORTH RAVINE	2.0 MI W OF AUBURN	5: Not eligible for NRHP		
19C0080	MARKHAM RAVINE	4.8 MI W OF DOWD RD	5: Not eligible for NRHP		
19C0082	MARKHAM RAVINE	0.25 MI S OF NICOLAUS RD	5: Not eligible for NRHP		
19C0083	AUBURN RAVINE	9.8 MI N OF SECOND BASELI	5: Not eligible for NRHP		
19C0084	DRY CREEK	0.4 MI N OF P.F.E. RD	5: Not eligible for NRHP		
19C0086	DRY CREEK	0.3 MI N CIRBY WY	5: Not eligible for NRHP	1973	
19C0087	DRY CREEK	0.1 MI SE VERNON ST	5: Not eligible for NRHP	1970	
19C0090	DOTY CREEK	0.5 MI E GARDEN BAR	5: Not eligible for NRHP	1923	
19C0093	MARKHAM RAVINE	0.9 MI S OF NICOLAUS RD	5: Not eligible for NRHP	1930	1991
19C0094	YANKEE SLOUGH	JUST N DALBY RD	5: Not eligible for NRHP	1935	
19C0095	COON CREEK	0.4 MI N WISE RD	5: Not eligible for NRHP	1930	
19C0096	COON CREEK	1.5 MI N OF NICOLAUS RD	5: Not eligible for NRHP	1938	
19C0100	SHIRT TAIL CREEK	0.5 MI N YANKEE JIM RD	5: Not eligible for NRHP	1940	
19C0101	MCKINNEY CREEK	0.1 MI NW MCKNY RUBCN SP	5: Not eligible for NRHP	1950	
19C0102	MCKINNEY CREEK	0.2 MI NW MCKNY RUBCN SP	5: Not eligible for NRHP	1950	
19C0104	BRANCH OF CURRY CREEK	2.2 MI N/O BASE LN RD	5: Not eligible for NRHP		
19C0105	CURRY CREEK	0.5MI NTH OF JACKSON RD.	5: Not eligible for NRHP	1992	
19C0106	COON CREEK	3 MI N PLESANT RD	5: Not eligible for NRHP	1945	
19C0107	SHIRLAND CANAL	0.5 MI S AUBURN-FOLSOM RD	5: Not eligible for NRHP	1939	
19C0108	SECRET RAVINE	JUST EAST OF I-80	5: Not eligible for NRHP	1930	1976
19C0110	AUBURN RAVINE	0.25 MI W FIDDYMENT RD	5: Not eligible for NRHP	1930	
19C0111	DOTY CREEK	0.9 MI N OF WISE RD	5: Not eligible for NRHP	1945	
19C0112	KINGS SLOUGH	6.0 MI N BASE LN RD	5: Not eligible for NRHP		
19C0114	COON CREEK	0.8 MI S OF RIOSA RD	5: Not eligible for NRHP	1928	
19C0115	DOTY RAVINE	0.3 MI SOUTH OF WISE RD	4: Hist sign not determi	1993	
19C0116	MCBRIDE CREEK	1.8 MI N FORRESTHILL RD	5: Not eligible for NRHP	1973	
19C0117	DRY CREEK	1.0 MI S BASE LINE RD	5: Not eligible for NRHP	1940	
19C0118	MARKHAM RAVINE	0.5 MI S NICOLAUS RD	5: Not eligible for NRHP	1940	1970
19C0119	SOUTH FORK DRY CREEK	2.0 MI S LONE STAR RD	5: Not eligible for NRHP	1923	
19C0121	YANKEE SLOUGH	1.0 MI N OF S.H. 65	5: Not eligible for NRHP	1935	
19C0122	COON CREEK	SOUTH OF RIOSA RD	5: Not eligible for NRHP	1928	
19C0124	CURRY CREEK	EAST OF SH 65	5: Not eligible for NRHP	1940	

Structure Maintenance & Investigations

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Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
19C0126	DOTY CREEK	0.9 MI N OF WISE RD	5: Not eligible for NRHP	1940	
19C0128	COON CREEK	1.0 MI E BREWER RD	5: Not eligible for NRHP	1955	
19C0129	YANKEE SLOUGH	JUST SOUTH DALBY RD	5: Not eligible for NRHP		
19C0130	YANKEE SLOUGH	JUST WEST DOWD RD	5: Not eligible for NRHP	1925	
19C0132	DOTY CREEK	0.9 MI N OF WISE RD	5: Not eligible for NRHP	1935	
19C0134	SOUTH CANAL	0.45 MI W AUBURN-FOLSOM R	5: Not eligible for NRHP	1940	
19C0135	PLEASANT GROVE CREEK	4.2 MI N/O BASE LINE RD	5: Not eligible for NRHP	1940	
19C0136	SECRET RAVINE	JUST EAST OF I-80	5: Not eligible for NRHP	1939	
19C0137	AUBURN RAVINE	7.6 MI N BASE LINE RD	5: Not eligible for NRHP	1941	1990
19C0138	MARKHAM RAVINE	0.5 MI S/O NICOLAUS RD	5: Not eligible for NRHP	1930	
19C0139	COON CREEK	0.8 MI S OF RIOSA RD	5: Not eligible for NRHP		
19C0140	AUBURN RAVINE	0.65 MI N SR 193	5: Not eligible for NRHP	1930	
19C0141	BEAR RIVER CANAL	0.4 MI N PLACER HILLS RD	5: Not eligible for NRHP	1975	
19C0142	ROCK CREEK	0.35 MI W SH 49	5: Not eligible for NRHP	1977	
19C0143	WISE CANAL	0.2 MI W SH 49	5: Not eligible for NRHP	1930	1945
19C0144	ORR CREEK	1.0 MI N HUBBARD	5: Not eligible for NRHP	1945	
19C0145	WISE CANAL	0.45 MI N BELL RD	5: Not eligible for NRHP	1930	
19C0146	SOUTH FORK DRY CREEK	JUST S DRY CREEK RD	5: Not eligible for NRHP	1930	1940
19C0147	WOOLEY CREEK	AT PLACER HILLS RD	5: Not eligible for NRHP	1930	
19C0148	BEAR RIVER CANAL	0.5 MI E PLACER HILLS RD	5: Not eligible for NRHP	1930	1945
19C0150	SQUAW CREEK	2 MI W OF SH 89	5: Not eligible for NRHP	1959	
19C0151	TRUCKEE RIVER	0.1 MI W OF SH 89	5: Not eligible for NRHP	1970	
19C0152	BEAR CREEK	0.9 MI W OF SH 89	5: Not eligible for NRHP	1970	1985
19C0153	BEAR CREEK	0.1 MI S SQUAW VALLEY RD	5: Not eligible for NRHP	1950	
19C0154	DRY CREEK	NEAR DRY CREEK RD	5: Not eligible for NRHP	1970	
19C0155	DRY CREEK	6.0 MI E RTE 49	5: Not eligible for NRHP	1930	
19C0156	BEAR RIVER CANAL	0.85 MI E PLACER HILLS RD	5: Not eligible for NRHP	1976	
19C0157	BEAR RIVER CANAL DRAIN	0.1 MI W PLACER HILL RD	5: Not eligible for NRHP	1989	
19C0158	WOOLEY CREEK	0.4 M W PLACER HILLS RD	5: Not eligible for NRHP	1930	1970
19C0159	DRY CREEK	1.1 MI S BASE LINE RD	5: Not eligible for NRHP	1973	
19C0160	MINERS RAVINE	0.4 MI N OLIVE RANCH RD	5: Not eligible for NRHP	1979	
19C0161	MINERS RAVINE	0.5 MI S CAVIT STALMAN RD	5: Not eligible for NRHP	1930	1970
19C0162	SECRET RAVINE	0.3 MI SOUTH EAST I-80	5: Not eligible for NRHP	1929	1935
19C0163	ROCK CREEK	0.35 MI W PLACER HILLS RD	5: Not eligible for NRHP	1970	
19C0164	SOUTH SUTTER CANAL	2.0 MI W DOWD RD	5: Not eligible for NRHP	1972	
19C0165	SUTTER CANAL	1.9 MI E BREWER RD	5: Not eligible for NRHP	1972	
19C0167	BLUE OAKS BLVD OH	AT INDUSTRIAL AVE	5: Not eligible for NRHP	1980	
19C0168	MINERS RAVINE	NEAR AUBURN FOLSOM RD	5: Not eligible for NRHP	1925	
19C0169	NEWCASTLE TUNNEL	UNDER SH 193	3: Posbl Elgb for NRHP	1932	
19C0170	OLD STATE HIGHWAY TUNNEL	BTWN SH 193 & I 80	3: Posbl Elgb for NRHP	1910	
19C0173	LINDA CREEK	NEAR S CIRBY RD	5: Not eligible for NRHP	1987	
19C0174	LINDA CREEK	S CIRBY RD MAP NO 7J13	4: Hist sign not determi	1995	
19C0175	SUGAR PINE DAM SPILLWAY	4 MI E OF IOWA HILL	5: Not eligible for NRHP	1981	

Structure Maintenance & Investigations

Historical Significance - Local Agency Bridges

District 03

Placer County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
19C0176	NORTH FORK AMERICAN RIVER	3.1 MI E I-80	5: Not eligible for NRHP	1984	
19C0178	ONION CREEK	6.6 MI S SODA SPRINGS	5: Not eligible for NRHP	1975	
19C0180	LINDA CREEK	0.2 MI N CIRBY WAY	5: Not eligible for NRHP	1964	
19C0181	CIRBY CREEK	0.1 MI E SUNRISE AVE	5: Not eligible for NRHP	1968	
19C0184	ANTELOPE CREEK	ATLANTIC STREET	5: Not eligible for NRHP	1985	1993
19C0185	MINERS RAVINE	0.2 MI S ATLANTIC ST	5: Not eligible for NRHP	1985	
19C0187	DRY CREEK	0.6 MI N CIRBY AVE	5: Not eligible for NRHP	1928	1979
19C0188	VERNON STREET	AT WASHINGTON BLVD	5: Not eligible for NRHP	1950	
19C0189	ATLANTIC STREET	AT WASHINGTON BLVD	5: Not eligible for NRHP	1950	
19C0190	ROSEVILLE UP	N/W OF ATLANTIC ST	5: Not eligible for NRHP	1950	
19C0191	PACIFIC STREET	WASHINGTON BLVD	5: Not eligible for NRHP	1960	
19C0192	ANDORA UNDERPASS	S DIAMOND OAKS RD	5: Not eligible for NRHP	1916	
19C0193	FOOTHILLS BLVD OH	FOTHIL BL & ATKINSON ST	5: Not eligible for NRHP	1988	
19C0194	FOOTHILLS BLVD OH	0.8 MI N COUNTY LINE	5: Not eligible for NRHP	1988	
19C0196	BEAR CREEK	W END ALPINE MEADOWS RD	5: Not eligible for NRHP	1965	
19C0197	SQUAW CREEK	0.1 1 W SQUAW VALLEY	4: Hist sign not determi	1993	
19C0198	AUBURN RAVINE	0.1 MI N/O MOORE ROAD	5: Not eligible for NRHP	1988	
19C0199L	MARKHAM RAVINE	0.25 MI E/O NEALSON LANE	5: Not eligible for NRHP	1987	
19C0199R	MARKHAM RAVINE	0.25 MI E/O NEALSON LANE	5: Not eligible for NRHP	1930	1950
19C0200	AUBURN OH	0.2 MI N PACIFIC AVE	5: Not eligible for NRHP	1976	
19C0201	AUBURN PARK UC	0.1 MI N SACRAMENTO ST	5: Not eligible for NRHP	1976	
19C0202	HARDING BLVD VIADUCT	0.1M EAST OF WILLS RD.	5: Not eligible for NRHP	1993	
19C0203	MINERS RAVINE	0.4 KM N JOE ROGERS RD	4: Hist sign not determi	1980	
19C0204	NORTH BRANCH ORCHARD CREEK	W OF STATE ROUTE 65	5: Not eligible for NRHP	2000	
19C0205	AUBURN RAVINE	0.25 KM E JCT WISE RD	4: Hist sign not determi	1925	1931
19C0206	SOUTH BRANCH PLEASANT GROVE CREEK	3.5 MILES WEST OF RT 65	5: Not eligible for NRHP	1998	
19C0207	PLEASANT GROVE CREEK	0.5 MI N. OF BLUE OAKS BL	5: Not eligible for NRHP	1999	
19C0208	SOUTH BRANCH PLEASANTS GROVE CREEK	0.7 MI S OF BLUE OAKS BL	5: Not eligible for NRHP	1999	
19C0209	PLEASANT GROVE CREEK	0.9 MI N OF BLUE OAKS BL	5: Not eligible for NRHP	1999	
19C0210	ANTELOPE CREEK	0.4 MI SE OF GALLERIA BL	5: Not eligible for NRHP	2000	
19C0211	FALSE RAVINE	0.4 MI S SECRET RAVINE PK	5: Not eligible for NRHP	2002	
19C0212	FALSE RAVINE	1 MI E OF E ROSEVILLE PW	5: Not eligible for NRHP	2001	
19C0213	MINERS RAVINE	0.4 MI S SECRET RAVINE PW	5: Not eligible for NRHP	2001	
19C0214	SOUTH BRANCH PLEASANT GROVE CREEK	.8 MI E WOODCREEK OAKS BL	5: Not eligible for NRHP	1991	
19C0215	PLEASANT GROVE CREEK	0.5 MI N OF BLUE OAKS BL	5: Not eligible for NRHP	2003	
19C0218	DOTY CREEK	0.7 MI N OF WISE RD.	5: Not eligible for NRHP	2000	
19C0219	COON CREEK	0.8 MI S. OF RIOSA ROAD	5: Not eligible for NRHP	2000	
19C0222	LINDA CREEK	0.3 MI NORTH OF CIRBY WAY	5: Not eligible for NRHP	2000	
19C0223	YANKEE SLOUGH	JUST NORTH OF DALBY RD.	5: Not eligible for NRHP	2004	
19C0224	AUBURN RAVINE	0.1 MI NORTH OF MOORE RD.	5: Not eligible for NRHP	2005	

Structure Maintenance & Investigations

Historical Significance - Local Agency Bridges

District 03

Sutter County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
18C0001	CROSS CANAL (VERONA BR)	SANKEY RD	5: Not eligible for NRHP	1969	
18C0004	TISDALE BYPASS	0.4 MI NW TISDALE RD	3: Posbl Elgb for NRHP	1935	
18C0009	BEAR RIVER	0.4 MI N/O BEAR RIVER DR	5: Not eligible for NRHP	1961	
18C0010	TISDALE BYPASS	11.3 MI NW OF ROBBINS	5: Not eligible for NRHP	1964	
18C0012	FEATHER RIVER	BTWN MRYSVL & YUBA CITY	5: Not eligible for NRHP	1958	
18C0018	2ND STREET UNDERPASS	AT BRIDGE STREET	5: Not eligible for NRHP	1935	
18C0023	HEIKEN WAY UNDERPASS	AT HEIKEN WAY	5: Not eligible for NRHP	1958	
18C0024	ROBBINS CANAL	0.02 MI E RECL RD-ROBBINS	5: Not eligible for NRHP	1975	
18C0025	SUTTER BYPASS EAST CHANNEL	1.1 MI W OF RTE 99	5: Not eligible for NRHP	1975	
18C0030	SUTTER BYPASS EAST CHANNEL	2.2 MI W OF ACACIA RD	5: Not eligible for NRHP	1997	
18C0031	SUTTER BYPASS WEST CHANNEL	1.2 MI E TARKE RD	5: Not eligible for NRHP	2001	
18C0032	YANKEE SLOUGH	0.3 MI S BEAR RIVER DRIVE	5: Not eligible for NRHP	1964	
18C0035	ROBBINS CANAL	.02 MI E OF RECLAMATION R	5: Not eligible for NRHP	1970	
18C0036	SUTTER BYPASS WEST CHANNEL	1.1 MI W OF SCHLAG RD	5: Not eligible for NRHP	1987	
18C0037	SUTTER BYPASS EAST CHANNEL	0.5 MI W SCHLAG ROAD	5: Not eligible for NRHP	1999	
18C0039	PHEASANT CANAL	0.5 MI N/O VARNEY RD	5: Not eligible for NRHP	1975	
18C0040	HEAD OF EAST CANAL	AT TISDALE RD	5: Not eligible for NRHP	1970	
18C0041	ROBBINS CANAL	0.01 MI E RECLAMATION RD	5: Not eligible for NRHP	1978	
18C0042	ROBBINS CANAL	AT RECLAMATION ROAD	5: Not eligible for NRHP	1999	
18C0043	SNAKE SLOUGH	AT SCHLAG ROAD	5: Not eligible for NRHP	1979	
18C0044	SNAKE SLOUGH	0.2 MI W BOULTON RD	5: Not eligible for NRHP		
18C0046	WESTSIDE CANAL	0.3 MI N FASIG RD	5: Not eligible for NRHP	1966	
18C0047	WESTSIDE CANAL	0.5 MI E CRANMORE RD	5: Not eligible for NRHP	1978	
18C0049	SUTTER-BUTTE CANAL	0.2 MI E OF KENT RD	5: Not eligible for NRHP	1975	
18C0050	NORTH DRAINAGE CANAL	1.2 MI W OF RTE 99	5: Not eligible for NRHP	1938	1975
18C0051	RIO OSO ROAD UP	0.6 MI E OF SH 70	5: Not eligible for NRHP	1927	
18C0052	YANKEE SLOUGH	1.9 MI NE/O SR 70	5: Not eligible for NRHP	1934	
18C0053	YANKEE SLOUGH	1.95 MI NE/O SH 70	5: Not eligible for NRHP	1934	
18C0054	SAND CANYON CREEK	0.4 MI S OF SANDERS ROAD	5: Not eligible for NRHP	1976	
18C0055	2ND STREET UC	AT 2ND ST W FEATHER RIVER	5: Not eligible for NRHP	1958	
18C0057	WESTSIDE CANAL	100' E CRANMORE RD	5: Not eligible for NRHP	1960	
18C0058	PHEASANT CANAL	2.3 MI W/O SH 113	5: Not eligible for NRHP	2003	
18C0059	PHEASANT CANAL	0.3 MI E OF SH 113	5: Not eligible for NRHP	1976	
18C0061	NATOMAS CANAL	NATOMAS ROAD	5: Not eligible for NRHP	1982	
18C0062	SCIATA CREEK	2.25 MI N SAC CO LINE	5: Not eligible for NRHP	1988	
18C0063	CURRY CREEK	2.9 MI N OF RIEGO RD	5: Not eligible for NRHP	1922	
18C0064	CURRY CREEK	4.2 MI N SAC CO LINE	5: Not eligible for NRHP	1922	
18C0065	PLEASANT GROVE CREEK	5.8 MI N/O SACTO CO LINE	5: Not eligible for NRHP	1960	
18C0066	PLEASANT GROVE CREEK BRANCH	6 MI N SAC CO LINE	5: Not eligible for NRHP	1950	
18C0067	KING SLOUGH	6.5 MI N/O RIEGO RD	5: Not eligible for NRHP	1931	
18C0068	AUBURN RAVINE	9.3 MI N SACTO CO LINE	5: Not eligible for NRHP	1950	
18C0069	NO NAME SLOUGH	0.2 MI N/O STRIPLIN RD	5: Not eligible for NRHP	1966	
18C0070	MARKHAM RAVINE	11.2 MI N SAC CO LINE	5: Not eligible for NRHP	1988	

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Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
18C0071	BUNKHAM SLOUGH	11.5 MI N/O RIEGO RD	5: Not eligible for NRHP	1950	
18C0072	COON CREEK	12.1 MI N/O RIEGO RD	5: Not eligible for NRHP	1937	1960
18C0073	YANKEE SLOUGH	16.1 MI N/O RIEGO RD	5: Not eligible for NRHP	1955	
18C0074	COON CREEK	1 MI W/O PLEASANT GROVE R	5: Not eligible for NRHP	1950	
18C0075	COON CREEK	4.85 MI E OF SH 99	5: Not eligible for NRHP	1930	
18C0077	SUTTER COUNTY EXTENSION CANAL	3.1 MI E/O ACACIA AVE	5: Not eligible for NRHP	1979	
18C0078	WADSWORTH CANAL	0.25 MI E OF HUMPHREY RD.	5: Not eligible for NRHP	1999	
18C0080	SUTTER BYPASS WEST CHANNEL	2.9 MI E S.H. 113	5: Not eligible for NRHP	1985	
18C0081	LIVE OAK CANAL	0.2 MI W TIERRA BUENA RD	5: Not eligible for NRHP	1970	1980
18C0082	EAST CANAL	2.8 MI E OF SH 113	5: Not eligible for NRHP	1987	
18C0084	SNAKE RIVER	5 MI WEST OF SH 99	5: Not eligible for NRHP	1990	
18C0085	SNAKE RIVER	0.3 MI N PENNINGTON RD	5: Not eligible for NRHP	1989	
18C0086	CHEROKEE DRAIN	AT NORTH BUTTE RD	5: Not eligible for NRHP	1920	
18C0087	WADSWORTH CANAL	AT ACACIA	5: Not eligible for NRHP	2003	
18C0088	COON CREEK	0.7 MI E GARWOOD RD	5: Not eligible for NRHP	1960	
18C0089	COON CREEK	0.3 MI SOUTH OF SH99	5: Not eligible for NRHP	1925	
18C0090	PING SLOUGH	1.1 MI EAST OF NICOLAUS	5: Not eligible for NRHP	1930	
18C0091	EASTSIDE CANAL	PACIFIC AVE	5: Not eligible for NRHP	1935	1960
18C0092	EASTSIDE CANAL	1/2 MI S CATLETT RD	5: Not eligible for NRHP	1935	1960
18C0093	SNAKE RIVER	1.8 MI N SANDERS RD	5: Not eligible for NRHP	1925	
18C0094	YANKEE SLOUGH	0.8 MI S OF BEAR RIV RD	5: Not eligible for NRHP	1950	
18C0095	EAST INTERCEPTOR CANAL	PEASE ROAD	5: Not eligible for NRHP	1995	
18C0097	SUTTER-BUTTE CANAL	0.2 MI E OF SH 99	5: Not eligible for NRHP	1930	
18C0098	SUTTER-BUTTE CANAL	0.2 MI E OF KENT RD	5: Not eligible for NRHP	1940	
18C0099	SUTTER-BUTTE CANAL	0.3 MI E OF KENT ROAD	5: Not eligible for NRHP	1950	
18C0100	SUTTER-BUTTE CANAL	0.5 MI E SHELDON RD	5: Not eligible for NRHP	1970	
18C0101	SUTTER-BUTTE CANAL	0.6 MI E OF METTER RD	5: Not eligible for NRHP		1974
18C0102	SUTTER-BUTTE CANAL S BRANCH	0.1 MI W OF MADDEN RD	5: Not eligible for NRHP	1950	
18C0103	LIVE OAK SLOUGH	0.2 MI W OF LARKIN RD	5: Not eligible for NRHP	1955	
18C0104	LIVE OAK SLOUGH	0.2 MI E MADDEN AVE	5: Not eligible for NRHP	1960	
18C0105	SOUTH BRANCH SUTTR-BUTTE CANAL	0.2 MI N OF ENCINAL RD	5: Not eligible for NRHP	1925	1950
18C0106	LIVE OAK CANAL	0.01 MI W OF LARKIN RD	5: Not eligible for NRHP	1945	
18C0107	SUTTER COUNTY EXTENSION CANAL	1.2 MI W OF BROADWAY	5: Not eligible for NRHP	1940	
18C0109	SNAKE RIVER	0.7 MI E OF E BUTTE RD	5: Not eligible for NRHP	1925	
18C0110	SUTTER COUNTY EXTENSION CANAL	0.8 MI E OF E BUTTE RD	5: Not eligible for NRHP	1940	
18C0111	BUTTE SLOUGH	1.1 MI W of W BUTTE ROAD	5: Not eligible for NRHP	1996	
18C0112	WADSWORTH CANAL	HUMPHREY ROAD	5: Not eligible for NRHP	1996	
18C0113	PLEASANT GROVE CREEK CANAL	AT NATOMAS RD	5: Not eligible for NRHP	1935	1965
18C0114	SNAKE SLOUGH	0.5 MI W TOWNSHIP RD	5: Not eligible for NRHP	1950	
18C0115	WADSWORTH DITCH	1.4 MI W OF ACACIA RD	5: Not eligible for NRHP	1970	
18C0116	PHEASANT CANAL	1.4 MI E STATE HWY 113	5: Not eligible for NRHP	1970	
18C0118	PHEASANT CANAL	2.7 MI E RECLAMATION RD	5: Not eligible for NRHP		
18C0119	ROBBINS CANAL	@ RECLAMATION RD	5: Not eligible for NRHP	1935	

Structure Maintenance & Investigations

Historical Significance - Local Agency Bridges

District 03

Sutter County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
18C0120	MCCLATCHY SLOUGH	MCCLATCHY RD	5: Not eligible for NRHP	1923	
18C0121	SUTTER-BUTTE CANAL	0.7 MI S/O PASEO RD	5: Not eligible for NRHP	1964	
18C0123	SNAKE RIVER	1.4 MI W OF BROADWAY	5: Not eligible for NRHP	1994	
18C0124	EAST INTERCEPTOR CANAL	0.3 MI N BUTTE HOUSE RD	4: Hist sign not determi	1995	
18C0125	CANAL	0.2 MI W PLEASAT GROVE RD	4: Hist sign not determi	1931	
18C0126	GILSIZER SLOUGH	0.6 MI S OF OBANION RD	4: Hist sign not determi	1923	
18C0128	SUTTER BYPASS WEST CHANNEL	0.2 MI W. of HAGEMAN ROAD	5: Not eligible for NRHP	2000	
18C0129	WEST INTERCEPTOR CANAL	0.5 N OF BUTTE HOUSE RD	5: Not eligible for NRHP	1995	
18C0130	INTERCEPTOR CANAL	0.4 NORTH OF BUTTE AVENUE	5: Not eligible for NRHP	1995	
18C0132	SUTTER-BUTTE CANAL	0.2 MILES S. OF MCDONALD	5: Not eligible for NRHP	1938	
18C0133	SUTTER COUNTY EXTENSION CANAL	0.5 MI W. OF TOWNSHIP RD	5: Not eligible for NRHP		

PLACER PARKWAY
CORRIDOR PRESERVATION

DRAFT
HISTORICAL RESOURCES EVALUATION REPORT

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR

June 29, 2007

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

Caltrans

FHWA

Prepared by

JRP Historical Consulting
for
URS Corporation

for
South Placer Regional Transportation Authority
California Department of Transportation
Federal Highway Administration

The preparation of this report was financed in part through a planning grant from the Federal Highway Administration

Draft

HISTORICAL RESOURCES EVALUATION REPORT

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR
Placer and Sutter Counties, California

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June 2007

SUMMARY OF FINDINGS

The Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans), in conjunction with the South Placer Regional Transportation Authority (SPRTA), propose to identify and preserve or acquire right-of-way for a future Placer Parkway, which would link State Route (SR) 65 in Placer County to SR 70/99 in Sutter County (Maps 1 and 2 in Appendix A). The FHWA is the federal lead agency for the National Environmental Policy Act (NEPA), and SPRTA is the lead agency for the California Environmental Quality Act (CEQA). The project is using federal funding and is therefore subject to review under the January 2004 *Programmatic Agreement (PA) (Appendix B) among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 (NHPA). The Section 106 PA is FHWA's approach for taking into account the effects of the Federal Aid Transportation Program on historic properties in California and for meeting compliance with Section 106 of the NHPA (36 CFR 800).

JRP Historical Consulting prepared this Historical Resources Evaluation Report (HRER) to evaluate historic buildings, structures, and objects within the Area of Potential Effect (APE) for the proposed project entitled "Placer Parkway Corridor Preservation Tier 1 Project, Placer and Sutter Counties, California" (Map 3 in Appendix A). This study provides a limited inventory and evaluation of buildings, structures, and objects in the APE that appear to be potentially eligible for listing in the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR) under Criterion C or 3.[1] The purpose of this document is to comply with applicable sections of the National Historic Preservation Act (NHPA) and the implementing regulations of the Advisory Council on Historic Preservation (ACHP) as these pertain to federally funded undertakings and their impacts on historic properties, as well as comply with CEQA as it applies to historic, built environment resources. Additionally, this information will assist the FHWA in determining which alternative(s) might trigger the need for compliance with Section 4(f) of the National Transportation Act. Additional research will be conducted during Tier 2 to identify properties eligible under the other NRHP and CRHR criteria.

Because of the long lead time for this project, JRP was asked to consider any buildings, structures or objects within the architectural APE that were constructed in or prior to 1975 as meeting the 50 year age requirement for eligibility. JRP found *no buildings, groups of buildings, or structures*, within the architectural (built environment) APE that appear to be potentially eligible for the NRHP, or CRHR, under Criterion C. Therefore, no building, object, or structure was formally evaluated on a California Department of Parks and Recreation (DPR) 523 form for this project. However, research did identify one resource within the architectural APE that was previously evaluated and found to be eligible for inclusion in the NRHP. In 1994 Reclamation District (RD) 1000 was determined eligible for the NRHP as a rural historic landscape (as a historic district) by a consensus between SHPO (State Historic Preservation Office, also known as the California Office of Historic Preservation or OHP) and the U.S. Army Corps of Engineers under Criterion A (1) at the state level of significance. The historic property's area of significance is reclamation and its historic context is the reclamation and flood control of the Sacramento River Basin within the Sacramento Flood Control Project during the period between 1911 and 1939. The historic district, including its contributing features, was found to retain historic integrity.[2] In addition,

[1] To meet Criterion C or 3, a resource must meet one of the following requirements: embody distinctive characteristics of a type, period or method of construction; represent the work of a master; possess high artistic values; represent a significant and distinguishable entity whose components may lack individual distinction.

[2] Dames & Moore, "Final Rural Historic Landscape Report for Reclamation District 1000 for the Cultural Resources Inventory and Evaluations for the America River Watershed Investigation, Sacramento and Sutter Counties, California," submitted to U.S. Army Corps of Engineers, Sacramento District, December 1995.

two county bridges (Bridge Nos. 19C0104 and 19C0124) and two railroad segments (Western Pacific and Sacramento Northern railroads) located within the architectural APE have been previously found to be not eligible for listing in the NRHP and thus required no further study for this project. These railroads, Map Reference Nos. 2 and 3, respectively, and bridges are shown on Map 3. The architectural APE encompasses a small portion of the easternmost section of RD 1000.

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ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
Caltrans	California Department of Transportation
CCRR	California Central Railroad
CEQA	California Environmental Quality Act
CRHR	California Register of Historical Resources
DPR	Department of Parks and Recreation
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
FHWA	Federal Highway Administration
HRER	Historical Resources Evaluation Report
JRP	JRP Historical Consulting
NEPA	National Environmental Policy Act
NRHP	National Register of Historic Places
OHP	Office of Historic Preservation
PA	Programmatic Agreement
RD 1000	Reclamation District No. 1000
SACOG	Sacramento Area Council of Governments
SHPO	State Historic Preservation Office
SPRTA	South Placer Regional Transportation Authority
Tier 1 EIS/EIR	Tier 1 Environmental Impact Statement/Program Environmental Impact Report
URS	URS Corporation
USGS	U.S. Geological Survey

HISTORICAL RESOURCES EVALUATION REPORT
PLACER PARKWAY CORRIDOR PRESERVATION TIER 1 EIS/PROGRAM EIR

1.0 INTRODUCTION

1.1 TIER 1 EIS/PROGRAM EIR

The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the South Placer Regional Transportation Authority (SPRTA) propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking State Route (SR) 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1).

The planning for Placer Parkway involves two phases: (1) the present action, selection of a corridor (titled the Placer Parkway Corridor Preservation Project), and (2) the future selection of a precise alignment within the corridor and a decision whether or not to build the Parkway. If a build alternative is selected and pursued after the second phase, the ultimate Placer Parkway project would be constructed and operated. Throughout this document the term "Proposed Action" is used to describe the selection of a corridor to preserve. The document generally uses the term "Parkway" to mean the ultimate roadway, including construction and operation, except where context indicates otherwise.

As stated, the action to be considered based on this Tier 1 analysis involves only the selection of a corridor to preserve, which has limited environmental effects by itself. However, the ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. In order to describe the effects of the ultimate Placer Parkway project to the greatest extent feasible at this early stage, the Tier 1 EIS/EIR also addresses the potential effects of construction and operation of the future roadway. This discussion of the roadway is necessarily limited, however, because only the general concepts of the roadway design and location are known at this time. If a corridor is selected and preserved at Tier 1, a subsequent Tier 2 analysis will evaluate the Parkway itself in detail—the specific roadway "footprint" within the selected corridor, including construction and operation of the roadway.

1.2 CORRIDOR SELECTION AND PRESERVATION

The concept for the Placer Parkway is more than a decade old. Placer County's 1994 General Plan depicts a "plan line" for it. Two planning studies helped to refine the concept:

- DKS Associates, 2000, Placer Parkway Interconnect Study/Conceptual Plan
- DKS Associates, 2001, Project Study Report (Project Development Support) for Placer Parkway

Placer Parkway is cited as a high-priority regional transportation project by the Sacramento Area Council of Governments (SACOG) 2025 Metropolitan Transportation Plan and the 2027 Placer County Regional Transportation Plan. The project vicinity and surrounding area include some of the fastest growing communities in the Sacramento region. A number of large urban development proposals are being considered by Placer and Sutter Counties. New development is expected to add a significant amount of residential, commercial, industrial, and educational uses.

A 2½-year screening and public outreach program that involved local jurisdictions (the Technical Advisory Committee); regional, state, and federal agencies; stakeholder groups that included representatives from planning and public works departments of all affected cities and counties,

environmental, business, agricultural, development, and homeowner interests (the Study Advisory Committee); and elected officials (the Policy Advisory Committee), resulted in the identification of five potential corridors for the Parkway. The Tier 1 Environmental Impact Statement/Program Environmental Impact Report will analyze these five corridor alternatives along with a No-Build Alternative.

Other potential transportation modes such as bus rapid transit may be developed in the corridor in the future, although they are not proposed as part of the current project. The width of the corridor for Placer Parkway is to vary from approximately 500 feet in the Eastern and Western segments to approximately 1,000 feet in the Central Segment. Depending upon the alternative, the corridor's length ranges from a minimum of 14.2 miles to a maximum of 16.2 miles. The selected corridor would contain the roadway, including the median, travel lanes, shoulder, associated access ramps, and a no-development buffer zone.

Corridor acquisition may not be completed until after Tier 2, as funding becomes available. Portions of the selected corridor would be preserved as a no-development buffer zone. The buffer would be maintained as a zone where development is either not permitted or is severely restricted. This is intended to restrict access to the proposed interchanges, protect the rural character of agriculturally designated areas in the vicinity of the Parkway as far as possible subject to future development, and to maximize opportunities to incorporate adjacent sensitive areas. It is intended that the buffer would be owned and managed in the future to achieve these objectives. For subsequent Tier 2 (project-level) environmental reviews, the size of this buffer zone could be considered flexible for agriculturally designated land undergoing urban development. In the Tier 2 environmental review, the specific buffer size and location would be determined. This determination would be based on performance standards on a case-by-case basis, depending on the land use needs of future approved development, and taking into account the primary objective of restricting future access to the Parkway.

Project proponents are considering employment of several land management and control mechanisms in order to ensure that the buffer would be effectively maintained as an area where development would either not be permitted, and where construction of any additional access onto the Parkway would not be allowed. These mechanisms could include land use controls, land purchase/leases, general plan amendments, zoning/overlay zoning changes, covenants/deed restrictions, agricultural/conservation easements, urban growth boundaries, etc. "Layering" or using several of these methods would provide more assurance that the buffers would be permanent, or at least more difficult to undo.

1.3 TECHNICAL STUDY OBJECTIVE

This Historical Resources Evaluation Report has been prepared to support the Tier 1 Environmental Impact Statement/Program Environmental Impact Report. It presents a Tier 1/Program level assessment of potential impacts related to Historical Resources for five corridor alternatives and the No-Build Alternative as described in Chapter 2. The scope of work performed for this report is based on the Caltrans Local Assistance Procedures Manual (Caltrans, 2006), as modified for purposes of Tier 1/ Program analysis by agreement of Caltrans and the Caltrans Environmental Handbook (Caltrans, 2004) on preparing a Historic Resources Evaluation Report. In addition, the evaluation considered guidance from the Federal Highway Administration (FHWA), Environmental Checklists for Draft and Final Environmental Documents (FHWA, 1998a; FHWA, 1998b).

This report is organized as follows:

Chapter 7 Preparer's Qualifications

This report also includes figures and tables, which show the project location, each build alternative, and pertinent technical information prepared to evaluate the build alternatives.

Throughout this document, the Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report is referred to as the Tier 1 EIS/EIR.

2.0 THE PROPOSED ACTION

The Proposed Action for the Placer Parkway Corridor Preservation Project is to select and preserve a 500- to 1,000-foot-wide corridor in the study area, within which the future four- or six-lane Placer Parkway may be constructed. The ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction, and operation of the Parkway. Although the action taken at Tier 1 on the Placer Parkway Corridor Preservation Project is limited, the underlying project whose effects are studied in this document is the Placer Parkway. To the extent feasible at this early stage, the Tier 1 EIS/EIR addresses the potential effects of construction and operation of the future roadway.

2.1 THE PROJECT STUDY AREA

The study area is an area of approximately 33,460 acres located in Sutter and Placer counties, with a small section located in Sacramento County (see Figures 1-1 and 2-1). The portion of the study area in Sacramento County is located in the extreme southwestern corner of the study area and does not include any of the proposed corridor alignment alternatives. It extends from SR 70/SR 99 in the west to SR 65 in the east, with the northern boundary extending to Sunset Boulevard West and the southern boundary located adjacent to Baseline and Riego Roads.

For the purposes of the analysis the study area is divided into three segments:

- Western Segment: the Western Segment extends from SR 70/99 to Pleasant Grove Road in Sutter County.
- Central Segment: the Central Segment extends from Pleasant Grove Road in Sutter County to approximately 2,300 feet north of Pleasant Grove Creek in Placer County.
- Eastern Segment: the Eastern Segment extends from approximately 2,300 feet north of Pleasant Grove Creek to SR 65 in Placer County.

2.2 CORRIDOR ALTERNATIVES

The following subsections describe the corridor alternatives, which are depicted on Figure 2-1, and are numbered according to location from south to north in the study area.

2.2.1 The No-Build Alternative

Under the No-Build Alternative, the project would not be implemented. A Placer Parkway corridor would not be selected/preserved, and the future Placer Parkway would not be constructed.

2.2.2 Alternative 1 – the Red Alternative

Alternative 1 would extend from SR 70/99 approximately ½ mile north of Riego Road, eastward approximately 1 mile north of Baseline Road to approximately Watt Avenue, proceeding north and transitioning in an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 16.2 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.3 Alternative 2 – the Orange Alternative

Alternative 2 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed northeast, then in a northerly direction south of Pleasant Grove Creek, transitioning to an easterly direction before it reaches Sunset Boulevard West, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.4 miles long. This alternative would include six interchanges, as described in Section 2.3.3 below.

2.2.4 Alternative 3 – the Blue Alternative

Alternative 3 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed north along the Sutter/Placer County Line, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.6 miles long. This alternative would include six interchanges, as described in Section 2.3.3 below.

2.2.5 Alternative 4 – the Yellow Alternative

Alternative 4 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.3 miles long. This alternative would include five interchanges, as described in Section 2.3.3 below.

2.2.6 Alternative 5 – the Green Alternative

Alternative 5 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 4,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.2 miles long. This alternative would include five interchanges, as described in Section 2.3.3 below.

2.3 PARKWAY DESIGN ASSUMPTIONS

Although the Parkway would be designed and construction-level impacts analyzed during Tier 2, for the purpose of this report and the Tier 1 EIS/Program EIR, several assumptions have been made about potential design and configuration concepts. These assumptions would be subject to further development and refinement, and specific decisions about design of the roadway would be made during the Tier 2 process. For example, the number, location, and design of over-crossings would be determined at the time of final Parkway design, in consultation with local jurisdictions. The following sections outline assumptions for the future roadway.

Preliminary costs estimates for the Parkway range from $600 to $650 million (2005 dollars). This includes costs for right-of-way, design, construction, and environmental mitigation for the four- to six-lane facility. The funding situation has spurred interest in exploring other more creative funding options. These include a county-wide sales tax, more developer contributions, and tolling facilities. The Technical Report and Tier 1 EIS/Program EIR do not make any assumptions about funding sources.

2.3.1 Conceptual Roadway Configuration

The Parkway would be a high-speed, limited access roadway. Depending upon the timing of adjacent urban development proposals and funding, the Parkway may be designed and constructed incrementally in segments. These could be built as a four-lane (interim) roadway until a six-lane segment is warranted, or as the full six-lane facility. A preliminary conceptual cross section (see Figure 2-2) was developed to facilitate the Tier 1/Program evaluation. It illustrates both four-lane (two lanes in both directions) and six-lane (three lanes in both directions) configurations within the 500- to 1,000-foot corridor widths. The roadway would include a central median approximately 100 to 134 feet wide, depending on local conditions and reflecting Caltrans safety guidance. The Parkway would be designed and constructed to Caltrans standards, unless specific design exceptions are granted. For the purposes of the Tier 1 EIS/Program EIR, the Parkway's opening year is assumed to be 2020.

Access would be provided at the western and eastern ends of the Parkway, where existing areas of dense development are already located or planned. Access would be restricted for the 7-mile Parkway Central Segment. The analysis assumes no interchanges in this segment. (A possible future extension of Watt Avenue or another nearby roadway may be considered in the Central Segment as a separate project.)

2.3.2 Conceptual Roadway Elevation

As the study area is comprised of relatively flat terrain, the majority of the future Placer Parkway is assumed to be at-grade. As necessary, bridges would be used to span certain features and improvements such as the Union Pacific Railroad tracks along Industrial Boulevard, Pleasant Grove Creek, the Natomas East Main Drainage Canal, and floodplains. Generally, the approximate height of bridges is expected to range from 10 feet above streams to 30 feet above the railroad. Culverts would be used at smaller creek crossings as appropriate, depending on local conditions and permit requirements. The Pleasant Grove Creek floodplain would be crossed by bridges (one in each direction) supported by abutments located approximately 800 feet on either side of the creek to avoid the riparian habitat associated with the creek.

Within the 100-year floodplain, the roadway would be elevated such that the bottom of any new bridges would be above the 100-year water surface elevation. The roadway support structures and bridges would be designed to minimize environmental impact, not impede stream and flood flows, and allow for the unobstructed passage of potential future streamside uses such as maintenance equipment, bikeways or trails.

Throughout the study area, the assumptions for creek and floodplain crossings include typical engineering specifications:

- a maximum bridge span of approximately 150 feet;
- for bridge spans exceeding 150 feet, assume one column, approximately 4 feet in diameter, every 150 feet; and
- all columns placed outside of the ordinary high water (OHW) level.

To maintain existing and future local roadway connectivity (for emergency access, farming operations, and community access), over-crossings would be constructed to convey traffic over the Parkway. These over-crossings would not connect to the Parkway. Parkway access would be via the interchanges described below.

2.3.3 Interchange Concepts

The analysis assumes that the location of interchanges (see Figure 2-1) is as follows.

- SR 70/99 (at ½ mile north of Riego Road or at Sankey Road)
- One or two locations to be determined in southern Sutter County
- Fiddyment Road
- Foothills Boulevard
- SR 65 at Whitney Ranch Parkway

The following discussion outlines concepts and assumptions for the six interchanges that could potentially serve Placer Parkway.

2.3.3.1 Western Segment

Within the Western Segment of the Parkway, a high-speed, freeway-to-freeway type interchange would connect the Parkway with SR 70/99 at one of following potential locations depending on the project alternative (see Section 2.2). Placer Parkway would terminate at SR 70/99.

- **Placer Parkway/SR 70/99 Interchange at North of Riego Road.** This alternative concept uses "braided" ramps to eliminate weaving problems or conflicts with the future SR 70/99 at Riego Road interchange being developed by Sutter County and Caltrans.

- **Placer Parkway/SR 70/99 Interchange at Sankey Road.** Under this alternative concept, the existing two-lane Sankey Road would be realigned to the south of Placer Parkway and the proposed freeway-to-freeway interchange, extending from approximately ¼ mile west of SR 70/99 to approximately ¼ mile east of the Union Pacific railroad tracks. There would be no direct access to SR 70/99 or Placer Parkway from the realigned Sankey Road.

Depending on the final alignment selected, one or two additional interchanges would also be located in south Sutter County. Conceptual locations are identified for purposes of this Tier 1/Program analysis (see Figure 2-1). The actual location of these interchanges would be developed in the Tier 2 phase, based on Sutter County requirements.

2.3.3.2 Central Segment

Within the Central Segment of the Parkway, there would not be any access proposed as part of the Project in the 7-mile segment between Fiddyment Road and Pleasant Grove Road. Please see Section 2.4 regarding a potential connection to a future extension of Watt Avenue (Figure 2-3) which could be proposed and constructed by others in the Central Segment; such an interchange is not part of the Placer Parkway.

2.3.3.3 Eastern Segment

Within the Eastern Segment of the Parkway, a signalized high-speed freeway-to-freeway and local access interchange would connect the Parkway to SR 65 at Whitney Ranch Parkway (Figure 2-1). From SR 65 eastward Placer Parkway would terminate and become Whitney Ranch Parkway east of the SR 65 exit ramp intersection. Traffic signals would be provided at the exit ramp terminals. This interchange would be approximately 1 mile north of a planned SR 65/Sunset Boulevard interchange and 1.2 miles south of the existing Twelve Bridges interchange.

As part of this interchange, auxiliary lanes would be required on SR 65 in both directions to enhance traffic operations on the north side of the future SR 65/Sunset Boulevard interchange. The southbound SR 65 exit-ramp at Sunset Boulevard is being designed to accommodate an additional auxiliary lane required for the future Placer Parkway/Whitney Ranch Parkway interchange to minimize the reconstruction of this ramp in the future. Within the Eastern Segment of the Parkway, from SR 65

westward, two interchanges with local roadways would be constructed, one at Foothills Boulevard and one at Fiddyment Road, as depicted on Figure 2-1.

The future interchange on Placer Parkway at Fiddyment Road would be located near the existing intersection of Fiddyment Road and Sunset Boulevard West. To provide acceptable traffic operations, additional distance needs to be provided between the Fiddyment Road/Sunset Boulevard West intersection and the Fiddyment Road/Placer Parkway westbound off-ramp intersection. Therefore, Sunset Boulevard West will need to be realigned to the north as it nears Fiddyment Road.

2.3.4 Landscaping Concept

For the purposes of this environmental analysis, preliminary landscaping concepts have been developed for Placer Parkway. These are entirely conceptual and would be subject to further refinement during the Tier 2 environmental process. It is anticipated that landscaping would be used to reflect local topography and vistas in the study area and complement the varying character of land adjacent to the Parkway corridor. Landscape design would vary within the Parkway's three segments depending on corridor width and type and density of surrounding land uses. Landscaping would be used within the median and the Parkway buffer zone to enhance the aesthetics of the Parkway, and would be used to provide screening and enhance local and long-distance views. Where appropriate, more concentrated plantings would be considered to buffer the Parkway from future adjacent land uses that may be incompatible with the Parkway concept, and to prevent unwanted intrusion into shoulder or median areas. Landscape design would likely include a mix of compatible native and non-native plants that may require some irrigation. Where possible and depending on availability, feasibility and cost, recycled water would be used for irrigation.

During a future design phase, lighting elements would be designed for safety and would consider the proposed landscaping plan in order to minimize potential aesthetic impacts (e.g., shielding lighting elements, using lower-voltage lighting, and proposing lighting fixtures that conform with the visual character of the area).

2.4 POTENTIAL WATT AVENUE INTERCHANGE

The Placer County General Plan includes a number of new roadways that may be needed in Placer County, according to travel demand forecasts. An extension of Watt Avenue to Placer Parkway (from Baseline Road to a new Blue Oaks Boulevard Extension) is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto the Placer Parkway via a new interchange (see Figure 2-3). A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. It would be subject to independent future environmental analysis and review and is not being fully evaluated within this Technical Report or Tier 1 EIS/Program EIR. However, the connection of Placer Parkway to a potential Watt Avenue extension could affect future travel patterns in the area, including use of the Parkway. Based on direction from previous planning studies, this Technical Study and the Tier 1 EIS/Program EIR will evaluate each corridor alternative with and without a Watt Avenue interchange. This evaluation does not predetermine the construction or alignment of a potential Watt Avenue or nearby roadway extension or the precise locations of any potential interchanges with Placer Parkway.

2.5 AGENCY PERMITS AND APPROVALS

The Proposed Action would preserve a preferred corridor for a future transportation facility. In the future, permits and approvals would be obtained from appropriate agencies prior to construction of the Parkway. These permits and approvals may include specific design or mitigation requirements that would be incorporated into the project.

2.6 SUBSEQUENT TIER 2 INFORMATION

As noted earlier, the design and construction of Placer Parkway—including its interchanges and over-crossings, and ancillary features such as stream crossings, safety devices, stormwater management structures, and similar improvements—would be evaluated in a subsequent Tier 2 environmental review process once a corridor has been identified.

3.0 RESEARCH AND FIELD METHODS

JRP Historical Consulting (JRP) developed the Area of Potential Effects (APE) for the architectural survey for the "Tier 1: Placer Parkway Corridor Preservation, Placer and Sutter Counties, California" in December 2005 and May 2006 in consultation with URS Corporation (URS) and the California Department of Transportation (Caltrans). Consistent with Caltrans policies and general cultural resource practices to include the area directly affected by construction, the architectural (built environment) APE generally runs either with or one parcel beyond the proposed archaeological APE. Where the project bisects a parcel, the boundary is generally drawn to include the whole parcel; however, where the architectural (built environment) APE intersects large, vacant agricultural parcels where there is little potential for effects, the proposed architectural APE is generally aligned with the right of way. Only those resources located within the architectural APE line were included in the survey. The architectural (built environment) APE is shown on Map 3 (Index and Sheets 1-4) in Appendix A.

URS conducted a search of the records at the Northeast and North Central information centers in June 2003. The searches included cultural resources site and historic property files, the National Register of Historic Places, California Register of Historical Resources, the Historic Property Data File for their respective counties, California Historic Landmarks, California Points of Historic Interest, Caltrans Local Bridge Survey, and historic General Land Office and USGS maps.

While the Secretary of Interior sets the standard guidelines for review of potential National Register eligible buildings, structures, or features that are 50 years of age or older, this age limit has been extended to include resources constructed in 1975 or before to account for lead-time between preparation of environmental documentation and potential Placer Parkway construction in the selected corridor. JRP therefore treated any property constructed in or before 1975 as meeting the 50-year age requirement for eligibility in the NRHP. Buildings, structures, and features built after 1975 were not included in the survey. Once the APE was defined, JRP staff conducted a reconnaissance survey of the area on March 22, 2005 to account in the field for all the buildings, structures, and objects found within the architectural (built environment) APE that appeared to be built in or before 1975. JRP performed a thorough field survey on April 19, 2005, inspecting those resources that met the 50-year age requirement for this project and analyzing the resources for potential eligibility under Criterion C. Only those properties that appeared to have potential for eligibility under Criterion C would require formal evaluation and completion of a DPR 523 form. To be eligible for inclusion in the NRHP a property must have both significance and integrity to be considered eligible for listing on the National Register. Loss of integrity, if sufficiently great, will overwhelm the historical significance of a resource and render it ineligible. Likewise, a resource can have complete integrity, but if it lacks significance, it must also be considered ineligible. Integrity played a key factor in determining potential eligibility under Criterion C for this project.

JRP examined previous historic resource inventory and evaluation surveys and reports and conducted research at the California State Library; County Assessor's and Recorder's offices for Placer and Sutter counties; Shields Library at University of California, Davis; and the Bureau of Land Management State Office, Sacramento. In addition, background research was done through First American Real Estate Solutions commercial database, review of historic and current USGS topographic maps, Caltrans Historic Bridge Inventory (Appendix B), and other documents to confirm dates of construction.

4.0 HISTORIC OVERVIEW

The project area is located in southeastern Sutter County and southwestern Placer County, immediately north of the northernmost boundary of Sacramento County. The study's architectural APE stretches east from SR 65 (between the cities of Roseville and Lincoln) in Placer County, westward taking a southwesterly approach across the sparsely populated, unincorporated land of western Placer County into southern Sutter County and ending at SR 70/99. The vast majority of the architectural APE includes vacant, undulating agricultural lands crisscrossed by drainages and tributaries of Pleasant Grove and Curry (Steelhead) creeks. The study area developed as a rural, agricultural region beginning in the 1850s, a character that continues to this day. The following overview provides broad historical background regarding the regional and local history.

4.1 SUTTER COUNTY PORTION OF THE APE

The area now encompassed by Sutter County was explored and settled by Spain and Mexico, and later by pioneers from the United States, prior to California statehood. One of the smaller counties in the state, Sutter County is situated in the heart of the Sacramento and Feather river valleys. Settlement patterns in the southernmost portion of the county followed a similar development pattern as southwestern Placer County. John Sutter received the New Helvetia land grant from the Mexican government in 1841 where he established Hock Farm along the Feather River on this grant, south of present day Yuba City, and used it as a cattle ranch during the 1840s. Over the next decade, the small population in what became Sutter County was restricted to the region around and north of Hock Farm. With the discovery of gold and the establishment of Yuba City in 1849 and the incorporation of Marysville in February 1851, the population of the county began to rise. As unsuccessful miners staked out homesteads and started farming the region's grasslands, small hamlets were established in the outer regions of the county.[3]

One such community in the vicinity of the project area was Pleasant Grove, located twenty miles southeast of Yuba City. Initially known as Gouge Eye, the town of Pleasant Grove developed in the late 1860s around Charles Bishop's general store, at the present day intersection of Howsley and Pleasant Grove roads. When the post office was constructed in 1867, Gouge Eye was renamed Pleasant Grove Creek, which was later shortened to its present name in 1875. The town grew quickly in the early years, and by the late 1880s included a shoemaker, doctor, town hall, barber, fraternal organizations like the Pleasant Grove Odd Fellows, a hotel, salon, blacksmiths, and general store. Early settlers included Ephraim Johnson, who purchased a 240-acre farm in 1878 just south of Pleasant Grove (south of the present day intersection of Pleasant Valley and Sankey roads and outside of the architectural APE) where he constructed a residence. Over the years he added 440 acres to his property, farming wheat, oats and barley on this land as well as more than 3,000 acres of leased land. By the mid 1880s, the town included a population of 100 people living on large farms. Grain, primarily wheat, and livestock formed the principal crops during this period, which continued into the first half of the twentieth century, while rice became an important crop in later years. Unlike the fruit regions of the county to the north and southeast, the area within the architectural APE remained rooted in the production of grain throughout the twentieth century.[4]

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[3] "History and Statistics," online at http://www.yubacity.net/documents/Budget_FY_05_06_Chapt_23.pdf, accessed May 18, 2006; "City of Marysville - Marysville's Golden History," online at www.marysville.ca.us/, accessed May 18, 2006.

[4] Phydelia Murphy Wagner, "A Brief History of Pleasant Grove," Sutter County History, online at http://www.rootsweb.com/~casutter/history/pleasant_grove.htm, accessed April 19, 2006; L.A. Crawford and E.B. Hurd, *Type of Farming Areas, Sacramento River Valley, 1930* (1935); Jacqueline Lowe, Julie Stark and Danae McDougal-Steward, *Worth Keeping: An Architectural History of Sutter and Yuba* Counties, California (Yuba City, California: Community Memorial Museum of Sutter County, 1990) 59.

4.2 PLACER COUNTY PORTION OF THE APE

Placer County was created in 1851 from portions of Sutter and Yuba Counties, two of California's original counties. Bordered by Sacramento County to the south, Lake Tahoe to the east, and Bear River to the north, many of the county's communities owe their birth to the gold rush.[5] Nevertheless, in the southwestern portion of the county, or "the valley," gold was never found in any quantity, so beginning in the 1850s, former miners staked out homesteads and started farming the region's undulating grasslands.[6] Even with gold mining as the major industry in the county through the 1880s, in the area around Roseville and Lincoln, farming continued to be the economic mainstay, along with timber harvesting. Bypassed by gold prospectors on their way to the goldfields, local farmers quickly built up large land holdings in the area.[7]

One of the first areas to be settled in the vicinity of the study area was the Dry Creek District, which extends east, south and west of present-day Roseville, followed by Pleasant Grove District (located northwest of Roseville, extending west to Sutter County) where Stephen A. Boutwell, William Dunlap and others acquired large tracts of land.[8] Local farmers quickly built up large land holdings along the various creeks that flow west into the American Basin. Called the "plains" by early prospectors on their way to the goldfields, early settlers came to the area in the 1850s. The region was eventually named the Pleasant Grove District after the creek which passed through. The Fiddyment family also settled in this district in 1856 when Elizabeth Jane Fiddyment and her young son, Walter F. Fiddyment Jr., joined her family on their large farm. Mrs. Fiddyment went on to become a large landholder, reportedly owning more than 13,000 acres in Placer County, while her son turned to raising sheep and cattle. The Fiddyment family maintained a strong presence in the region, expanding their holdings and improving their ranch complexes. Walter eventually became one of the largest grain and stock ranchers in the county, while his sons and grandsons went into the poultry business on the family land.[9] To the northeast of the Fiddyments, a New England farmer, George Whitney, settled on 180 acres about three miles northeast of present-day Rocklin in 1857. In this unoccupied and open land he established the Spring Valley Ranch, also known as the Whitney Ranch, where he successfully bred sheep. Between 1861 and 1873 he acquired numerous parcels of land, some under the Pre-emption Law of 1841, some former homesteaded lands purchased outright, and some from the Southern Pacific Railroad, ranging in size from 40 to 2,000 acres. The Whitney Ranch grew to encompass more than 20,000 acres of land in the Sacramento Valley, 2,000 acres of land at the confluence of the Feather and Sacramento rivers (in Sutter County), 15,000 acres of private land within Tahoe National Forest, and grazing rights for sheep on 50,000 acres of railroad and government land. In addition to stock raising, the Whitney Ranch also produced wheat, with 1,200 acres in production in 1872. After 1875, Whitney's son, Joel Parker Whitney, began cultivating all available grain land on the ranch, eventually planting more than 8,000 acres of wheat. The ranch

[5] JRP Historical Consulting, "Historic Resources Inventory and Evaluation Report, Roseville AFC, Placer County, California," (June 2001) prepared for URS Corporation. Owen Coy, *California County Boundaries* (Fresno: Valley Publishers, 1973), 200-203.

[6] Leonard M. Davis, *Roseville Yesterday and Today* (Roseville: Roseville Community Projects Inc., 1975), 11, 15. In this work, Davis uses excerpts from his book, *From Trail to Rail! Being a History of the City of Roseville California 1864-1909* (Roseville, CA: Roseville Community Projects: 1964).

[7] William N. Abeloe, *Historic Spots in California* (Stanford, CA: Stanford University Press, 1966), 265.

[8] Davis, Trail to Rail!, 1-2; Davis, *Roseville Yesterday and Today*, 19

[9] Leonard M. Davis, *Milestones and Memories 1850-2000: The Story of Roseville, California* (Roseville, CA: Roseville Arts Center, 2002), 10; U.S. Census Bureau, MSS Population Schedule, Township No. 9, Placer County, 1870; PAR Environmental Services, Inc., Department of Parks and Recreation Form, Fiddyment Turkey Farm Complex (February 27, 2001); EIP Associates, *West Roseville Specific Plan and Sphere of Influence Amendment Area EIR* (January 2004) 4.8-3 through 4.8-6.

exported its grain crops and livestock from Whitney Station (located near the present day intersection of Sunset and Industrial boulevards), three miles west of the Whitney Ranch.[10]

The construction and development of the railroad industry in the 1860s and 1870s played a significant role in the development of the region. The construction of the California Central Railroad (CCRR), an 18½-mile line that would linkup the cities of Marysville and Sacramento by means of a connection with Sacramento Valley Railroad, and later the Central Pacific Railroad, which was absorbed into Southern Pacific railway system, led to the establishment of Lincoln and Roseville.[11] Agriculture remained first in the region's economy into the twentieth century, with Roseville eventually becoming the shipping and trading center for southern Placer County. Despite this, the area's population remained low, even after the construction of the state highway (LRN 3) from Sacramento (through Roseville) to Lincoln in 1909.[12]

While agricultural production continues to be an important land use in southwestern Placer County, the region began undergoing extensive development following World War II as the accelerated growth rate in the greater Sacramento metropolitan area began impacting surrounding communities. The completion of SR 65 in the westernmost portion of the APE in 1971, and the growth of Lincoln, Roseville and Rocklin that began in the 1960s, has impacted the rural character of western Placer County. Suburban housing and commercial developments just south of the project area and industrial development dating from the late 1960s along Industrial Boulevard occupy much of the land that was once open range.

4.3 RECLAMATION DISTRICT 1000

In the forty-year period from 1870 to 1910, Sutter, Placer and other mid-valley counties remained sparsely populated and some actually declined in population. A completely new pattern emerged between 1910 and 1930 as large numbers of new settlers came to the Sacramento Valley, many attracted by improved flood control systems, irrigation, and the promising development of fruit and nut orchards. Unlike wheat farming or dairying, orchard culture provided a viable family income from relatively small parcels of land. Agrarian visionaries foresaw vast parts of the region populated with small prosperous farms living on ten to twenty-acre farms. Through reclamation and irrigation of the Sacramento Valley during the late nineteenth and early twentieth centuries, the number of people and individual farms expanded tremendously in the fruit growing regions of Sutter and Yuba counties during this period.[13]

With the influx of population in Sutter County in the late nineteenth century, the state sought to control seasonal flooding while promoting agriculture in the American Basin. Great strides had already been made with construction of a series of levees, river gauges to monitor water levels, and the establishment of reclamation districts. The region had been devastated by major floods in 1861-1862 and again in 1875, and while the government had severely restricted hydraulic mining in the mid 1880s, the region was still vulnerable to damage from mining debris and flooding. Use of much of the land in the southernmost

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[10] Thompson and West, *History of Placer County* (Oakland: Thompson and West: 1882) 246-47; Don Donaldson, "Mausoleum, Stables Mark Remains of Once Huge, Rich Placer Ranch," *The Sacramento Bee*, October 23, 1958, C 2-3.

[11] Norman E. Tuturo, *The Governor: The Life and Legacy of Leland Stanford* (Spokane, Washington: Arthur H. Clark Company, June 2004) 262-263; W.B. Lardener and M.J. Brock, *History of Placer and Nevada Counties California* (Los Angeles: Historic Record Company, 1924) 1043; Thompson and West, *History of Placer County, California* (Oakland: Thompson and West, 1882) 273; James D. Hart, *A Companion to California* (New York: Oxford University Press, 1978) 363; Davis, *Roseville Yesterday and Today*¸ 29.

[12] Caltrans Route Adoption Maps and Highway Files, Caltrans Transportation Library, Sacramento; California Highway Commission, *Part II: Report of the California Highway Commission, to Accompany the First Biennial Report of the Department of Public Works* (Sacramento: GPO, November 1, 1922) 201; Department of Public Works, California Highway Commission, *Road Map of the State of California* (Sacramento: GPO, 1922).

[13] Joseph A. McGowan, *History of the Sacramento Valley, Volume II,* (New York and West Palm Beach: Lewis Historical Publishing Company, 1961), 1; Lawrence J. Jelinek, "Harvest Empire: A History of California Agriculture," *Golden State Series* (San Francisco: Boyd & Fraser Publishing Company, 1924), 55-58, 61-63.

portion of the county was limited to seasonal grazing and some farming on higher ground, and for fishing and hunting.[14] New reclamation efforts in the first decade of the twentieth century spurred the state legislature to create Reclamation District (RD) No. 1000 Rural Historic District (RD 1000) in 1911 (Figure 4-1). It later became part of the Sacramento Valley Flood Control Project. Located in northeastern Sacramento and southern Sutter counties, it consisted of 55,130 acres from the Sacramento River east to the Western Pacific Railroad (currently part of the Southern Pacific) tracks and included drainage canals, pumps, levees, ditches, pumping plants and a system of roads. After drainage and construction of levees, the Natomas Consolidated Company surveyed and subdivided the land. Part of the construction included the Natomas East Main Drainage Canal, which is crossed by the western ends of all of the project alternatives reaching SR 70/99. To promote RD 1000 by demonstrating land productivity, Natomas Consolidated leased large acreage blocks for wheat and grain crop production, thus establishing a pattern of large acreage, single-crop land use. The company also built a 60-mile network of roads across RD 1000 to provide access to drainage canals for construction and maintenance, as well as to serve farm roads to parcels within the district's various subdivisions. This network was originally comprised of dirt roads (roughly two lanes wide) that the Natomas Company graded. Most of these roads were paved with macadam or concrete during the 1920s and 1930s. They generally followed the township and section survey lines and the drainage canals to form large regularly-spaced grids in the landscape.[15] Despite these improvement efforts, selling land in the district was a slow process into the late 1940s.[16]

The California State Historic Preservation Office (SHPO) concurred that RD 1000 is significant within the context of reclamation and flood control within the Sacramento Valley during the early twentieth century. It noted that RD 1000 was one of the first large modern reclamation districts in the state and was the largest reclamation project in the country at the time of its initial construction. It provided flood control and also created large areas of productive agricultural land. The Natomas Company built and developed RD 1000's drainage system, including its levees, canals, and pumps, as well as its road system, and these features provided the framework for the spatial land pattern of the district. RD 1000 also served the goals of the region-wide early twentieth century Sacramento Flood Control Project, which was a product of more than 60 years of legislation and technical studies that provided the legal, institutional, and engineering framework to achieve flood control along the Sacramento River. The Sacramento Flood Control Project also supported improved navigation along the river and reclamation of land for productive agricultural uses and development. RD 1000 and its landscape features were considered representative of this important historical trend. OHP agreed that RD 1000 represented the emergence of modern corporations as land owners and developers of reclamation districts, and is representative of the use of large-scale land-moving gold dredging machinery employed for the transformation of the landscape into productive agricultural land. The historic district's primary contributing features are elements of the district's drainage system, road system, and large-scale land patterns, some of which pass through the project's architectural APE. SHPO considered them significant as manifestations of the early twentieth century reclamation and flood control efforts in the Sacramento Valley.[17]

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[14] USGS, *Sacramento* 1892, *Vernon* 1910, and *Pleasant Grove Quadrangle* 1910; Dames & Moore, "Final Rural Historic Landscape Report . . .," 40-41; Marjorie Gordon, *Changes in Harmony: An Illustrated History of Yuba and Sutter Counties* (Northridge, California: Windsor Publications, Inc., 1988) 68-70.

[15] Dames & Moore, "Final Rural Historic Landscape Report . . .," 29-32, 40-41, 62, and 99; Harmon S. Bonte, State of California, Department of Public Works, Division of Water Resources, *Bulletin No. 37: Financial and General Data Pertaining to Irrigation, Reclamation and Other Public Districts in California,* (Sacramento: California State Printing Office, 1931) 181 and 183; USGS, *Verona,* 1994; *Annual Report of the Commissioner of Public Works,* (Sacramento: 1905); House Document Number 81, 62nd Congress, 1st Session, *Flood Control Sacramento and San Joaquin Rivers,* 1911; USGS, *Pleasant Grove,* 1953.

[16] Dames & Moore, "Final Rural Historic Landscape Report . . .," 14.

[17] Dames & Moore, "Final Rural Historic Landscape Report for Reclamation District 1000 . . .," iv, 6-14, and 58-61.

4.4 CONCLUSION

Little change occurred in the study area during the second half of the twentieth century. Despite the construction of SR 70 and SR 65 around 1970, the region's growth was restricted to residential construction on large agricultural tracts. While commercial and industrial development in the northeastern portion (north of Roseville) of the architectural APE began in the late 1960s and continues today around Industrial Boulevard and SR 65, in the majority of the project area agriculture continues to dominate the landscape. Only in recent decades have residential subdivisions begun spreading west from Roseville and north from Sacramento County.

5.0 FINDINGS AND CONCLUSIONS

5.1 FINDINGS

The vast majority of the survey population identified for this study, those buildings, structures and objects that were constructed in or before 1975, are Ranch-, Minimal Traditional- or Contemporary-style residential structures predominantly built during the 1960s and 1970s. Figure 5-1 shows a typical post-1960 residence located on Phillip Road. These buildings are of standard twentieth century styles, types, and methods or construction and are ubiquitous in Northern California and in Sutter and Placer counties.

Of the handful of properties that were built in the first half of the twentieth century, most have been substantially altered by additions, replacement siding or windows, or have suffered severe damage from lack of maintenance and do not appear to retain sufficient integrity to warrant further investigation. Table 5-1 lists the only National Register-eligible property identified as a property in this study. The architectural APE also included two county-owned bridges along South Brewer and Lotus roads in Placer County and two railroads. Caltrans previously identified these bridges (19C0104 and 19C0124) as Category 5 structures (not eligible for listing in the National Register of Historic Places) in the California Historic Bridge Inventory (1986 and updates) (Table 5-2). The Western Pacific Railroad and Sacramento Northern Railroad segments (Table 5-2) within the project area have been previously found to be ineligible for inclusion in the NRHP and therefore required no further study for this project.[18]

Table 5-1
Properties Previously Determined Eligible for Listing in the National Register of Historic Places and Which are Historical Resources Under CEQA

Name	Address	OHP Status Code	Map Ref No.
Reclamation District 1000	Between Western Pacific Railroad and Sacramento River	2D	1

Table 5-2
Properties Previously Determined Ineligible for Listing in the National Register of Historic Places and Which are Not Historical Resources Under CEQA

Name	Address	OHP Status Code	Map Ref No.
Sacramento Northern Railroad Segment	Not applicable	6	2
Western Pacific Railroad Segment	Not applicable	6	3
Bridge 19C0104	Brewer Road, branch of Curry Creek	6	n/a
Bridge 19C0124	Locust Road east of SR 65, Curry Creek	6	n/a

[18] JRP Historical Consulting Services, Far Western Anthropological Research Group, Inc., and Foothill Resources, Ltd., "Archaeological Survey Report and Historic Study Report for the State Route 70 Project, Sutter and Yuba Counties, California," prepared for Woodward-Clyde Consultants, December 1994; JRP Historical Consulting Services, "Addendum Historic Architectural Survey Report and Historic Evaluation Report, State Route 70 Expressway/Freeway Project in Sutter and Yuba Counties, California," Volume I, prepared for Caltrans District 3, June 1995.

The following properties were determined eligible for listing in the National Register of Historic Places as a result of the current study and are historical resources under CEQA: None.

The following properties were determined ineligible for listing in the National Register of Historic Places as a result of the current study and which are not historical resources under CEQA: None.

Toni Webb of JRP, who meets the Professionally Qualified Staff Standards in Section 106 PA Attachment 1 as an Architectural Historian or above, has determined that the only other properties present within the architectural (built environment) APE for the Tier 1 studies, including state-owned resources, meet the criteria for Section 106 PA Attachment 4 (Properties Exempt from Evaluation).

5.2 CONCLUSIONS

Research completed for this phase of the project did identify one resource, RD 1000, within the architectural (built environment) APE that was previously evaluated and found to be eligible for inclusion in the NRHP at the state level of significance under Criterion A. Additionally, JRP identified three other properties that, while they do not appear to be eligible under Criterion C as representative examples of a type, period, or method of construction, or as works of a master, appear to retain sufficient integrity to warrant formal evaluation during the Tier 2 phase of the project. Site-specific research conducted on these properties may produce information that possibly may support eligibility under Criteria A or B. Those resources (APN 35-260-011, 35-260-014 and 017-130-036) are identified on Map 3, Sheets 1 and 3, in Appendix A.

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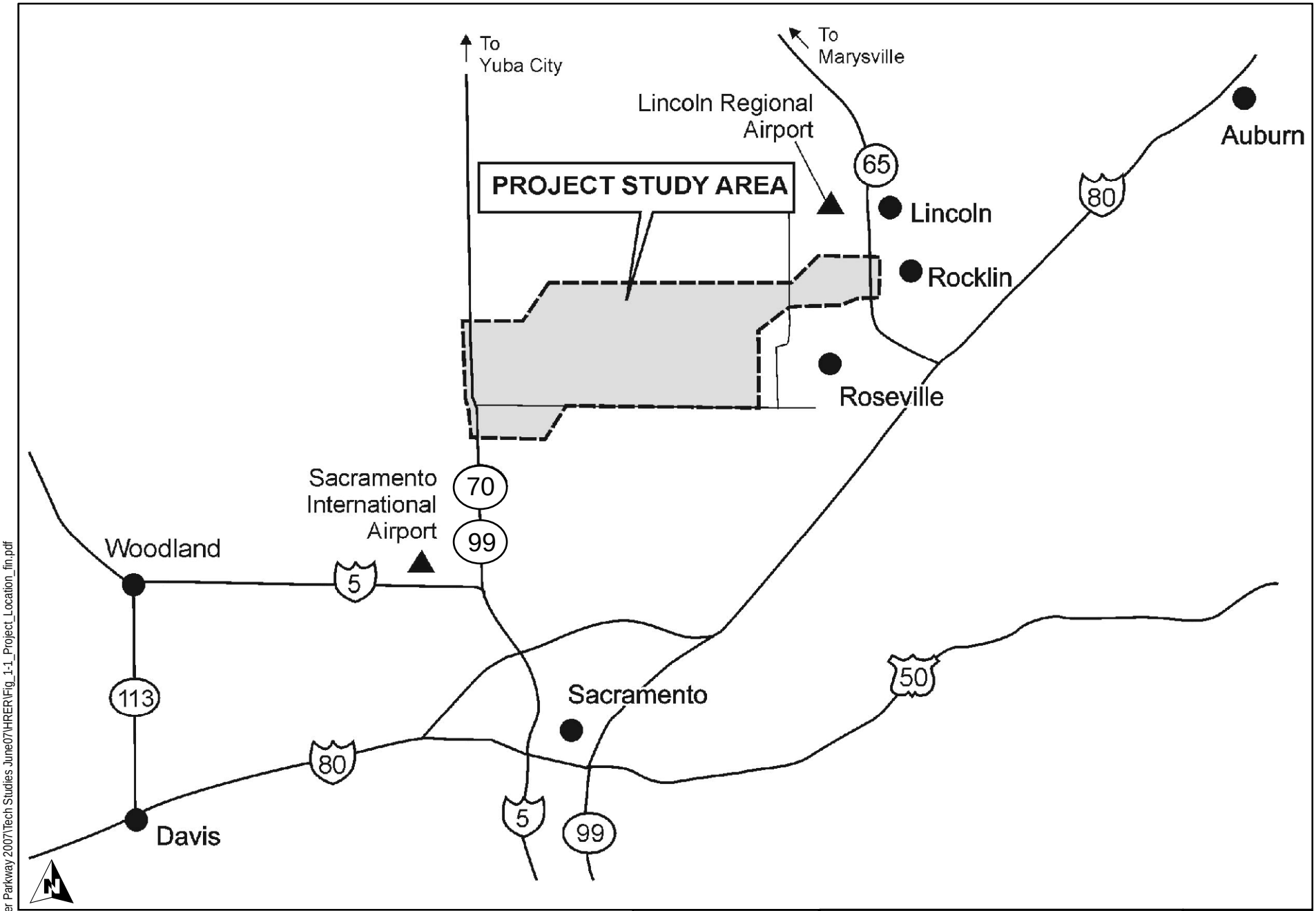
7.0 PREPARERS' QUALIFICATIONS

This project was conducted under the general direction of Rand Herbert (M.A.T. in History, University of California, Davis), a principal at JRP with more than 25 years experience conducting these types of studies. Mr. Herbert qualifies as a historian/architectural historian under the United States Secretary of the Interior's Professional Qualification Standards (as defined in 36 CFR Part 61).

JRP architectural historian Toni Webb was the project manager/lead historian for the project. Ms. Webb conducted research and field recordation, and prepared the contextual statement. Ms. Webb received a B.F.A. in Historic Preservation from the Savannah College of Art and Design and has more than 6 years of experience in public history and historic preservation. Based on her level of experience and education, Ms. Webb qualifies as an architectural historian under the Secretary of the Interior's Professional Qualification Standards (as defined in 36 CFR Part 61).

Research Assistant Steven J. Melvin (B.A. in History, University of Minnesota, Certificate in Public History, California State University, Chico; and is currently pursuing an M.A. in Public History from California State University, Sacramento) assisted with the research and preparation of the contextual statement.

Figures



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Miles

PLACER PARKWAY

Tier 1 EIS/EIR
Historical Resources
Evaluation Report

Project Location

Figure 1-1

June 2007

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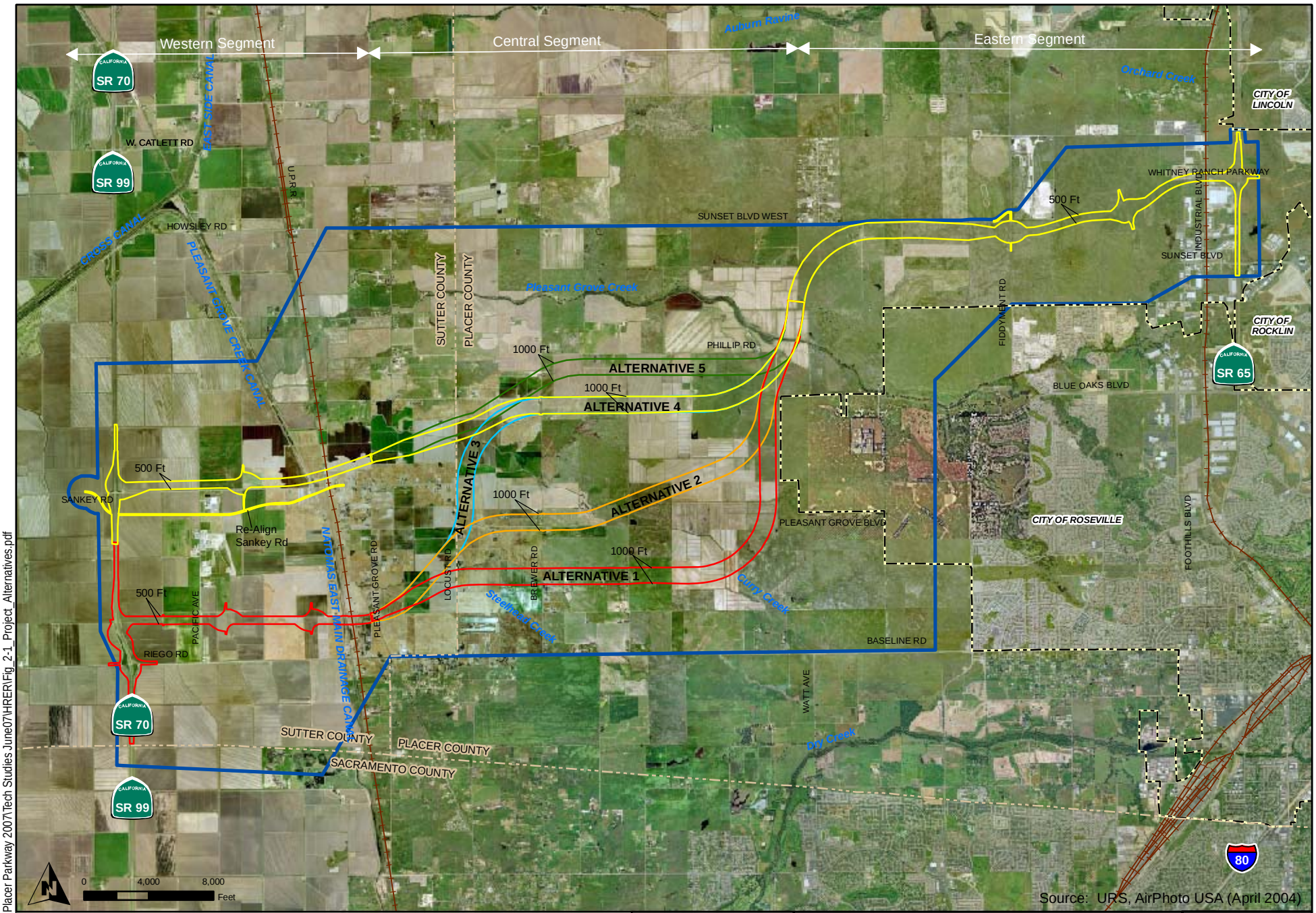
Western Segment
Central Segment
Eastern Segment
Auburn Ravine
Orchard Creek
CITY OF LINCOLN
SR 70
W. CATLETT RD
SR 99
EAST SIDE CANAL
UPRR
WHITNEY RANCH PARKWAY
500 Ft
SUNSET BLVD WEST
INDUSTRIAL BLVD
SUNSET BLVD
CROSS CANAL
HOWSLEY RD
PLEASANT GROVE CREEK CANAL
SUTTER COUNTY
PLACER COUNTY
Pleasant Grove Creek
FIDDYMENT RD
CITY OF ROCKLIN
PHILLIP RD
1000 Ft
ALTERNATIVE 5
ALTERNATIVE 4
SR 65
BLUE OAKS BLVD
500 Ft
SANKEY RD
ALTERNATIVE 3
1000 Ft
ALTERNATIVE 2
Re-Align
Sankey Rd
PLEASANT GROVE BLVD
CITY OF ROSEVILLE
FOOTHILLS BLVD
NATOMAS EAST MAIN DRAINAGE CANAL
PLEASANT GROVE RD
LOCUST RD
BREWER RD
1000 Ft
ALTERNATIVE 1
Curry Creek
Steelhead Creek
500 Ft
PACIFIC AVE
RIEGO RD
BASELINE RD
WATT AVE
SR 70
SUTTER COUNTY
PLACER COUNTY
SACRAMENTO COUNTY
Dry Creek
SR 99
80
0
4,000
8,000
Feet
Source: URS, AirPhoto USA (April 2004)
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary
PLACER PARKWAY
Tier 1 EIS/EIR
Historical Resources
Evaluation Report
Project Alternatives
Figure 2-1
June 2007
6/15/07 ..vsa/hkT:\Placer Parkway 2007\Tech Studies June07\HRER\Fig_2-1_Project_Alternatives.pdf
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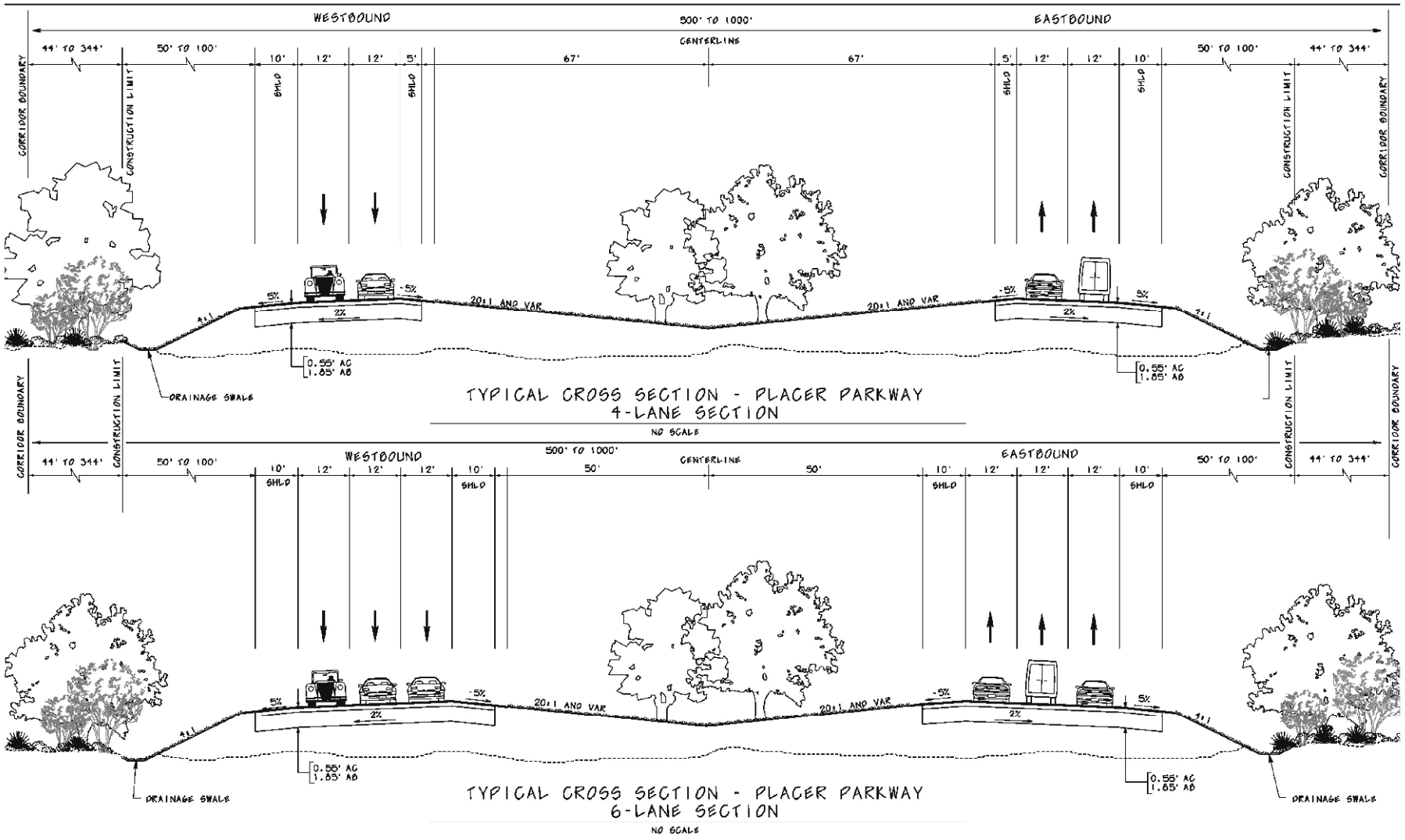
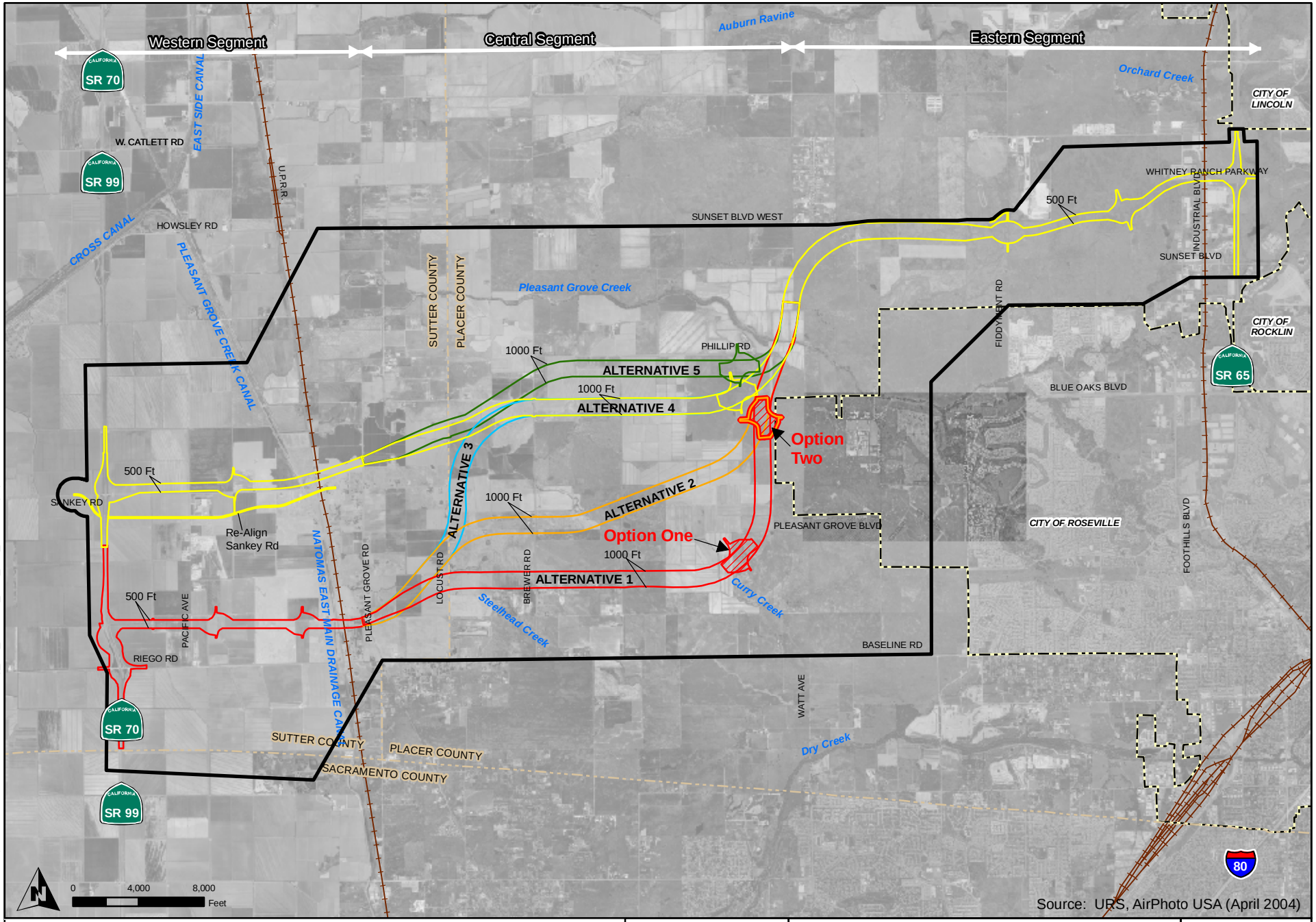


PLACER PARKWAY CORRIDOR PRESERVATION	Tier 1 EIS/EIR Historical Resources Evaluation Report	Typical Cross Section (Conceptual)	***Figure 2-2*** ***June 2007***

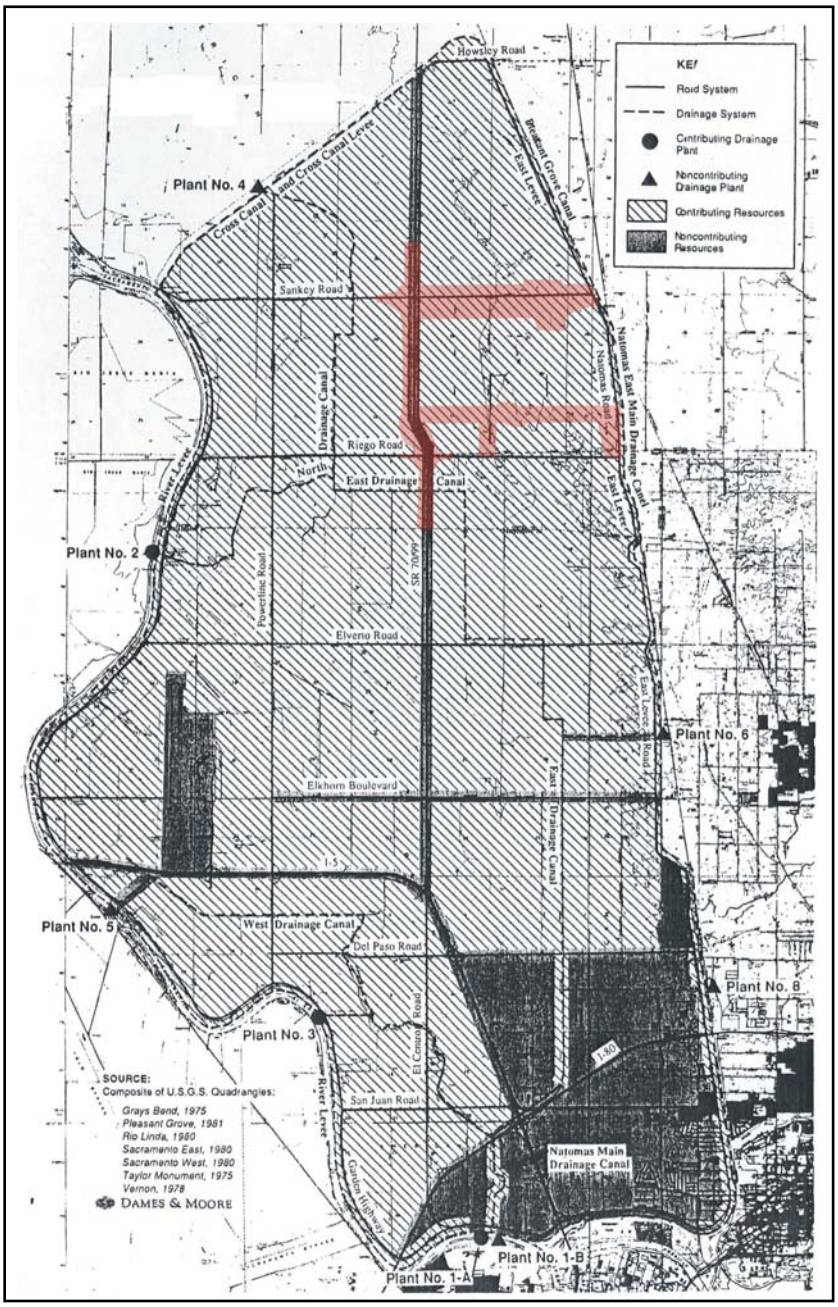


Tier 1 EIS/EIR
Historical Resources Evaluation Report

Potential Watt Avenue Interchange

Figure 2-3

June 2007



Note:
The project's architectural APE shown in red.

PLACER PARKWAY	Tier 1 EIS/EIR Historical Resources Evaluation Report	RD 1000 Historic District and Project APE	***Figure 4-1*** ***June 2007***

PLACER PARKWAY CORRIDOR PRESERVATION	Tier 1 EIS/EIR Historical Resources Evaluation Report	Typical Post-1960 Residence in APE	***Figure 5-1*** ***June 2007***

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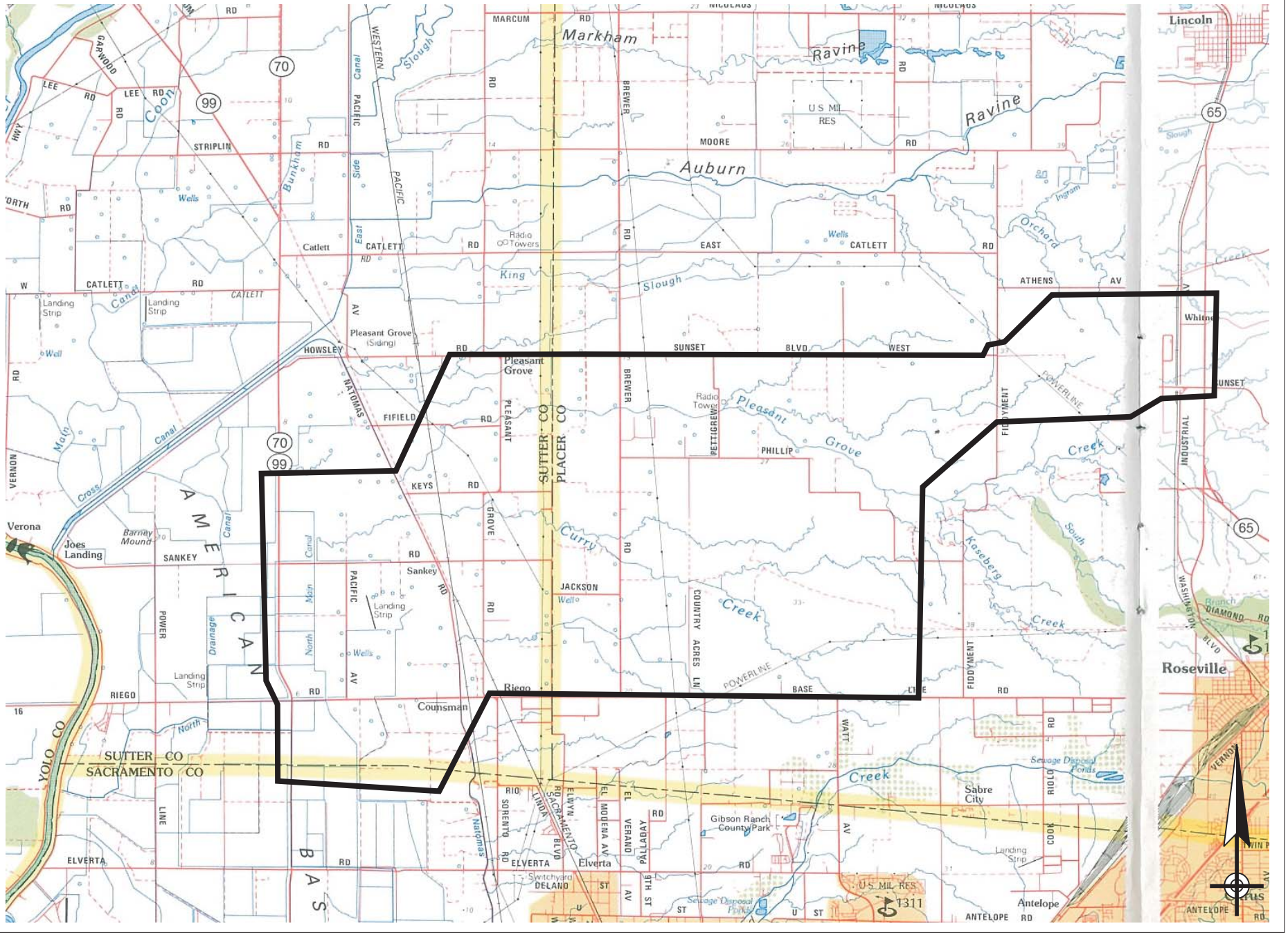
Appendix A
Maps

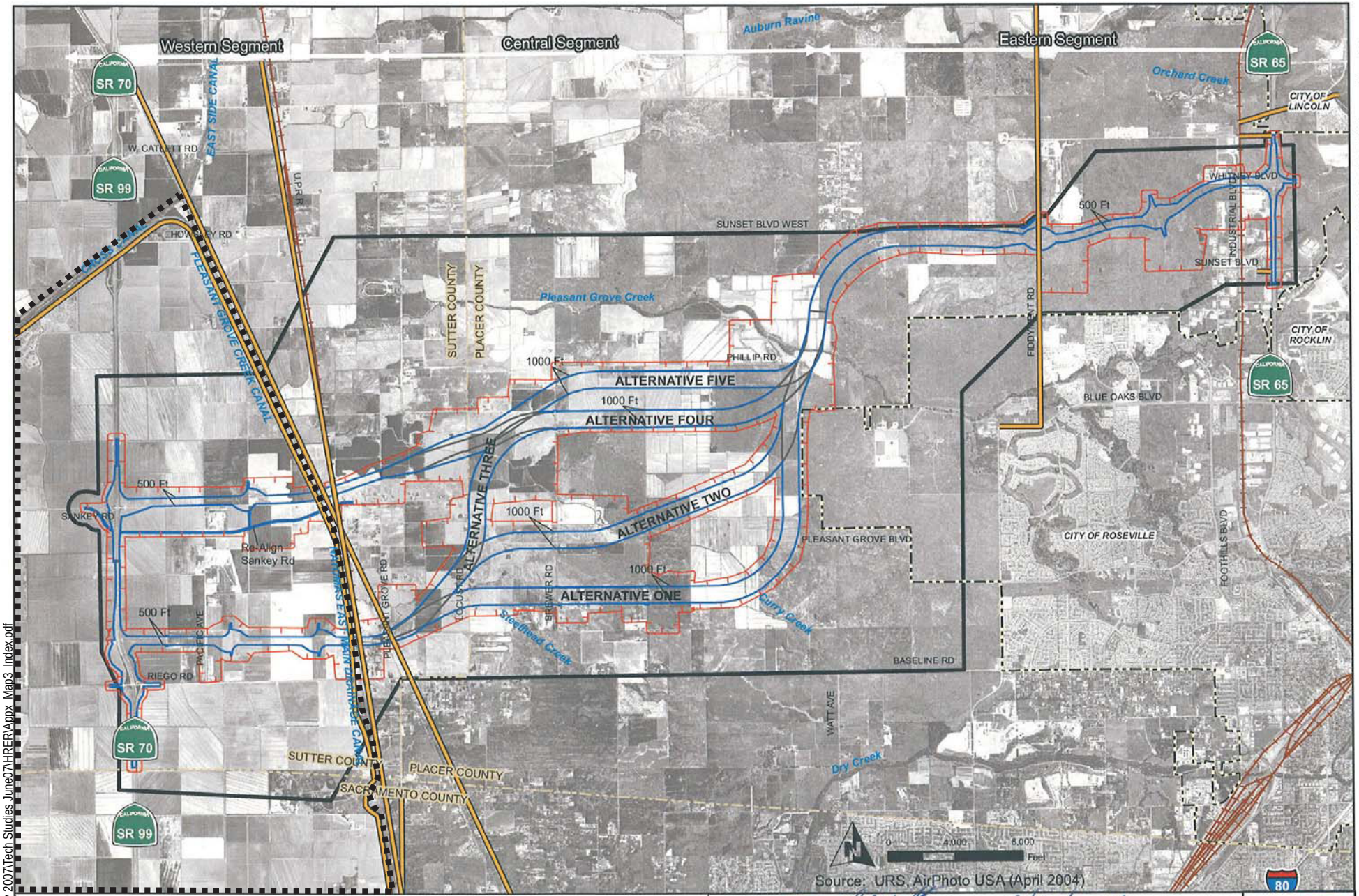
MAP 1

Project Location in California



MAP 2

Project Vicinity



- Alternative
- Study Area Boundary
- County Boundary
- City Boundary
- Historical Architectural Resource
- Recorded Linear Historic Resource
- Recorded Architectural Resource
- Recorded Archaeological Site (Surface Point Only)
- Identified Bridge from Caltrans Bridge Inventory
- Archaeology APE (The archaeological APE includes private and publicly owned property and reflects the outer limits of the alternative alignment corridors.)
- Historic Architecture APE (The historic architecture APE includes private and publicly owned property, and comprises areas which could be subject to potential direct impacts associated with any of the alignment alternatives.)
- Reclamation District 1000

APPROVED
CALTRANS DISTRICT 03, ENVIRONMENTAL BRANCH — DATE 6/19/2006
STEVE PROPST, LOCAL ASSISTANCE ENGINEER — DATE 6/29/06

Tier 1 EIS/EIR

MAP 3
Index
APE: Archaeology and Historic Properties

May 2006

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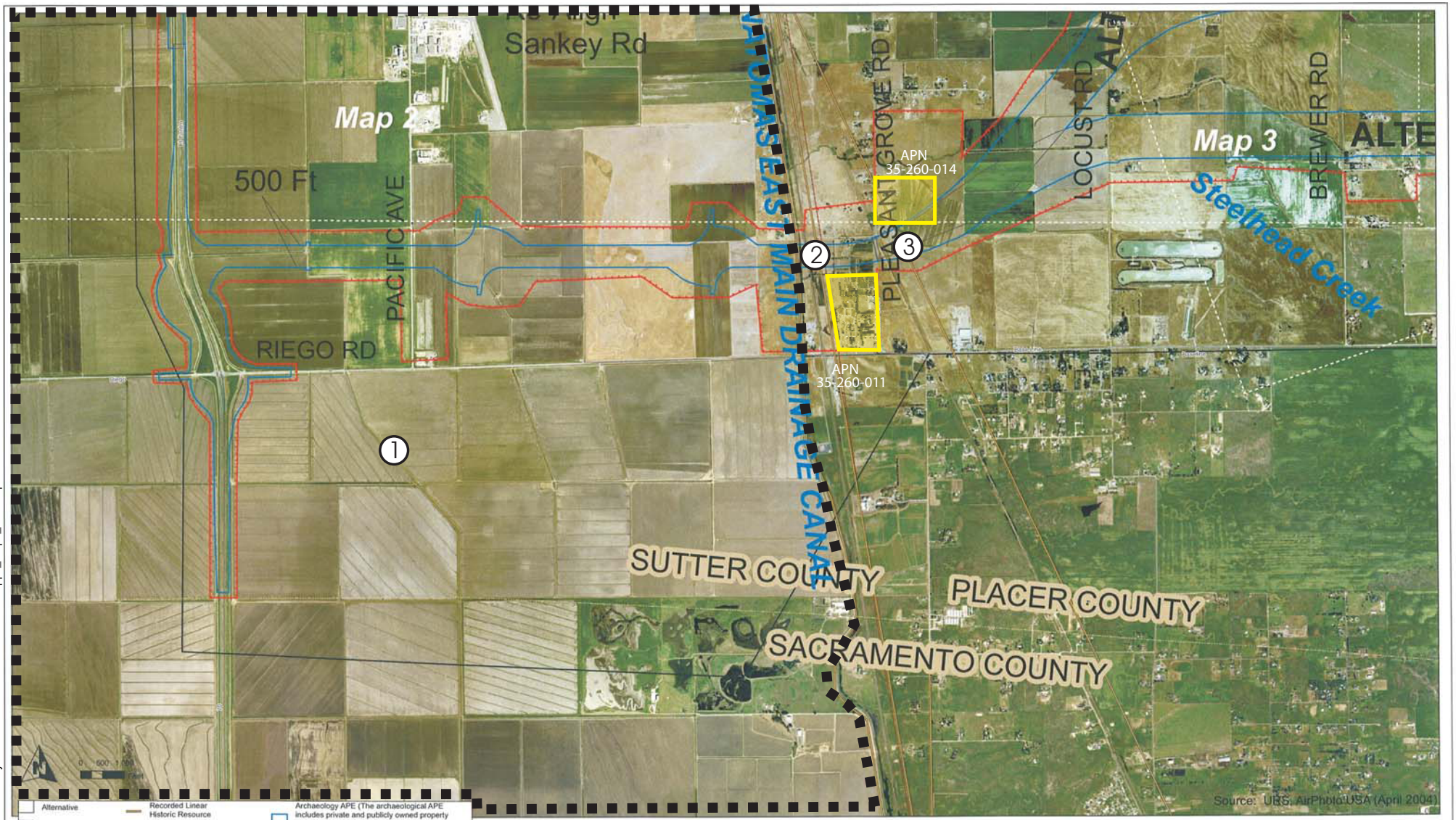


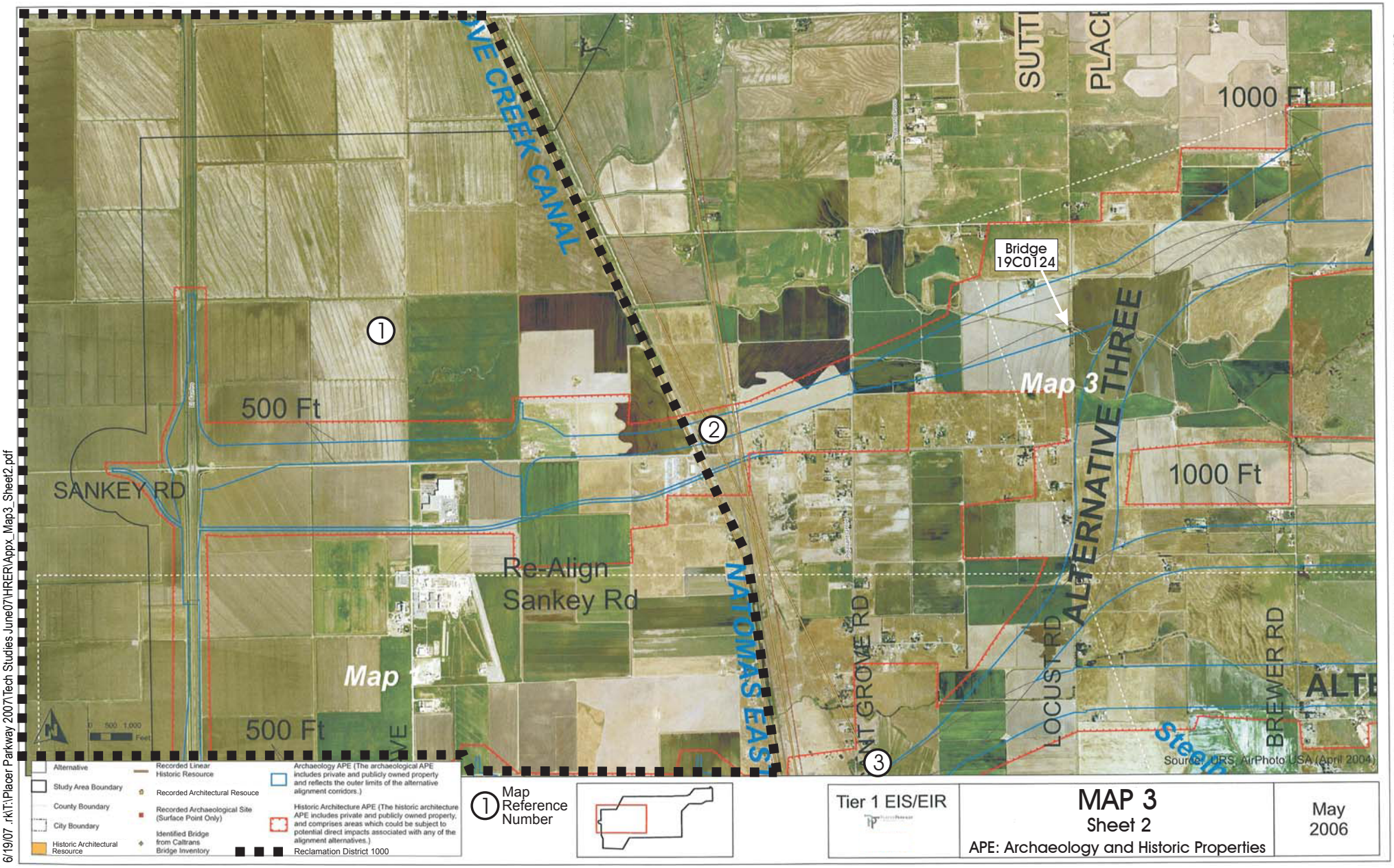
1 Map Reference Number

Tier 1 EIS/EIR

MAP 3
Sheet 1
APE: Archaeology and Historic Properties

May 2006

NOTE: Properties highlighted in yellow do not appear to be potentially eligible under Criterion C, but in white may require additional research for potential eligiblity under Criterion A and B at a later date.



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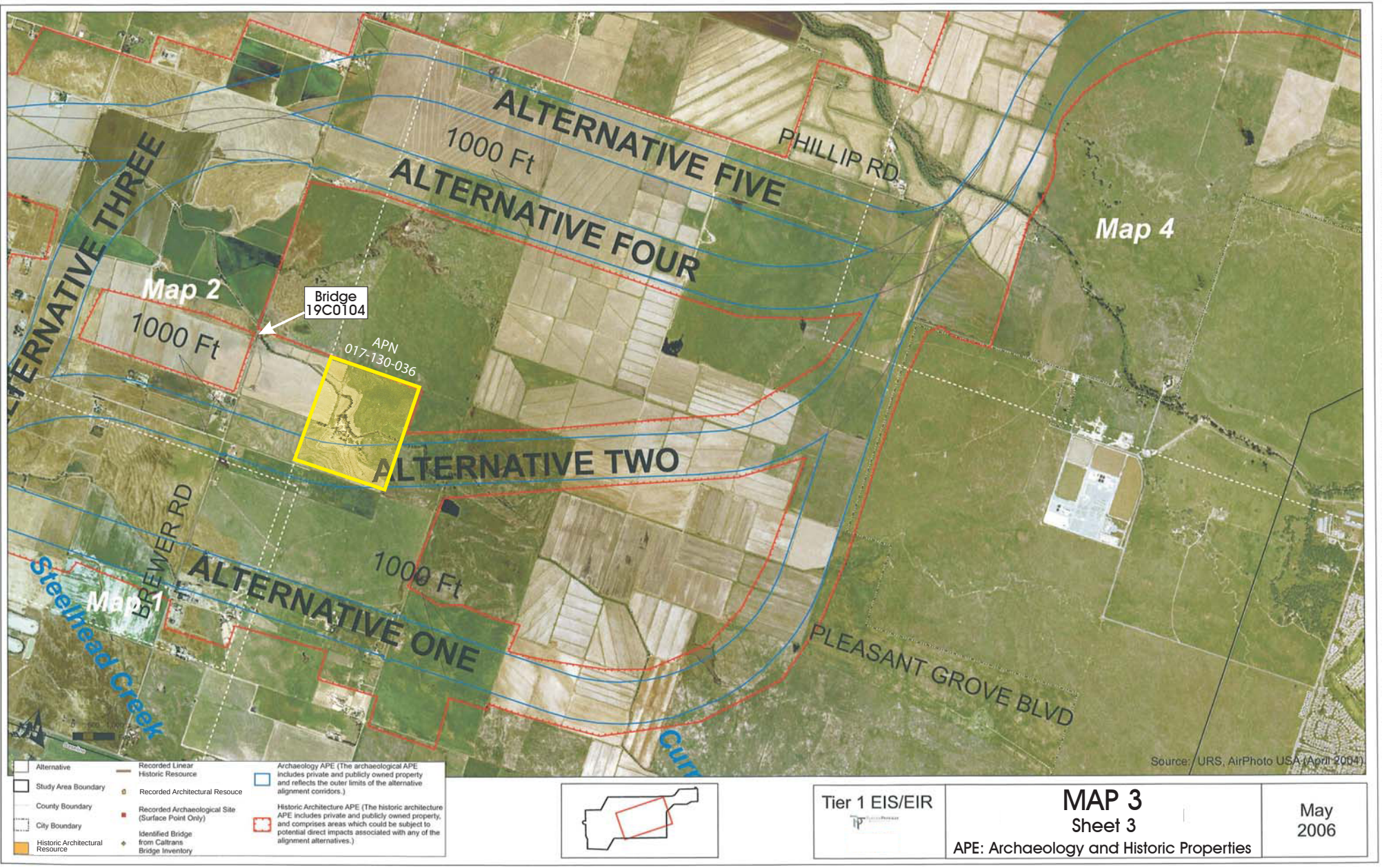
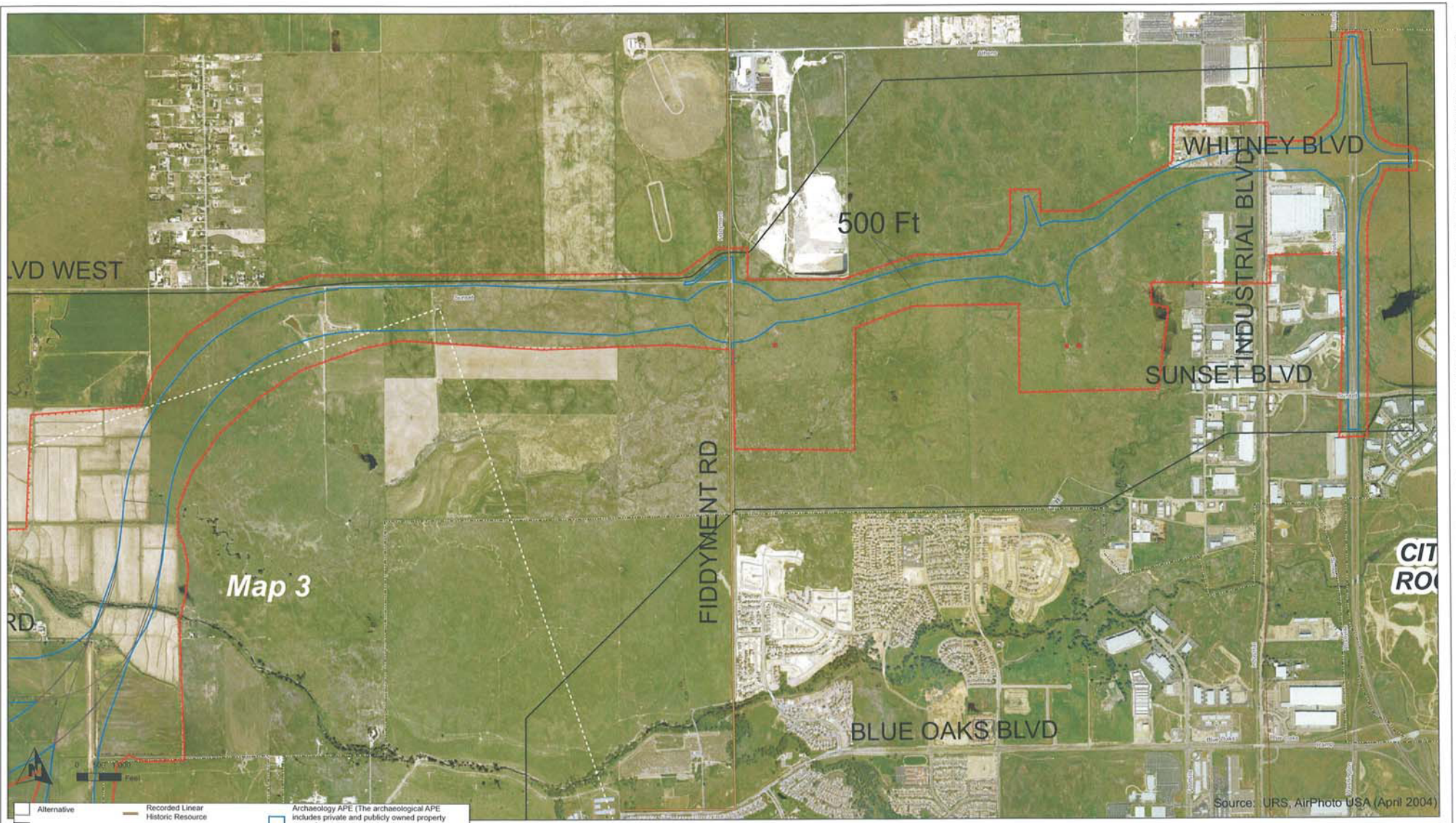


Tier 1 EIS/EIR

MAP 3
Sheet 3
APE: Archaeology and Historic Properties

May 2006

NOTE: Properties highlighted in yellow do not appear to be potentially eligible under Criterion C, but in white may require additional research for potential eligiblity under Criterion A and B at a later date.



Tier 1 EIS/EIR

MAP 3

Sheet 4

APE: Archaeology and Historic Properties

May 2006

Appendix B
Programmatic Agreement

DEPARTMENT OF TRANSPORTATION
DISTRICT 3 – SACRAMENTO OFFICE
2389 GATEWAY OAKS DRIVE, SUITE 100
SACRAMENTO, CA 95833
PHONE (916) 274-0568
FAX (274) 274-0648
TTY (530) 741-4509

7.11.2006

Flex your power!
Be energy efficient!

July 5, 2006

Gene Fong
Federal Highway Administration
650 Capitol Mall, Suite 4-100
Sacramento, CA 958144-4708
Attn: Gary Sweeten

Dear Mr. Fong

The Federal Highway Administration (FHWA) and California Department of Transportation (Caltrans) are working with the Placer County Transportation Planning Agency (PCTPA) on the Placer Parkway Project. PCTPA proposes to identify and acquire right-of-way for the purpose of preserving a corridor for a future Placer Parkway, an east-west connection between State Route (SR) 65 near Lincoln in Placer County and SR 70/99 in southern Sutter County. Our agencies are working together to produce a Tier 1 Environmental Impact Statement (EIS), pursuant to the National Environmental Policy Act (NEPA) that will evaluate several corridor alternatives and will lead to the selection of one corridor for right-of-way preservation.

As a Federal undertaking, this project also requires compliance with Section 106 of the National Historic Preservation Act (NHPA). Pursuant to 36 CFR 800, the regulations implementing Section 106 of the NHPA, we have prepared a draft Programmatic Agreement that will govern Section 106 compliance responsibilities associated with implementing this undertaking. If FHWA agrees with this proposed PA, please forward the attached documentation to the California State Historic Preservation Officer for his review. Caltrans and PCTPA staff are available to meet with the SHPO to explain the undertaking in more detail if that is helpful.

Should you require any additional project information, please contact Erick Wulf at (916) 274-0563 or erick.wulf@dot.ca.gov or Anmarie Medin at (916) 274-584 or anmarie.medin@dot.ca.gov. Thank you in advance for your assistance in this matter.

Sincerely,

Japtej S Gill

JAPTEJ GILL
Chief, Environmental Planning, S4

c: Stan Tidman, Placer County Transportation Planning Agency

bc: EWulf, AMedin

PROGRAMMATIC AGREEMENT

BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER REGARDING IMPLEMENTATION OF THE PLACER PARKWAY PROJECT, PLACER COUNTY, CALIFORNIA

WHEREAS, the Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans), in cooperation with the Placer County Transportation Planning Agency (PCTPA), propose to identify and acquire right-of-way for the purpose of preserving a corridor for a future Placer Parkway, an east-west connection between State Route (SR) 65 near Lincoln in Placer County and SR 70/99 in southern Sutter County (Undertaking); and,

WHEREAS, the FHWA is preparing a Tier 1 Environmental Impact Statement (EIS), pursuant to the National Environmental Policy Act (NEPA), 42 USC 4321 *et seq,* that will evaluate several corridor alternatives and will lead to the selection of one corridor for right-of-way preservation; and

WHEREAS, given the existing and projected rapid growth in and around the project study area, the FHWA has determined it is vital to identify a corridor as early as feasible so that local jurisdiction planning decisions can consider the future Placer Parkway and before new development reduces corridor options and/or increase right-of-way acquisition costs for the Undertaking; and,

WHEREAS, the FHWA has determined that a phased approach for compliance with Section 106 of the NHPA is appropriate for the Undertaking, such that completion of the identification of historic properties, determinations of specific effects in historic properties, and resolution of any adverse effects will be carried out as part of planning for and prior to the approval of specific Tier 2 undertakings; and,

WHEREAS, the FHWA has consulted with the California State Historic Preservation Officer (SHPO) pursuant to the 1 January 2004 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA), and where the PA so directs, in accordance with 36 CFR Part 800, the regulations that implement Section 106 of the National Historic Preservation Act (NHPA) (16 U.S.C. 470f), regarding the Undertaking's potential effects on historic properties; and,

WHEREAS, following the completion of Tier 1 EIS, the FHWA, as funding becomes available for design and construction, will conduct Tier 2 environmental studies to analyze the environmental impacts of different alignments within the selected corridor in order to determine the specific transportation facility 'footprint' within the corridor , including project-level compliance with the Section 106 process to determine specific impacts to historic properties as

well as opportunities for avoidance, minimization of harm, and appropriate mitigation, if required, for the Undertaking; and,

WHEREAS, the FHWA desires to enter into a Programmatic Agreement (Agreement) at this time in order to establish a framework for conducting Section 106 consultation for Tier 1 and Tier 2; and,

WHEREAS, Caltrans has participated in consultation and has been invited to be a signatory to this Agreement; and

WHEREAS, PCTPA has participated in consultation and has been invited to be a signatory to this Agreement; and

WHEREAS, the Advisory Council on Historic Preservation (ACHP) has been afforded the opportunity to participate in the Section 106 process and has not elected to participate; and,

WHEREAS, Caltrans, on behalf of the FHWA, has initiated consultation with the Shingle Springs Band of Miwok Indians, Todd Valley Miwok-Maidu Cultural Foundation, Maidu Elders Orgainzation, and Enteprise Rancheria of Maidu Indians, as well as with the following federally-recognized Indian Tribes: United Auburn Indian Community (Tribes).

WHEREAS, the FHWA has involved, and will continue to involve, the public and historic interest groups, as stipulated under NEPA and the NHPA in a manner consistent with the PA and Caltrans' public involvement procedures;

NOW, THEREFORE, the FHWA and the SHPO agree that, upon the FHWA's decision to proceed with the Undertaking, the FHWA shall ensure that the Undertaking is implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on historic properties; and further agree that these stipulations shall govern the Undertaking and all of its parts until this Agreement expires or is terminated.

STIPULATIONS

The FHWA will ensure that the following stipulations are implemented:

I. DEFINITIONS

The definitions set forth at 36 CFR § 800.16 are applicable throughout this Agreement.

II. TIER 1 PHASED IDENTIFICATION OF HISTORIC PROPERTIES

A. Area of Potential Effects

1. The Undertaking's area of potential effects (APE) for Tier 1 is situated in southwest Placer County, between Highways 65 and 70, north of Baseline Road and south of Sunset Boulevard West (attachment A to this Agreement).

2. If modifications to the Undertaking, subsequent to the execution of this Agreement, necessitate the revision of the APE, Caltrans will consult with the PCTPA, the FHWA, and the SHPO to facilitate mutual agreement on the subject revisions. If Caltrans, the PCTPA, the FHWA, and the SHPO cannot reach such agreement, then the parties of this Agreement shall resolve the dispute in accordance with stipulation VIII.C below. If Caltrans, the PCTPA, the FHWA, and the SHPO reach mutual agreement on the proposed revisions, then Caltrans will submit a final map of the revisions, consistent with the requirements of stipulations VIII.A and XVI.A of the PA, no later than 30 days following such agreement.

B. Phased Identification of Historic Properties

1. Areas Common to all Alternatives/Corridors: the FHWA shall ensure that PCTPA or its consultants inventory properties within the area(s) common to all Tier 1 corridors according to the following specifications:
   a. Archaeological Properties
      (1) Conduct an inventory of archaeological properties where access has been secured in areas that have not previously been surveyed and those areas deemed by Caltrans PQS in need of resurvey because of the age or condition of the previous survey. Archaeological properties will be identified in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms.
   b. Built Environment Properties
      (1) Conduct a limited inventory of built environment properties within the entire Tier 1 APE. Built environment properties that have the potential to meet NRHP Criterion C will be identified and evaluated in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms. Other built environment properties within the APE that meet the age and integrity criteria will be inventoried and evaluated during Tier 2 studies, as provided for in stipulation III of this Agreement.
2. Areas Unique to Specific Alternatives/Corridors: the FHWA shall ensure that PCTPA or its consultants inventory properties within the area(s) unique to specific Tier 1 alternatives/corridors according to the following specifications:
   a. Archaeological Properties
      (1) Complete a records search for the Tier 1 APE and prepare a predictive model utilizing environmental factors and historic land-use data to assess the archaeological sensitivity of the project corridors including potential for buried resources. Segments of Tier 1 alignments/corridors that are not in common will be inventoried for archaeological properties during Tier 2 studies, as provided for in stipulation III of this Agreement.
   b. Built Environment Properties
      (1) Conduct a limited inventory of built environment properties within the entire Tier 1 APE. Built environment properties that have the potential to meet NRHP Criterion C will be identified and evaluated

in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms. Other built environment properties within the APE that meet the age and integrity criteria will be inventoried and evaluated during Tier 2 studies, as provided for in stipulation III of this Agreement.

3. Tier 1 Reporting and SHPO Consultation
   a. The FHWA shall ensure that PCTPA or its consultants prepare documentation of their findings and determinations pursuant to stipulation XVI of the PA. The reports shall be submitted to Caltrans PQS for review and approval.pursuant to stipulation XVI of the PA.
   b. Eligibility determinations shall be submitted to SHPO pursuant to stipulation VIII.C(5) of the PA.

C. Phased Assessment of Effects

1. The FHWA shall assess the potential for Tier 1 of the Undertaking to effect historic properties in accordance with stipulation X of the PA. As Tier 1 is defined as acquisition of property, the FHWA anticipates there will be no adverse effects during Tier 1. The FHWA shall consult with SHPO on the effect finding pursuant to stipulation X of the PA.

III. TIER 2 PHASED SECTION 106 CONSULTATION

A. Area of Potential Effects: The objective of the Tier 1 EIS is to identify and preserve an approximate 500'- to 1,000'-wide corridor for acquisition. The Tier 1 EIS will focus on broad topics such as general location, mode choice, area-wide air quality and land use, and other environmental issues. Once the corridor is selected, the subsequent Tier 2 environmental review, relying on the work from the Tier 1 EIS, will provide a more detailed analysis of the environmental impacts for the future transportation facility alignment alternatives within the selected corridor. Once a Tier 2 preferred alternative is chosen, the FHWA and PCTPA will delimit an APE for the Tier 2 preferred alternative in accordance with stipulation VIII.A of the PA. If subsequent modifications to the APE are necessary, the FHWA shall follow the procedures of stipulation II.A(2) of this Agreement.

B. Phased Identification and Evaluation.

1. Archaeological Properties
   a. The FHWA shall ensure that PCTPA or its consultants conducts a pedestrian reconnaissance of all lands within the final APE for any Tier 2 preferred alternative. Archaeological properties will be identified and evaluated in accordance with stipulation VIII.B and C of the PA, and documented on appropriate DPR 523 inventory forms.
2. Built Environment Properties
   a. The FHWA shall ensure that PCTPA or its consultants conducts an inventory of built environment properties within the final APE for any Tier 2 preferred alternative. Built environment properties will be

evaluated for NRHP eligibility in accordance with stipulation VIII.(B) and (C) of the PA, and documented on appropriate DPR 523 inventory forms.

3. Tier 2 Reporting and SHPO Consultation
   a. The FHWA shall ensure that PCTPA or its consultants prepare documentation of their findings and determinations pursuant to stipulation XVI of the PA. The reports will be submitted to Caltrans PQS for review and approval pursuant to stipulation XVI of the PA.
   b. Eligibility determinations shall be submitted to SHPO pursuant to stipulation VIII.C(5) of the PA.

C. **Assessment of Effects.** The FHWA will assess any Tier 2 preferred alternative for its potential to affect historic properties and will consult with the SHPO pursuant to stipulation IX and X of the PA. Should FHWA find that any Tier 2 preferred alternative will result in an adverse effect, FHWA shall consult with SHPO pursuant to stipulation XI of the PA.

D. **Applicable Requirements.** FHWA will conduct the Section 106 process during Tier 2 in accordance with stipulations of the PA and applicable requirements under Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) and the Section 106 regulations (36 C.F.R. Part 800), including any subsequent amendments thereto. Nothing in this Agreement is intended to supersede or modify any requirement contained in the Section 106 statute or the Section 106 regulations.

E. **Consulting Parties**. During Tier 2, the same party may be designated as a consulting party for more than one alternative. FHWA will ensure comments of all consulting parties are incorporated into the Section 106 consultation process as provided for in all applicable laws.

IV. TIER 2 SECTION 106 COMMITMENTS AND CONCEPTUAL MITIGATION

A. FHWA and PCTPA agree to implement and/or fund the activities listed in this section as part of any Tier 2 environmental studies. Additional commitments may be made, as appropriate, as an outcome of the Section 106 consultation process for any Tier 2 alternative.

B. **Avoidance and Minimization of Impacts**

1. In General. In accordance with the consultation process required under Section 106 and in accordance with other applicable laws, FHWA, PCTPA, and Caltrans will seek ways to avoid, minimize, and mitigate adverse impacts to the environment, including adverse effects to historic properties.
2. Context-Sensitive Solutions. FHWA, PCTPA, and Caltrans will apply the principles of context-sensitive solutions during project development, in accordance with applicable Caltrans policies. In accordance with those principles and where appropriate, FHWA, PCTPA, and Caltrans will develop any Tier 2 alternative with sensitivity to aesthetic values and the historic context, utilizing the services of professionals with experience in areas related to historic preservation.

C. Should implementation of any Tier 2 alternative result in adverse effects to a historic property important solely for its information value (Criterion D), FHWA will ensure a data recovery plan is prepared according to guidance in Attachment 6 of the PA and submitted to the SHPO for review in accordance with stipulation II.C(3) of this Agreement.

D. The FHWA will not authorize the execution of any Undertaking activity that may effect (36 CFR § 800.16(i)) historic properties in the Undertaking's APE prior to the completion of the Section 106 process provided for in this Agreement.

V. NATIVE AMERICAN CONSULTATION

The FHWA has consulted with the Tribes regarding the proposed Undertaking, will continue to consult with the Tribes, and will afford the Tribes, should the Tribe so desire, the further opportunity to more directly and actively participate in the implementation of the Undertaking; Should any specific Tribe desire to participate in this Agreement as herein set forth, the FHWA shall consult with them to reach consensus regarding the manner in which the Tribe may participate in the implementation of this Agreement and the Undertaking, and regarding any time frames or other matters that may govern the nature, scope, and frequency of such participation.

VI. TREATMENT OF HUMAN REMAINS

The Agreement parties agree that human burials and related items discovered during implementation of the terms of this Agreement and of the Undertaking will be treated in accordance with the requirements of § 7050.5(b) of the California Health and Safety Code. If, pursuant to § 7050.5(c) of the Code, the county coroner or medical examiner determines that the human remains are or may be of Native American origin, then the discovery shall be treated in accordance with the provisions of §§ 5097.98(a)-(d) of the California Public Resources Code.

VII. DISCOVERIES AND UNANTICIPATED EFFECTS

If the FHWA determines, after any future construction of the Undertaking has commenced, that the Undertaking will affect a previously unidentified property that may be eligible for the National Register, or affect a known historic property in an unanticipated manner, the FHWA will address the discovery or unanticipated effect in accordance with 36 CFR § 800.13(b)(3). The FHWA at its discretion may hereunder, and pursuant to 36 CFR § 800.13(c), assume any discovered property to be eligible for inclusion in the National Register.

VIII. ADMINISTRATIVE PROVISIONS

A. PROFESSIONAL QUALIFICATIONS AND STANDARDS

1. **Professional Qualifications**. All activities prescribed by stipulations II, III, IV, V, VI, and VII of this Agreement shall be carried out under the authority of the FHWA by or under the direct supervision of a person or persons meeting at a minimum the Secretary of Interior's *Professional Qualifications Standards* (48 FR 44738-39) (PQS) in the appropriate disciplines. However, nothing in this stipulation may be interpreted to preclude the FHWA or any

agent or contractor thereof from using the properly supervised services of persons who do not meet the PQS.

2. **Documentation Standards.** Written documentation of activities prescribed by stipulations II, III, IV, V, VI, and VII of this Agreement shall conform to *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740) as well as to applicable standards and guidelines established by the SHPO.

3. **Curation and Curation Standards.** The FHWA shall ensure that, to the extent permitted under §§ 5097.98 and 5097.991 of the California Public Resources Code, the materials and records resulting from the activities prescribed by this Agreement are curated in accordance with 36 CFR Part 79. The FHWA will ensure that, to the extent permitted by applicable law and regulation, the views of the Most Likely Descendant(s) are taken into consideration when decisions are made about the disposition of other Native American archaeological materials and records.

B. **CONFIDENTIALITY.** The Agreement parties acknowledge that historic properties covered by this Agreement are subject to the provisions of section 304 of the NHPA, and section 6254.10 of the California Government Code (Public Records Act), relating to the disclosure of archaeological site information and, having so acknowledged, will ensure that all actions and documentation prescribed by this Agreement are consistent with said sections.

C. **RESOLVING OBJECTIONS.**

1. Should any Agreement party object to the manner in which the terms of this Agreement are implemented, to any action carried out or proposed with respect to the implementation of the Agreement, or to any documentation prepared in accordance with and subject to the terms of this Agreement, the FHWA shall immediately notify the other parties to this Agreement of those objections, and shall consult with the objecting party and with the other parties for no more than 14 days to resolve the objection. The FHWA shall reasonably determine when this consultation will commence. If the objection is resolved through such consultation, the action subject to dispute may proceed in accordance with the terms of that resolution. If, after initiating such consultation, the FHWA determines that the objection cannot be resolved through consultation, the FHWA shall forward all documentation relevant to the objection, including the FHWA's proposed response to the objection, to the ACHP, with the expectation that the ACHP will, within thirty (30) days after receipt of such documentation, do one of the following:

   a. advise the FHWA that the ACHP concurs in the FHWA's proposed response to the objection, whereupon the FHWA will respond to the objection accordingly. The objection shall thereby be resolved; or,

b. provide the FHWA with recommendations, which the FHWA will take into account in reaching a final decision regarding its response to the objection. The objection shall thereby be resolved; or,

c. notify the FHWA that the objection will be referred for comment, pursuant to 36 CFR § 800.7(c), and proceed to refer the objection and comment. The FHWA shall take the resulting comment into account, in accordance with 36 CFR § 800.7(c)(4) and section 110(1) of the NHPA. The objection shall thereby be resolved.

2. Should the ACHP not exercise one of the foregoing options within 30 days after receipt of all pertinent documentation, the FHWA may assume the ACHP's concurrence in its proposed response to the objection and proceed to implement that response. The objection shall thereby be resolved.

3. The FHWA shall take into account any ACHP recommendation or comment provided in accordance with section C.1 of this stipulation, with reference only to the subject of the objection. The FHWA's responsibility to carry out all actions under this Agreement not the subject to the objection will remain unchanged.

4. At any time during the implementation of the measures stipulated in this Agreement, should an objection pertaining to such implementation be raised by a member of the public, the FHWA shall notify the Agreement parties in writing of the objection and take the objection into consideration. The FHWA shall consult with the objecting party and, if the objecting party so requests, with the other Agreement parties for no more than fifteen (15) days. Within ten (10) days following closure of this consultation period, the FHWA will render a decision regarding the objection and notify all consulting parties hereunder of its decision in writing. The objection will thereby be resolved. In reaching its decision, the FHWA will take into account any comments from the consulting parties regarding the objection, including the objecting party. The FHWA's decision regarding the resolution will be final.

5. The FHWA shall provide all Agreement parties, the ACHP when the ACHP has issued comments hereunder, and any parties that have objected pursuant to section C.4 of this stipulation, with a copy of its final written decision regarding any objection addressed pursuant to this stipulation.

6. The FHWA may authorize any action subject to objection under section C of this stipulation to proceed after the objection has been resolved in accordance with the terms of section C.

D. **AMENDMENTS:** Any Agreement party may propose that this Agreement be amended, whereupon the Agreement parties will consult for no more than 30 days to consider such amendment. The FHWA may extend this consultation period.

The amendment process shall comply with 36 CFR §§ 800.6(c)(1) and 800.6(c)(7). This Agreement may be amended only upon the written agreement of the signatory parties. If it is not amended, this Agreement may be terminated by either signatory party in accordance with section E of this stipulation.

E. TERMINATION

1. If this Agreement is not amended as provided for in section D.1 of stipulation VIII, above, or if either signatory party proposes termination of this Agreement for other reasons, the signatory party proposing termination shall, in writing, notify the other Agreement parties, explain the reasons for proposing termination, and consult with the other Agreement parties for at least 30 days to seek alternatives to termination. Such consultation shall not be required if the FHWA proposes termination because the Undertaking no longer meets the definition set forth at 36 CFR § 800.16(y).

2. Should such consultation result in an agreement on an alternative to termination, then the parties shall proceed in accordance with the terms of that agreement.

3. Should such consultation fail, the signatory party proposing termination may terminate this Agreement by promptly notifying the other Agreement parties in writing. Termination hereunder shall render this Agreement without further force or effect.

4. If this Agreement is terminated hereunder, and if the FHWA determines that the Undertaking will nonetheless proceed, then the FHWA shall either consult in accordance with 36 CFR § 800.6 to develop a new Agreement, or request the comments of the ACHP, pursuant to 36 CFR Part 800.

F. DURATION OF THE AGREEMENT

1. Unless terminated pursuant to section F of stipulation VIII above, or unless it is superseded by an amended Agreement, this Agreement will be in effect following execution by the signatory parties until the FHWA, in consultation with the other Agreement parties, determines that all of its stipulations have been satisfactorily fulfilled. This Agreement will terminate and have no further force or effect on the day that the FHWA notifies the other Agreement parties in writing of its determination that all stipulations of this Agreement have been satisfactorily fulfilled.

2. The terms of this Agreement shall be satisfactorily fulfilled within twenty (20) years following the date of execution by the signatory parties. If the FHWA determines that this requirement cannot be met, the Agreement parties will consult to reconsider its terms. Reconsideration may include the continuation of the Agreement as originally executed, amendment of the Agreement, or termination. In the event of termination, the FHWA will comply with section

F.4 of stipulation VIII, above, if it determines that the Undertaking will proceed notwithstanding termination of this Agreement.

3. If the Undertaking has not been implemented within twenty (20) years following execution of this Agreement by the signatory parties, this Agreement shall automatically terminate and have no further force or effect. In such event, the FHWA shall notify the other Agreement parties in writing and, if it chooses to continue with the Undertaking, shall reinitiate review of the Undertaking in accordance with 36 CFR Part 800.

G. **EFFECTIVE DATE.** This Agreement will take effect on the date that it has been fully executed by the FHWA and the SHPO.

EXECUTION of this Agreement by the FHWA and the SHPO, its transmittal by the FHWA to the ACHP in accordance with 36 CFR § 800.6(b)(1)(iv), and subsequent implementation of its terms, shall evidence, pursuant to 36 CFR § 800.6(c), that this Agreement is an agreement with the ACHP for purposes of section 110(1) of the NHPA, and shall further evidence that the FHWA has taken into account the effects of the Undertaking on historic properties and has afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties.

SIGNATORY PARTIES:
Federal Highway Administration

By _____ Date _____
Gene Fong
Division Administrator

California State Office of Historic Preservation

By _____ Date _____
M. Wayne Donaldson, FAIA
State Historic Preservation Officer

CONCURRING PARTIES:
Placer County Transportation Planning Agency

By _____ Date _____
Celia McAdam, Executive Director

California Department of Transportation

By _____ Date _____
Jody Jones, District 3 Director

Appendix C
Historic Bridge Inventory

Structure Maintenance & Investigations

Historical Significance - Local Agency Bridges

District 03

Placer County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
19C0001	NORTH FORK AMERICAN RIVER	0.3 MI NE OF SH 49	5: Not eligible for NRHP	1955	
19C0002	NORTH FORK AMERICAN RIVER	1.5 MI W SHIRTTAIL CAN.RD	2: Eligible for NRHP	1930	
19C0004	AUBURN RAVINE	0.6 MI N/O S.H. 193	5: Not eligible for NRHP	1990	
19C0006	SECRET RAVINE	6.2 MI N OF SACTO CO.LINE	5: Not eligible for NRHP	1964	
19C0010	DRY CREEK	BTWN OAK ST & PARK DR	5: Not eligible for NRHP	1987	
19C0011	DRY CREEK	0.4 MI N P.F.E. RD	5: Not eligible for NRHP	1954	
19C0015	APPLEGATE ROAD UP	0.5 MI S OF BURGAN RD	5: Not eligible for NRHP	1927	
19C0016	APPLEGATE ROAD UP	BOOLE RD	5: Not eligible for NRHP	1909	
19C0017	APPLEGATE ROAD UP	3.5 MI S CODY LANE	5: Not eligible for NRHP	1927	
19C0020	ANTELOPE CREEK	JUST WEST OF SH 80	5: Not eligible for NRHP	1989	
19C0021	SOUTH YUBA RIVER	NEAR HAMPSHIRE ROCKS RD	5: Not eligible for NRHP	1963	
19C0023	PIPELINE OVERCROSSING	0.3 MI NORTH OF S.H. 174	5: Not eligible for NRHP		
19C0024	CANYON WAY UP	0.2 MI N INT WEIMAR X RD	5: Not eligible for NRHP	1931	
19C0025	SOUTH YUBA RIVER	NORTH OF YUBA DRIVE	5: Not eligible for NRHP	1929	
19C0026	SQUAW CREEK	0.6 MI E/O HWY 89	5: Not eligible for NRHP	1958	
19C0027	MAGRA ROAD OH	ADJACENT TO I-80	5: Not eligible for NRHP	1928	
19C0028	CASA LOMA ROAD UP	ADJACENT TO I-80	5: Not eligible for NRHP	1932	
19C0032	SOUTH YUBA RIVER	JUST NORTH OF I-80	5: Not eligible for NRHP	1925	
19C0033	DRY CREEK	NEAR CLINTON AVE	5: Not eligible for NRHP	1950	
19C0034	AUBURN RAVINE	NEAR CHILI HILL RD	5: Not eligible for NRHP	1905	1950
19C0035	AUBURN RAVINE	BTWN MILLERTON & STONE RD	5: Not eligible for NRHP	1930	1970
19C0036	AUBURN RAVINE	JUNCT WITH OPHIR RD	5: Not eligible for NRHP	1940	1970
19C0037	CROTHER ROAD OH	NEAR BURGAN RD	5: Not eligible for NRHP	1973	
19C0039	SOUTH FORK DRY CREEK	2.0 MI E OF RTE 49	5: Not eligible for NRHP	1966	
19C0040	BEAR RIVER CANAL	1.2 MI N OF I-80	5: Not eligible for NRHP	1935	1965
19C0041	SOUTH YUBA RIVER	1.7 MI E OF CISCO	5: Not eligible for NRHP	1929	
19C0042	SOUTH YUBA RIVER	2.3 MI E OF CISCO	5: Not eligible for NRHP	1929	
19C0046	PLEASANT GROVE CREEK	0.7 MI S PLACER BLVD	5: Not eligible for NRHP	1950	
19C0047	PLACER BLVD OH	AT INDUSTRIAL BLVD	5: Not eligible for NRHP	1966	
19C0048	ROCK CREEK	0.5 MI N ATHENS AVE	5: Not eligible for NRHP	1950	
19C0049	DRY CREEK	0.35 MI E OF VERNON ST	5: Not eligible for NRHP	1972	
19C0051	MINERS RAVINE	1.1 MI N DOUGLAS BLVD	5: Not eligible for NRHP	1930	1981
19C0052	MINERS RAVINE	2.1 MI N DOUGLAS BLVD	5: Not eligible for NRHP	1950	1981
19C0053	PG&E OH FLUME	10.6 MI SACTO CO LINE	5: Not eligible for NRHP	1931	
19C0054	MINERS RAVINE	2.7 MI N OF CO LINE	5: Not eligible for NRHP	1964	
19C0055	SECRET RAVINE	0.9 MI E TAYLOR BLVD	5: Not eligible for NRHP	1970	
19C0056	ANTELOPE CREEK	0.15 MI E SIERRA COLL RD	5: Not eligible for NRHP	1970	
19C0058	SUNSET BLVD OH	NEAR PACIFIC ST.	5: Not eligible for NRHP	1961	
19C0059	EAST NICOLAUS DISTRIBUTION CANAL	1.5 MI WEST OF DOWD RD	5: Not eligible for NRHP	1963	
19C0060	NORTH FORK AMERICAN RIVER	EAST OF I-80	5: Not eligible for NRHP	1972	
19C0061	BOWMAN ROAD OH	0.1 MI SOUTH OF 19C-62	5: Not eligible for NRHP	1949	
19C0062	BOWMAN ROAD OH	0.1 MI NORTH OF 19C-61	5: Not eligible for NRHP	1949	
19C0063	PLEASANT GROVE CREEK	3.5 MI N/O 2ND BASE LN RD	5: Not eligible for NRHP	1976	

Structure Maintenance & Investigations

Historical Significance - Local Agency Bridges

District 03

Placer County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
19C0066	WISE CANAL	0.4 MI E OF S.H. 49	5: Not eligible for NRHP	1975	2004
19C0067	SIERRA BOULEVARD OH	ROSEVILLE ST & LINCOLN ST	2: Eligible for NRHP	1929	
19C0069	ROCK CREEK	0.5 MI N OF E CATLETT	5: Not eligible for NRHP	1977	
19C0071	NORTH FORK AMERICAN RIVER	9 MI S SODA SPRINGS	5: Not eligible for NRHP	1900	
19C0072	SECRET RAVINE	0.3 MI E OF I-80	5: Not eligible for NRHP	1983	
19C0073	WOOLEY CREEK	4.0 MI NORTH OF I-80	5: Not eligible for NRHP	1950	
19C0074	WISE CANAL	NE HWY 49	5: Not eligible for NRHP		
19C0075	AUBURN RAVINE	NEAR AUBURN RAVINE RD	5: Not eligible for NRHP	1980	1987
19C0076	WISE CANAL	JUST EAST HWY 49	5: Not eligible for NRHP		1983
19C0077	CLOSED ROADWAY	NEAR SACRAMENTO ST.	5: Not eligible for NRHP	1970	
19C0078	RIOSA ROAD CANAL	1.4 MI E SUTTER CO LINE	5: Not eligible for NRHP		
19C0079	NORTH RAVINE	2.0 MI W OF AUBURN	5: Not eligible for NRHP		
19C0080	MARKHAM RAVINE	4.8 MI W OF DOWD RD	5: Not eligible for NRHP		
19C0082	MARKHAM RAVINE	0.25 MI S OF NICOLAUS RD	5: Not eligible for NRHP		
19C0083	AUBURN RAVINE	9.8 MI N OF SECOND BASELI	5: Not eligible for NRHP		
19C0084	DRY CREEK	0.4 MI N OF P.F.E. RD	5: Not eligible for NRHP		
19C0086	DRY CREEK	0.3 MI N CIRBY WY	5: Not eligible for NRHP	1973	
19C0087	DRY CREEK	0.1 MI SE VERNON ST	5: Not eligible for NRHP	1970	
19C0090	DOTY CREEK	0.5 MI E GARDEN BAR	5: Not eligible for NRHP	1923	
19C0093	MARKHAM RAVINE	0.9 MI S OF NICOLAUS RD	5: Not eligible for NRHP	1930	1991
19C0094	YANKEE SLOUGH	JUST N DALBY RD	5: Not eligible for NRHP	1935	
19C0095	COON CREEK	0.4 MI N WISE RD	5: Not eligible for NRHP	1930	
19C0096	COON CREEK	1.5 MI N OF NICOLAUS RD	5: Not eligible for NRHP	1938	
19C0100	SHIRT TAIL CREEK	0.5 MI N YANKEE JIM RD	5: Not eligible for NRHP	1940	
19C0101	MCKINNEY CREEK	0.1 MI NW MCKNY RUBCN SP	5: Not eligible for NRHP	1950	
19C0102	MCKINNEY CREEK	0.2 MI NW MCKNY RUBCN SP	5: Not eligible for NRHP	1950	
19C0104	BRANCH OF CURRY CREEK	2.2 MI N/O BASE LN RD	5: Not eligible for NRHP		
19C0105	CURRY CREEK	0.5MI NTH OF JACKSON RD.	5: Not eligible for NRHP	1992	
19C0106	COON CREEK	3 MI N PLESANT RD	5: Not eligible for NRHP	1945	
19C0107	SHIRLAND CANAL	0.5 MI S AUBURN-FOLSOM RD	5: Not eligible for NRHP	1939	
19C0108	SECRET RAVINE	JUST EAST OF I-80	5: Not eligible for NRHP	1930	1976
19C0110	AUBURN RAVINE	0.25 MI W FIDDYMENT RD	5: Not eligible for NRHP	1930	
19C0111	DOTY CREEK	0.9 MI N OF WISE RD	5: Not eligible for NRHP	1945	
19C0112	KINGS SLOUGH	6.0 MI N BASE LN RD	5: Not eligible for NRHP		
19C0114	COON CREEK	0.8 MI S OF RIOSA RD	5: Not eligible for NRHP	1928	
19C0115	DOTY RAVINE	0.3 MI SOUTH OF WISE RD	4: Hist sign not determi	1993	
19C0116	MCBRIDE CREEK	1.8 MI N FORRESTHILL RD	5: Not eligible for NRHP	1973	
19C0117	DRY CREEK	1.0 MI S BASE LINE RD	5: Not eligible for NRHP	1940	
19C0118	MARKHAM RAVINE	0.5 MI S NICOLAUS RD	5: Not eligible for NRHP	1940	1970
19C0119	SOUTH FORK DRY CREEK	2.0 MI S LONE STAR RD	5: Not eligible for NRHP	1923	
19C0121	YANKEE SLOUGH	1.0 MI N OF S.H. 65	5: Not eligible for NRHP	1935	
19C0122	COON CREEK	SOUTH OF RIOSA RD	5: Not eligible for NRHP	1928	
19C0124	CURRY CREEK	EAST OF SH 65	5: Not eligible for NRHP	1940	

Structure Maintenance & Investigations

Historical Significance - Local Agency Bridges

District 03

Placer County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
19C0126	DOTY CREEK	0.9 MI N OF WISE RD	5: Not eligible for NRHP	1940	
19C0128	COON CREEK	1.0 MI E BREWER RD	5: Not eligible for NRHP	1955	
19C0129	YANKEE SLOUGH	JUST SOUTH DALBY RD	5: Not eligible for NRHP		
19C0130	YANKEE SLOUGH	JUST WEST DOWD RD	5: Not eligible for NRHP	1925	
19C0132	DOTY CREEK	0.9 MI N OF WISE RD	5: Not eligible for NRHP	1935	
19C0134	SOUTH CANAL	0.45 MI W AUBURN-FOLSOM R	5: Not eligible for NRHP	1940	
19C0135	PLEASANT GROVE CREEK	4.2 MI N/O BASE LINE RD	5: Not eligible for NRHP	1940	
19C0136	SECRET RAVINE	JUST EAST OF I-80	5: Not eligible for NRHP	1939	
19C0137	AUBURN RAVINE	7.6 MI N BASE LINE RD	5: Not eligible for NRHP	1941	1990
19C0138	MARKHAM RAVINE	0.5 MI S/O NICOLAUS RD	5: Not eligible for NRHP	1930	
19C0139	COON CREEK	0.8 MI S OF RIOSA RD	5: Not eligible for NRHP		
19C0140	AUBURN RAVINE	0.65 MI N SR 193	5: Not eligible for NRHP	1930	
19C0141	BEAR RIVER CANAL	0.4 MI N PLACER HILLS RD	5: Not eligible for NRHP	1975	
19C0142	ROCK CREEK	0.35 MI W SH 49	5: Not eligible for NRHP	1977	
19C0143	WISE CANAL	0.2 MI W SH 49	5: Not eligible for NRHP	1930	1945
19C0144	ORR CREEK	1.0 MI N HUBBARD	5: Not eligible for NRHP	1945	
19C0145	WISE CANAL	0.45 MI N BELL RD	5: Not eligible for NRHP	1930	
19C0146	SOUTH FORK DRY CREEK	JUST S DRY CREEK RD	5: Not eligible for NRHP	1930	1940
19C0147	WOOLEY CREEK	AT PLACER HILLS RD	5: Not eligible for NRHP	1930	
19C0148	BEAR RIVER CANAL	0.5 MI E PLACER HILLS RD	5: Not eligible for NRHP	1930	1945
19C0150	SQUAW CREEK	2 MI W OF SH 89	5: Not eligible for NRHP	1959	
19C0151	TRUCKEE RIVER	0.1 MI W OF SH 89	5: Not eligible for NRHP	1970	
19C0152	BEAR CREEK	0.9 MI W OF SH 89	5: Not eligible for NRHP	1970	1985
19C0153	BEAR CREEK	0.1 MI S SQUAW VALLEY RD	5: Not eligible for NRHP	1950	
19C0154	DRY CREEK	NEAR DRY CREEK RD	5: Not eligible for NRHP	1970	
19C0155	DRY CREEK	6.0 MI E RTE 49	5: Not eligible for NRHP	1930	
19C0156	BEAR RIVER CANAL	0.85 MI E PLACER HILLS RD	5: Not eligible for NRHP	1976	
19C0157	BEAR RIVER CANAL DRAIN	0.1 MI W PLACER HILL RD	5: Not eligible for NRHP	1989	
19C0158	WOOLEY CREEK	0.4 M W PLACER HILLS RD	5: Not eligible for NRHP	1930	1970
19C0159	DRY CREEK	1.1 MI S BASE LINE RD	5: Not eligible for NRHP	1973	
19C0160	MINERS RAVINE	0.4 MI N OLIVE RANCH RD	5: Not eligible for NRHP	1979	
19C0161	MINERS RAVINE	0.5 MI S CAVIT STALMAN RD	5: Not eligible for NRHP	1930	1970
19C0162	SECRET RAVINE	0.3 MI SOUTH EAST I-80	5: Not eligible for NRHP	1929	1935
19C0163	ROCK CREEK	0.35 MI W PLACER HILLS RD	5: Not eligible for NRHP	1970	
19C0164	SOUTH SUTTER CANAL	2.0 MI W DOWD RD	5: Not eligible for NRHP	1972	
19C0165	SUTTER CANAL	1.9 MI E BREWER RD	5: Not eligible for NRHP	1972	
19C0167	BLUE OAKS BLVD OH	AT INDUSTRIAL AVE	5: Not eligible for NRHP	1980	
19C0168	MINERS RAVINE	NEAR AUBURN FOLSOM RD	5: Not eligible for NRHP	1925	
19C0169	NEWCASTLE TUNNEL	UNDER SH 193	3: Posbl Elgb for NRHP	1932	
19C0170	OLD STATE HIGHWAY TUNNEL	BTWN SH 193 & I 80	3: Posbl Elgb for NRHP	1910	
19C0173	LINDA CREEK	NEAR S CIRBY RD	5: Not eligible for NRHP	1987	
19C0174	LINDA CREEK	S CIRBY RD MAP NO 7J13	4: Hist sign not determi	1995	
19C0175	SUGAR PINE DAM SPILLWAY	4 MI E OF IOWA HILL	5: Not eligible for NRHP	1981	

Structure Maintenance & Investigations

Historical Significance - Local Agency Bridges

District 03

Placer County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
19C0176	NORTH FORK AMERICAN RIVER	3.1 MI E I-80	5: Not eligible for NRHP	1984	
19C0178	ONION CREEK	6.6 MI S SODA SPRINGS	5: Not eligible for NRHP	1975	
19C0180	LINDA CREEK	0.2 MI N CIRBY WAY	5: Not eligible for NRHP	1964	
19C0181	CIRBY CREEK	0.1 MI E SUNRISE AVE	5: Not eligible for NRHP	1968	
19C0184	ANTELOPE CREEK	ATLANTIC STREET	5: Not eligible for NRHP	1985	1993
19C0185	MINERS RAVINE	0.2 MI S ATLANTIC ST	5: Not eligible for NRHP	1985	
19C0187	DRY CREEK	0.6 MI N CIRBY AVE	5: Not eligible for NRHP	1928	1979
19C0188	VERNON STREET	AT WASHINGTON BLVD	5: Not eligible for NRHP	1950	
19C0189	ATLANTIC STREET	AT WASHINGTON BLVD	5: Not eligible for NRHP	1950	
19C0190	ROSEVILLE UP	N/W OF ATLANTIC ST	5: Not eligible for NRHP	1950	
19C0191	PACIFIC STREET	WASHINGTON BLVD	5: Not eligible for NRHP	1960	
19C0192	ANDORA UNDERPASS	S DIAMOND OAKS RD	5: Not eligible for NRHP	1916	
19C0193	FOOTHILLS BLVD OH	FOTHIL BL & ATKINSON ST	5: Not eligible for NRHP	1988	
19C0194	FOOTHILLS BLVD OH	0.8 MI N COUNTY LINE	5: Not eligible for NRHP	1988	
19C0196	BEAR CREEK	W END ALPINE MEADOWS RD	5: Not eligible for NRHP	1965	
19C0197	SQUAW CREEK	0.1 1 W SQUAW VALLEY	4: Hist sign not determi	1993	
19C0198	AUBURN RAVINE	0.1 MI N/O MOORE ROAD	5: Not eligible for NRHP	1988	
19C0199L	MARKHAM RAVINE	0.25 MI E/O NEALSON LANE	5: Not eligible for NRHP	1987	
19C0199R	MARKHAM RAVINE	0.25 MI E/O NEALSON LANE	5: Not eligible for NRHP	1930	1950
19C0200	AUBURN OH	0.2 MI N PACIFIC AVE	5: Not eligible for NRHP	1976	
19C0201	AUBURN PARK UC	0.1 MI N SACRAMENTO ST	5: Not eligible for NRHP	1976	
19C0202	HARDING BLVD VIADUCT	0.1M EAST OF WILLS RD.	5: Not eligible for NRHP	1993	
19C0203	MINERS RAVINE	0.4 KM N JOE ROGERS RD	4: Hist sign not determi	1980	
19C0204	NORTH BRANCH ORCHARD CREEK	W OF STATE ROUTE 65	5: Not eligible for NRHP	2000	
19C0205	AUBURN RAVINE	0.25 KM E JCT WISE RD	4: Hist sign not determi	1925	1931
19C0206	SOUTH BRANCH PLEASANT GROVE CREEK	3.5 MILES WEST OF RT 65	5: Not eligible for NRHP	1998	
19C0207	PLEASANT GROVE CREEK	0.5 MI N. OF BLUE OAKS BL	5: Not eligible for NRHP	1999	
19C0208	SOUTH BRANCH PLEASANTS GROVE CREEK	0.7 MI S OF BLUE OAKS BL	5: Not eligible for NRHP	1999	
19C0209	PLEASANT GROVE CREEK	0.9 MI N OF BLUE OAKS BL	5: Not eligible for NRHP	1999	
19C0210	ANTELOPE CREEK	0.4 MI SE OF GALLERIA BL	5: Not eligible for NRHP	2000	
19C0211	FALSE RAVINE	0.4 MI S SECRET RAVINE PK	5: Not eligible for NRHP	2002	
19C0212	FALSE RAVINE	1 MI E OF E ROSEVILLE PW	5: Not eligible for NRHP	2001	
19C0213	MINERS RAVINE	0.4 MI S SECRET RAVINE PW	5: Not eligible for NRHP	2001	
19C0214	SOUTH BRANCH PLEASANT GROVE CREEK	.8 MI E WOODCREEK OAKS BL	5: Not eligible for NRHP	1991	
19C0215	PLEASANT GROVE CREEK	0.5 MI N OF BLUE OAKS BL	5: Not eligible for NRHP	2003	
19C0218	DOTY CREEK	0.7 MI N OF WISE RD.	5: Not eligible for NRHP	2000	
19C0219	COON CREEK	0.8 MI S. OF RIOSA ROAD	5: Not eligible for NRHP	2000	
19C0222	LINDA CREEK	0.3 MI NORTH OF CIRBY WAY	5: Not eligible for NRHP	2000	
19C0223	YANKEE SLOUGH	JUST NORTH OF DALBY RD.	5: Not eligible for NRHP	2004	
19C0224	AUBURN RAVINE	0.1 MI NORTH OF MOORE RD.	5: Not eligible for NRHP	2005	

Structure Maintenance & Investigations

Historical Significance - Local Agency Bridges

District 03

Sutter County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
18C0001	CROSS CANAL (VERONA BR)	SANKEY RD	5: Not eligible for NRHP	1969	
18C0004	TISDALE BYPASS	0.4 MI NW TISDALE RD	3: Posbl Elgb for NRHP	1935	
18C0009	BEAR RIVER	0.4 MI N/O BEAR RIVER DR	5: Not eligible for NRHP	1961	
18C0010	TISDALE BYPASS	11.3 MI NW OF ROBBINS	5: Not eligible for NRHP	1964	
18C0012	FEATHER RIVER	BTWN MRYSVL & YUBA CITY	5: Not eligible for NRHP	1958	
18C0018	2ND STREET UNDERPASS	AT BRIDGE STREET	5: Not eligible for NRHP	1935	
18C0023	HEIKEN WAY UNDERPASS	AT HEIKEN WAY	5: Not eligible for NRHP	1958	
18C0024	ROBBINS CANAL	0.02 MI E RECL RD-ROBBINS	5: Not eligible for NRHP	1975	
18C0025	SUTTER BYPASS EAST CHANNEL	1.1 MI W OF RTE 99	5: Not eligible for NRHP	1975	
18C0030	SUTTER BYPASS EAST CHANNEL	2.2 MI W OF ACACIA RD	5: Not eligible for NRHP	1997	
18C0031	SUTTER BYPASS WEST CHANNEL	1.2 MI E TARKE RD	5: Not eligible for NRHP	2001	
18C0032	YANKEE SLOUGH	0.3 MI S BEAR RIVER DRIVE	5: Not eligible for NRHP	1964	
18C0035	ROBBINS CANAL	.02 MI E OF RECLAMATION R	5: Not eligible for NRHP	1970	
18C0036	SUTTER BYPASS WEST CHANNEL	1.1 MI W OF SCHLAG RD	5: Not eligible for NRHP	1987	
18C0037	SUTTER BYPASS EAST CHANNEL	0.5 MI W SCHLAG ROAD	5: Not eligible for NRHP	1999	
18C0039	PHEASANT CANAL	0.5 MI N/O VARNEY RD	5: Not eligible for NRHP	1975	
18C0040	HEAD OF EAST CANAL	AT TISDALE RD	5: Not eligible for NRHP	1970	
18C0041	ROBBINS CANAL	0.01 MI E RECLAMATION RD	5: Not eligible for NRHP	1978	
18C0042	ROBBINS CANAL	AT RECLAMATION ROAD	5: Not eligible for NRHP	1999	
18C0043	SNAKE SLOUGH	AT SCHLAG ROAD	5: Not eligible for NRHP	1979	
18C0044	SNAKE SLOUGH	0.2 MI W BOULTON RD	5: Not eligible for NRHP		
18C0046	WESTSIDE CANAL	0.3 MI N FASIG RD	5: Not eligible for NRHP	1966	
18C0047	WESTSIDE CANAL	0.5 MI E CRANMORE RD	5: Not eligible for NRHP	1978	
18C0049	SUTTER-BUTTE CANAL	0.2 MI E OF KENT RD	5: Not eligible for NRHP	1975	
18C0050	NORTH DRAINAGE CANAL	1.2 MI W OF RTE 99	5: Not eligible for NRHP	1938	1975
18C0051	RIO OSO ROAD UP	0.6 MI E OF SH 70	5: Not eligible for NRHP	1927	
18C0052	YANKEE SLOUGH	1.9 MI NE/O SR 70	5: Not eligible for NRHP	1934	
18C0053	YANKEE SLOUGH	1.95 MI NE/O SH 70	5: Not eligible for NRHP	1934	
18C0054	SAND CANYON CREEK	0.4 MI S OF SANDERS ROAD	5: Not eligible for NRHP	1976	
18C0055	2ND STREET UC	AT 2ND ST W FEATHER RIVER	5: Not eligible for NRHP	1958	
18C0057	WESTSIDE CANAL	100' E CRANMORE RD	5: Not eligible for NRHP	1960	
18C0058	PHEASANT CANAL	2.3 MI W/O SH 113	5: Not eligible for NRHP	2003	
18C0059	PHEASANT CANAL	0.3 MI E OF SH 113	5: Not eligible for NRHP	1976	
18C0061	NATOMAS CANAL	NATOMAS ROAD	5: Not eligible for NRHP	1982	
18C0062	SCIATA CREEK	2.25 MI N SAC CO LINE	5: Not eligible for NRHP	1988	
18C0063	CURRY CREEK	2.9 MI N OF RIEGO RD	5: Not eligible for NRHP	1922	
18C0064	CURRY CREEK	4.2 MI N SAC CO LINE	5: Not eligible for NRHP	1922	
18C0065	PLEASANT GROVE CREEK	5.8 MI N/O SACTO CO LINE	5: Not eligible for NRHP	1960	
18C0066	PLEASANT GROVE CREEK BRANCH	6 MI N SAC CO LINE	5: Not eligible for NRHP	1950	
18C0067	KING SLOUGH	6.5 MI N/O RIEGO RD	5: Not eligible for NRHP	1931	
18C0068	AUBURN RAVINE	9.3 MI N SACTO CO LINE	5: Not eligible for NRHP	1950	
18C0069	NO NAME SLOUGH	0.2 MI N/O STRIPLIN RD	5: Not eligible for NRHP	1966	
18C0070	MARKHAM RAVINE	11.2 MI N SAC CO LINE	5: Not eligible for NRHP	1988	

Structure Maintenance & Investigations

Historical Significance - Local Agency Bridges

District 03

Sutter County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
18C0071	BUNKHAM SLOUGH	11.5 MI N/O RIEGO RD	5: Not eligible for NRHP	1950	
18C0072	COON CREEK	12.1 MI N/O RIEGO RD	5: Not eligible for NRHP	1937	1960
18C0073	YANKEE SLOUGH	16.1 MI N/O RIEGO RD	5: Not eligible for NRHP	1955	
18C0074	COON CREEK	1 MI W/O PLEASANT GROVE R	5: Not eligible for NRHP	1950	
18C0075	COON CREEK	4.85 MI E OF SH 99	5: Not eligible for NRHP	1930	
18C0077	SUTTER COUNTY EXTENSION CANAL	3.1 MI E/O ACACIA AVE	5: Not eligible for NRHP	1979	
18C0078	WADSWORTH CANAL	0.25 MI E OF HUMPHREY RD.	5: Not eligible for NRHP	1999	
18C0080	SUTTER BYPASS WEST CHANNEL	2.9 MI E S.H. 113	5: Not eligible for NRHP	1985	
18C0081	LIVE OAK CANAL	0.2 MI W TIERRA BUENA RD	5: Not eligible for NRHP	1970	1980
18C0082	EAST CANAL	2.8 MI E OF SH 113	5: Not eligible for NRHP	1987	
18C0084	SNAKE RIVER	5 MI WEST OF SH 99	5: Not eligible for NRHP	1990	
18C0085	SNAKE RIVER	0.3 MI N PENNINGTON RD	5: Not eligible for NRHP	1989	
18C0086	CHEROKEE DRAIN	AT NORTH BUTTE RD	5: Not eligible for NRHP	1920	
18C0087	WADSWORTH CANAL	AT ACACIA	5: Not eligible for NRHP	2003	
18C0088	COON CREEK	0.7 MI E GARWOOD RD	5: Not eligible for NRHP	1960	
18C0089	COON CREEK	0.3 MI SOUTH OF SH99	5: Not eligible for NRHP	1925	
18C0090	PING SLOUGH	1.1 MI EAST OF NICOLAUS	5: Not eligible for NRHP	1930	
18C0091	EASTSIDE CANAL	PACIFIC AVE	5: Not eligible for NRHP	1935	1960
18C0092	EASTSIDE CANAL	1/2 MI S CATLETT RD	5: Not eligible for NRHP	1935	1960
18C0093	SNAKE RIVER	1.8 MI N SANDERS RD	5: Not eligible for NRHP	1925	
18C0094	YANKEE SLOUGH	0.8 MI S OF BEAR RIV RD	5: Not eligible for NRHP	1950	
18C0095	EAST INTERCEPTOR CANAL	PEASE ROAD	5: Not eligible for NRHP	1995	
18C0097	SUTTER-BUTTE CANAL	0.2 MI E OF SH 99	5: Not eligible for NRHP	1930	
18C0098	SUTTER-BUTTE CANAL	0.2 MI E OF KENT RD	5: Not eligible for NRHP	1940	
18C0099	SUTTER-BUTTE CANAL	0.3 MI E OF KENT ROAD	5: Not eligible for NRHP	1950	
18C0100	SUTTER-BUTTE CANAL	0.5 MI E SHELDON RD	5: Not eligible for NRHP	1970	
18C0101	SUTTER-BUTTE CANAL	0.6 MI E OF METTER RD	5: Not eligible for NRHP		1974
18C0102	SUTTER-BUTTE CANAL S BRANCH	0.1 MI W OF MADDEN RD	5: Not eligible for NRHP	1950	
18C0103	LIVE OAK SLOUGH	0.2 MI W OF LARKIN RD	5: Not eligible for NRHP	1955	
18C0104	LIVE OAK SLOUGH	0.2 MI E MADDEN AVE	5: Not eligible for NRHP	1960	
18C0105	SOUTH BRANCH SUTTR-BUTTE CANAL	0.2 MI N OF ENCINAL RD	5: Not eligible for NRHP	1925	1950
18C0106	LIVE OAK CANAL	0.01 MI W OF LARKIN RD	5: Not eligible for NRHP	1945	
18C0107	SUTTER COUNTY EXTENSION CANAL	1.2 MI W OF BROADWAY	5: Not eligible for NRHP	1940	
18C0109	SNAKE RIVER	0.7 MI E OF E BUTTE RD	5: Not eligible for NRHP	1925	
18C0110	SUTTER COUNTY EXTENSION CANAL	0.8 MI E OF E BUTTE RD	5: Not eligible for NRHP	1940	
18C0111	BUTTE SLOUGH	1.1 MI W of W BUTTE ROAD	5: Not eligible for NRHP	1996	
18C0112	WADSWORTH CANAL	HUMPHREY ROAD	5: Not eligible for NRHP	1996	
18C0113	PLEASANT GROVE CREEK CANAL	AT NATOMAS RD	5: Not eligible for NRHP	1935	1965
18C0114	SNAKE SLOUGH	0.5 MI W TOWNSHIP RD	5: Not eligible for NRHP	1950	
18C0115	WADSWORTH DITCH	1.4 MI W OF ACACIA RD	5: Not eligible for NRHP	1970	
18C0116	PHEASANT CANAL	1.4 MI E STATE HWY 113	5: Not eligible for NRHP	1970	
18C0118	PHEASANT CANAL	2.7 MI E RECLAMATION RD	5: Not eligible for NRHP		
18C0119	ROBBINS CANAL	@ RECLAMATION RD	5: Not eligible for NRHP	1935	

Structure Maintenance & Investigations

Historical Significance - Local Agency Bridges

District 03

Sutter County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built	Year Wid/Ext
18C0120	MCCLATCHY SLOUGH	MCCLATCHY RD	5: Not eligible for NRHP	1923	
18C0121	SUTTER-BUTTE CANAL	0.7 MI S/O PASEO RD	5: Not eligible for NRHP	1964	
18C0123	SNAKE RIVER	1.4 MI W OF BROADWAY	5: Not eligible for NRHP	1994	
18C0124	EAST INTERCEPTOR CANAL	0.3 MI N BUTTE HOUSE RD	4: Hist sign not determi	1995	
18C0125	CANAL	0.2 MI W PLEASAT GROVE RD	4: Hist sign not determi	1931	
18C0126	GILSIZER SLOUGH	0.6 MI S OF OBANION RD	4: Hist sign not determi	1923	
18C0128	SUTTER BYPASS WEST CHANNEL	0.2 MI W. of HAGEMAN ROAD	5: Not eligible for NRHP	2000	
18C0129	WEST INTERCEPTOR CANAL	0.5 N OF BUTTE HOUSE RD	5: Not eligible for NRHP	1995	
18C0130	INTERCEPTOR CANAL	0.4 NORTH OF BUTTE AVENUE	5: Not eligible for NRHP	1995	
18C0132	SUTTER-BUTTE CANAL	0.2 MILES S. OF MCDONALD	5: Not eligible for NRHP	1938	
18C0133	SUTTER COUNTY EXTENSION CANAL	0.5 MI W. OF TOWNSHIP RD	5: Not eligible for NRHP		

PLACER PARKWAY
CORRIDOR PRESERVATION

DRAFT
HYDROLOGY AND FLOODPLAIN TECHNICAL MEMORANDUM

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR

June 29, 2007

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

Caltrans

FHWA

Prepared by

URS Corporation

for
South Placer Regional Transportation Authority
California Department of Transportation
Federal Highway Administration

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Draft

HYDROLOGY AND FLOODPLAIN TECHNICAL MEMORANDUM

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR
Placer and Sutter Counties, California

June 2007

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LIST OF ACRONYMS

BMPs	Best Management Practices
Caltrans	California Department of Transportation
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
cfs	cubic feet per second
ERP	Ecosystem Restoration Plan
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
GIS	Geographical Information System
HCP	Habitat Conservation Plan
HDM	Highway Design Manual
I-80	Interstate 80
LID	Low Impact Development
MOU	memorandum of understanding
mph	miles per hour
NEMDC	Natomas East Main Drainage Canal
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
OHW	ordinary high water
PCFCWCD	Placer County Flood Control and Water Conservation District
PCTPA	Placer County Transportation Planning Agency
PDF	project design feature
PSR	Project Study Report
RD 1000	Reclamation District No. 1000
ROW	right-of-way
SACOG	Sacramento Area Council of Governments
SAFCA	Sacramento Area Flood Control Agency
SC	standard condition
SOI	Sphere of Influence
SPRTA	South Placer Regional Transportation Authority
SR	State Route
TAZ	traffic analysis zone
Tier 1 EIS/EIR	Tier 1 Environmental Impact Statement/Program Environmental Impact Report
USCOE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

HYDROLOGY AND FLOODPLAIN TECHNICAL MEMORANDUM PLACER PARKWAY CORRIDOR PRESERVATION TIER 1 EIS/ PROGRAM EIR

1.0 INTRODUCTION

1.1 TIER 1 EIS/PROGRAM EIR

The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the South Placer Regional Transportation Authority (SPRTA) propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking State Route (SR) 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1).

The planning for Placer Parkway involves two phases: (1) the present action, selection of a corridor (titled the Placer Parkway Corridor Preservation Project), and (2) the future selection of a precise alignment within the corridor and a decision whether or not to build the Parkway. If a build alternative is selected and pursued after the second phase, the ultimate Placer Parkway project would be constructed and operated. Throughout this document the term "Proposed Action" is used to describe the selection of a corridor to preserve. The document generally uses the term "Parkway" to mean the ultimate roadway, including construction and operation, except where context indicates otherwise.

As stated, the action to be considered based on this Tier 1 analysis involves only the selection of a corridor to preserve, which has limited environmental effects by itself. However, the ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. In order to describe the effects of the ultimate Placer Parkway project to the greatest extent feasible at this early stage, the Tier 1 EIS/EIR also addresses the potential effects of construction and operation of the future roadway. This discussion of the roadway is necessarily limited, however, because only the general concepts of the roadway design and location are known at this time. If a corridor is selected and preserved at Tier 1, a subsequent Tier 2 analysis will evaluate the Parkway itself in detail—the specific roadway "footprint" within the selected corridor, including construction and operation of the roadway.

1.2 CORRIDOR SELECTION AND PRESERVATION

The concept for the Placer Parkway is over a decade old. Placer County's 1994 General Plan depicts a "plan line" for it. Two planning studies helped to refine the concept:

- DKS Associates, 2000, Placer Parkway Interconnect Study/Conceptual Plan
- DKS Associates, 2001, Project Study Report (Project Development Support) for Placer Parkway

Placer Parkway is cited as a high-priority regional transportation project by the Sacramento Area Council of Governments (SACOG) 2025 Metropolitan Transportation Plan and the 2027 Placer County Regional Transportation Plan. The project vicinity and surrounding area include some of the fastest growing communities in the Sacramento region. A number of large urban development proposals are being considered by Placer and Sutter counties. New development is expected to add a significant amount of residential, commercial, industrial, and educational uses.

A 2½-year screening and public outreach program that involved local jurisdictions (the Technical Advisory Committee); regional, state, and federal agencies; stakeholder groups that included representatives from planning and public works departments of all affected cities and counties, environmental, business, agricultural, development, and homeowner interests (the Study Advisory Committee); and elected officials (the Policy Advisory Committee), resulted in the identification of five potential corridors for the Parkway. The Tier 1 Environmental Impact Statement/Program Environmental Impact Report will analyze these five corridor alternatives along with a No-Build Alternative.

Other potential transportation modes such as bus rapid transit may be developed in the corridor in the future, although they are not proposed as part of the current project. The width of the corridor for the Placer Parkway is to vary from approximately 500 feet in the Eastern and Western segments to approximately 1,000 feet in the Central Segment. Depending upon the alternative, the corridor's length ranges from a minimum of 14.2 miles to a maximum of 16.2 miles. The selected corridor would contain the roadway, including the median, travel lanes, shoulder, associated access ramps and a no-development buffer zone

Corridor acquisition may not be completed until after Tier 2, as funding becomes available. Portions of the selected corridor would be preserved as a no-development buffer zone. The buffer would be maintained as a zone where development is either not permitted or is severely restricted. This is intended to restrict access to the proposed interchanges, protect the rural character of agriculturally designated areas in the vicinity of the Parkway as far as possible subject to future development, and to maximize opportunities to incorporate adjacent sensitive areas. It is intended that the buffer would be owned and managed in the future to achieve these objectives. For subsequent Tier 2 (project-level) environmental reviews, the size of this buffer zone could be considered flexible for agriculturally designated land undergoing urban development. In the Tier 2 environmental review, the specific buffer size and location would be determined. This determination would be based on performance standards on a case-by-case basis, depending on the land use needs of future approved development, and taking into account the primary objective of restricting future access to the Parkway.

Project proponents are considering employment of several land management and control mechanisms in order to ensure that the buffer would be effectively maintained as an area where development would either not be permitted, and where construction of any additional access onto the Parkway would not be allowed. These mechanisms could include land use controls, land purchase/leases, general plan amendments, zoning/overlay zoning changes, covenants/deed restrictions, agricultural/conservation easements, urban growth boundaries, etc. "Layering" or using several of these methods would provide more assurance that the buffers would be permanent, or at least more difficult to undo.

1.3 TECHNICAL STUDY OBJECTIVE

This Hydrology and Floodplain Technical Memorandum has been prepared to support the Tier 1 Environmental Impact Statement/Program Environmental Impact Report. It presents a Tier 1/Program level assessment of potential impacts related to hydrology and floodplains for five corridor alternatives and the No-Build Alternative as described in Chapter 2.

The scope of work performed for this report is based on the Caltrans Local Assistance Procedures Manual (Caltrans, 2006), as modified for purposes of Tier 1/Program analysis by agreement of Caltrans; the Caltrans Highway Design Manual (HDM) (Caltrans, 2001b) and the Caltrans Environmental Handbook guidance (Caltrans, 2005) on preparing a Hydrology and Floodplain Technical Memorandum. In addition, the evaluation considered guidance from the FHWA Environmental Checklists for Draft and Final Environmental Documents (FHWA, 1998a; FHWA, 1998b).

This report is organized as follows:

Chapter 2	The Proposed Action
Chapter 3	Regulatory Setting
Chapter 4	Affected Environment
Chapter 5	Potential Direct Impacts
Chapter 6	Secondary and Indirect Impacts
Chapter 7	Cumulative Impacts
Chapter 8	Watt Avenue Interchange
Chapter 9	Avoidance, Minimization and/or Mitigation Strategies
Chapter 10	Analyses to be Undertaken in Tier 2
Chapter 11	References

This report also includes figures and tables, which show the project location, each build alternative, and pertinent technical information prepared to evaluate the build alternatives.

Throughout this document, the Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report is referred to as the Tier 1 EIS/EIR.

2.0 THE PROPOSED ACTION

The Proposed Action for the Placer Parkway Corridor Preservation Project is to select and preserve a 500- to 1,000-foot-wide corridor in the project study area, within which the future four- or six-lane Placer Parkway may be constructed. The ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction, and operation of the Parkway. Although the action taken at Tier 1 on the Placer Parkway Corridor Preservation Project is limited, the underlying project whose effects are studied in this document is the Placer Parkway. To the extent feasible at this early stage, the Tier 1 EIS/EIR addresses the potential effects of construction and operation of the future roadway.

2.1 THE PROJECT STUDY AREA

The project study area is an area of approximately 33,460 acres located in Sutter and Placer counties, with a small section located in Sacramento County (see Figures 1-1 and 2-1). The portion of the study area in Sacramento County is located in the extreme southwest corner of the study area and does not include the area of any of the proposed corridor alignment alternatives. It extends from SR 70/SR 99 in the west to SR 65 in the east, with the northern boundary extending to Sunset Boulevard West and the southern boundary located adjacent to Baseline and Riego roads.

For the purposes of the analysis the study area is divided into three segments:

- Western Segment: the Western Segment extends from SR 70/99 to Pleasant Grove Road in Sutter County.
- Central Segment: the Central Segment extends from Pleasant Grove Road in Sutter County to approximately 2,300 feet north of Pleasant Grove Creek in Placer County.
- Eastern Segment: the Eastern Segment extends from approximately 2,300 feet north of Pleasant Grove Creek to SR 65 in Placer County.

2.2 CORRIDOR ALTERNATIVES

The following subsections describe the corridor alternatives, which are depicted on Figure 2-1, and are numbered according to location from south to north in the study area.

2.2.1 The No-Build Alternative

Under the No-Build Alternative, the project would not be implemented. A Placer Parkway corridor would not be selected/preserved, and the future Placer Parkway would not be constructed.

2.2.2 Alternative 1 – the Red Alternative

Alternative 1 would extend from SR 70/99 approximately ½ mile north of Riego Road, eastward approximately 1 mile north of Baseline Road to approximately Watt Avenue, proceeding north and transitioning in an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 16.2 miles long. This alternative would include six interchanges as described in Section 2.3.3.

2.2.3 Alternative 2 – the Orange Alternative

Alternative 2 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed northeast, then in a northerly direction south of Pleasant Grove Creek, transitioning to an easterly direction before it reaches Sunset Boulevard West, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.4 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.4 Alternative 3 – the Blue Alternative

Alternative 3 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed north along the Sutter/Placer County Line, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.6 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.5 Alternative 4 – the Yellow Alternative

Alternative 4 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.3 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.2.6 Alternative 5 – the Green Alternative

Alternative 5 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 4,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.2 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.3 PARKWAY DESIGN ASSUMPTIONS

Although the Parkway would be designed and construction-level impacts analyzed during Tier 2, for the purpose of this report and the Tier 1 EIS/Program EIR, several assumptions have been made about potential design and configuration concepts. These assumptions would be subject to further development and refinement, and specific decisions about design of the roadway would be made during the Tier 2 process. For example, the number, location, and design of over-crossings would be determined at the time of final Parkway design, in consultation with local jurisdictions. The following sections outline assumptions for the future roadway.

Preliminary costs estimates for the Parkway range from $600 to $650 million (2005 dollars). This includes costs for right-of-way, design, construction and environmental mitigation for the four- to six-lane facility. The funding situation has spurred interest in exploring other more creative funding options.

These include a county-wide sales tax, more developer contributions, and tolling facilities. The Technical Report and Tier 1 EIS/Program EIR do not make any assumptions about funding sources.

2.3.1 Conceptual Roadway Configuration

The Parkway would be a high-speed, limited access roadway. Depending upon the timing of adjacent urban development proposals and funding, the Parkway may be designed and constructed incrementally in segments. These could be built as a four-lane (interim) roadway until a six-lane segment is warranted, or as the full six-lane facility. A preliminary conceptual cross section (see Figure 2-2) was developed to facilitate the Tier 1/Program evaluation. It illustrates both four-lane (two lanes in both directions) and six-lane (three lanes in both directions) configurations within the 500- to 1,000-foot corridor widths. The roadway would include a central median approximately 100 to 134 feet wide, depending on local conditions and reflecting Caltrans safety guidance. The Parkway would be designed and constructed to Caltrans standards, unless specific design exceptions are granted. For the purposes of the Tier 1 EIS/Program EIR, the Parkway's opening year is assumed to be 2020.

Access would be provided at the western and eastern ends of the Parkway, where existing areas of dense development are already located or planned. Access would be restricted for the 7-mile Parkway Central Segment. The analysis assumes no interchanges in this segment. (A possible future extension of Watt Avenue or another nearby roadway may be considered in the Central Segment as a separate project.)

2.3.2 Conceptual Roadway Elevation

As the study area is comprised of relatively flat terrain, the majority of the future Placer Parkway is assumed to be at-grade. As necessary, bridges would be used to span certain features and improvements such as the Union Pacific Railroad tracks along Industrial Boulevard, Pleasant Grove Creek, the Natomas East Main Drainage Canal, and floodplains. Generally, the approximate height of bridges is expected to range from 10 feet above streams to 30 feet above the railroad. Culverts would be used at smaller creek crossings as appropriate, depending on local conditions and permit requirements. The Pleasant Grove Creek floodplain would be crossed by bridges (one in each direction) supported by abutments located approximately 800 feet on either side of the creek to avoid the riparian habitat associated with the creek.

Within the 100-year floodplain, the roadway would be elevated such that the bottom of any new bridges would be above the 100-year water surface elevation. The roadway support structures and bridges would be designed to minimize environmental impact, not impede stream and flood flows, and allow for the unobstructed passage of potential future streamside uses such as maintenance equipment, bikeways, or trails.

Throughout the project study area, the assumptions for creek and floodplain crossings include typical engineering specifications:

- a maximum bridge span of approximately 150 feet;
- for bridge spans exceeding 150 feet, assume one column, approximately 4 feet in diameter, every 150 feet; and
- all columns placed outside of the ordinary high water (OHW) level.

To maintain existing and future local roadway connectivity (for emergency access, farming operations, and community access), over-crossings would be constructed to convey traffic over the Parkway. These over-crossings would not connect to the Parkway. Parkway access would be via the interchanges described below.

2.3.3 Interchange Concepts

The analysis assumes that the location of interchanges (see Figure 2-1) is as follows.

- SR 70/99 (at ½ mile north of Riego Road or at Sankey Road)
- One or two locations to be determined in southern Sutter County
- Fiddyment Road
- Foothills Boulevard
- SR 65 at Whitney Ranch Parkway

The following discussion outlines concepts and assumptions for the six interchanges that could potentially serve Placer Parkway.

2.3.3.1 Western Segment

Within the Western Segment of the Parkway, a high-speed, freeway-to-freeway type interchange would connect the Parkway with SR 70/99 at one of following potential locations depending on the project alternative (see Section 2.2). Placer Parkway would terminate at SR 70/99.

- **Placer Parkway/SR 70/99 Interchange at North of Riego Road.** This alternative concept uses "braided" ramps to eliminate weaving problems or conflicts with the future SR 70/99 at Riego Road interchange being developed by Sutter County and Caltrans.

- **Placer Parkway/SR 70/99 Interchange at Sankey Road.** Under this alternative concept, the existing two-lane Sankey Road would be realigned to the south of Placer Parkway and the proposed freeway-to-freeway interchange, extending from approximately ¼ mile west of SR 70/99 to approximately ¼ mile east of the Union Pacific railroad tracks. There would be no direct access to SR 70/99 or Placer Parkway from the realigned Sankey Road.

Depending on the final alignment selected, one or two additional interchanges would also be located in south Sutter County. Conceptual locations are identified for purposes of this Tier 1/Program analysis (see Figure 2-1). The actual location of these interchanges would be developed in the Tier 2 phase, based on Sutter County requirements.

2.3.3.2 Central Segment

Within the Central Segment of the Parkway, there would not be any access proposed as part of the project in the 7-mile segment between Fiddyment Road and Pleasant Grove Road. Please see Section 2.4 regarding a potential connection to a future extension of Watt Avenue (Figure 2-3) which could be proposed and constructed by others in the Central Segment; such an interchange is not part of the Placer Parkway.

2.3.3.3 Eastern Segment

Within the Eastern Segment of the Parkway, a signalized high-speed freeway-to-freeway and local access interchange would connect the Parkway to SR 65 at Whitney Ranch Parkway (Figure 2-1). From SR 65 eastward Placer Parkway would terminate and become Whitney Ranch Parkway east of the SR 65 exit ramp intersection. Traffic signals would be provided at the exit ramp terminals. This interchange would be approximately 1 mile north of a planned SR 65/Sunset Boulevard interchange and 1.2 miles south of the existing Twelve Bridges interchange.

As part of this interchange, auxiliary lanes would be required on SR 65 in both directions to enhance traffic operations on the north side of the future SR 65/Sunset Boulevard interchange. The southbound SR 65 exit-ramp at Sunset Boulevard is being designed to accommodate an additional auxiliary lane required for the future Placer Parkway/Whitney Ranch Parkway interchange to minimize the reconstruction of this ramp in the future. Within the Eastern Segment of the Parkway, from SR 65 westward, two interchanges with local roadways would be constructed, one at Foothills Boulevard and one at Fiddyment Road, as depicted on Figure 2-1.

The future interchange on Placer Parkway at Fiddyment Road would be located near the existing intersection of Fiddyment Road and Sunset Boulevard West. To provide acceptable traffic operations, additional distance needs to be provided between the Fiddyment Road/Sunset Boulevard West intersection and the Fiddyment Road/Placer Parkway westbound off-ramp intersection. Therefore, Sunset Boulevard West will need to be realigned to the north as it nears Fiddyment Road.

2.3.4 Landscaping Concept

For the purposes of this environmental analysis, preliminary landscaping concepts have been developed for Placer Parkway. These are entirely conceptual and would be subject to further refinement during the Tier 2 environmental process. It is anticipated that landscaping would be used to reflect local topography and vistas in the study area and complement the varying character of land adjacent to the Parkway corridor. Landscape design would vary within the Parkway's three segments depending on corridor width and type and density of surrounding land uses. Landscaping would be used within the median and the Parkway buffer zone to enhance the aesthetics of the Parkway, and would be used to provide screening and enhance local and long-distance views. Where appropriate, more concentrated plantings would be considered to buffer the Parkway from future adjacent land uses that may be incompatible with the Parkway concept, and to prevent unwanted intrusion into shoulder or median areas. Landscape design would likely include a mix of compatible native and non-native plants that may require some irrigation. Wherever possible, native plant species would be used in line with Caltrans policy. Where possible and depending on availability, feasibility and cost, recycled water would be used for irrigation.

During a future design phase, lighting elements would be designed for safety and would consider the proposed landscaping plan in order to minimize potential aesthetic impacts (e.g., shielding lighting elements, using lower voltage-lighting, and proposing lighting fixtures that conform with the visual character of the area).

2.4 POTENTIAL WATT AVENUE INTERCHANGE

The Placer County General Plan includes a number of new roadways that may be needed in Placer County, according to travel demand forecasts. An extension of Watt Avenue to Placer Parkway (from Baseline Road to a new Blue Oaks Boulevard Extension) is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto the Placer Parkway via a new interchange (see Figure 2-3). A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. It would be subject to independent future environmental analysis and review and is not being fully evaluated within this Technical Report or Tier 1 EIS/Program EIR. However, the connection of Placer Parkway to a potential Watt Avenue extension could affect future travel patterns in the area, including use of the Parkway. Based on direction from previous planning studies, this Technical Study and the Tier 1 EIS/Program EIR will evaluate each corridor alternative with and without a Watt Avenue interchange. This evaluation does not predetermine the construction or alignment of a potential Watt Avenue or nearby roadway extension or the precise locations of any potential interchanges to Placer Parkway.

2.5 AGENCY PERMITS AND APPROVALS

The Proposed Action would preserve a preferred corridor for a future transportation facility. In the future, permits and approvals would be obtained from appropriate agencies prior to construction of the Parkway. These permits and approvals may include specific design or mitigation requirements that would be incorporated into the project.

2.6 SUBSEQUENT TIER 2 INFORMATION

As noted earlier, the design and construction of Placer Parkway—including its interchanges and over-crossings, and ancillary features such as stream crossings, safety devices, stormwater management structures, and similar improvements—would be evaluated in a subsequent Tier 2 environmental review process once a corridor has been identified. Chapter 10 provides more detailed information regarding Tier 2 studies.

3.0 REGULATORY SETTING

3.1 FEDERAL AND STATE REGULATIONS

The regulations that apply to hydrology and floodplains related to transportation projects include the following:

- Federal Executive Order 11988 Floodplain Management;
- Title 23, Code of Federal Regulations, Part 650, Subpart A (23 CFR 650A);
- 23 CFS 771; Environmental Impact and Related Procedures (FHWA); and
- National Flood Insurance Act 1968.

The implementation of Executive Order 11988 in transportation projects is addressed by Title 23, Code of Federal Regulations, Part 650, Subpart A (23 CFR 650A). When transportation improvements encroach on a base floodplain (i.e., 100-year floodplain), the FHWA requires the agency responsible for the project to perform a location hydraulic base floodplain elevation study and assess the risk involved. If the study indicates that there would be significant encroachment within the base floodplain, then the FHWA must make a finding that the project is the "only practicable alternative." FHWA considers a significant encroachment to entail one or more of the following: (1) a significant potential for interruption or termination of a transportation facility which is needed for emergency vehicles or provides a community's only evacuation route; (2) a significant risk; or (3) a significant adverse impact on natural and beneficial floodplain values.

The U.S. Army Corps of Engineers (USCOE) regulates the placement of fill or dredged materials that affect waters of the United States, which include stream courses and jurisdictional wetlands. The USCOE regulates these activities under the authority of Section 404 of the Clean Water Act. The USCOE would regulate any development in the vicinity of the study area that affects jurisdictional wetlands. As part of the 404 permit, coordination with U.S. Fish and Wildlife Service (USFWS) would be required. It is anticipated that the future construction of the Placer Parkway will either likely require an individual USCOE Permit or will be covered by a future permit obtained for the Placer County Habitat Conservation Plan (HCP).

The USCOE has overall authority for the Sacramento River Flood Control Project—a series of engineering measures that are aimed at reducing the risk of flooding in the City of Sacramento. The USCOE is also responsible for regulating use of and impacts to United States waterways. The USCOE regulates modifications to the levees and to discharges to the receiving waters with respect to quantity and quality. The Federal Emergency Management Agency (FEMA) is responsible for determining flood elevations based on USCOE studies. FEMA is also responsible for developing the Flood Insurance Rate Maps, which are used in the National Flood Insurance Program (NFIP). Participation in the NFIP provides an opportunity for property owners in the community to purchase flood insurance, provided that the community complies with FEMA requirements for maintaining flood protection and managing development in the floodplain. Within designated floodplains, the community must not permit any development, new construction or encroachment, which would cause an increase in the 100-year (base) flood elevation. FEMA defines a significant increase to mean a maximum one foot rise in the base flood elevation.

The State Board of Reclamation is responsible for maintenance of a major portion of the Sacramento River Flood Control Project, including the levee system that surrounds the Natomas Basin (see Section 4.1.1 for a detailed description of the basin). The Board of Reclamation is also responsible for flood control in the state of California, and has guidelines and criteria for work in or near levees.

A Section 401 Certification will be necessary to obtain a 404 permit for discharge into waters subject to USCOE jurisdiction. The certification is issued by the Regional Water Quality Control Board. Section 401 Certification will be necessary to obtain a 404 permit for discharge into waters subject to USCOE.

The California Department of Fish and Game's Lake and Streambed Alteration Program (California Fish and Game Code Section 1600-1607) requires any person who proposes a project that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake or use materials from a streambed to notify the department before beginning the project. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation.

3.2 LOCAL REGULATIONS

3.2.1 Sutter County

Sutter County is responsible for reviewing and approving development plans within the unincorporated areas of the county. The Sutter County General Plan (1996) contains specific goals and policies intended to minimize potential impacts associated with drainage and flood hazards, which include the following:

Goal 3.D To collect and dispose of stormwater in a safe and efficient manner.

Goal 4.A To preserve and protect the water resources of the County.

Goal 7.C To minimize the risk of personal injury, property damage and the economic and social disruptions associated with floods.

Sutter County has developed Design Standards to regulate and guide the design and preparation of plans for construction of streets, highways drainage facilities.

Sutter County has a Flood Damage Prevention Ordinance that addresses floodplain management. The ordinance limits construction within the 100-year floodplain to prevent damage to structures and to limit the effect of development on base flood elevations.

3.2.2 Placer County

Placer County is responsible for reviewing and approving development plans within the unincorporated areas of the county. The Placer County General Plan (2005) contains specific goals and policies intended to minimize potential impacts associated with drainage and flood hazards, which include the following:

Goal 4.E To collect and dispose of stormwater in a manner that least inconveniences the public, reduces potential water-related damage, and enhances the environment.

Goal 4.F To protect the lives and property of the citizens of Placer County from hazards associated with development in floodplains and manage floodplains for their natural resource values.

Goal 6.A To protect and enhance the natural qualities of Placer County's streams, creeks and groundwater.

The Placer County Flood Control and Water Conservation District (PCFCWCD) formulates regional strategies for flood control management. In the PCFCWCD Stormwater Management Manual, policies,

guidelines, and specific development criteria are presented for stormwater management. The main objective of the PCFCWCD is to reduce the effects of flooding through Best Management Practices (BMPs). The manual addresses the following elements that must be included in a stormwater management project:

- Drainage structure design—The storm drainage shall be planned and designed so that no damage occurs to structures or improvements during the 100-year event and no inundation of developed or to-be-developed portions of private property occurs during the 10-year event;
- Use of detention basins to reduce post-project runoff rates and/or volumes to 90 percent of pre-project levels;
- Floodplain Management Plan;
- System Monitoring Program; and
- Operations and Maintenance Program.

Placer County Flood Damage Prevention Ordinance (Article 15.52) addresses floodplain management. The ordinance limits construction within the 100-year floodplain to prevent damage to structures and to limit the effect of development on base flood elevations.

3.2.3 Reclamation District No. 1000

Reclamation District No. 1000 (RD 1000) operates and maintains facilities that provide drainage and flood protection for lands within the Natomas Basin (see Section 4.1.1 for a detailed description of the Basin). RD 1000's policies and procedures related to drainage are provided in "Reclamation District No. 1000 Proposed Interior Drainage Plan and Procedures" dated August 1993. RD 1000 requires the use of the "Sacramento City and County Drainage Manual Volume 2: Hydrology Standards" (City and County of Sacramento, 1996) as the basis for technical analyses. The "Sacramento City North Natomas Drainage Design and Procedures Manual" (City of Sacramento, 1998) also provides guidance on drainage design within the basin.

RD 1000's policies for development within the Natomas Basin include (RD 1000, 1993):

- Development cannot cause an increase in the 100-year water surface elevation due to floodplain encroachment.
- Development must provide detention such that post-development peak flows do not exceed pre-development peak flows.
- Development must provide additional pumping and conveyance capacity to the extent that demands on RD 1000's pumping plants and canals are increased.
- Fill must not be placed within floodplains where depth is greater than 2 feet.
- Loss of floodplain storage must be mitigated by providing in-kind replacement storage.

3.2.4 Sacramento Area Flood Control Agency

The Sacramento Area Flood Control Agency (SAFCA) comprises the City and County of Sacramento, Sutter County, the American River Flood Control District, and RD 1000. This agency does not own or operate flood control facilities or provide regulations, but coordinates flood control on a regional basis and raises money through assessments to help pay for the local contribution of costs needed to leverage state and federal money for flood-control projects. One of SAFCA's primary focuses is on the levees that are part of the flood control system surrounding the Natomas Basin (see Section 4.1.1). These include levees along the Cross Canal, Sacramento River, American River, the Pleasant Grove Creek Canal, and the Natomas East Main Drainage Canal.

4.0 AFFECTED ENVIRONMENT

This section describes the existing conditions with respect to hydrology and floodplains. The hydrologic setting is based on existing available data, maps and reports. Floodplains within the study area are based on existing Flood Insurance Rate Maps prepared by FEMA.

4.1 HYDROLOGY

The study area is located within the Sacramento River Basin, which is bounded by the Sierra Nevada to the east, the Coast Ranges to the west, the Cascade Range and Trinity Mountains to the north, and the Delta-Central Sierra area to the south. The Sacramento River is the principal stream in the basin. Its major tributaries are the Pit and McCloud Rivers, which join the Sacramento River from the north, and the Feather and American Rivers, which are tributaries from the east.

As shown on Figure 4-1, the majority of the study area is east of the Natomas Basin and is within the watersheds of Pleasant Grove Creek, Curry Creek, and the Natomas East Main Drainage Canal (a.k.a. Steelhead Creek). A small portion of the study area in the northeastern corner is within the Auburn Ravine watershed.

The existing topography of the study area is relatively flat. The area generally slopes from east to west, from elevation 165 feet above mean sea level (msl) in the northeastern corner to less than elevation 10 feet on the western edge within the Natomas Basin. In general, soils within the study area are categorized as hydrologic soil groups C and D, with C soils having zones of hardpan layers occurring less than 4 feet below ground surface (Quad Knopf, 2001). Localized areas with hydrologic soil groups A and B may be present, especially along Pleasant Grove Creek.

4.1.1 Natomas Basin

The western portion of the study area (approximately 23 percent) is located within the Natomas Basin (see Figure 4-1). The Natomas Basin is defined as land in Sacramento and Sutter counties bounded by the Sacramento River on the west and south, the Cross Canal on the north, the American River on the south and the Pleasant Grove Creek Canal and the Natomas East Main Drainage Canal on the east. The basin includes 53,000 acres and is about 15 miles long from north to south and about 6 miles wide from west to east (EDAW, 2005). Land in the basin is generally flat with elevations from 10 to 25 feet msl and some localized areas up to elevation 40 feet.

The Natomas Basin is completely enclosed by levees that prevent natural drainage out of the basin. All storm runoff must be collected and pumped out. Drainage within the basin has relied on the agricultural fields to hold runoff and act as de-facto detention storage facilities. As agricultural land becomes urbanized, with pavement and buildings replacing fields, peak runoff and the volume of storm runoff are increased. City/County of Sacramento, RD 1000 and Sutter County have all established guidelines for drainage and flood control within the Natomas Basin.

4.1.2 Pleasant Grove Creek Watershed

Pleasant Grove Creek (Figure 4-1) discharges to the Pleasant Grove Creek Canal, which conveys flow north to the Cross Canal and ultimately to the Sacramento River near Verona, California east of the study area. The Pleasant Grove Creek watershed has a total drainage area of approximately 47 square miles upstream of the Cross Canal (CH2M Hill, 1993). Approximately 30 percent of the study area is within the Pleasant Grove Creek watershed.

Pleasant Grove Creek historically drained along its natural courses to the Sacramento River. Reclamation District 1001 was formed in 1911 and constructed a canal/levee system to reclaim lands east of the Feather River from flooding. The Pleasant Grove Creek Canal intercepts flow from Pleasant Grove Creek as well as flow from Curry Creek and flow from the Howsley tributaries north of Pleasant Grove Creek.

There are no long-term continuous streamflow measurements for Pleasant Grove Creek. A previous study evaluated potential increases in flooding due to development within the watershed. As part of these studies, flood hydrographs for Pleasant Grove Creek and its tributaries were developed in accordance with PCFCWCD's Stormwater Management Manual. For the 1993 conditions, the 100-year peak flow for Pleasant Grove Creek was estimated to be on the order of approximately 10,000 cubic feet per second (cfs) (CH2M Hill, 1993).

4.1.3 Curry Creek Watershed

Curry Creek (Figure 4-1) also discharges to the Pleasant Grove Creek Canal, which conveys flow north to the Cross Canal and ultimately to the Sacramento River. The total area of the Curry Creek watershed upstream of the Cross Canal is approximately 17 square miles (CH2M Hill, 1993). Approximately 29 percent of the study area is within the Curry Creek watershed.

There are no long-term continuous streamflow measurements for Curry Creek. A previous study evaluated potential increases in flooding due to development within these watersheds. As part of these studies, flood hydrographs for these creeks were developed in accordance with PCFCWCD's Stormwater Management Manual. For the 1993 conditions, the 100-year peak flow for Curry Creek was estimated to be on the order of approximately 1,000 cfs (CH2M Hill, 1993).

4.1.4 Auburn Ravine Watershed

Approximately 4 square miles of the study area, located in the northeastern corner, is within the Auburn Ravine watershed. This portion of the study area drains to Orchard Creek, which is a tributary to Auburn Ravine.

The Auburn Ravine watershed totals approximately 79 square miles and slopes from east to west, ranging in elevation from 1,600 feet in the Sierra Nevada foothills near Auburn, California to 30 feet near Sutter County (Placer County, 2002). Orchard Creek has a watershed of approximately 12 square miles (EIP, 1997). It originates east of the study area, near Sierra College Boulevard in the Twelve Bridges area. Orchard Creek flows westward under Fiddyment Road north of the study area and then joins Auburn Ravine.

The East Side Canal intercepts flow from Auburn Ravine, as well as other creeks farther north, i.e., Coon Creek, Bunkham Slough, Markham Ravine, and King Slough and then joins with the Pleasant Grove Creek Canal. Flows from both the East Side Canal and Pleasant Grove Creek Canal combine to flow into the Natomas Cross Canal, where they ultimately discharge into the Sacramento River.

There are no long-term continuous streamflow measurements for Auburn Ravine or Orchard Creek. Estimated peak flows for Auburn Ravine at the Cross Canal during the winter range from a few hundred cfs to more than 17,000 cfs for a 100-year storm event (Placer County, 2002). The 100-year peak flow for Orchard Creek would be expected to be on the order of less than 3,000 cfs based on drainage area proportioning.

Flows in Auburn Ravine are augmented by water imported from the Yuba, Bear, and American River watersheds (located outside of the study area, discharges from wastewater treatment facilities, and irrigation water. Winter streamflows are comprised primarily of storm runoff supplemented by discharge from wastewater treatment facilities. During the summer months, when natural flows are low due to little

or no rainfall, streamflows consist primarily of irrigation water deliveries and powerhouse discharges. Based on regulated streamflow data from the Nevada Irrigation District's gauge in Auburn Ravine below SR 65 for the period 1985 through 1997, average regulated streamflows vary from 117 cfs in January to 30 cfs in October (City of Lincoln et al., 1998).

4.1.5 Natomas East Main Drainage Canal Watershed

The Natomas East Main Drainage Canal (NEMDC) watershed is approximately 180 square miles, of which 55 percent is drained by Dry Creek, south of the study area (DWR, 2003). Approximately 14 percent of the study area is within the NEMDC watershed, specifically within the Steelhead Creek portion (Figure 4-1). Steelhead Creek drains the southern portion of the study area to the canal/creek, which then conveys the flow towards the south. NEMDC ultimately discharges via pumping into the Sacramento River.

There are no long-term continuous streamflow measurements for Steelhead Creek. Water levels in the canal at the El Camino Avenue bridge were measured from late summer/fall 2001 to June 2002. Stage measurements ranged from 12.47 to 25.55 feet, with the median value at 13.28 feet (DWR, 2003).

4.2 FLOODPLAINS

The majority of the FEMA floodplain areas are located in the western portion of the study area. Other notable FEMA floodplain areas in the study area are associated with Pleasant Grove Creek and Curry Creek. The most recent FEMA Flood Insurance Rate Maps that cover the study area are dated June/July 1998. Both the 100-year and 500-year floodplains are shown on Figure 4-2.

The 100-year floodplains mapped by FEMA are designated as Zone A, for which no detailed studies were performed and no base flood elevations (BFEs) were determined. While not currently mapped by FEMA, smaller streams and creeks or the upper reaches of streams and creeks may have floodplains associated with them, but detailed studies have not been performed to date.

During a 100-year storm event, the capacity of the Pleasant Grove Creek Canal would be exceeded and flow would enter the Natomas Basin at Sankey Road. This area is referred to as the "Sankey Gap." Due to the relatively flat topography west of the canal and lack of well-defined creek channels, the floodplain is shallow and wide. Within the Natomas Basin, north of Riego Road and east of Highway 99, flood depths range from 0.5 foot to 3.5 feet as a result of overflow from the Sankey Gap. East of the canals, the 100-year floodplain areas are located primarily along the creeks and their associated tributaries. The floodplain for Steelhead Creek is a partial floodplain delineation that covers only the lower reach of the creek and not the channels and swales further upstream (Quad Knopf, 2006).

According to Sutter County officials, there are plans to remove the Sankey Gap from the 100-year floodplain (see Figure 4-2). The timing of these potential floodplain improvements to this area is not known.

The Natomas Basin is surrounded by levees. After record floods in 1986, substantial improvements to the levees were made by federal and state agencies in the 1990s. In 1998, the USCOE certified that the levees around the Natomas area provide flood protection exceeding the 100-year flood and hence the designation shown on the FEMA floodplain maps that have an effective date of 1998. Recent engineering studies commissioned by SAFCA, which included geotechnical investigations and seepage evaluation, indicate that the Natomas Basin area may not have 100-year flood protection, and may require additional levee improvements (Kollars and Dahlber, 2006). These recent investigations suggest that underseepage could threaten the stability of the levees (SAFCA, 2006). SAFCA, the USCOE, and the Reclamation Board are currently conducting evaluations to identify and implement the improvements needed to provide the area with protection against a 200-year event. FEMA is currently re-evaluating the level of protection provided by the existing levee system and may revise the Flood Insurance Rate Maps for the Natomas Basin (SACBEE, 2007).

5.0 POTENTIAL DIRECT IMPACTS

Potential impacts to hydrology and floodplains were evaluated through a quantitative comparison of the potential impact of each of the corridor alignment alternatives to relevant parameters affecting surface water hydrology and floodplains.

The criteria used in this analysis were developed to allow comparison of potential impacts to hydrology and floodplains associated with each of the corridor alignment alternatives. The focus of this Tier 1 analysis was to identify potential impacts that differentiate between proposed alternatives. For example, the measurement of linear feet of floodplain crossed by an alternative quantifies the magnitude of that resource in the watersheds that would be potentially impacted. Floodplain crossings that are less than the typical bridge span length would not encroach into the floodplain, while longer crossings would require columns that could potentially impact floodplains elevations and widths. Comparison of the magnitude of floodplain crossing length potentially affected by each alternative is a quantitative approach to comparing the relative potential impact of the various alternatives.

Table 5-1 summarizes the evaluation criteria considered in the analysis of the alternatives. These are described below.

Amount of Impervious Area. The construction of Placer Parkway would result in the construction of paved surface areas in the study area. This would increase the total amount of impervious surface, thereby increasing stormwater runoff. The amount of impervious area includes the road, shoulder, and interchanges. Increased runoff could contribute to downstream flooding, and could exceed the hydraulic capacity of existing drainage facilities, resulting in localized flooding. As a consequence of vegetation removal during construction activities, stormwater runoff may be temporarily increased. Also, soil excavation and grading during construction could increase the risk of erosion and sedimentation of nearby water bodies. The amount of impervious area is indicative of the amount of soil that may be disturbed and require erosion controls and stabilization during and after construction and provides an order of magnitude of the potential increase in runoff. Given the high existing potential for flooding in and downstream of the study area, any increase in runoff associated with the project could contribute to localized and regional flooding.

Stream and Canal Crossings. Stream and canal crossings (see Figure 5-1) may constrict or block natural streamflows, which may affect the hydraulics of the stream or canal. Special considerations must be addressed when construction is performed in or near creeks and canals, such as limiting fill placed in creeks/canals and minimizing alteration of streams.

Length of Floodplain Crossed. The ability of a bridge to cross a floodplain without encroachment depends on the length of the crossing. Since there are no design details for the floodplain crossings, typical Caltrans crossings have been assumed for the Tier 1 analysis (see Section 2.3.2). If the width of the floodplain at the planned crossing exceeds the typical span length for a bridge (assumed to be 150 feet), then columns or piers would be required to support the bridge.

Angle of Crossing of Floodplain. Longitudinal encroachment of the floodplain is a primary impact consideration for FHWA and Caltrans in evaluating the environmental impact of a proposed stream crossing by a roadway facility. The degree of longitudinal impact of the alternative crossings on the existing floodplain is defined by the angle at which the roadway crosses the floodplain area. This angle (in the range of zero degrees to 90 degrees) defines the magnitude of potential impact to the floodplain area. A perpendicular crossing (at 90 degrees) represents the scenario with the least potential impact. As the angle of crossing approaches zero degrees, the crossing becomes more longitudinal and increases the potential for encroachment into the floodplain. The evaluation seeks to minimize the potential impact, so a higher value for the angle of the potential floodplain crossing is considered better (i.e., the angle is more perpendicular than longitudinal).

Table 5-1
Summary of Criteria Used for Evaluation of Alternatives
Hydrology and Floodplains

Evaluation Criteria	Regulatory Concerns (Potential Impacts)	Quantitative Evaluation Approach	Justification
Amount of Impervious Area	• Hydrologic integrity • Increased peak flows and runoff volumes cause flooding downstream	Magnitude of area affected; lower value better	Potential increase in impervious area and resultant increase in runoff may impact downstream areas; objective is to minimize increase of impervious area
	• BMPs required to offset increases in runoff	Magnitude of area potentially available for BMPs; higher value better	Opportunities to site BMPs (e.g., ability to located detention basins/swales within the right-of-way to attenuate peak runoff)
Stream Crossings	• Hydrologic integrity • Constriction or blockage of natural streamflow • Constriction or blockage of natural streambed migration • Modification of downstream natural flooding regime • Reduction in downstream transport of sediment and nutrients • Streambed alteration	Number of streams crossed by each alternative; lower number better	Alternative crossing may affect hydrology of downstream segments; objective is to minimize the number of streams potentially affected Streambed alteration requires permit from California Department of Fish and Game
Canal Crossings	• Hydrologic integrity • Constriction or blockage of canal flow	Number of canals crossed by each alternative; lower number better	Alternative crossing may affect hydrology of canal; objective is to minimize the number canals potentially affected
Length of Floodplain Crossed	• Hydrologic Integrity • Maintenance of beneficial floodplain values • Constriction or blockage of flow	Total length of alternative that crosses 100-year and 500-year floodplain; lower value better	Potential impact to beneficial floodplain values; objective is to minimize the crossing length potentially affecting the floodplain
Angle of Floodplain Crossing	• Minimization of effects to hydraulic and floodplain functions	Average angle of alternative crossing of stream or floodplain (range 0° to 90°); higher value better	Indicator of degree of longitudinal impact to floodplain areas; objective is to minimize the angle of potential effect
Total Floodplain Area Crossed	• Hydrologic integrity • Maintenance of beneficial floodplain values • Constriction or blockage of flow that could increase flood elevation, extend floodplain boundary and reduce storage • Encroachment could raise base flood elevation and reduce flood storage benefits	Magnitude of area affected; lower value better	Potential impact to beneficial floodplain values; objective is to minimize the area potentially affected

Total Area of Floodplain Crossed. Roads, bridges and culverts that cross a designated floodplain may encroach into the floodplain and affect the hydraulics of the creek and its associated floodplain. While a detailed analysis would be required to evaluate the effects of the potential encroachment, the estimated amount of floodplain that may be affected by the project provides an indication of the potential magnitude of the encroachment for comparing the alternatives. In addition, because there are restrictions on construction activities and types of development that can be implemented in a floodplain, the amount of floodplain within a proposed corridor provides an indication of land use limitations. Floodplains in relation to the alternatives and segments are shown on Figure 4-2.

Portions of Placer Parkway would be constructed within designated floodplains. At some major creek crossings, sections of the Parkway would be elevated on a bridge (see Section 2.3.2). Bridges would be designed such that the base of any new bridges within floodplains would be above the 100-year water surface. Encroachment at these crossings from fill placement or column installation within the floodplain could compromise creek capacity for conveyance of the 100-year flow and result in an increase in the base flood elevation and corresponding floodplain width upstream of the proposed crossing. In addition, increased flows due to increased impervious surfaces could also affect the floodplain.

Comparative data were collated and evaluated for each alternative and its segments (i.e., western, central and eastern) using Geographical Information System (GIS) technology. Table 5-2 summarizes the detailed information for each alternative and segment.

5.1 NO-BUILD ALTERNATIVE

Under the No-Build Alternative, land for the future construction of Placer Parkway would not be acquired and Placer Parkway would not be constructed. No impacts to floodplains or other hydrological resources would occur as a result of the No-Build Alternative.

5.2 ALTERNATIVE 1 – THE RED ALTERNATIVE

5.2.1 Alternative 1 – Western Segment

The Western Segment of Alternative 1 is located entirely within Sutter County. Most of this segment is within the Natomas Basin. The total length of this segment is approximately 15,300 feet along the centerline of the corridor. Three interchanges would be included along this segment, as shown on Figure 2-1.

Amount of Impervious Area. The estimated amount of impervious area associated with this segment is 322 acres (see Table 5-2). Most of this is in the Natomas Basin watershed (316 acres), with the remaining 6 acres in the NEMDC watershed.

The increase in impervious area would result in increased peak flows and runoff volumes. Although the amount of impervious area is relatively small (less than approximately 1 percent) compared with the total drainage area of the Natomas watershed (53,000 acres), BMPs would be required to attenuate peak flows to less than pre-project levels and retain the additional runoff volume. Sutter County's General Plan requires that new development must adequately mitigate increases in stormwater flows and volume to avoid increase in downstream flows and must conform to the appropriate county requirements and standards governing drainage. RD 1000 also requires that projects provide detention to attenuate peak flows to pre-project levels so that the capacity of RD 1000's pumping stations are not exceeded.

BMPs to attenuate peak flows and retain runoff volume could be located within the right-of-way of this segment that is located within the 500-year floodplain. Alternatively, BMPs could be placed within upstream watersheds along the Central Segment to provide compensating benefits, or the project could participate in the City of Roseville's Regional Retention Basin project.

Table 5-2
Summary of Alternatives: Hydrology and Floodplains

Alternative	Segment	Length (feet)	Impervious Area (acres)	FEMA 100-Year Floodplain Crossing (feet)	Minimum Angle of Floodplain Crossing (degrees)	FEMA 100-Year Floodplain (acres)	FEMA 500-Year Floodplain (acres)	Interchanges (#)	Stream Crossings (#)	Canal Crossings (#)
1	Western	15,300	322	Total = 4,100 NB: 3,500 SC: 600	NA	211.4	172.2	3	0	1
	Central	40,600	103	Total = 2,800 SC: 1,000 CC: 500 PGC: 200 + 300	0	46.6	14.0	0	9	0
	Eastern	29,600	321	PGC: 800	90	10.7	2.8	3	6	0
	Total	85,500	745	6900		268.7	189.0	6	15	1
2	Western	15,300	322	Total = 4,100 NB: 3,500 SC: 600	NA	211.4	172.2	3	0	1
	Central	36,400	94	Total = 2,500 SC: 1,000 CC: 1,000 + 200 PGC: 500	45	79.5	25.9	0	5	0
	Eastern	29,600	321	PGC: 800	90	10.7	2.8	3	6	0
	Total	81,300	737	7600		301.6	200.9	6	11	1
3	Western	15,300	322	Total = 4,100 NB: 3,500 SC: 600	NA	211.4	172.2	3	0	1
	Central	37,500	97	Total = 3800 SC: 1,000 CC: 2,500 PGC: 500	45	94.4	25.9	0	4	0
	Eastern	29,600	321	PGC: 800	90	10.7	2.8	3	6	0
	Total	82,400	740	8,900		316.2	200.9	6	10	1

Table 5-2
Summary of Alternatives: Hydrology and Floodplains (Continued)

Alternative	Segment	Length (feet)	Impervious Area (acres)	FEMA 100-Year Floodplain Crossing (feet)	Minimum Angle of Floodplain Crossing (degrees)	FEMA 100-Year Floodplain (acres)	FEMA 500-Year Floodplain (acres)	Interchanges (#)	Stream Crossings (#)	Canal Crossings (#)
4	Western	15,300	223	Total = 15,300 NB: 11,300 CC: 4,000	NA	254.8	55.9	2	0	1
	Central	30,600	80	Total = 6,300 CC: 5,000 PGC: 500	45	104.8	37.2	0	3	0
	Eastern	29,600	321	PGC: 800	90	10.7	2.8	3	6	0
	Total	75,500	624	21,600		370.3	95.9	5	9	1
5	Western	15,300	223	Total = 15,300 NB: 11,300 CC: 4,000	NA	254.8	55.9	2	0	1
	Central	30,100	78	Total = 6,300 CC: 5,000 PGC: 500	45	106.8	27.8	0	3	0
	Eastern	29,600	321	PGC: 800	90	10.7	2.8	3	6	0
	Total	75,000	622	21,600		372.3	86.5	5	9	1

Notes:

1. Alternatives and segments are shown on Figures 2-1 and 4-1.
2. Impervious area includes paved road surface, paved shoulders and interchanges. Road surface assumes 6 lanes (three in each direction). NA = not applicable. NB= Natomas Basin. CC = Curry Creek. PGC = Pleasant Grove Creek. SC= Steelhead Creek.

Western Segment impacts for Alternatives 1, 2, and 3 are the same and for Alternatives 4 and 5 are the same.

Eastern Segment impacts are the same for all alternatives.

Stream and Canal Crossings. This segment would cross the Natomas East Main Drainage Canal. The width of this canal at this crossing and its associated wetlands is estimated to be greater than a standard bridge span of 150 feet and would therefore need to be supported by columns. In addition, a railroad ROW is located very close to the canal; this railroad ROW would also need to be spanned. The columns would be placed outside the ordinary high water elevation of the canal, to the extent practical. The bridges would be designed and constructed to minimize potential impacts to the canal. There are no stream crossings along this segment.

Length of Floodplain Crossed. The total length of 100-year floodplain crossed by this segment is approximately 4,100 feet, most of which (approximately 3,500 feet) is in the western portion within the Natomas Basin. The remaining 600 feet of the segment crosses the 100-year floodplain east of the NEMDC.

In order to minimize potential impacts to the floodplain, the portion of road that traverses the 100-year floodplain would be elevated on a bridge. The bridge would be designed such that the bottom of the bridge would be above the 100-year water surface elevation. The encroachment in the floodplain would be limited to the bridge columns. The columns would be placed to minimize potential impacts. Therefore, encroachment within the floodplain would be minimal.

Angle of Crossing of Floodplain. This segment is almost entirely within the floodplain, which is broad and shallow, therefore, the angle of crossing is not applicable to this segment.

Total Area of Designated Floodplain Crossed. As shown on Figure 4-2, the western portion and the very eastern portion of the Western Segment would be within the 100-year floodplain. Roughly half of the corridor associated with this segment would be within the 100-year floodplain. The remainder of this segment is within Zone X500, which is designated as an area inundated by the 500-year flood event. The estimated footprint within the 100-year floodplain is approximately 211 acres. Approximately 172 acres is within the 500-year floodplain.

5.2.2 Alternative 1 – Central Segment

The Central Segment for Alternative 1 is located in Sutter and Placer counties. It traverses three watersheds: the Natomas East Main Drainage Canal, Curry Creek, and Pleasant Grove Creek. The total length of this segment is approximately 40,600 feet along the centerline of the corridor. There are no interchanges proposed along this segment.

Amount of Impervious Area. The estimated amount of total impervious area associated with this segment is 103 acres. Approximately 51, 33, and 19 acres are within the NEMDC, Curry Creek, and Pleasant Grove Creek watersheds, respectively.

The increase in impervious area would result in increased peak flows and runoff volumes. Although the amount of impervious area is relatively small compared with the total drainage area of the watersheds, BMPs would be required to attenuate peak flows to less than pre-project levels and retain the additional runoff. PCFCWCD's Stormwater Management Manual requires that peak flows be reduced to approximately 90 percent of pre-project conditions for 2-year through 100-year storm events. The Stormwater Management Manual also requires that retention be provided for flow volumes exceeding pre-project flow volumes. Also, Sutter County's General Plan requires that new development must adequately mitigate increases in stormwater flows and volume to avoid increase in downstream flows and must conform to the appropriate county requirements and standards governing drainage.

The total width of the proposed Parkway corridor is approximately 1,000 feet in the Central Segment. Accounting for the six travel lanes and the Parkway's shoulders, this leaves approximately 888 feet of

unpaved area along the length of the Parkway in this segment where BMPs, such as detention basins and swales, could be located either within the median or between the proposed shoulders and the corridor edge.

Stream and Canal Crossings. There are nine stream crossings within this segment: four on Steelhead Creek, three on Curry Creek and two on Pleasant Grove Creek. This segment crosses approximately 7,000 feet of Steelhead Creek longitudinally. Depending on the alignment of the road within the corridor, realignment of this section of Steelhead Creek may be required. Culverts may be used at smaller creek crossings. Where creek crossings coincide with floodplain crossings, the road would be elevated on a bridge.

This segment does not cross any existing canals. Therefore, there would be no potential impacts to canals.

Length of Floodplain Crossed. The total length of 100-year floodplain crossed by this segment is approximately 2,800 feet. At the western edge, the Central Segment would start in the eastern edge of the 100-year floodplain associated with the NEMDC and extend for approximately 1,000 feet.

This segment crosses the 100-year floodplain associated with Curry Creek in one location. The width of the floodplain at this crossing is approximately 500 feet. Because the floodplain width exceeds the typical maximum bridge span length of 150 feet, columns would be required to support the roadway. The columns would be placed outside the ordinary high water elevation of the creek. The bridges and columns would be designed and constructed to minimize potential impacts to the floodplain.

The eastern portion of this segment crosses the 100-year floodplain associated with Pleasant Grove Creek. There are two crossings. The widths of the floodplain at these crossings are approximately 200 and 300 feet. Because the floodplain widths exceed the typical maximum bridge span of 150 feet, columns would be required. The columns would be placed outside the ordinary high water level of the creek. The bridges and columns would be designed and constructed to minimize potential impacts to the floodplain.

Angle of Crossing of Floodplain. This segment crosses Steelhead Creek longitudinally, i.e., the angle of the crossing is essentially zero. The floodplain for Steelhead Creek has not been fully delineated; however, it may extend further upstream than is designated on the current FEMA FIRM. Detailed studies would need to confirm the 100-year water levels for Steelhead Creek in the vicinity of the creek crossings

The Curry Creek floodplain crossing and both of the Pleasant Grove Creek floodplain crossings are at approximately 90-degree angles.

Total Area of Designated Floodplain Crossed. As described above, this corridor crosses through several floodplains. The total amount of 100-year floodplain area crossed by this segment is approximately 46 acres. In addition, this segment crosses the 500-year floodplain associated with the NEMDC; approximately 14 acres are within this 500-year floodplain.

5.2.3 Alternative 1 – Eastern Segment

All of the Eastern Segment of Alternative 1 is within Placer County. Most of this segment is within the Pleasant Grove Creek watershed, with the portion nearest SR 65 located within the Auburn Ravine watershed. The total length of this segment is approximately 29,600 feet measured along the centerline of the corridor. Approximately 21,600 feet is within the Pleasant Grove Creek watershed and the remaining 8,000 feet is within the Auburn Ravine watershed. Three interchanges would be included along this segment as shown on Figure 4-1; two of the three interchanges would be within the Pleasant Grove Creek watershed.

Amount of Impervious Area. The estimated amount of impervious area associated with this segment is 321 acres, of which approximately 218 acres are within Pleasant Grove Creek watershed and the remaining 102 acres are within Auburn Ravine watershed. The increase in impervious area would result in increased peak flows and runoff volumes. Although the amount of impervious area is relatively small compared with the total drainage area of the watersheds, BMPs would be required to attenuate peak flows to less than pre-project levels and retain the additional runoff. PCFCWCD's SWMM requires that peak flows be reduced to below pre-project conditions for 2-year through 100-year storm events. The Stormwater Management Manual also requires that retention be provided for flow volumes exceeding pre-project flow volumes.

The total width of the proposed Parkway corridor is approximately 1,000 feet west of Fiddyment Road and approximately 500 feet east of Fiddyment Road segment. The corridor includes a 100-foot unpaved median, six travel lanes, and the Parkway's shoulders. BMPs, such as detention basins and swales, could be located within the median. There also would be opportunity to locate BMPs between the proposed shoulders and the corridor edge (approximately 888 feet of unpaved area west of Fiddyment Road and approximately 388 feet of unpaved area east of Fiddyment Road).

Stream Crossings. Six new stream crossings are within this segment: four on tributaries of Pleasant Grove Creek and two on tributaries of Orchard Creek. All of these crossing are in the headwaters of the creeks; therefore, culverts would be used at these crossings. In addition, this segment includes three existing stream crossings along SR 65. These crossings would require modifications, such as extension of existing culverts, as part of adding the auxiliary lanes.

Canal Crossings. This segment does not cross any existing canals. Therefore, there would be no potential impacts to canals.

Length of Floodplain Crossed. This segment crosses the 100-year floodplain associated with a tributary to Pleasant Grove Creek. The floodplain width at this crossing is approximately 800 feet. Because the floodplain width exceeds the typical maximum bridge span length of 150 feet, columns would be required. The columns would be placed outside the ordinary high water level of the creek. The bridges and columns would be designed and constructed to minimize potential impacts to the floodplain.

Angle of Crossing of Floodplain. This segment crosses the floodplain associated with a tributary of Pleasant Grove Creek at approximately a 90-degree angle.

Total Area of Designated Floodplain Crossed. The total amount of 100-year floodplain area crossed by this segment is approximately 11 acres. In addition, this segment crosses approximately 3 acres within the 500-year floodplain.

5.3 ALTERNATIVE 2 – THE ORANGE ALTERNATIVE

5.3.1 Alternative 2 – Western Segment

The Western Segment of Alternative 2 is the same as that for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.3.2 Alternative 2 – Central Segment

The Central Segment for Alternative 2 is located in Sutter and Placer counties. It traverses three watersheds: the Natomas East Main Drainage Canal, Curry Creek, and Pleasant Grove Creek. The total length of this segment is approximately 36,400 feet along the centerline of the corridor. There are no interchanges along this segment.

Amount of Impervious Area. The estimated amount of impervious area associated with this segment is 94 acres. Approximately 41, 35, and 19 acres are within the NEMDC, Curry Creek, and Pleasant Grove Creek watersheds, respectively.

The increase in impervious area would result in increased peak flows and runoff volumes. Although the amount of impervious area is relatively small compared with the total drainage area of the watersheds, BMPs would be required to attenuate peak flows to less than pre-project levels and retain the additional runoff. PCFCWCD's Stormwater Management Manual requires that peak flows be reduced to approximately 90 percent of pre-project conditions for 2-year through 100-year storm events. The Stormwater Management Manual also requires that retention be provided for flow volumes exceeding pre-project flow volumes. Also, Sutter County's General Plan requires that new development must adequately mitigate increases in stormwater flows and volume to avoid increase in downstream flows and must conform to the appropriate county requirements and standards governing drainage.

The total width of the proposed Parkway corridor is approximately 1,000 feet in the Eastern Segment. Accounting for the six travel lanes and the Parkway's shoulders, this leaves approximately 888 feet of unpaved area along the length of corridor in this segment where BMPs such as detention basins and swales could be located either within the median or between the proposed shoulders and the corridor edge.

Stream Crossings. Five stream crossings are within this segment: one on Steelhead Creek, two on Curry Creek and two on Pleasant Grove Creek. Culverts may be used at smaller creek crossings. Where creek crossings coincide with floodplain crossings, the road would be elevated on a bridge.

Canal Crossings. This segment does not cross any existing canals. Therefore, there would be no potential impacts to canals.

Length of Floodplain Crossed. The total length of 100-year floodplain crossed by this segment is approximately 3,500 feet. The western edge of the Central Segment would start in the eastern portion of the 100-year floodplain associated with the NEMDC and extend for approximately 1,000 feet.

This segment crosses the 100-year floodplain associated with Curry Creek in two locations. The approximate widths of the floodplains are on the order of 1,000 feet at the first crossing and approximately 200 feet at the second crossing. Because the floodplain widths exceed the typical maximum bridge span length of 150 feet, columns would be required. The columns would be placed outside the ordinary high water elevation of the creek. The bridges and columns would be designed and constructed to minimize potential impacts to the floodplain.

In addition, the eastern portion of this segment crosses the 100-year floodplain associated with Pleasant Grove Creek. The two crossings are the same as those described for the Central Segment of Alternative 1. Because the floodplain widths exceed the typical maximum bridge span of 150 feet, columns would be required. The columns would be placed outside the ordinary high water elevation of the creek. The bridges would be designed and constructed to minimize potential impacts to the floodplain.

Angle of Crossing of Floodplain. This segment crosses the floodplain associated with Steelhead Creek at approximately a 45-degree angle. The Curry Creek floodplain crossings are at approximately 45- and 90-degree angles. Both of the Pleasant Grove Creek floodplain crossings are at approximately 90-degree angles.

Total Area of Designated Floodplain Crossed. As described above, this corridor crosses several floodplains. The total amount of 100-year floodplain area crossed by this segment is approximately

80 acres. In addition, this segment crosses the 500-year floodplain associated with the NEMDC; approximately 26 acres are within this 500-year floodplain.

5.3.3 Alternative 2 – Eastern Segment

The Eastern Segment of Alternative 2 is the same as that for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.4 ALTERNATIVE 3 – THE BLUE ALTERNATIVE

5.4.1 Alternative 3 – Western Segment

The Western Segment of Alternative 3 is the same as that for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.4.2 Alternative 3 – Central Segment

The Central Segment for Alternative 3 is located in Sutter and Placer counties. It traverses three watersheds: NEMDC, Curry Creek, and Pleasant Grove Creek. The total length of this segment is approximately 38,000 feet along the centerline of the corridor. No interchanges are planned along this segment.

Amount of Impervious Area. The estimated amount of impervious area associated with this segment is 97 acres. Approximately 23, 58, and 16 acres are within the NEMDC, Curry Creek, and Pleasant Grove Creek watersheds, respectively.

The increase in impervious area would result in increased peak flows and runoff volumes. Although the amount of impervious area is relatively small compared with the total drainage area of the watersheds, BMPs would be required to attenuate peak flows to less than pre-project levels and retain the additional runoff. The PCFCWCD's Stormwater Management Manual requires that peak flows be reduced to approximately 90 percent of pre-project conditions for 2-year through 100-year storm events. The Stormwater Management Manual also requires that retention be provided for flow volumes exceeding pre-project flow volumes. Also, Sutter County's General Plan requires that new development must adequately mitigate increases in stormwater flows and volume to avoid increase in downstream flows and must conform to the appropriate county requirements and standards governing drainage.

The total width of the proposed Parkway corridor is approximately 1,000 feet in the Central Segment. Accounting for the six travel lanes and the Parkway's shoulders, this leaves approximately 888 feet of unpaved area along the length of the Parkway in this segment where BMPs such as detention basins and swales could be located either within the median or between the proposed shoulders and the corridor edge.

Stream Crossings. Four stream crossings are within this segment: one on Steelhead Creek, one on Curry Creek, and two on Pleasant Grove Creek. Culverts or a bridge could be used at the Steelhead Creek crossing. The Curry Creek and Pleasant Grove Creek crossings coincide with floodplain crossings; therefore, the road would be elevated on a bridge.

Canal Crossings. This segment does not cross any existing canals. Therefore, there would be no potential impacts to canals.

Length of Floodplain Crossed. The total length of 100-year floodplain crossed by this segment is approximately 4,800 feet.

At the western edge, the Central Segment would start in the eastern edge of the 100-year floodplain associated with the NEMDC and extend for approximately 1,000 feet.

This segment crosses the 100-year floodplain associated with Curry Creek. Depending on the alignment of the crossing within the proposed corridor, the floodplain width is on the order of 2,500 feet. Because the floodplain width exceeds the typical maximum bridge span length of 150 feet, columns would be required. The columns would be placed outside the ordinary high water elevation of the creek. The bridges and columns would be designed and constructed to minimize potential impacts to the floodplain.

In addition, the eastern portion of this segment crosses the 100-year floodplain associated with Pleasant Grove Creek. These two crossings are the same as those described for the Central Segment of Alternative 1.

Angle of Crossing of Floodplain. This segment crosses the floodplain associated with Steelhead Creek at approximately a 45-degree angle. The Curry Creek floodplain crossing is at approximately a 90-degree angle. Both of the Pleasant Grove Creek floodplain crossings are at approximately 90-degree angles.

Total Area of Designated Floodplain Crossed. As described above, this corridor crosses several floodplains. The total amount of 100-year floodplain area crossed by this segment is approximately 94 acres. In addition, this segment crosses the 500-year floodplain associated with the NEMDC; approximately 26 acres are within this 500-year floodplain.

5.4.3 Alternative 3 – Eastern Segment

The Eastern Segment of Alternative 3 is the same as that for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.5 ALTERNATIVE 4 – THE YELLOW ALTERNATIVE

5.5.1 Alternative 4 – Western Segment

Amount of Impervious Area. Most of the Western Segment of Alternative 4 is within the Natomas Basin. The total length of this segment is approximately 15,300 feet along the centerline of the corridor. Two interchanges would be included along this segment as shown on Figure 4-1. The estimated amount of impervious area associated with this segment is 223 acres.

The increase in impervious area would result in increased peak flows and runoff volumes. Although the amount of impervious area is relatively small (less than 1 percent) compared with the total drainage area of the Natomas watershed (53,000 acres), BMPs would be required to attenuate peak flows to less than pre-project levels and retain the additional runoff volume. Sutter County's General Plan requires that new development must adequately mitigate increases in stormwater flows and volume to avoid increase in downstream flows and must conform to the appropriate county requirements and standards governing drainage. RD 1000 also requires that projects provide detention to attenuate peak flows to pre-project levels so that the capacity of RD 1000's pumping stations are not exceeded.

In addition, this segment includes the realignment of Sankey Road. The estimated amount of impervious area for the Sankey Road realignment is approximately 46 acres; however, since the realigned roadway would be slightly longer than the existing roadway, the additional amount of impervious area would be minimal.

Stream Crossings. There are no stream crossings within this segment.

Canal Crossings. This segment would cross the Pleasant Grove Creek Canal. The canal is within the 100-year floodplain, and as such, this portion of the road would be elevated on a bridge. The columns to support the bridge would be placed outside the ordinary high water elevation of the canal. The approximate width of the canal at this crossing is on the order of 150 to 200 feet.

Length of Floodplain Crossed. Since the entire segment is essentially within the 100-year floodplain, the entire length of this corridor traverses the floodplain. The total length is approximately 15,300 feet. When the Sankey Gap is removed from the 100-year floodplain some time in the future, the length of floodplain crossed by this segment would be reduced.

Angle of Crossing of Floodplain. This segment is almost entirely within the floodplain, which is broad and shallow, therefore, the angle of crossing is not applicable to this segment.

Total Area of Designated Floodplain Crossed. As shown on Figure 4-2, essentially all of the Western Segment associated with Alternative 4 would be within the 100-year floodplain. The estimated footprint within the 100-year floodplain is 255 acres. In addition, approximately 56 acres of the proposed corridor would be within the 500-year floodplain. When the Sankey Gap is removed from the 100-year floodplain some time in the future, the amount of floodplain crossed by this segment would be reduced.

In order to minimize potential impacts to the floodplain, the road would be elevated on a bridge. The bridge would be designed such that the bottom of the bridge would be above the 100-year water surface elevation. The encroachment in the floodplain would be limited to the bridge columns. The columns would be placed to minimize potential impacts. Therefore, encroachment within the floodplain would be minimal.

5.5.2 Alternative 4 – Central Segment

The Central Segment for Alternative 4 is located in Sutter and Placer counties. It traverses two watersheds: Curry Creek and Pleasant Grove Creek. The total length of this segment is approximately 30,600 feet along the centerline of the corridor. There are no interchanges along this segment.

Amount of Impervious Area. The estimated amount of impervious area associated with this segment is 80 acres. Approximately 64 and 16 acres are within the Curry Creek and Pleasant Grove Creek watersheds, respectively.

The increase in impervious area would result in increased peak flows and runoff volumes. Although the amount of impervious area is relatively small compared with the total drainage area of the watersheds, BMPs would be required to attenuate peak flows to less than pre-project levels and retain the additional runoff. The PCFCWCD's Stormwater Management Manual requires that peak flows be reduced to approximately 90 percent of pre-project conditions for 2-year through 100-year storm events. The Stormwater Management Manual also requires that retention be provided for flow volumes exceeding pre-project flow volumes. Also, Sutter County's General Plan requires that new development must adequately mitigate increases in stormwater flows and volume to avoid increase in downstream flows and must conform to the appropriate county requirements and standards governing drainage.

The total width of the proposed Parkway corridor is approximately 1,000 feet in the Central Segment. Accounting for the six travel lanes and the Parkway's shoulders, this leaves approximately 888 feet of unpaved area along the length of the Parkway in this segment where BMPs such as detention basins and swales could be located either within the median or between the proposed shoulders and the corridor edge.

Stream Crossings. Three stream crossings are within this segment: one on Curry Creek and two on Pleasant Grove Creek. The Curry Creek and Pleasant Grove Creek crossings coincide with floodplain crossings; therefore, the road would be elevated on a bridge.

Canal Crossings. This segment does not cross any existing canals. Therefore, there would be no potential impacts to canals.

Length of Floodplain Crossed. The total length of 100-year floodplain crossed by the Central Segment is approximately 6,300 feet. This segment crosses the 100-year floodplain associated with Curry Creek, which is essentially an extension of the floodplain associated with the Western Segment of Alternative 4. Therefore, the elevated road would continue approximately 5,000 feet into the Central Segment. The elevated road would be supported by columns. The columns would be placed outside the ordinary high water elevation of the creek. The bridges and columns would be designed and constructed to minimize potential impacts to the floodplain.

In addition, the eastern portion of this segment crosses the 100-year floodplain associated with Pleasant Grove Creek. These two crossings are the same as those described for the Central Segment of Alternative 1.

Angle of Crossing of Floodplain. This segment crosses the Curry Creek floodplain at approximately a 45-degree angle. Both of the Pleasant Grove Creek floodplain crossings area at approximately 90-degree angles.

Total Area of Designated Floodplain Crossed. As described above, this corridor crosses several floodplains. The total amount of 100-year floodplain area crossed by this segment is approximately 105 acres. In addition, this segment crosses approximately 37 acres within the 500-year floodplain.

5.5.3 Alternative 4 – Eastern Segment

The Eastern Segment of Alternative 4 is the same as that for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.6 ALTERNATIVE 5 – THE GREEN ALTERNATIVE

5.6.1 Alternative 5 – Western Segment

The Western Segment of Alternative 5 is the same as that for Alternative 4. Therefore, the potential impacts for this segment are the same as discussed for Alternative 4.

5.6.2 Alternative 5 – Central Segment

The Central Segment for Alternative 5 is located within Sutter and Placer counties. It traverses two watersheds: Curry Creek and Pleasant Grove Creek. The total length of this segment is approximately 30,500 feet along the centerline of the corridor. There are no interchanges along this segment.

Amount of Impervious Area. The estimated amount of impervious area associated with this segment is 78 acres. Approximately 60 and 19 acres are within the Curry Creek and Pleasant Grove Creek watersheds, respectively.

The increase in impervious area would result in increased peak flows and runoff volumes. Although the amount of impervious area is relatively small compared with the total drainage area of the watersheds, BMPs would be required to attenuate peak flows to less than pre-project levels and retain the additional runoff. The PCFCWCD's Stormwater Management Manual requires that peak flows be reduced to

approximately 90 percent of pre-project conditions for 2-year through 100-year storm events. The Stormwater Management Manual also requires that retention be provided for flow volumes exceeding pre-project flow volumes. Also, Sutter County's General Plan requires that new development must adequately mitigate increases in stormwater flows and volume to avoid increase in downstream flows and must conform to the appropriate county requirements and standards governing drainage.

The total width of the proposed Parkway corridor is approximately 1,000 feet in the Central Segment. Accounting for the six travel lanes and the Parkway's shoulders, leaves approximately 888 feet of unpaved area along the length of the Parkway in this segment where BMPs such as detention basins and swales could be located either within the median or between the proposed shoulders and the corridor edge.

Stream Crossings. Three stream crossings are within this segment: one on Curry Creek and two on Pleasant Grove Creek. The Curry Creek and Pleasant Grove Creek crossings coincide with floodplain crossings; therefore, the road would be elevated on a bridge.

Canal Crossings. This segment does not cross any existing canals. Therefore, there would be no potential impacts to canals.

Length of Floodplain Crossed. The total length of 100-year floodplain crossed by this segment is approximately 6,300 feet.

Similar to the Central Segment for Alternative 5, this segment crosses the 100-year floodplain associated with Curry Creek, which is essentially an extension of the floodplain associated with the Western Segment of Alternative 4. Therefore, the elevated road would continue approximately 4,000 feet into the Central Segment. The elevated road would be supported by columns. The columns would be placed outside the ordinary high water elevation of the creek. The bridges and columns would be designed and constructed to minimize potential impacts to the floodplain.

In addition, the eastern portion of this segment crosses the 100-year floodplain associated with Pleasant Grove Creek. These two crossings are the same as those described for the Central Segment of Alternative 1.

Angle of Crossing of Floodplain. This segment crosses the Curry Creek floodplain at approximately a 45-degree angle. Both of the Pleasant Grove Creek floodplain crossings area at approximately 90-degree angles.

Total Area of Designated Floodplain Crossed. As described above, this corridor crosses through several floodplains. The total amount of 100-year floodplain area crossed by this segment is approximately 107 acres. In addition, this segment crosses approximately 28 acres within the 500-year floodplain.

5.6.3 Alternative 5 – Eastern Segment

The Eastern Segment of Alternative 5 is the same as that for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.7 COMPARISON OF ALTERNATIVES

The five build alternatives are summarized and ranked in Table 5-3. The No-Build Alternative is not shown in Table 5-3 because no impacts would be associated with this alternative. A ranking of 1 correlates to the lowest number of impacts in any particular input category.

Table 5-3
Summary of Alternative Ranking: Hydrology and Floodplains

Alternative	Total Length		Impervious Area		Stream Crossings		Canal Crossings		Watersheds	
	Feet	Rank	Acres	Rank	Number	Rank	Number	Rank	Number	Rank
1	85,500	5	745	5	15	4	1	0	5	2
2	81,300	3	737	3	11	3	1	0	5	2
3	82,400	4	740	4	10	2	1	0	5	2
4	75,500	2	624	2	9	1	1	0	4	1
5	75,000	1	622	1	9	1	1	0	4	1

Alternative	100-Year Floodplain Crossing		500-Year Floodplain Crossing		100-Year Floodplain Crossed		Minimum Angle of Crossing		
	Acres	Rank	Acres	Rank	Feet	Rank	Degrees	Rank	
1	269	1	189	3	6,900	1	0	2	
2	302	2	201	4	7,600	2	45	1	
3	317	3	201	4	8,900	3	45	1	
4	370	4	96	2	21,600	4	45	1	
5	372	5	87	1	21,600	4	45	1	

5.7.1 Amount of Impervious Area

With respect to the amount of impervious area, Alternative 1 would have the largest increase in impervious area because it is the longest corridor and has the greatest number of interchanges, while Alternative 5 would have the least (i.e., shorter corridor length and fewer interchanges). However, the difference between these two alternatives is only 123 acres. Approximately 66 (Alternatives 4 and 5) to 76 percent (Alternatives 1, 2, and 3) of the total impervious area associated with the project would be created by the proposed interchanges.

As summarized in Table 5-4, Alternatives 1 and 2 would create less impervious area in Curry Creek than Alternatives 3, 4, and 5 because these alternatives would have shorter roadway lengths through the Curry Creek watershed. The amount of impervious area that would be created by the project for these alternatives would range from approximately 0.4 to 0.6 percent of the total Curry Creek drainage area.

All of the alternatives would create approximately the same amount of impervious area (approximately 0.4 square mile) within the Pleasant Grove Creek watershed, because the corridor alignments for all alternatives are similar and they all would include two interchanges. This amount would be approximately 0.8 percent of the total Pleasant Grove Creek watershed area.

Alternatives 4 and 5 would create less impervious area (approximately 0.3 square mile) in the Natomas Basin than Alternatives 1, 2, and 3 (approximately 0.5 square mile). The difference is primarily because Alternatives 4 and 5 would include two interchanges and Alternatives 1, 2, and 3 would include three interchanges within the watershed. The amount of impervious area that would be created by the project would range from approximately 0.4 to 0.6 percent of the total Natomas Basin drainage area.

Alternatives 1, 2, and 3 would contribute less than 0.1 square mile of impervious area in the NEMDC watershed, which would be less than 1 percent of the total NEMDC watershed area. Alternatives 4 and 5 do not traverse the NEMDC watershed and therefore the Parkway would not contribute any impervious area in this watershed; however, the proposed Sankey Road re-alignment would create less than 5 acres of impervious area within the NEMDC watershed.

Because the proposed corridor alignment and one interchange would be the same for all alternatives, all of the alternatives would create the same amount of impervious area within the Auburn Ravine watershed, approximately 0.2 square mile. This would be about 1 percent of the total drainage area of Orchard Creek and only about 0.2 percent of the total Auburn Ravine watershed.

All of the alternatives would create the same amount of impervious area within the Pleasant Grove Creek and Auburn Ravine watersheds. Alternatives 1, 2, and 3 would create slightly more impervious area in the Natomas watershed, while Alternatives 4 and 5 would create slightly more impervious area in the Curry Creek watershed. With the exception of the small amount of impervious area associated with the Sankey Road re-alignment, Alternatives 4 and 5 would not create any new impervious area within the NEMDC watershed.

5.7.2 Stream and Canal Crossings

Alternatives 4 and 5 have the fewest stream crossings (12 crossings), while Alternative 1 has the most (18 crossings). Alternatives 4 and 5 cross Curry Creek, Pleasant Grove Creek and tributaries to Orchard Creek. Alternatives 1, 2 and 3, cross these same creeks in different locations, but also cross Steelhead Creek.

Table 5-4
Amount of Parkway Impervious Area in Watersheds

Alternative	Total Watershed Area (sq. mi.)[1]	Area in Corridor (sq. mi.)[2]	Parkway Impervious Area (sq. mi.)[3]	Parkway Impervious Area as Percentage of Watershed
Natomas Watershed				
1	83	0.6	0.5	0.6%
2	83	0.6	0.5	0.6%
3	83	0.6	0.5	0.6%
4	83	0.5	0.3	0.4%
5	83	0.5	0.3	0.4%
Steelhead Creek (NEMDC) Watershed[4]				
1	9	0.8	0.09	1%
2	9	0.6	0.07	0.8%
3	9	0.4	0.05	0.6%
4	9	0	0	0
5	9	0	0	0
Curry Creek Watershed				
1	17	0.4	0.05	0.3%
2	17	0.5	0.05	0.3%
3	17	0.7	0.08	0.5%
4	17	0.9	0.11	0.6%
5	17	0.9	0.11	0.6%
Pleasant Grove Creek Watershed				
1	47	1.0	0.4	0.8%
2	47	1.0	0.4	0.8%
3	47	1.0	0.4	0.8%
4	47	1.0	0.4	0.8%
5	47	1.0	0.4	0.8%
Auburn Ravine Watershed				
1-5	79	0.2	0.16	0.2%

Notes:

1. Total watershed areas based on information from CH2M Hill (1993).
2. Area in corridor is based on length and width of corridor, plus interchanges and Sankey Road realignment.
3. Parkway impervious area includes road surface (6 lanes at 12 feet), shoulders (4 at 10 feet), interchanges and Sankey Road realignment.
4. While the Parkway corridor and roadway would not traverse the NEMDC watershed for Alternatives 4 and 5, there would be a small amount of impervious area created by the re-alignment of Sankey Road (approximately less than 5 acres).

Alternatives 1, 2, and 3 would cross the Natomas East Main Drainage Canal and Alternatives 4 and 5 would cross the Pleasant Grove Creek Canal. Each of the proposed canal crossings would likely require the placement of fill material (either an embankment or piers) within wetlands or waters associated with the canal crossings. The wetlands and open water of the canal at the southern crossing (Alternatives 1, 2, and 3) (Natomas East Main Drainage Canal) appear to be more than 150 feet wide and would also need to span a railroad ROW. The northern crossing (Pleasant Grove Creek Canal) (Alternatives 4 and 5) appears similar (about 150 to 200 feet) but the distance between the railroad ROW and the canal is greater. Because the estimated canal widths are approximately the same or wider than a typical bridge span, it is very likely that columns or an embankment would be required at one or both locations.

5.7.3 Length of Floodplain Crossed

Alternative 1 crosses the 100-year floodplain the least (approximately 6,900 feet), while Alternatives 4 and 5 cross the most (21,600 feet). This suggests that Alternatives 4 and 5 would require more columns to be placed within the floodplains and therefore the potential for significant encroachment would be greater for these alternatives.

When the Sankey Gap is removed from the 100-year floodplain sometime in the future, the amount of floodplain crossed by Alternatives 4 and 5 would be reduced on the order of approximately 8,000 feet. Even with removal of the Sankey Gap, Alternatives 4 and 5 would still cross considerably more floodplain than Alternatives 1, 2 and 3.

5.7.4 Angle of Crossing of Floodplain

Alternative 1 crosses Steelhead Creek longitudinally for approximately 7,000 feet; this may require relocation of the creek. Alternative 1 is the only alternative with a longitudinal crossing. The minimum angle of crossing for the other alternatives is 45 degrees in the Central Segments.

5.7.5 Total Area of Designated Floodplain Crossed

Alternative 1 would cross the least amount of 100-year floodplain (269 acres) and Alternative 5 would cross the most (372 acres). This difference is primarily due to the amount of 100-year floodplain designated within the Natomas Basin. In the future, when Sankey Gap is eliminated from the 100-year floodplain, there will be very little difference in the total amount of floodplain crossed by the alternatives.

While there is not much difference between the total amounts of floodplain crossed by the various alternatives, (103 acres), there is a difference in where the alternatives cross the Curry Creek floodplain. As summarized in Table 5-5, Alternatives 1 and 2 cross the Curry Creek floodplain farther upstream within the watershed than do Alternatives 3, 4, and 5. Potential impacts would be greater for floodplain crossings that are lower in the watershed. For example, floodplains are wider and therefore crossings would be longer. Any encroachment or fill placed in the floodplain would have the potential to impact upstream areas; therefore, crossings higher in the watershed (Alternatives 1 and 2) would have fewer impacts to floodplains.

Until the Sankey Gap is addressed and removed from the 100-year floodplain, the Western Segment associated with Alternatives 3, 4, and 5 is almost entirely within the 100-year floodplain. This limits the opportunities to site BMPs within the corridor for attenuation of peak flows and retention of runoff volumes.

Table 5-5
Distribution of Curry Creek Floodplain Crossed by Alternative

Alternative	Total Floodplain Area (sq. mi.)	Floodplain Downstream of Crossing (sq. mi.)	Floodplain in Corridor (sq. mi.)	Floodplain Upstream of Crossing (sq. mi.)	Percent of Floodplain Upstream of Crossing	Floodplain Crossing Length (feet)
1	3	2.7	0.1	0.2	6	5,009
2	3	2.3	0.1	0.6	20	7,400
3	3	1.3	0.1	1.6	53	7,900
4	3	0.8	0.2	2	67	21,600
5	3	0.8	0.2	2	67	21,600

6.0 SECONDARY AND INDIRECT IMPACTS

Recent FHWA, EPA, and Caltrans guidance on growth inducement (Mare Island Accord, 2006) advises that analysis of potential impacts associated with growth should include an evaluation of the effects of growth on resources of concern. The following discussion presents a qualitative evaluation of potential secondary and indirect impacts of Anticipated Growth (see below for definition) on human and environmental resources in the study area.

The Council on Environmental Quality (CEQ) provided clarification of the terminology "indirect impacts" when it issued the National Environmental Policy Act in 1978. Secondary and indirect impacts are defined as impacts "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." Moreover, indirect effects ". . . may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems."

A key term used in this section is "Anticipated Growth." This is defined as the growth that is anticipated in the study area as described in the relevant General Plans and adopted regional forecasts, such as the SACOG Blueprint scenario, including additional growth that may occur as a result of major new development proposals that have not yet been formally approved. It is possible that this additional growth may accelerate the rate of buildout in the study area, but it is not ultimately expected to result in any greater levels of development than is presented in adopted regional forecasts.

The following discussion considers secondary and indirect impacts on hydrology and floodplains that may occur as a result of direct impacts associated with the Parkway, and also as a result of anticipated growth. The study area for the analysis of secondary and indirect impacts on hydrology and floodplains is shown in Figure 6-1.

6.1 GROWTH INDUCEMENT SCENARIO

NEPA and CEQA both require environmental analyses to consider the effects of a project on growth. Caltrans defines growth inducement as the relationship between a proposed project and growth. This section summarizes the relationship between the Placer Parkway Corridor Preservation project and regional growth, and discusses potential secondary and indirect effects of the project related to growth inducement.

Placer Parkway would be growth inducing, as a component of the rapidly evolving urban matrix in western Placer County. While the project study area is predominately undeveloped at this time, parts of the study area are within local General Plan designations allowing urban growth. In addition, there are numerous proposals for major new development projects in and around the study area depicted on Figure 6-2 that are currently in various stages of the approval and entitlement process. Portions of the surrounding area (especially northern Sacramento County and southwestern Placer County) have developed very rapidly over the past several decades. This has occurred as a result of many factors, including continuing net population growth statewide, strong employment growth in the Sacramento region, relative housing affordability, and location amenities.

Population and employment growth projections for California and the Sacramento Region in general, and for south Sutter County and southwestern Placer County in particular (described in detail in the Tier 1 EIS/EIR Community Impact Assessment), indicate that that development pressures in the project vicinity will remain relatively intense, irrespective of the Parkway. Between 1950 and 2000, the California population more than tripled. During the same period, population in the six-county SACOG region increased by more than 800 percent (DOF, 2006). Projections and established goals and policies from a wide range of sources, including SACOG, Placer, Sacramento and Sutter counties, and the Cities of

Roseville, Rocklin and Lincoln, confirm that relatively high rates of population and employment growth and housing and commercial development are anticipated in the six-county region by 2050. Between 2000 and 2050, California's population is expected to increase from approximately 34 million to 55 million. During the same time period, SACOG projects that the region's growth will double, from 1.9 million in 2000 to 3.95 million in 2050, with the Roseville-Rocklin-Lincoln area remaining one of the fastest growing areas in the region (Levy and Doche-Boulos, 2005; SACOG, 2006).

Placer Parkway would be growth inducing because it would help support changes in the amount of growth beyond current general plan levels, and could influence the pace and location of some development. It is likely that Placer Parkway could help to implement the various specific development proposals in the study area, since it would serve to relieve traffic congestion associated with these proposals. Furthermore, the Parkway could affect the timing of development in the vicinity of the proposed interchange locations, particularly those proposed near vacant land adjacent to rapidly developing areas or areas now proposed for urban development. However, as the Parkway would be a limited-access road located in an area that is already undergoing extensive and rapid urbanization, its potential to facilitate growth that would not have otherwise occurred is limited. It could result in different land uses, or more intensive land uses, in the vicinity of interchanges where land use plans are still being developed and have not yet been approved. Also, it could hasten the buildout of planned commercial and industrial uses, especially in the Sunset Industrial Area and proposed Placer Ranch Specific Plan area, as well as in the Sutter Pointe Specific Plan area.

In the longer term, improved access provided to lands in the Western and Eastern segments could be a factor in stimulating additional growth and development in areas west of SR 70/99 not protected by the Natomas Basin HCP, or north of the Sutter Pointe Specific Plan area, or north of Sunset Boulevard West in Placer County. Although growth is anticipated in these areas over time (as reflected in SACOG's preferred Blueprint scenario, the Sutter County General Plan, and the City of Lincoln General Plan), such development is not reflected in general plans at present and has not been formally proposed by landowners. By providing improved access to adjacent areas, Placer Parkway could be one of many factors that would encourage growth in these areas sooner than this might otherwise occur.

The factors influencing growth in the region are complex. The Parkway is one of several major urban development proposals in the region. While Placer Parkway would contribute to regional growth, including growth beyond the level identified in current general plans, it is not feasible to quantify the amount of its contribution. A single new transportation facility such as the Parkway is only one of the many factors contributing to regional growth, and it is speculative to assign a particular quantity of growth to any one factor.

Furthermore, several factors serve to limit the likely effect of the Parkway on growth, including the following:

- No interchanges are proposed for any areas that are not already approved or proposed for development;
- All approved and proposed residential development that has not already been built is projected to be built out prior to 2020, when the Parkway is proposed to open; and
- Real estate market pressures in the area have been and continue to be intense without the Parkway, and local government jurisdictions have been supportive of processing development applications in spite of anticipated regional transportation challenges.

It is unlikely that the choice of one Parkway alternative over another would substantially change expected patterns of growth and development in the project study area and the surrounding region. In the Western Segment, all corridor alignment alternatives would provide new access to an area that is currently

undeveloped farmland, but that is proposed for mixed use urban development. The three more southerly alignments (Alternatives 1, 2, and 3) would provide two interchanges in the South Sutter Pointe Specific Plan area, while the more northerly alignments (Alternatives 4 and 5) would provide only one interchange in this area, approximately one mile farther north of the more southerly alignments in the Western Segment. Since none of the alternative alignments would include any intersections in the Central Segment, there would be little difference in growth inducement effects among the alternatives in this segment. In the Eastern Segment, two interchanges are proposed within the existing Sunset Industrial Area Plan, in an area proposed for the Placer Ranch Specific Plan. While these interchanges would provide new access to a currently undeveloped area, this area is planned for growth. In the Eastern Segment all alternatives would follow an identical alignment, so there would be no differences in growth inducement effects among the alternatives.

A future interchange at Watt Avenue could be growth inducing, because it would provide major new regional access to a portion of the project study area that is currently rural and undeveloped, although both conceptual interchange locations are now surrounded by formal development proposals or land controlled by development interests. A Watt Avenue interchange is not proposed as part of the project.

6.2 SECONDARY AND INDIRECT EFFECT EVALUATION

6.2.1 No-Build Alternative

Under the No-Build Alternative, land for the Parkway would not be acquired and the Parkway would not be constructed. There would not be any secondary or indirect impacts on hydrology and floodplains under the No-Build Alternative.

6.2.2 Build Alternatives

Construction and operation of the Parkway and anticipated growth could result in secondary and indirect impacts on hydrology and floodplains.

Anticipated growth would result in the creation of additional impervious surfaces and increased run-off in the study area that would most likely not have occurred in the absence of such growth. As the amount of land that can be developed decreases, the potential for land use changes and floodplain encroachment increases. If land outside of floodplain limits becomes less available, there may be a tendency for development to encroach into the floodplain, causing further adverse impacts. These impacts would be direct impacts of other projects not associated with Placer Parkway, and would be required to be analyzed as part of independent environmental review. Although it is not feasible to perform a detailed evaluation of these projects at this stage as specific design details are not known, potential impacts are taken into account in the Placer Parkway 2040 Cumulative analysis (see Section 7.2). This analysis evaluates a 2040 cumulative scenario, which is considered to be an appropriate projection of future development. This scenario includes full-residential build-out in Placer County west of Sierra College Boulevard, including general plan areas and major developments, and employment and population growth in line with SACOG forecasts. It assumes levels of growth and development will occur at the higher end of a potential feasible range and therefore represents a reasonable maximum development scenario for which cumulative and secondary and indirect impacts have been analyzed.

Although it is not possible to predict with any certainty where new impervious surfaces may be created, it is reasonable to assume that impacts associated with reduction in pervious land cover and increased run-off, either directly associated with the construction of the Parkway or as a result of growth induced by the Parkway could adversely affect floodplains and hydrology. This could occur in a number of ways:

- Contamination of surface water and groundwater through increased run-off of pollutants;
- Increased peak flows and runoff volumes cause flooding downstream;
- Declining levels of developable land could place additional pressure for continued floodplain encroachment, with its associated adverse effect on wildlife and increased risk of flooding;
- Impacts on aquatic wildlife as a result of increased sedimentation from run-off; or
- Impacts on aquatic wildlife as a result of constriction or blockage of natural stream flow associated with stream crossings.

7.0 CUMULATIVE IMPACTS

7.1 CUMULATIVE IMPACT SCENARIO

Analysis of cumulative impacts is required under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that are the focus of cumulative impact analysis. The CEQ's regulations (CEQ, 1987) explicitly state that cumulative impacts must be evaluated along with the direct and indirect effects of each alternative.

CEQA defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, §15355). Stated another way, "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the environmental document together with other projects causing related impacts" (CEQA Guidelines, §15130). Although a project may cause an individually limited or individually minor incremental impact that, by itself, is not significant, the increment may be "cumulatively considerable" and thus significant.

FHWA has requested that cumulative conditions for the analysis of project alternatives in the Tier 1 EIS/ EIR for the Parkway be based on development levels that are 20 years beyond the projected opening of the project. For planning purposes, Placer County Transportation Planning Agency (PCTPA) has identified 2020 as the opening year of the Parkway. Cumulative impacts are therefore being evaluated for the year 2040. This 2040 scenario includes the following projects (see Figure 6-2):

- Full build-out of all residential land in Placer County west of Sierra College Boulevard, including current general plan areas and the following major development proposals in West Placer County:
  - The Creekview and Sierra Vista Specific Plan areas in Roseville's Memorandum of Understanding (MOU) Remainder Area
  - The Sphere of Influence (SOI) expansion areas of Lincoln
  - The Placer Vineyards, Regional University and Community, and Placer Ranch Specific Plans in unincorporated Placer County
  - The Curry Creek Community Plan area
- Growth in retail employment in Placer County that balances the growth in residential development by matching SACOG's countywide estimate of about 0.32 employee per dwelling unit from their 2025 forecasts.
- Growth in total employment levels in Placer County that balances the growth in residential development by matching SACOG's 1.3 employees per dwelling unit from their 2025 forecasts.
- Full build-out of the residential development in the Sutter Pointe Specific Plan area along with a non-residential development level that balances the residential development in that area.

- Estimated 2040 developments in all other portions of SACOG's six-county region based on assuming a constant rate for the development growth between 2005 levels and the 2050 Preferred Blueprint scenario for each of SACOG's traffic analysis zones (TAZs).

7.2 CUMULATIVE IMPACTS EVALUATION

7.2.1 No-Build Alternative

Under the No-Build Alternative, land would not be acquired for the Parkway and the Parkway would not be constructed. There would not be any contribution by the Parkway to cumulative impacts under the No-Build Alternative.

7.2.2 Alternatives 1 Through 5

The combined effects of floodplain encroachment associated with multiple projects could exacerbate adverse impacts associated with individual projects, through cumulative loss of pervious surfaces and corresponding increase in the volume and rate of runoff due to reduced percolation of surface water. This also could lead to increased flooding risk as land throughout the area covered under the cumulative impact scenario is converted from pervious surface to development, and overall peak flow rates and runoff volumes are increased. Cumulative impacts can also be caused by acceleration of runoff caused by improved conveyance of stormwater through streets, gutters and storm sewer facilities. The potential adverse impacts on hydrology and floodplains associated with this development could result in significant cumulative impacts.

The amount of impervious area associated with Placer Parkway would be roughly one square mile (ranging from approximately 0.98 square mile for Alternative 5 to approximately 1.2 square miles for Alternative 1). While this is a very small amount compared to the total area of the watersheds and the project's contribution to peak flows and volumes in the creeks would be expected to be small, when combined with potential upstream flow increases, the cumulative impacts could still be significant.

Mitigation strategies have been identified to reduce these impacts to less-than-significant levels. These include strategies to avoid impacts by design (i.e., strategies to limit impacts from construction activities, and site planning and design features to avoid impacts), implementation of Best Management Practices, and participation in the City of Roseville's planned regional stormwater retention facility (Reason Farms). This facility has been specifically planned to alleviate potential downstream flooding.

In addition, Sutter County and Placer County General Plan policies and programs are intended to offset the potential direct and cumulative flooding and water quality problems that may arise from development. New developments are required to detain onsite drainage such that the rate of runoff is maintained at pre-development levels. Because peak runoff rates from new development would be maintained at pre-development levels, there would be no increases in peak flows. Both Sutter and Placer counties have ordinances that limit construction in floodplains. Given the specific policy directives of the General Plans. Given this regulatory environment, the relatively minor amount of impervious surface associated with Placer Parkway in comparison to the overall cumulative development scenario, and with development of the mitigation strategies identified in this report into enforceable mitigation measures, Placer Parkway's incremental contribution to cumulative impacts related to peak flows and floodplains would not be cumulatively considerable. Therefore, Placer Parkway's cumulative impacts associated with peak flows and floodplains would be less than significant.

8.0 WATT AVENUE INTERCHANGE

As shown on Figure 2-3, there are two general locations proposed for the Watt Avenue interchange. Because the configuration of the interchanges would not likely change by location, the increase in impervious surface would be similar for all locations. The estimated amount of additional impervious area associated with the interchange is approximately 65 acres. The first location for the interchange, associated only with Alternative 1 (Option One), would be located near and potentially cross Curry Creek and its floodplain. The other Watt Avenue interchange locations, which are associated with Alternative 1 (Option Two), and Alternatives 2 through 5, would be placed outside of the Pleasant Grove Creek floodplain limits and would not cross the creek; therefore, the potential impacts to hydrology and floodplains would be less for these options.

9.0 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION STRATEGIES

Table 9-1 summarizes the mitigation strategies to be considered for the project. Local, state, and federal agencies are requiring the development of practical mitigation measures in response to the impacts of construction activities and ongoing project operations that increase flows to existing waterways and cause flooding. The measures considered for the project have been categorized as standard conditions (SCs) and project design features (PDFs). SCs include the regulatory requirements dictated by local, state and/or federal mandates. These include the required compliance with Floodplain Management Order requirements, as well as county ordinances (e.g., flood damage and prevention ordinance). PDFs include measures that can be incorporated into the design of the project to avoid, minimize, or reduce potential environmental impacts.

Table 9-1
Potential Mitigation Measures to be Considered in Tier 2
for Impacts to Surface Water Hydrology and Floodplains

Parameter	Category	Measure
Surface Water Hydrology	SC	• Meet Sutter County, PCFCWCD and RD 1000 requirements for siting and design of facilities and hydrologic modification
	PDF	• Minimize the number of stream crossings by alternative • Minimize flow modification to streams (patterns and volume) • Mimic the natural patterns as much as possible
Floodplain Encroachment	SC	• Comply with floodplain encroachment guidance and siting/design guidance to minimize potential impacts (FHWA, USCOE, CDFG)
	PDF	• Minimize the existing floodplain affected • Use least intrusive construction methods reasonably available • Design features to avoid impacts to hydraulics and flooding • Incorporate appropriate BMPs; e.g., provide appropriate detention and retention

Notes:

BMPs = best management practices
PDF = project design feature
SC = standard condition

Based on identified impacts described above, the following key strategies for mitigation have been preliminarily identified and are discussed in further detail:

- Avoidance by design (Caltrans design guidance, consider future development in design);
- Implement Caltrans/Placer County/Sutter County BMPs (see next page for description);
- Explore potential to be included in an expansion of the City of Roseville Retention Basin; and
- Identify and address, as needed, Pleasant Grove Creek/Curry Creek Watershed Management Groups' requirements.

9.1 AVOIDANCE BY DESIGN

To reduce the environmental impacts of highways and bridges on hydrology and floodplains, the following construction, site planning, and design practices will be considered and evaluated at the preliminary design stage.

Limit Impacts from Construction Activities

- Limit temporary disturbance to minimum areas necessary for construction;
- Restore disturbed areas to pre-project conditions;
- Limit construction activities in or near creeks, including limiting amount of fill placed in creeks;
- Use the least intrusive construction methods reasonably available; and
- Avoid or minimize construction activities in floodplains (e.g., locate construction staging areas outside floodplain limits).

Site Planning to Avoid Impacts

- Avoid or minimize stream crossings if possible;
- Align roadway within the corridor to decrease impervious cover by reducing the area of pavement or number of road miles if possible;
- Provide sufficient setback distances in accordance with Caltrans and county requirements between the highway right-of-way and wetlands or riparian areas, where feasible; and
- Locate the Parkway and bridges away from sensitive areas and establish buffer zones where possible.

Design Project Features to Avoid Impacts

- Design project features (e.g., culverts, drainage systems, and bridges) to avoid increasing flow velocities that may cause or contribute to downstream erosion and flooding;
- Design project features to minimize potential for debris clogging that could cause flooding;
- Disconnect and infiltrate runoff using structural runoff controls, such as vegetated swales;
- Incorporate appropriate BMPs (e.g., provided appropriate detention and use vegetation to reduce flow velocities and peak discharges);
- For roads and bridges that cross floodplains, maximize spans and minimize piers/columns;
- Maximize the angle of stream crossing (closer to 90° is better);
- Design bridges and columns such that increase in the base flood elevation is less than one foot as specified by FEMA (see Section 3-1); and
- Mimic natural patterns as much as possible, including considering Low Impact Development (LID) whenever appropriate.

9.2 IMPLEMENT BMPS

The Caltrans Statewide Storm Water Management Plan identifies permanent and temporary BMPs that have been approved for statewide application. These BMPs must be considered during the planning and design process. BMPs that are to be incorporated into the design of new facilities as appropriate are listed below.

Consideration of Downstream Effects Related to Potentially Increased Flow

- Incorporate BMPs that will provide detention and retention such that peak flows from post-development stormwater runoff are less than pre-project peak flows in accordance with PCFCWCD's, Sutter County's, and RD 1000's criteria.

Preservation of Existing Vegetation

- Preserve existing vegetation to the extent practical.

Concentrated Flow Conveyance Systems

- Incorporate features to eliminate or reduce concentration of discharge and thereby reduce erosion. Features could include ditches, berms, dikes, and swales; overside drains; flared culvert end sections; and outlet protection/velocity dissipation devices.

Slope/Surface Protection Systems

- Incorporate vegetated surfaces that reduce flow velocities and promote infiltration to reduce the amount of runoff.

9.3 PARTICIPATE IN REGIONAL RETENTION BASIN

To help mitigate increased runoff, several projects are being developed in the region. The largest currently planned is the development of a regional stormwater retention facility called Reason Farms. The City of Roseville developed the Reason Farms retention basin to alleviate potential downstream flooding that could be caused by entitled projects and future projects within the City of Roseville or within the area covered by the Memorandum of Understanding between the City of Roseville and the County of Placer (County). The Reason Farm retention basin is located on Pleasant Grove Creek within the north-central portion of the study area, just north of the Alternative 5 Central Segment. . To accommodate the estimated retention storage volume requirements for the City of Roseville plus the West Roseville Specific Plan and MOU areas, the retention basin was designed to provide 2,530 acre-feet of storage capacity. Construction of the Reason Farms facility is anticipated to begin in 2010, with a second phase of construction planned for 2017. This plan is currently undergoing revision in connection with the Reason Farms Environmental Preserve Master Plan.

To offset the increased volume of runoff created by the Parkway, the project could participate in expansion of the Reason Farms regional retention basin. Expansion of the retention facility in the future to accommodate retention storage of other entities would be physically possible, either through extension of the embankment or through excavation. Such an expansion would require City of Roseville approval and additional environmental review.

9.4 IDENTIFY AND ADDRESS, AS NEEDED, PLEASANT GROVE CREEK/CURRY CREEK WATERSHED MANAGEMENT GROUPS' REQUIREMENTS

The Pleasant Grove/Curry Creek Ecosystem Restoration Plan (ERP) (Foothill, 2005) addresses resource management and land use in the Pleasant Grove and Curry Creek watersheds and is intended to guide future planning, restoration, and land use management activities in the watersheds. Objectives from the ERP that may be relevant and should be considered during planning, design, and construction of Placer Parkway include the following:

Objective 5.2 Protect, enhance, or recreate natural riparian processes, particularly hydrology and associated high water events, to promote the natural cycle of channel movement and sediment deposition that create a mosaic of riparian vegetation types.

Objective 6.3 Integrate meaningful ecosystem protection and restoration opportunities with the development review and approval process to encourage low impact development and transportation planning.

Objective 6.6 Ensure that flood control projects benefit habitat and wildlife while also meeting the needs of the watershed's agricultural and urban populations.

9.5 IDENTIFY AND ADDRESS, AS NEEDED, NATOMAS BASIN HABITAT CONSERVATION PLAN'S REQUIREMENTS

The purpose of the Natomas Basin Habitat Conservation Plan (NBHCP) (City of Sacramento et al, 2003) is to promote biological conservation in conjunction with economic and urban development within the basin. The goal of the NBHCP is to preserve, restore, and enhance habitat values while allowing urban development to proceed according to local land use plans. The NBHCP provides requirements regarding buffers between development and specific resource areas (e.g., garter snake habitat, wetlands, etc.), grading and construction activity restrictions, management of vegetation control along ditches and canals, and application of herbicides and pesticides. Runoff from paved areas should be directed away from wetlands. Because floodwaters can destroy giant garter snake retreats, these areas should not be inundated.

10.0 ANALYSES TO BE UNDERTAKEN IN TIER 2

The technical studies and reports that will need to be completed as part of Tier 2 include the following:

- Drainage Report consistent with Caltrans Highway Design Manual 800 (Caltrans, 2001b) and Caltrans Design Directive D-6 requirements (Caltrans, 2001a) (Note: guidance provided by Caltrans Environmental Handbook, Volume 1, Chapter 9 will also be followed once it becomes available); and
- Location Hydraulic Study and Summary Floodplain Encroachment Report consistent with Caltrans Environmental Handbook, Volume 1, Chapter 17 requirements (Caltrans, 2005).

Hydrologic and hydraulic analyses should be performed in accordance with Caltrans' Highway Design Manual (Caltrans, 2001b). The results should be compiled into a drainage report (Caltrans, 2001a). A copy of the drainage report requirements is attached as Appendix A. With respect to hydrology and floodplains, the drainage report should include the following:

- Summary of hydrologic and hydraulic analyses;
- Copy of the appropriate FEMA map(s);
- Map or table summarizing elevations of flood of record, 100-year flood and Ordinary High Water;
- Summary of modeling results; and
- Floodplain summary sheet in accordance with HDM 804.7

As discussed above, floodplain encroachment associated with Placer Parkway is not expected to be significant. In accordance with Caltrans' guidance (Caltrans, 2005) a Location Hydraulic Study will need to be performed to demonstrate that the proposed design would not significantly encroach on or impact floodplains. Since the project would not be expected to significantly increase the base flood elevation in the floodplains, a Summary Floodplain Encroachment Report would be prepared.

The Location Hydraulic Study is performed to evaluate the base flood (100-year) and potential impacts from the Proposed Action on the base floodplain. The study should be based on FEMA's Flood Insurance Study data and the FIRMs. Contents of the Location Hydraulic Study (Caltrans, 2005) should include:

- The risks associated with implementation of the action;
- The impacts on natural and beneficial floodplain values;
- The support of probable incompatible floodplain development;
- The measures to minimize floodplain impacts associated with the action; and
- The measures to restore and preserve the natural and beneficial floodplain values impacted by the action.

The Summary Floodplain Encroachment Report (Caltrans, 2005) will be based on the results of the location hydraulic study. The seven key issues to be addressed comprise the following:

1. Is the Proposed Action a longitudinal encroachment of the base floodplain?

2. Are the risks associated with the implementation of the Proposed Action significant?

3. Will the Proposed Action support probable incompatible floodplain development?

4. Are there any significant impacts on natural and beneficial floodplain values?

5. Routine construction procedures are required to minimize impacts on the floodplain. Are there any special mitigation measures necessary to minimize impacts or restore and preserve natural and beneficial floodplain values?

6. Does the Proposed Action constitute a significant floodplain encroachment as defined in 23 CFR 650.105q?

7. Are location hydraulic studies that document the above answers in the file?

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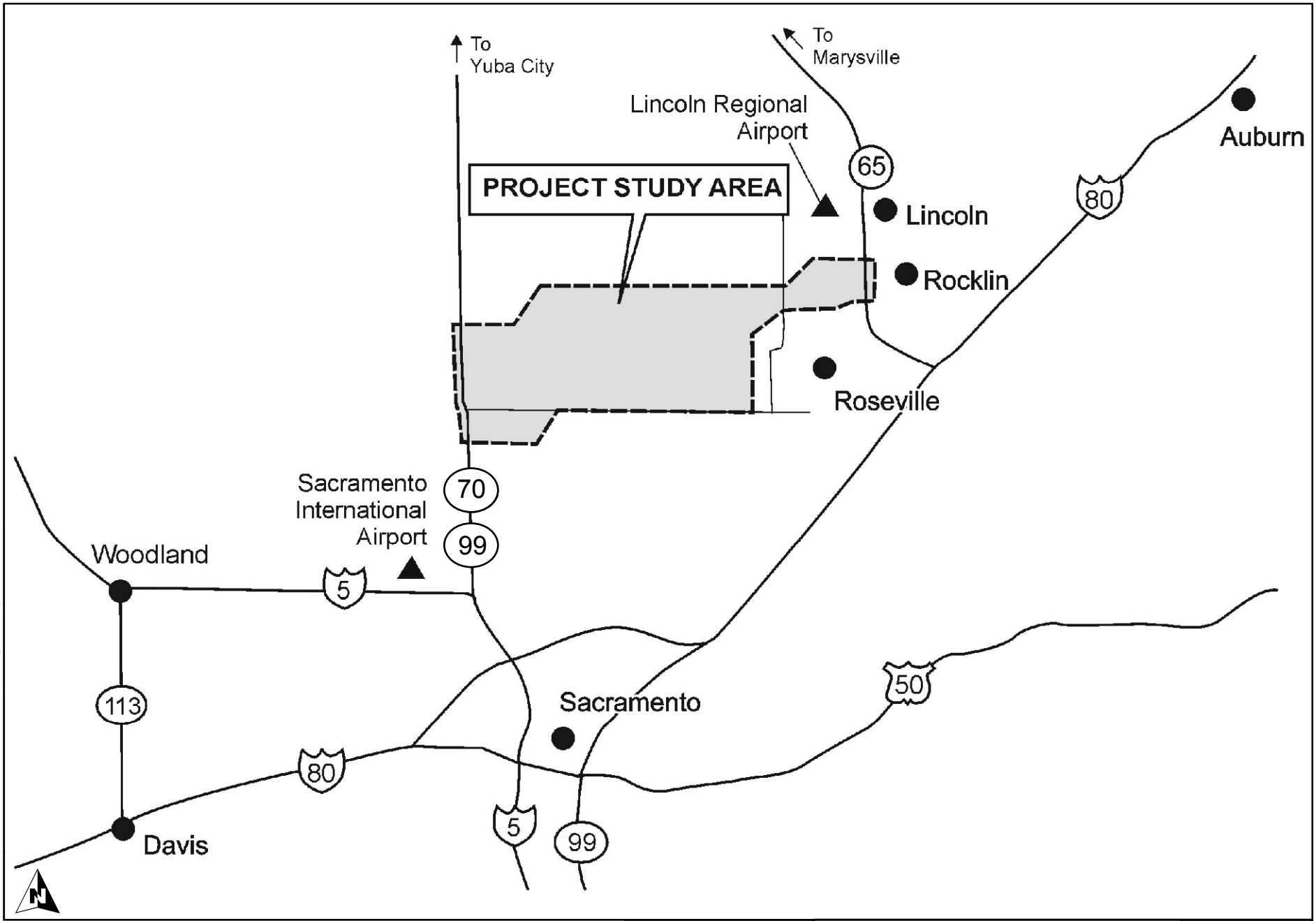

PLACER PARKWAY
CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Hydrology and Floodplain
Technical Memorandum

Project Location

Figure 1-1

June 2007

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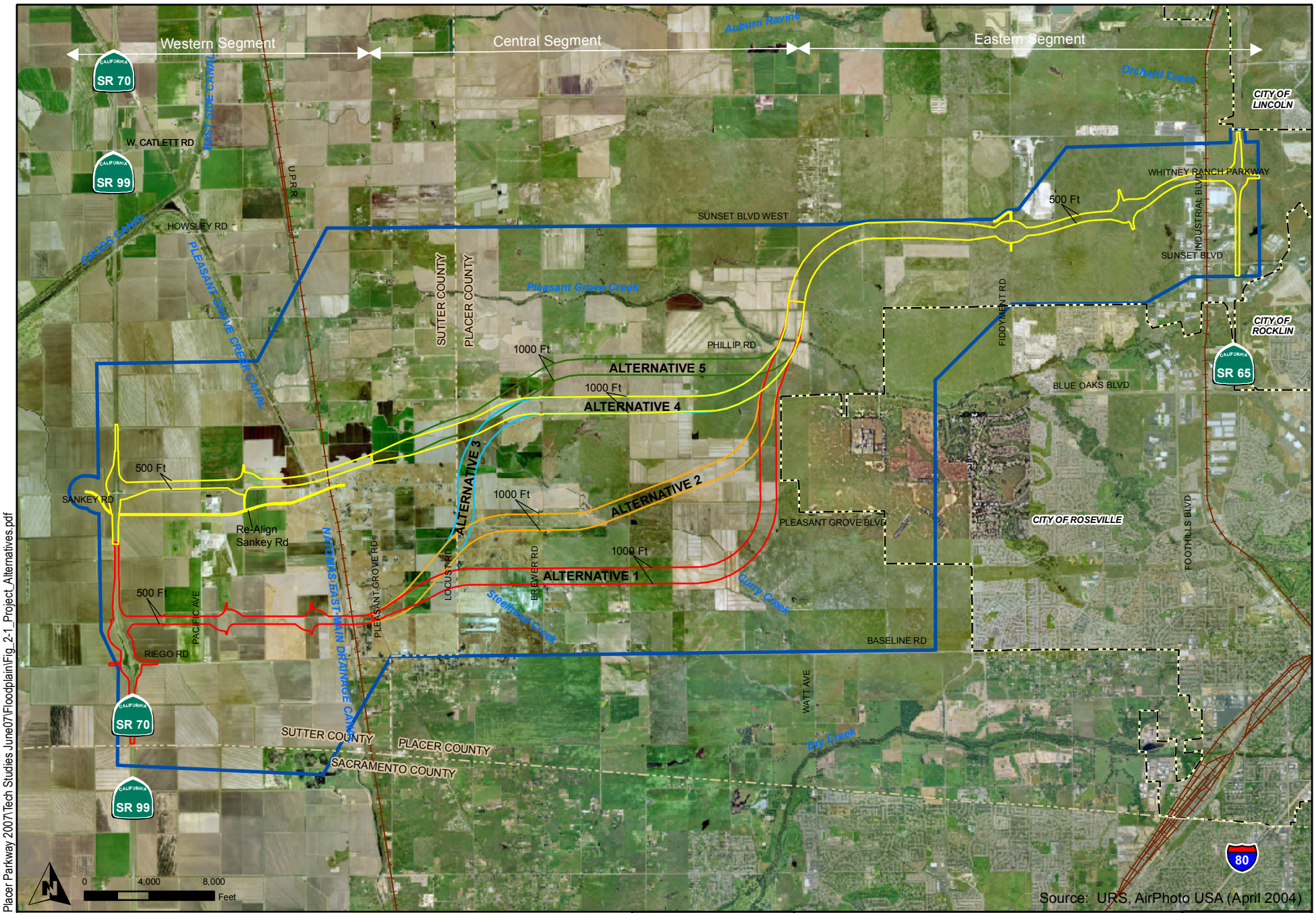

Tier 1 EIS/EIR
Hydrology and Floodplain Technical Memorandum

Project Alternatives

Figure 2-1

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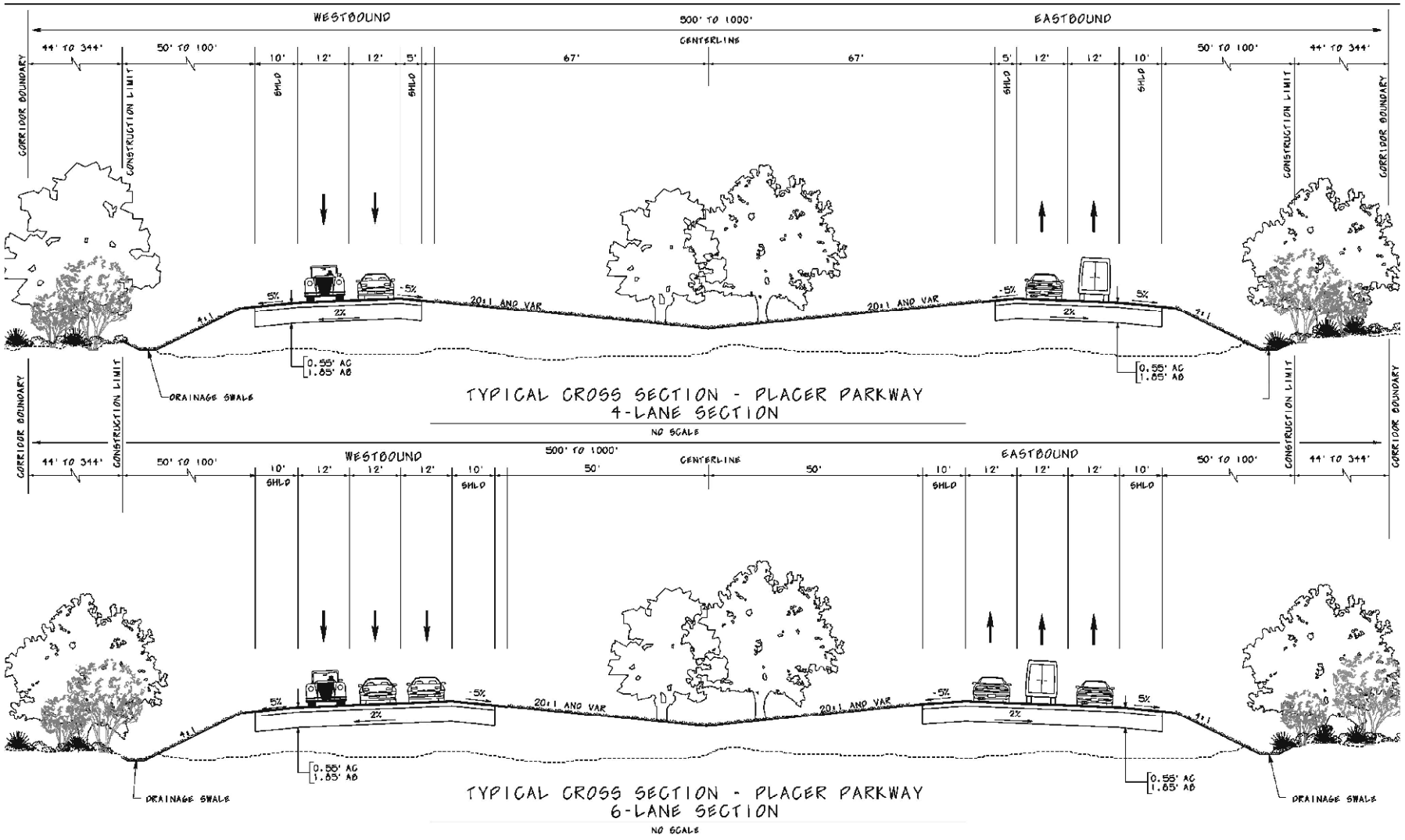

PLACER PARKWAY CORRIDOR PRESERVATION	Tier 1 EIS/EIR Hydrology and Floodplain Technical Memorandum	Typical Cross Section (Conceptual)	***Figure 2-2*** ***June 2007***

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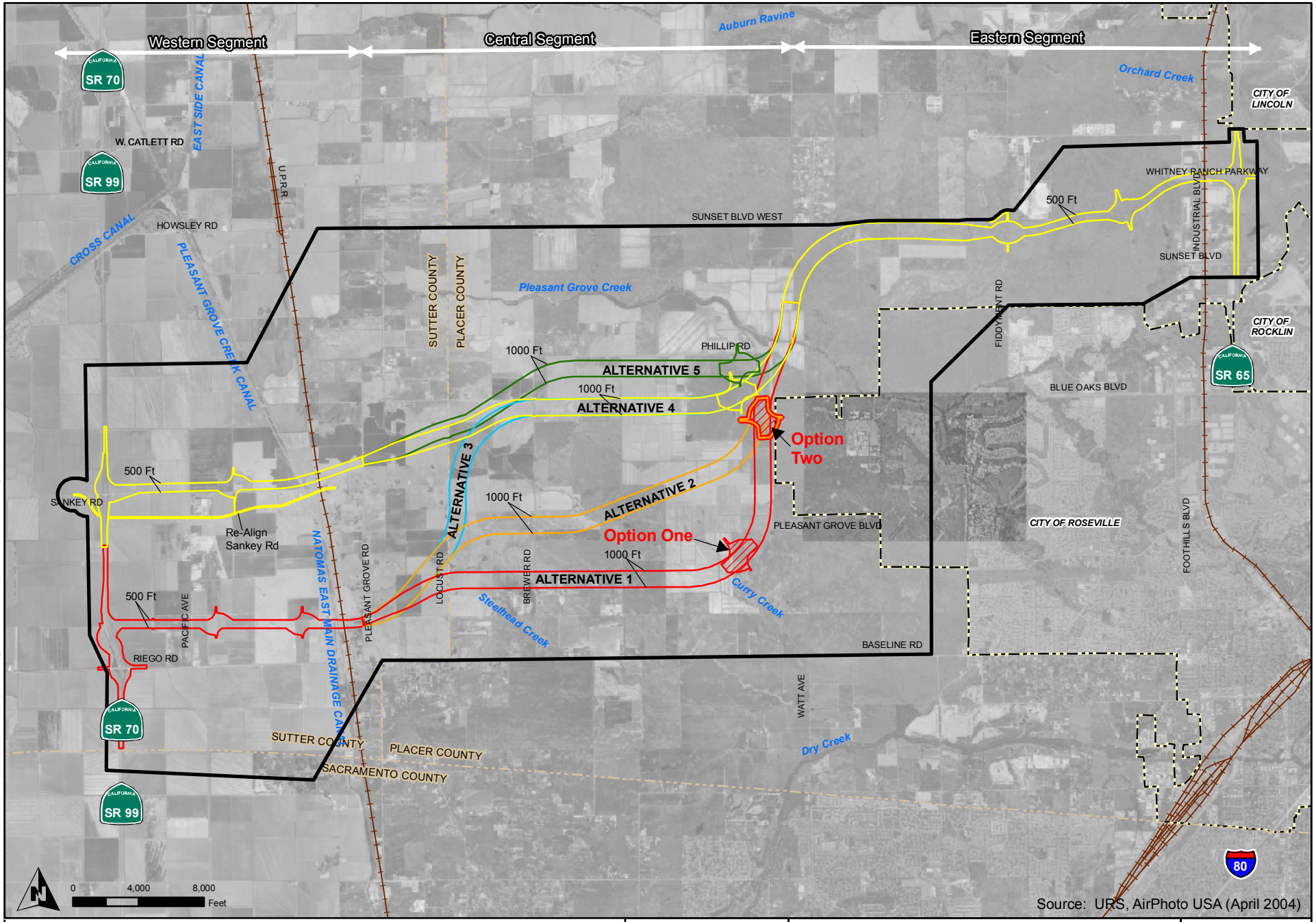

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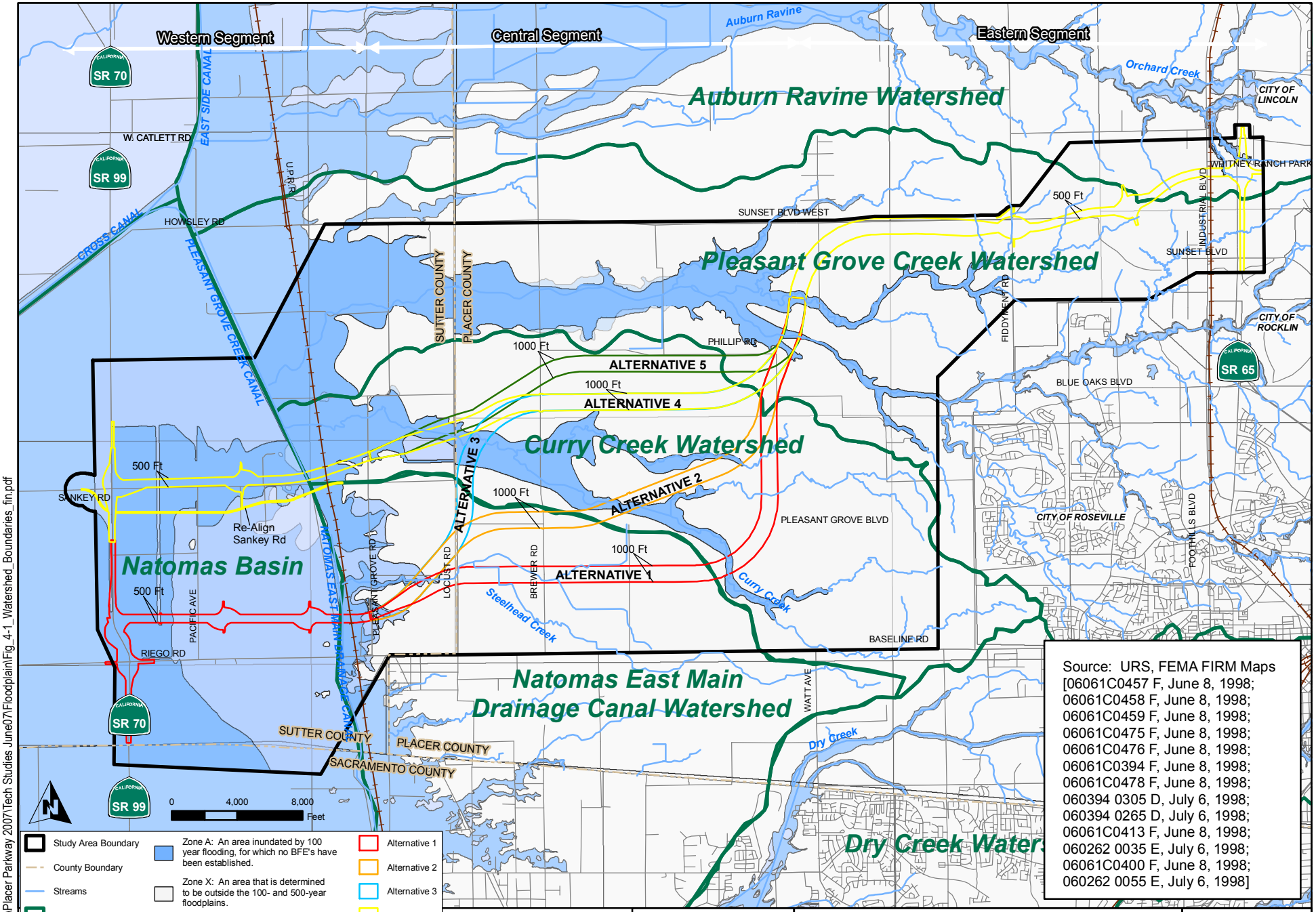
Hydrology and Floodplain Technical Memorandum

Potential Watt Avenue Interchange

Figure 2-3

June 2007



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060262 0035 E, July 6, 1998;
06061C0400 F, June 8, 1998;
060262 0055 E, July 6, 1998]

PLACER PARKWAY CORRIDOR PRESERVATION

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Hydrology and Floodplain
Technical Memorandum

Watershed Boundaries

Figure 4-1

June 2007

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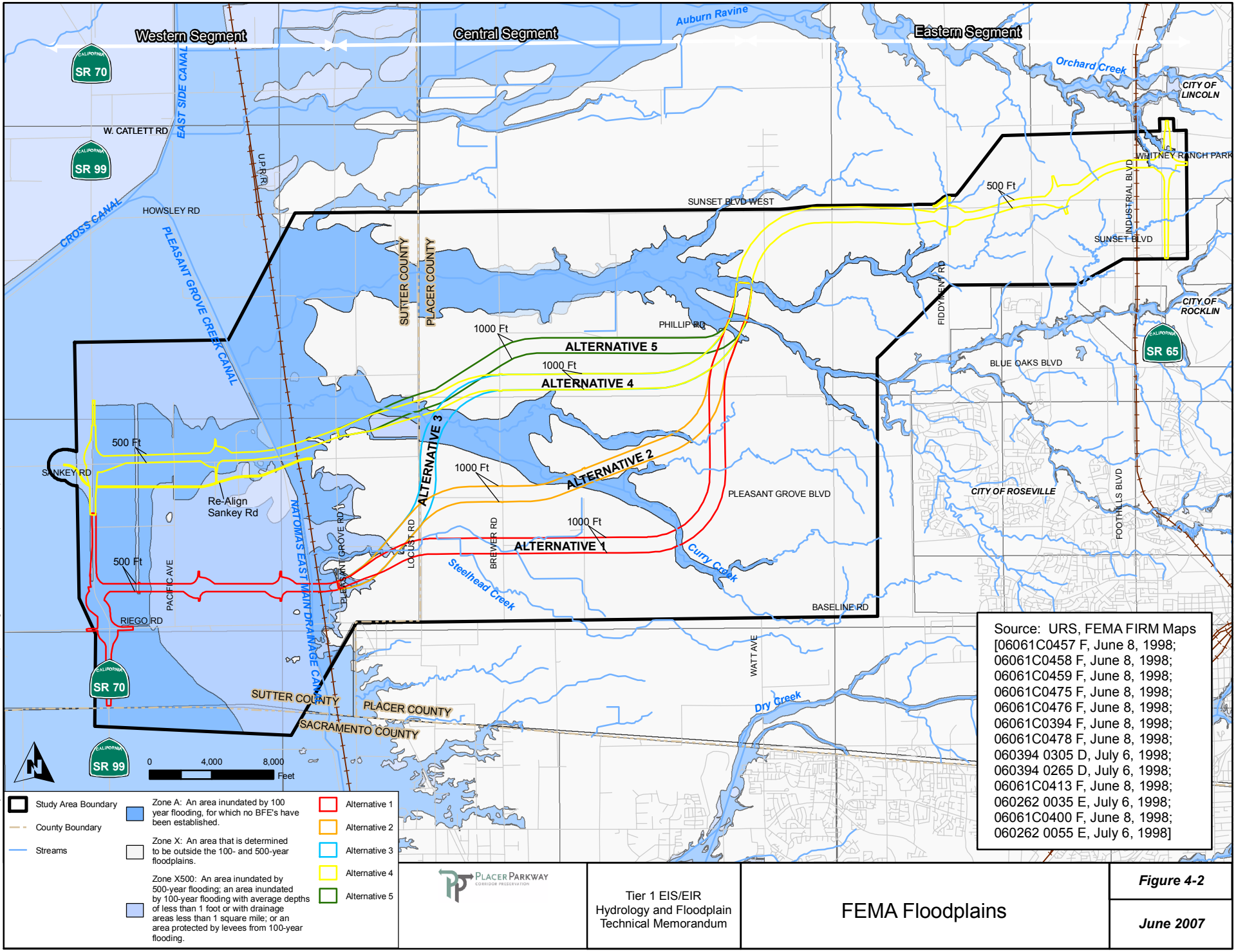

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PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
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Technical Memorandum

FEMA Floodplains

Figure 4-2

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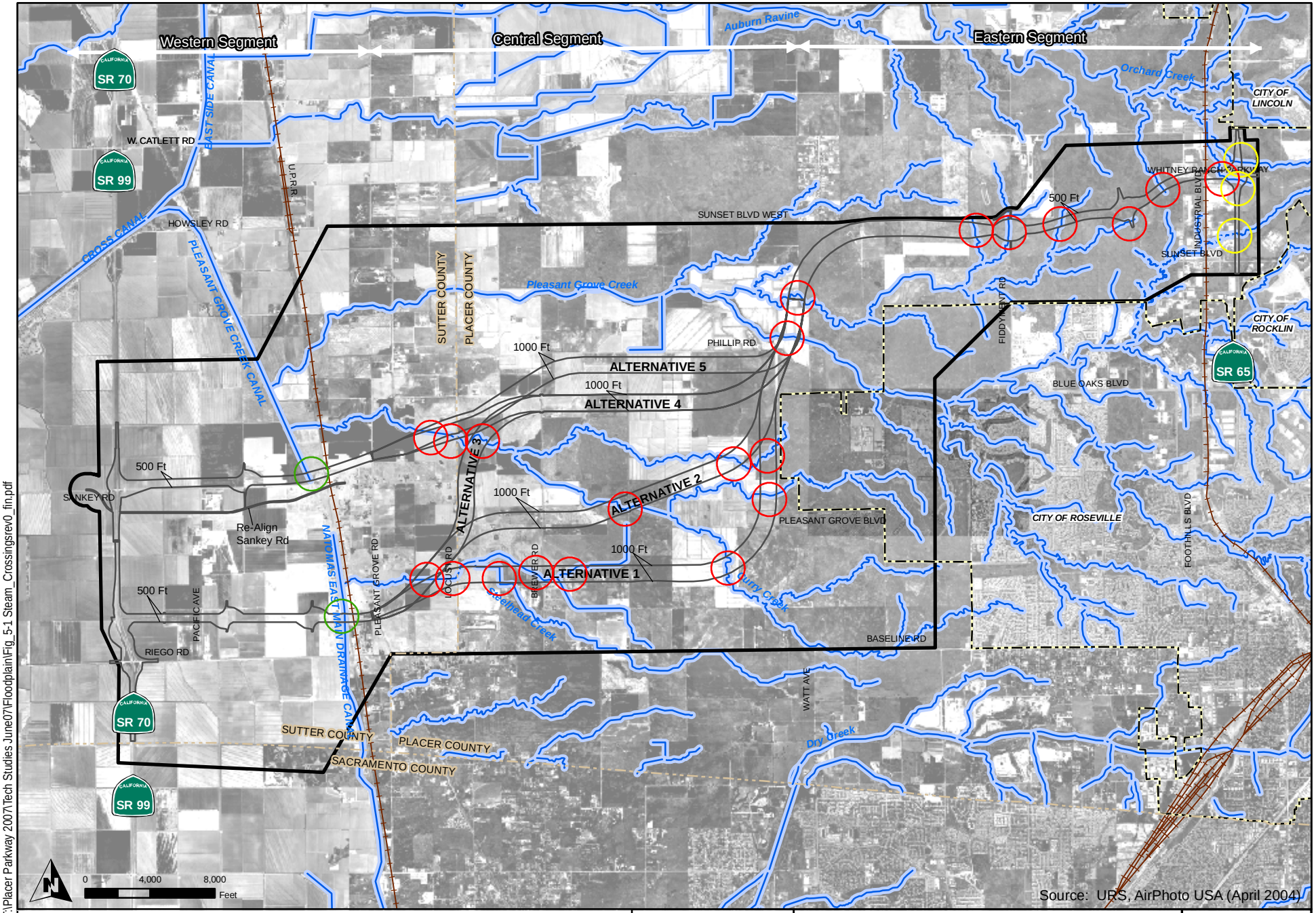

TIER 1 EIS/EIR
Hydrology and Floodplain
Technical Memorandum

Stream Crossings

Figure 5-1

June 2007

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Cities/Towns:

A - Woodland
B - Sacramento
C - Citrus Heights
D - Folsom
E - Roseville
F - Rocklin
G - Loomis
H - Lincoln
I - Wheatland
J - Auburn

Planned/Proposed Development Areas:

1 - Natomas Joint Vision Area
2 - Rio Linda and Elverta Community Plan Area
3 - McClellan Redevelopment Project Area
4 - Measure M / Sutter Pointe
5 - Placer Vineyards Specific Plan Area
6 - Riolo Vineyards Specific Plan Area
7 - Sierra Vista Specific Plan Area
8 - Curry Creek Community Plan Area
9 - Regional University Specific Plan Area
10 - Creekview Specific Plan Area
11 - Brookfield Property
12 - Placer Ranch Specific Plan Area
13 - City of Lincoln SOI Expansion Area

Nicolaus Road
Feather River
Sacramento River
Sacramento International Airport
SR 99
SR 70
SR 65
80
5
CROSS CANAL
EAST SIDE CANAL

0 8,000 16,000 Feet

County Boundary
Railroads
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Existing and Approved Development
Planned / Proposed Development (including future conservation areas)
Existing Conservation Areas
Developed Unincorporated Areas
Municipal Facilities
Study Area for Secondary and Indirect Impacts
Project Study Area Boundary
100 Year Floodplain Areas

Source: North Fork Associates;Mara Feeney Associates; Sutter County Planning Division; County of Sacramento Planning and Community Development Department; City of Sacramento Development Services Department; Sunset Industrial Area Plan; City of Lincoln Community Development Department; Natomas Basin HCP;Placer County Planning Deptartment; City of Sacramento; City of Roseville

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Hydrology and Floodplain
Technical Memorandum

Secondary and Indirect Impact Analysis Study Area

Figure 6-1

June 2007

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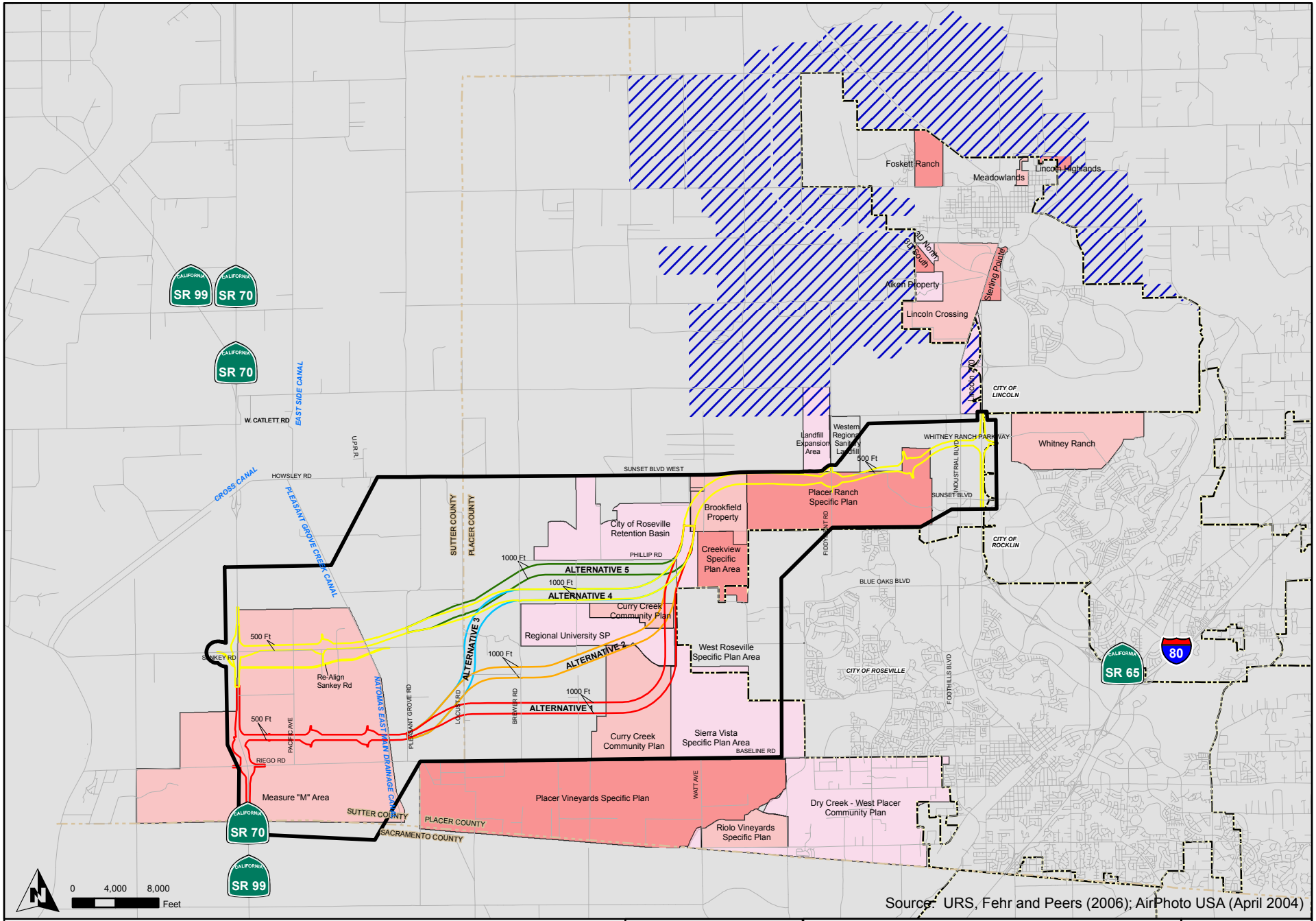

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Hydrology and Floodplain
Technical Memorandum

Planned / Proposed Development

Figure 6-2

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Appendix A
Drainage Report Outline

APPENDIX A
DRAINAGE REPORT OUTLINE

Title Page

- *Co-Route – PM/KP*
- *Project Description, EA, Date*

Responsible Registered Engineer:

- *Signature(s) and stamp(s) of Engineer(s) in responsible charge*

Table of Contents:

Summary:

- *A general discussion of the scope of the drainage work on the project, including but not limited to:*
  - *Breadth/Limitations of Report*
  - *References to Approving and Correlating documents*
  - *Any creek, stream, and river crossings and associated floodplains*
  - *Historical issues (see Hydraulic Files, local Maintenance Supervisor, and/or local residents)*
  - *Recurrence intervals used*
  - *Special circumstances affecting design (downstream facilities, fish passage, etc.)*
  - *Drainage pattern changes (if any) and mitigation measures (if any)*
  - *Methodologies employed and justification*
  - *Agencies whose facilities may be impacted by project (and the nature of the impact)*
  - *Agencies and organizations whose activities affect design (i.e., RWQCB, TRPA, Watershed groups)*
  - *Drainage system nomenclature*
  - *Storm water and erosion control strategies*
  - *Project personnel*

(Note: For less complex projects the report may be a title and summary on one page)

The following categories may or may not be applicable depending on the project situation:

Offsite:

Hydrology:

- Watershed map with contours and delineated shed boundaries
- Basin characteristics used for runoff determination (vary according to methodology)
- Assumptions
- Rainfall data (appropriate gauge and intensities)
- Points of concentration and outfalls
- Soil characteristics (if applicable, may be on separate map)
- Debris/bulking potential
- Time of concentration calculations
- Summary table by shed with A, Tc, C or CN, Q_{10}, and Q_{100}

Hydraulics:

- System number referenced to appropriate shed designation (specify by PM/KP and station)
- System controls (constrains upstream or downstream)
- Available headwater (AHW)
- HGL calculations (resulting HW compared to AHW)
- Analysis of hydraulically efficient materials (lower friction)
- Inlet/Outlet treatment
- Energy dissipation requirements (if any)

Onsite:

Roadway Drainage:

- Shed maps (with delineated boundaries and nomenclature)
- Recurrence interval selected and justification
- Points of concentration (DIs) identified by station
- Tc calculations (remember cumulative effect)
- System controls
- Grate interception/bypass calculations (on grade and in sag)
- Gutter spread and capacity calculations (table for summary)
- HGL Table or profile for networks (when applicable)
- Summary table by shed with A, Tc, C, and Design Q

Open Channels:

- *Typical section(s), design Q, WSel, longitudinal slope, and velocity calculations*
- *System controls, establishment of Manning's "n"*
- *Evaluation of need for bank stabilization and/or armoring*
- *Summary of and reference to any modeling results*

Storm Water Quality (Using Storm Water Quality Handbook, Project Planning and Design Guide):

- *Establishment of need for temporary or permanent controls*
- *BMPs selected and justification*
- *Design storm(s) and justification*
- *Storm water quality checklist (Section 3, pp. 8 and 9, May 2000 or later revision)*

Floodplain Information:

- *Copy of study prepared by Hydraulics, including:*
  - *Copy or reference to FEMA maps*
  - *Mapping or table of elevations depicting flood of record, 100-year and Ordinary High Water*
  - *Summary of and reference to any modeling results*
  - *Floodplain summary sheet per HDM 804.7 or local version.*

PLACER PARKWAY
CORRIDOR PRESERVATION

DRAFT
INITIAL SITE ASSESSMENT

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR

June 29, 2007

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

Caltrans

FHWA

Prepared by

URS Corporation

for
South Placer Regional Transportation Authority
California Department of Transportation
Federal Highway Administration

The preparation of this report was financed in part through a planning grant from the Federal Highway Administration

Draft

INITIAL SITE ASSESSMENT

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR
Placer and Sutter Counties, California

June 2007

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Section **Page**

LIST OF APPENDICES

LIST OF FIGURES

LIST OF ACRONYMS

ACM	asbestos-containing material
ADL	aerially deposited lead
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
AWP	Annual Work Plan
BTEX	benzene, toluene, ethylbenzene, and total xylenes
Caltrans	California Department of Transportation
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESQG	conditionally exempt small quantity generator
CIWMB	California Integrated Waste Management Board
CORRACTS	Corrective Action Report
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EDR	Environmental Data Resources, Inc.
EHD	Environmental Health Division
ERNS	Emergency Response Notification System
FHWA	Federal Highway Administration
FINDS	Facility Index System
I-80	Interstate 80
ISA	Initial Site Assessment
kg	kilogram(s)
LFG	landfill gas
LPB	lead-based paint
LQG	large quantity generator
LUST	leaking underground storage tank
MOU	Memorandum of Understanding
mph	miles per hour
MRP	Monitoring and Reporting Program
MTBE	methyl tert butyl ether
NEPA	National Environmental Policy Act
NFRAP	No Further Remedial Action Planned
NPL	National Priorities List
OHW	ordinary high water
PCB	polychlorinated biphenyl
PCEHD	Placer County Environmental Health Department
PCTPA	Placer County Transportation Planning Agency
PSR	Project Study Report
RCRA	Resource Conservation and Recovery Act
RCRAInfo	Resource Conservation and Recovery Act Information System
REC	recognized environmental condition
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
SLIC	spills, leaks, investigations, and cleanups
SOI	Sphere of Influence
SPRTA	South Placer Regional Transportation Authority

SQG	small quantity generator
SR	State Route
SWIS	Solid Waste Information System
SWRCB	State Water Resources Control Board
TAZ	traffic analysis zone
Tier 1 EIS/EIR	Tier 1 Environmental Impact Statement/Program Environmental Impact Report
TPH	total petroleum hydrocarbon
TSDF	Treatment, Storage and Disposal Facility
U.S. EPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
UST	underground storage tank
VOC	volatile organic compound
WDS	waste discharge system
WPWMA	Western Placer Waste Management Authority
WRSL	Western Regional Sanitary Landfill

INITIAL SITE ASSESSMENT
PLACER PARKWAY CORRIDOR PRESERVATION
TIER 1 EIS/PROGRAM EIR

1.0 INTRODUCTION

1.1 TIER 1 EIS/PROGRAM EIR

The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the South Placer Regional Transportation Authority (SPRTA) propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking State Route (SR) 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1).

The planning for Placer Parkway involves two phases: (1) the present action, selection of a corridor (titled the Placer Parkway Corridor Preservation Project), and (2) the future selection of a precise alignment within the corridor and a decision whether or not to build the Parkway. If a build alternative is selected and pursued after the second phase, the ultimate Placer Parkway project would be constructed and operated. Throughout this document the term "Proposed Action" is used to describe the selection of a corridor to preserve. The document generally uses the term "Parkway" to mean the ultimate roadway, including construction and operation, except where context indicates otherwise.

As stated, the action to be considered based on this Tier 1 analysis involves only the selection of a corridor to preserve, which has limited environmental effects by itself. However, the ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. In order to describe the effects of the ultimate Placer Parkway project to the greatest extent feasible at this early stage, the Tier 1 EIS/EIR also addresses the potential effects of construction and operation of the future roadway. This discussion of the roadway is necessarily limited, however, because only the general concepts of the roadway design and location are known at this time. If a corridor is selected and preserved at Tier 1, a subsequent Tier 2 analysis will evaluate the Parkway itself in detail—the specific roadway "footprint" within the selected corridor, including construction and operation of the roadway.

1.2 CORRIDOR SELECTION AND PRESERVATION

The concept for the Placer Parkway is over a decade old. Placer County's 1994 General Plan depicts a "plan line" for it. Two planning studies helped to refine the concept:

- DKS Associates, 2000, Placer Parkway Interconnect Study/Conceptual Plan
- DKS Associates, 2001, Project Study Report (Project Development Support) for Placer Parkway

Placer Parkway is cited as a high-priority regional transportation project by the Sacramento Council of Governments (SACOG) 2025 Metropolitan Transportation Plan and the 2027 Placer County Regional Transportation Plan. The project vicinity and surrounding area include some of the fastest growing communities in the Sacramento region. A number of large urban development proposals are being considered by Sutter and Placer counties. New development is expected to add a significant amount of residential, commercial, industrial, and educational uses.

A 2½-year screening and public outreach program that involved local jurisdictions (the Technical Advisory Committee); regional, state, and federal agencies; stakeholder groups that included

representatives from planning and public works departments of all affected cities and counties, environmental, business, agricultural, development, and homeowner interests (the Study Advisory Committee); and elected officials (the Policy Advisory Committee), resulted in the identification of five potential corridors for the Parkway. The Tier 1 Environmental Impact Statement/Program Environmental Impact Report will analyze these five corridor alternatives along with a No-Build Alternative.

Other potential transportation modes such as bus rapid transit may be developed in the corridor in the future, although they are not proposed as part of the current project. The width of the corridor for the Placer Parkway is to vary from approximately 500 feet in the Eastern and Western segments to approximately 1,000 feet in the Central Segment. Depending upon the alternative, the corridor's length ranges from a minimum of 14.2 miles to a maximum of 16.2 miles. The selected corridor would contain the roadway, including the median, travel lanes, shoulder, associated access ramps and a no-development buffer zone.

Corridor acquisition may not be completed until after Tier 2, as funding becomes available. Portions of the selected corridor would be preserved as a no-development buffer zone. The buffer would be maintained as a zone where development is either not permitted or is severely restricted. This is intended to restrict access to the proposed interchanges, protect the rural character of agriculturally designated areas in the vicinity of the Parkway as far as possible subject to future development, and to maximize opportunities to incorporate adjacent sensitive areas. It is intended that the buffer would be owned and managed in the future to achieve these objectives. For subsequent Tier 2 (project-level) environmental reviews, the size of this buffer zone could be considered flexible for agriculturally designated land undergoing urban development. In the Tier 2 environmental review, the specific buffer size and location would be determined. This determination would be based on performance standards on a case-by-case basis, depending on the land use needs of future approved development, and taking into account the primary objective of restricting future access to the Parkway.

Project proponents are considering employment of several land management and control mechanisms in order to ensure that the buffer would be effectively maintained as an area where development would either not be permitted, and where construction of any additional access onto the Parkway would not be allowed. These mechanisms could include land use controls, land purchase/leases, general plan amendments, zoning/overlay zoning changes, covenants/deed restrictions, agricultural/conservation easements, urban growth boundaries, etc. "Layering" or using several of these methods would provide more assurance that the buffers would be permanent, or at least more difficult to undo.

1.3 TECHNICAL STUDY OBJECTIVE

This Initial Site Assessment has been prepared to support the Tier 1 Environmental Impact Statement/Program Environmental Impact Report. It presents a Tier 1/Program level assessment of potential impacts related to the presence of hazardous materials or sites for five corridor alternatives and the No-Build Alternative as described in Chapter 2.

The scope of work performed for this report is based on the Caltrans Local Assistance Procedures Manual (Caltrans, 2006), as modified for purposes of Tier 1/Program analysis by agreement of Caltrans, and the Caltrans Environmental Handbook guidance (Caltrans, 2005) on preparing an Initial Site Assessment. In addition, the evaluation considered guidance from the FHWA, Environmental Checklists for Draft and Final Environmental Documents (FHWA, 1998a; FHWA, 1998b).

The purpose of this ISA is to review past and current land uses and activities within the study area to identify the potential presence of hazardous substances, including hazardous wastes. This assessment was accomplished by, and limited to, a study area reconnaissance and review of readily available pertinent documentation regarding past and current land use to identify any "recognized environmental conditions" (RECs), regulatory enforcement actions, permit status, or investigations into hazardous materials or

wastes associated with the site. American Society for Testing and Materials (ASTM) standards on environmental site assessments (ASTM E 1527-05) define a "recognized environmental condition" as:

> The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

This ISA includes the following:

- Review of pertinent, available documents and maps describing local geological and hydrogeological conditions;
- Review of readily available historical aerial photographs of the study area. These photographs were reviewed for evidence of previous activities and development which would suggest the potential presence of hazardous substances at the study area;
- Review and interpretation of archival U.S. Geological Survey (USGS) topographic maps for information regarding historical land use potentially involving the manufacture, generation, use, storage, and/or disposal of hazardous substances at the study area;
- A reconnaissance of readily accessible portions of the study area to assess evidence of current and/or past use or storage of toxic or hazardous materials; onsite ponds, landfills, dry wells, waste streams or other disposal units; visible soil contamination, aboveground or underground storage tanks; electrical transformers containing polychlorinated biphenyls (PCBs); and drums, barrels and other storage containers;
- A visual review of adjacent properties to identify potential sources of contaminants that could adversely impact the environment;
- Review of the database list search conducted by Environmental Data Resources, Inc. (EDR) of federal and state known or potential hazardous waste sites or landfills, and sites otherwise under investigation for environmental violations;[1]

[1] An initial EDR report was prepared for the Placer Parkway project in May 2003 and the results were summarized in the Technical Memorandum, Screening Evaluation of PSR Alternatives, Placer Parkway Corridor Preservation Tier 1 EIS/EIR dated February 23, 2004. That document concluded the following:

- 17 properties were identified as potentially representing sites of concern;
- 13 of these were deemed insignificant with respect to the screening analysis because they either had no known contamination releases, minute volumes of hazardous materials/wastes, were closed agency cases, or were likely to be easily remediated;
- The remaining four sites were mapped on Figure 5-9 of the Technical Memorandum.

A new EDR report, dated March 20, 2006, was prepared for this ISA because the original report was almost 3 years old. In the intervening years, several sites have been dropped from various lists and several name changes have occurred due to property transactions. The two EDR reports have been compared and found to be consistent. Accordingly, this ISA document supersedes the information presented in the February 2004 Technical Memorandum.

- Inquiries to the California Environmental Protection Agency, Regional Water Quality Control Board, and Department of Toxic Substances Control, the Placer County Office of Emergency Services, and the Placer County Environmental Health Department for information regarding environmental permits, environmental violations or incidents, and/or the status of enforcement actions within the study area or adjacent properties;

- Review of the California Department of Transportation (Caltrans) ISA checklist for hazardous waste to ensure that relevant information detailed on this checklist and appropriate for a Tier 1/Program level analysis is contained within this report; and

- Preparation of this report to present findings and conclusions.

This report is organized as follows:

Chapter 2 The Proposed Action
Chapter 3 Study Area Overview
Chapter 4 Site History and Regulatory Files
Chapter 5 Site Reconnaissance
Chapter 6 Summary of Findings
Chapter 7 Secondary and Indirect Impacts
Chapter 8 Cumulative Impacts
Chapter 9 Potential Watt Avenue Interchange
Chapter 10 Avoidance, Minimization, and/or Mitigation Strategies
Chapter 11 Analyses to be Undertaken in Tier 2
Chapter 12 Limitations
Chapter 13 References

This report also includes figures that show the project location, each build alternative, and pertinent technical information prepared to evaluate the build alternatives.

Throughout this document, the Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report is referred to as the Tier 1 EIS/EIR.

2.0 THE PROPOSED ACTION

The Proposed Action for the Placer Parkway Corridor Preservation Project is to select and preserve a 500- to 1,000-foot-wide corridor in the project study area, within which the future four- or six-lane Placer Parkway may be constructed. The ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction, and operation of the Parkway. Although the action taken at Tier 1 on the Placer Parkway Corridor Preservation Project is limited, the underlying project whose effects are studied in this document is the Placer Parkway. To the extent feasible at this early stage, the Tier 1 EIS/EIR addresses the potential effects of construction and operation of the future roadway.

2.1 THE PROJECT STUDY AREA

The project study area is an area of approximately 33,460 acres located in Placer and Sutter counties, with a small section located in Sacramento County (see Figures 1-1 and 1-2). The portion of the study area in Sacramento County is located in the extreme southwestern corner of the study area and does not include any of the proposed corridor alignment alternatives. It extends from SR 70/SR 99 in the west to SR 65 in the east, with the northern boundary extending to Sunset Boulevard West and the southern boundary located adjacent to Baseline and Riego roads.

For the purposes of the analysis the study area is divided into three segments:

- Western Segment: the Western Segment extends from SR 70/99 to Pleasant Grove Road in Sutter County.
- Central Segment: the Central Segment extends from Pleasant Grove Road in Sutter County to approximately 2,300 feet north of Pleasant Grove Creek in Placer County.
- Eastern Segment: the Eastern Segment extends from approximately 2,300 feet north of Pleasant Grove Creek to SR 65 in Placer County.

2.2 CORRIDOR ALTERNATIVES

The following subsections describe the corridor alternatives, which are depicted on Figure 2-1, and are numbered according to location from south to north in the study area.

2.2.1 The No-Build Alternative

Under the No-Build Alternative, the project would not be implemented. A Placer Parkway corridor would not be selected/preserved, and the future Placer Parkway would not be constructed.

2.2.2 Alternative 1 – the Red Alternative

Alternative 1 would extend from SR 70/99 approximately ½ mile north of Riego Road, eastward approximately 1 mile north of Baseline Road to approximately Watt Avenue, proceeding north and transitioning in an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 16.2 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.3 Alternative 2 – the Orange Alternative

Alternative 2 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed northeast, then in a northerly direction south of Pleasant Grove Creek, transitioning to an easterly direction before it reaches Sunset Boulevard West, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.4 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.4 Alternative 3 – the Blue Alternative

Alternative 3 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed north along the Sutter/Placer County Line, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.6 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.5 Alternative 4 – the Yellow Alternative

Alternative 4 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.3 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.2.6 Alternative 5 – the Green Alternative

Alternative 5 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 4,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.2 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.3 PARKWAY DESIGN ASSUMPTIONS

Although the Parkway would be designed and construction-level impacts analyzed during Tier 2, for the purpose of this report and the Tier 1 EIS/Program EIR, several assumptions have been made about potential design and configuration concepts. These assumptions would be subject to further development and refinement, and specific decisions about design of the roadway would be made during the Tier 2 process. For example, the number, location, and design of over-crossings would be determined at the time of final Parkway design, in consultation with local jurisdictions. The following sections outline assumptions for the future roadway.

Preliminary costs estimates for the Parkway range from $600 to $650 million (2005 dollars). This includes costs for right-of-way, design, construction and environmental mitigation for the four- to six-lane facility. The funding situation has spurred interest in exploring other more creative funding options.

These include a county-wide sales tax, more developer contributions, and tolling facilities. The Technical Report and Tier 1 EIS/Program EIR do not make any assumptions about funding sources.

2.3.1 Conceptual Roadway Configuration

The Parkway would be a high-speed, limited access roadway. Depending upon the timing of adjacent urban development proposals and funding, the Parkway may be designed and constructed incrementally in segments. These could be built as a four-lane (interim) roadway until a six-lane segment is warranted, or as the full six-lane facility. A preliminary conceptual cross section (see Figure 2-2) was developed to facilitate the Tier 1/Program evaluation. It illustrates both four-lane (two lanes in both directions) and six-lane (three lanes in both directions) configurations within the 500- to 1,000-foot corridor widths. The roadway would include a central median approximately 100 to 134 feet wide, depending on local conditions and reflecting Caltrans safety guidance. The Parkway would be designed and constructed to Caltrans standards, unless specific design exceptions are granted. For the purposes of the Tier 1 EIS/Program EIR, the Parkway's opening year is assumed to be 2020.

Access would be provided at the western and eastern ends of the Parkway, where existing areas of dense development are already located or planned. Access would be restricted for the 7-mile Parkway Central Segment. The analysis assumes no interchanges in this segment. (A possible future extension of Watt Avenue or another nearby roadway may be considered in the Central Segment as a separate project.)

2.3.2 Conceptual Roadway Elevation

As the study area is comprised of relatively flat terrain, the majority of the future Placer Parkway is assumed to be at-grade. As necessary, bridges would be used to span certain features and improvements such as the Union Pacific Railroad tracks along Industrial Boulevard, Pleasant Grove Creek, the Natomas East Main Drainage Canal, and floodplains. Generally, the approximate height of bridges is expected to range from 10 feet above streams to 30 feet above the railroad. Culverts would be used at smaller creek crossings as appropriate, depending on local conditions and permit requirements. The Pleasant Grove Creek floodplain would be crossed by bridges (one in each direction) supported by abutments located approximately 800 feet on either side of the creek to avoid the riparian habitat associated with the creek.

Within the 100-year floodplain, the roadway would be elevated such that the bottom of any new bridges would be above the 100-year water surface elevation. The roadway support structures and bridges would be designed to minimize environmental impact, not impede stream and flood flows, and allow for the unobstructed passage of potential future streamside uses such as maintenance equipment, bikeways, or trails.

Throughout the project study area, the assumptions for creek and floodplain crossings include typical engineering specifications:

- a maximum bridge span of approximately 150 feet;
- for bridge spans exceeding 150 feet, assume one column, approximately 4 feet in diameter, every 150 feet; and
- all columns placed outside of the ordinary high water (OHW) level.

To maintain existing and future local roadway connectivity (for emergency access, farming operations, and community access), over-crossings would be constructed to convey traffic over the Parkway. These over-crossings would not connect to the Parkway. Parkway access would be via the interchanges described below.

2.3.3 Interchange Concepts

The analysis assumes that the location of interchanges (see Figure 2-1) is as follows.

- SR 70/99 (at ½ mile north of Riego Road or at Sankey Road)
- One or two locations to be determined in southern Sutter County
- Fiddyment Road
- Foothills Boulevard
- SR 65 at Whitney Ranch Parkway

The following discussion outlines concepts and assumptions for the six interchanges that could potentially serve Placer Parkway.

2.3.3.1 Western Segment

Within the Western Segment of the Parkway, a high-speed, freeway-to-freeway type interchange would connect the Parkway with SR 70/99 at one of following potential locations depending on the project alternative (see Section 2.2). Placer Parkway would terminate at SR 70/99.

- **Placer Parkway/SR 70/99 Interchange at North of Riego Road.** This alternative concept uses "braided" ramps to eliminate weaving.

- Problems or conflicts with the future SR 70/99 at Riego Road interchange being developed by Sutter County and Caltrans.

- **Placer Parkway/SR 70/99 Interchange at Sankey Road.** Under this alternative concept, the existing two-lane Sankey Road would be realigned to the south of Placer Parkway and the proposed freeway-to-freeway interchange, extending from approximately ¼ mile west of SR 70/99 to approximately ¼ mile east of the Union Pacific railroad tracks. There would be no direct access to SR 70/99 or Placer Parkway from the realigned Sankey Road.

Depending on the final alignment selected, one or two additional arterial interchanges would also be located in south Sutter County. Conceptual locations are identified for purposes of this Tier 1/Program analysis (see Figure 2-2). The actual location of these interchanges would be developed in the Tier 2 phase, based on Sutter County requirements.

2.3.3.2 Central Segment

Within the Central Segment of the Parkway, there would not be any access proposed as part of the Project in the 7-mile segment between Fiddyment Road and Pleasant Grove Road. Please see Section 2.4 regarding a potential connection to a future extension of Watt Avenue (Figure 2-3) which could be proposed and constructed by others in the Central Segment; such an interchange is not part of the Placer Parkway.

2.3.3.3 Eastern Segment

Within the Eastern Segment of the Parkway, a signalized high-speed freeway-to-freeway and local access interchange would connect the Parkway to SR 65 at Whitney Ranch Parkway (Figure 2-1). From SR 65 eastward Placer Parkway would terminate and become Whitney Ranch Parkway east of the SR 65 exit ramp intersection. Traffic signals would be provided at the exit ramp terminals. This interchange would

be approximately 1 mile north of a planned SR 65/Sunset Boulevard interchange and 1.2 miles south of the existing Twelve Bridges interchange.

As part of this interchange, auxiliary lanes would be required on SR 65 in both directions to enhance traffic operations on the north side of the future SR 65/Sunset Boulevard interchange. The southbound SR 65 exit-ramp at Sunset Boulevard is being designed to accommodate an additional auxiliary lane required for the future Placer Parkway/Whitney Ranch Parkway interchange to minimize the reconstruction of this ramp in the future. Within the Eastern Segment of the Parkway, from SR 65 westward, two interchanges with local roadways would be constructed, one at Foothills Boulevard and one at Fiddyment Road, as depicted on Figure 2-1.

The future interchange on Placer Parkway at Fiddyment Road would be located near the existing intersection of Fiddyment Road and Sunset Boulevard West. To provide acceptable traffic operations, additional distance needs to be provided between the Fiddyment Road/Sunset Boulevard West intersection and the Fiddyment Road/Placer Parkway westbound off-ramp intersection. Therefore, Sunset Boulevard West will need to be realigned to the north as it nears Fiddyment Road.

2.3.4 Landscaping Concept

For the purposes of this environmental analysis, preliminary landscaping concepts have been developed for Placer Parkway. These are entirely conceptual and would be subject to further refinement during the Tier 2 environmental process. It is anticipated that landscaping would be used to reflect local topography and vistas in the study area and complement the varying character of land adjacent to the Parkway corridor. Landscape design would vary within the Parkway's three segments depending on corridor width and type and density of surrounding land uses. Landscaping would be used within the median and the Parkway buffer zone to enhance the aesthetics of the Parkway, and would be used to provide screening and enhance local and long-distance views. Where appropriate, more concentrated plantings would be considered to buffer the Parkway from future adjacent land uses that may be incompatible with the Parkway concept, and to prevent unwanted intrusion into shoulder or median areas. Landscape design would likely include a mix of compatible native and non-native plants that may require some irrigation. Wherever possible, native plant species would be used in line with Caltrans policy. Where possible and depending on availability, feasibility and cost, recycled water would be used for irrigation.

During a future design phase, lighting elements would be designed for safety and would consider the proposed landscaping plan in order to minimize potential aesthetic impacts (e.g., shielding lighting elements, using lower-voltage lighting, and proposing lighting fixtures that conform with the visual character of the area).

2.4 POTENTIAL WATT AVENUE INTERCHANGE

The Placer County General Plan includes a number of new roadways that may be needed in Placer County, according to travel demand forecasts. An extension of Watt Avenue to Placer Parkway (from Baseline Road to a new Blue Oaks Boulevard Extension) is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto the Placer Parkway via a new interchange (see Figure 2-3). A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. It would be subject to independent future environmental analysis and review and is not being fully evaluated within this Technical Report or Tier 1 EIS/Program EIR. However, the connection of Placer Parkway to a potential Watt Avenue extension could affect future travel patterns in the area, including use of the Parkway. Based on direction from previous planning studies, this Technical Study and the Tier 1 EIS/Program EIR will evaluate each corridor alternative with and without a Watt Avenue interchange. This evaluation does not predetermine the construction or alignment of a potential

Watt Avenue or nearby roadway extension or the precise locations of any potential interchanges with Placer Parkway.

2.5 AGENCY PERMITS AND APPROVALS

The Proposed Action would preserve a preferred corridor for a future transportation facility. In the future, permits and approvals would be obtained from appropriate agencies prior to construction of the Parkway. These permits and approvals may include specific design or mitigation requirements that would be incorporated into the project.

2.6 SUBSEQUENT TIER 2 INFORMATION

As noted earlier, the design and construction of Placer Parkway—including its interchanges and over-crossings, and ancillary features such as stream crossings, safety devices, storm water management structures, and similar improvements—would be evaluated in a subsequent Tier 2 environmental review process once a corridor has been identified. Chapter 11 provides more detailed information regarding Tier 2 studies.

3.0 STUDY AREA OVERVIEW

This section presents a general description of the study area. A reconnaissance of the study area was conducted on March 20, 2006. Observations made during the site reconnaissance are discussed in Chapter 5.

3.1 STUDY AREA LOCATION AND DESCRIPTION

The majority of the study area is in southwestern Placer County, with some areas in southeastern Sutter County and a small area in northern Sacramento County (Figures 1-1 and 2-1). The topography of the study area generally rises from west to east, with elevations ranging from 10 to 165 feet. The study area is drained by Pleasant Grove Creek in the north, Curry Creek in the south, and the Natomas East Main Drainage Canal in the west.

The study area is primarily in agricultural uses. Other development includes a mixture of commercial and light and heavy industrial uses. In general, development increases in density moving from west to east, with a concentration of new development (mainly residential) in the Eastern Segment of the study area.

3.2 GEOLOGIC AND HYDROGEOLOGIC SETTING

The study area is located on the eastern side of the Sacramento Valley, at the eastern border of the Great Valley Geomorphic Province. The Sacramento Valley extends from Redding in the north to the Sacramento-San Joaquin Delta Region in the south. At the latitude of the study area, the valley is approximately 48 miles wide. The Sacramento Valley is a large northwest trending topographic depression bounded to the east and west by the Sierra Nevada and Coast mountain ranges, respectively. Sediments derived from these ranges were shed into the basin and achieved thicknesses approaching 40,000 feet (Norris and Webb, 1976). Geologic units represented in the study area include the Mehrten Formation, the Turlock Lake Formation, and the Riverbank Formation. The Mehrten Formation consists of undifferentiated andesitic mudflows, volcanic breccias, pyroclastic deposits, lava flows, and sedimentary river channel deposits. The Turlock Lake Formation represents eroded alluvial fans which were derived primarily from granitic and metamorphic rocks of the Sierra Nevada located to the east of the subject area. The Riverbank Formation consists of weathered reddish gravel, sand, and silt. Other areas of the study area are blanketed with Holocene alluvium and undivided basin deposits (Helley and Harwood, 1985).

Groundwater level measurements are made by the California Department of Water Resources (DWR) and cooperating federal and local agencies. The DWR maintains the data on their website (www.well.water.ca.gov/map). The data indicate that the depth to groundwater in the site vicinity is generally highest during the spring season and lowest during the late fall season.

4.0 SITE HISTORY AND REGULATORY FILES

This section discusses data obtained from aerial photographs and historical topographic maps, and information obtained from federal, state, and county database files.

4.1 HISTORICAL AERIAL PHOTOGRAPHS

Historical aerial photographs of the study area for the years 1952, 1958, 1964, 1975, 1988, 1991, 1994, and 2004 were reviewed and interpreted for indications of past site land use and/or site activities which may have involved the manufacture, generation, use, storage, and/or disposal of hazardous materials. The following observations were made:

- 1952 – The study area is in use as agricultural land, with some residences and farm buildings along the roads. Railroad tracks are visible in the Eastern Segment, near SR 65;
- 1958 – The study area appears relatively unchanged with respect to the 1952 photograph. Handwritten notes on the photograph indicate that Sunset Boulevard was named Oil Derrick Road, but no evidence of oil or gas development was noted in the study area;
- 1964 – Increasing residential development is visible along the main roads, particularly in the Eastern Segment and the southern portion of the study area;
- 1975 – In the Eastern Segment of the study area, near the present location of the Western Regional Sanitary Landfill (WRSL), two ponds are visible. The aerial photograph appeared to be projected over a topographic map, and on that map these ponds were labeled "industrial waste ponds." These ponds are located to the north of any proposed corridor alternatives. The remainder of the study area appeared relatively unchanged with respect to the 1964 photograph;
- 1988 – The WRSL is visible in the Eastern Segment of the study area. The ponds are no longer visible. The remainder of the study area appears relatively unchanged with respect to the 1975 photograph, with increasing development along SR 65 and Industrial Boulevard;
- 1991 – Increasing residential and commercial development is visible in the Eastern Segment of the study area;
- 1994 – The study area appears relatively unchanged with respect to the 1991 photograph; and
- 2004 – The study area appears relatively unchanged with respect to the 1994 photograph.

4.2 HISTORICAL TOPOGRAPHIC MAPS

In order to supplement information obtained through the review of aerial photographs and discussions with agency and other contacts, archival topographic maps were reviewed and interpreted for indication of topographic and land use change that may indicate the presence or historical occurrence of site land use and/or site activities which may have involved the manufacture, generation, use, storage, and/or disposal of hazardous materials. The following observations were made from the maps that were available:

USGS Sacramento, California Quadrangle, 1892 updated 1906 (1:125,000)

At the low level of detail relative to modern standards presented on this map (USGS, 1892a), all that can be ascertained is that roads corresponding to SR 70/99, SR 65, Baseline Road, Sunset Boulevard, and Brewer Road were present. A railroad line is also present, approximately paralleling SR 65.

USGS Sacramento, California Quadrangle, 1892 updated 1929 (1:125,000)

No significant differences between this map (USGS, 1892b) and the previous topographic map were noted.

USGS Sacramento, California Quadrangle, 1961 (1:250,000)

This topographic map (USGS, 1961) shows the Natomas East Main Drainage Canal. Two additional railroad lines are noted, one paralleling the canal (denoted as "abandoned") and one slightly farther east, intersecting the canal south of Sankey Road. The Catlett Power Station is depicted near the canal on Catlett Road, but is not within the study area. No other development features are noted.

USGS Roseville, California and Pleasant Grove, California Quadrangles, 1967, Photorevised 1987 (1:24,000)

These topographic maps (USGS, 1987a, 1987b) depict several buildings along the main roads. The increasing density of the road and power line networks also indicates increasing development.

USGS Sacramento, California Quadrangle, 1994 (1:100,000)

No significant differences between this map (USGS, 1994) and the previous topographic map were noted.

4.3 REGULATORY AGENCY FILES

A review of readily available agency lists was conducted for information regarding hazardous substance releases, landfills, hazardous waste facilities, or environmental investigations at or near the site. A search of state and federal agency databases was obtained from EDR of Milford, Connecticut. The EDR Report is presented in Appendix A, which includes a figure illustrating sites identified within the study area. The EDR figure includes 23 mappable "sites." Of these, 17 are represented by a single property. The remaining 6 sites contain a total of 55 specific properties, which cannot be shown individually on the map because of its scale. Review of the EDR Report and site reconnaissance (discussed in Chapter 5) concluded that only five locations represent potential RECs for the proposed Placer Parkway project. These are shown on Figure 4-1 and are discussed in subsequent sections of this report.

4.3.1 EDR Report

EDR reviews databases compiled by federal, state, and local governmental agencies. The complete list of databases reviewed by EDR together with a description of each database and its release date is provided in the EDR Report. This information is reported as received from EDR. EDR reports information as provided by federal and state databases. The accuracy and/or completeness of information contained in these federal and state databases cannot be verified. However, the use of and reliance on this information is a professionally accepted practice in the conduct of environmental due diligence. Caltrans requires a review of county, state, and U.S. Environmental Protection Agency (U.S. EPA) lists of known hazardous substance facilities within 1 mile of the site for an ISA. The entire Parkway study area was reviewed for potential facilities. Records searched for the EDR Report are described in the EDR Report and summarized below.

Federal National Priorities List

The EPA's National Priorities List (NPL), released November 2005, contains information on uncontrolled or abandoned hazardous waste sites. To appear on the NPL, sites must have met or surpassed a predetermined hazard ranking system code, been chosen as a state's top priority site, pose a significant

health or environmental threat, or be a site where the U.S. EPA has determined that remedial action is more cost-effective than removal action. The EDR database review included the proposed NPL, delisted NPL, and NPL Liens databases. This review did not identify any NPL sites within the study area.

Federal CERCLIS

The U.S. EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database, dated October 2005, identifies known or suspected uncontrolled or abandoned hazardous waste sites. The EDR database review included the CERCLIS database. This search did not identify any CERCLIS sites within the study area.

Federal No Further Remedial Action Planned

The No Further Remedial Action Planned (NFRAP) database contains sites where, following an initial investigation, no contamination was found, contamination was removed quickly, or the contamination was not serious enough to warrant NPL status. The U.S. EPA database release date was October 2005. The database search did not identify any NFRAP sites within the study area.

Federal RCRAInfo

The Resource Conservation and Recovery Act Information System (RCRAInfo) includes selective information on sites that generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kilograms (kg) of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate more than 1,000 kg of hazardous waste, or more than 1 kg of acutely hazardous waste per month. Treatment, Storage and Disposal Facilities (TSDFs) treat, store, or dispose of the waste. The Corrective Action Report (CORRACTS) identifies hazardous waste handlers with RCRA corrective action activity. The RCRAInfo and CORRACTS databases were released by the U.S. EPA in December 2005. The database search did not identify any CORRACTS or TSDF sites within the study area. The database search identified one LQG facility within the study area:

- *All Terrain Exploration Drilling, 6330 Brewer Road, Pleasant Grove, California.* This facility is located slightly north of the Alternative 2 corridor alignment along South Brewer Road. This facility has no reported violations of its LQG permit. Based on the absence of permit violations, the potential for this facility to represent a REC for the project is considered to be low.

The database search identified 13 SQG facilities within the study area. Of these, 12 facilities had no reported violations of their SQG permits. The one remaining facility is discussed below:

- *Tenco Tractor Inc., 7310 Pacific Avenue, Pleasant Grove, California.* This facility is located south of the Western Segment of Alternatives 4 and 5 and north of the Sankey Road realignment. This facility is also listed, either under this name or as Holt of California, on the state leaking underground storage tank (LUST), underground storage tank (UST), spills, leaks, investigations, and cleanups (SLIC), aboveground storage tank (AST), HAZNET, and waste discharge system (WDS) databases. One reported violation of the facility's SQG permit occurred in December 1989. The violation type was "Generator – Land Ban Requirements," and was reported as being back in compliance in May 1990. Other databases report that a benzene spill case at the site was closed by the RWQCB in June 2001. Historical UST databases report that six USTs have been present

at this facility, containing waste solvents, motor oil, and unleaded gasoline. According to data on the RWQCB's website, as of November 2005, groundwater at this facility was impacted with benzene, toluene, ethylbenzene, and total xylenes (BTEX), gasoline- and diesel-range organic compounds, and gasoline oxygenates including methyl tert butyl ether (MTBE). These compounds have impacted a drinking water aquifer, and remediation at this facility is ongoing. Given the contaminant concentrations, the ongoing remediation, and the proximity of this facility to one of the proposed corridors, this facility represents a potential REC for the project, with a low potential for impact.

Federal Emergency Response Notification System

The Emergency Response Notification System (ERNS) is a national database initiated in 1986, which is used to collect information on reported spills or releases of oil or hazardous substances. The database contains information from spill reports made to federal authorities including the Coast Guard, the U.S. EPA, the National Response Center, and the Department of Transportation. The agency release date for the ERNS was December 2005. The database search identified two ERNS sites within the study area:

- *South Brewer and East Catlett, Lincoln, California.* This spill occurred in 1992 at the intersection of South Brewer Road and East Catlett Road, which is located north of the study area's boundary. According to the database, one drum of an unknown material was discovered. Given this event's location outside of the study area, the potential for this spill to represent a REC for the project is considered to be low.

- *Natomas Road North of Keyes Road/Next to Canal, Pleasant Grove, California.* This spill occurred in 1987 at the intersection of Natomas Road and Keyes Road, along the Natomas East Main Drainage Canal. According to the database, two 25-gallon drums of an unknown material were discovered. Considering the length of time that has elapsed since this event, the small quantity involved, and the location of the spill outside of any of the proposed corridor alignment alternatives, the potential for this spill to represent a REC for the project is considered to be low.

State CAL-SITES

This California Department of Toxic Substances Control (DTSC) database contains information on properties in California where hazardous substances have been released, or where the potential for such a release exists. The release date for the CAL-SITES database was August 2005. The database search did not identify any CAL-SITES sites within the study area.

State Annual Work Plan

The Annual Work Plan (AWP) database is maintained by DTSC and identifies known hazardous substances sites targeted for cleanup. The AWP database was released in August 2005. The database search did not identify any AWP sites within the study area.

State Leaking Underground Storage Tank

The LUST database contains information pertaining to reported leaking underground storage tanks within the state of California. The California Regional Water Quality Control Board (RWQCB) release date for the LUST database for Region 5C was January 2006, and for Region 6L was September 2003. The database search identified three LUST sites within the study area. One of these facilities, Holt of California, is discussed in the RCRAInfo section above (as Tenco Tractor, Inc.). The other two facilities are discussed below:

- *SBC, 5495 Pleasant Grove Road, Pleasant Grove, California.* This facility is located near the western end of the northern boundary of the study area, and is not located within any of the proposed corridor alignment alternatives. According to information from the database report and from the RWQCB website, one diesel UST was removed from this facility in 2003 and was found to have leaked. Subsequent groundwater monitoring detected low levels of oxygenates and diesel-range organics. The most recent round of sampling (June 2005) did not detect any groundwater contamination. This facility is also listed in the state UST database as the Pacific Bell facility, which does not provide any further information. Given the absence of an ongoing source of contamination, the low initial contaminant concentrations, the declining concentrations over time, and the location of this facility outside of any of the proposed Parkway corridors, the potential for this facility to represent a REC for the project is considered to be low.

- *Reynolds West Coast End Plant, 3939 Cincinnati Avenue, Rocklin, California.* This facility is located near the eastern boundary of the study area, and is not located within any of the proposed corridor alignment alternatives. This facility is also listed in the state historical UST, FID, and SWEEPS databases and the Placer County MS database as Reynolds Metal Company, and as the Ball Metal Beverage Container Company in the federal RCRIS and Facility Index System (FINDS) databases and the state HAZNET and CORTESE databases. According to information from the database report and from the RWQCB website, toluene leaked from a UST and contaminated soil at the facility. The RWQCB closed the soil remediation case for this facility in July 2000. The other database listings report that the facility is a small quantity generator of hazardous wastes with no reported permit violations. HAZNET shows several shipments of hazardous wastes, including PCBs, halogenated organic compounds, and waste oil. Considering the "no further action required" case status, the impacts to soils only, the absence of hazardous waste generator permit violations, and the location of this facility outside of any of the proposed Parkway corridors, the potential for this facility to represent a REC for the project is considered to be low.

State Solid Waste Information System

The Solid Waste Information System (SWIS) is maintained by the California Integrated Waste Management Board (CIWMB) and was updated in December 2005. This database lists active, closed, and inactive landfills. The database search did not identify any SWIS facilities within the study area. Note that the Western Regional Sanitary Landfill was not included on this database. This is probably because the address of the Western Regional Sanitary Landfill (and the adjacent Materials Recycling Facility) discussed in Section 4.3.2 is Athens Road at Fiddyment Road, which is outside of the database search area.

State Underground Storage Tank

The state UST database is a comprehensive listing of facilities with active USTs and was updated in January 2006. The database search identified four UST facilities within the study area. One of these facilities, Tenco Tractor, Inc., is discussed in the RCRAInfo section above, and another facility, Pacific Bell, is discussed in the Federal ERNS section above (as SBC). The other two facilities are discussed below:

- *Hunt and Sons Cardlock, 4000 Cincinnati Avenue, Rocklin, California.* This facility is located near the eastern boundary of the study area, and is not located within any of the proposed corridor alignment alternatives. This facility is also listed in the state HAZNET

database. The size, construction and contents of the UST are not known from the database information. Given the location of this facility outside of any of the proposed Parkway corridors, the potential for it to represent a REC for the project is considered to be low.

- *Best Machinery Tractor Company, 3131 Sankey Road, Pleasant Grove, California.* This facility is located in the Western Segment of the study area, and is located directly south of Alternatives 4 and 5 west of Pleasant Grove Road. This facility is also reported on the state historical UST and WDS databases. The facility used to have one 1,000-gallon leaded gasoline UST, which was removed in 1986. The facility also reportedly has a waste discharge system on-site, most likely a septic field. Given the absence of reported impacts to soil or groundwater, the potential for this facility to represent a REC for the project is considered to be low.

State Aboveground Storage Tank

The state AST database is a comprehensive listing of registered AST facilities and petroleum AST facilities. This database is maintained by the State Water Resources Control Board (SWRCB) and was last updated in January 2006. The database search identified five AST facilities within the study area. One of these sites, Holt of California, is discussed in the RCRAInfo section above (as Tenco Tractor). The other four facilities are Pleasant Grove Ready-Mix, Hertz Equipment Rental Corporation, GAP Inc. – Online Ordering and Customer Service, and Sysco Food Services. The database only reports the total number of gallons stored at each facility. No further information is available for these facilities from this database. However, based on the absence of these sites from other databases, their potential to represent a REC to the project is considered to be low.

State REF

The REF database lists properties that have been referred by DTSC to another state or local regulatory agency. DTSC maintains this database and it was last updated in August 2005. The database search identified one REF facility within the study area; Cornelius Airstrip. However, during the site reconnaissance, it was determined that no airstrip is located at the address listed in the database. The database indicates that, wherever the airstrip is located, no problems have been identified.

State Waste Discharge System

The WDS database catalogues facilities that have been issued waste discharge requirements. SWRCB maintains this database and it was last updated in December 2005. The database search identified seven WDS facilities within the study area. One of these facilities, Best Machinery Tractor Company, is discussed in the state UST section above, and another facility, Holt of California, is discussed in the RCRAInfo section above (as Tenco Tractor). The remaining five facilities are discussed below:

- *Doorcraft-Rocklin, 3901 Cincinnati Avenue, Rocklin, California.* This facility is located near the eastern boundary of the study area, and is not located within any of the proposed corridor alignment alternatives. According to the database, this is a Category C facility, which is likely a septic field. The facility is considered a minor threat to water quality. Based on this information, the potential for it to represent a REC for the project is considered to be low.

- *Progress Rail Services, 3909 Cincinnati Avenue, Rocklin, California.* This facility is located near the eastern boundary of the study area, and is not located within any of the proposed corridor alignment alternatives. This facility is also listed on the state HAZNET database, which reports that the facility has shipped small amounts of off-

specification, aged, or surplus organics. According to the WDS database, this is a Category C facility, which is likely a septic field. The facility is considered a minor threat to water quality. Based on this information, the potential for it to represent a REC for the project is considered to be low.

- *A R Ready Mix, 3131 Sankey Road, Pleasant Grove, California (same address as Best Machinery Tractor Co.).* This facility is located in the Western Segment of the study area, and is located directly south of Alternatives 4 and 5 west of Pleasant Grove Road. According to the WDS database, this is a Category C facility, which is likely a septic field. The facility is considered to be a minor threat to water quality. Based on this information, the potential for it to represent a REC for the project is considered to be low.

- *Sysco Distribution Center WWTP, 7062 Pacific Avenue, Pleasant Grove, California.* This property is a food distribution warehouse that reportedly includes a municipal/domestic waste treatment facility that is listed as Category B (a facility having a physical, chemical, or biological waste treatment system) and is considered to represent a moderate threat to water quality. It is located south of Alternatives 4 and 5 west of Pleasant Grove Road. Given the nature of the facility, the potential for the property to represent a REC for the project is considered to be low.

- *Teichert, 7466 Pacific Avenue, Pleasant Grove, California.* This property is located south of Alternatives 4 and 5 west of Pleasant Grove Road. It is a Category C facility that is judged to represent a minor threat to water quality. Given its distance from the realignment corridor, the potential for the property to represent a REC for the project is considered to be low.

4.3.2 Orphan Facilities

Orphan facilities are those facilities that have been identified within the database report, but not mapped due to inadequate or erroneous geocode information. Fifty-nine orphan facilities were listed in the EDR report. Of these, three were located based on information provided by site names and local knowledge and were determined to be within the study area:

- *Western Placer HHWCF (Household Hazardous Waste Collection Facility), Athens Road at Fiddyment, Lincoln, California.* This facility, commonly known as the Materials Recycling Facility, is located in the Western Segment of the study area, co-located with the Western Regional Sanitary Landfill (WRSL). The facility was listed in the state HazNet database as having generated nine shipments of household waste. No further information is available. According to the CIWMB website, the WRSL is an active landfill that accepts ash, construction and demolition debris, mixed municipal waste, and sludge/biosolids. The facility was inspected by the local enforcement agency on February 23, 2006, and no violations or areas of concern were noted.

The 280-acre WRSL is in the northwestern portion of the Eastern Segment southeast of the Fiddyment Road and Athens Avenue intersection. The land is owned and operated by the Western Placer Waste Management Authority, a joint powers organization consisting of Placer County and the cities of Lincoln, Roseville, and Rocklin.

A groundwater monitoring well network was installed between 1995 and 2000 (with occasional replacement wells installed subsequently), and regular monitoring has been conducted at the WRSL since 1995. The network consists of 25 wells (6 for corrective action monitoring, 18 for detection monitoring, and 1 for water level only).

A monitoring well located immediately west of one of the original unlined modules first showed evidence of groundwater degradation in the fourth quarter 1995. Several volatile organic compounds (VOCs) were identified as having exceeded their respective Tolerance Limits, defined in WDR Order No. R5-2002-0218 as either:

- The background value established in the Monitoring and Reporting Program (MRP) for that constituent; or

- The constituent's background value, based on data for each reporting period collected only from the background monitoring points.

The presence of VOCs in the monitoring well was attributed to contamination via the migration of landfill gas (LFG).

A Corrective Action Program and addendum were submitted to the RWQCB and were approved. The initial corrective actions identified were the installation of final cover and the extraction of LFG. Quarterly monitoring of groundwater quality in the six corrective action wells supplemented by trend analysis of results is used to evaluate the effectiveness of the actions.

At the present time, the WRSL is not considered to represent a potential REC to the project, given the lack of violations and regulatory sanctions. The possibility of the WRSL representing a potential REC will be evaluated further near the time of construction.

- *Rio Bravo Power Plant, 3100 Sparta Court, Lincoln, California,* is listed on the SWEEPS and UST lists. This facility is a biomass plant to generate electrical power. A fluidized bed boiler is used to provide steam. The location and size of the onsite UST is not known. In the event that the UST is located within the proposed Placer Parkway alignment, it would represent a REC for the project.

- *Formica Corporation, 3500 Cincinnati Avenue, Sunset Whitney Ranch, California.* Formica Corporation was included in the following lists: FINDS; LUST; CHMIRS; Cortese; RCRA-LQG; RCRA-TSDF; CORRACT; CERC-NFRAP; HIST UST; and EMI. The site is located approximately 1,400 feet to the east and hydrologically upgradient of the study area with respect to groundwater. Formica is reported to have had one violation in records reviewed. The site was the location of a hazardous material release to soil associated with a 50,000-gallon underground fuel oil tank and an 180-gallon diesel tank, both of which were removed in 1992. Remediation consisted of soil over excavation until acceptable levels of total petroleum hydrocarbons (TPHs) remained. The case was closed by the Environmental Health Division (EHD) in 1996 (ESA, 1997). The Formica property is not considered to be an REC for the project.

4.3.3 Other Sites

Other potential hazardous waste/materials sites not listed in the EDR Report because they are immediately outside of the study area are discussed below.

- *Placer Propane (Enterprise Propane), 1545 Nichols Street, California.* Placer Propane (also called Enterprise Propane) is located approximately 1,000 feet southeast of the study area west of Industrial Boulevard. This facility stores and transfers propane to tanks on trucks and rail cars. A tank farm is located at this site containing close to 1,000,000 gallons of propane. Placer Propane is considered an extremely/acutely hazardous materials facility, and therefore, is required to prepare and submit a Risk

Management Plan to EHD. Placer Propane (under the name Enterprise Propane) recently submitted this plan to the EHD, and it is still under review by the County. Once reviewed, it will enter a 45-day public comment period (Reid, 2006).

The Risk Management Plan evaluates alternative and worst-case scenarios and includes an evaluation of sensitive receptors in the area. Placer Propane will need to prepare a revision to their plan that addresses new land use in the area. Upon revision, part of the plan may include giving copies of the plan to nearby sensitive land uses, including educational facilities or sensitive institutions (i.e., hospitals and nursing homes) (Reid, 2006). This facility is judged not to be a concern for the project.

4.3.4 Sutter County Environmental Health Division

According to the Sutter County Environmental Health Division, there are no known contaminated sites in the Sutter County portion of the Placer Parkway study area (Wilson, 2006).

4.3.5 Sutter County Agricultural Commission

This agency issues AST/UST permits within Sutter County. There are no known leaking ASTs or USTs in the Sutter County portion of the Placer Parkway study area (Schoenwald, 2006).

4.3.6 Placer County Office of Emergency Services

The Placer County Office of Emergency Services (which includes the Placer County Fire Department) was contacted with respect to hazardous materials files on facilities in the study area. The Office confirmed that emergency response plans in event of a fire at the Western Regional Landfill had been prepared. The Office did not consider any other facilities within the study area to be of concern.

4.3.7 Placer County Environmental Health Department

The Placer County Environmental Health Department (PCEHD) maintains a database of sites of potential environmental concern; however, the data available in the EDR report regarding sites in this database is insufficient to assess their potential to affect the study area. The PCEHD was contacted with respect to hazardous materials files on sites and/or facilities within or near the study area. According to Mr. John Miners, the PCEHD is not aware of any sites and/or facilities within or near the study area that could represent a REC to the project (Miners, 2006).

4.3.8 Regional Water Quality Control Board

The Regional Water Quality Control Board Central Valley Region maintains a web site (www.waterboards.ca.gov) with comprehensive LUST and SLIC databases. The Western Regional Sanitary Landfill is owned and operated by the Western Placer Waste Management Authority (WPWMA). It operates under Waste Discharge Requirements issued by the RWQCB. A release of hazardous constituents was detected in 1995 and corrective actions were implemented, as discussed in Section 5.3.2 of this report. A series of five monitoring wells is located along the south property line of the WRSL adjacent to the proposed Placer Parkway corridor. Regular monitoring of landfill gas, leachate, and groundwater indicates that regulatory criteria are not exceeded in this area. The presence of the WRSL does not at present constitute a REC for the proposed project.

4.3.9 Department of Toxic Substances Control

The DTSC was contacted regarding information about hazardous materials releases within the study area. DTSC information did not indicate any hazardous materials releases had occurred in the study area.

5.0 SITE RECONNAISSANCE

A reconnaissance of the site and neighboring properties was conducted on March 20, 2006. The visit consisted of a driving tour of the study area. Given the size of the study area (approximately 110 square miles), the site reconnaissance was performed to field-verify sites of concern identified in the regulatory file review, and to identify any other sites of concern. Selected photographs of the site taken during the site reconnaissance are presented in Appendix B. No specific studies were conducted with respect to historical railway sites within the study area because no historical railway sites appeared in any government list. Similarly, the Historical Resources Evaluation Report (JRP, 2006) states that two historic railway segments in the study area were previously found to be ineligible for inclusion in the National Register of Historic Places and, accordingly, were not evaluated further for this project.

5.1 PAST USES OF THE PROPERTY

According to a review of historical documents, the study area has been used primarily as agricultural land. Increasing development has occurred in the last few decades, especially in the eastern portion of the study area and along existing roads.

5.2 SITE OBSERVATIONS

5.2.1 Hazardous Materials

Underground/Aboveground Storage Tanks

No USTs or ASTs were noted during the site reconnaissance. Several USTs and ASTs that were reported at various facilities within the study area are discussed in the database report sections above.

Drums and Containers

During the site reconnaissance, drums were noted in three areas (Figure 4-1):

Site 1: The first site was a property containing numerous abandoned automobiles and pieces of agricultural equipment. Several drums were also noted among the debris. This property is located on the northwestern corner of the intersection of Riego Road and Pleasant Grove Road, extending approximately 1,200 feet north of Riego Road. Estimating from the most recent aerial photographs, the dumping appeared to impact an area of approximately 300 feet by 1,200 feet (360,000 square feet). Because this area is located in the vicinity of the proposed alignment corridors for Alternatives 1, 2, and 3, it represents a potential REC for these alternatives.

Site 2: The second site was a private property located on Sankey Road between Pleasant Grove Road and the Natomas East Main Drainage Canal. Approximately 100 drums were noted on this property. From the public right-of-way, it was not clear whether the drums were full or empty. Some of the drums were irregularly placed in animal pastures while others were stacked near a farm outbuilding. Based on estimates from the most recent aerial photographs, the dumping appears to affect an area of approximately 600 square feet. Because this area is located along the proposed realignment of Sankey Road associated with Alternatives 4 and 5, this area represents a potential REC for these alternatives.

Site 3: The third site appeared to be an uncontrolled dumping site on Philip Road (estimated coordinates of 38.8027°N, 121.4048°W). Refuse visible from the public right-of-way included household waste, tires, agricultural equipment, and two 55-gallon drums. Estimating from the most recent aerial photographs, the dumping appeared to impact an area of approximately 500 square feet. Because this site

is located in the proposed corridor alignment for all Alternatives, it represents a potential REC for the proposed project.

5.2.2 Hazardous Waste

No direct evidence of hazardous waste was observed in the study area during the site reconnaissance; however, the three sites mentioned in Section 5.2.1 possibly contain hazardous wastes.

5.2.3 PCB-Containing Equipment

Pole-mounted and pad-mounted transformers were observed throughout the study area. Also, a new gas-fired power plant was under construction in the Eastern Segment of the study area. The new plant is known as the Roseville Energy Park. Because this plant is still under construction, PCBs should not be an issue at this facility. The same reasoning applies to the Rio Bravo Power Plant, a relatively new facility (1990).

5.2.4 Solid Waste

Solid waste dumpsters and trashcans were observed at properties throughout the study area. As noted in Section 4.3.2, the WRSL is located in the Eastern Segment of the study area. This facility is not considered to represent a REC for the project.

5.2.5 Drains and Sumps

The scope of this site reconnaissance did not permit investigation of the entire study area for drains and sumps.

5.2.6 Wells

The scope of the site reconnaissance did not permit investigation of the entire study area for the presence of wells. Due to the agricultural land uses present in the area and the absence of potable surface water pipelines in the majority of the study area, many numerous active, inactive, and abandoned water wells are present.

5.2.7 Pits, Ponds, and Lagoons

Several catchment basins are located in developed areas in the Eastern Segment of the study area. Also, several agricultural ponds were noted on properties in the Central and Western segments of the study area. No pits were noted during the site reconnaissance; however, the scope of this site reconnaissance did not permit investigation of the entire study area.

5.3 NEIGHBORING PROPERTIES

The properties surrounding the study area are similar in character to the study area. Properties to the east across SR 65 are a mixture of commercial and residential development. The properties immediately north, south, and west of the study area are primarily agricultural. The potential for the properties surrounding the study area to represent a REC for the project is considered to be low.

The nearby Placer Propane facility is discussed in Section 4.3.3.

6.0 DIRECT IMPACTS

Environmental impacts associated with the potential presence of hazardous materials fall into two distinct categories. The first relates to the existence of hazardous materials (sources, sites or facilities) in an area in which a project is proposed to be located. Such materials may pose a risk to human health and the environment during the construction or operation of the project, and must be appropriately remediated prior to the onset of any construction activities. A summary of the potential presence of hazardous materials is presented in Sections 6.2 through 6.6.

Several avoidance, minimization, and/or mitigation strategies are proposed as part of the project, as described in Chapter 10. Four of these mitigation strategies are intended to address potential impacts, as follows:

- Impacts associated with the presence of lead-based paint (LBP) and/or asbestos-containing material (ACM) due to the demolition of structures along the preferred alignment;
- Impacts associated with the presence of aerially deposited lead (ADL) along the edges of existing roadways where future construction will occur;
- Impacts associated with soil contamination in potential REC areas, e.g., Tenco Tractor and three uncontrolled dump sites; and,
- Impacts associated with agricultural soils where pesticides have been historically applied.

The second category of potential environmental impacts associated with hazardous materials relates to the potential of the proposed project to use, generate, store, or release hazardous waste. Placer Parkway would not generate any hazardous waste during operation but may involve the use and storage of potentially hazardous materials during construction.

6.1 NO-BUILD ALTERNATIVE

Under the No-Build Alternative, land would not be acquired for the Parkway and the Parkway would not be constructed. There would not be any increased use and/or storage of hazardous materials in the study area associated with the No-Build Alternative, and no investigations would be required with respect to the potential presence of hazardous materials within the study area.

6.2 ALTERNATIVE 1

6.2.1 Western Segment

One dump site, discussed in Section 5.2.1, was identified in the Western Segment of Alternative 1 during the site reconnaissance. Site 1 is located near the Alternative 1 corridor. It contains numerous abandoned automobiles and pieces of agricultural equipment. Several drums were also noted amongst the debris. This property is located at the northwestern corner of the intersection of Riego Road and Pleasant Grove Road. Based on estimates from the most recent aerial photographs, the dumping appeared to affect an area of approximately 300 feet by 1,200 feet (360,000 square feet). This site represents a potential REC for Alternative 1.

6.2.2 Central Segment

The site reconnaissance identified an uncontrolled dumping site (Figure 4-1, Site 3) on Phillip Road (estimated coordinates of 38.8027°N, 121.4048°W). Refuse visible from the public right-of-way included household waste, tires, agricultural equipment, and two 55-gallon drums. Based on estimates from the most recent aerial photographs, the dumping appeared to affect an area of approximately 500 square feet. This site represents a potential REC for Alternative 1.

6.2.3 Eastern Segment

The Rio Bravo site, which reportedly contains a UST, currently represents a potential REC for Alternative 1. The WRSL is located in this segment but, as discussed in Section 4.3.2, it does not at present represent a potential REC for the project. A future interchange at Fiddyment Road could potentially encroach upon the area immediately west of the existing sanitary landfill that is owned by the Western Placer Waste Management Authority and which is identified as a future landfill expansion area. Encroachment, if any would affect approximately 5 to 6 acres of the southeastern corner of this property.

6.3 ALTERNATIVE 2

6.3.1 Western Segment

The Western Segment of Alternative 2 is the same as that of Alternative 1. Therefore the potential impacts for this segment are the same as discussed for Alternative 1.

6.3.2 Central Segment

The Central Segment of Alternative 2 differs in alignment from Alternative 1, but the single REC identified for Alternative 1 is the same REC that is identified for Alternative 2. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

6.3.3 Eastern Segment

The Eastern Segment of Alternative 2 is the same as for Alternative 1. Therefore the potential impacts for this segment are the same as discussed for Alternative 1.

The WRSL is located in this segment but, as discussed in Section 4.3.2, it does not at present represent a potential REC for the project.

6.4 ALTERNATIVE 3

6.4.1 Western Segment

The Western Segment of Alternative 3 is the same as that of Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

6.4.2 Central Segment

The Central Segment of Alternative 3 differs in alignment from Alternative 1, but the single REC identified for Alternative 1 is the same REC that is identified for Alternative 3. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

6.4.3 Eastern Segment

The Eastern Segment of Alternative 3 is the same as for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

The WRSL is located in this segment but, as discussed in Section 4.3.2, it does not at present represent a potential REC for the project.

6.5 ALTERNATIVE 4

6.5.1 Western Segment

One dump site (Figure 4-1, Site 2), discussed in Section 5.2.1, was identified in the Western Segment of Alternative 4 during the site reconnaissance. Approximately 100 drums were noted on the property, which, based on site reconnaissance and air photo review, appears to be about 600 square feet in size. Tenco Tractor, discussed in Section 4.3.1 under Federal RCRAInfo, also represents a potential REC for the project, with a low potential for impact.

6.5.2 Central Segment

The Central Segment of Alternative 4 differs in alignment from Alternative 1, but the single REC identified for Alternative 1 is the same REC that is identified for Alternative 4. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

6.5.3 Eastern Segment

The Eastern Segment of Alternative 4 is the same as Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

The WRSL is located in this segment but, as discussed in Section 4.3.2, it does not at present represent a potential REC for the project.

6.6 ALTERNATIVE 5

6.6.1 Western Segment

The Western Segment of Alternative 5 is the same as for Alternative 4. Therefore, the potential impacts for this segment are the same as discussed for Alternative 4.

6.6.2 Central Segment

The Central Segment of Alternative 5 differs in alignment from Alternative 1, but the single REC identified for Alternative 1 is the same REC that is identified for Alternative 5. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

6.6.3 Eastern Segment

The Eastern Segment of Alternative 5 is the same as Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

The WRSL is located in this segment but, as discussed in Section 4.3.2, it does not at present represent a potential REC for the project.

6.7 COMPARISON OF ALTERNATIVES

All five build alternatives could be potentially affected by the presence of RECs within the alternative alignments. All alignments of alternatives may contain three RECs and two, Alternatives 4 and 5, may contain four RECs. This is not anticipated to result in any substantial difference between alternatives, as the presence of occurrences of potential RECs is not significantly different in terms of need for further investigation and potential remediation requirements.

The potential RECs are:

- An uncontrolled dump site in the Western Segment (Alternatives 1, 2, and 3);
- A second uncontrolled dump site in the Western Segment (Alternatives 4 and 5);
- The Tenco Tractor site (Alternatives 4 and 5);
- A third uncontrolled dump site in the Central Segment (all alternatives); and
- The Rio Bravo site in the Eastern Segment (all alternatives).

Further information on the Tenco Tractor site, the location of the UST on the Rio Bravo site, and the uncontrolled dump sites would be obtained during Tier 2 (see Section 11 for further details).

The use and storage of potentially hazardous materials during construction of the Parkway, and the associated risk of accidental release into the environment, or of human exposure, would be the same for all build alternatives.

Potentially hazardous materials used during construction would predominantly be petroleum hydrocarbons, e.g., diesel, gasoline, and motor oil. Accidental releases could be attributable to normal construction activities, such as overfilling of vehicles or fuel storage tanks, as well as normal leakage. Soil and/or surface waters would be the media most likely affected, with exposure to humans and ecological receptors by means of direct contact.

7.0 SECONDARY AND INDIRECT IMPACTS

Recent FHWA, U.S. EPA, and Caltrans guidance on growth inducement (Mare Island Accord, 2006) advises that analysis of potential impacts associated with growth should include an evaluation of the effects of growth on resources of concern. The following discussion presents a qualitative evaluation of potential secondary and indirect impacts of Anticipated Growth (see below for definition) on human and environmental resources in the study area.

The Council on Environmental Quality (CEQ) provided clarification of the terminology "indirect impacts" when it issued the National Environmental Policy Act (NEPA) in 1978. Secondary and Indirect impacts are defined as impacts "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." Moreover, indirect effects ". . . may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems."

A key term used in this section is "Anticipated Growth." This is defined as the growth that is anticipated in the study area as described in the relevant General Plans and adopted regional forecasts, such as the SACOG Blueprint scenario (as detailed in the Community Impact Assessment), including additional growth that may occur as a result of major new development proposals that have not yet been formally approved. It is possible that this additional growth may accelerate the rate of buildout in the study area, but it is not ultimately expected to result in any greater levels of development than is presented in adopted regional forecasts.

The following discussion considers secondary and indirect impacts associated with the presence of hazardous materials or sites in the study area that may occur as a result of direct impacts associated with the Parkway, and also as a result of anticipated growth. The study area for the analysis of secondary and indirect impacts is shown in Figure 7-1.

7.1 GROWTH INDUCEMENT SCENARIO

NEPA and CEQA both require environmental analyses to consider the effects of a project on growth. Caltrans defines growth inducement as the relationship between a proposed project and growth. This section summarizes the relationship between the project and regional growth, and discusses potential secondary and indirect effects of the project related to growth inducement.

Placer Parkway would be growth inducing, as a component of the rapidly evolving urban matrix in western Placer County. While the project study area is predominately undeveloped at this time, parts of the study area are within local General Plan designations allowing urban growth. In addition, there are numerous proposals for major new development projects in and around the study area depicted on Figure 7-2 that are currently in various stages of the approval and entitlement process. Portions of the surrounding area (especially northern Sacramento County and southwestern Placer County) have developed very rapidly over the past several decades. This has occurred as a result of many factors, including continuing net population growth statewide, strong employment growth in the Sacramento region, relative housing affordability, and location amenities.

Population and employment growth projections for California and the Sacramento Region in general, and for southwestern Placer County and south Sutter County in particular (described in detail in the Tier 1 EIS/EIR Community Impact Assessment), indicate that that development pressures in the project vicinity will remain relatively intense, irrespective of the Placer Parkway project. Between 1950 and 2000, the California population more than tripled. During the same period, population in the six-county SACOG region increased by more than 800 percent (DOF, 2006). Projections and established goals and policies

from a wide range of sources, including SACOG, Placer, Sacramento and Sutter counties, and the Cities of Roseville, Rocklin and Lincoln, confirm that relatively high rates of population and employment growth and housing and commercial development are anticipated in the six-county region by 2050. Between 2000 and 2050, California's population is expected to increase from approximately 34 million to 55 million. During the same time period, SACOG projects that the region's growth will double, from 1.9 million in 2000 to 3.95 million in 2050, with the Roseville-Rocklin-Lincoln area remaining one of the fastest growing areas in the region (Levy and Doche-Boulos, 2005; SACOG, 2006).

Placer Parkway would be growth inducing because it would help support changes in the amount of growth beyond current general plan levels, and could influence the pace and location of some development. It is likely that Placer Parkway could help to implement the various specific development proposals in the study area, since it would serve to relieve traffic congestion associated with these proposals. Furthermore, the Parkway could affect the timing of development in the vicinity of the proposed interchange locations, particularly those proposed near vacant land adjacent to rapidly developing areas or areas now proposed for urban development. However, as the Parkway would be a limited-access road located in an area that is already undergoing extensive and rapid urbanization, its potential to facilitate growth that would not have otherwise occurred is limited. It could result in different land uses, or more intensive land uses, in the vicinity of interchanges where land use plans are still being developed and have not yet been approved. Also, it could hasten the buildout of planned commercial and industrial uses, especially in the Sunset Industrial Area and proposed Placer Ranch Specific Plan area, as well as in the proposed Sutter Pointe Specific Plan area.

In the longer term, improved access provided to lands in the Western and Eastern segments could be a factor in stimulating additional growth and development in areas west of SR 70/99 not protected by the Natomas Basin HCP, or north of the Sutter Pointe Specific Plan area, or north of Sunset Boulevard West in Placer County. Although growth is anticipated in these areas over time (as reflected in SACOG's preferred Blueprint scenario, the Sutter County General Plan, and the City of Lincoln General Plan), such development is not reflected in general plans at present and has not been formally proposed by landowners. By providing improved access to adjacent areas, Placer Parkway could be one of many factors that would encourage growth in these areas sooner than this might otherwise occur.

The factors influencing growth in the region are complex. Placer Parkway is one of several major urban development proposals in the region. While Placer Parkway would contribute to regional growth, including growth beyond the level identified in current general plans, it is not feasible to quantify the amount of its contribution. A single new transportation facility such as the Parkway is only one of the many factors contributing to regional growth, and it is speculative to assign a particular quantity of growth to any one factor.

Furthermore, several factors serve to limit the likely effect of the Parkway on growth, including the following:

- No interchanges are proposed for any areas that are not already approved or proposed for development;
- All approved and proposed residential development that has not already been built is projected to be built out prior to 2020, when the Parkway is proposed to open; and,
- Real estate market pressures in the area have been and continue to be intense without the Parkway, and local government jurisdictions have been supportive of processing development applications in spite of anticipated regional transportation challenges.

It is unlikely that the choice of one Placer Parkway alternative over another would substantially change expected patterns of growth and development in the project study area and the surrounding region. In the

Western Segment, all corridor alignment alternatives would provide new access to an area that is currently undeveloped farmland, but that is proposed for mixed use urban development. The three more southerly alignments (Alternatives 1, 2, and 3) would provide two interchanges in the Sutter Pointe Specific Plan area, while the more northerly alignments (Alternatives 4 and 5) would provide only one interchange in this area, approximately one mile farther north of the more southerly alignments in the Western Segment. Since none of the alternative alignments would include any intersections in the Central Segment, there would be little difference in growth inducement effects among the alternatives in this segment. In the Eastern Segment, two interchanges are proposed within the existing Sunset Industrial Area Plan, in an area proposed for the Placer Ranch Specific Plan. While these interchanges would provide new access to a currently undeveloped area, this area is planned for growth. In the Eastern Segment all alternatives would follow an identical alignment, so there would be no differences in growth inducement effects among the alternatives.

A future interchange at Watt Avenue could be growth inducing, because it would provide major new regional access to a portion of the project study area that is currently rural and undeveloped, although both conceptual interchange locations are now surrounded by formal development proposals or land controlled by development interests. A Watt Avenue interchange is not proposed as part of the project.

7.2 SECONDARY AND INDIRECT EFFECT EVALUATION

7.2.1 No-Build Alternative

Under the No-Build Alternative, land would not be acquired for the Parkway and the Parkway would not be constructed. There would not be any secondary or indirect impacts associated with hazardous materials and sites present in the study area under the No-Build Alternative.

7.2.2 Build Alternatives 1 Through 5

There would not be expected to be any secondary and indirect impacts with respect to hazardous materials or sites as a result of the Parkway. Although any disturbance of potentially hazardous sites presents a risk of secondary effects on human health and impacts to soil and groundwater and surface water as a result of accidental release or spillage, such release or spillage is not considered likely during the construction of the Parkway. The potential RECs in the study area would be subject to further investigation during Tier 2 and would be expected to be properly remediated prior to any construction activities.

The anticipated growth that would be expected to occur as a result of Placer Parkway could result in secondary and indirect impacts related to the potential presence of hazardous materials in the study area.

Anticipated growth could result in the potential disturbance of as yet unknown hazardous sites and potential RECs that may occur in and around the study area. If not properly investigated and remediated, such disturbance could result in accidental spillage or releases, which could adversely affect human health, soil, air quality and groundwater or surface water. Such effects would be direct impacts of other projects not associated with Placer Parkway, and would be required to be analyzed as part of independent environmental review. Although it is not feasible to perform a detailed evaluation of these projects at this stage as specific design details are not known, potential impacts are taken into account in the Placer Parkway 2040 Cumulative analysis (see Section 8.2). This analysis evaluates a 2040 cumulative scenario (Figure 7-2), which is considered to be an appropriate projection of future development. This scenario includes full-residential build out in Placer County west of Sierra College Boulevard, including general plan areas and major developments, and employment and population growth in line with SACOG forecasts. It assumes levels of growth and development will occur at the higher end of a potential feasible range and therefore represents a reasonable maximum development scenario for which cumulative and secondary and indirect impacts have been analyzed.

8.0 CUMULATIVE IMPACTS

8.1 CUMULATIVE IMPACT SCENARIO

Analysis of cumulative impacts is required under the National Environmental Policy Act and the California Environmental Quality Act (CEQA). Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that are the focus of cumulative impact analysis. The CEQ's regulations (CEQ, 1987) explicitly state that cumulative impacts must be evaluated along with the direct and indirect effects of each alternative.

CEQA defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, §15355). Stated another way, "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the environmental document together with other projects causing related impacts" (CEQA Guidelines, §15130). Although a project may cause an individually limited or individually minor incremental impact that, by itself, is not significant, the increment may be "cumulatively considerable" and thus significant.

FHWA has requested that cumulative conditions for the analysis of project alternatives in the Tier 1 EIS/EIR for Placer Parkway be based on development levels that are 20 years beyond the projected opening of the Parkway. For planning purposes, Placer County Transportation Planning Agency (PCTPA) has identified 2020 as the opening year of the Parkway. Cumulative impacts are therefore being evaluated for the year 2040. This 2040 scenario includes the following projects (see Figure 7-2):

- Full build-out of all residential land in Placer County west of Sierra College Boulevard, including current general plan areas and the following major development proposals in West Placer County:
  - The Creekview and Sierra Vista Specific Plan areas in Roseville's Memorandum of Understanding (MOU) Remainder Area
  - The Sphere of Influence (SOI) expansion areas of Lincoln
  - The Placer Vineyards, Regional University and Community, and Placer Ranch Specific Plans in unincorporated Placer County
  - The Curry Creek Community Plan area
- Growth in retail employment in Placer County that balances the growth in residential development by matching SACOG's countywide estimate of about 0.32 employee per dwelling unit from their 2025 forecasts.
- Growth in total employment levels in Placer County that balances the growth in residential development by matching SACOG's 1.3 employees per dwelling unit from their 2025 forecasts.
- Full build-out of the residential development in the proposed Sutter Pointe Specific Plan area along with a non-residential development level that balances the residential development in that area.

- Estimated 2040 developments in all other portions of SACOG's six-county region based on assuming a constant rate for the development growth between 2005 levels and the 2050 Preferred Blueprint scenario for each of SACOG's traffic analysis zones (TAZs).

8.2 CUMULATIVE IMPACTS EVALUATION

8.2.1 No-Build Alternative

Under the No-Build Alternative, land would not be acquired for the Parkway and the Parkway would not be constructed. There would not be any cumulative impacts under the No-Build Alternative.

8.2.2 Build Alternatives 1 Through 5

Placer Parkway and other development considered in the cumulative impact scenario would all involve the disturbance, storage, use, disposal and transport of hazardous materials to varying degrees during construction and operation. Increased urbanization and development directly increases the use, storage and generation of hazardous materials and the risk of accidental release into the environment. The adverse effects on groundwater or surface water, habitat, species, air quality, and associated effects on human health, can be exacerbated as a result of hazardous materials use and release from multiple projects in the same geographic area.

Impacts related to these activities are considered less than significant because the storage, use, disposal and transport of hazardous materials are extensively regulated by various federal, state, and local agencies, and it is assumed that those involved with the project would implement and comply with these existing hazardous materials regulations. In addition, each of these related projects would undergo its own CEQA review and include mitigation based on these regulations. Therefore significant hazards to the public would not occur, and no cumulatively significant impacts related to hazardous wastes or materials are expected.

The Parkway could potentially experience impacts associated with the presence of LBP and/or ACM due to the demolition of structures along the preferred alignment, the presence of ADL along the edges of existing roadways where future construction will occur, soil contamination in potential REC areas, e.g., Tenco Tractor, Rio Bravo Power Plant, and three uncontrolled dump sites, and agricultural soils where pesticides have been historically applied. The potential presence of these three RECs within the alignments of Alternatives 1, 2, and 3, and the presence of four potential RECs within the alignment of Alternatives 4 and 5 is not considered to present a risk of contribution to cumulative impacts. It is likely that impacts associated with these RECs can be fully avoided, either through design of the Parkway to avoid these site locations or implementation of appropriate preventative and mitigation measures during construction to prevent accidental release of contaminants to soil or groundwater.

Mitigation strategies have been identified to reduce these impacts to less-than-significant levels. With development of the mitigation strategies into enforceable mitigation measures, Placer Parkway's incremental contribution to less-than-significant cumulative impacts related to hazardous materials would not result in a cumulatively significant impact. Since cumulative impacts from the proposed project and related projects are not significant, the proposed project, by itself, cannot cause a cumulatively considerable incremental impact. Placer Parkway's cumulative impacts related to hazardous materials are therefore not significant.

9.0 POTENTIAL WATT AVENUE INTERCHANGE

No hazardous materials sites, sources, or facilities were identified in the vicinity of the location of a potential interchange between a potential new Watt Avenue interchange with any of the Parkway build alternatives.

10.0 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION STRATEGIES

A number of potential avoidance, minimization, and/or mitigation strategies may be implemented to prevent or reduce potential environmental impacts associated with hazardous waste sources and sites in the study area, and from the use and storage of hazardous materials during construction:

- During Tier 2, it is anticipated that the selected alternative could be located such that the five potential RECs would not be disturbed, particularly in view of their location primarily on the outer edges or just outside the proposed corridor alternative alignments.

- All buildings and other structures proposed for demolition should be surveyed for the presence of LBP and ACM. Any such LBP and/or ACM should be appropriately abated by a certified contractor prior to demolition and disposed of in accordance with federal, state, and local regulations;

- An ADL investigation should be conducted along unpaved shoulders adjacent to highways and roads in high traffic areas that will be disturbed during construction activities. The only locations where traffic is heavy enough to warrant an ADL investigation (when peak monthly Average Daily Traffic exceeded 10,000 vehicles in 1985; 1985 was the last year when leaded gasoline was sold in the United States) would be the intersections of the proposed Parkway and SR 65 in the east and SR 70/99 in the west; Caltrans will likely have completed an ADL site investigation at the above intersections a few years before this project goes to construction (Chadha, 2006).

- Potentially impacted soils proposed for excavation associated with potential RECs, e.g., Tenco Tractor, Rio Bravo Power Plant, and three uncontrolled dump sites, should be tested for appropriate analytes and handled in accordance with regulatory standards;

- Current agricultural soils and former undisturbed agricultural soils that are proposed for excavation during construction should be tested for pesticides and other contaminants and disposed of in accordance with federal, state, and local regulations; and

- A Health and Safety Plan should be prepared by the contractor prior to construction. This plan should describe appropriate procedures to follow in the event that any contaminated soil or groundwater is encountered during construction activities. Any unknown substances should be tested, handled, and disposed of in accordance with appropriate federal, state, and local regulations.

11.0 ANALYSES TO BE UNDERTAKEN IN TIER 2

All of the alternative alignments may potentially affect identified RECs within the study area. Further investigation of these RECs is recommended to determine what risk, if any, is posed to human and environmental health. These investigations would include the following:

- Interviews with regulators and owners/occupants of potential contaminated properties;
- An investigation of building/structure records and surveys of building and structural materials for any facilities that will be fully or partly demolished during the construction of Placer Parkway;
- Identification of location and condition and condition of UST within Rio Bravo; and
- Development of detailed hydrogeology information, including geology and groundwater depth and gradient, for the chosen alignment.
- Further investigation of Tenco Tractor site. It is assumed that continued investigation and monitoring of the Tenco Tractor site would be the responsibility of the landowner and the only costs accruing to the Placer Parkway project would be associated with a review of available records and data. A budget estimate for these services is $10,000 (in 2006 dollars).

For the remaining four RECs, three uncontrolled dump sites, and a possible UST at the Rio Bravo property, it is assumed that costs (in 2006 dollars) associated with site investigations would be on the order of $20,000 per location for Sites 2 and 3, as well as Rio Bravo. Site 1 is significantly larger; an investigation of this property is assumed to cost on the order of $50,000.

Due to the great variation in scale between the results of the EDR report and Figure 4-1, which illustrates potential RECs relative to the alternative alignments, it is difficult to say which, if any, of the RECs actually lies within a proposed alignment corridor. Figure 4-1 suggests the following:

- Drums and containers (Site 1) is very close to the Western Segment of Alternatives 1, 2, and 3;
- Drums and containers (Site 2) is very close to the realignment of Sankey Road associated with Alternatives 4 and 5;
- The location of the potential UST within the Rio Bravo site is unknown. Further clarification would be required during Tier 2; and
- The remaining two RECs seem to be several hundred feet from the proposed alternatives.

As environmental conditions in the study area may change between 2006 and the expected initial construction year of Placer Parkway (between 2015 and 2020), it is recommended that an update of this Initial Site Assessment be performed during the Tier 2 environmental process, and within six months of the start of each phase of construction. The update should include an updated database search, regulatory agency file review, and site reconnaissance for the selected corridor. If, during the update, the potential for any businesses adjacent to the project to create a REC cannot be clarified, recommendations should be developed for appropriate soil sampling within the adjacent project area.

12.0 LIMITATIONS

The conclusions presented in this report are professional opinions based upon visual observations of the study area, and interpretation of the available historical information and documents reviewed. The conclusions are intended exclusively for the purpose outlined in this report, and at the location and project indicated. This report is intended for the sole use of FHWA, Caltrans, and SPRTA. The scope of services performed in execution of this investigation may not be appropriate to satisfy the needs of other users, and any use or reuse of this document or the findings, conclusions, or recommendations presented herein is at the sole risk of said user.

It should be recognized that this study is not intended to be a definitive investigation of potential environmental impacts in the study area. Given that the scope of services for this investigation was limited, it is possible that currently unrecognized contamination might exist in the study area.

Opinions presented herein apply to the existing and reasonably foreseeable site conditions at the time of the assessment. They cannot necessarily apply to site changes of which this office is unaware and has not had the opportunity to evaluate. Changes in the conditions of this property may occur with time due to natural processes or human activities in the study area. Changes in applicable standards may also occur as a result of legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond the control of the authors.

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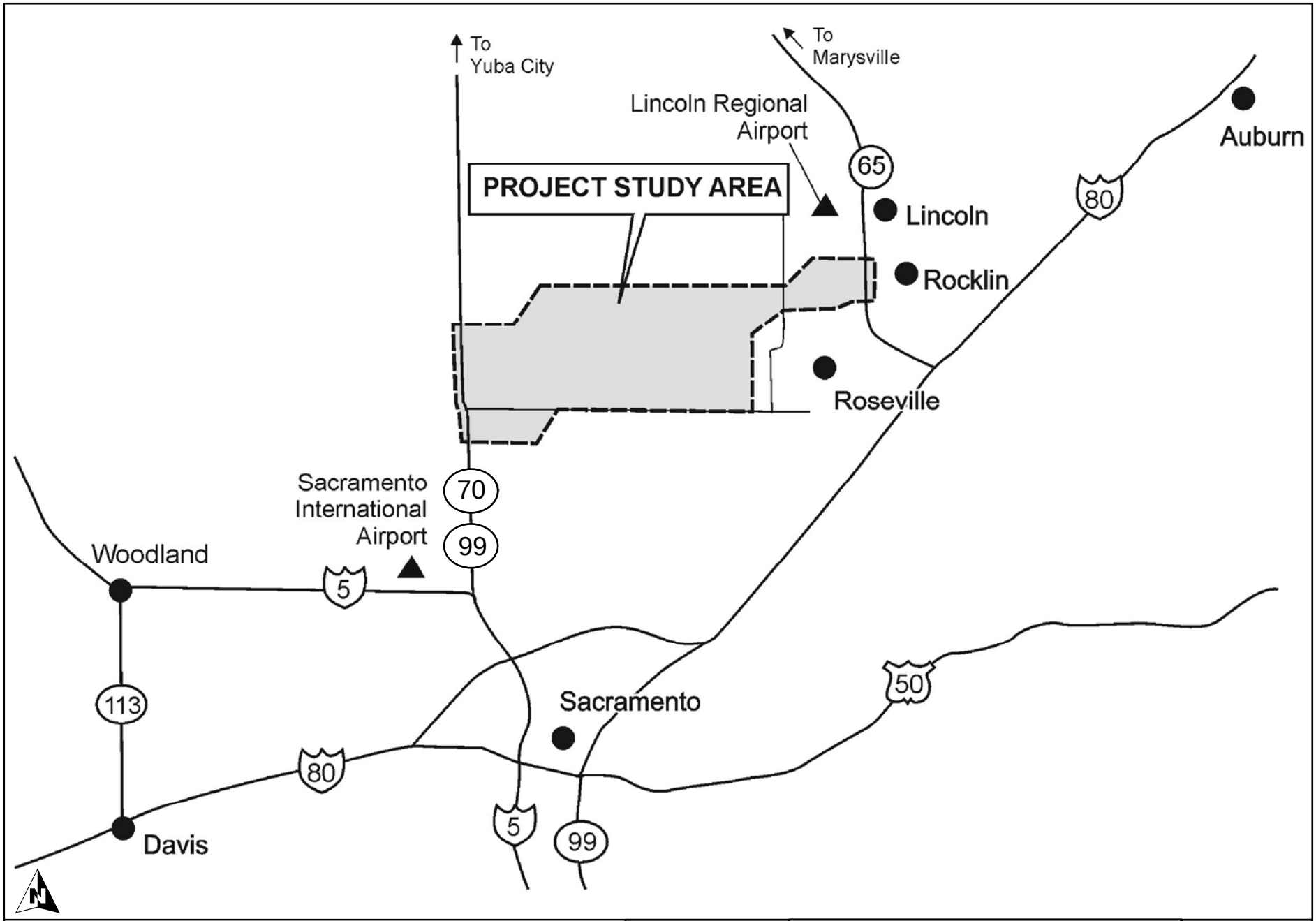

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Miles

PLACER PARKWAY

Tier 1 EIS/EIR
Initial Site
Assessment

Project Location

Figure 1-1

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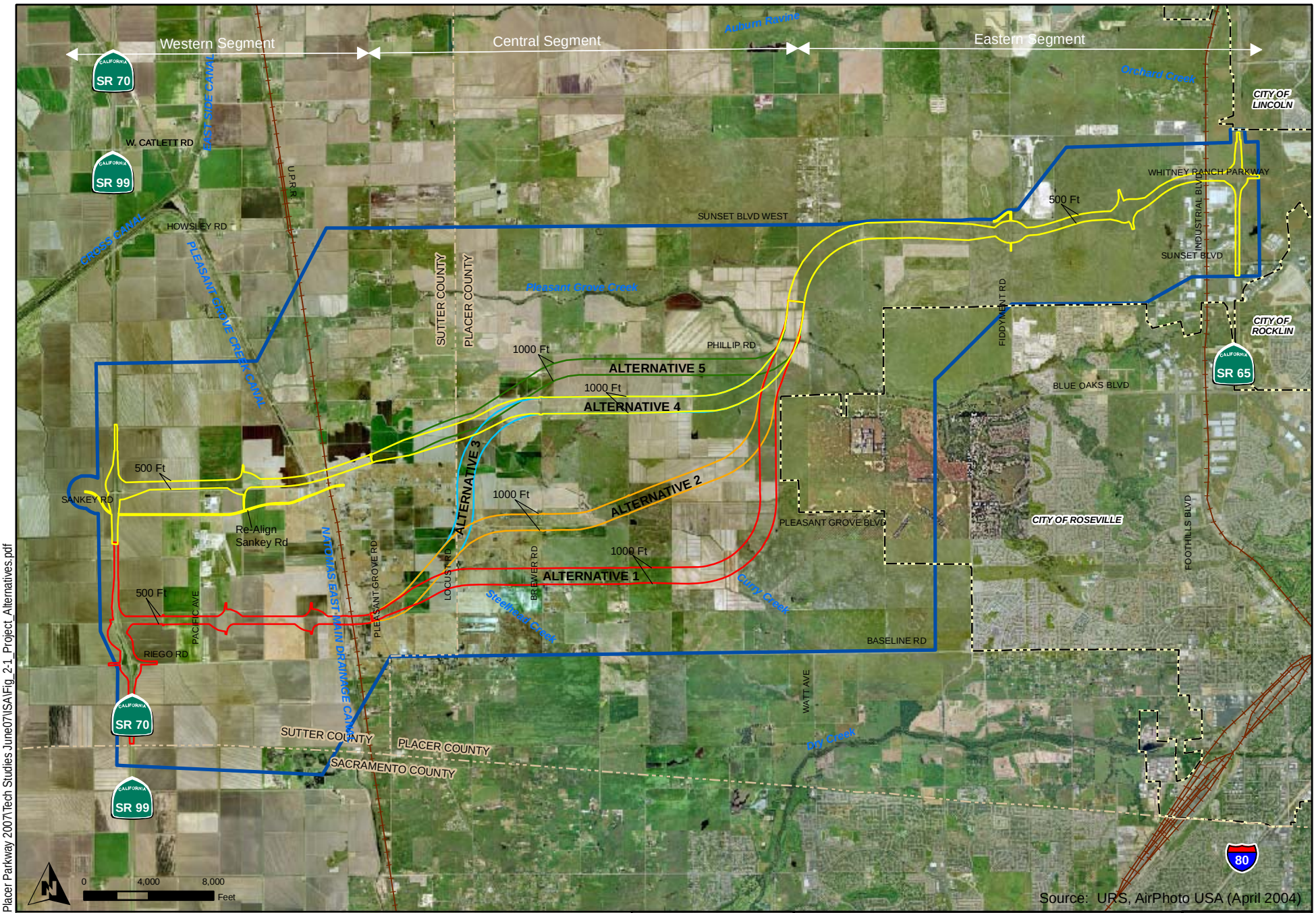
Western Segment
Central Segment
Eastern Segment
Auburn Ravine
Orchard Creek
CITY OF LINCOLN
SR 70
W. CATLETT RD
SR 99
EAST SIDE CANAL
UPRR
WHITNEY RANCH PARKWAY
500 Ft
SUNSET BLVD WEST
INDUSTRIAL BLVD
SUNSET BLVD
CROSS CANAL
HOWSLEY RD
PLEASANT GROVE CREEK CANAL
SUTTER COUNTY
PLACER COUNTY
Pleasant Grove Creek
FIDDYMENT RD
CITY OF ROCKLIN
PHILLIP RD
1000 Ft
ALTERNATIVE 5
ALTERNATIVE 4
SR 65
BLUE OAKS BLVD
500 Ft
SANKEY RD
ALTERNATIVE 3
1000 Ft
ALTERNATIVE 2
Re-Align
Sankey Rd
PLEASANT GROVE BLVD
CITY OF ROSEVILLE
FOOTHILLS BLVD
NATOMAS EAST MAIN DRAINAGE CANAL
PLEASANT GROVE RD
LOCUST RD
BREWER RD
1000 Ft
ALTERNATIVE 1
Curry Creek
Steelhead Creek
500 Ft
PACIFIC AVE
RIEGO RD
BASELINE RD
WATT AVE
SR 70
SUTTER COUNTY
PLACER COUNTY
SACRAMENTO COUNTY
Dry Creek
SR 99
80
0
4,000
8,000
Feet
Source: URS, AirPhoto USA (April 2004)
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary
PLACER PARKWAY
Tier 1 EIS/EIR
Initial Site
Assessment
Project Alternatives
Figure 2-1
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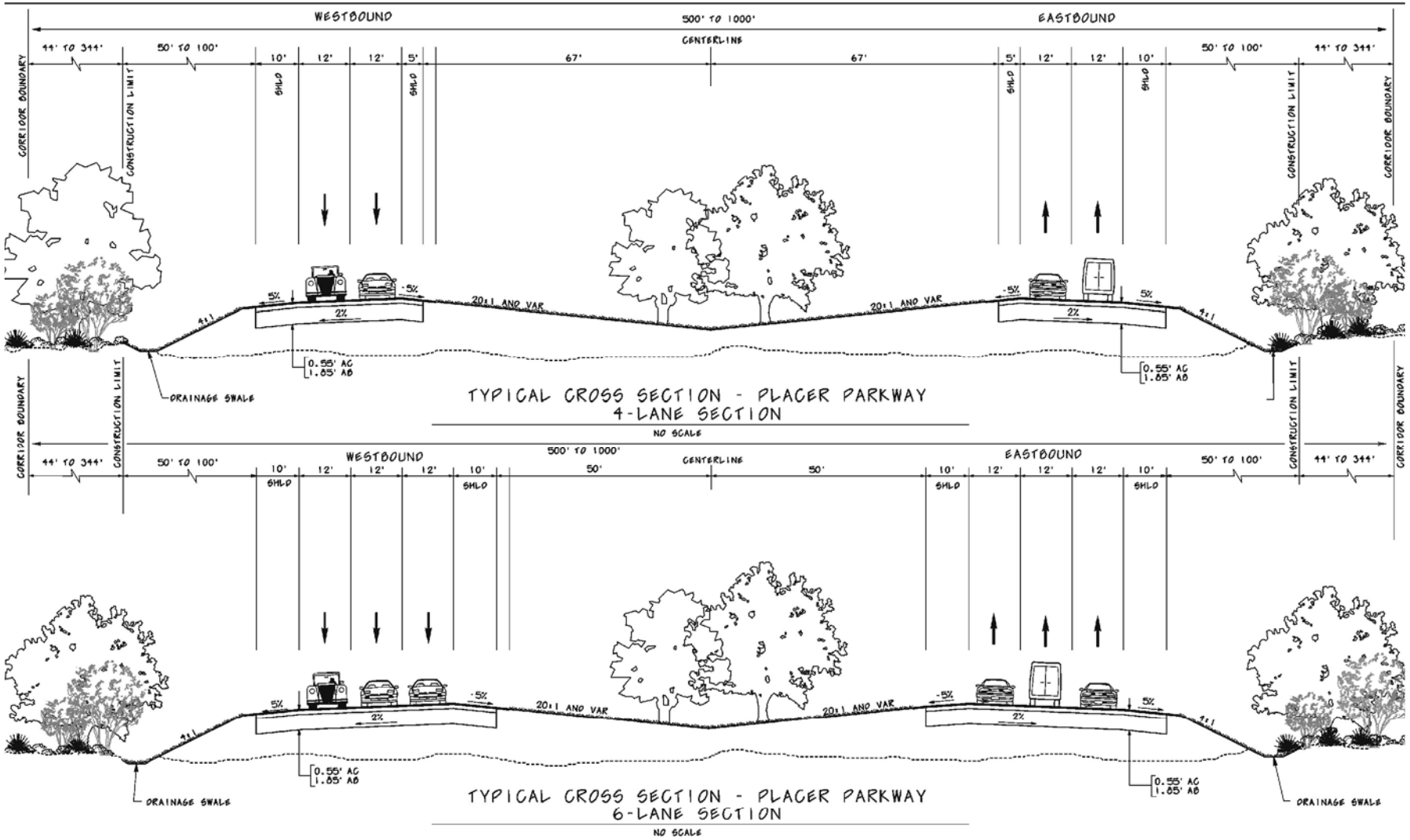
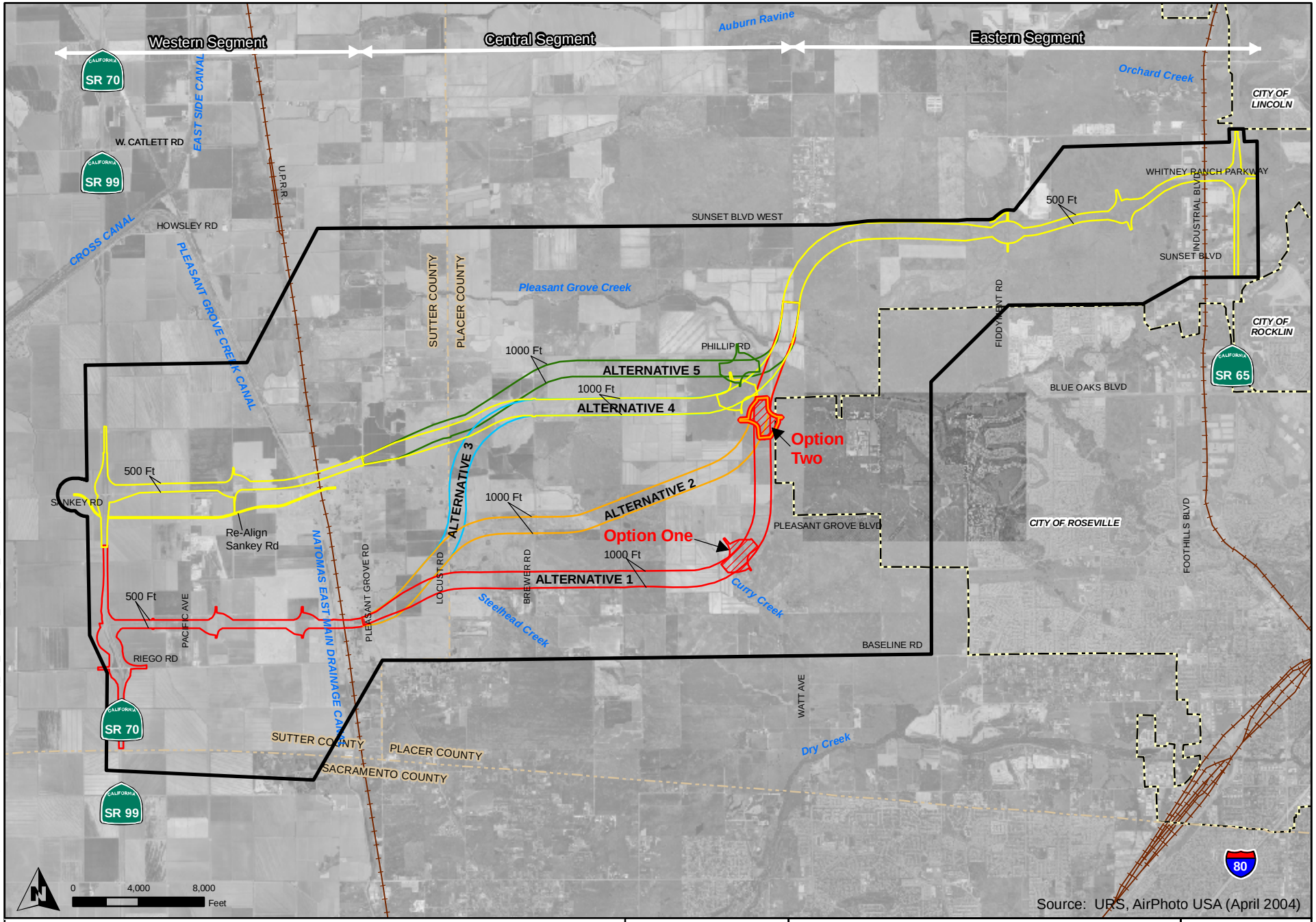


PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR Initial Site Assessment	Typical Cross Section (Conceptual)	***Figure 2-2***
		June 2007

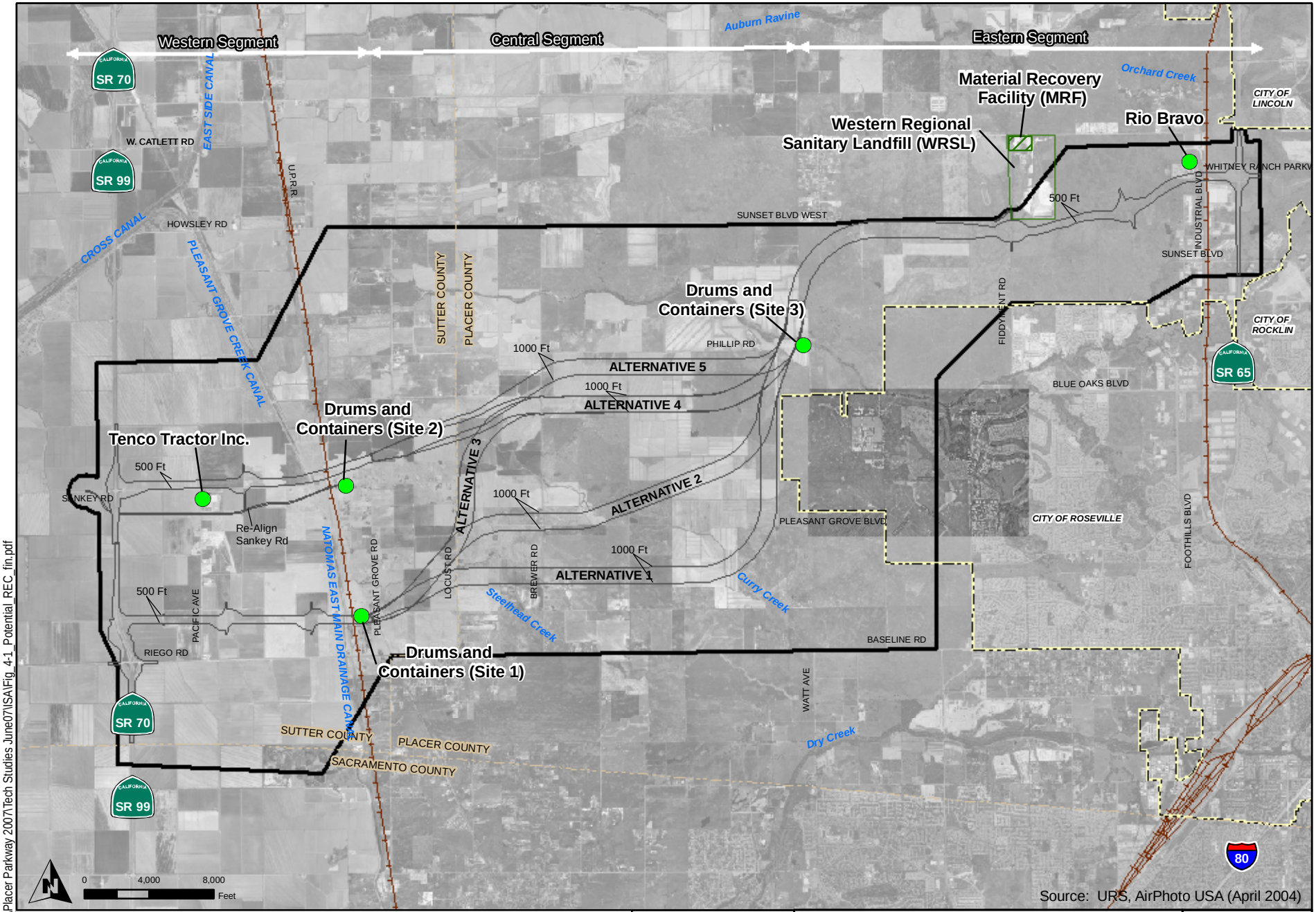


Tier 1 EIS/EIR
Initial
Site Assessment

Potential Watt Avenue Interchange

Figure 2-3

June 2007



Alternative
Study Area Boundary
County Boundary
City Boundary
Recognized Environmental Condition (REC)

PLACER PARKWAY

Tier 1 EIS/EIR
Initial Site Assessment

Potential Recognized Conditions (RECs) With Respect to Project Alternatives

Figure 4-1

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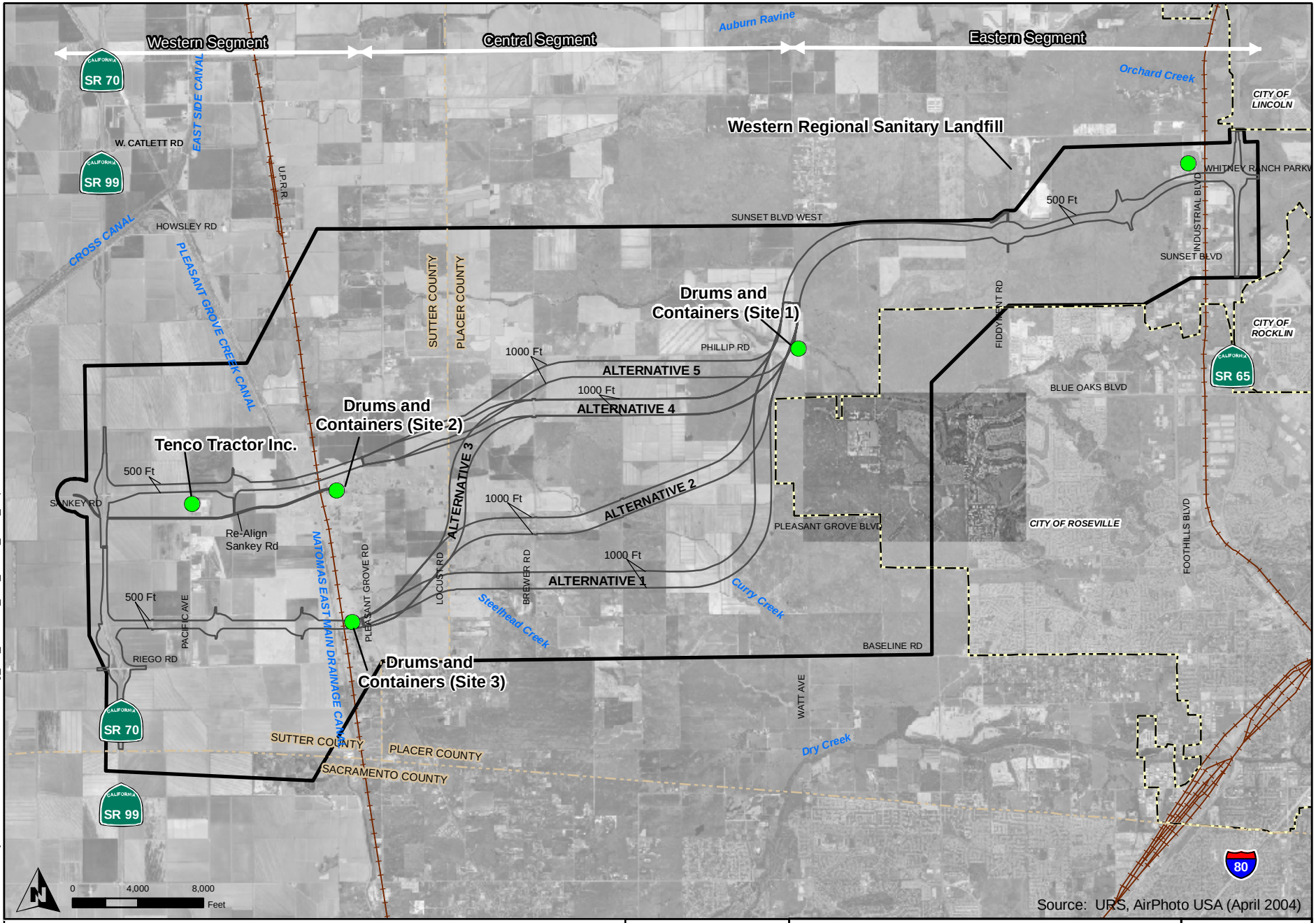

PLACER PARKWAY

Tier 1 EIS/EIR
Initial Site Assessment

Potential Hazardous Waste Sites in Study Area

Figure 5-1

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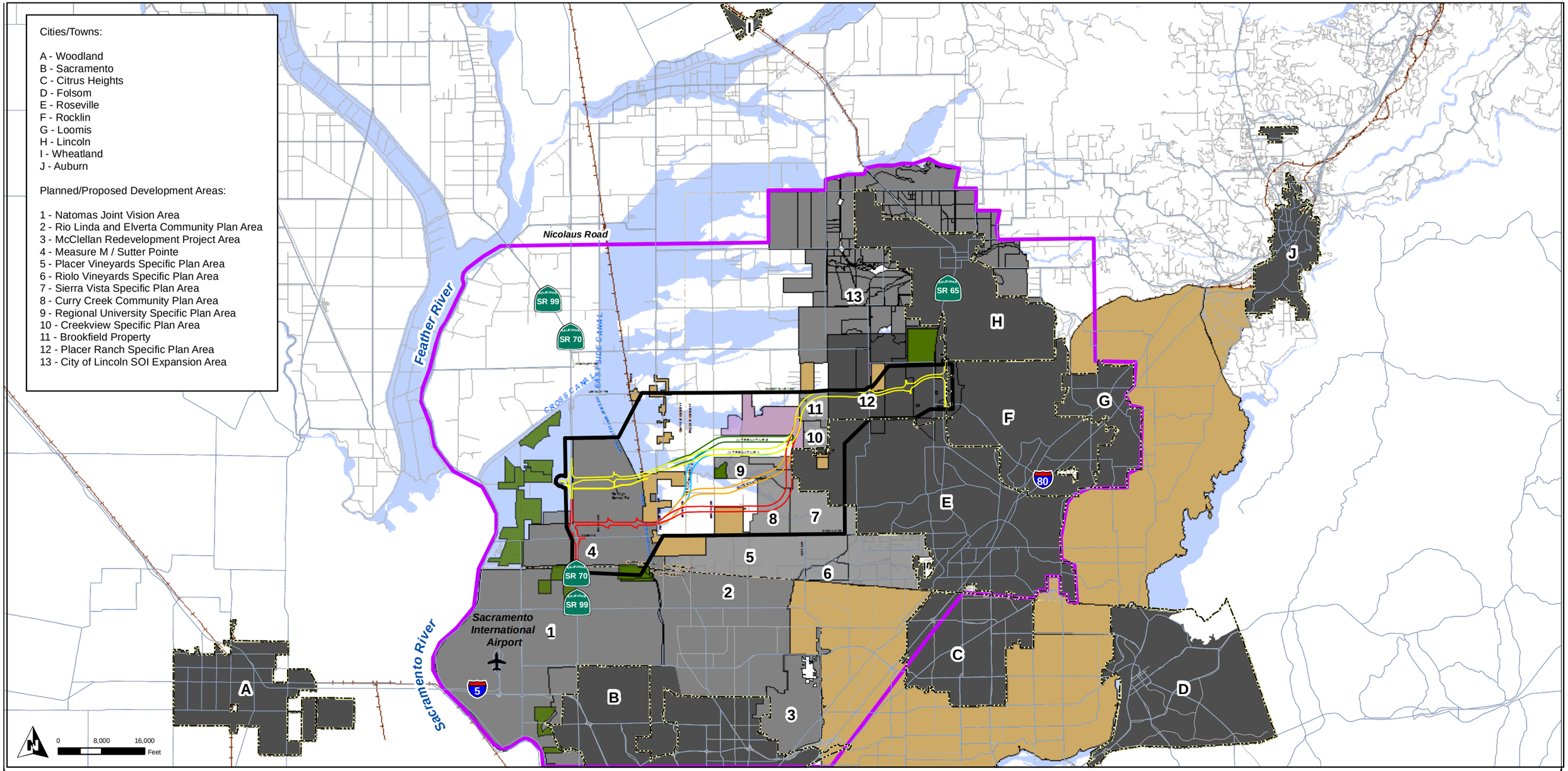
Cities/Towns:

A - Woodland
B - Sacramento
C - Citrus Heights
D - Folsom
E - Roseville
F - Rocklin
G - Loomis
H - Lincoln
I - Wheatland
J - Auburn

Planned/Proposed Development Areas:

1 - Natomas Joint Vision Area
2 - Rio Linda and Elverta Community Plan Area
3 - McClellan Redevelopment Project Area
4 - Measure M / Sutter Pointe
5 - Placer Vineyards Specific Plan Area
6 - Riolo Vineyards Specific Plan Area
7 - Sierra Vista Specific Plan Area
8 - Curry Creek Community Plan Area
9 - Regional University Specific Plan Area
10 - Creekview Specific Plan Area
11 - Brookfield Property
12 - Placer Ranch Specific Plan Area
13 - City of Lincoln SOI Expansion Area



County Boundary
Railroads
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Existing and Approved Development
Planned / Proposed Development (including future conservation areas)
Existing Conservation Areas
Developed Unincorporated Areas
Municipal Facilities
Study Area for Secondary and Indirect Impacts
Project Study Area Boundary
100 Year Floodplain Areas

Source: North Fork Associates;Mara Feeney Associates; Sutter County Planning Division; County of Sacramento Planning and Community Development Department; City of Sacramento Development Services Department; Sunset Industrial Area Plan; City of Lincoln Community Development Department; Natomas Basin HCP;Placer County Planning Deptartment; City of Sacramento; City of Roseville

PLACER PARKWAY
CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Initial Site Assessment

Secondary and Indirect Impact Analysis Study Area

Figure 7-1

June 2007

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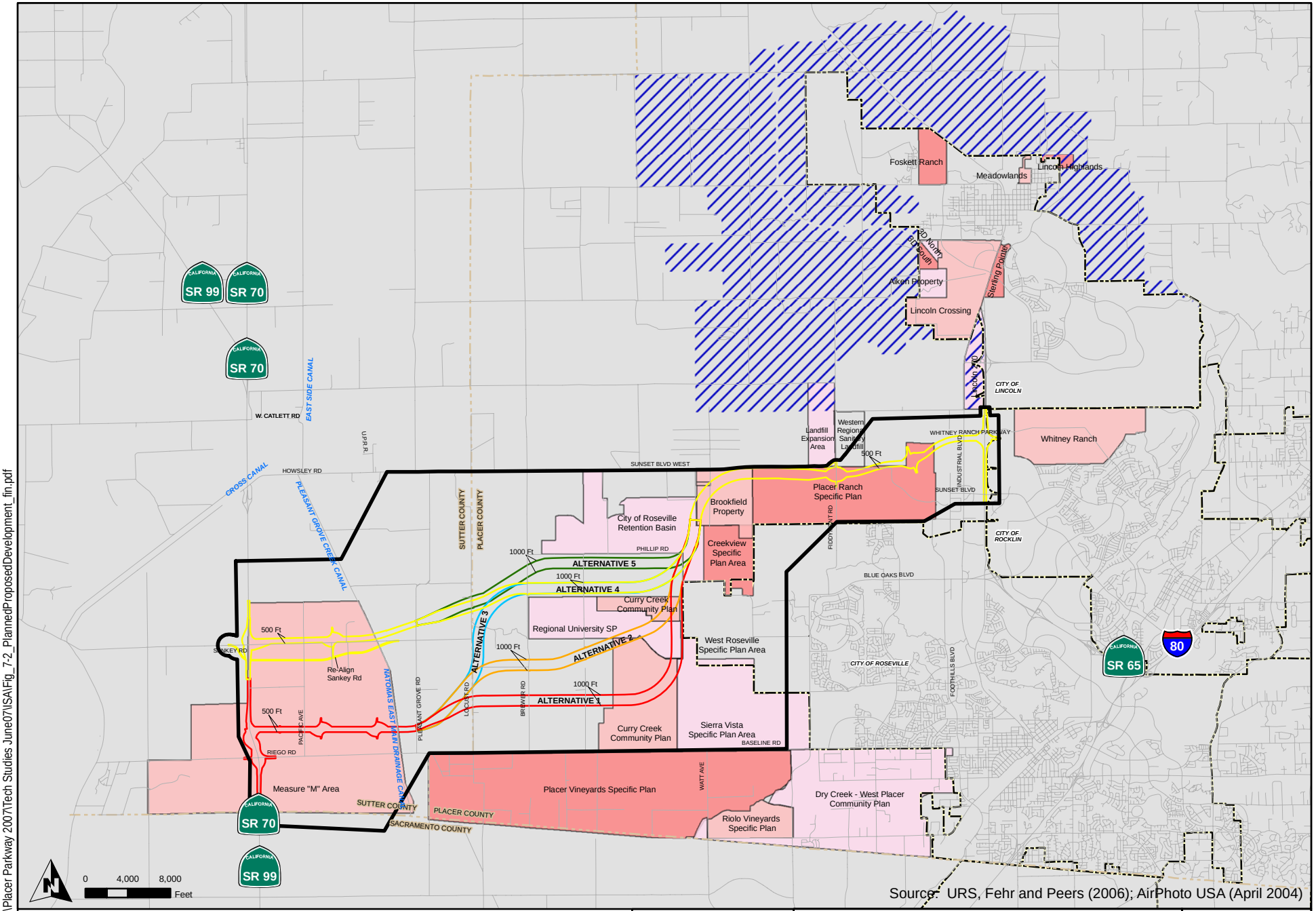

Study Area Boundary
City Boundary
County Boundary
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
City of Lincoln Sphere of Influence
Planned/Proposed Development

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR Initial Site Assessment

Planned / Proposed Development

Figure 7-2

June 2007

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URS Corporation L:\Projects\PlacerParkway2006_28066593\MXD\Current Working Documents\Technical_Noise_Report\Fig_7-6_Fehr&Peers_PlannedProposedDevelopment.mxd Date: 7/17/2006 6:24:01 PM Name: akeele0

Appendix A
EDR Regulatory Database Report

EDR DataMap™ Area Study

Placer Parkway
Placer County, CA 95747

March 20, 2006

Inquiry number 01635365.1r

EDR® Environmental Data Resources Inc

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR).

TARGET PROPERTY INFORMATION

ADDRESS

PLACER COUNTY, CA 95747
PLACER COUNTY, CA 95747

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records within the requested search area for the following databases:

FEDERAL RECORDS

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
Delisted NPL	National Priority List Deletions
NPL RECOVERY	Federal Superfund Liens
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP	CERCLIS No Further Remedial Action Planned
CORRACTS	Corrective Action Report
RCRA-TSDF	Resource Conservation and Recovery Act Information
HMIRS	Hazardous Materials Information Reporting System
US ENG CONTROLS	Engineering Controls Sites List
US INST CONTROL	Sites with Institutional Controls
DOD	Department of Defense Sites
FUDS	Formerly Used Defense Sites
US BROWNFIELDS	A Listing of Brownfields Sites
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
UMTRA	Uranium Mill Tailings Sites
ODI	Open Dump Inventory
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
SSTS	Section 7 Tracking Systems
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
MINES	Mines Master Index File
RAATS	RCRA Administrative Action Tracking System

STATE AND LOCAL RECORDS

AWP	Annual Workplan Sites

EXECUTIVE SUMMARY

Cal-Sites Calsites Database
CA BOND EXP. PLAN Bond Expenditure Plan
NFA No Further Action Determination
NFE Properties Needing Further Evaluation
SCH School Property Evaluation Program
Toxic Pits Toxic Pits Cleanup Act Sites
SWF/LF Solid Waste Information System
WMUDS/SWAT Waste Management Unit Database
SWRCY Recycler Database
Notify 65 Proposition 65 Records
DEED Deed Restriction Listing
VCP Voluntary Cleanup Program Properties
CLEANERS Cleaner Facilities
WIP Well Investigation Program Case List
CDL Clandestine Drug Labs

TRIBAL RECORDS

INDIAN RESERV Indian Reservations
INDIAN LUST Leaking Underground Storage Tanks on Indian Land
INDIAN UST Underground Storage Tanks on Indian Land

EDR PROPRIETARY RECORDS

Manufactured Gas Plants EDR Proprietary Manufactured Gas Plants

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL RECORDS

RCRAInfo: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System(RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-LQG list, as provided by EDR, and dated 12/15/2005 has revealed that there is 1 RCRA-LQG site within the searched area.

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
ALL TERRAIN EXPLORATION DRILLI	6330 BREWER RD	15	69

RCRAInfo: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System(RCRIS). The database includes selective information on sites which generate, transport, store , treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/15/2005 has revealed that there are 13 RCRA-SQG sites within the searched area.

Site	Address	Map ID	Page
AMERICAN TEL & TEL INFORMATION	***3300 INDUSTRIAL AVENUE***	***1***	***3***
HEWLETT PACKARD COMPANY	***3301 INDUSTRIAL AVE***	***1***	***3***
A TEICHERT AND SON INC	***1145 TARA CT***	***4***	***21***
BALL METAL BEVERAGE CONTAINER	***3939 CINCINNATI AVE.***	***4***	***33***
COMTEK COMPUTER ROCKLIN SITE	***3387 INDUSTRIAL AVE***	***4***	***38***
HERMAN MILLER INC	***333 SUNSET BLVD***	***5***	***45***
A AND C PUMPING	***3205 FIFIFIELD***	***6***	***47***
GEMMA POWER SYSTEMS CALIFORNIA	5120 PHILLIP RD	12	50
SYSCO FOODS	***7062 PACIFIC AVE***	***14***	***54***
TENCO TRACTOR INC	***7310 PACIFIC AVE***	***14***	***59***
TEICHERT	***7466 PACIFIC AVE***	***14***	***67***
CONSOLIDATED DEALER SYSTEMS	***2546 RIEGO RD***	***19***	***72***
MCI TELECOMMUNICATIONS	***3387 RIEGO RD***	***23***	***80***

ERNS: The Emergency Response Notification System records and stores information on reported releases of oil and hazardous substances. The source of this database is the U.S. EPA.

A review of the ERNS list, as provided by EDR, and dated 12/31/2005 has revealed that there are 2 ERNS sites within the searched area.

Site	Address	Map ID	Page
SO BREWER & E CATLETT	SO BREWER & E CATLETT	2	6
NATOMAS RD N OF KEYES RD/NXT T	NATOMAS RD N OF KEYES R	10	50

EXECUTIVE SUMMARY

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 01/09/2006 has revealed that there are 15 FINDS sites within the searched area.

Site	Address	Map ID	Page
AMERICAN TEL & TEL INFORMATION	***3300 INDUSTRIAL AVENUE***	***1***	***3***
HEWLETT PACKARD COMPANY	***3301 INDUSTRIAL AVE***	***1***	***3***
BUILDERS PRESTAIN INCORPORATED	1203 WEST SUNSET BOULEV	4	13
A TEICHERT AND SON INC	***1145 TARA CT***	***4***	***21***
DOORCRAFT ROCKLIN	***3901 CINCINNATI AVENUE***	***4***	***24***
BALL METAL BEVERAGE CONTAINER	***3939 CINCINNATI AVE.***	***4***	***33***
COMTEK COMPUTER ROCKLIN SITE	***3387 INDUSTRIAL AVE***	***4***	***38***
HERMAN MILLER INC	***333 SUNSET BLVD***	***5***	***45***
A AND C PUMPING	***3205 FIFIFIELD***	***6***	***47***
SYSCO FOODS	***7062 PACIFIC AVE***	***14***	***54***
TENCO TRACTOR INC	***7310 PACIFIC AVE***	***14***	***59***
EL CENTRO STG	7339 PACIFIC AVE	14	66
TEICHERT	***7466 PACIFIC AVE***	***14***	***67***
CONSOLIDATED DEALER SYSTEMS	***2546 RIEGO RD***	***19***	***72***
MCI TELECOMMUNICATIONS	***3387 RIEGO RD***	***23***	***80***

STATE AND LOCAL RECORDS

REF: This category contains properties where contamination has not been confirmed and which were determined as not requiring direct DTSC Site Mitigation Program action or oversight. Accordingly, these sites have been referred to another tate or local regulatory agency.

A review of the REF list, as provided by EDR, and dated 08/08/2005 has revealed that there is 1 REF site within the searched area.

Site	Address	Map ID	Page
CORNELIUS AIRSTRIP	RIEGO RD / PACIFIC AV	22	79

WDS: California Water Resources Control Board - Waste Discharge System.

A review of the CA WDS list, as provided by EDR, and dated 12/19/2005 has revealed that there are 7 CA WDS sites within the searched area.

Site	Address	Map ID	Page
DOORCRAFT-ROCKLIN	***3901 CINCINNATI AVE***	***4***	***23***
PROGRESS RAIL SERVICES	***3909 CINCINNATI AVE***	***4***	***29***
AR READY MIX	3131 SANKEY RD	13	51
BEST MACHINERY TRACTOR CO.	***SANKEY ROAD, 3131***	***13***	***52***
SYSCO DISTRIBUTION CENTER WWTP	7062 PACIFIC AVE	14	53

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
HOLT OF CALIFORNIA	***7310 PACIFIC AVE***	***14***	***55***
TEICHERT	***7466 PACIFIC AVE***	***14***	***67***

CORTESE: This database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The source is the California Environmental Protection Agency/Office of Emergency Information.

A review of the Cortese list, as provided by EDR, and dated 04/01/2001 has revealed that there are 2 Cortese sites within the searched area.

Site	Address	Map ID	Page
BALL METAL BEVERAGE CONTAINER	***3939 CINCINNATI AVE.***	***4***	***33***
TENCO TRACTOR INC	***7310 PACIFIC AVE***	***14***	***59***

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 01/09/2006 has revealed that there are 3 LUST sites within the searched area.

Site	Address	Map ID	Page
SBC Facility Status: Post remedial action monitoring	5495 PLEASANT GROVE ROA	3	6
REYNOLDS WEST COAST END PLANT Facility Status: Case Closed	3939 CINCINNATI AVE	4	35
HOLT OF CALIFORNIA Facility Status: Remedial action (cleanup) Underway	***7310 PACIFIC AVE***	***14***	***55***

CA FID: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 3 CA FID UST sites within the searched area.

Site	Address	Map ID	Page
AQUA ENGINEERING CO. INC.	***905 PLACER BLVD***	***4***	***9***
REYNOLDS METALS COMPANY	***3939 CINCINNATI AVE***	***4***	***30***
FARM AIR FLYING SERVICE, INC.	***4425 W RIEGO RD***	***21***	***72***

EXECUTIVE SUMMARY

CA SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 01/09/2006 has revealed that there are 2 SLIC sites within the searched area.

Site	Address	Map ID	Page
HOLT OF CALIFORNIA Facility Status: Case Closed	7310 PACIFIC AVENUE	14	55
TENCO TRACTOR INC	***7310 PACIFIC AVE***	***14***	***59***

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 01/09/2006 has revealed that there are 4 UST sites within the searched area.

Site	Address	Map ID	Page
PACIFIC BELL	5495 PLEASANT GROVE RD.	3	6
HUNT & SONS CARDLOCK	***4000 CINCINNATI AVE***	***4***	***37***
BEST MACHINERY TRACTOR CO.	***SANKEY ROAD, 3131***	***13***	***52***
TENCO TRACTOR INC	***7310 PACIFIC AVE***	***14***	***59***

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 7 HIST UST sites within the searched area.

Site	Address	Map ID	Page
AQUA ENGINEERING CO. INC.	905 PLACER BLVD	4	8
REYNOLDS METALS COMPANY	3939 CINCINNATI AVE	4	32
LUTZ RANCH	3145 KEYS RD	9	50
BEST MACHINERY TRACTOR CO.	***SANKEY ROAD, 3131***	***13***	***52***
TENCO TRACTOR INC	***7310 PACIFIC AVE***	***14***	***59***
LINCOLN RANCH	***1515 S BREWER RD***	***16***	***69***
FARM AIR FLYING SERVICE, INC.	***4425 W RIEGO RD***	***21***	***72***

AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the AST list, as provided by EDR, and dated 01/30/2006 has revealed that there are 5 AST sites within the searched area.

Site	Address	Map ID	Page
HERTZ EQUIPMENT RENTAL CORP.	1175 TARA CT.	4	19
GAP INC. - ON LINE ORDERING AN	3830 ATHERTON ROAD	5	44
SYSCO FOOD SERVICES	7062 PACIFIC AVE	14	53
HOLT OF CALIFORNIA	***7310 PACIFIC AVE***	***14***	***55***
PLEASANT GROVE READY-MIX	7466 PACIFIC AVE.	14	67

EXECUTIVE SUMMARY

CA MS: Placer County Master List of Facilities includes Aboveground Hazardous Material tanks, Underground Storage tanks, Site Clean-up sites.

A review of the CA PLACER CO. MS list, as provided by EDR, and dated 01/18/2006 has revealed that there are 31 CA PLACER CO. MS sites within the searched area.

Site	Address	Map ID	Page
ACE HARDWARE	3305 INDUSTRIAL CT	1	3
ACE HARDWARE	3305 INDUSTRIAL CT	1	3
ACE HARDWARE	3305 INDUSTRIAL CT	1	3
LUCENT TECHNOLOGIES INC	***3301 INDUSTRIAL AVE***	***1***	***4***
SIERRA PACIFIC TURF SUPPLY	3765 CINCINNATI AVE	4	8
AQUA ENGINEERING COMPANY, INC.	905 PLACER BLVD.	4	8
SCP DISTRIBUTORS, LLC	3830 CINCINNATI AVE 140	4	10
AUTOEX, INC.	1155 W SUNSET BLVD	4	13
SYNESIS CORPORATION	***3645 CINCINATI***	***4***	***15***
HYDRAULIC TECH	3833 CINCINNATI AVE	4	16
KENT H LANDSBERG CO	***1221 TARA CT***	***4***	***16***
THOMAS L ASHER COMPANY	***1175 TARA CT***	***4***	***19***
VERIZON WIRELESS (STANDFORD RA	1150 TARA CT	4	19
CONSOLIDATED FREIGHTWAYS	1145 TARA CT	4	21
UNIVERSITY MECHANICAL	1140 TARA COURT	4	22
MAJOR DRILLING USA INC	3883 CINCINNATI AVE	4	23
DOORCRAFT-ROCKLIN	***3901 CINCINNATI AVE***	***4***	***23***
PROGRESS RAIL SERVICES	***3909 CINCINNATI AVE***	***4***	***29***
REYNOLDS METALS COMPANY	***3939 CINCINNATI AVE***	***4***	***30***
ARTESYN SOLUTIONS (ROCKLIN)	3391 INDUSTRIAL BLVD	4	36
HEWLETT PACKARD COMPANY	3391 INDUSTRIAL AVE	4	36
HUNT & SONS CARDLOCK	***4000 CINCINNATI AVE***	***4***	***37***
SUNSET 76 SERVICE STATION	3710 PLACER CORPORATE D	4	37
AMERICAN ENGINEERING & ASPHALT	4175 CINCINNATI AVE	4	40
VERIZON WIRELESS ROCKLIN SWITC	125 CYBER CT	4	41
GREENHECK FAN CORPORATION	170 CYBER CT	4	41
PRECISION METAL FABRICATORS	575 MENLO DR 1	5	42
TRANSNATIONAL PRINTING SERVICE	575 MENLO DRIVE, SUITE	5	42
GAP (THE) CALL CENTER	3830 ATHERTON RD	5	43
HERMAN MILLER INC.	333 SUNSET BLVD	5	46
REASON FARM'S PARTNERSHIP	6660 PHILLIP RD	7	47

SWEEPS: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1980's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 7 SWEEPS UST sites within the searched area.

Site	Address	Map ID	Page
AQUA ENGINEERING CO. INC.	***905 PLACER BLVD***	***4***	***9***
REYNOLDS METALS COMPANY	***3939 CINCINNATI AVE***	***4***	***30***
BEST MACHINERY TRACTOR CO.	***SANKEY ROAD, 3131***	***13***	***52***
TENCO TRACTOR INC	***7310 PACIFIC AVE***	***14***	***59***
LINCOLN RANCH	***1515 S BREWER RD***	***16***	***69***
MEYER FOOD STORE	8000 PLEASANT GROVE ROA	20	72
FARM AIR FLYING SERVICE, INC.	***4425 W RIEGO RD***	***21***	***72***

EXECUTIVE SUMMARY

CHMIRS: The California Hazardous Material Incident Report System contains information on reported hazardous material incidents, i.e., accidental releases or spills. The source is the California Office of Emergency Services.

A review of the CHMIRS list, as provided by EDR, and dated 12/31/2004 has revealed that there are 4 CHMIRS sites within the searched area.

Site	Address	Map ID	Page
Not reported	***5300 PHILLIP RD***	***8***	***47***
Not reported Date Completed: 08-MAY-89	BASE LINE RD. AT WATT A	17	70
Not reported Date Completed: 16-AUG-89	N SIDE R/W RIEGO RD. 1/	22	76
Not reported Date Completed: 13-AUG-88	RIEGO RD., .25 MILE E/O	22	78

HAZNET: The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000-1,000,000 annually, representing approximately 350,000-500,000 shipments. Data from non-California manifests & continuation sheets are not included at the present time. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, & disposal method. The source is the Department of Toxic Substance Control is the agency

A review of the HAZNET list, as provided by EDR, and dated 12/31/2003 has revealed that there are 29 HAZNET sites within the searched area.

Site	Address	Map ID	Page
LUCENT TECHNOLOGIES INC	***3301 INDUSTRIAL AVE***	***1***	***4***
PACIFIC BELL INC	3535 INDUSTRIAL	4	10
TRIAMID INC	1203 WEST SUNSET BLVD	4	13
PRIDE INDUSTRIES ELECTRONICS D	1151 WEST SUNSET BLVD	4	13
SYNESIS CORPORATION	***3645 CINCINATI***	***4***	***15***
KENT H LANDSBERG CO	***1221 TARA CT***	***4***	***16***
HERTZ EQUIPMENT RENTALS	1175 TERA CT	4	17
THOMAS L ASHER COMPANY	***1175 TARA CT***	***4***	***19***
CONSOLIDATED FREIGHTS	1145 TERA COURT	4	20
CF MOTOR FREIGHT	1145 TERA COURT	4	20
EME TECHNOLOGIES	3860 CINCINNATI AVE	4	22
CARLESBURG FINANCIAL CORP	3883 CINCINNATI AVE	4	22
PROGRESS VANGUARD CORPORATION	3909 CINCINNATI AVE	4	27
PROGRESS RAIL SERVICES	***3909 CINCINNATI AVE***	***4***	***29***
BALL METAL BEVERAGE CONTAINER	***3939 CINCINNATI AVE.***	***4***	***33***
HUNT & SONS CARDLOCK	***4000 CINCINNATI AVE***	***4***	***37***
COMTEK COMPUTER ROCKLIN SITE	***3387 INDUSTRIAL AVE***	***4***	***38***
TNT LOGISTICS	3381 INDUSTRIAL BLVD	4	39
TRANS STATES LINES INCORPORATE	3361 INDUSTRIAL AVE	4	41
TRANSNATIONAL PRINTING SERV,IN	575 MENLO DR	5	42
PARALLAX INC	3805 ATHERTON RD	5	44
MILLER SQA WEST	333 SUNSET BLVD	5	45
Not reported	***5300 PHILLIP RD***	***8***	***47***
CITY OF ROSEVILLE	5220 PHILLIPS ROAD	11	50
HOLT OF CALIFORNIA	***7310 PACIFIC AVE***	***14***	***55***
CONSOLIDATED DEALER SYSTEMS	7414 PACIFIC AVE	14	66
SIERRA MACHINERY SERVICES INC	7518 PACIFIC AVE	14	68

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
VINCE STANICH	6400 BASE LINE RD	18	71
FARM AIR FLYING SERVICE, INC.	***4425 W RIEGO RD***	***21***	***72***

Emissions Inventory Data: Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies

A review of the EMI list, as provided by EDR, and dated 12/31/2003 has revealed that there are 3 EMI sites within the searched area.

Site	Address	Map ID	Page
BUILDERS PRESTAIN INC.	1203 W. SUNSET BLVD.	4	11
DOORCRAFT ROCKLIN	***3901 CINCINNATI AVENUE***	***4***	***24***
EL CENTRO STG	7339 PACIFIC AVE	14	62

EXECUTIVE SUMMARY

Please refer to the end of the findings report for unmapped orphan sites due to poor or inadequate address information.

MAP FINDINGS SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
NPL	0
Proposed NPL	0
Delisted NPL	0
NPL RECOVERY	0
CERCLIS	0
CERC-NFRAP	0
CORRACTS	0
RCRA TSD	0
RCRA Lg. Quan. Gen.	1
RCRA Sm. Quan. Gen.	13
ERNS	2
HMIRS	0
US ENG CONTROLS	0
US INST CONTROL	0
DOD	0
FUDS	0
US BROWNFIELDS	0
CONSENT	0
ROD	0
UMTRA	0
ODI	0
TRIS	0
TSCA	0
FTTS	0
SSTS	0
PADS	0
MLTS	0
MINES	0
FINDS	15
RAATS	0
STATE AND LOCAL RECORDS	
AWP	0
Cal-Sites	0
CA Bond Exp. Plan	0
NFA	0
NFE	0
REF	1
SCH	0
Toxic Pits	0
State Landfill	0
CA WDS	7
WMUDS/SWAT	0
Cortese	2
SWRCY	0
LUST	3
CA FID UST	3

MAP FINDINGS SUMMARY

Database	Total Plotted
SLIC	2
Sacramento Co. CS	0
UST	4
HIST UST	7
AST	5
PLACER CO. MS	31
SWEEPS UST	7
CHMIRS	4
Notify 65	0
DEED	0
VCP	0
DRYCLEANERS	0
WIP	0
CDL	0
Sacramento Co. ML	0
HAZNET	29
EMI	3

TRIBAL RECORDS

INDIAN RESERV	0
INDIAN LUST	0
INDIAN UST	0

EDR PROPRIETARY RECORDS

Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

1 **ACE HARDWARE** **CA PLACER CO. MS** **S106715772**
3305 INDUSTRIAL CT **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0009774
District Code: 17
Program Elements: 2115
Facility Status: 1

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1 **ACE HARDWARE** **CA PLACER CO. MS** **S106715771**
3305 INDUSTRIAL CT **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0009773
District Code: 17
Program Elements: 2106
Facility Status: 1

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1 **ACE HARDWARE** **CA PLACER CO. MS** **S106715773**
3305 INDUSTRIAL CT **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0009824
District Code: 17
Program Elements: 2268
Facility Status: 1

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1 **AMERICAN TEL & TEL INFORMATION SYSTEMS** **RCRA-SQG** **1000360816**
3300 INDUSTRIAL AVENUE **FINDS** **CAD010992667**
SUNSET-WHITNEY RANCH, CA 95677

RCRAInfo:
Owner: NOT REQUIRED
(415) 555-1212
EPA ID: CAD010992667

Contact: Not reported

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

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1 **HEWLETT PACKARD COMPANY** **RCRA-SQG** **1001967558**
3301 INDUSTRIAL AVE **FINDS** **CAR000070516**
ROCKLIN, CA 95765

HEWLETT PACKARD COMPANY (Continued) **1001967558**

RCRAInfo:
Owner: TOWNSEND CAPITOL L L C
(303) 282-5000
EPA ID: CAR000070516

Contact: RICHARD BOULDT
(916) 785-4233

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
HAZARDOUS WASTE TRACKING SYSTEM-DATAMART
RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

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1 **LUCENT TECHNOLOGIES INC** **HAZNET** **S103975553**
3301 INDUSTRIAL AVE **CA PLACER CO. MS** **N/A**
ROCKLIN, CA 95765

HAZNET:
Gepaid: CAL000143587
TSD EPA ID: CAD008252405
Gen County: Placer
Tsd County: Los Angeles
Tons: .0834
Facility Address 2: Not reported
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Recycler
Contact: LUCENT TECHNOLOGIES INC
Telephone: (908) 582-3000
Mailing Name: Not reported
Mailing Address: 475 SOUTH STREET ROOM 25078
MORRISTOWN, NJ 07962 - 1976
County Placer

Gepaid: CAL000143587
TSD EPA ID: CAD008252405
Gen County: Placer
Tsd County: Los Angeles
Tons: .3544
Facility Address 2: Not reported
Waste Category: Unspecified solvent mixture Waste
Disposal Method: Recycler
Contact: LUCENT TECHNOLOGIES INC
Telephone: (908) 582-3000
Mailing Name: Not reported
Mailing Address: 475 SOUTH STREET ROOM 25078
MORRISTOWN, NJ 07962 - 1976
County Placer

LUCENT TECHNOLOGIES INC (Continued) **S103975553**

Gepaid: CAL000143587
TSD EPA ID: CAD044429835
Gen County: Placer
Tsd County: Los Angeles
Tons: .1911
Facility Address 2: Not reported
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Disposal, Other
Contact: LUCENT TECHNOLOGIES INC
Telephone: (908) 582-3000
Mailing Name: Not reported
Mailing Address: 475 SOUTH STREET ROOM 25078
MORRISTOWN, NJ 07962 - 1976
County Placer

Gepaid: CAL000143587
TSD EPA ID: CAT080033681
Gen County: Placer
Tsd County: Los Angeles
Tons: .3544
Facility Address 2: Not reported
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Disposal, Other
Contact: LUCENT TECHNOLOGIES INC
Telephone: (908) 582-3000
Mailing Name: Not reported
Mailing Address: 475 SOUTH STREET ROOM 25078
MORRISTOWN, NJ 07962 - 1976
County Placer

Placer MS:
Facility ID: PR0002811
District Code: 17
Program Elements: 2106
Facility Status: 2

Facility ID: PR0006204
District Code: 17
Program Elements: 2115
Facility Status: 2

Facility ID: PR0007003
District Code: 17
Program Elements: 2270
Facility Status: 2

Facility ID: PR0009145
District Code: 15
Program Elements: 2105
Facility Status: 2

Facility ID: PR0009146
District Code: 15
Program Elements: 2115
Facility Status: 2

2 **SO BREWER & E CATLETT** **ERNS** **92251457**
SO BREWER & E CATLETT **N/A**
LINCOLN, CA

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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3 **PACIFIC BELL** **UST** **U003996919**
5495 PLEASANT GROVE RD. **N/A**
PLEASANT GROVE, CA 95603

State UST:
Facility ID: 51-000-000216
Total Tanks: Not reported
Region: STATE
Local Agency: 51000

Facility ID: 51-216
Total Tanks: Not reported
Region: STATE
Local Agency: 51000

UST Sutter County:
Cross Street: Not reported
Owner: Not reported
Owner Address: Not reported
Owner Phone: Not reported
Facility Id: Not reported
Facility Phone: Not reported
Contaminant: YES
Removed: REMOVED
Date Closed: 8/6/2003
Contents: DIESEL
Tanks Capacity: 675
Region: SUTTER
Flag: CLOSE

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3 **SBC** **LUST** **S106127644**
5495 PLEASANT GROVE ROAD **N/A**
PLEASANT GROVE, CA 95668

State LUST:
Cross Street: HOWSLEY ROAD
Qty Leaked: Not reported
Case Number Not reported
Reg Board: Not reported
Chemical: Not reported
Lead Agency: Regional Board
Local Agency : 51000
Case Type: Other ground water affected
Status: **Post remedial action monitoring**
Review Date: Not reported
Workplan: 2004-05-06 00:00:00
Pollution Char: Not reported
Remed Action: Not reported
Monitoring: 2005-03-01 00:00:00
Close Date: Not reported
Confirm Leak: Not reported
Prelim Assess: 2004-05-06 00:00:00
Remed Plan: Not reported

SBC (Continued) **S106127644**

Release Date: Not reported
Cleanup Fund Id : Not reported
Discover Date : Not reported
Enforcement Dt : Not reported
Enf Type: SEL
Enter Date : Not reported
Funding: Not reported
Staff Initials: KS
How Discovered: Tank Closure
How Stopped: Close Tank
Interim : Not reported
Leak Cause: UNK
Leak Source: UNK
MTBE Date : Not reported
Max MTBE GW : Not reported
MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected
Priority: Not reported
Local Case # : Not reported
Beneficial: Not reported
Staff : MK
GW Qualifier : Not reported
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: Not reported
Operator : Not reported
Oversight Prgm: LUST
Review Date : Not reported
Stop Date : Not reported
Work Suspended : Not reported
Responsible Party ANDRES TAYLOR
RP Address: P.O. BOX 5095, RM. 3E
Global Id: T0610152235
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 0
Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported
Summary : Not reported

LUST Region 5:
Substance: Not reported
Case Type: Other ground water affected
Program: LUST
Staff Initials: MK Case Number: 510103
Status: Post remedial action monitoring
MTBE Code: N/A
Lead Agency: Regional

4 **SIERRA PACIFIC TURF SUPPLY** **CA PLACER CO. MS** **S105211867**
3765 CINCINNATI AVE **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0008582
District Code: 15
Program Elements: 2105
Facility Status: 1

Facility ID: PR0008583
District Code: 15
Program Elements: 2115
Facility Status: 1

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4 **AQUA ENGINEERING COMPANY, INC.** **CA PLACER CO. MS** **S105035263**
905 PLACER BLVD. **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0002288
District Code: 12
Program Elements: 2105
Facility Status: 2

---

4 **AQUA ENGINEERING CO. INC.** **HIST UST** **U001613777**
905 PLACER BLVD **N/A**
ROCKLIN, CA 95677

UST HIST:

Facility ID:	46482	Owner Name:	DABBAGH/SCHAUER
Total Tanks:	2	Region:	STATE
Owner Address:	905 PLACER BLVD. ROCKLIN, CA 95677		
Tank Used for:	PRODUCT		
Tank Num:	1	Container Num:	1
Tank Capacity:	00001000	Year Installed:	1980
Type of Fuel:	REGULAR	Tank Construction:	10 gauge
Leak Detection:	None		
Contact Name:	GARY SCHAUER	Telephone:	(916) 645-8122
Facility Type:	Other	Other Type:	PUMP ASSEMBLY

Facility ID:	46482	Owner Name:	DABBAGH/SCHAUER
Total Tanks:	2	Region:	STATE
Owner Address:	905 PLACER BLVD. ROCKLIN, CA 95677		
Tank Used for:	PRODUCT		
Tank Num:	2	Container Num:	2
Tank Capacity:	00001000	Year Installed:	1980
Type of Fuel:	DIESEL	Tank Construction:	10 gauge
Leak Detection:	None		
Contact Name:	GARY SCHAUER	Telephone:	(916) 645-8122
Facility Type:	Other	Other Type:	PUMP ASSEMBLY

4 **AQUA ENGINEERING CO. INC.** **CA FID UST** **S101627978**
905 PLACER BLVD **SWEEPS UST** **N/A**
ROCKLIN, CA 95677

FID:

Facility ID:	31000432	Regulate ID:	00046482
Reg By:	Active Underground Storage Tank Location		
Cortese Code:	Not reported	SIC Code:	Not reported
Status:	Active	Facility Tel:	(916) 645-8122
Mail To:	Not reported 905 PLACER BLVD ROCKLIN, CA 95677		
Contact:	Not reported	Contact Tel:	Not reported
DUNs No:	Not reported	NPDES No:	Not reported
Creation:	10/22/93	Modified:	00/00/00
EPA ID:	Not reported		
Comments:	Not reported		

SWEEPS:

Status :	A
Comp Number :	46482
Number :	9
Board Of Equalization :	44-017208
Ref Date :	07-01-85
Act Date :	Not reported
Created Date :	02-29-88
Tank Status :	A
Owner Tank Id :	1
Swrcb Tank Id :	31-000-046482-000001
Actv Date :	07-01-85
Capacity :	1000
Tank Use :	M.V. FUEL
Stg :	P
Content :	LEADED
Number Of Tanks :	2

Status :	A
Comp Number :	46482
Number :	9
Board Of Equalization :	44-017208
Ref Date :	07-01-85
Act Date :	Not reported
Created Date :	02-29-88
Tank Status :	A
Owner Tank Id :	2
Swrcb Tank Id :	31-000-046482-000002
Actv Date :	07-01-85
Capacity :	1000
Tank Use :	M.V. FUEL
Stg :	P
Content :	DIESEL
Number Of Tanks :	Not reported

4 **SCP DISTRIBUTORS, LLC** **CA PLACER CO. MS** **S105708915**
3830 CINCINNATI AVE 140 **N/A**
ROCKL, CA 95765

Placer MS:
Facility ID: PR0008724
District Code: 18
Program Elements: 2105
Facility Status: 1

Facility ID: PR0008725
District Code: 18
Program Elements: 2115
Facility Status: 1

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4 **PACIFIC BELL INC** **HAZNET** **S104181008**
3535 INDUSTRIAL **N/A**
ROCKLIN, CA 95765

HAZNET:
Gepaid: CAL000219392
TSD EPA ID: CAD009452657
Gen County: Placer
Tsd County: Placer
Tons: 0.75
Facility Address 2: Not reported
Waste Category: Unspecified organic liquid mixture
Disposal Method: Recycler
Contact: SHARON BAYLE/STAFF ASSOCIATE
Telephone: (925) 867-5741
Mailing Name: BILL HUDSON/SITE MGR
Mailing Address: PO BOX 5095 ROOM 3E000
SAN RAMON, CA 94583
County Placer

Gepaid: CAL000219392
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: San Mateo
Tons: 0.22
Facility Address 2: Not reported
Waste Category: Unspecified oil-containing waste
Disposal Method: Recycler
Contact: SHARON BAYLE/STAFF ASSOCIATE
Telephone: (925) 867-5741
Mailing Name: Not reported
Mailing Address: PO BOX 5095 ROOM 3E000
SAN RAMON, CA 94583
County Not reported

Gepaid: CAL000219392
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: San Mateo
Tons: 0.22
Facility Address 2: Not reported
Waste Category: Unspecified organic liquid mixture
Disposal Method: Recycler
Contact: SHARON BAYLE/STAFF ASSOCIATE
Telephone: (925) 867-5741
Mailing Name: Not reported
Mailing Address: PO BOX 5095 ROOM 3E000

PACIFIC BELL INC (Continued) **S104181008**

SAN RAMON, CA 94583
County Not reported

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4 **BUILDERS PRESTAIN INC.** **EMI** **S106827436**
1203 W. SUNSET BLVD. **N/A**
ROCKLIN, CA 95677

EMISSIONS :

Year :	1990
Facility ID :	65
Air District Code :	PLA
SIC Code :	2439
Air Basin :	SV
Air District Name :	PLACER COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	31
County ID :	31
Total Organic Hydrocarbon Gases Tons/Yr:	7
Reactive Organic Gases Tons/Yr:	7
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr :	0
Part. Matter 10 Micrometers and Smaller Tons/Yr :	0

Year :	1993
Facility ID :	65
Air District Code :	PLA
SIC Code :	2439
Air Basin :	SV
Air District Name :	PLACER COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	31
County ID :	31
Total Organic Hydrocarbon Gases Tons/Yr:	24
Reactive Organic Gases Tons/Yr:	24
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr :	0
Part. Matter 10 Micrometers and Smaller Tons/Yr :	0

Year :	1995
Facility ID :	65
Air District Code :	PLA
SIC Code :	2439
Air Basin :	SV
Air District Name :	PLACER COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	31
County ID :	31
Total Organic Hydrocarbon Gases Tons/Yr:	24
Reactive Organic Gases Tons/Yr:	24
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0

BUILDERS PRESTAIN INC. (Continued) **S106827436**

Particulate Matter Tons/Yr : 0
Part. Matter 10 Micrometers and Smaller Tons/Yr : 0

Year : 1996
Facility ID : 65
Air District Code : PLA
SIC Code : 2439
Air Basin : SV
Air District Name : PLACER COUNTY APCD
Community Health Air Pollution Info System : Not reported
Consolidated Emission Reporting Rule : Not reported
County Code : 31
County ID : 31
Total Organic Hydrocarbon Gases Tons/Yr: 24
Reactive Organic Gases Tons/Yr: 24
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr : 0
Part. Matter 10 Micrometers and Smaller Tons/Yr : 0

Year : 1997
Facility ID : 65
Air District Code : PLA
SIC Code : 2439
Air Basin : SV
Air District Name : PLACER COUNTY APCD
Community Health Air Pollution Info System : Not reported
Consolidated Emission Reporting Rule : Not reported
County Code : 31
County ID : 31
Total Organic Hydrocarbon Gases Tons/Yr: 24
Reactive Organic Gases Tons/Yr: 24
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr : 0
Part. Matter 10 Micrometers and Smaller Tons/Yr : 0

Year : 1998
Facility ID : 65
Air District Code : PLA
SIC Code : 2439
Air Basin : SV
Air District Name : PLACER COUNTY APCD
Community Health Air Pollution Info System : Not reported
Consolidated Emission Reporting Rule : Not reported
County Code : 31
County ID : 31
Total Organic Hydrocarbon Gases Tons/Yr: 24
Reactive Organic Gases Tons/Yr: 24
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr : 0
Part. Matter 10 Micrometers and Smaller Tons/Yr : 0

4 **TRIAMID INC** **HAZNET** **S103992633**
1203 WEST SUNSET BLVD **N/A**
ROCKLIN, CA 95678

HAZNET:
Gepaid: CAC001058328
TSD EPA ID: CAT080013352
Gen County: Placer
Tsd County: Los Angeles
Tons: .9174
Facility Address 2: Not reported
Waste Category: Aqueous solution with 10% or more total organic residues
Disposal Method: Recycler
Contact: CORP
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: PO BOX 7879
CITRUS HEIGHTS, CA 95621 - 7879
County Placer

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4 **BUILDERS PRESTAIN INCORPORATED** **FINDS** **1005775225**
1203 WEST SUNSET BOULEVARD **110002416109**
ROCKLIN, CA 95677

FINDS:
Other Pertinent Environmental Activity Identified at Site:
NATIONAL EMISSIONS INVENTORY

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4 **AUTOEX, INC.** **CA PLACER CO. MS** **S104915152**
1155 W SUNSET BLVD **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0004860
District Code: 13
Program Elements: 2105
Facility Status: 2

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4 **PRIDE INDUSTRIES ELECTRONICS DIV** **HAZNET** **S103624204**
1151 WEST SUNSET BLVD **N/A**
ROCKLIN, CA 95765

HAZNET:
Gepaid: CAL000091899
TSD EPA ID: CAD009452657
Gen County: Placer
Tsd County: San Mateo
Tons: .6879
Facility Address 2: Not reported
Waste Category: Unspecified solvent mixture Waste
Disposal Method: Recycler
Contact: PRIDE INDUSTRIES NPO
Telephone: (916) 783-5266
Mailing Name: Not reported
Mailing Address: 1151 W SUNSET BLVD
ROCKLIN, CA 95765 - 1304
County Placer

PRIDE INDUSTRIES ELECTRONICS DIV (Continued) **S103624204**

Gepaid: CAL000091899
TSD EPA ID: CAD003963592
Gen County: Placer
Tsd County: Santa Clara
Tons: .5250
Facility Address 2: Not reported
Waste Category: Other inorganic solid waste
Disposal Method: Recycler
Contact: PRIDE INDUSTRIES NPO
Telephone: (916) 783-5266
Mailing Name: Not reported
Mailing Address: 1151 W SUNSET BLVD
ROCKLIN, CA 95765 - 1304
County Placer

Gepaid: CAL000091899
TSD EPA ID: CAD009452657
Gen County: Placer
Tsd County: San Mateo
Tons: .2293
Facility Address 2: Not reported
Waste Category: Unspecified solvent mixture Waste
Disposal Method: Not reported
Contact: PRIDE INDUSTRIES NPO
Telephone: (916) 783-5266
Mailing Name: Not reported
Mailing Address: 1151 W SUNSET BLVD
ROCKLIN, CA 95765 - 1304
County Placer

Gepaid: CAL000091899
TSD EPA ID: CAD003963592
Gen County: Placer
Tsd County: Santa Clara
Tons: 0.2
Facility Address 2: Not reported
Waste Category: Other inorganic solid waste
Disposal Method: Recycler
Contact: PRIDE INDUSTRIES NPO
Telephone: (916) 783-5266
Mailing Name: Not reported
Mailing Address: 1151 W SUNSET BLVD
ROCKLIN, CA 95765 - 1304
County Placer

Gepaid: CAL000091899
TSD EPA ID: CAD009452657
Gen County: Placer
Tsd County: San Mateo
Tons: 0.6879
Facility Address 2: Not reported
Waste Category: Unspecified solvent mixture Waste
Disposal Method: Recycler
Contact: PRIDE INDUSTRIES NPO
Telephone: (916) 783-5266
Mailing Name: Not reported
Mailing Address: 1151 W SUNSET BLVD
ROCKLIN, CA 95765 - 1304

PRIDE INDUSTRIES ELECTRONICS DIV (Continued) **S103624204**

County Placer

Click this hyperlink while viewing on your computer to access
8 additional CA HAZNET record(s) in the EDR Site Report.

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4 SYNESIS CORPORATION **HAZNET S103655535**
3645 CINCINATI **CA PLACER CO. MS N/A**
ROCKLIN, CA 95677

HAZNET:

Gepaid:	CAL000037434
TSD EPA ID:	CAD003963592
Gen County:	Placer
Tsd County:	Santa Clara
Tons:	.0000
Facility Address 2:	Not reported
Waste Category:	Other inorganic solid waste
Disposal Method:	Recycler
Contact:	R J ASSOCIATES
Telephone:	(000) 000-0000
Mailing Name:	Not reported
Mailing Address:	3645 CINCINATI ROCKLIN, CA 95677
County	Placer

Gepaid:	CAL000037434
TSD EPA ID:	CAD008364432
Gen County:	Placer
Tsd County:	Los Angeles
Tons:	.0625
Facility Address 2:	Not reported
Waste Category:	Unspecified solvent mixture Waste
Disposal Method:	Recycler
Contact:	R J ASSOCIATES
Telephone:	(000) 000-0000
Mailing Name:	Not reported
Mailing Address:	3645 CINCINATI ROCKLIN, CA 95677
County	Placer

Gepaid:	CAL000037434
TSD EPA ID:	CAD008364432
Gen County:	Placer
Tsd County:	Los Angeles
Tons:	.2085
Facility Address 2:	Not reported
Waste Category:	Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.)
Disposal Method:	Not reported
Contact:	R J ASSOCIATES
Telephone:	(000) 000-0000
Mailing Name:	Not reported
Mailing Address:	3645 CINCINATI ROCKLIN, CA 95677
County	Placer

SYNESIS CORPORATION (Continued) **S103655535**

Gepaid: CAL000037434
TSD EPA ID: CAD008364432
Gen County: Placer
Tsd County: Los Angeles
Tons: .0000
Facility Address 2: Not reported
Waste Category:
Disposal Method: Recycler
Contact: R J ASSOCIATES
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 3645 CINCINATI
ROCKLIN, CA 95677
County Placer

Gepaid: CAL000037434
TSD EPA ID: CAD008364432
Gen County: Placer
Tsd County: Los Angeles
Tons: .4170
Facility Address 2: Not reported
Waste Category: Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.)
Disposal Method: Recycler
Contact: R J ASSOCIATES
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 3645 CINCINATI
ROCKLIN, CA 95677
County Placer

Placer MS:
Facility ID: PR0002563
District Code: 10
Program Elements: 2106
Facility Status: 2

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4 **HYDRAULIC TECH** **CA PLACER CO. MS** **S104915373**
3833 CINCINNATI AVE **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0002581
District Code: 13
Program Elements: 2105
Facility Status: 2

---

4 **KENT H LANDSBERG CO** **HAZNET** **S102286041**
1221 TARA CT **CA PLACER CO. MS** **N/A**
ROCKLIN, CA 95765

KENT H LANDSBERG CO (Continued) **S102286041**

HAZNET:
Gepaid: CAP000093435
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: Los Angeles
Tons: 0.04
Facility Address 2: Not reported
Waste Category: Unspecified alkaline solution
Disposal Method: Recycler
Contact: --
Telephone: (916) 645-8100
Mailing Name: Not reported
Mailing Address: 1221 TARA CT
ROCKLIN, CA 95765
County Not reported

Placer MS:
Facility ID: PR0002575
District Code: 18
Program Elements: 2105
Facility Status: 1

Facility ID: PR0006181
District Code: 18
Program Elements: 2115
Facility Status: 1

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4 **HERTZ EQUIPMENT RENTALS** **HAZNET** **S103967686**
1175 TERA CT **N/A**
ROCKLIN, CA 95765

HAZNET:
Gepaid: CAL000179826
TSD EPA ID: CAD059494310
Gen County: Placer
Tsd County: Santa Clara
Tons: .2500
Facility Address 2: Not reported
Waste Category: Unspecified oil-containing waste
Disposal Method: Disposal, Other
Contact: HERTZ EQUIPMENT RENTALS
Telephone: (916) 645-0310
Mailing Name: Not reported
Mailing Address: 1175 TARA CT
ROCKLIN, CA 95765
County Placer

Gepaid: CAL000179826
TSD EPA ID: CAD044003556
Gen County: Placer
Tsd County: Yolo
Tons: 6.0465
Facility Address 2: Not reported
Waste Category: Unspecified oil-containing waste
Disposal Method: Not reported
Contact: HERTZ EQUIPMENT RENTALS
Telephone: (916) 645-0310
Mailing Name: Not reported
Mailing Address: 1175 TARA CT

HERTZ EQUIPMENT RENTALS (Continued) **S103967686**

ROCKLIN, CA 95765
County: Placer

Gepaid: CAL000179826
TSD EPA ID: CAD044003556
Gen County: Placer
Tsd County: Yolo
Tons: 6.0465
Facility Address 2: Not reported
Waste Category: Unspecified oil-containing waste
Disposal Method: Transfer Station
Contact: HERTZ EQUIPMENT RENTALS
Telephone: (916) 645-0310
Mailing Name: Not reported
Mailing Address: 1175 TARA CT
ROCKLIN, CA 95765
County: Placer

Gepaid: CAL000179826
TSD EPA ID: CAD044003556
Gen County: Placer
Tsd County: Yolo
Tons: 10.4250
Facility Address 2: Not reported
Waste Category: Oil/water separation sludge
Disposal Method: Transfer Station
Contact: HERTZ EQUIPMENT RENTALS
Telephone: (916) 645-0310
Mailing Name: Not reported
Mailing Address: 1175 TARA CT
ROCKLIN, CA 95765
County: Placer

Gepaid: CAL000179826
TSD EPA ID: CAD044003556
Gen County: Placer
Tsd County: Yolo
Tons: 5.421
Facility Address 2: Not reported
Waste Category: Oil/water separation sludge
Disposal Method: Transfer Station
Contact: HERTZ EQUIPMENT RENTALS
Telephone: (916) 645-0310
Mailing Name: Not reported
Mailing Address: 1175 TARA CT
ROCKLIN, CA 95765
County: Placer

Click this hyperlink while viewing on your computer to access
20 additional CA HAZNET record(s) in the EDR Site Report.

4 **THOMAS L ASHER COMPANY** **HAZNET** **S103879973**
1175 TARA CT **CA PLACER CO. MS** **N/A**
ROCKLIN, CA 95765

HAZNET:
Gepaid: CAC002567487
TSD EPA ID: CAD059494310
Gen County: Placer
Tsd County: Placer
Tons: 8.34
Facility Address 2: Not reported
Waste Category: Oil/water separation sludge
Disposal Method: Transfer Station
Contact: STEVE ELLIOTT
Telephone: (916) 434-1865
Mailing Name: STEVE ELLIOTT
Mailing Address: 1175 TARA CT
ROCKLIN, CA 95765
County Placer

Placer MS:
Facility ID: PR0006709
District Code: 18
Program Elements: 2106
Facility Status: 2

Facility ID: PR0006710
District Code: 18
Program Elements: 2275
Facility Status: 2

Facility ID: PR0006711
District Code: 18
Program Elements: 2115
Facility Status: 2

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4 **HERTZ EQUIPMENT RENTAL CORP.** **AST** **A100154497**
1175 TARA CT. **N/A**
ROCKLIN, CA 95765

AST:
Owner: HERTZ EQUIPMENT RENTAL CORP.
Total Gallons: 3675

---

4 **VERIZON WIRELESS (STANDFORD RANCH)** **CA PLACER CO. MS** **S104732987**
1150 TARA CT **N/A**
ROSEVILLE, CA 95678

Placer MS:
Facility ID: PR0007751
District Code: 17
Program Elements: 2105
Facility Status: 1

Facility ID: PR0007752
District Code: 17
Program Elements: 2115
Facility Status: 1

4 **CONSOLIDATED FREIGHTS** **HAZNET** **S103958380**
1145 TERA COURT **N/A**
ROCKLIN, CA 95765

HAZNET:
Gepaid: CAL000144588
TSD EPA ID: CAD000088252
Gen County: Placer
Tsd County: Los Angeles
Tons: .1125
Facility Address 2: Not reported
Waste Category: Aqueous solution with less than 10% total organic residues
Disposal Method: Transfer Station
Contact: CORPORATION
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 1145 TARA CT
ROCKLIN, CA 95765
County Placer

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4 **CF MOTOR FREIGHT** **HAZNET** **S103955487**
1145 TERA COURT **N/A**
ROCKLIN, CA 95765

HAZNET:
Gepaid: CAC001051808
TSD EPA ID: CAD000088252
Gen County: Placer
Tsd County: Los Angeles
Tons: .0800
Facility Address 2: Not reported
Waste Category: Other organic solids
Disposal Method: Transfer Station
Contact: CF MOTORS
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 1145 TERA COURT
ROCKLIN, CA 95765
County Placer

Gepaid: CAC001051808
TSD EPA ID: CAD000088252
Gen County: Placer
Tsd County: Los Angeles
Tons: .1167
Facility Address 2: Not reported
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Transfer Station
Contact: CF MOTORS
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 1145 TERA COURT
ROCKLIN, CA 95765
County Placer

CF MOTOR FREIGHT (Continued) **S103955487**

Gepaid: CAC001051808
TSD EPA ID: CAD000088252
Gen County: Placer
Tsd County: Los Angeles
Tons: .2502
Facility Address 2: Not reported
Waste Category: Unspecified oil-containing waste
Disposal Method: Transfer Station
Contact: CF MOTORS
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 1145 TERA COURT
ROCKLIN, CA 95765
County Placer

---

4 **CONSOLIDATED FREIGHTWAYS** **CA PLACER CO. MS** **S104915249**
1145 TARA CT **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0002312
District Code: 13
Program Elements: 2105
Facility Status: 2

Facility ID: PR0006072
District Code: 13
Program Elements: 2115
Facility Status: 2

---

4 **A TEICHERT AND SON INC** **RCRA-SQG** **1004676211**
1145 TARA CT **FINDS** **CAR000082289**
ROCKLIN, CA 95765

RCRAInfo:
Owner: BARTOLO DIMATTEO
(209) 826-5711
EPA ID: CAR000082289

Contact: GEORGE TAKEMORI
(916) 386-3716

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

4 **UNIVERSITY MECHANICAL** **CA PLACER CO. MS** **S104915746**
1140 TARA COURT **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0003576
District Code: 13
Program Elements: 2105
Facility Status: 2

---

4 **EME TECHNOLOGIES** **HAZNET** **S107149165**
3860 CINCINNATI AVE **N/A**
ROCKLIN, CA 95765

HAZNET:
Gepaid: CAL000272071
TSD EPA ID: CAD000190816
Gen County: Placer
Tsd County: Placer
Tons: 1.25
Facility Address 2: Not reported
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Contact: LIEN NGUYEN/OFFICE MANAGER
Telephone: (408) 590-1853
Mailing Name: Not reported
Mailing Address: 224 N WOLFE RD
SUNNYVALE, CA 94086 - 4510
County Placer

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4 **CARLESBURG FINANCIAL CORP** **HAZNET** **S103656704**
3883 CINCINNATI AVE **N/A**
ROSEVILLE, CA 95765

HAZNET:
Gepaid: CAC001188024
TSD EPA ID: CAD990794133
Gen County: Placer
Tsd County: San Joaquin
Tons: 4.2140
Facility Address 2: Not reported
Waste Category: Asbestos-containing waste
Disposal Method: Disposal, Land Fill
Contact: CARLESBOURG FINANCIAL CORP
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 2800 28TH ST
SANTA MONICA, CA 90405
County Placer

4 **MAJOR DRILLING USA INC** **CA PLACER CO. MS** **S104181016**
3883 CINCINNATI AVE **N/A**
ROCKLIN, CA 95766

Placer MS:
Facility ID: PR0007329
District Code: 50
Program Elements: 2106
Facility Status: 1

Facility ID: PR0007330
District Code: 50
Program Elements: 2115
Facility Status: 1

Facility ID: PR0007773
District Code: 50
Program Elements: 2270
Facility Status: 1

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4 **DOORCRAFT-ROCKLIN** **CA PLACER CO. MS** **S102285945**
3901 CINCINNATI AVE **CA WDS** **N/A**
ROCKLIN, CA 95765

WDS:
Facility ID: 5S 31I009124
Facility Contact: Not reported — Facility Telephone: Not reported
SIC Code: Not reported — SIC Code 2: Not reported
Agency Name: DOORCRAFT OF CA/JELD-WEN
Agency Address: Not reported
Agency Contact: Not reported — Agency Phone: Not reported
Design Flow: Not reported — Baseline Flow: Not reported
Facility Type: Not reported
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
Agency Type: Not reported
Waste Type: Not reported
Threat to Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.
Reclamation: Not reported
POTW: Not reported
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion: 5S

Placer MS:
Facility ID: PR0002320
District Code: 15
Program Elements: 2106
Facility Status: 1

Facility ID: PR0006088
District Code: 15

DOORCRAFT-ROCKLIN (Continued) **S102285945**

Program Elements: 2115
Facility Status: 1

Facility ID: PR0007550
District Code: 15
Program Elements: 2268
Facility Status: 1

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4 **DOORCRAFT ROCKLIN** **FINDS 1005775228**
3901 CINCINNATI AVENUE **EMI 110002416127**
ROCKLIN, CA 95677

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AEROMETRIC INFORMATION RETRIEVAL SYSTEM/AIRS FACILITY SYSTEM
NATIONAL EMISSIONS INVENTORY

EMISSIONS :

Year :	1990
Facility ID :	39
Air District Code :	PLA
SIC Code :	2541
Air Basin :	SV
Air District Name :	PLACER COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	31
County ID :	31
Total Organic Hydrocarbon Gases Tons/Yr:	15
Reactive Organic Gases Tons/Yr:	15
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr :	1
Part. Matter 10 Micrometers and Smaller Tons/Yr :	1

Year :	1993
Facility ID :	39
Air District Code :	PLA
SIC Code :	2541
Air Basin :	SV
Air District Name :	PLACER COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	31
County ID :	31
Total Organic Hydrocarbon Gases Tons/Yr:	14
Reactive Organic Gases Tons/Yr:	14
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr :	2
Part. Matter 10 Micrometers and Smaller Tons/Yr :	1

Year :	1995
Facility ID :	39
Air District Code :	PLA
SIC Code :	2541
Air Basin :	SV

DOORCRAFT ROCKLIN (Continued) **1005775228**

Air District Name :	PLACER COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	31
County ID :	31
Total Organic Hydrocarbon Gases Tons/Yr:	14
Reactive Organic Gases Tons/Yr:	14
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr :	2
Part. Matter 10 Micrometers and Smaller Tons/Yr :	1

Year :	1996
Facility ID :	39
Air District Code :	PLA
SIC Code :	2541
Air Basin :	SV
Air District Name :	PLACER COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	31
County ID :	31
Total Organic Hydrocarbon Gases Tons/Yr:	14
Reactive Organic Gases Tons/Yr:	14
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr :	2
Part. Matter 10 Micrometers and Smaller Tons/Yr :	1

Year :	1997
Facility ID :	39
Air District Code :	PLA
SIC Code :	2541
Air Basin :	SV
Air District Name :	PLACER COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	31
County ID :	31
Total Organic Hydrocarbon Gases Tons/Yr:	14
Reactive Organic Gases Tons/Yr:	14
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr :	2
Part. Matter 10 Micrometers and Smaller Tons/Yr :	1

Year :	1998
Facility ID :	39
Air District Code :	PLA
SIC Code :	2541
Air Basin :	SV
Air District Name :	PLACER COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported

DOORCRAFT ROCKLIN (Continued) **1005775228**

County Code :	31
County ID :	31
Total Organic Hydrocarbon Gases Tons/Yr:	14
Reactive Organic Gases Tons/Yr:	14
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr :	2
Part. Matter 10 Micrometers and Smaller Tons/Yr :	1

Year :	1999
Facility ID :	39
Air District Code :	PLA
SIC Code :	2541
Air Basin :	SV
Air District Name :	PLACER COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	31
County ID :	31
Total Organic Hydrocarbon Gases Tons/Yr:	20
Reactive Organic Gases Tons/Yr:	20
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr :	7
Part. Matter 10 Micrometers and Smaller Tons/Yr :	3

Year :	2000
Facility ID :	39
Air District Code :	PLA
SIC Code :	2541
Air Basin :	SV
Air District Name :	PLACER COUNTY APCD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	31
County ID :	31
Total Organic Hydrocarbon Gases Tons/Yr:	20
Reactive Organic Gases Tons/Yr:	20
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr :	7
Part. Matter 10 Micrometers and Smaller Tons/Yr :	3

Year :	2001
Facility ID :	39
Air District Code :	PLA
SIC Code :	2541
Air Basin :	SV
Air District Name :	PLACER COUNTY APCD
Community Health Air Pollution Info System :	Y
Consolidated Emission Reporting Rule :	Not reported
County Code :	31
County ID :	31
Total Organic Hydrocarbon Gases Tons/Yr:	20

DOORCRAFT ROCKLIN (Continued) **1005775228**

Reactive Organic Gases Tons/Yr: 20
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr : 7
Part. Matter 10 Micrometers and Smaller Tons/Yr : 3

Year : 2002
Facility ID : 39
Air District Code : PLA
SIC Code : 2541
Air Basin : SV
Air District Name : PLACER COUNTY APCD
Community Health Air Pollution Info System : Y
Consolidated Emission Reporting Rule : Not reported
County Code : 31
County ID : 31
Total Organic Hydrocarbon Gases Tons/Yr: 22
Reactive Organic Gases Tons/Yr: 20
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr : 4
Part. Matter 10 Micrometers and Smaller Tons/Yr : 2

Year : 2003
Facility ID : 39
Air District Code : PLA
SIC Code : 2541
Air Basin : SV
Air District Name : PLACER COUNTY APCD
Community Health Air Pollution Info System : Not reported
Consolidated Emission Reporting Rule : Not reported
County Code : 31
County ID : 31
Total Organic Hydrocarbon Gases Tons/Yr: 22
Reactive Organic Gases Tons/Yr: 20
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr : 5
Part. Matter 10 Micrometers and Smaller Tons/Yr : 2

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4 **PROGRESS VANGUARD CORPORATION** **HAZNET** **S104582710**
3909 CINCINNATI AVE **N/A**
ROCKLIN, CA 95765

HAZNET:
Gepaid: CAL000201001
TSD EPA ID: CAT080013352
Gen County: Placer
Tsd County: Los Angeles
Tons: 6.255
Facility Address 2: Not reported
Waste Category: Oil/water separation sludge
Disposal Method: Recycler
Contact: CAE VANGUARD
Telephone: (000) 000-0000
Mailing Name: Not reported

PROGRESS VANGUARD CORPORATION (Continued) **S104582710**

Mailing Address: 3909 CINCINNATI AVE
ROCKLIN, CA 95765
County Placer

Gepaid: CAL000201001
TSD EPA ID: WAD991281767
Gen County: Placer
Tsd County: 99
Tons: 3.0441
Facility Address 2: Not reported
Waste Category: Unspecified organic liquid mixture
Disposal Method: Disposal, Land Fill
Contact: CAE VANGUARD
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 3909 CINCINNATI AVE
ROCKLIN, CA 95765
County Placer

Gepaid: CAL000201001
TSD EPA ID: WAD991281767
Gen County: Placer
Tsd County: 99
Tons: 1.925
Facility Address 2: Not reported
Waste Category: Other organic solids
Disposal Method: Disposal, Land Fill
Contact: CAE VANGUARD
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 3909 CINCINNATI AVE
ROCKLIN, CA 95765
County Placer

Gepaid: CAL000171519
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: 99
Tons: 1.66
Facility Address 2: Not reported
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Disposal, Land Fill
Contact: MICHAEL P VANDEN BERGH SR DIR
Telephone: (256) 840-2122
Mailing Name: Not reported
Mailing Address: PO BOX 1037
ALBERTVILLE, AL 35950
County Not reported

Gepaid: CAL000171519
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: 99
Tons: 0.51
Facility Address 2: Not reported
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Recycler
Contact: MICHAEL P VANDEN BERGH SR DIR
Telephone: (256) 840-2122

PROGRESS VANGUARD CORPORATION (Continued) **S104582710**

Mailing Name: Not reported
Mailing Address: PO BOX 1037
ALBERTVILLE, AL 35950
County Not reported

Click this hyperlink while viewing on your computer to access
20 additional CA HAZNET record(s) in the EDR Site Report.

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4 **PROGRESS RAIL SERVICES** **HAZNET** **S104252366**
3909 CINCINNATI AVE **CA PLACER CO. MS** **N/A**
ROCKLIN, CA 95765 **CA WDS**

HAZNET:
Gepaid: CAL000171519
TSD EPA ID: NVD980895338
Gen County: Placer
Tsd County: Placer
Tons: 0.91
Facility Address 2: Not reported
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Disposal, Land Fill
Contact: M.P. VANDEN BERGH/DIR OF ENVIR
Telephone: (256) 840-2122
Mailing Name: SR DIR ENV SERVICES
Mailing Address: PO BOX 1037
ALBERTVILLE, AL 35950
County Placer

Gepaid: CAL000171519
TSD EPA ID: NVD980895338
Gen County: Placer
Tsd County: Placer
Tons: 0.08
Facility Address 2: Not reported
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Recycler
Contact: M.P. VANDEN BERGH/DIR OF ENVIR
Telephone: (256) 840-2122
Mailing Name: SR DIR ENV SERVICES
Mailing Address: PO BOX 1037
ALBERTVILLE, AL 35950
County Placer

Gepaid: CAL000171519
TSD EPA ID: WAD991281767
Gen County: Placer
Tsd County: Placer
Tons: 0.41
Facility Address 2: Not reported
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Recycler
Contact: M.P. VANDEN BERGH/DIR OF ENVIR
Telephone: (256) 840-2122
Mailing Name: SR DIR ENV SERVICES
Mailing Address: PO BOX 1037
ALBERTVILLE, AL 35950
County Placer

WDS:
Facility ID: 5S 31I015746

PROGRESS RAIL SERVICES (Continued) **S104252366**

Facility Contact	GERRY COOK	Facility Telephone	(916) 645-6006
SIC Code:	Not reported	SIC Code 2:	Not reported
Agency Name:	PROGRESS RAIL SERVICES		
Agency Address:	1185 Industrial Blvd Boaz 35957 - 1069		
Agency Contact:	MICHAEL VANDENBERGH	Agency Phone:	(256) 598-1261
Design Flow:	Not reported	Baseline Flow:	Not reported

Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.

Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.

Agency Type: Private

Waste Type: Not reported

Threat to Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.

Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

Reclamation: Not reported

POTW: Not reported

NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board

Subregion: 5S

Placer MS:

Facility ID: PR0007471
District Code: 18
Program Elements: 2106
Facility Status: 1

Facility ID: PR0007472
District Code: 18
Program Elements: 2115
Facility Status: 1

Facility ID: PR0007560
District Code: 18
Program Elements: 2275
Facility Status: 1

---

4 **REYNOLDS METALS COMPANY** **CA FID UST** **S101629730**
3939 CINCINNATI AVE **CA PLACER CO. MS** **N/A**
ROCKLIN, CA 95677 **SWEEPS UST**

REYNOLDS METALS COMPANY (Continued) **S101629730**

FID:

Facility ID:	31000027	Regulate ID:	00022091
Reg By:	Active Underground Storage Tank Location		
Cortese Code:	Not reported	SIC Code:	Not reported
Status:	Active	Facility Tel:	(804) 743-5219
Mail To:	Not reported 7900 REYCAN RD ROCKLIN, CA 95677		
Contact:	Not reported	Contact Tel:	Not reported
DUNs No:	Not reported	NPDES No:	Not reported
Creation:	10/22/93	Modified:	00/00/00
EPA ID:	Not reported		
Comments:	Not reported		

Placer MS:

Facility ID:	PR0002689
District Code:	11
Program Elements:	2106
Facility Status:	2

Facility ID:	PR0003959
District Code:	11
Program Elements:	2301
Facility Status:	2

Facility ID:	PR0004372
District Code:	11
Program Elements:	2350
Facility Status:	1

Facility ID:	PR0006335
District Code:	11
Program Elements:	2115
Facility Status:	2

Facility ID:	PR0006983
District Code:	11
Program Elements:	2270
Facility Status:	2

SWEEPS:

Status :	A
Comp Number :	22091
Number :	9
Board Of Equalization :	Not reported
Ref Date :	07-01-85
Act Date :	Not reported
Created Date :	02-29-88
Tank Status :	A
Owner Tank Id :	C00010384D
Swrcb Tank Id :	31-000-022091-000001
Actv Date :	07-01-85
Capacity :	10000
Tank Use :	UNKNOWN
Stg :	P
Content :	Not reported
Number Of Tanks :	3

REYNOLDS METALS COMPANY (Continued) **S101629730**

Status : A
Comp Number : 22091
Number : 9
Board Of Equalization : Not reported
Ref Date : 07-01-85
Act Date : Not reported
Created Date : 02-29-88
Tank Status : A
Owner Tank Id : 2
Swrcb Tank Id : 31-000-022091-000002
Actv Date : 07-01-85
Capacity : 1000
Tank Use : UNKNOWN
Stg : W
Content : Not reported
Number Of Tanks : Not reported

Status : A
Comp Number : 22091
Number : 9
Board Of Equalization : Not reported
Ref Date : 07-01-85
Act Date : Not reported
Created Date : 02-29-88
Tank Status : A
Owner Tank Id : 1
Swrcb Tank Id : 31-000-022091-000003
Actv Date : 07-01-85
Capacity : 6000
Tank Use : UNKNOWN
Stg : W
Content : Not reported
Number Of Tanks : Not reported

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4 **REYNOLDS METALS COMPANY** **HIST UST** **U001613786**
3939 CINCINNATI AVE **N/A**
ROCKLIN, CA 95677

UST HIST:

Facility ID:	22091	Owner Name:	REYNOLDS METALS COMPANY
Total Tanks:	3	Region:	STATE
Owner Address:	7900 REYCAN ROAD RICHMOND, VA 23237		
Tank Used for:	PRODUCT		
Tank Num:	1	Container Num:	C00010384D
Tank Capacity:	00010000	Year Installed:	1979
Type of Fuel:	Not reported	Tank Construction:	5/16 inches
Leak Detection:	Visual, Stock Inventor		
Contact Name:	Not reported	Telephone:	(804) 743-5219
Facility Type:	Other	Other Type:	CAN MANUFACTURING

Facility ID:	22091	Owner Name:	REYNOLDS METALS COMPANY
Total Tanks:	3	Region:	STATE
Owner Address:	7900 REYCAN ROAD RICHMOND, VA 23237		
Tank Used for:	WASTE		
Tank Num:	2	Container Num:	2
Tank Capacity:	00001000	Year Installed:	1975

REYNOLDS METALS COMPANY (Continued) **U001613786**

Type of Fuel:	Not reported	Tank Construction:	3/16 inches
Leak Detection:	Stock Inventor		
Contact Name:	Not reported	Telephone:	(804) 743-5219
Facility Type:	Other	Other Type:	CAN MANUFACTURING
Facility ID:	22091	Owner Name:	REYNOLDS METALS COMPANY
Total Tanks:	3	Region:	STATE
Owner Address:	7900 REYCAN ROAD		
	RICHMOND, VA 23237		
Tank Used for:	WASTE		
Tank Num:	3	Container Num:	0000000001
Tank Capacity:	00006000	Year Installed:	1981
Type of Fuel:	Not reported	Tank Construction:	3/16 inches
Leak Detection:	Visual		
Contact Name:	Not reported	Telephone:	(804) 743-5219
Facility Type:	Other	Other Type:	CAN MANUFACTURING

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4 **BALL METAL BEVERAGE CONTAINER CORPORATION** **RCRA-SQG** **1000318261**
3939 CINCINNATI AVE. **FINDS** **CAD010981165**
ROCKLIN, CA 95765 **HAZNET**
Cortese

RCRAInfo:
Owner: NOT REQUIRED
(415) 555-1212
EPA ID: CAD010981165

Contact: Not reported

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
NATIONAL EMISSIONS INVENTORY
RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM
TOXIC CHEMICAL RELEASE INVENTORY SYSTEM

HAZNET:

Gepaid:	CAD010981165
TSD EPA ID:	CAT000646117
Gen County:	Placer
Tsd County:	Kings
Tons:	.5625
Facility Address 2:	Not reported
Waste Category:	Liquids with polychlorinated biphenyls > 50 mg/l
Disposal Method:	Transfer Station
Contact:	BALL CORPORATION
Telephone:	(804) 281-2000
Mailing Name:	Not reported
Mailing Address:	9300 W 108TH CIRCLE
	BROOMFIELD, CO 80021 - 1701
County	Placer

BALL METAL BEVERAGE CONTAINER CORPORATION (Continued) **1000318261**

Gepaid: CAD010981165
TSD EPA ID: CAT000613950
Gen County: Placer
Tsd County: Sacramento
Tons: .3627
Facility Address 2: Not reported
Waste Category: Liquids with halogenated organic compounds > 1000 mg/l
Disposal Method: Transfer Station
Contact: BALL CORPORATION
Telephone: (804) 281-2000
Mailing Name: Not reported
Mailing Address: 9300 W 108TH CIRCLE
BROOMFIELD, CO 80021 - 1701
County Placer

Gepaid: CAD010981165
TSD EPA ID: CAT000613950
Gen County: Placer
Tsd County: Sacramento
Tons: .8880
Facility Address 2: Not reported
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
Disposal Method: Transfer Station
Contact: BALL CORPORATION
Telephone: (804) 281-2000
Mailing Name: Not reported
Mailing Address: 9300 W 108TH CIRCLE
BROOMFIELD, CO 80021 - 1701
County Placer

Gepaid: CAD010981165
TSD EPA ID: CAD044003556
Gen County: Placer
Tsd County: Yolo
Tons: 3.1900
Facility Address 2: Not reported
Waste Category: Waste oil and mixed oil
Disposal Method: Transfer Station
Contact: BALL CORPORATION
Telephone: (804) 281-2000
Mailing Name: Not reported
Mailing Address: 9300 W 108TH CIRCLE
BROOMFIELD, CO 80021 - 1701
County Placer

Gepaid: CAD010981165
TSD EPA ID: CAD044003556
Gen County: Placer
Tsd County: Yolo
Tons: 4.0240
Facility Address 2: Not reported
Waste Category: Waste oil and mixed oil
Disposal Method: Transfer Station
Contact: BALL CORPORATION
Telephone: (804) 281-2000
Mailing Name: Not reported
Mailing Address: 9300 W 108TH CIRCLE
BROOMFIELD, CO 80021 - 1701

BALL METAL BEVERAGE CONTAINER CORPORATION (Continued) **1000318261**

County Placer

Click this hyperlink while viewing on your computer to access
22 additional CA HAZNET record(s) in the EDR Site Report.

CORTESE:
Region: CORTESE
Fac Address 2: Not reported

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4 **REYNOLDS WEST COAST END PLANT** **LUST** **S100943455**
3939 CINCINNATI AVE **N/A**
ROCKLIN, CA 95677

State LUST:

Cross Street:	Not reported		
Qty Leaked:	Not reported		
Case Number	Not reported		
Reg Board:	Not reported		
Chemical:	Toluene		
Lead Agency:	Regional Board		
Local Agency :	31000		
Case Type:	Soil only		
Status:	**Case Closed**		
Review Date:	Not reported	Confirm Leak:	Not reported
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	1992-04-02 00:00:00	Remed Plan:	1992-04-02 00:00:00
Remed Action:	Not reported		
Monitoring:	Not reported		
Close Date:	2000-07-14 00:00:00		
Release Date:	Not reported		
Cleanup Fund Id :	Not reported		
Discover Date :	Not reported		
Enforcement Dt :	1965-01-01 00:00:00		
Enf Type:	None Taken		
Enter Date :	Not reported		
Funding:	Not reported		
Staff Initials:	DAV		
How Discovered:	Not reported		
How Stopped:	Not reported		
Interim :	Not reported		
Leak Cause:	Not reported		
Leak Source:	Not reported		
MTBE Date :	Not reported		
Max MTBE GW :	Not reported		
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected		
Priority:	Low priority. Priority ranking can change over time.		
Local Case # :	Not reported		
Beneficial:	Not reported		
Staff :	PRS		
GW Qualifier :	Not reported		
Max MTBE Soil :	3.7 Parts per Million		
Soil Qualifier :	Not reported		
Hydr Basin #:	SACRAMENTO VALLEY (5		
Operator :	REYNOLDS METALS CO		
Oversight Prgm:	LUST		
Review Date :	2000-07-24 00:00:00		
Stop Date :	Not reported		
Work Suspended :	No		
Responsible Party	REYNOLDS METALS COMPANY		

REYNOLDS WEST COAST END PLANT (Continued) **S100943455**

RP Address: 7900 REYCAN RD, RICHMOND, VA 23237
Global Id: T0606100003
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 1
Mtbe Fuel: 0
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported
Summary : ERM REPORT ON MAR'93 RECOMMENDED CLOSURE.. ALL THREE RISK ASSSESSMENT SCENARIOS DEMONSTARATES THAT THE REMAINING TOLUENE CONCENTRATIONS, BOTH SURROUNDING AND BENEATH THE PLANT, DO NOT POSE A RISK TO HUMAN HEALTH.

LUST Region 5:
Substance: TOLUENE
Case Type: Soil only
Program: LUST
Staff Initials: PRS Case Number: 310005
Status: Case Closed
MTBE Code: N/A
Lead Agency: Regional

---

4 **ARTESYN SOLUTIONS (ROCKLIN)** **CA PLACER CO. MS** **S105113357**
3391 INDUSTRIAL BLVD **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0008039
District Code: 18
Program Elements: 2106
Facility Status: 2

Facility ID: PR0008162
District Code: 18
Program Elements: 2115
Facility Status: 2

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4 **HEWLETT PACKARD COMPANY** **CA PLACER CO. MS** **S105708790**
3391 INDUSTRIAL AVE **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0009048
District Code: 50
Program Elements: 2105
Facility Status: 2

Facility ID: PR0009049
District Code: 50
Program Elements: 2115
Facility Status: 2

4 **HUNT & SONS CARDLOCK** **HAZNET** **U003940064**
4000 CINCINNATI AVE **UST** **N/A**
ROCKLIN, CA 95677 **CA PLACER CO. MS**

HAZNET:
Gepaid: CAL000258459
TSD EPA ID: CAD028409019
Gen County: Placer
Tsd County: Placer
Tons: 0.2
Facility Address 2: Not reported
Waste Category: Unspecified oil-containing waste
Disposal Method: Transfer Station
Contact: PHIL JENKINS
Telephone: (916) 383-4868
Mailing Name: Not reported
Mailing Address: PO BOX 277670
SACRAMENTO, CA 95827
County Placer

Placer MS:
Facility ID: PR0007419
District Code: 18
Program Elements: 2304
Facility Status: 1

Facility ID: PR0007420
District Code: 18
Program Elements: 2114
Facility Status: 1

Facility ID: PR0007421
District Code: 18
Program Elements: 2115
Facility Status: 1

Facility ID: PR0008975
District Code: 18
Program Elements: 2268
Facility Status: 1

State UST:
Facility ID: FA0004348
Total Tanks: Not reported
Region: STATE
Local Agency: 31000

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4 **SUNSET 76 SERVICE STATION** **CA PLACER CO. MS** **S105513083**
3710 PLACER CORPORATE DR **N/A**
RO, CA 95677

Placer MS:
Facility ID: PR0008738
District Code: 18
Program Elements: 2303
Facility Status: 3

Facility ID: PR0008739
District Code: 18
Program Elements: 2114
Facility Status: 3

SUNSET 76 SERVICE STATION (Continued) **S105513083**

Facility ID: PR0008740
District Code: 18
Program Elements: 2268
Facility Status: 3

Facility ID: PR0008742
District Code: 18
Program Elements: 2115
Facility Status: 3

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4 **COMTEK COMPUTER ROCKLIN SITE** **RCRA-SQG 1001486905**
3387 INDUSTRIAL AVE **FINDS CAR000053165**
ROCKLIN, CA 95765 **HAZNET**

RCRAInfo:
Owner: COMTEK COMPUTER SYSTEM INC
(916) 748-7698
EPA ID: CAR000053165

Contact: ERNIE MCKEE
(916) 748-7728

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
HAZARDOUS WASTE TRACKING SYSTEM-DATAMART
RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

HAZNET:
Gepaid: CAR000053165
TSD EPA ID: CAD003963592
Gen County: Placer
Tsd County: Santa Clara
Tons: .1000
Facility Address 2: Not reported
Waste Category: Other inorganic solid waste
Disposal Method: Recycler
Contact: COMTEK COMPUTER SYSTEM INC
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 3387 INDUSTRIAL AVE
ROCKLIN, CA 95765
County Placer

Gepaid: CAR000053165
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: Santa Clara
Tons: 0.07
Facility Address 2: Not reported
Waste Category: Other inorganic solid waste
Disposal Method: Recycler
Contact: ERNIE MCKEE/EHS SPECIALIST II
Telephone: (916) 748-7728
Mailing Name: Not reported
Mailing Address: 2751 MERCANTILE DR STE 100

COMTEK COMPUTER ROCKLIN SITE (Continued) **1001486905**

RANCHO CORDOVA, CA 95742
County Not reported

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4 **TNT LOGISTICS** **HAZNET** **S105724421**
3381 INDUSTRIAL BLVD **N/A**
ROCKLIN, CA 95765

HAZNET:
Gepaid: CAL000208167
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: Los Angeles
Tons: 0.03
Facility Address 2: Not reported
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Transfer Station
Contact: DAN WOOD/OPS SUP
Telephone: (916) 748-9206
Mailing Name: Not reported
Mailing Address: 3381 INDUSTRIAL BLVD
ROCKLIN, CA 95765
County Not reported

Gepaid: CAL000208167
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: Los Angeles
Tons: 0.15
Facility Address 2: Not reported
Waste Category: Other inorganic solid waste
Disposal Method: Disposal, Land Fill
Contact: DAN WOOD/OPS SUP
Telephone: (916) 748-9206
Mailing Name: Not reported
Mailing Address: 3381 INDUSTRIAL BLVD
ROCKLIN, CA 95765
County Not reported

Gepaid: CAL000208167
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: Los Angeles
Tons: 0.25
Facility Address 2: Not reported
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Disposal, Land Fill
Contact: DAN WOOD/OPS SUP
Telephone: (916) 748-9206
Mailing Name: Not reported
Mailing Address: 3381 INDUSTRIAL BLVD
ROCKLIN, CA 95765
County Not reported

TNT LOGISTICS (Continued) **S105724421**

Gepaid: CAL000208167
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: Los Angeles
Tons: 0.1
Facility Address 2: Not reported
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Transfer Station
Contact: DAN WOOD/OPS SUP
Telephone: (916) 748-9206
Mailing Name: Not reported
Mailing Address: 3381 INDUSTRIAL BLVD
ROCKLIN, CA 95765
County Not reported

Gepaid: CAL000208167
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: Los Angeles
Tons: 0.12
Facility Address 2: Not reported
Waste Category: Other inorganic solid waste
Disposal Method: Disposal, Land Fill
Contact: DAN WOOD/OPS SUP
Telephone: (916) 748-9206
Mailing Name: Not reported
Mailing Address: 3381 INDUSTRIAL BLVD
ROCKLIN, CA 95765
County Not reported

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4 **AMERICAN ENGINEERING & ASPHALT INC** **CA PLACER CO. MS** **S105708748**
4175 CINCINNATI AVE **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0003856
District Code: 17
Program Elements: 2106
Facility Status: 1

Facility ID: PR0005946
District Code: 17
Program Elements: 2115
Facility Status: 1

Facility ID: PR0008511
District Code: 17
Program Elements: 2270
Facility Status: 1

4 **VERIZON WIRELESS ROCKLIN SWITC** **CA PLACER CO. MS** **S105982476**
125 CYBER CT **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0009401
District Code: 18
Program Elements: 2105
Facility Status: 1

Facility ID: PR0009402
District Code: 18
Program Elements: 2115
Facility Status: 1

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4 **TRANS STATES LINES INCORPORATED** **HAZNET** **S103653785**
3361 INDUSTRIAL AVE **N/A**
ROCKLIN, CA 95765

HAZNET:
Gepaid: CAC001298536
TSD EPA ID: CAD000088252
Gen County: Placer
Tsd County: Los Angeles
Tons: .9000
Facility Address 2: Not reported
Waste Category: Other inorganic solid waste
Disposal Method: Transfer Station
Contact: TRANS STATES LINES
Telephone: (800) 824-3735
Mailing Name: Not reported
Mailing Address: PO BOX 17011
FORT SMITH, AK 72917
County Placer

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4 **GREENHECK FAN CORPORATION** **CA PLACER CO. MS** **S105113391**
170 CYBER CT **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0008094
District Code: 50
Program Elements: 2106
Facility Status: 1

Facility ID: PR0008245
District Code: 50
Program Elements: 2270
Facility Status: 1

Facility ID: PR0008246
District Code: 50
Program Elements: 2115
Facility Status: 1

5 **PRECISION METAL FABRICATORS** **CA PLACER CO. MS** **S105708788**
575 MENLO DR 1 **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0002565
District Code: 12
Program Elements: 2105
Facility Status: 2

Facility ID: PR0009117
District Code: 18
Program Elements: 2106
Facility Status: 2

Facility ID: PR0009118
District Code: 18
Program Elements: 2115
Facility Status: 2

Facility ID: PR0009317
District Code: 18
Program Elements: 2268
Facility Status: 2

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5 **TRANSNATIONAL PRINTING SERVICE** **CA PLACER CO. MS** **S106967355**
575 MENLO DRIVE, SUITE 4 **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0003750
District Code: 12
Program Elements: 2106
Facility Status: 2

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5 **TRANSNATIONAL PRINTING SERV,IN** **HAZNET** **S102826203**
575 MENLO DR **N/A**
ROCKLIN, CA 95677

HAZNET:
Gepaid: CAL921055208
TSD EPA ID: CAD000088252
Gen County: Placer
Tsd County: Los Angeles
Tons: .2293
Facility Address 2: Not reported
Waste Category: Unspecified oil-containing waste
Disposal Method: Transfer Station
Contact: BART & JOYCE VOLEN
Telephone: (916) 632-5888
Mailing Name: Not reported
Mailing Address: 575 MENLO DR STE 4
ROCKLIN, CA 95765
County Placer

TRANSNATIONAL PRINTING SERV,IN (Continued) **S102826203**

Gepaid: CAL921055208
TSD EPA ID: CAD000088252
Gen County: Placer
Tsd County: Los Angeles
Tons: .4587
Facility Address 2: Not reported
Waste Category: Waste oil and mixed oil
Disposal Method: Transfer Station
Contact: BART & JOYCE VOLEN
Telephone: (916) 632-5888
Mailing Name: Not reported
Mailing Address: 575 MENLO DR STE 4
ROCKLIN, CA 95765
County Placer

Gepaid: CAL921055208
TSD EPA ID: CAD000088252
Gen County: Placer
Tsd County: Los Angeles
Tons: .6880
Facility Address 2: Not reported
Waste Category: Unspecified solvent mixture Waste
Disposal Method: Transfer Station
Contact: BART & JOYCE VOLEN
Telephone: (916) 632-5888
Mailing Name: Not reported
Mailing Address: 575 MENLO DR STE 4
ROCKLIN, CA 95765
County Placer

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5 **GAP (THE) CALL CENTER** **CA PLACER CO. MS** **S104180840**
3830 ATHERTON RD **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0007381
District Code: 17
Program Elements: 2106
Facility Status: 1

Facility ID: PR0007382
District Code: 17
Program Elements: 2115
Facility Status: 1

Facility ID: PR0009599
District Code: 17
Program Elements: 2268
Facility Status: 1

5 **GAP INC. - ON LINE ORDERING AND CUSTOMER SERVICE** **AST** **A100271611**
3830 ATHERTON ROAD **N/A**
ROCKLIN, CA 95765

AST:
Owner: GAP INC. - TECHNICAL CENTER
Total Gallons: 4000

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5 **PARALLAX INC** **HAZNET** **S103980951**
3805 ATHERTON RD **N/A**
ROCKLIN, CA 95765

HAZNET:
Gepaid: CAL000178962
TSD EPA ID: CAD003963592
Gen County: Placer
Tsd County: Santa Clara
Tons: .0325
Facility Address 2: Not reported
Waste Category: Other inorganic solid waste
Disposal Method: Recycler
Contact: PARALLAX INC
Telephone: (916) 624-8333
Mailing Name: Not reported
Mailing Address: 3805 ATHERTON RD STE 102
ROCKLIN, CA 95765
County Placer

Gepaid: CAL000178962
TSD EPA ID: CAD003963592
Gen County: Placer
Tsd County: Santa Clara
Tons: .0325
Facility Address 2: Not reported
Waste Category: Other inorganic solid waste
Disposal Method: Not reported
Contact: PARALLAX INC
Telephone: (916) 624-8333
Mailing Name: Not reported
Mailing Address: 3805 ATHERTON RD STE 102
ROCKLIN, CA 95765
County Placer

Gepaid: CAL000178962
TSD EPA ID: CAD003963592
Gen County: Placer
Tsd County: Santa Clara
Tons: 0.125
Facility Address 2: Not reported
Waste Category: Other inorganic solid waste
Disposal Method: Recycler
Contact: PARALLAX INC
Telephone: (916) 624-8333
Mailing Name: Not reported
Mailing Address: 3805 ATHERTON RD STE 102
ROCKLIN, CA 95765
County Placer

5 **HERMAN MILLER INC** **RCRA-SQG** **1000686112**
333 SUNSET BLVD **FINDS** **CAD983633371**
ROCKLIN, CA 95677

RCRAInfo:
Owner: HERMAN MILLER INC
(616) 772-3300
EPA ID: CAD983633371

Contact: ALLEN YUHL
(916) 624-2448

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

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5 **MILLER SQA WEST** **HAZNET** **S103653543**
333 SUNSET BLVD **N/A**
ROCKLIN, CA 95677

HAZNET:
Gepaid: CAD983633371
TSD EPA ID: CAL000051079
Gen County: Placer
Tsd County: Sacramento
Tons: .2293
Facility Address 2: Not reported
Waste Category: Waste oil and mixed oil
Disposal Method: Transfer Station
Contact: MILLER SQA WEST
Telephone: (916) 632-4260
Mailing Name: Not reported
Mailing Address: 333 SUNSET BLVD
ROCKLIN, CA 95765 - 3707
County Placer

Gepaid: CAD983633371
TSD EPA ID: CAT080022148
Gen County: Placer
Tsd County: San Bernardino
Tons: .0625
Facility Address 2: Not reported
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Transfer Station
Contact: MILLER SQA WEST
Telephone: (916) 632-4260
Mailing Name: Not reported
Mailing Address: 333 SUNSET BLVD
ROCKLIN, CA 95765 - 3707
County Placer

MILLER SQA WEST (Continued) **S103653543**

Gepaid: CAD983633371
TSD EPA ID: CAT080022148
Gen County: Placer
Tsd County: San Bernardino
Tons: .0417
Facility Address 2: Not reported
Waste Category: Unspecified oil-containing waste
Disposal Method: Transfer Station
Contact: MILLER SQA WEST
Telephone: (916) 632-4260
Mailing Name: Not reported
Mailing Address: 333 SUNSET BLVD
ROCKLIN, CA 95765 - 3707
County Placer

Gepaid: CAD983633371
TSD EPA ID: CAT080022148
Gen County: Placer
Tsd County: San Bernardino
Tons: .5003
Facility Address 2: Not reported
Waste Category: Adhesives
Disposal Method: Transfer Station
Contact: MILLER SQA WEST
Telephone: (916) 632-4260
Mailing Name: Not reported
Mailing Address: 333 SUNSET BLVD
ROCKLIN, CA 95765 - 3707
County Placer

Gepaid: CAD983633371
TSD EPA ID: CAT080022148
Gen County: Placer
Tsd County: San Bernardino
Tons: .2293
Facility Address 2: Not reported
Waste Category: Waste oil and mixed oil
Disposal Method: Transfer Station
Contact: MILLER SQA WEST
Telephone: (916) 632-4260
Mailing Name: Not reported
Mailing Address: 333 SUNSET BLVD
ROCKLIN, CA 95765 - 3707
County Placer

Click this hyperlink while viewing on your computer to access
23 additional CA HAZNET record(s) in the EDR Site Report.

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5 **HERMAN MILLER INC.** **CA PLACER CO. MS** **S103464786**
333 SUNSET BLVD **N/A**
ROCKLIN, CA 95765

Placer MS:
Facility ID: PR0002603
District Code: 15
Program Elements: 2106
Facility Status: 2

Facility ID: PR0006228

HERMAN MILLER INC. (Continued) **S103464786**

District Code: 15
Program Elements: 2115
Facility Status: 2

Facility ID: PR0007004
District Code: 15
Program Elements: 2270
Facility Status: 2

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6 **A AND C PUMPING** **RCRA-SQG 1000598222**
3205 FIFIFIELD **FINDS CAD983622689**
PLEASANT GROVE, CA 95668

RCRAInfo:
Owner: BENNY F LEWIS
(916) 927-9490
EPA ID: CAD983622689

Contact: Not reported

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

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7 **REASON FARM'S PARTNERSHIP** **CA PLACER CO. MS S106447372**
6660 PHILLIP RD **N/A**
ROSEVILLE, CA 95678

Placer MS:
Facility ID: PR0009832
District Code: 11
Program Elements: 2301
Facility Status: 3

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8 **HAZNET S105640358**
5300 PHILLIP RD **CHMIRS N/A**
ROSEVILLE, CA 95577

HAZNET:
Gepaid: CAL000224676
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: Santa Clara
Tons: 0.05
Facility Address 2: Not reported
Waste Category: Other organic solids
Disposal Method: Disposal, Other
Contact: BRIEN MCKENZIE-BUSINESS MGR
Telephone: (925) 250-9195
Mailing Name: Not reported
Mailing Address: 5300 PHILLIP RD
ROSEVILLE, CA 95747
County Not reported

(Continued) **S105640358**

Gepaid: CAL000224676
TSD EPA ID: Not reported
Gen County: Placer
Tsd County: Santa Clara
Tons: 0.14
Facility Address 2: Not reported
Waste Category: Liquids with halogenated organic compounds > 1000 mg/l
Disposal Method: Disposal, Other
Contact: BRIEN MCKENZIE-BUSINESS MGR
Telephone: (925) 250-9195
Mailing Name: Not reported
Mailing Address: 5300 PHILLIP RD
ROSEVILLE, CA 95747
County Not reported

Gepaid: CAL000224676
TSD EPA ID: CAD982446874
Gen County: Placer
Tsd County: Placer
Tons: 0.62
Facility Address 2: Not reported
Waste Category: Waste oil and mixed oil
Disposal Method: Transfer Station
Contact: BRIEN MCKENZIE-BUSINESS MGR
Telephone: (925) 250-9195
Mailing Name: Not reported
Mailing Address: 5300 PHILLIP RD
ROSEVILLE, CA 95747
County Placer

CHMIRS:
OES Control Number: 008397
Extent of Release: Not reported
Property Use: Not reported
Incident Date: Not reported
Date Completed: Not reported
Time Completed : Not reported
Agency Id Number : Not reported
Agency Incident Number : Not reported
OES Incident Number : 008397
Time Notified : Not reported
Surrounding Area : Not reported
Estimated Temperature : Not reported
Property Management : Not reported
More Than Two Substances Involved? : Not reported
Special Studies 1 : Not reported
Special Studies 2 : Not reported
Special Studies 3 : Not reported
Special Studies 4 : Not reported
Special Studies 5 : Not reported
Special Studies 6 : Not reported
Resp Agncy Personel # Of Decontaminated : Not reported
Others Number Of Decontaminated : Not reported
Others Number Of Injuries : Not reported
Others Number Of Fatalities : Not reported
Vehicle Make/year : Not reported
Vehicle License Number : Not reported
Vehicle State : Not reported

(Continued) **S105640358**

Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	Not reported
Report Date :	Not reported
Comments :	Not reported
Facility Telephone Number :	Not reported
Waterway Involved :	NO
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	unknown
Containment :	Not reported
What Happened :	Not reported
Type :	PETROLEUM
Other :	Not reported
Substance :	waste oil, transmission oil , battery acid
Quantity Released :	
E Date :	Not reported
Contained :	NO
Site Type :	RESIDENCE
Evacuations :	NO
Num Of Injuries :	NO
Num Of Fatalities :	NO
Date/Time :	Not reported
Year :	1995
Agency :	property owner
BBLS :	Not reported
Cups :	Not reported
CUFT :	Not reported
Gallons :	Not reported
Grams :	Not reported
Pounds :	Not reported
Liters :	Not reported
Ounces :	Not reported
Pints :	Not reported
Quarts :	Not reported
Sheen :	Not reported
Tons :	Not reported
Unknown :	Not reported
Description :	illegally dumped by previous tenant of residence (paul tracy schaffer)who owns a mobil auto repair business named "auto pro " phone# 916-784-8603
Incident date :	am/30 mar95
Admin Agency :	Not reported
OES date :	5/23/1995
OES time :	10:47:22 AM
OES notification :	Not reported
Amount :	unknown, large amt

9 **LUTZ RANCH** — **HIST UST** — **U003730625**
3145 KEYS RD — **N/A**
PLEASANT GROVE, CA 95668

UST HIST:

Facility ID:	23128	Owner Name:	ROBERT W. LUTZ
Total Tanks:	1	Region:	STATE
Owner Address:	3145 KEYS RD. PLEASANT GROVE, CA 95668		
Tank Used for:	PRODUCT		
Tank Num:	1	Container Num:	1
Tank Capacity:	00005000	Year Installed:	1978
Type of Fuel:	Not reported	Tank Construction:	5/16 inches
Leak Detection:	Visual		
Contact Name:	Not reported	Telephone:	(916) 655-3361
Facility Type:	Other	Other Type:	FARM

---

10 **NATOMAS RD N OF KEYES RD/NXT TO CANAL** — **ERNS** — **8720283**
NATOMAS RD N OF KEYES RD/NXT TO CANAL — **N/A**
PLEASANT GROVE, CA

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

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11 **CITY OF ROSEVILLE** — **HAZNET** — **S105087586**
5220 PHILLIPS ROAD — **N/A**
ROSEVILLE, CA 95747

HAZNET:

Gepaid:	CAC002297753
TSD EPA ID:	CAD982042475
Gen County:	Placer
Tsd County:	Solano
Tons:	2.5284
Facility Address 2:	Not reported
Waste Category:	Asbestos-containing waste
Disposal Method:	Disposal, Land Fill
Contact:	CITY OF ROSEVILLE
Telephone:	(916) 329-9010
Mailing Name:	Not reported
Mailing Address:	311 VERNON STE 206 ROSEVILLE, CA 95678
County	Placer

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12 **GEMMA POWER SYSTEMS CALIFORNIA** — **RCRA-SQG** — **1008402387**
5120 PHILLIP RD — **CAR000164665**
ROSEVILLE, CA 95747

GEMMA POWER SYSTEMS CALIFORNIA (Continued) **1008402387**

RCRAInfo:
Owner: GEMMA POWER SYSTEMS CALIFORNIA INC
EPA ID: CAR000164665

Contact: FELIPE USCATEGUI
860-234-0555

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

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13 **AR READY MIX** **CA WDS** **S106447130**
3131 SANKEY RD **N/A**
PLEASANT GROVE, CA 95668

WDS:

Facility ID:	5S 51I018474		
Facility Contact	Michael Haycox	Facility Telephone	(530) 662-1004
SIC Code:	3273	SIC Code 2:	Not reported
Agency Name:	A R READYMIX		
Agency Address:	3600 Wilbur Ave Antioch 94509		
Agency Contact:	Ray Griffin	Agency Phone:	(925) 754-2717
Design Flow:	Not reported	Baseline Flow:	Not reported

Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
Agency Type: Private
Waste Type: Not reported
Threat to Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.
Reclamation: Not reported
POTW: Not reported
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion: 5S

13 **BEST MACHINERY TRACTOR CO.**
SANKEY ROAD, 3131
PLEASANT GROVE, CA 95668

Database(s): UST, HIST UST, CA WDS, SWEEPS UST
EDR ID Number: U003714088
EPA ID Number: N/A

WDS:

Facility ID:	5S 51I011150		
Facility Contact	SAM LA CARA	Facility Telephone	(916) 655-3971
SIC Code:	Not reported	SIC Code 2:	Not reported
Agency Name:	BEST MACHINERY & TRACTOR CO IN		
Agency Address:	3131 Sankey Rd Pleasant Grove 95668 - 9700		
Agency Contact:	WILLIAM H SORENSEN	Agency Phone:	(916) 655-3971
Design Flow:	Not reported	Baseline Flow:	Not reported
Facility Type:	Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.		
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.		
Agency Type:	Private		
Waste Type:	Not reported		
Threat to Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.		
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.		
Reclamation:	Not reported		
POTW:	Not reported		
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board		
Subregion:	5S		

UST HIST:

Facility ID:	10488	Owner Name:	BEST MACHINERY TRACTOR CO.
Total Tanks:	1	Region:	STATE
Owner Address:	3131 SANKEY RD. PLEASANT GROVE, CA 95668		
Tank Used for:	PRODUCT		
Tank Num:	1	Container Num:	1
Tank Capacity:	00000000	Year Installed:	Not reported
Type of Fuel:	REGULAR	Tank Construction:	Not Reported
Leak Detection:	Stock Inventor		
Contact Name:	MICHAEL D. HUEY	Telephone:	(916) 655-3971
Facility Type:	Other	Other Type:	FORKLIFTS ETC

SWEEPS:

Status :	Not reported
Comp Number :	10488
Number :	Not reported
Board Of Equalization :	Not reported
Ref Date :	Not reported
Act Date :	Not reported
Created Date :	Not reported
Tank Status :	Not reported

BEST MACHINERY TRACTOR CO. (Continued) **U003714088**

Owner Tank Id : Not reported
Swrcb Tank Id : 51-000-010488-000001
Actv Date : Not reported
Capacity : 1000
Tank Use : M.V. FUEL
Stg : PRODUCT
Content : LEADED
Number Of Tanks : 1

UST Sutter County:
Cross Street: Not reported
Owner: Not reported
Owner Address: Not reported
Owner Phone: Not reported
Facility Id: Not reported
Facility Phone: Not reported
Contaminant: NO
Removed: CLOSED
Date Closed: 1/1/1986
Contents: LEADED
Tanks Capacity: 8000
Region: SUTTER
Flag: CLOSE

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14 **SYSCO FOOD SERVICES** **AST** **A100211430**
7062 PACIFIC AVE **N/A**
PACIFIC GROVE, CA 95668

AST:
Owner: SYSCO FOOD SERVICES OF SACTO
Total Gallons: 20000

---

14 **SYSCO DISTRIBUTION CENTER WWTP** **CA WDS** **S105037118**
7062 PACIFIC AVE **N/A**
PLEASANT GROVE, CA 95668

WDS:
Facility ID: Sacramento River 51NC00005
Facility Contact: MARK TUTTLE | Facility Telephone: Not reported
SIC Code: Not reported | SIC Code 2: Not reported
Agency Name: SYSCO FOOD SERVICES OF SAC INC
Agency Address: 7062 PACIFIC AVE
PLEASANT GROVE 95668
Agency Contact: MARK TUTTLE | Agency Phone: Not reported
Design Flow: 0.00861 Million Gal/Day | Baseline Flow: Not reported
Facility Type: Municipal/Domestic - Facility that treats sewage or a mixture of predominantly sewage and other waste from districts, municipalities, communities, hospitals, schools, and publicly or privately owned systems (excluding individual subsurface leaching systems disposing of less than 1,000 gallons per day).
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
Agency Type: Private
Waste Type: Not reported
Threat to Water: Moderate Threat to Water Quality. A violation could have a major adverse impact on receiving biota, can cause aesthetic impairment to a significant human population, or render unusable a potential domestic or municipal water supply. Awsthetic impairment would

SYSCO DISTRIBUTION CENTER WWTP (Continued) **S105037118**

include nuisance from a waste treatment facility.
Complexity: Category B - Any facility having a physical, chemical, or biological waste treatment system (except for septic systems with subsurface disposal), or any Class II or III disposal site, or facilities without treatment systems that are complex, such as marinas with petroleum products, solid wastes, and sewage pump out facilities.
Reclamation: Not reported
POTW: Not reported
NPDES Number: Not reported
Subregion: 5S

Facility ID: 5S 51I017176
Facility Contact: MARK NELSON
Facility Telephone: (916) 569-7000
SIC Code: Not reported
SIC Code 2: Not reported
Agency Name: SYSCO FOOD SERVICES OF SACTO I
Agency Address: PO Box 138007
Sacramento 95813 - 8007
Agency Contact: MARK NELSON
Agency Phone: (916) 569-7000
Design Flow: Not reported
Baseline Flow: Not reported
Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
Agency Type: Private
Waste Type: Not reported
Threat to Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.
Reclamation: Not reported
POTW: Not reported
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion: 5S

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14 **SYSCO FOODS** **RCRA-SQG 1004678218**
7062 PACIFIC AVE **FINDS CAR000106351**
PLEASANT GROVE, CA 95668

SYSCO FOODS (Continued) **1004678218**

RCRAInfo:
Owner: SYSCO CORP
(281) 584-1700
EPA ID: CAR000106351

Contact: ADAM AGUILAR
(916) 569-7117

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
AEROMETRIC INFORMATION RETRIEVAL SYSTEM/AIRS FACILITY SYSTEM
HAZARDOUS WASTE TRACKING SYSTEM-DATAMART
RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

---

14 **HOLT OF CALIFORNIA** **SLIC** **S106855395**
7310 PACIFIC AVENUE **N/A**
PLEASANT GROVE, CA 95668

CA STATE SLIC :

Global Id :	SL0610161557
Region :	STATE
Assigned Name :	SLICSITE
Lead Agency Contact :	DEVRA LEWIS
Lead Agency :	CENTRAL VALLEY RWQCB (REGION 5S)
Lead Agency Case Number :	Not reported
Responsible Party :	Not reported
Recent Dtw :	Not reported
Facility Status :	**Case Closed**
Substance Released :	SUB031

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14 **HOLT OF CALIFORNIA** **HAZNET** **S103967975**
7310 PACIFIC AVE **LUST** **N/A**
PLEASANT GROVE, CA 95668 **AST**
CA WDS

State LUST:

Cross Street:	RIEGO RD		
Qty Leaked:	Not reported		
Case Number	Not reported		
Reg Board:	Not reported		
Chemical:	Regular Gasoline		
Lead Agency:	Regional Board		
Local Agency :	51000		
Case Type:	Drinking Water Aquifer affected		
Status:	**Remedial action (cleanup) Underway**		
Review Date:	1990-11-28 00:00:00	Confirm Leak:	1990-11-28 00:00:00
Workplan:	Not reported	Prelim Assess:	Not reported
Pollution Char:	2004-03-30 00:00:00	Remed Plan:	2004-03-30 00:00:00
Remed Action:	2005-02-15 00:00:00		
Monitoring:	Not reported		
Close Date:	Not reported		
Release Date:	Not reported		
Cleanup Fund Id :	Not reported		
Discover Date :	Not reported		

HOLT OF CALIFORNIA (Continued) **S103967975**

Enforcement Dt : 2001-12-10 00:00:00
Enf Type: SEL
Enter Date : Not reported
Funding: Not reported
Staff Initials: JEF
How Discovered: Not reported
How Stopped: Not reported
Interim : Not reported
Leak Cause: Not reported
Leak Source: Not reported
MTBE Date : 2000-11-07 00:00:00
Max MTBE GW : 700.00 Parts per Billion
MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected
Priority: High priority
Local Case # : Not reported
Beneficial: Not reported
Staff : MK
GW Qualifier : =
Max MTBE Soil : Not reported
Soil Qualifier : Not reported
Hydr Basin #: SACRAMENTO VALLEY (5
Operator : Not reported
Oversight Prgm: LUST
Review Date : 2001-11-15 00:00:00
Stop Date : Not reported
Work Suspended : No
Responsible Party HOLT OF CALIFORNIA
RP Address: 7310 PACIFIC AVE, PLEASANT GROVE, CA 95668
Global Id: T0610100025
Org Name: Not reported
Contact Person: Not reported
MTBE Conc: 3
Mtbe Fuel: 1
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported
Summary : 2-5000 GAL MOTOR OIL
1-5000 GAL WASTE OIL
1-2000 GAL SOLVENT
1-2000 GAL WASTE OIL

LUST Region 5:
Substance: REGULR GASOLINE
Case Type: Drinking Water Aquifer affected
Program: LUST
Staff Initials: MK Case Number: 510028
Status: Remedial action (cleanup) Underway
MTBE Code: 5
Lead Agency: Regional

HOLT OF CALIFORNIA (Continued) **S103967975**

HAZNET:

Gepaid: CAL000827891
TSD EPA ID: CAD009452657
Gen County: Sutter
Tsd County: San Mateo
Tons: 1.0842
Facility Address 2: Not reported
Waste Category: Unspecified organic liquid mixture
Disposal Method: Not reported
Contact: HOLT OF CALIFORNIA
Telephone: (916) 991-8200
Mailing Name: Not reported
Mailing Address: 7310 PACIFIC AVE
PLEASANT GROVE, CA 95668 - 9708
County Sutter

Gepaid: CAL000827891
TSD EPA ID: CAD009452657
Gen County: Sutter
Tsd County: San Mateo
Tons: 3.7113
Facility Address 2: Not reported
Waste Category: Unspecified organic liquid mixture
Disposal Method: Recycler
Contact: HOLT OF CALIFORNIA
Telephone: (916) 991-8200
Mailing Name: Not reported
Mailing Address: 7310 PACIFIC AVE
PLEASANT GROVE, CA 95668 - 9708
County Sutter

Gepaid: CAL000827891
TSD EPA ID: CAD044003556
Gen County: Sutter
Tsd County: Yolo
Tons: 8.2356
Facility Address 2: Not reported
Waste Category: Waste oil and mixed oil
Disposal Method: Transfer Station
Contact: HOLT OF CALIFORNIA
Telephone: (916) 991-8200
Mailing Name: Not reported
Mailing Address: 7310 PACIFIC AVE
PLEASANT GROVE, CA 95668 - 9708
County Sutter

Gepaid: CAL000827891
TSD EPA ID: CAD044003556
Gen County: Sutter
Tsd County: Yolo
Tons: 1.2093
Facility Address 2: Not reported
Waste Category: Unspecified oil-containing waste
Disposal Method: Transfer Station
Contact: HOLT OF CALIFORNIA
Telephone: (916) 991-8200
Mailing Name: Not reported
Mailing Address: 7310 PACIFIC AVE

HOLT OF CALIFORNIA (Continued) **S103967975**

PLEASANT GROVE, CA 95668 - 9708
County Sutter

Gepaid: CAL000827891
TSD EPA ID: CAT080033681
Gen County: Sutter
Tsd County: Los Angeles
Tons: 0.4
Facility Address 2: Not reported
Waste Category: Other organic solids
Disposal Method: Disposal, Land Fill
Contact: HOLT OF CALIFORNIA
Telephone: (916) 991-8200
Mailing Name: Not reported
Mailing Address: 7310 PACIFIC AVE
PLEASANT GROVE, CA 95668 - 9708
County Sutter

Click this hyperlink while viewing on your computer to access
39 additional CA HAZNET record(s) in the EDR Site Report.

WDS:
Facility ID: Sacramento River 51NC00009
Facility Contact: LARRY NORBY
Facility Telephone: Not reported
SIC Code: Not reported
SIC Code 2: Not reported
Agency Name: HOLT OF CALIFORNIA
Agency Address: PO BOX 'X'
SACRAMENTO 95813 - 1306
Agency Contact: LARRY NORBY
Agency Phone: Not reported
Design Flow: Not reported
Baseline Flow: Not reported
Facility Type: Other - Does not fall into the category of Municipal/Domestic, Industrial, Agricultural or Solid Waste (Class I, II or III)
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
Agency Type: Private
Waste Type: Not reported
Threat to Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity: Category B - Any facility having a physical, chemical, or biological waste treatment system (except for septic systems with subsurface disposal), or any Class II or III disposal site, or facilities without treatment systems that are complex, such as marinas with petroleum products, solid wastes, and sewage pump out facilities.
Reclamation: Not reported
POTW: Not reported
NPDES Number: Not reported
Subregion: 5S

AST:
Owner: HOLT OF CALIFORNIA
Total Gallons: 8250

14 TENCO TRACTOR INC
7310 PACIFIC AVE
PLEASANT GROVE, CA 95668

Database(s): RCRA-SQG, FINDS, Cortese, UST, SLIC, HIST UST, SWEEPS UST
EDR ID Number: 1000178152
EPA ID Number: CAD982418402

RCRAInfo:
Owner: NOT REQUIRED
(415) 555-1212
EPA ID: CAD982418402

Contact: Not reported

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: Violations exist

Regulation Violated: Not reported
Area of Violation: GENERATOR-LAND BAN REQUIREMENTS
Date Violation Determined: 12/27/1989
Actual Date Achieved Compliance: 05/03/1990

Enforcement Action: WRITTEN INFORMAL
Enforcement Action Date: 04/17/1990
Penalty Type: Not reported

There are 1 violation record(s) reported at this site:

Evaluation	Area of Violation	Date of Compliance
Other Evaluation	GENERATOR-LAND BAN REQUIREMENTS	19900503

FINDS:
Other Pertinent Environmental Activity Identified at Site:
NATIONAL EMISSIONS INVENTORY
RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

CORTESE:
Region: CORTESE
Fac Address 2: 7310 PACIFIC AVE

SLIC Region 5:
Facility Status: Closed by RB
Pollutant: Benzene
Report Date: / /
Lead Agency: DLL
Date Added: Not reported
Date Closed: 6/13/2001
Unit: Facility is a Spill or site
Date Filed: 06/13/01

UST HIST:
Facility ID: 68462
Total Tanks: 1
Owner Address: 7310 PACIFIC AVENUE
PLEASANT GROVE, CA 95668
Tank Used for: PRODUCT
Tank Num: 1
Tank Capacity: 00002000
Type of Fuel: Not reported
Leak Detection: Stock Inventor, Pressure Test
Contact Name: Not reported
Facility Type: Other
Owner Name: TENCO
Region: STATE
Container Num: 5
Year Installed: Not reported
Tank Construction: X inches
Telephone: (916) 655-3131
Other Type: TRACTOR REPAIR

TENCO TRACTOR INC (Continued) **1000178152**

SWEEPS:

Status :	Not reported
Comp Number :	68462
Number :	Not reported
Board Of Equalization :	Not reported
Ref Date :	Not reported
Act Date :	Not reported
Created Date :	Not reported
Tank Status :	Not reported
Owner Tank Id :	Not reported
Swrcb Tank Id :	51-000-068462-000001
Actv Date :	Not reported
Capacity :	2000
Tank Use :	HAZARDOUS
Stg :	PRODUCT
Content :	FILL TANK CO
Number Of Tanks :	6

Status :	Not reported
Comp Number :	68462
Number :	Not reported
Board Of Equalization :	Not reported
Ref Date :	Not reported
Act Date :	Not reported
Created Date :	Not reported
Tank Status :	Not reported
Owner Tank Id :	Not reported
Swrcb Tank Id :	51-000-068462-000002
Actv Date :	Not reported
Capacity :	5000
Tank Use :	OIL
Stg :	PRODUCT
Content :	MOTOR OIL
Number Of Tanks :	Not reported

Status :	Not reported
Comp Number :	68462
Number :	Not reported
Board Of Equalization :	Not reported
Ref Date :	Not reported
Act Date :	Not reported
Created Date :	Not reported
Tank Status :	Not reported
Owner Tank Id :	Not reported
Swrcb Tank Id :	51-000-068462-000003
Actv Date :	Not reported
Capacity :	2000
Tank Use :	HAZARDOUS
Stg :	WASTE
Content :	SOLVENT
Number Of Tanks :	Not reported

Status :	Not reported
Comp Number :	68462
Number :	Not reported
Board Of Equalization :	Not reported
Ref Date :	Not reported

TENCO TRACTOR INC (Continued) **1000178152**

Act Date :	Not reported
Created Date :	Not reported
Tank Status :	Not reported
Owner Tank Id :	Not reported
Swrcb Tank Id :	51-000-068462-000004
Actv Date :	Not reported
Capacity :	5000
Tank Use :	OIL
Stg :	WASTE
Content :	WASTE OIL
Number Of Tanks :	Not reported

Status :	Not reported
Comp Number :	68462
Number :	Not reported
Board Of Equalization :	Not reported
Ref Date :	Not reported
Act Date :	Not reported
Created Date :	Not reported
Tank Status :	Not reported
Owner Tank Id :	Not reported
Swrcb Tank Id :	51-000-068462-000005
Actv Date :	Not reported
Capacity :	5000
Tank Use :	OIL
Stg :	PRODUCT
Content :	MOTOR OIL
Number Of Tanks :	Not reported

Status :	Not reported
Comp Number :	68462
Number :	Not reported
Board Of Equalization :	Not reported
Ref Date :	Not reported
Act Date :	Not reported
Created Date :	Not reported
Tank Status :	Not reported
Owner Tank Id :	Not reported
Swrcb Tank Id :	51-000-068462-000008
Actv Date :	Not reported
Capacity :	6000
Tank Use :	M.V. FUEL
Stg :	PRODUCT
Content :	REG UNLEADED
Number Of Tanks :	Not reported

UST Sutter County:

Cross Street:	Not reported
Owner:	Not reported
Owner Address:	Not reported
Owner Phone:	Not reported
Facility Id:	Not reported
Facility Phone:	Not reported
Contaminant:	GROUNDWATER/SOIL
Removed:	REMOVED
Date Closed:	7/18/1992
Contents:	FILL TANK CO
Tanks Capacity:	2000

TENCO TRACTOR INC (Continued) **1000178152**

Region: SUTTER
Flag: CLOSE

Facility Id: Not reported
Facility Phone: Not reported
Contaminant: GROUNDWATER/SOIL
Removed: REMOVED
Date Closed: 7/18/1992
Contents: MOTOR OIL
Tanks Capacity: 5000
Region: SUTTER
Flag: CLOSE

Facility Id: Not reported
Facility Phone: Not reported
Contaminant: GROUNDWATER/SOIL
Removed: REMOVED
Date Closed: 7/18/1992
Contents: SOLVENT
Tanks Capacity: 2000
Region: SUTTER
Flag: CLOSE

Facility Id: Not reported
Facility Phone: Not reported
Contaminant: GROUNDWATER/SOIL
Removed: REMOVED
Date Closed: 7/18/1992
Contents: WASTE OIL
Tanks Capacity: 5000
Region: SUTTER
Flag: CLOSE

Facility Id: Not reported
Facility Phone: Not reported
Contaminant: GROUNDWATER/SOIL
Removed: REMOVED
Date Closed: 7/18/1992
Contents: MOTOR OIL
Tanks Capacity: 5000
Region: SUTTER
Flag: CLOSE

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14 **EL CENTRO STG** **EMI** **S105937618**
7339 PACIFIC AVE **N/A**
PLEASANT GROVE, CA 95668

EMISSIONS :

Year :	1987
Facility ID :	15
Air District Code :	FR
SIC Code :	723
Air Basin :	SV
Air District Name :	FEATHER RIVER AQMD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	51
County ID :	51
Total Organic Hydrocarbon Gases Tons/Yr:	0

EL CENTRO STG (Continued) **S105937618**

Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	1
Particulate Matter Tons/Yr :	8
Part. Matter 10 Micrometers and Smaller Tons/Yr :	4

Year :	1990
Facility ID :	15
Air District Code :	FR
SIC Code :	723
Air Basin :	SV
Air District Name :	FEATHER RIVER AQMD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	51
County ID :	51
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	1
Particulate Matter Tons/Yr :	1
Part. Matter 10 Micrometers and Smaller Tons/Yr :	0

Year :	1993
Facility ID :	15
Air District Code :	FR
SIC Code :	723
Air Basin :	SV
Air District Name :	FEATHER RIVER AQMD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	51
County ID :	51
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr :	5
Part. Matter 10 Micrometers and Smaller Tons/Yr :	2

Year :	1995
Facility ID :	15
Air District Code :	FR
SIC Code :	723
Air Basin :	SV
Air District Name :	FEATHER RIVER AQMD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	51
County ID :	51
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0

EL CENTRO STG (Continued) **S105937618**

SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr : 5
Part. Matter 10 Micrometers and Smaller Tons/Yr : 2

Year : 1996
Facility ID : 15
Air District Code : FR
SIC Code : 723
Air Basin : SV
Air District Name : FEATHER RIVER AQMD
Community Health Air Pollution Info System : Not reported
Consolidated Emission Reporting Rule : Not reported
County Code : 51
County ID : 51
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr : 5
Part. Matter 10 Micrometers and Smaller Tons/Yr : 2

Year : 1997
Facility ID : 15
Air District Code : FR
SIC Code : 723
Air Basin : SV
Air District Name : FEATHER RIVER AQMD
Community Health Air Pollution Info System : Not reported
Consolidated Emission Reporting Rule : Not reported
County Code : 51
County ID : 51
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr : 5
Part. Matter 10 Micrometers and Smaller Tons/Yr : 2

Year : 1998
Facility ID : 15
Air District Code : FR
SIC Code : 723
Air Basin : SV
Air District Name : FEATHER RIVER AQMD
Community Health Air Pollution Info System : Not reported
Consolidated Emission Reporting Rule : Not reported
County Code : 51
County ID : 51
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr : 5
Part. Matter 10 Micrometers and Smaller Tons/Yr : 2

EL CENTRO STG (Continued) **S105937618**

Year :	1999
Facility ID :	6007
Air District Code :	FR
SIC Code :	723
Air Basin :	SV
Air District Name :	FEATHER RIVER AQMD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	51
County ID :	51
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr :	5
Part. Matter 10 Micrometers and Smaller Tons/Yr :	2

Year :	2000
Facility ID :	6007
Air District Code :	FR
SIC Code :	723
Air Basin :	SV
Air District Name :	FEATHER RIVER AQMD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	51
County ID :	51
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr :	5
Part. Matter 10 Micrometers and Smaller Tons/Yr :	2

Year :	2001
Facility ID :	6007
Air District Code :	FR
SIC Code :	723
Air Basin :	SV
Air District Name :	FEATHER RIVER AQMD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	51
County ID :	51
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr :	5
Part. Matter 10 Micrometers and Smaller Tons/Yr :	1

Year :	2002
Facility ID :	6007

EL CENTRO STG (Continued) **S105937618**

Air District Code :	FR
SIC Code :	723
Air Basin :	SV
Air District Name :	FEATHER RIVER AQMD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	51
County ID :	51
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr :	22
Part. Matter 10 Micrometers and Smaller Tons/Yr :	8

Year :	2003
Facility ID :	6007
Air District Code :	FR
SIC Code :	723
Air Basin :	SV
Air District Name :	FEATHER RIVER AQMD
Community Health Air Pollution Info System :	Not reported
Consolidated Emission Reporting Rule :	Not reported
County Code :	51
County ID :	51
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr :	22
Part. Matter 10 Micrometers and Smaller Tons/Yr :	8

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14 **EL CENTRO STG** **FINDS** **1005496318**
7339 PACIFIC AVE **110001172917**
PLEASANT GROVE, CA 95668

FINDS:
Other Pertinent Environmental Activity Identified at Site:
NATIONAL EMISSIONS INVENTORY

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14 **CONSOLIDATED DEALER SYSTEMS** **HAZNET** **S106092228**
7414 PACIFIC AVE **N/A**
PLEASANT GROVE, CA 95668

HAZNET:

Gepaid:	CAL000224796
TSD EPA ID:	Not reported
Gen County:	Sutter
Tsd County:	Los Angeles
Tons:	1.04
Facility Address 2:	Not reported
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Recycler

CONSOLIDATED DEALER SYSTEMS (Continued) **S106092228**

Contact: ED BAUER
Telephone: (916) 655-3635
Mailing Name: Not reported
Mailing Address: PO BOX 891
ROSEVILLE, CA 95678
County Not reported

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14 **PLEASANT GROVE READY-MIX** **AST** **A100176530**
7466 PACIFIC AVE. **N/A**
PLEASANT GROVE, CA 95668

AST:
Owner: A.TEICHERT & SON, INC.
Total Gallons: 10464

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14 **TEICHERT** **RCRA-SQG** **1005441170**
7466 PACIFIC AVE **FINDS** **CAR000116319**
PLEASANT GROVE, CA 95668 **CA WDS**

RCRAInfo:
Owner: TEICHERT
(916) 386-3716
EPA ID: CAR000116319

Contact: GEORGE TAKEMORI
(916) 386-3716

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
HAZARDOUS WASTE TRACKING SYSTEM-DATAMART
RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

WDS:
Facility ID: 5S 51I014718
Facility Contact: Roger Riott
Facility Telephone: (916) 991-8170
SIC Code: Not reported
SIC Code 2: Not reported
Agency Name: TEICHERT & SON, INC
Agency Address: PO BOX 15002
SACRAMENTO 95851 - 1002
Agency Contact: Steve AZEVEDO
Agency Phone: (916) 484-3011
Design Flow: Not reported
Baseline Flow: Not reported
Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
Agency Type: Private
Waste Type: Not reported
Threat to Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded

TEICHERT (Continued) **1005441170**

at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.
Reclamation: Not reported
POTW: Not reported
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion: 5S

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14 **SIERRA MACHINERY SERVICES INC** **HAZNET** **S102798966**
7518 PACIFIC AVE **N/A**
PLEASANT GROVE, CA 95668

HAZNET:
Gepaid: CAL000208173
TSD EPA ID: CAD044003556
Gen County: Sutter
Tsd County: Yolo
Tons: .8340
Facility Address 2: Not reported
Waste Category: Unspecified oil-containing waste
Disposal Method: Transfer Station
Contact: WSTRN TRACTION CO PLSANT GROVE
Telephone: (916) 655-3077
Mailing Name: Not reported
Mailing Address: 7518 PACIFIC AVE
PLEASANT GROVE, CA 95668
County Sutter

Gepaid: CAL000253419
TSD EPA ID: CA0000084517
Gen County: Sutter
Tsd County: Sutter
Tons: 0.12
Facility Address 2: Not reported
Waste Category: Unspecified organic liquid mixture
Disposal Method: Transfer Station
Contact: JOHN DALBIANCO-SERVICE MANAGER
Telephone: (916) 655-3077
Mailing Name: Not reported
Mailing Address: 7518 PACIFIC AVE
PLEASANT GROVE, CA 95668
County Sutter

Gepaid: CAC000941928
TSD EPA ID: CAT080011059
Gen County: Sutter
Tsd County: Los Angeles
Tons: .4587
Facility Address 2: Not reported
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Not reported
Contact: UNKNOWN
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 650 CALIFORNIA ST

SIERRA MACHINERY SERVICES INC (Continued) **S102798966**

SAN FRANCISCO, CA 94108
County Sutter

Gepaid: CAC000941928
TSD EPA ID: CAT080011059
Gen County: Sutter
Tsd County: Los Angeles
Tons: .5838
Facility Address 2: Not reported
Waste Category: Unspecified oil-containing waste
Disposal Method: Recycler
Contact: UNKNOWN
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 650 CALIFORNIA ST
SAN FRANCISCO, CA 94108
County Sutter

Gepaid: CAC000941928
TSD EPA ID: CAT080033681
Gen County: Sutter
Tsd County: Los Angeles
Tons: .4587
Facility Address 2: Not reported
Waste Category: Off-specification, aged, or surplus organics
Disposal Method: Treatment, Incineration
Contact: UNKNOWN
Telephone: (000) 000-0000
Mailing Name: Not reported
Mailing Address: 650 CALIFORNIA ST
SAN FRANCISCO, CA 94108
County Sutter

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15 **ALL TERRAIN EXPLORATION DRILLING** **RCRA-LQG** **1007200241**
6330 BREWER RD **CAL000056603**
PLEASANT GROVE, CA 95668

RCRAInfo:
Contact: SALLY ANDRESEN
(916) 991-2999

Classification: Large Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

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16 **LINCOLN RANCH** **HIST UST** **U003730627**
1515 S BREWER RD **SWEEPS UST** **N/A**
PLEASANT GROVE, CA 95668

UST HIST:
Facility ID: 23266
Total Tanks: 1
Owner Address: 293 EAST GRIDLEY ROAD
GRIDLEY, CA 95948
Tank Used for: PRODUCT
Tank Num: 1
Tank Capacity: 00007000
Type of Fuel: DIESEL
Owner Name: MORGAN C. CHAMBERS
Region: STATE
Container Num: 1
Year Installed: Not reported
Tank Construction: Not Reported

LINCOLN RANCH (Continued) **U003730627**

Leak Detection: Stock Inventor
Contact Name: W. MERKLEY Telephone: (916) 655-3502
Facility Type: Other Other Type: FARMING

SWEEPS:
Status : A
Comp Number : 23266
Number : 9
Board Of Equalization : Not reported
Ref Date : 07-01-85
Act Date : Not reported
Created Date : 02-29-88
Tank Status : A
Owner Tank Id : 1
Swrcb Tank Id : 51-000-023266-000001
Actv Date : 07-01-85
Capacity : 7000
Tank Use : M.V. FUEL
Stg : P
Content : DIESEL
Number Of Tanks : 1

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17 **CHMIRS** **S100217200**

BASE LINE RD. AT WATT AVE. **N/A**
ROSEVILLE, CA

CHMIRS:
OES Control Number: 8906044
Extent of Release: Not reported
Property Use: County/City Road
Incident Date: 08-MAY-89
Date Completed: 08-MAY-89
Time Completed : 1950
Agency Id Number : 31805
Agency Incident Number : 88002
OES Incident Number : 8906044
Time Notified : 1700
Surrounding Area : 650
Estimated Temperature : 80
Property Management : K
More Than Two Substances Involved? : N
Special Studies 1 : Not reported
Special Studies 2 : Not reported
Special Studies 3 : Not reported
Special Studies 4 : Not reported
Special Studies 5 : Not reported
Special Studies 6 : Not reported
Resp Agncy Personel # Of Decontaminated : 0
Others Number Of Decontaminated : 0
Others Number Of Injuries : 0
Others Number Of Fatalities : 0
Vehicle Make/year : FREIGHTLINER
Vehicle License Number : 3C60801
Vehicle State : CA
Vehicle Id Number : Not reported
CA/DOT/PUC/ICC Number : CALT16193
Company Name : NORTHWEST RAIL SERVICE
Reporting Officer Name/ID : GERALD F. KOPP, EMERGENCY SERVICES TECH.
Report Date : 10-MAY-89

(Continued) **S100217200**

Comments :	Not reported
Facility Telephone Number :	916 889-7720
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported
What Happened :	Not reported
Type :	Not reported
Other :	Not reported
Substance :	Not Reported
E Date :	10-MAY-90
Contained :	Not reported
Site Type :	Not reported
Evacuations :	Not reported
Num Of Injuries :	Not reported
Num Of Fatalities :	Not reported
Date/Time :	Not reported
Year :	88-92
Agency :	Not reported
BBLS :	Not reported
Cups :	Not reported
CUFT :	Not reported
Gallons :	Not reported
Grams :	Not reported
Pounds :	Not reported
Liters :	Not reported
Ounces :	Not reported
Pints :	Not reported
Quarts :	Not reported
Sheen :	Not reported
Tons :	Not reported
Unknown :	Not reported
Description :	Not reported
Incident date :	Not reported
Admin Agency :	Not reported
OES date :	Not reported
OES time :	Not reported
OES notification :	Not reported
Amount :	Not reported

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18 **VINCE STANICH** **HAZNET** **S107143584**
6400 BASE LINE RD **N/A**
ROSEVILLE, CA 95747

HAZNET:

Gepaid:	CAC002570913
TSD EPA ID:	CAT000646117
Gen County:	Placer
Tsd County:	Placer
Tons:	8.42
Facility Address 2:	Not reported
Waste Category:	Other organic solids
Disposal Method:	Disposal, Land Fill
Contact:	VINCE STANICH
Telephone:	(916) 744-1940
Mailing Name:	Not reported
Mailing Address:	PO BOX 488
	CLARKSBURG, CA 95612

VINCE STANICH (Continued) **S107143584**

County Placer

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19 **CONSOLIDATED DEALER SYSTEMS** **RCRA-SQG** **1000473094**
2546 RIEGO RD **FINDS** **CAD982445512**
PLEASANT GROVE, CA 95668

RCRAInfo:
Owner: NOT REQUIRED
(415) 555-1212
EPA ID: CAD982445512

Contact: Not reported

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

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20 **MEYER FOOD STORE** **SWEEPS UST** **S106929359**
8000 PLEASANT GROVE ROAD **N/A**
ELVERTA, CA 95626

SWEEPS:

Status :	A
Comp Number :	228
Number :	9
Board Of Equalization :	Not reported
Ref Date :	04-22-92
Act Date :	04-22-92
Created Date :	04-22-92
Tank Status :	A
Owner Tank Id :	1
Swrcb Tank Id :	31-000-000228-000001
Actv Date :	04-22-92
Capacity :	10000
Tank Use :	M.V. FUEL
Stg :	P
Content :	REG UNLEADED
Number Of Tanks :	1

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21 **FARM AIR FLYING SERVICE, INC.** **HAZNET** **1000483055**
4425 W RIEGO RD **CA FID UST** **N/A**
SACRAMENTO, CA 95837 **HIST UST**
SWEEPS UST

HAZNET:

Gepaid:	CAC000742392
TSD EPA ID:	CAT000646117
Gen County:	Sacramento
Tsd County:	Kings
Tons:	1.3500
Facility Address 2:	Not reported
Waste Category:	Other organic solids
Disposal Method:	Disposal, Land Fill
Contact:	FARM AIR FLYING SERVICE INC

FARM AIR FLYING SERVICE, INC. (Continued) **1000483055**

Telephone: (916) 922-9063
Mailing Name: Not reported
Mailing Address: 4425 W. RIEGO ROAD
SACRAMENTO, CA 95837
County Sacramento

FID:

Facility ID:	34000554	Regulate ID:	00037312
Reg By:	Active Underground Storage Tank Location		
Cortese Code:	Not reported	SIC Code:	Not reported
Status:	Active	Facility Tel:	(916) 922-9063
Mail To:	Not reported 4425 W RIEGO RD SACRAMENTO, CA 95837		
Contact:	Not reported	Contact Tel:	Not reported
DUNs No:	Not reported	NPDES No:	Not reported
Creation:	10/22/93	Modified:	00/00/00
EPA ID:	Not reported		
Comments:	Not reported		

UST HIST:

Facility ID:	37312	Owner Name:	FARM AIR FLYING SERVICE, INC.
Total Tanks:	7	Region:	STATE
Owner Address:	4425 W. RIEGOR ROAD SACRAMENTO, CA 95837		
Tank Used for:	PRODUCT		
Tank Num:	1	Container Num:	1
Tank Capacity:	00010000	Year Installed:	1981
Type of Fuel:	06	Tank Construction:	Not Reported
Leak Detection:	None		
Contact Name:	Not reported	Telephone:	(916) 922-9063
Facility Type:	Other	Other Type:	AERIAL APPLICATOR

Facility ID:	37312	Owner Name:	FARM AIR FLYING SERVICE, INC.
Total Tanks:	7	Region:	STATE
Owner Address:	4425 W. RIEGOR ROAD SACRAMENTO, CA 95837		
Tank Used for:	PRODUCT		
Tank Num:	2	Container Num:	2
Tank Capacity:	00010000	Year Installed:	1981
Type of Fuel:	06	Tank Construction:	Not Reported
Leak Detection:	None		
Contact Name:	Not reported	Telephone:	(916) 922-9063
Facility Type:	Other	Other Type:	AERIAL APPLICATOR

Facility ID:	37312	Owner Name:	FARM AIR FLYING SERVICE, INC.
Total Tanks:	7	Region:	STATE
Owner Address:	4425 W. RIEGOR ROAD SACRAMENTO, CA 95837		
Tank Used for:	PRODUCT		
Tank Num:	3	Container Num:	3
Tank Capacity:	00005000	Year Installed:	1981
Type of Fuel:	06	Tank Construction:	Not Reported
Leak Detection:	None		
Contact Name:	Not reported	Telephone:	(916) 922-9063
Facility Type:	Other	Other Type:	AERIAL APPLICATOR

Facility ID:	37312	Owner Name:	FARM AIR FLYING SERVICE, INC.

FARM AIR FLYING SERVICE, INC. (Continued) **1000483055**

Total Tanks:	7	Region:	STATE
Owner Address:	4425 W. RIEGOR ROAD SACRAMENTO, CA 95837		
Tank Used for:	PRODUCT		
Tank Num:	4	Container Num:	4
Tank Capacity:	00003000	Year Installed:	1981
Type of Fuel:	UNLEADED	Tank Construction:	Not Reported
Leak Detection:	None		
Contact Name:	Not reported	Telephone:	(916) 922-9063
Facility Type:	Other	Other Type:	AERIAL APPLICATOR

Facility ID:	37312	Owner Name:	FARM AIR FLYING SERVICE, INC.
Total Tanks:	7	Region:	STATE
Owner Address:	4425 W. RIEGOR ROAD SACRAMENTO, CA 95837		
Tank Used for:	PRODUCT		
Tank Num:	5	Container Num:	5
Tank Capacity:	00000500	Year Installed:	1981
Type of Fuel:	Not reported	Tank Construction:	Not Reported
Leak Detection:	None		
Contact Name:	Not reported	Telephone:	(916) 922-9063
Facility Type:	Other	Other Type:	AERIAL APPLICATOR

Facility ID:	37312	Owner Name:	FARM AIR FLYING SERVICE, INC.
Total Tanks:	7	Region:	STATE
Owner Address:	4425 W. RIEGOR ROAD SACRAMENTO, CA 95837		
Tank Used for:	WASTE		
Tank Num:	6	Container Num:	6
Tank Capacity:	00000500	Year Installed:	1981
Type of Fuel:	WASTE OIL	Tank Construction:	Not Reported
Leak Detection:	None		
Contact Name:	Not reported	Telephone:	(916) 922-9063
Facility Type:	Other	Other Type:	AERIAL APPLICATOR

Facility ID:	37312	Owner Name:	FARM AIR FLYING SERVICE, INC.
Total Tanks:	7	Region:	STATE
Owner Address:	4425 W. RIEGOR ROAD SACRAMENTO, CA 95837		
Tank Used for:	WASTE		
Tank Num:	7	Container Num:	7
Tank Capacity:	00000000	Year Installed:	1981
Type of Fuel:	Not reported	Tank Construction:	Not Reported
Leak Detection:	Visual		
Contact Name:	Not reported	Telephone:	(916) 922-9063
Facility Type:	Other	Other Type:	AERIAL APPLICATOR

SWEEPS:

Status :	A
Comp Number :	37312
Number :	9
Board Of Equalization :	Not reported
Ref Date :	07-01-85
Act Date :	Not reported
Created Date :	02-29-88
Tank Status :	A
Owner Tank Id :	1
Swrcb Tank Id :	34-000-037312-000001

FARM AIR FLYING SERVICE, INC. (Continued) **1000483055**

Actv Date : 07-01-85
Capacity : 10000
Tank Use : M.V. FUEL
Stg : P
Content : AVIA. GAS
Number Of Tanks : 6

Status : A
Comp Number : 37312
Number : 9
Board Of Equalization : Not reported
Ref Date : 07-01-85
Act Date : Not reported
Created Date : 02-29-88
Tank Status : A
Owner Tank Id : 2
Swrcb Tank Id : 34-000-037312-000002
Actv Date : 07-01-85
Capacity : 10000
Tank Use : M.V. FUEL
Stg : P
Content : AVIA. GAS
Number Of Tanks : Not reported

Status : A
Comp Number : 37312
Number : 9
Board Of Equalization : Not reported
Ref Date : 07-01-85
Act Date : Not reported
Created Date : 02-29-88
Tank Status : A
Owner Tank Id : 3
Swrcb Tank Id : 34-000-037312-000003
Actv Date : 07-01-85
Capacity : 5000
Tank Use : M.V. FUEL
Stg : P
Content : AVIA. GAS
Number Of Tanks : Not reported

Status : A
Comp Number : 37312
Number : 9
Board Of Equalization : Not reported
Ref Date : 07-01-85
Act Date : Not reported
Created Date : 02-29-88
Tank Status : A
Owner Tank Id : 4
Swrcb Tank Id : 34-000-037312-000004
Actv Date : 07-01-85
Capacity : 3000
Tank Use : M.V. FUEL
Stg : P
Content : REG UNLEADED
Number Of Tanks : Not reported

FARM AIR FLYING SERVICE, INC. (Continued) **1000483055**

Status :	A
Comp Number :	37312
Number :	9
Board Of Equalization :	Not reported
Ref Date :	07-01-85
Act Date :	Not reported
Created Date :	02-29-88
Tank Status :	A
Owner Tank Id :	5
Swrcb Tank Id :	34-000-037312-000005
Actv Date :	07-01-85
Capacity :	500
Tank Use :	UNKNOWN
Stg :	P
Content :	Not reported
Number Of Tanks :	Not reported

Status :	A
Comp Number :	37312
Number :	9
Board Of Equalization :	Not reported
Ref Date :	07-01-85
Act Date :	Not reported
Created Date :	02-29-88
Tank Status :	A
Owner Tank Id :	6
Swrcb Tank Id :	34-000-037312-000006
Actv Date :	07-01-85
Capacity :	500
Tank Use :	OIL
Stg :	W
Content :	WASTE OIL
Number Of Tanks :	Not reported

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22 **CHMIRS** **S100275074**

N SIDE R/W RIEGO RD. 1/4 E PACIFIC AVE. **N/A**
PLEASANT GROVE, CA 95959

CHMIRS:

OES Control Number:	8907575
Extent of Release:	Not reported
Property Use:	County/City Road
Incident Date:	16-AUG-89
Date Completed: 16-AUG-89	
Time Completed :	2030
Agency Id Number :	51802
Agency Incident Number :	890816
OES Incident Number :	8907575
Time Notified :	1150
Surrounding Area :	650
Estimated Temperature :	Not reported
Property Management :	Not reported
More Than Two Substances Involved? :	N
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported

(Continued) **S100275074**

Special Studies 6 :	Not reported
Resp Agncy Personel # Of Decontaminated :	0
Others Number Of Decontaminated :	0
Others Number Of Injuries :	0
Others Number Of Fatalities :	0
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	GARY W KRAUS
Report Date :	01-SEP-89
Comments :	Not reported
Facility Telephone Number :	916 741-7370
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported
What Happened :	Not reported
Type :	Not reported
Other :	Not reported
Substance :	Not Reported
E Date :	17-MAY-90
Contained :	Not reported
Site Type :	Not reported
Evacuations :	Not reported
Num Of Injuries :	Not reported
Num Of Fatalities :	Not reported
Date/Time :	Not reported
Year :	88-92
Agency :	Not reported
BBLS :	Not reported
Cups :	Not reported
CUFT :	Not reported
Gallons :	Not reported
Grams :	Not reported
Pounds :	Not reported
Liters :	Not reported
Ounces :	Not reported
Pints :	Not reported
Quarts :	Not reported
Sheen :	Not reported
Tons :	Not reported
Unknown :	Not reported
Description :	Not reported
Incident date :	Not reported
Admin Agency :	Not reported
OES date :	Not reported
OES time :	Not reported
OES notification :	Not reported
Amount :	Not reported

22 **CHMIRS** **S100222433**
N/A

RIEGO RD., .25 MILE E/O PACIFICA AVE.
PLEASANT GROVE, CA 95668

CHMIRS:

OES Control Number:	9991291
Extent of Release:	Not reported
Property Use:	County/City Road
Incident Date:	13-AUG-88
Date Completed: 13-AUG-88	
Time Completed :	1600
Agency Id Number :	51802
Agency Incident Number :	880813
OES Incident Number :	9991291
Time Notified :	1030
Surrounding Area :	650
Estimated Temperature :	95
Property Management :	K
More Than Two Substances Involved? :	N
Special Studies 1 :	Not reported
Special Studies 2 :	Not reported
Special Studies 3 :	Not reported
Special Studies 4 :	Not reported
Special Studies 5 :	Not reported
Special Studies 6 :	Not reported
Resp Agncy Personel # Of Decontaminated :	Not reported
Others Number Of Decontaminated :	Not reported
Others Number Of Injuries :	Not reported
Others Number Of Fatalities :	Not reported
Vehicle Make/year :	Not reported
Vehicle License Number :	Not reported
Vehicle State :	Not reported
Vehicle Id Number :	Not reported
CA/DOT/PUC/ICC Number :	Not reported
Company Name :	Not reported
Reporting Officer Name/ID :	CYNTHIA ALLEN
Report Date :	19-SEP-88
Comments :	No
Facility Telephone Number :	916 741-7370
Waterway Involved :	Not reported
Waterway :	Not reported
Spill Site :	Not reported
Cleanup By :	Not reported
Containment :	Not reported
What Happened :	Not reported
Type :	Not reported
Other :	Not reported
Substance :	Not Reported
E Date :	03-MAY-89
Contained :	Not reported
Site Type :	Not reported
Evacuations :	Not reported
Num Of Injuries :	Not reported
Num Of Fatalities :	Not reported
Date/Time :	Not reported
Year :	88-92
Agency :	Not reported
BBLS :	Not reported
Cups :	Not reported

(Continued) **S100222433**

CUFT :	Not reported
Gallons :	Not reported
Grams :	Not reported
Pounds :	Not reported
Liters :	Not reported
Ounces :	Not reported
Pints :	Not reported
Quarts :	Not reported
Sheen :	Not reported
Tons :	Not reported
Unknown :	Not reported
Description :	Not reported
Incident date :	Not reported
Admin Agency :	Not reported
OES date :	Not reported
OES time :	Not reported
OES notification :	Not reported
Amount :	Not reported

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22 **CORNELIUS AIRSTRIP** **REF** **S100190476**
RIEGO RD / PACIFIC AVE **N/A**
PLEASANT GROVE, CA 95668

REF:

Facility ID	51070016
Dtsc Region Code :	1
Region Code Definition :	SACRAMENTO
County Code :	51
Site Name Under :	Not reported
Current Status Date :	11161994
Current Status Code :	REFOA
Current Status :	PROPERTY/SITE REFERRED TO ANOTHER AGENCY
Lead Agency Code :	Not reported
Lead Agency :	N/A
Site Type Code :	Not reported
Site Type :	N/A
National Priorities List :	Not reported
Tier :	Not reported
Source Of Funding Code :	Not reported
Staff Member :	Not reported
Supervisor :	Not reported
Sic Code :	07
Sic Code Definition :	AGRICULTURAL SERVICES
Site Mitigatn & Brnflds Reuse Prog (SMBR) Code :	CC
SMBR Branch :	CENTRAL CALIFORNIA
Regional Water Quality Control Board :	CV
RWQCB Definition :	CENTRAL VALLEY
Site Access Controlled :	Not reported
Listed In Haz Wst & Substncs Sites List (CORTESE):	Not reported
Date Hazard Ranked :	Not reported
GW Contamination Suspected :	Not reported
# Of Sources Contributing To Contamination :	0
Lat/Long :	0° 0′ 0″ / 0° 0′ 0″
Direction Lat :	Not reported
Direction Long :	Not reported
Lat/long Method :	Not reported
Entity Lat/long Coordinates Refer To :	Not reported
State Assembly Distt Code :	02
State Senate Distt Code :	04

CORNELIUS AIRSTRIP (Continued) **S100190476**

Identifying Code: Not reported
ID Value: Not reported
Other ID Desc: Not reported
Alternate Name(s): CORNELIUS AIRSTRIP
Address(es) : RIEGO RD & PACIFIC AVE
PLEASANT GROVE, CA 95668
Background Info : Not reported
Facility Id : 51070016
AWP Activities Code : 1
DTSC Site Activity Code : DISC
Activity Code Def: DISCOVERY
AWP Activity Id : Not reported
Dt Activity Due For Completion : Not reported
Revised Due Date : Not reported
Date Activity Completed : 04151983
Est # Of Person-years To Complete : 0
Est. Size Of An Activity Code : Not reported
Site Status When Activity Commitment Made : REFOA
Status Code Definition : PROPERTY/SITE REFERRED TO ANOTHER AGENCY
Cubic Yards Of Solids Removed At Completion : 0
Gallons Of Liquid Removed Upon Completion : 0
Cubic Yards Of Solids Treated Upon Completion : 0
Actvty Deleted Via Commitmnt/Completns Screen : Not reported
Special Program Code: Not reported
Special Program : Not reported
Comments Date : 04151983
Comments : Facility identified from Division of Aero printout.
The Sutter County Community Services Department indicated that it does not have a Hazardous Materials Remediation program and is not overseeing this site.
Facility Drive-By: No problems. Small farm operation.
No problem based on drive-by.

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23 **MCI TELECOMMUNICATIONS** **RCRA-SQG 1000133620**
3387 RIEGO RD **FINDS CAD982332868**
ELVERTA, CA 95626

RCRAInfo:
Owner: MCIT COMMUNICATIONS
(415) 555-1212
EPA ID: CAD982332868

Contact: ENVIRONMENTAL MANAGER
(415) 732-2001

Classification: Small Quantity Generator
TSDF Activities: Not reported

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site:
RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

ORPHAN SUMMARY

City		EDR ID	Site Name	Site Address	Zip	Database(s)
ELVERTA		S106929272	MCI TELECOMMUNICATIONS	3387 RIEGO ROAD	95626	SWEEPS UST
LINCOLN		S105708772	CAL TRANS - LINCOLN (65 & 193)	65 / 193 HWY	95648	CA PLACER CO. MS
LINCOLN		1000592960	SIERRA PACIFIC IND	1445 HWY 65	95648	RCRA-SQG, FINDS, HAZNET
LINCOLN		1006094990	LINCOLN CLAY PRODUCTS COMPANY	1800 HIGHWAY 65	95648	EMI, SWEEPS UST
LINCOLN		A100176332	LINCOLN CLAY PRODUCTS, CO.	1500 HWY. 65	95648	AST
LINCOLN		S100833486	BOHEMIA, INC.	HIGHWAY 65	95648	CA BOND EXP. PLAN
LINCOLN		S105211840	LONGS DRUG STORE #535	425 S 65 HWY	95648	CA PLACER CO. MS
LINCOLN		S105708917	SHELL GAS STATION	385 S 65 HWY	95648	CA PLACER CO. MS
LINCOLN		S105954536	LINCOLN CROSSING ELEMENTARY - SITE B	HIGHWAY 65 / FIRST STREET	95648	SCH
LINCOLN		U001613217	LINCOLN SMALL LOG SAWMILL	HIGHWAY 65	95648	HIST UST, SWEEPS UST
LINCOLN		S107145145	WESTERN PLACER HHWCF	ATHENS ROAD_@ FIDDYMENT	95648	HAZNET
LINCOLN		S105593033	NEXTEL COMM (SITE 1831)	1445 65 HWY	95648	CA PLACER CO. MS
LINCOLN		S105708806	LINCOLN CLAY PRODUCTS	1500 65 HWY	95648	CA PLACER CO. MS
LINCOLN		S105708851	NORTHERN ENERGY - "G" STREET	1301 65 HWY	95648	CA PLACER CO. MS
LINCOLN		S105708896	RAMOS OIL COMPANY - HWY 65	1187 65 HWY	95648	CA PLACER CO. MS
LINCOLN		S106967345	RALEY'S #280	725 S HWY 65 AVE	95648	CA PLACER CO. MS
LINCOLN		S107137436	NEXCYCLE/SAFEWAY #1761	405 S HWY 65	95648	SWRCY
LINCOLN		S106715863	WESTERN PLACER USD	2705 NICHOLAS RD	95648	CA PLACER CO. MS
LINCOLN		S106715862	WESTERN PLACER USD	2705 NICHOLAS RD	95648	CA PLACER CO. MS
LINCOLN		S106715861	WESTERN PLACER USD	2705 NICHOLAS RD	95648	CA PLACER CO. MS
LINCOLN		S103648319	WESTERN PLACER UNIFIED SCHOOL DISTRICT	2701 NICHOLAS	95648	HAZNET
LINCOLN		A100150541	NCPA CT NO.1 (PLACER FACILITY)	2155 NICHOLS BLVD.	95648	AST
LINCOLN		A100184377	KIEWIT PACIFIC	SOUTH OF 12 BRIDGES DR	95648	AST
LINCOLN		S105082903	PLACER HOLDING INC	1/2 MI SOUTH OF TWELVE BRIDGES DR	95648	HAZNET
LINCOLN		S106931386	RIO BRAVO ROCKLIN	3100 SPARTA CRT	95648	SWEEPS UST
LINCOLN		S105982357	NICHOLAS TURKEY BREEDING FARM	UNIT NEWCASTLE HWY 1895	95648	CA PLACER CO. MS
LINCOLN	CA	S103442075	TRMT OF PETROLEUM CONTAM. SOIL	HWY 65	95648	WMUDS/SWAT
LINCOLN	CA	S104384457	ALPHA EXPLOSIVES	E. OF HWY 65, N. OF WISE RD	95648	WMUDS/SWAT
NICOLAUS		1000418034	ONSTOTT DUSTERS	12755 HIGHWAY 99 (NORTH OF ADDRESS)	95659	REF
NICOLAUS		1003879344	ONSTOTT DUSTERS INC	12755 HWY 99	95659	CERC-NFRAP
NICOLAUS		1003879367	WEST CATLETT AIRSTRIP	W CATLETT RD @ MAIN CANAL	95659	CERC-NFRAP
NICOLAUS		S106927903	JOHN L. DAVIS	3792 EL CENTRO ROAD HWY 70	95659	SWEEPS UST
NICOLAUS		U003730574	JOHN L. DAVIS	3792 EL CENTRO RD (HWY 70)	95659	HIST UST
NICOLAUS		U003790419	VERONA STORE	GARDEN HIGHWAY, 6744	95659	UST
NICOLAUS		1000250908	PACIFIC BELL	EAST OF HIGHWAY 70 THROWBRIDGE	95659	RCRA-SQG, FINDS
PLEASANT GRO		S106715818	P G & E (PLEASANT GROVE SUBSTAT)	INDUSTRIAL AVE	95668	CA PLACER CO. MS
PLEASANT GRO		S106715819	P G & E (PLEASANT GROVE SUBSTAT)	INDUSTRIAL AVE	95668	CA PLACER CO. MS
PLEASANT GROVE		U003790413	TERMINIX INTERNATIONAL, INC.	GARDEN HWY, 370	95668	UST
PLEASANT GROVE		1007569223	SIERRA MACHINERY SERVICES	751 B PACIFIC AVENUE	95668	RCRA-SQG
PLEASANT GROVE		1000250793	PACIFIC BELL	PETTIGREW ROAD	95668	RCRA-SQG, FINDS
PLEASANT GROVE		S103891905	A.T.&T. SITE (FORMER)	PETTIGREW RD	95668	LUST, Cortese, CA PLACER CO. MS
PLEASANT GROVE		U003786015	PACIFIC BELL (PLEASANT GROVE)	PLEASANT GROVE/HOWSELY RD	95668	UST, CA PLACER CO. MS
PLEASANT GROVE		S104403888	FARM AIR FLYING SERVICE	4425 RIEGO RD	95668	LUST, Cortese

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
ROCKLIN	S104915104	AKTIS CORPORATION	3845 ATHERTON RD 1	95765	CA PLACER CO. MS
ROCKLIN	S104915328	GEOCHEMICAL SERVICES, INC.	3805 ATHERTON RD 6	95765	CA PLACER CO. MS
ROCKLIN	S105954530	SUNSET WEST THIRD MIDDLE SCHOOL	BLUE OAKS BOULEVARD/SUNSET BOULEVARD	95765	SCH
ROCKLIN	S102286177	PECK HEATING AND AIR., INC.	3650 CINCINNATI STE B AVE	95765	CA PLACER CO. MS
ROCKLIN	S105211857	PERRY RACING	3630 CINCINNATI AVE A	95765	CA PLACER CO. MS
ROCKLIN	A100282059	PACIFIC BELL	3535 INDUSTRIAL AVE	95765	AST
ROCKLIN	S100945717	STANFORD RANCH CLEANERS	2351 SUNSET BLVD 100	95765	CA PLACER CO. MS
ROCKLIN	S104915293	FIBREWOOD CORPORATION	SUNSET AND HIGHWAY BLVD 65	95765	CA PLACER CO. MS
ROCKLIN	S106447330	KIEWIT PACIFIC CO.	WHITNEY BLVD	95765	CA PLACER CO. MS
ROSEVILLE	S106092593	ADVANCED DENTAL CONCEPT	1269 PLEASANT GROVE BLVD STE 100	95747	HAZNET, Sacramento Co. ML
ROSEVILLE	S105982356	NICHOLAS TURKEY BREEDING FARM	UNIT FIDDYMENT RD 5350	95747	CA PLACER CO. MS
SACRAMENTO	S101628551	SOPWITH FARMS	4850 RIEGO RD	95836	CA FID UST, SWEEPS UST
SACRAMENTO	S106717922	FARM AIR FLYING SERVICE	4425 W RIEGO ROAD	95836	SLIC
SACRAMENTO	S100925118	FARM AIR, SUTTER COUNTY	4425 WEST RIEGO ROAD	95836	Toxic Pits
SUNSET WHITNEY RANCH	1000299404	FORMICA CORP	3500 CINCINNATI AVE	95765	FINDS, LUST, CHMIRS, Cortese, RCRA-LQG, RCRA-TSDF, CORRACT CERC-NFRAP, HIST UST, EMI
TROWBRIDGE	1000434481	CHEVRON USA INC TROWBRIDGE BULK PLT	PACIFIC & TROWBRIDGE	95659	RCRA-SQG, FINDS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

FEDERAL RECORDS

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 11/29/05
Date Data Arrived at EDR: 01/31/06
Date Made Active in Reports: 02/27/06
Number of Days to Update: 27

Source: EPA
Telephone: N/A
Last EDR Contact: 03/01/06
Next Scheduled EDR Contact: 05/01/06
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 8
Telephone: 303-312-6774

EPA Region 4
Telephone 404-562-8033

Proposed NPL: Proposed National Priority List Sites

Date of Government Version: 11/29/05
Date Data Arrived at EDR: 01/31/06
Date Made Active in Reports: 02/27/06
Number of Days to Update: 27

Source: EPA
Telephone: N/A
Last EDR Contact: 03/01/06
Next Scheduled EDR Contact: 05/01/06
Data Release Frequency: Quarterly

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 11/29/05
Date Data Arrived at EDR: 01/31/06
Date Made Active in Reports: 02/27/06
Number of Days to Update: 27

Source: EPA
Telephone: N/A
Last EDR Contact: 03/01/06
Next Scheduled EDR Contact: 05/01/06
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91
Date Data Arrived at EDR: 02/02/94
Date Made Active in Reports: 03/30/94
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 03/06/06
Next Scheduled EDR Contact: 05/22/06
Data Release Frequency: No Update Planned

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/24/05
Date Data Arrived at EDR: 12/21/05
Date Made Active in Reports: 01/30/06
Number of Days to Update: 40

Source: EPA
Telephone: 703-413-0223
Last EDR Contact: 12/21/05
Next Scheduled EDR Contact: 03/20/06
Data Release Frequency: Quarterly

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

Date of Government Version: 10/24/05
Date Data Arrived at EDR: 12/21/05
Date Made Active in Reports: 01/30/06
Number of Days to Update: 40

Source: EPA
Telephone: 703-413-0223
Last EDR Contact: 12/21/05
Next Scheduled EDR Contact: 03/20/06
Data Release Frequency: Quarterly

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/29/05
Date Data Arrived at EDR: 01/11/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 41

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/06/06
Next Scheduled EDR Contact: 06/05/06
Data Release Frequency: Quarterly

RCRA: Resource Conservation and Recovery Act Information

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/15/05
Date Data Arrived at EDR: 12/28/05
Date Made Active in Reports: 01/30/06
Number of Days to Update: 33

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/01/06
Next Scheduled EDR Contact: 04/24/06
Data Release Frequency: Quarterly

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/05
Date Data Arrived at EDR: 01/12/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 40

Source: National Response Center, United States Coast Guard
Telephone: 202-260-2342
Last EDR Contact: 01/12/06
Next Scheduled EDR Contact: 04/24/06
Data Release Frequency: Annually

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/05
Date Data Arrived at EDR: 01/16/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 36

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 01/16/06
Next Scheduled EDR Contact: 04/17/06
Data Release Frequency: Annually

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/02/05
Date Data Arrived at EDR: 08/12/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 55

Source: Environmental Protection Agency
Telephone: 703-603-8867
Last EDR Contact: 03/03/06
Next Scheduled EDR Contact: 04/03/06
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 01/10/05
Date Data Arrived at EDR: 02/11/05
Date Made Active in Reports: 04/06/05
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 703-603-8867
Last EDR Contact: 03/03/06
Next Scheduled EDR Contact: 04/03/06
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/04
Date Data Arrived at EDR: 02/08/05
Date Made Active in Reports: 08/04/05
Number of Days to Update: 177

Source: USGS
Telephone: 703-692-8801
Last EDR Contact: 02/06/06
Next Scheduled EDR Contact: 05/08/06
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/05/05
Date Data Arrived at EDR: 01/19/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 33

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 01/19/06
Next Scheduled EDR Contact: 04/03/06
Data Release Frequency: Varies

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 11/29/05
Date Data Arrived at EDR: 12/05/05
Date Made Active in Reports: 01/30/06
Number of Days to Update: 56

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/13/06
Next Scheduled EDR Contact: 06/12/06
Data Release Frequency: Semi-Annually

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/14/04
Date Data Arrived at EDR: 02/15/05
Date Made Active in Reports: 04/25/05
Number of Days to Update: 69

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/13/06
Next Scheduled EDR Contact: 04/24/06
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/07/05
Date Data Arrived at EDR: 01/06/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 46

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 01/04/06
Next Scheduled EDR Contact: 04/03/06
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 11/04/05
Date Data Arrived at EDR: 11/28/05
Date Made Active in Reports: 01/30/06
Number of Days to Update: 63

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 10/28/05
Next Scheduled EDR Contact: 12/19/05
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/85
Date Data Arrived at EDR: 08/09/04
Date Made Active in Reports: 09/17/04
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/04
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/03
Date Data Arrived at EDR: 07/13/05
Date Made Active in Reports: 08/17/05
Number of Days to Update: 35

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 12/21/05
Next Scheduled EDR Contact: 03/20/06
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/02
Date Data Arrived at EDR: 04/27/04
Date Made Active in Reports: 05/21/04
Number of Days to Update: 24

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/06/06
Next Scheduled EDR Contact: 04/17/06
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 01/17/06
Date Data Arrived at EDR: 01/24/06
Date Made Active in Reports: 02/27/06
Number of Days to Update: 34

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 12/20/05
Next Scheduled EDR Contact: 03/20/06
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Date of Government Version: 01/17/06
Date Data Arrived at EDR: 01/24/06
Date Made Active in Reports: 02/27/06
Number of Days to Update: 34

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 12/20/05
Next Scheduled EDR Contact: 03/20/06
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/03
Date Data Arrived at EDR: 01/03/05
Date Made Active in Reports: 01/25/05
Number of Days to Update: 22

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 03/06/06
Next Scheduled EDR Contact: 04/17/06
Data Release Frequency: Annually

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 12/27/05
Date Data Arrived at EDR: 02/08/06
Date Made Active in Reports: 02/27/06
Number of Days to Update: 19

Source: EPA
Telephone: 202-564-3887
Last EDR Contact: 02/08/06
Next Scheduled EDR Contact: 05/08/06
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/18/05
Date Data Arrived at EDR: 10/31/05
Date Made Active in Reports: 12/20/05
Number of Days to Update: 50

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 02/08/06
Next Scheduled EDR Contact: 04/03/06
Data Release Frequency: Quarterly

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/08/05
Date Data Arrived at EDR: 12/27/05
Date Made Active in Reports: 01/30/06
Number of Days to Update: 34

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 12/27/05
Next Scheduled EDR Contact: 03/27/06
Data Release Frequency: Semi-Annually

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 01/09/06
Date Data Arrived at EDR: 01/16/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 36

Source: EPA
Telephone: N/A
Last EDR Contact: 01/03/06
Next Scheduled EDR Contact: 04/03/06
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95
Date Data Arrived at EDR: 07/03/95
Date Made Active in Reports: 08/07/95
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 03/06/06
Next Scheduled EDR Contact: 06/05/06
Data Release Frequency: No Update Planned

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/03
Date Data Arrived at EDR: 06/17/05
Date Made Active in Reports: 08/04/05
Number of Days to Update: 48

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/17/06
Next Scheduled EDR Contact: 06/12/06
Data Release Frequency: Biennially

STATE AND LOCAL RECORDS

AWP: Annual Workplan Sites

Known Hazardous Waste Sites. California DTSC's Annual Workplan (AWP), formerly BEP, identifies known hazardous substance sites targeted for cleanup.

Date of Government Version: 08/08/05
Date Data Arrived at EDR: 08/29/05
Date Made Active in Reports: 09/21/05
Number of Days to Update: 23

Source: California Environmental Protection Agency
Telephone: 916-323-3400
Last EDR Contact: 03/16/06
Next Scheduled EDR Contact: 05/29/06
Data Release Frequency: Annually

CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database.

Date of Government Version: 08/08/05
Date Data Arrived at EDR: 08/29/05
Date Made Active in Reports: 09/21/05
Number of Days to Update: 23

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 03/15/06
Next Scheduled EDR Contact: 05/29/06
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/89
Date Data Arrived at EDR: 07/27/94
Date Made Active in Reports: 08/02/94
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/94
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NFA: No Further Action Determination

This category contains properties at which DTSC has made a clear determination that the property does not pose a problem to the environment or to public health.

Date of Government Version: 08/08/05
Date Data Arrived at EDR: 08/29/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 38

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/15/06
Next Scheduled EDR Contact: 05/29/06
Data Release Frequency: Quarterly

NFE: Properties Needing Further Evaluation

This category contains properties that are suspected of being contaminated. These are unconfirmed contaminated properties that need to be assessed using the PEA process. PEA in Progress indicates properties where DTSC is currently conducting a PEA. PEA Required indicates properties where DTSC has determined a PEA is required, but not currently underway.

Date of Government Version: 08/08/05
Date Data Arrived at EDR: 08/29/05
Date Made Active in Reports: 09/21/05
Number of Days to Update: 23

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/15/06
Next Scheduled EDR Contact: 05/29/06
Data Release Frequency: Quarterly

REF: Unconfirmed Properties Referred to Another Agency

This category contains properties where contamination has not been confirmed and which were determined as not requiring direct DTSC Site Mitigation Program action or oversight. Accordingly, these sites have been referred to another state or local regulatory agency.

Date of Government Version: 08/08/05
Date Data Arrived at EDR: 08/29/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 38

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/15/06
Next Scheduled EDR Contact: 05/29/06
Data Release Frequency: Quarterly

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 08/08/05
Date Data Arrived at EDR: 08/29/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 38

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/15/06
Next Scheduled EDR Contact: 05/29/06
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/95
Date Data Arrived at EDR: 08/30/95
Date Made Active in Reports: 09/26/95
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/30/06
Next Scheduled EDR Contact: 05/01/06
Data Release Frequency: No Update Planned

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/08/05
Date Data Arrived at EDR: 12/13/05
Date Made Active in Reports: 01/19/06
Number of Days to Update: 37

Source: Integrated Waste Management Board
Telephone: 916-341-6320
Last EDR Contact: 03/15/06
Next Scheduled EDR Contact: 06/12/06
Data Release Frequency: Quarterly

CA WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 12/19/05
Date Data Arrived at EDR: 12/21/05
Date Made Active in Reports: 01/19/06
Number of Days to Update: 29

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 12/21/05
Next Scheduled EDR Contact: 03/20/06
Data Release Frequency: Quarterly

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/00
Date Data Arrived at EDR: 04/10/00
Date Made Active in Reports: 05/10/00
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 03/06/06
Next Scheduled EDR Contact: 06/05/06
Data Release Frequency: Quarterly

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

Date of Government Version: 04/01/01
Date Data Arrived at EDR: 05/29/01
Date Made Active in Reports: 07/26/01
Number of Days to Update: 58

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-9100
Last EDR Contact: 02/06/06
Next Scheduled EDR Contact: 04/24/06
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 01/05/06
Date Data Arrived at EDR: 01/09/06
Date Made Active in Reports: 01/31/06
Number of Days to Update: 22

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 01/09/06
Next Scheduled EDR Contact: 04/10/06
Data Release Frequency: Quarterly

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/03
Date Data Arrived at EDR: 09/10/03
Date Made Active in Reports: 10/07/03
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 916-542-5424
Last EDR Contact: 03/06/06
Next Scheduled EDR Contact: 06/05/06
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Date of Government Version: 01/15/06
Date Data Arrived at EDR: 01/16/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 36

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 01/16/06
Next Scheduled EDR Contact: 04/03/06
Data Release Frequency: Quarterly

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/04
Date Data Arrived at EDR: 09/07/04
Date Made Active in Reports: 10/12/04
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 12/27/05
Next Scheduled EDR Contact: 03/27/06
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Date of Government Version: 05/19/03
Date Data Arrived at EDR: 05/19/03
Date Made Active in Reports: 06/02/03
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 02/13/06
Next Scheduled EDR Contact: 05/15/06
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Date of Government Version: 09/30/04
Date Data Arrived at EDR: 10/20/04
Date Made Active in Reports: 11/19/04
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 01/09/06
Next Scheduled EDR Contact: 04/10/06
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/01
Date Data Arrived at EDR: 02/28/01
Date Made Active in Reports: 03/29/01
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-576-2220
Last EDR Contact: 02/20/06
Next Scheduled EDR Contact: 05/22/06
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 01/09/06
Date Data Arrived at EDR: 01/09/06
Date Made Active in Reports: 01/31/06
Number of Days to Update: 22

Source: State Water Resources Control Board
Contact: Placer County Environmental Health, (530) 745-2300
Contact: Roseville City Fire Department, (916) 774-582
Last EDR Contact: 01/09/06
Next Scheduled EDR Contact: 04/10/06
Data Release Frequency: Quarterly

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Date of Government Version: 06/07/05
Date Data Arrived at EDR: 06/07/05
Date Made Active in Reports: 06/29/05
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-346-7491
Last EDR Contact: 01/04/06
Next Scheduled EDR Contact: 04/03/06
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Date of Government Version: 02/26/04
Date Data Arrived at EDR: 02/26/04
Date Made Active in Reports: 03/24/04
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-346-7491
Last EDR Contact: 12/27/05
Next Scheduled EDR Contact: 03/27/06
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/05
Date Data Arrived at EDR: 02/15/05
Date Made Active in Reports: 03/28/05
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-4130
Last EDR Contact: 02/06/06
Next Scheduled EDR Contact: 05/08/06
Data Release Frequency: Varies

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/01
Date Data Arrived at EDR: 04/23/01
Date Made Active in Reports: 05/21/01
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 01/16/06
Next Scheduled EDR Contact: 04/17/06
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/94
Date Data Arrived at EDR: 09/05/95
Date Made Active in Reports: 09/29/95
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/98
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SLIC: Statewide SLIC Cases

The Spills, Leaks, Investigations, and Cleanups (SLIC) listings includes unauthorized discharges from spills and leaks, other than from underground storage tanks or other regulated sites.

Date of Government Version: 01/09/06
Date Data Arrived at EDR: 01/09/06
Date Made Active in Reports: 01/31/06
Number of Days to Update: 22

Source: State Water Resources Control Board
Contact: Placer County Environmental Health, (530) 745-2300
Contact: Roseville City Fire Department, (916) 774-582
Last EDR Contact: 01/09/06
Next Scheduled EDR Contact: 04/10/06
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

Date of Government Version: 04/03/03
Date Data Arrived at EDR: 04/07/03
Date Made Active in Reports: 04/25/03
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 02/20/06
Next Scheduled EDR Contact: 05/22/06
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 09/30/04
Date Data Arrived at EDR: 10/20/04
Date Made Active in Reports: 11/19/04
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 01/09/06
Next Scheduled EDR Contact: 04/10/06
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 02/17/06
Date Data Arrived at EDR: 02/17/06
Date Made Active in Reports: 03/13/06
Number of Days to Update: 24

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 02/13/06
Next Scheduled EDR Contact: 05/15/06
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 11/17/04
Date Data Arrived at EDR: 11/18/04
Date Made Active in Reports: 01/04/05
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 01/23/06
Next Scheduled EDR Contact: 04/24/06
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Unregulated sites that impact groundwater or have the potential to impact groundwater.

Date of Government Version: 04/01/05
Date Data Arrived at EDR: 04/05/05
Date Made Active in Reports: 04/21/05
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 01/16/06
Next Scheduled EDR Contact: 04/03/06
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 05/24/05
Date Data Arrived at EDR: 05/25/05
Date Made Active in Reports: 06/16/05
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 01/06/06
Next Scheduled EDR Contact: 04/03/06
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites

Date of Government Version: 09/07/04
Date Data Arrived at EDR: 09/07/04
Date Made Active in Reports: 10/12/04
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 03/06/06
Next Scheduled EDR Contact: 06/05/06
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

Date of Government Version: 11/24/04
Date Data Arrived at EDR: 11/29/04
Date Made Active in Reports: 01/04/05
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 03/06/06
Next Scheduled EDR Contact: 05/22/06
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 11/17/04
Date Data Arrived at EDR: 01/17/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 35

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 01/17/06
Next Scheduled EDR Contact: 04/03/06
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 12/14/05
Date Data Arrived at EDR: 12/14/05
Date Made Active in Reports: 01/19/06
Number of Days to Update: 36

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 03/13/06
Next Scheduled EDR Contact: 05/29/06
Data Release Frequency: Annually

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 01/09/06
Date Data Arrived at EDR: 01/09/06
Date Made Active in Reports: 01/31/06
Number of Days to Update: 22

Source: SWRCB
Contact: Placer County Environmental Health, (530) 745-2300
Contact: Roseville City Fire Department, (916) 774-582
Last EDR Contact: 01/09/06
Next Scheduled EDR Contact: 04/10/06
Data Release Frequency: Semi-Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/90
Date Data Arrived at EDR: 01/25/91
Date Made Active in Reports: 02/12/91
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/01
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AST: Aboveground Petroleum Storage Tank Facilities
Registered Aboveground Storage Tanks.

Date of Government Version: 01/30/06
Date Data Arrived at EDR: 01/30/06
Date Made Active in Reports: 02/17/06
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5712
Last EDR Contact: 01/30/06
Next Scheduled EDR Contact: 05/01/06
Data Release Frequency: Quarterly

SWEEPS UST: SWEEPS UST Listing
Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1980?s. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/94
Date Data Arrived at EDR: 07/07/05
Date Made Active in Reports: 08/11/05
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/05
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/04
Date Data Arrived at EDR: 11/30/05
Date Made Active in Reports: 01/19/06
Number of Days to Update: 50

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 02/20/06
Next Scheduled EDR Contact: 05/22/06
Data Release Frequency: Varies

NOTIFY 65: Proposition 65 Records
Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/93
Date Data Arrived at EDR: 11/01/93
Date Made Active in Reports: 11/19/93
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 01/16/06
Next Scheduled EDR Contact: 04/17/06
Data Release Frequency: No Update Planned

DEED: Deed Restriction Listing
Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 01/03/06
Date Data Arrived at EDR: 01/04/06
Date Made Active in Reports: 01/19/06
Number of Days to Update: 15

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/03/06
Next Scheduled EDR Contact: 04/03/06
Data Release Frequency: Semi-Annually

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 08/08/05
Date Data Arrived at EDR: 08/29/05
Date Made Active in Reports: 09/21/05
Number of Days to Update: 23

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 03/15/06
Next Scheduled EDR Contact: 05/29/06
Data Release Frequency: Quarterly

CLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 04/18/05
Date Data Arrived at EDR: 04/18/05
Date Made Active in Reports: 05/06/05
Number of Days to Update: 18

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 01/04/06
Next Scheduled EDR Contact: 04/03/06
Data Release Frequency: Annually

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 01/23/06
Date Data Arrived at EDR: 01/24/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 28

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 01/23/06
Next Scheduled EDR Contact: 04/24/06
Data Release Frequency: Varies

CDL: DTSC Clan Lab Removals

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/05
Date Data Arrived at EDR: 02/10/06
Date Made Active in Reports: 03/13/06
Number of Days to Update: 31

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 02/08/06
Next Scheduled EDR Contact: 04/24/06
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/03
Date Data Arrived at EDR: 10/11/05
Date Made Active in Reports: 10/31/05
Number of Days to Update: 20

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 02/24/06
Next Scheduled EDR Contact: 05/08/06
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/03
Date Data Arrived at EDR: 07/19/05
Date Made Active in Reports: 08/11/05
Number of Days to Update: 23

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 01/16/06
Next Scheduled EDR Contact: 04/17/06
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

TRIBAL RECORDS

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/04
Date Data Arrived at EDR: 02/08/05
Date Made Active in Reports: 08/04/05
Number of Days to Update: 177

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 02/06/06
Next Scheduled EDR Contact: 05/08/06
Data Release Frequency: Semi-Annually

INDIAN LUST: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 09/07/05
Date Data Arrived at EDR: 09/08/05
Date Made Active in Reports: 10/31/05
Number of Days to Update: 53

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/10/06
Next Scheduled EDR Contact: 05/22/06
Data Release Frequency: Varies

INDIAN LUST: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 12/01/05
Date Data Arrived at EDR: 01/03/06
Date Made Active in Reports: 01/19/06
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 02/20/06
Next Scheduled EDR Contact: 05/22/06
Data Release Frequency: Varies

INDIAN UST: Underground Storage Tanks on Indian Land

Date of Government Version: 11/08/05
Date Data Arrived at EDR: 11/09/05
Date Made Active in Reports: 12/12/05
Number of Days to Update: 33

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 02/20/06
Next Scheduled EDR Contact: 05/22/06
Data Release Frequency: Varies

EDR PROPRIETARY RECORDS

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

COUNTY RECORDS

ALAMEDA COUNTY:

Underground Tanks

Date of Government Version: 11/08/05
Date Data Arrived at EDR: 11/10/05
Date Made Active in Reports: 12/08/05
Number of Days to Update: 28

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 02/27/06
Next Scheduled EDR Contact: 04/24/06
Data Release Frequency: Semi-Annually

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 02/16/06
Date Data Arrived at EDR: 02/17/06
Date Made Active in Reports: 03/13/06
Number of Days to Update: 24

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 01/23/06
Next Scheduled EDR Contact: 04/24/06
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 12/09/05
Date Data Arrived at EDR: 12/09/05
Date Made Active in Reports: 01/19/06
Number of Days to Update: 41

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 03/13/06
Next Scheduled EDR Contact: 05/29/06
Data Release Frequency: Semi-Annually

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 01/18/06
Date Data Arrived at EDR: 01/18/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 34

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 01/18/06
Next Scheduled EDR Contact: 05/08/06
Data Release Frequency: Semi-Annually

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing.

Date of Government Version: 12/09/05
Date Data Arrived at EDR: 12/09/05
Date Made Active in Reports: 01/11/06
Number of Days to Update: 33

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 03/06/06
Next Scheduled EDR Contact: 06/05/06
Data Release Frequency: Quarterly

LOS ANGELES COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

List of Solid Waste Facilities

Date of Government Version: 02/14/06
Date Data Arrived at EDR: 02/28/06
Date Made Active in Reports: 03/13/06
Number of Days to Update: 13

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 02/15/06
Next Scheduled EDR Contact: 05/15/06
Data Release Frequency: Varies

City of El Segundo Underground Storage Tank

Date of Government Version: 11/14/05
Date Data Arrived at EDR: 11/14/05
Date Made Active in Reports: 12/08/05
Number of Days to Update: 24

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 02/27/06
Next Scheduled EDR Contact: 05/15/06
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Date of Government Version: 03/28/03
Date Data Arrived at EDR: 10/23/03
Date Made Active in Reports: 11/26/03
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 02/24/06
Next Scheduled EDR Contact: 05/22/06
Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Date of Government Version: 11/29/05
Date Data Arrived at EDR: 12/01/05
Date Made Active in Reports: 12/16/05
Number of Days to Update: 15

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 02/27/06
Next Scheduled EDR Contact: 05/15/06
Data Release Frequency: Semi-Annually

City of Los Angeles Landfills

Date of Government Version: 03/01/05
Date Data Arrived at EDR: 03/18/05
Date Made Active in Reports: 04/08/05
Number of Days to Update: 21

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 03/15/06
Next Scheduled EDR Contact: 06/12/06
Data Release Frequency: Varies

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 10/31/05
Date Data Arrived at EDR: 01/30/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 22

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 02/13/06
Next Scheduled EDR Contact: 05/15/06
Data Release Frequency: Semi-Annually

Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/05/06
Date Data Arrived at EDR: 02/16/06
Date Made Active in Reports: 03/13/06
Number of Days to Update: 25

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 02/03/06
Next Scheduled EDR Contact: 05/15/06
Data Release Frequency: Annually

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/98
Date Data Arrived at EDR: 07/07/99
Date Made Active in Reports: N/A
Number of Days to Update: 25

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 07/06/99
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 08/08/05
Date Data Arrived at EDR: 08/26/05
Date Made Active in Reports: 09/28/05
Number of Days to Update: 33

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 01/30/06
Next Scheduled EDR Contact: 05/01/06
Data Release Frequency: Semi-Annually

NAPA COUNTY:

Sites With Reported Contamination

Date of Government Version: 12/27/05
Date Data Arrived at EDR: 12/28/05
Date Made Active in Reports: 01/19/06
Number of Days to Update: 22

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 12/27/05
Next Scheduled EDR Contact: 03/27/06
Data Release Frequency: Semi-Annually

Closed and Operating Underground Storage Tank Sites

Date of Government Version: 12/27/05
Date Data Arrived at EDR: 12/28/05
Date Made Active in Reports: 01/11/06
Number of Days to Update: 14

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 12/27/05
Next Scheduled EDR Contact: 03/27/06
Data Release Frequency: Annually

ORANGE COUNTY:

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 12/01/05
Date Data Arrived at EDR: 12/20/05
Date Made Active in Reports: 01/19/06
Number of Days to Update: 30

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 03/08/06
Next Scheduled EDR Contact: 06/05/06
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 12/01/05
Date Data Arrived at EDR: 12/16/05
Date Made Active in Reports: 01/11/06
Number of Days to Update: 26

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 03/08/06
Next Scheduled EDR Contact: 06/05/06
Data Release Frequency: Quarterly

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 12/01/05
Date Data Arrived at EDR: 12/20/05
Date Made Active in Reports: 01/19/06
Number of Days to Update: 30

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 03/08/06
Next Scheduled EDR Contact: 06/05/06
Data Release Frequency: Annually

PLACER COUNTY:

Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 01/18/06
Date Data Arrived at EDR: 01/18/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 34

Source: Placer County Health and Human Services
Telephone: 530-889-7312
Last EDR Contact: 12/20/05
Next Scheduled EDR Contact: 03/20/06
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 02/09/06
Date Data Arrived at EDR: 02/10/06
Date Made Active in Reports: 03/13/06
Number of Days to Update: 31

Source: Department of Public Health
Telephone: 951-358-5055
Last EDR Contact: 01/16/06
Next Scheduled EDR Contact: 04/17/06
Data Release Frequency: Quarterly

Underground Storage Tank Tank List

Date of Government Version: 02/09/06
Date Data Arrived at EDR: 02/10/06
Date Made Active in Reports: 03/09/06
Number of Days to Update: 27

Source: Health Services Agency
Telephone: 951-358-5055
Last EDR Contact: 01/16/06
Next Scheduled EDR Contact: 04/17/06
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS - Contaminated Sites

Date of Government Version: 02/02/06
Date Data Arrived at EDR: 02/13/06
Date Made Active in Reports: 03/13/06
Number of Days to Update: 28

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/30/06
Next Scheduled EDR Contact: 05/01/06
Data Release Frequency: Quarterly

ML - Regulatory Compliance Master List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/02/06
Date Data Arrived at EDR: 02/10/06
Date Made Active in Reports: 03/13/06
Number of Days to Update: 31

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/30/06
Next Scheduled EDR Contact: 05/01/06
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 12/21/05
Date Data Arrived at EDR: 12/21/05
Date Made Active in Reports: 01/19/06
Number of Days to Update: 29

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 03/06/06
Next Scheduled EDR Contact: 06/05/06
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 11/01/05
Date Data Arrived at EDR: 12/29/05
Date Made Active in Reports: 01/19/06
Number of Days to Update: 21

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 02/20/06
Next Scheduled EDR Contact: 05/22/06
Data Release Frequency: Varies

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 05/16/05
Date Data Arrived at EDR: 05/18/05
Date Made Active in Reports: 06/16/05
Number of Days to Update: 29

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 01/20/06
Next Scheduled EDR Contact: 04/03/06
Data Release Frequency: Quarterly

SAN FRANCISCO COUNTY:

Local Oversite Facilities

Date of Government Version: 12/07/05
Date Data Arrived at EDR: 12/07/05
Date Made Active in Reports: 01/19/06
Number of Days to Update: 43

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 03/06/06
Next Scheduled EDR Contact: 06/05/06
Data Release Frequency: Quarterly

Underground Storage Tank Information

Date of Government Version: 12/07/05
Date Data Arrived at EDR: 12/07/05
Date Made Active in Reports: 01/11/06
Number of Days to Update: 35

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 03/06/06
Next Scheduled EDR Contact: 06/05/06
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SAN MATEO COUNTY:

Fuel Leak List

Date of Government Version: 01/11/06
Date Data Arrived at EDR: 01/12/06
Date Made Active in Reports: 01/31/06
Number of Days to Update: 19

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 01/09/06
Next Scheduled EDR Contact: 04/10/06
Data Release Frequency: Semi-Annually

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 01/09/06
Date Data Arrived at EDR: 01/10/06
Date Made Active in Reports: 01/31/06
Number of Days to Update: 21

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 01/09/06
Next Scheduled EDR Contact: 04/10/06
Data Release Frequency: Annually

SANTA CLARA COUNTY:

LOP Listing

A listing of open leaking underground storage tanks.

Date of Government Version: 10/24/05
Date Data Arrived at EDR: 11/28/05
Date Made Active in Reports: 12/12/05
Number of Days to Update: 14

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 12/27/05
Next Scheduled EDR Contact: 03/27/06
Data Release Frequency: No Update Planned

Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/05
Date Data Arrived at EDR: 03/30/05
Date Made Active in Reports: 04/21/05
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 12/27/05
Next Scheduled EDR Contact: 03/27/06
Data Release Frequency: Semi-Annually

Hazardous Material Facilities

Date of Government Version: 12/12/05
Date Data Arrived at EDR: 12/12/05
Date Made Active in Reports: 01/19/06
Number of Days to Update: 38

Source: City of San Jose Fire Department
Telephone: 408-277-4659
Last EDR Contact: 03/06/06
Next Scheduled EDR Contact: 06/05/06
Data Release Frequency: Annually

SOLANO COUNTY:

Leaking Underground Storage Tanks

Date of Government Version: 12/13/05
Date Data Arrived at EDR: 12/14/05
Date Made Active in Reports: 01/19/06
Number of Days to Update: 36

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/13/06
Next Scheduled EDR Contact: 06/12/06
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Underground Storage Tanks

Date of Government Version: 10/13/05
Date Data Arrived at EDR: 10/31/05
Date Made Active in Reports: 12/08/05
Number of Days to Update: 38

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/13/06
Next Scheduled EDR Contact: 06/12/06
Data Release Frequency: Quarterly

SONOMA COUNTY:

Leaking Underground Storage Tank Sites

Date of Government Version: 01/23/06
Date Data Arrived at EDR: 01/23/06
Date Made Active in Reports: 02/21/06
Number of Days to Update: 29

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 01/23/06
Next Scheduled EDR Contact: 04/24/06
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks

Date of Government Version: 12/31/05
Date Data Arrived at EDR: 01/05/06
Date Made Active in Reports: 01/31/06
Number of Days to Update: 26

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 01/03/06
Next Scheduled EDR Contact: 04/03/06
Data Release Frequency: Semi-Annually

VENTURA COUNTY:

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 08/01/05
Date Data Arrived at EDR: 09/20/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 16

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/20/06
Next Scheduled EDR Contact: 05/22/06
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 11/30/05
Date Data Arrived at EDR: 01/03/06
Date Made Active in Reports: 01/19/06
Number of Days to Update: 16

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/15/06
Next Scheduled EDR Contact: 06/12/06
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 12/29/05
Date Data Arrived at EDR: 01/20/06
Date Made Active in Reports: 02/15/06
Number of Days to Update: 26

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/11/06
Next Scheduled EDR Contact: 04/10/06
Data Release Frequency: Quarterly

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 11/30/05
Date Data Arrived at EDR: 01/04/06
Date Made Active in Reports: 01/19/06
Number of Days to Update: 15

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/15/06
Next Scheduled EDR Contact: 06/12/06
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Date of Government Version: 01/18/06
Date Data Arrived at EDR: 02/09/06
Date Made Active in Reports: 03/09/06
Number of Days to Update: 28

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 01/16/06
Next Scheduled EDR Contact: 04/17/06
Data Release Frequency: Annually

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

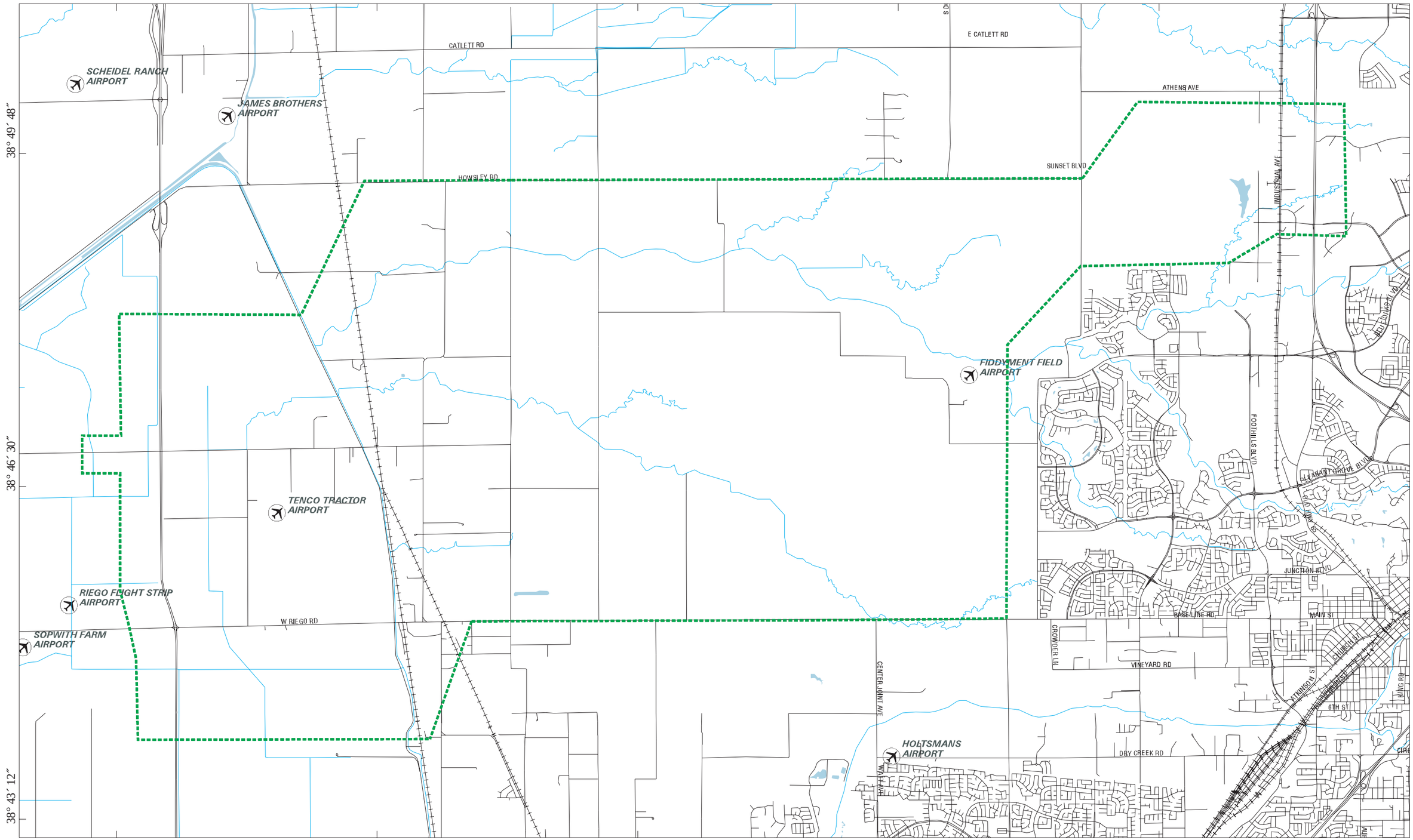
GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.



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Appendix B
Site Photographs

Site Location: Placer Parkway Study Area
Placer and Sutter Counties, California

Photograph 1

Intersection of Sankey Road and Highway 70/99, at the western boundary of the study area.

Photograph 2

Looking south to north at a property containing numerous abandoned automobiles and pieces of agricultural equipment. Several drums were also noted amongst the debris. This property is located on the northwest corner of the intersection of Riego Road and Pleasant Grove Road.

Site 1, Figure 4-1.

Photograph 3

Looking north to south at a property located on Sankey Road between Pleasant Grove Road and the Natomas Main Drainage Canal. Approximately 100 drums were noted on this property.

Site 2, Figure 4-1.

Photograph 4

Looking south to north at an area of uncontrolled dumping along Philip Road (estimated coordinates 38.8027°N, 121.4048°W). Refuse visible from the public right-of-way included household waste, tires, agricultural equipment, and two 55-gallon drums.

Site 3, Figure 4-1.

Photograph 5

Looking west to east from Philip Road at the construction site for a new substation. Infrastructure development, including this facility and a new wastewater treatment plant, appear to be moving in tandem with the increasing residential development in the area.

Photograph 6

Looking west to east from Phillip Road across an area that has been cleared for further development.

Photograph 7

The eastern segment of the study area is marked by increasing development, particularly residential development.

Photograph 8

Looking southeast at the Western Regional Landfill, located in the eastern segment of the study area.

Photograph 9

Looking north along Highway 65 at the intersection with Sunset Boulevard. Highway 65 is the eastern boundary of the study area.

Appendix C
ISA Checklist

Caltrans Metric

Initial Site Assessment (ISA) Checklist

Project Information

District 3 County Placer, Sutter, and Sacramento Route Between SR 65 to the east and SR 70/99 to the west

Kilometer Post (Post Mile) N/A EA N/A

Description The project is a Tier 1 EIS/Program EIR for the preservation of a corridor for the future construction of Placer Parkway – a new east-west roadway linking SR 65 and SR 70/99. The study area is approximately 110 square miles in size.

Is the project on the HW Study Minimal-Risk Projects List (HW1)? No

Project Manager phone #

Project Engineer phone #

Project Screening

Attach the project location map to this checklist to show location of all know and/or potential HW sites identified. See attached maps from the Draft Initial Site Assessment dated August 21, 2006.

1 Project Features: New R/W? Yes Excavation? Minimal Railroad Involvement? Minimal

Structure demolition/modification? Minimal Subsurface utility relocation? Minimal

2. Project Setting Primarily agricultural, underdeveloped land between Highway 65 in the east and Highways 70/99 in the west

Rural or Urban Rural

Current land uses Mainly agricultural with scattered commercial/light industrial in east and west

Adjacent land uses Same as above with residential primarily to south
(industrial, light industry, commercial, agricultural, residential, etc.)

3 Check federal, State, and local environmental and health regulatory agency records as necessary, to see if any known hazardous waste site is in or near the project area. If a known site is identified, show its location on the attached map and attach additional sheets, as needed, to provide pertinent information for the proposed project.

4 Conduct Field Inspection. Date March 20, 2006 Use the attached map to locate potential or known HW sites.

STORAGE STRUCTURES / PIPELINES: Refer to the Draft Initial Site Assessment dated August 21, 2006, for details and illustration of known and potential hazardous waste sites in the study area.

Underground tanks _____ Surface tanks _____
Sumps _____ Ponds _____
Drums _____ Basins _____
Transformers _____ Landfill _____
Other _____

Initial Site Assessment (ISA) Checklist

(continued)

CONTAMINATION: (spills, leaks, illegal dumping, etc.) Refer to the Draft Initial Site Assessment dated August 21, 2006, for details and illustration of known and potential hazardous waste sites in the study area.

Surface staining _____ Oil sheen _____

Odors _____ Vegetation damage _____

Other _____

HAZARDOUS MATERIALS: (asbestos, lead, etc.) Refer to the Draft Initial Site Assessment dated August 21, 2006, for details and illustration of known and potential hazardous waste sites in the study area.

Buildings _____ Spray-on fireproofing _____

Pipe wrap _____ Friable tile _____

Acoustical plaster _____ Serpentine _____

Paint _____ Other _____

5 Additional record search, as necessary, of subsequent land uses that could have resulted in a hazardous waste site. Use the attached map to show the location of potential hazardous waste sites.

6 Other comments and/or observations: Areal extent and concentrations of possible contamination to be evaluated during subsequent Tier 2 studies upon selection of preferred alternative alignment.

ISA Determination

Does the project have potential hazardous waste involvement? Yes If there is known or potential hazardous waste involvement, is additional ISA work needed before task orders can be prepared for the Investigation? Yes If "YES," explain; then give an estimate of additional time required:

The possible lateral extent and nature of contamination for relevant recognized environmental conditions (RECs) should be evaluated in order to provide a basis for scoping of subsequent Tier 2 studies. Estimated time: 2 months.

A brief memo should be prepared to transmit the ISA conclusions to the Project Manager and Project Engineer.

ISA Conducted by Angela Ledgerwood **Date** 12/1/06*

By Raymond H. Rice

* Checklist not signed at time of Draft ISA Submittal

PLACER PARKWAY
CORRIDOR PRESERVATION

DRAFT
MEPLAN TECHNICAL REPORT
Placer Parkway Corridor Preservation Tier 1 EIS/EIR

June 29, 2007

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

Caltrans

FHWA

Prepared by
DKS Associates and Michael Clay

for
URS Corporation

South Placer Regional Transportation Authority
California Department of Transportation
Federal Highway Administration

The preparation of this report was financed in part through a planning grant from the Federal Highway Administration

DRAFT MEPLAN TECHNICAL REPORT
PLACER PARKWAY CORRIDOR PRESERVATION TIER 1 EIS/PROGRAM EIR

June 2007

Prepared by DKS Associates
and Michael Clay
in association with
URS Corporation
For Placer County
Transportation Planning Agency

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ACRONYMS

AFA	Analysis Focus Area
BRT	bus rapid transit
Caltrans	California Department of Transportation
CIP	Capital Improvement Project
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
FHWA	Federal Highway Administration
HCM	Highway Capacity Manual
HDM	Highway Design Manual
I-5	Interstate 5
I-80	Interstate 80
LOS	Level of Service
LRDP	long-range development plan
LRT	light rail transit
mph	miles per hour
MPO	Metropolitan Planning Organization
MTP	Metropolitan Transportation Plan
MTP	Mineta Transportation Institute
NEPA	National Environmental Policy Act
OHW	ordinary high water
PCTPA	Placer County Transportation Planning Agency
PLACE^{3}S	Planning for Community Energy, Economics, and Environmental Sustainability
PSR	Project Study Report
RAD	Regional Analysis District
ROW	right-of-way
SACOG	Sacramento Area Council of Governments
SAM	social accounting matrix
SOI	Sphere of Influence
SPRTA	South Placer Regional Transportation Authority
SR	State Route
Tier 1 EIS/EIR	Environmental Impact Statement/Program Environmental Impact Report
TAC	Technical Advisory Committee
TASA	Transportation Analysis Study Area
TAZ	traffic analysis zone
TCR	Transportation Concept Report
TIP	Transportation Improvement Program
UPRR	Union Pacific Rail Road
VMT	vehicle miles of travel

1.0 INTRODUCTION

1.1 Tier 1 EIS/Program EIR

The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the South Placer Regional Transportation Authority (SPRTA) propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking State Route (SR) 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1).

The planning for Placer Parkway involves two phases: (1) the present action, selection of a corridor (titled the Placer Parkway Corridor Preservation Project), and (2) the future selection of a precise alignment within the corridor and a decision whether or not to build the Parkway. If a build alternative is selected and pursued after the second phase, the ultimate Placer Parkway project would be constructed and operated. Throughout this document the term "Proposed Action" is used to describe the selection of a corridor to preserve. The document generally uses the term "Parkway" to mean the ultimate roadway, including construction and operation, except where context indicates otherwise.

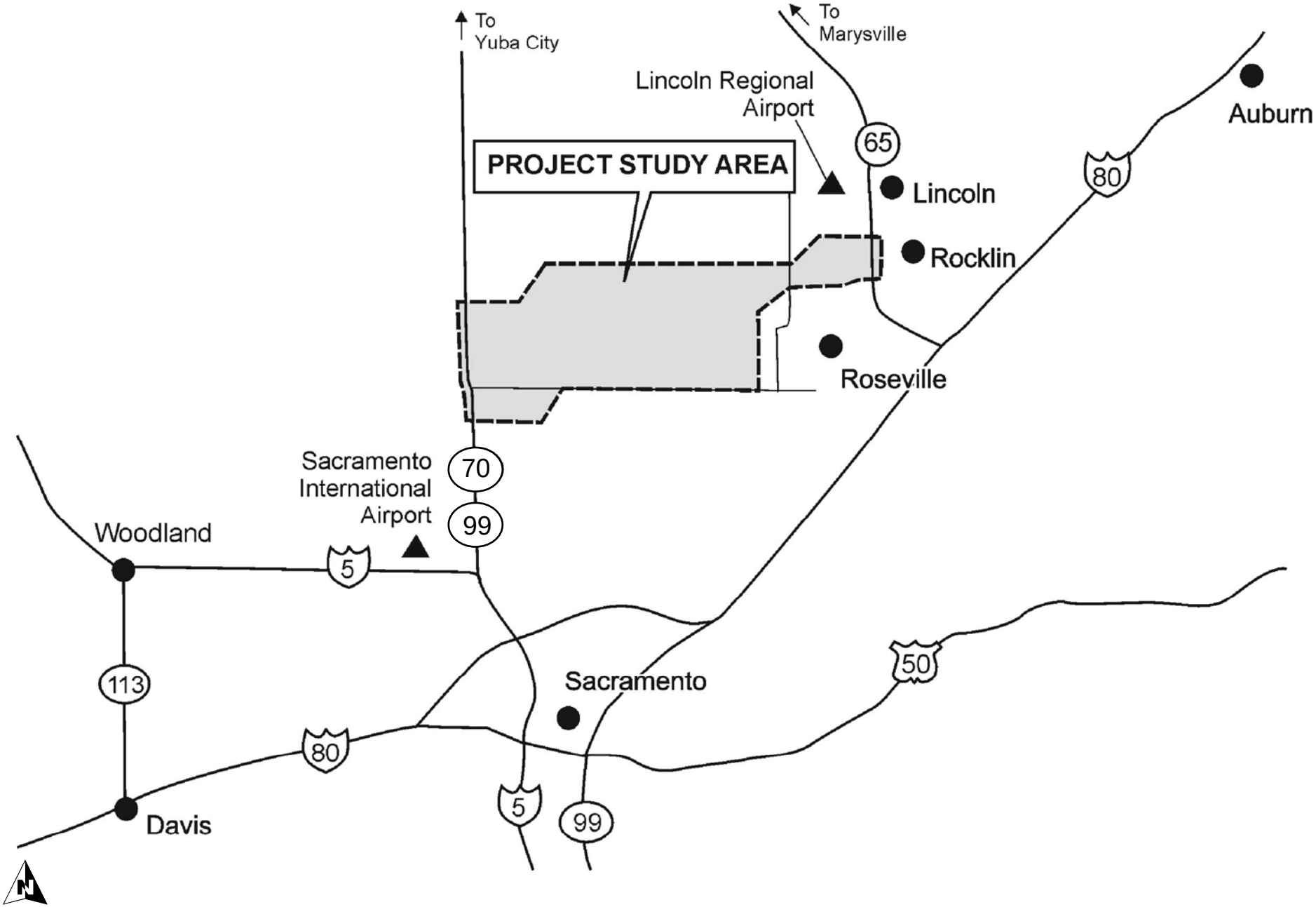
As stated, the action to be considered based on this Tier 1 analysis involves only the selection of a corridor to preserve, which has limited environmental effects by itself. However, the ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. In order to describe the effects of the ultimate Placer Parkway project to the greatest extent feasible at this early stage, the Tier 1 EIS/EIR also addresses the potential effects of construction and operation of the future roadway. This discussion of the roadway is necessarily limited, however, because only the general concepts of the roadway design and location are known at this time. If a corridor is selected and preserved at Tier 1, a subsequent Tier 2 analysis will evaluate the Parkway itself in detail—the specific roadway "footprint" within the selected corridor, including construction and operation of the roadway.

1.2 Corridor Selection and Preservation

The concept for the Placer Parkway is over a decade old. Placer County's 1994 General Plan depicts a "plan line" for it. Two planning studies (DKS Associates, 2000 and 2001) helped to refine the concept:

- DKS Associates, 2000, Placer Parkway Interconnect Study/Conceptual Plan
- DKS Associates, 2001, Project Study Report (Project Development Support) for Placer Parkway

Placer Parkway is cited as a high-priority regional transportation project by the Sacramento Area Council of Governments (SACOG) 2025 Metropolitan Transportation Plan and the 2027 Placer County Regional Transportation Plan. The project vicinity and surrounding area include some of the fastest growing communities in the Sacramento region. A number of large urban development proposals are being considered by Placer and Sutter counties. New development is expected to add a significant amount of residential, commercial, industrial, and educational uses.



0 5
Miles

PLACER PARKWAY
CORRIDOR PRESERVATION

Tier 1 EIS/EIR
MEPLAN
Technical Report

Project Location Map

Figure 1

June 2007

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A 2½-year screening and public outreach program that involved local jurisdictions (the Technical Advisory Committee); regional, state, and federal agencies; stakeholder groups that included representatives from planning and public works departments of all affected cities and counties, environmental, business, agricultural, development, and homeowner interests (the Study Advisory Committee); and elected officials (the Policy Advisory Committee), resulted in the identification of five potential corridors for the Parkway. The Tier 1 Environmental Impact Statement/Program Environmental Impact Report (Tier 1 EIS/EIR) will analyze these five corridor alternatives along with a No-Build Alternative (Figure 2).

Other potential transportation modes such as bus rapid transit may be developed in the corridor in the future, although they are not proposed as part of the current project. The width of the corridor for the Placer Parkway is to vary from approximately 500 feet in the Eastern and Western segments to approximately 1,000 feet in the Central Segment. Depending upon the alternative, the corridor's length ranges from a minimum of 14.2 miles to a maximum of 16.2 miles. The selected corridor would contain the roadway, including the median, travel lanes, shoulder, associated access ramps and a no-development buffer zone.

Corridor acquisition may not be completed until after Tier 2, as funding becomes available. Portions of the selected corridor would be preserved as a no-development buffer zone. The buffer would be maintained as a zone where development is either not permitted or is severely restricted. This is intended to restrict access to the proposed interchanges, protect the rural character of agriculturally designated areas in the vicinity of the Parkway as far as possible subject to future development, and to maximize opportunities to incorporate adjacent sensitive areas. It is intended that the buffer would be owned and managed in the future to achieve these objectives. For subsequent Tier 2 (project-level) environmental reviews, the size of this buffer zone could be considered flexible for agriculturally designated land undergoing urban development. In the Tier 2 environmental review, the specific buffer size and location would be determined. This determination would be based on performance standards on a case-by-case basis, depending on the land use needs of future approved development, and taking into account the primary objective of restricting future access to the Parkway.

Project proponents are considering employment of several land management and control mechanisms to ensure that the buffer would be effectively maintained as an area where development would not be permitted, and where construction of any additional access onto the Parkway would not be allowed. These mechanisms could include land use controls, land purchase/leases, general plan amendments, zoning/overlay zoning changes, covenants/deed restrictions, agricultural/conservation easements, urban growth boundaries, etc. "Layering" or using several of these methods would provide more assurance that the buffers would be permanent, or at least more difficult to undo.

1.3 Technical Study Objective

Placer Parkway would be designed to improve regional accessibility for businesses and jobs in the project vicinity including access to SR 70/99 and the I-5 corridor in northern Sacramento County. With its controlled access, an objective of the proposed transportation facility would be to strike a balance among advancing planned job growth along the SR 65 and SR 70/99 corridors, avoiding urban growth inducement in areas not designated for development, and helping to preserve the rural character of southwestern Placer County and south Sutter County.

During the modified National Environmental Policy Act (NEPA)/404 process[1], the importance of identifying secondary/indirect impacts, particularly growth-inducement, was a key process issue. In addition to traditional methods used to evaluate growth-inducement impacts, the Placer Parkway Project Team identified the MEPLAN model, which was used in the SACOG Blueprint process, as an additional analysis tool to quantify such impacts in the Tier 1 EIS/EIR. FHWA, Caltrans, the U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (U.S. EPA) supported the additional analysis.

The Project Team has applied the MEPLAN model to assess the potential for growth inducement among Parkway alternatives, consistent with a Tier 1/Program level assessment. This MEPLAN Technical Report presents an assessment of the potential impact on the location of development through 2040 due to implementing the corridor alignment alternatives and the No-Build Alternative as described in Chapter 2.

The MEPLAN analysis also includes an evaluation of development levels with and without a Placer Parkway interchange at a potential future extension of Watt Avenue. The potential extension of Watt Avenue and an interchange with Placer Parkway are not part of the project. This potential work would be a distinct project or projects with a separate environmental review. The direction to analyze each build alternative with and without a Watt Avenue interchange is based on input from the Policy Advisory Committee during the preparation of the Concept Plan and Project Study Report (PSR) (DKS Associates, 2001) for Placer Parkway.

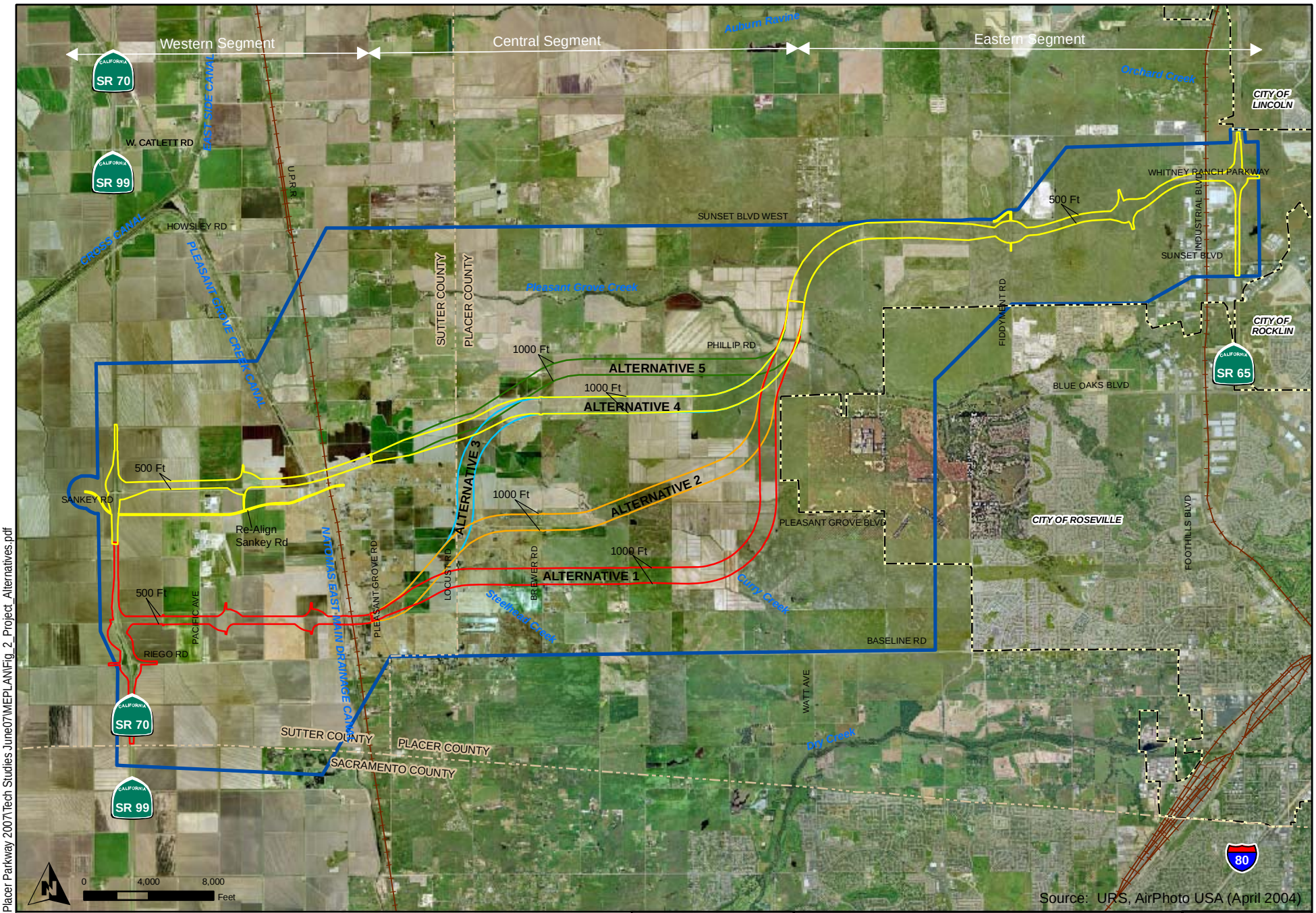
This report is organized as follows:

Chapter 2	The Proposed Action
Chapter 3	Description of the Sacramento MEPLAN Model
Chapter 4	Use of MEPLAN for Placer Parkway Corridor Preservation Tier 1 EIS/EIR
Chapter 5	Results of MEPLAN Analysis
Chapter 6	References

This report also includes figures and tables, which show the project location, each action alternative, and pertinent technical information prepared to evaluate the action alternatives.

Throughout this document, the Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report is referred to as the Tier 1 EIS/EIR.

[1] As part of the planning process for the Tier 1 EIS/EIR, FHWA, Caltrans, and PCTPA (acting on the behalf of SPRTA (South Placer Regional Transportation Authority) agreed to participate with the U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (U.S. EPA) in the modified NEPA/404 process. The goal of this modified NEPA/404 process for the Tier 1 EIS/EIR is to ensure that Tier 1 decisions reflect careful consideration of the 404 Guidelines that implement the U.S. Clean Water Act. These guidelines are to be addressed as early as possible in the Tier 1 NEPA evaluation to eliminate the need to revisit decisions in Tier 2 that might otherwise conflict with 404 permit requirements.



Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
MEPLAN
Technical Report

Project Alternatives

Figure 2

June 2007

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2.0 THE PROPOSED ACTION

The Proposed Action for the Placer Parkway Corridor Preservation Project is to select and preserve a 500- to 1,000-foot-wide corridor in the project study area, within which the future four- or six-lane Placer Parkway may be constructed. The ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction, and operation of the Parkway. Although the action taken at Tier 1 on the Placer Parkway Corridor Preservation Project is limited, the underlying project whose effects are studied in this document is the Placer Parkway. To the extent feasible at this early stage, the Tier 1 EIS/EIR addresses the potential effects of construction and operation of the future roadway.

2.1 The Study Area

The study area is an area of approximately 33,460 acres located in Sutter and Placer counties, with a small section located in Sacramento County (Figures 1 and 2). The portion of the study area that is located in Sacramento County is in the extreme southwestern corner of the study area and does not include any of the proposed corridor alignment alternatives. It extends from SR 70/SR 99 in the west to SR 65 in the east, with the northern boundary extending to Sunset Boulevard West and the southern boundary located adjacent to Baseline and Riego Roads. The study area as defined for transportation analysis includes the study area and is described in Section 3.1.

The study area is divided into three segments:

- Western Segment: the Western Segment extends from SR 70/99 to Pleasant Grove Road in Sutter County.
- Central Segment: the Central Segment extends from Pleasant Grove Road in Sutter County to approximately 2,300 feet north of Pleasant Grove Creek in Placer County.
- Eastern Segment: the Eastern Segment extends from approximately 2,300 feet north of Pleasant Grove Creek to SR 65 in Placer County.

2.2 Corridor Alternatives

The following subsections describe the corridor alignment alternatives, which are depicted on Figure 2, and are numbered according to location from south to north in the study area.

2.2.1 The No-Build Alternative

Under the No-Build Alternative, the project would not be implemented. A Placer Parkway corridor would not be selected/preserved, and the future Placer Parkway would not be constructed.

2.2.2 Alternative 1 – the Red Alternative

Alternative 1 would extend from SR 70/99 approximately ½ mile north of Riego Road, eastward approximately 1 mile north of Baseline Road to approximately Watt Avenue, proceeding north and transitioning in an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 16.2 miles long. This alternative includes six interchanges, as described in Section 2.3.3.

2.2.3 Alternative 2 – the Orange Alternative

Alternative 2 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed northeast, then in a northerly direction south of Pleasant Grove Creek, transitioning to an easterly direction before it reaches Sunset Boulevard West, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.4 miles long. This alternative would include six interchanges, as described in Section 2.3.3 below.

2.2.4 Alternative 3 – the Blue Alternative

Alternative 3 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed north along the Sutter/Placer County Line, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.6 miles long. This alternative would include six interchanges, as described in Section 2.3.3 below.

2.2.5 Alternative 4 – the Yellow Alternative

Alternative 4 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.3 miles long. This alternative would include five interchanges, as described in Section 2.3.3 below.

2.2.6 Alternative 5 – the Green Alternative

Alternative 5 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 4,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.2 miles long. This alternative would include five interchanges, as described in Section 2.3.3 below.

2.3 Parkway Design Assumptions

Although the Parkway would be designed and construction-level impacts analyzed during Tier 2, for the purpose of this report and the Tier 1 EIS/EIR, several assumptions have been made about potential design and configuration concepts. These assumptions would be subject to further development and refinement, and specific decisions about design of the roadway would be made during the Tier 2 process. For example, the number, location, and design of over-crossings would be determined at the time of final Parkway design, in consultation with local jurisdictions. The following sections outline assumptions for the future roadway.

Preliminary costs estimates for the Parkway range from $600 to $650 million (2005 dollars). This includes costs for right-of-way, design, construction and environmental mitigation for the four- to six-lane facility. The funding situation has spurred interest in exploring other more creative funding options.

These include a county-wide sales tax, more developer contributions, and tolling facilities. The Technical Report and Tier 1 EIS/EIR do not make any assumptions about funding sources.

2.3.1 Conceptual Roadway Configuration

The Parkway would be a high-speed, limited access roadway. Depending upon the timing of adjacent urban development proposals and funding, the Parkway may be designed and constructed incrementally in segments. These could be built as a four-lane (interim) roadway until a six-lane segment is warranted, or as the full six-lane facility. A preliminary conceptual cross section (see Figure 3) was developed to facilitate the Tier 1/Program evaluation. It illustrates both four-lane (two lanes in both directions) and six-lane (three lanes in both directions) configurations within the 500- to 1,000-foot corridor widths. The roadway would include a central median approximately 100 to 134 feet wide, depending on local conditions and reflecting Caltrans safety guidance. The Parkway would be designed and constructed to Caltrans standards, unless specific design exceptions are granted. For the purposes of the Tier 1 EIS/EIR, the Parkway's opening year is assumed to be 2020.

Access would be provided at the western and eastern ends of the Parkway, where existing areas of dense development are already located or planned. Access would be restricted for the 7-mile Parkway Central Segment. The analysis assumes no interchanges in this segment. (A possible future extension of Watt Avenue or another nearby roadway may be considered in the Central Segment as a separate project.)

2.3.2 Conceptual Roadway Elevation

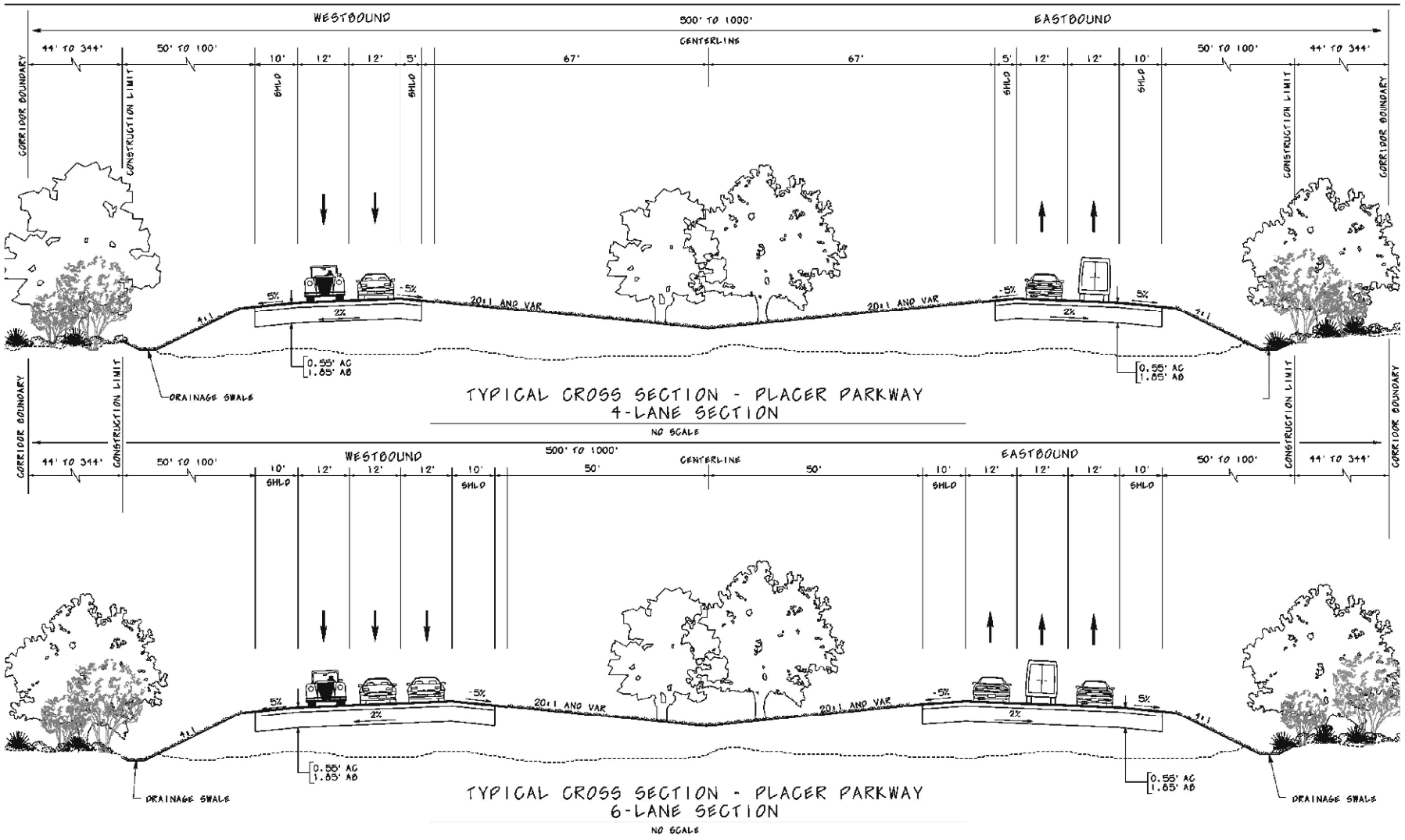
As the study area is comprised of relatively flat terrain, the majority of the future Placer Parkway is assumed to be at-grade. As necessary, bridges would be used to span certain features and improvements such as the Union Pacific Railroad tracks along Industrial Boulevard, Pleasant Grove Creek, the Natomas East Main Drainage Canal, and floodplains. Generally, the approximate height of bridges is expected to range from 10 feet above streams to 30 feet above the railroad. Culverts would be used at smaller creek crossings as appropriate, depending on local conditions and permit requirements. The Pleasant Grove Creek floodplain would be crossed by bridges (one in each direction) supported by abutments located approximately 800 feet on either side of the creek to avoid the riparian habitat associated with the creek.

Within the 100-year floodplain, the roadway would be elevated such that the bottom of any new bridges would be above the 100-year water surface elevation. The roadway support structures and bridges would be designed to minimize environmental impact, not impede stream and flood flows, and allow for the unobstructed passage of potential future streamside uses such as maintenance equipment, bikeways or trails.

Throughout the study area, the assumptions for creek and floodplain crossings include typical engineering specifications:

- a maximum bridge span of approximately 150 feet;
- for bridge spans exceeding 150 feet, assume one column, approximately 4 feet in diameter, every 150 feet; and
- all columns placed outside of the ordinary high water (OHW) level.

To maintain existing and future local roadway connectivity (for emergency access, farming operations, and community access), over-crossings would be constructed to convey traffic over the Parkway. These over-crossings would not connect to the Parkway. Parkway access would be via the interchanges described below.



PLACER PARKWAY	Tier 1 EIS/EIR MEPLAN Technical Report	Typical Cross Section (Conceptual)	***Figure 3*** ***June 2007***

6/13/07 ..rk\T\Placer Parkway 2007\Tech Studies June07\MEPLAN\Fig_3_Typical_CrossSection.pdf

URS Corporation L:\Projects\PlacerParkway2006_28066583\MXD\Current Working Documents\HydrologyTechMemo\Fig_2-2_Typical_CrossSection.mxd Date: 5/23/2006 2:14:19 PM Name: akkeele0

2.3.3 Interchange Concepts

The analysis assumes that the location of interchanges (see Figure 2) is as follows.

- SR 70/99 (at ½ mile north of Riego Road or at Sankey Road)
- One or two locations to be determined in southern Sutter County
- Fiddyment Road
- Foothills Boulevard
- SR 65 at Whitney Ranch Parkway

The following discussion outlines concepts and assumptions for the interchanges that could potentially serve Placer Parkway.

2.3.3.1 Western Segment

Within the Western Segment of the Parkway, a high-speed, freeway-to-freeway type interchange would connect the Parkway with SR 70/99 at one of following potential locations depending on the project alternative (see Section 2.2). Placer Parkway would terminate at SR 70/99.

- **Placer Parkway/SR 70/99 Interchange at North of Riego Road.** This alternative concept uses "braided" ramps to eliminate weaving problems or conflicts with the future SR 70/99 at Riego Road interchange being developed by Sutter County and Caltrans.

- **Placer Parkway/SR 70/99 Interchange at Sankey Road.** Under this alternative concept, the existing two-lane Sankey Road would be realigned to the south of Placer Parkway and the proposed freeway-to-freeway interchange, extending from approximately ¼ mile west of SR 70/99 to approximately ¼ mile east of the Union Pacific railroad tracks. There would be no direct access to SR 70/99 or Placer Parkway from the realigned Sankey Road.

Depending on the final alignment selected, one or two additional arterial interchanges would also be located in south Sutter County. Conceptual locations are identified for purposes of this Tier 1/Program analysis (see Figure 2). The actual location of these interchanges would be developed in the Tier 2 phase, based on Sutter County requirements.

2.3.3.2 Central Segment

Within the Central Segment of the Parkway, there would not be any access proposed as part of the Project in the 7-mile segment between Fiddyment Road and Pleasant Grove Road. Please see Section 2.4 regarding a potential connection to a future extension of Watt Avenue (Figure 4) which could be proposed and constructed by others in the Central Segment; such an interchange is not part of the Placer Parkway.

2.3.3.3 Eastern Segment

Within the Eastern Segment of the Parkway, a signalized high-speed freeway-to-freeway and local access interchange would connect the Parkway to SR 65 at Whitney Ranch Parkway (Figure 2). From SR 65 eastward Placer Parkway would terminate and become Whitney Ranch Parkway east of the SR 65 exit ramp intersection. Traffic signals would be provided at the exit ramp terminals. This interchange would be approximately 1 mile north of a planned SR 65/Sunset Boulevard interchange and 1.2 miles south of the existing Twelve Bridges interchange.

As part of this interchange, auxiliary lanes would be required on SR 65 in both directions to enhance traffic operations on the north side of the future SR 65/Sunset Boulevard interchange. The southbound SR 65 exit-ramp at Sunset Boulevard is being designed to accommodate an additional auxiliary lane required for the future Placer Parkway/Whitney Ranch Parkway interchange to minimize the reconstruction of this ramp in the future. Within the Eastern Segment of the Parkway, from SR 65 westward, two interchanges with local roadways would be constructed, one at Foothills Boulevard and one at Fiddyment Road, as depicted on Figure 2.

The future interchange on Placer Parkway at Fiddyment Road would be located near the existing intersection of Fiddyment Road and Sunset Boulevard West. To provide acceptable traffic operations additional distance needs to be provided between the Fiddyment Road/Sunset Boulevard West intersection and the Fiddyment Road/Placer Parkway westbound off-ramp intersection. Therefore, Sunset Boulevard West will need to be realigned to the north as it nears Fiddyment Road.

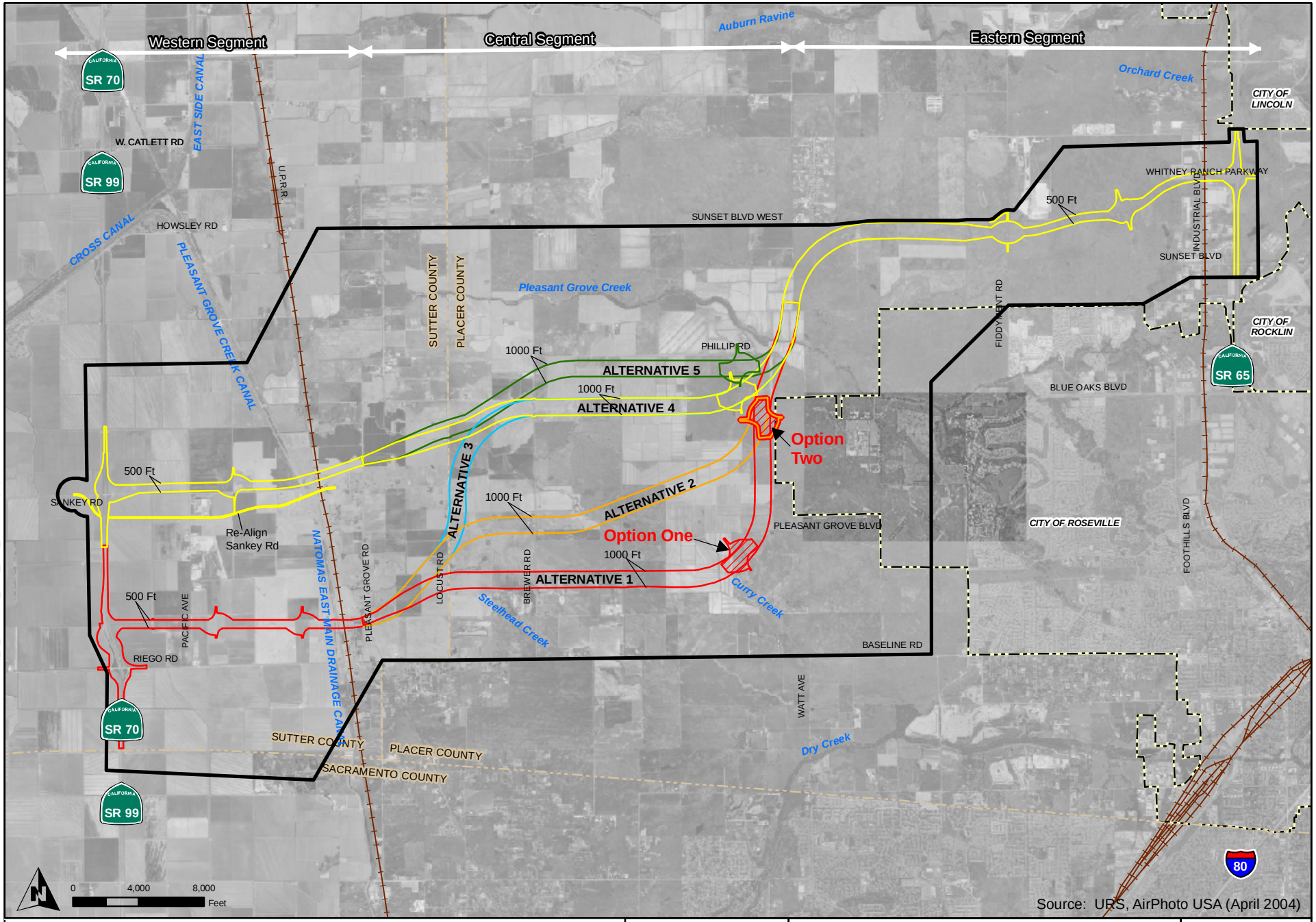
2.3.4 Landscaping Concept

For the purposes of this environmental analysis, preliminary landscaping concepts have been developed for Placer Parkway. These are entirely conceptual and would be subject to further refinement during the Tier 2 environmental process. It is anticipated that landscaping would be used to reflect local topography and vistas in the study area and complement the varying character of land adjacent to the Parkway corridor. Landscape design would vary within the Parkway's three segments depending on corridor width and type and density of surrounding land uses. Landscaping would be used within the median and the Parkway buffer zone to enhance the aesthetics of the Parkway, and would be used to provide screening and enhance local and long-distance views. Where appropriate, more concentrated plantings would be considered to buffer the Parkway from future adjacent land uses that may be incompatible with the Parkway concept, and to prevent unwanted intrusion into shoulder or median areas. Landscape design would likely include a mix of compatible native and non-native plants that may require some irrigation. Wherever possible, native plant species would be used in line with Caltrans policy. Where possible and depending on availability, feasibility and cost, recycled water would be used for irrigation.

During a future design phase, lighting elements would be designed for safety and would consider the proposed landscaping plan in order to minimize potential aesthetic impacts (e.g., shielding lighting elements, using lower-voltage lighting, and proposing lighting fixtures that conform with the visual character of the area).

2.4 Potential Watt Avenue Interchange

The Placer County General Plan includes a number of new roadways that may be needed in Placer County, according to travel demand forecasts. An extension of Watt Avenue to Placer Parkway (from Baseline Road to a new Blue Oaks Boulevard Extension) is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto the Placer Parkway via a new interchange (see Figure 4). A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. It would be subject to independent future environmental analysis and review and is not being fully evaluated within this Technical Report or Tier 1 EIS/EIR. However, the connection of Placer Parkway to a potential Watt Avenue extension could affect future travel patterns in the area, including use of the Parkway. Based on direction from previous planning studies, this Technical Study and the Tier 1 EIS/EIR will evaluate each corridor alternative with and without a Watt Avenue interchange. This evaluation does not predetermine the construction or alignment of a potential Watt Avenue or nearby roadway extension or the precise locations of any potential interchanges with Placer Parkway.



Tier 1 EIS/EIR
MEPLAN
Technical Report

Potential Watt Avenue Interchange

Figure 4

June 2007

2.5 Agency Permits and Approvals

The Proposed Action would preserve a preferred corridor for a future transportation facility. In the future, permits and approvals would be obtained from appropriate agencies prior to construction of the Parkway. These permits and approvals may include specific design or mitigation requirements that would be incorporated into the project.

2.6 Subsequent Tier 2 Information

As noted earlier, the design and construction of Placer Parkway—including its interchanges and over-crossings, and ancillary features such as stream crossings, safety devices, stormwater management structures, and similar improvements—would be evaluated in a subsequent Tier 2 environmental review process once a corridor has been identified.

3.0 DESCRIPTION OF THE SACRAMENTO MEPLAN MODEL

The Sacramento region has been a leader in developing urban models. In the fall of 2002 SACOG became one of the first Metropolitan Planning Organizations (MPO) in the United States to use a fully integrated land use and transportation model for policy purposes. The adoption of this policy was preceded by extensive model-demonstration exercises aimed at showing the usefulness of these models for urban and regional policy analysis. Researchers at the University of California, Davis, together with the consulting firms HBA Specto and Modelistica, implemented the first set of models with the cooperation of SACOG. These exercises were largely academic in nature (see Johnston and de la Barra, 2000; Rodier et al., 2002; and Abraham and Hunt, 1999 for examples of this work).

The Sacramento Model Test Bed study was a side-by-side comparison of the SACOG travel model, a land use model that was used in conjunction with the SACOG travel model, and two fully integrated land use and travel demand models of which MEPLAN was one. The purpose of the study was to test and compare each model's policy analysis ability (Hunt et al., 2001). Each model was given identical data from the Sacramento region for model calibration. A trend scenario was run as well as three policy scenarios. While this study did not explicitly recommend one model over another, the findings of this study, together with the previous model demonstration studies, led to MEPLAN being adopted by SACOG for regional policy analysis. SACOG implemented and funded the third incarnation of the Sacramento MEPLAN model, the model used in this technical study for the Placer Parkway Corridor Preservation Tier 1 EIS/EIR.

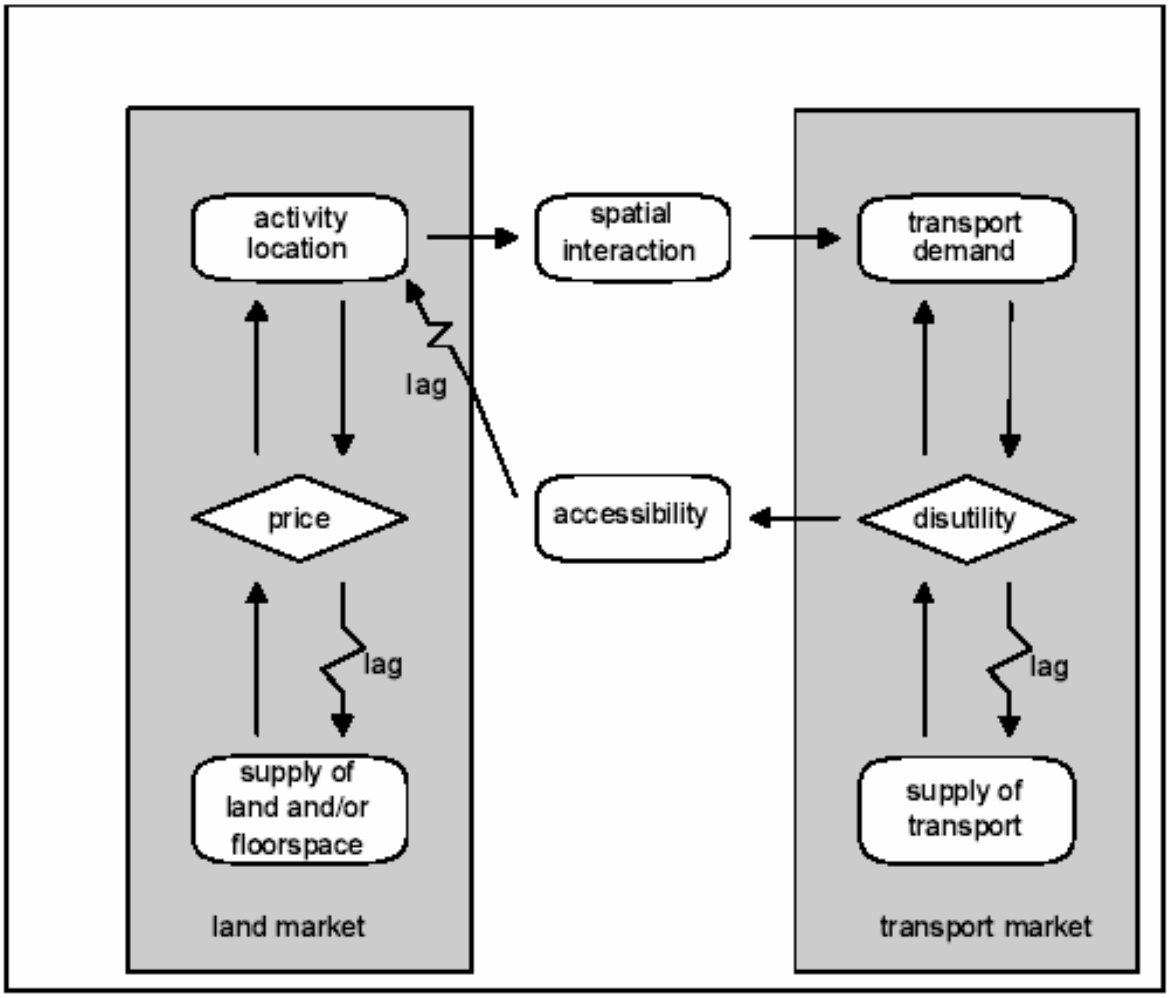
A growing body of work has been produced that has analyzed the MEPLAN model's response to uncertain conditions, including uncertain model inputs, parameters, and spatial allocations (Clay and Johnston, 2005; Clay and Johnston, 2006; Clay and Johnston, 2006; and Rodier and Johnston, 2001). Across all of these studies and the other scenario/policy testing research cited below, MEPLAN has not been shown to err in the ranking of policies or scenarios for the indicators analyzed in this present study.

3.1 Overview of MEPLAN

The MEPLAN modeling framework is described by Hunt and Simmonds (1993). The basis of the framework is the interaction between two parallel markets, a land market and a transportation market. This interaction is illustrated in Figure 5. Behavior in these two markets is a response to price, and price-like signals that arise from market mechanisms. In the land markets, price and generalized cost (disutility) affect production, consumption, and location decisions by activities. In the transportation markets, money and time costs of travel affect both mode and route selection decisions.

The cornerstone of the land market model is a spatially disaggregated social accounting matrix (SAM) (Pyatt and Thorbecke, 1967) or input-output table (Leontieff, 1951) that is expanded to include variable technical coefficients and uses different categories of space (e.g., different types of building and/or land). Logit models of location choice are used to allocate volumes of activities in the different sectors of the SAM to geographic zones. The attractiveness or utility of zones is based on the cost of inputs (which include transportation costs) to the producing activity, location-specific disutilities, and the costs of transporting the resulting production to consumption activities. The resulting patterns of economic interactions among activities in different zones are used to generate origin-destination matrices of different types of trips. These matrices are loaded to a multi-modal network representation that includes nested logit forms for the mode choice models and stochastic user equilibrium for the traffic assignment model (with capacity constraints). The resulting network times and costs affect transportation costs, which then affect the attractiveness of zones and the location of activities, and thus the feedback from transportation to land use is accomplished.

Figure 5: System of Two Types of Markets
Markets in land and in transportation and the interactions between them form the basis of the MEPLAN framework.



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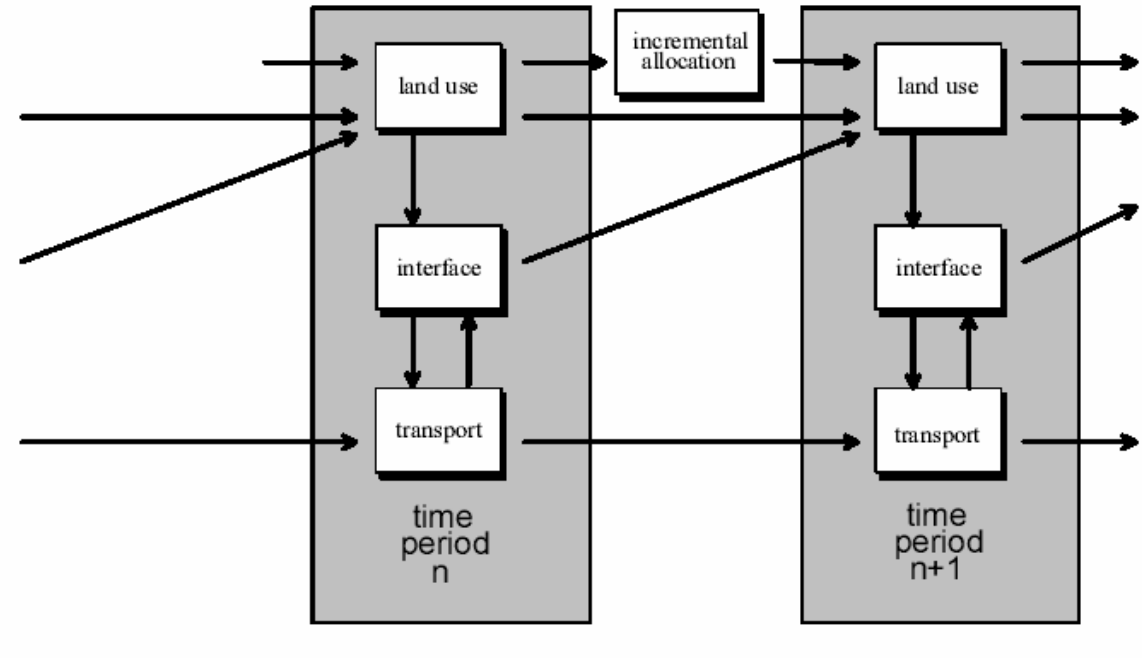
The framework is moved through time in steps from one time period to the next, making it "quasi-dynamic." In a given time period, the land market model is run first, followed by the transportation market model, and then an incremental model simulates changes in the next time period (see Figure 6). The transportation costs arising in one period are fed into the land market model in the next time period, thereby introducing lags in the location response to transport conditions. See the paper by Hunt and Simmonds (1993) for descriptions of the mathematical forms used in MEPLAN and a study by Johnston et al. (2001) for a more complete explanation of the model structure.

Figure 6: MEPLAN Submodels and Their Interactions
Temporal dynamics are simulated by ordering the sequence of interactions among the program modules at adjacent points in time.



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3.2 Development MEPLAN Model for Sacramento Region

The specific structure of the Sacramento MEPLAN model is shown in the diagram in Figure 7, and Table 1 defines the categories in the diagram. The large matrix in the middle of the diagram lists the factors in the land use submodel and describes the nature of the interaction between factors. A given row in this matrix describes the consumption needed to produce one unit of the factor, indicating which factors are consumed and whether the rate of consumption is fixed (f) or price elastic (e).

The Sacramento MEPLAN model uses eleven industry and service factors that are based on the SAM and aggregated to match employment and location data. Households are divided into three income categories (high, medium, and low) based on the SAM and residential location data. The consumption of households by businesses represents the purchase and supply of labor. This MEPLAN model does not include the number of workers by education level in the households, which would result in a more accurate matching of workers with jobs. This disaggregation may be done at a later stage if funding is available.

The consumption of business activities by households represents the purchase of goods and services by consumers. Industry and households consume space at different rates and have different price elasticities, and thus seven land use factors are used in the model. Constraints are placed on the amount of manufacturing land use to represent zoning regulations that restrict the location of heavy industry. Developed land other than land used for agriculture is represented in the molded by the factor URBAN

Figure 7: The MEPLAN Matrices

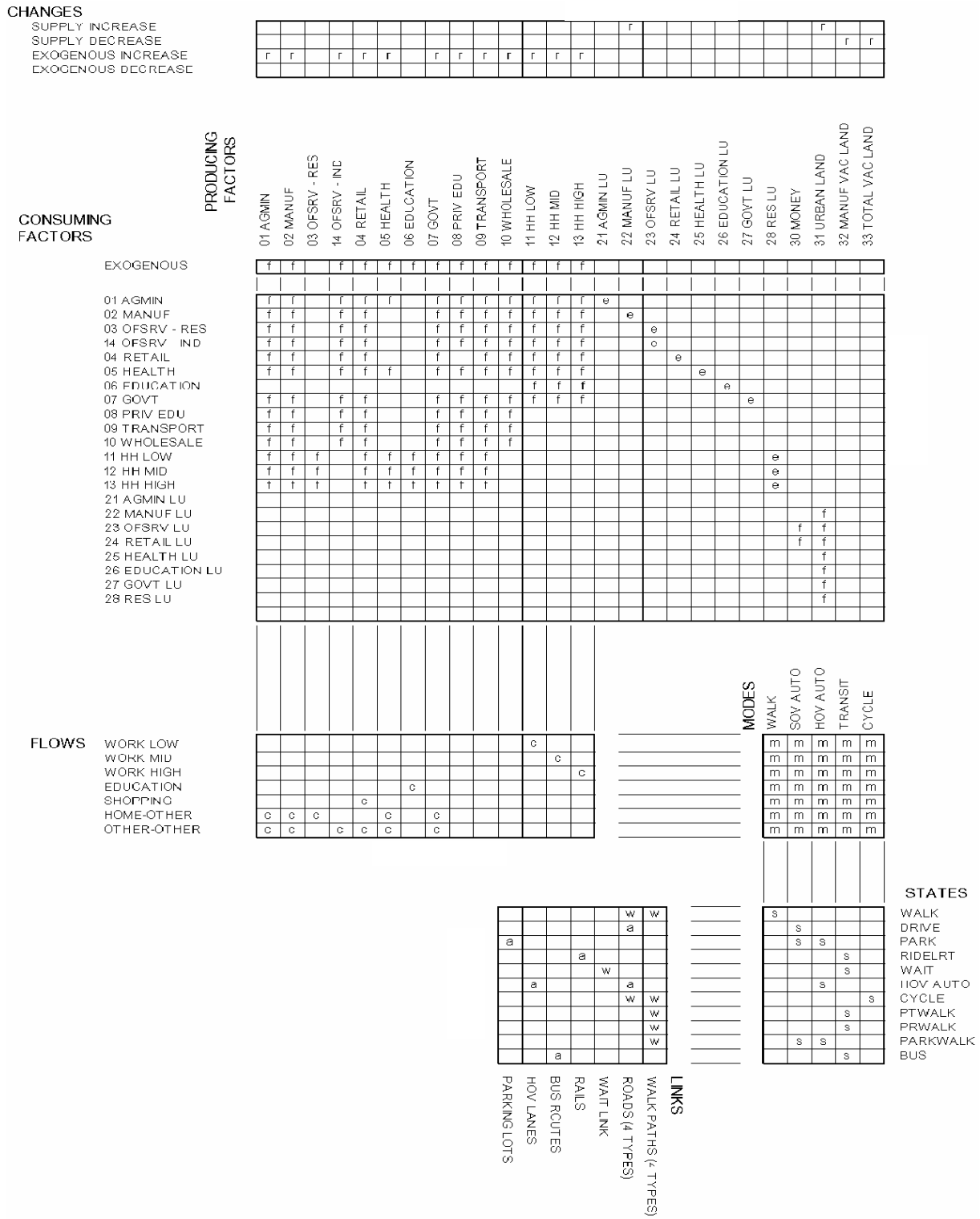


Table 1:
Description of MEPLAN Categories in Figure 7

Type of Category	Category Name	Category Description
Industry and Service	AGMIN	Agriculture and mining
	MANUF	Manufacturing
	OFSRV-RES	Services and office employment consumed by households
	OFSRV-IND	Services and office employment consumed by other industry
	RETAIL	Retail
	HEALTH	Health
	EDUCATION	Primary and secondary education
	GOVT	Government
	PRIV EDU	Private education
	TRANSPORT	Commercial transportation
	WHOLESALE	Wholesale
Households	HH LOW	Households with annual income less than $20,000
	HHMID	Households with annual income between $20,000 and $50,000
	HH HIGH	Households with annual income greater than $50,000
Land Use	AGMIN LU	Land used for agriculture
	MANUF LU	Land used for manufacturing
	OFSRV LU	Land used for services and office employment
	RETAIL LU	Land used for retail
	HEALTH LU	Land used for health
	EDUCATION LU	Land used for education
	GOVT LU	Land used for government
	RES LU	Land used by residences

LAND. Two factors are used to keep track of the amount of vacant land available for different purposes in future time periods (MANUF VAC LAND and TOTAL VAC LAND), and the development process converts these two factors to URBAN LAND. The MONEY factor is a calibration parameter that allows differential rents to be paid by different users of the same category of land, meaning that a firm would pay a higher rent for the same category of land in the downtown zone than it would in a more rural zone.

The single-row matrix just above the large matrix in Figure 7 shows activity that is demanded exogenously, which includes exporting industry, retired households, and unemployed households. This corresponds to the "basic" economy in a Lowry model (Lowry, 1964).

The matrix directly above at the top of the diagram shows the structure of the incremental model that operates between time periods. The r's for the industry and household factors indicate the economic growth in the region, and the r's for the land use factors show how vacant land is converted to urban land.

The matrix on the left below the large matrix indicates the structure of the interface between the land use and transportation submodels. Each row represents one of the matrices of transportation demand and indicates the producing factors (in the corresponding columns in the matrix above) whose matrices of trades are related to that flow.

The remaining three matrices at the bottom show the structure of the transportation model. Five modes are available, and each mode can consist of several different types of activity on different types of links. The matrix directly to the right shows that all modes are available to all flows (m). The matrix below this, on the right, indicates the travel states (s) that make up each mode. The matrix on the left shows which travel states are allowed on each transportation network link and whether capacity restraint is in effect (a) or not (w). The design of the mode choice and assignment models is based on the Sacramento Regional Travel Demand model. A more detailed description of the Sacramento MEPLAN model design can be found in Abraham's dissertation (2000).

3.3 Applications of Sacramento Regional MEPLAN Model

3.3.1 Blueprint

In 2005/2006 SACOG engaged in a long-range visioning process that involved citizens, planners, and elected officials from the various counties and municipalities that make up the SACOG study area. This effort was in part a response to substantial growth forecasts for this region that estimated an increase of 1.7 million new people in the region by 2050. The MEPLAN model was used in this "Sacramento Region Blueprint Project," to forecast what the increase in population would look like in terms of land development, congestion, travel times, and air quality. A "Future Base Case" was established that allocated the forecast growth, in both population and employment, to land and the increased travel to the road and transit networks. This forecast was then presented as a starting point for the regional planning process.

SACOG's regional travel demand model, SACMET, was converted to a MEPLAN format for the Blueprint analysis. MEPLAN uses "regional analysis districts" (RADs), which are groupings of "traffic analysis zones" (TAZs). The full SACMET roadway and transit networks are used in MEPLAN with the RAD "centroids" connected to the detailed transportation networks through multiple "centroid connectors." The resulting traffic assignments are less accurate than SACMET on the local roadway system but similar to SACMET on the regional roadway system and provide an adequate input to a model that allocates development at a RAD level. The model was calibrated to a year 2000 base year, and ran in 2.5-year time steps out to 2050. According to SACOG, the travel model performance gives an adequate response over time on a regional level (congestion response over time).

The Future Base Case land use scenario contained 800,000 vacant acres zoned for development, of which only roughly 250,000 were assumed to be consumed by 2050. This scenario was intended to represent a market-oriented outcome in which developers could build and households and employment could be located where they received the highest benefit without land use or zoning restrictions. This scenario produced a fairly low density sprawling region with large increases in travel times due to network congestion. The travel outputs were input into the region's air quality model to produce forecasts of air pollution for the analysis year. These forecasts demonstrated that an uncontrolled urban future would lead to increased air pollution and a failure to meet U.S. EPA air quality standards (i.e., SACOG would become a non-attainment region).

This Future Base Case was used as a starting point in the numerous citizen meetings held throughout the region. Citizens were asked to evaluate smaller geographies, typically in the vicinity of where the meeting was being held. As the meetings progress from the local level to the county level the geographies being considered increased until they reached the regional level. The PLACE^{3}S (**PLA**nning for **C**ommunity **E**nergy, **E**conomics, and **E**nvironmental **S**ustainability) planning tool was used at these meetings to give real-time feedback to citizens as they manipulated the physical layout of the region to better suit their "vision" of Sacramento's future. MEPLAN was also employed at the conclusion of this process to obtain regionwide impacts for the preferred land use scenario. Throughout this process the

ability of MEPLAN to represent both the land use response and the traffic response to the alternatives considered added value as well as an economic reality check on the feasibility of the scenarios for SACOG's planning staff.

3.3.2 Long-Range Transportation and Land Use Scenarios (Mineta Foundation)

In the Sacramento Region Blueprint Project, citizens were only able to manipulate two characteristics of the region, the density and the use of land. The region's travel networks—which represented the region's transportation improvement program (TIP) and long-range development plan (LRDP)—were maintained in the MEPLAN analysis regardless of the land use scenario being tested. This was for a variety of reasons, not the least of which was simplification of an already complex process.

At the same time the Blueprint Project was being conducted the Mineta Transportation Institute (MTI) funded a project that also used the Sacramento MEPLAN model to analyze citizen-generated scenarios (Johnston et al., 2005). That work differed from the Blueprint Project in several important ways. The outreach for the MTI project was not as comprehensive. Only two citizens groups, who focus on environmental and equity issues, were selected for that project rather than the public at-large. The selected citizens groups were given full access to the model (street networks, bus and light rail transit systems, land use, densities, and growth boundaries). Also, rather than start at the neighborhood level and move successively up in scale, the citizen groups were only allowed to generate alternative scenarios at the regional level (all six counties in the SACOG study area). The intermediate step of using PLACE^{3}S was omitted and scenarios were input directly into MEPLAN for analysis.

The citizens groups chose to remove all road expansion (including HOV lane additions or expansions) and interchange improvements from 2005 on in the region and redirect the infrastructure money into a set of ambitious transit investments, including an expanded light rail transit (LRT) system and the development of a bus rapid transit (BRT) system. The citizens also employed an aggressive urban growth boundary and a per trip road pricing policy. These were modeled in the following combinations: Scenario 1—transit improvement scenario, Scenario 2—urban growth boundary, Scenario 3—transit improvements with urban growth boundary, Scenario 4—transit improvements with trip-based pricing, and Scenario 5—transit improvements with urban growth boundary and trip based pricing. Several of the combinations were shown to reduce region wide VMT (and by consequence, vehicle emissions) by significant amounts over the modeled period. In addition, traveler welfare measures were used to analyze the degree to which travelers were hurt or benefited from the citizen's scenarios. All of the scenarios produced a net benefit to lower income households. Scenarios 1 and 4 caused middle and upper income households to be worse off than the market-oriented Future Base Case. These scenarios also produced a net loss to the region as a whole. Scenarios 2 and 3 benefited all income levels and the region as a whole. Scenario 5 benefited the lower and middle income households but hurt the higher income households. It did, however, benefit the region overall.

The results and conclusions of the MTI study are interesting and readers are encouraged to reference the full text of the report. However, for the purposes of this technical study for the Tier 1 EIS/EIR, it is most import to note that the MEPLAN model has been demonstrated in the MTI study and others (see Rodier et al., 2002, and Hunt et al., 2001 for examples) to be able to effectively rank a broad range of land and transport scenarios across a number of relevant indicators. In the MTI study the results were shown to SACOG planning and modeling staff before publication. The authors concluded, ". . . a model such as MEPLAN can produce broadly reasonable rankings for a variety of policy scenarios 50 years into the future" (p. 43).

4.0 USE OF MEPLAN FOR PLACER PARKWAY TIER 1 EIS/EIR

The Project Team for Placer Parkway explained to SACOG its desire to explore the potential use of MEPLAN in the Parkway planning process, specifically to:

- Identify the potential for growth with and without the project, and
- Differentiate the potential for growth inducement among alternatives.

SACOG agreed that the model would be a useful tool for this purpose. They recommended that the model's assumptions about future land supply by RAD be modified to reflect recent local government input to SACOG for implementing the Blueprint through the ongoing 2035 MTP update. SACOG subsequently provided the revised land supply information for each RAD.

To help distinguish between Parkway alternatives it was desirable to split some MEPLAN zones. Table 2 describes the locations where three MEPLAN zones where the split into two or three zones each. The MEPLAN zone system used for the Parkway analysis is shown in Figure 8.

Table 2:
MEPLAN Zone Splits used in Analysis of Placer Parkway Alternatives

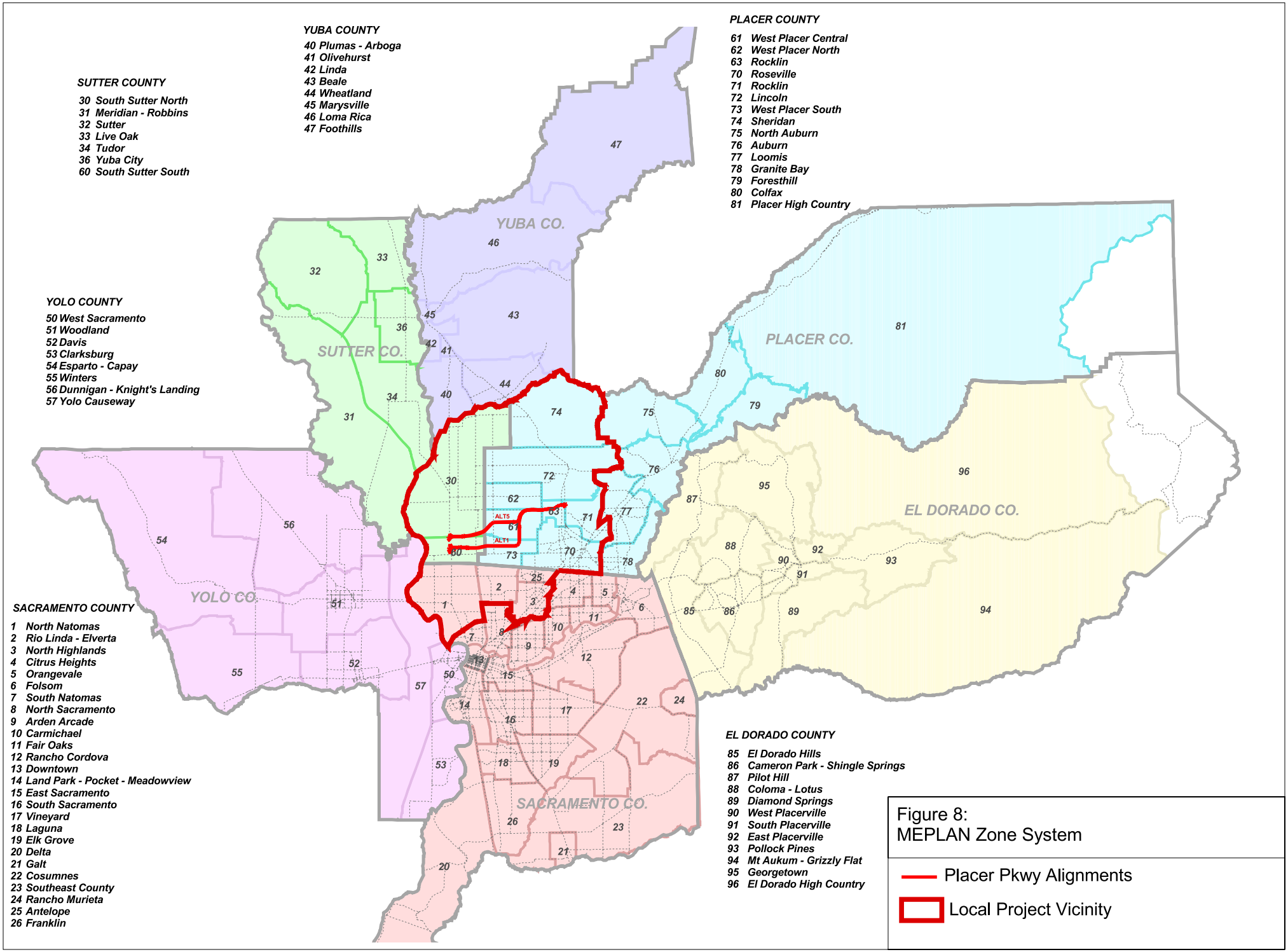
MEPLAN Zones [1]	Split Zones[2]	Geographic Area[3]
30 (South Sutter County)	30	North of Sankey Road
	60	South of Sankey Road
73 (West Placer County)	61	South of a line about 2 miles north of Baseline Road
	62	From 2 miles north of Baseline Road to Sunset Boulevard West
	73	North of Sunset Boulevard West
71 (Rocklin)	63	West of SR 65
	71	East of SR 65

See Figure 8 for MEPLAN zone boundaries
[1] SACOG RADs which were used as MEPLAN zones for land allocation analysis. The RAD names identify general areas but are not completely consistent with city boundaries
[2] Additional zones for Placer Parkway MEPLAN analysis
[3] Location of zone split

The MEPLAN model was run for the following corridor alignment alternatives and potential Watt Avenue connection options:

- No-Build Alternative
- Alternative 1
- Alternative 1 with Watt Avenue interchange
- Alternative 5
- Alternative 5 with Watt Avenue interchange

This MEPLAN analysis uses Alternatives 1 and 5 to "bracket" the differences in regional development allocation between a southern and northern alignment for the proposed Parkway.


SUTTER COUNTY
30 South Sutter North
31 Meridian - Robbins
32 Sutter
33 Live Oak
34 Tudor
36 Yuba City
60 South Sutter South
YUBA COUNTY
40 Plumas - Arboga
41 Olivehurst
42 Linda
43 Beale
44 Wheatland
45 Marysville
46 Loma Rica
47 Foothills
PLACER COUNTY
61 West Placer Central
62 West Placer North
63 Rocklin
70 Roseville
71 Rocklin
72 Lincoln
73 West Placer South
74 Sheridan
75 North Auburn
76 Auburn
77 Loomis
78 Granite Bay
79 Foresthill
80 Colfax
81 Placer High Country
YOLO COUNTY
50 West Sacramento
51 Woodland
52 Davis
53 Clarksburg
54 Esparto - Capay
55 Winters
56 Dunnigan - Knight's Landing
57 Yolo Causeway
SACRAMENTO COUNTY
1 North Natomas
2 Rio Linda - Elverta
3 North Highlands
4 Citrus Heights
5 Orangevale
6 Folsom
7 South Natomas
8 North Sacramento
9 Arden Arcade
10 Carmichael
11 Fair Oaks
12 Rancho Cordova
13 Downtown
14 Land Park - Pocket - Meadowview
15 East Sacramento
16 South Sacramento
17 Vineyard
18 Laguna
19 Elk Grove
20 Delta
21 Galt
22 Cosumnes
23 Southeast County
24 Rancho Murieta
25 Antelope
26 Franklin
EL DORADO COUNTY
85 El Dorado Hills
86 Cameron Park - Shingle Springs
87 Pilot Hill
88 Coloma - Lotus
89 Diamond Springs
90 West Placerville
91 South Placerville
92 East Placerville
93 Pollock Pines
94 Mt Aukum - Grizzly Flat
95 Georgetown
96 El Dorado High Country
YUBA CO.
SUTTER CO.
PLACER CO.
EL DORADO CO.
YOLO CO.
SACRAMENTO CO.
ALT5
ALT1
Figure 8:
MEPLAN Zone System
Placer Pkwy Alignments
Local Project Vicinity

5.0 RESULTS OF MEPLAN ANALYSIS

Tables 3 through 6 show the estimated change in 2040 development levels in each MEPLAN zone between the No-Build Alternative and the selected build alternatives based on the MEPLAN model. The percentage change in development due to the build alternatives is shown graphically in Figures 9 through 16. Tables 7 and 8 focus on the change in households and jobs in the "local project vicinity," a geographic area, shown on Figures 9 through 16, in the vicinity of the proposed project where land use information is available at the RAD level. This combination of RADs does not constitute a formal project "study area" for the project as defined in the Tier 1 EIS/EIR.

A review of these tables and figures indicates the following:

- The MEPLAN model maintains the same amount of 2040 development (households and jobs) in the six-county region[2] but it allocates 2040 development somewhat differently with the build alternatives than with the No-Build Alternative due to the change in accessibility provided by Placer Parkway.

- Compared to the No-Build Alternative, the MEPLAN model estimates that about 1,000 to 1,200 additional households would develop by 2040 in the local project vicinity with the build alternatives (see Table 7). The amount of residential development in the remainder of the region would decrease by about the same amount.

- The 1,000 to 1,200 additional households represent an increase of about 0.4 percent in the total number of households in the local project vicinity by 2040.

- Although Figures 9 through 16 show that in some rural portions of Yuba, Sutter, and Yolo counties the build alternatives would have changes in households compared to the No-Build Alternative, the increase or decrease of 0.5 to 2 percent in these rural areas is a small number of households (less than 50 in any MEPLAN zone)

- The MEPLAN model estimates that Alternative 1 would have about the same number of households in the local project vicinity as Alternative 5 (see Table 7). The addition of a Watt Avenue interchange on Placer Parkway would increase the number of households in the local project vicinity by about 180 for Alternative 1 and by about 70 for Alternative 5.

- Compared to the No-Build Alternative, the MEPLAN model estimates that about 1,800 to 2,100 additional jobs would exist by 2040 in the local project vicinity (see Table 8) with the build alternatives. The amount of jobs in the remainder of the region would decrease by about the same amount.

- The 1,800 to 2,100 additional jobs represent an increase of about 0.6 percent to 0.7 percent in the total number of jobs in the local project vicinity by 2040.

- The MEPLAN model estimates that Alternative 1 would have about 100 more jobs in the local project vicinity than Alternative 5 (see Table 8). The addition of a Watt Avenue interchange on Placer Parkway would increase the number of jobs in the local project vicinity by about 200 for Alternative 1 and by about 260 for Alternative 5.

[2] Regional totals between alternatives differ by no more than 0.02 percent.

- The location of the increase in households is somewhat influenced by the corridor alignment. A comparison between Figures 10 and 14 indicates that a small number of additional households would locate farther north under Alternative 5 than under Alternative 1. A similar comparison on the increase in jobs between Figures 9 and 13 shows less of a difference between Alternatives 1 and 5.

Table 3:
Change in 2040 Regional Development Allocation Due to Placer Parkway for Alternative 1

MEPLAN Zone			No-Build		Alternative 1		Difference			
							Households		Jobs	
RAD	RAD Name	County	Households	Jobs	Households	Jobs	Number	Percent	Number	Percent
1	North Natomas	Sacramento	52,338	21,252	52,611	21,241	273	1%	-12	0%
2	Rio Linda – Elverta		11,460	12,811	11,443	12,879	-17	0%	68	1%
3	North Highlands		34,297	68,854	34,269	68,970	-28	0%	116	0%
4	Citrus Heights		52,007	44,696	51,988	44,650	-19	0%	-47	0%
5	Orangevale		16,807	12,778	16,804	12,750	-2	0%	-28	0%
6	Folsom		25,788	49,598	25,784	49,577	-4	0%	-22	0%
7	South Natomas		20,435	39,911	20,420	39,957	-15	0%	46	0%
8	North Sacramento		24,990	65,483	24,961	65,545	-30	0%	62	0%
9	Arden Arcade		51,585	78,879	51,551	78,819	-34	0%	-61	0%
10	Carmichael		28,474	18,967	28,452	18,928	-22	0%	-39	0%
11	Fair Oaks		18,564	16,029	18,554	15,986	-9	0%	-43	0%
12	Rancho Cordova		72,854	147,124	72,785	146,779	-69	0%	-344	0%
13	Downtown		18,300	152,615	18,288	152,248	-12	0%	-367	0%
14	Land Park – Pocket		57,274	45,312	57,234	45,357	-39	0%	45	0%
15	East Sacramento		54,802	73,085	54,792	73,000	-10	0%	-85	0%
16	South Sacramento		61,169	86,279	61,117	86,021	-53	0%	-258	0%
17	Vineyard		22,166	17,478	22,100	17,424	-67	0%	-54	0%
18	Laguna		34,858	25,503	34,776	25,422	-83	0%	-81	0%
19	Elk Grove		24,526	25,866	24,511	25,764	-15	0%	-102	0%
20	Delta		11,449	10,506	11,389	10,483	-60	-1%	-22	0%
21	Galt		10,533	9,948	10,515	9,931	-17	0%	-18	0%
22	Cosumnes		8,170	7,500	8,159	7,472	-11	0%	-28	0%
23	Southeast County		8,783	5,782	8,761	5,771	-23	0%	-12	0%
24	Rancho Murieta		5,487	2,040	5,484	2,038	-3	0%	-2	0%
25	Antelope		15,977	4,542	15,979	4,556	1	0%	14	0%
26	Franklin		2,304	2,395	2,297	2,389	-7	0%	-6	0%
30	South Sutter – North	Sutter	0	3,466	0	3,526	0	0%	60	2%
60	South Sutter – South		8,867	3,069	8,943	3,346	76	1%	277	9%
31	Meridian – Robbins		1,373	1,620	1,366	1,620	-7	-1%	0	0%
32	Sutter		2,283	991	2,278	991	-6	0%	0	0%

Table 3:
Change in 2040 Regional Development Allocation Due to Placer Parkway for Alternative 1

MEPLAN Zone			No-Build		Alternative 1		Difference			
							Households		Jobs	
RAD	RAD Name	County	Households	Jobs	Households	Jobs	Number	Percent	Number	Percent
33	Live Oak		6,447	3,721	6,416	3,712	-31	0%	-8	0%
34	Tudor		2,245	1,076	2,245	1,076	0	0%	-1	0%
36	Yuba City		39,862	51,549	39,858	51,425	-4	0%	-125	0%
40	Plumas – Arboga		9,935	2,840	9,950	2,837	15	0%	-3	0%
41	Olivehurst		5,198	2,008	5,199	1,981	1	0%	-26	-1%
42	Linda		10,606	26,600	10,599	26,722	-6	0%	122	0%
43	Beale	Yuba	7,434	3,894	7,446	3,873	11	0%	-22	-1%
44	Wheatland		5,832	3,291	5,883	3,288	51	1%	-3	0%
45	Marysville		6,223	15,266	6,223	15,165	0	0%	-101	-1%
46	Loma Rica		10,596	7,824	10,573	7,762	-23	0%	-62	-1%
47	Foothills		6,809	1,485	6,797	1,479	-12	0%	-6	0%
50	West Sacramento		26,038	47,240	26,023	47,186	-15	0%	-54	0%
51	Woodland		25,380	48,262	25,347	48,233	-33	0%	-29	0%
52	Davis		31,631	50,944	31,592	50,995	-39	0%	51	0%
53	Clarksburg		1,100	1,627	1,098	1,625	-2	0%	-2	0%
54	Esparto – Capay	Yolo	4,002	5,853	3,998	5,862	-5	0%	9	0%
55	Winters		4,669	5,016	4,658	5,014	-11	0%	-2	0%
56	Dunnigan-Knight's Landing		3,439	4,047	3,431	4,053	-8	0%	6	0%
57	Yolo Causeway		0	0	0	0	0	0	0	0
70	Roseville		48,085	108,042	48,124	108,192	39	0%	150	0%
71	Rocklin – East	Placer	29,743	28,156	29,776	28,356	33	0%	200	1%
63	Rocklin – West		458	4,628	510	4,753	52	11%	125	3%
61	West Placer – North	Placer	2,120	9	2,219	9	99	5%	0	1%
62	West Placer – Central		122	1	130	1	7	6%	0	4%
72	Lincoln		39,751	29,183	40,085	29,816	334	1%	632	2%
73	West Placer – South		17,996	10,171	18,061	10,396	65	0%	225	2%
74	Sheridan		7,195	1,796	7,261	1,880	66	1%	84	5%
75	North Auburn		9,636	12,282	9,643	12,337	7	0%	55	0%
76	Auburn		15,093	34,744	15,102	34,776	9	0%	33	0%

Table 3:
Change in 2040 Regional Development Allocation Due to Placer Parkway for Alternative 1

MEPLAN Zone			No-Build		Alternative 1		Difference			
							Households		Jobs	
RAD	RAD Name	County	Households	Jobs	Households	Jobs	Number	Percent	Number	Percent
77	Loomis		9,472	14,246	9,488	14,315	16	0%	69	0%
78	Granite Bay		10,276	6,847	10,278	6,832	2	0%	-15	0%
79	Foresthill		3,423	2,839	3,423	2,841	0	0%	2	0%
80	Colfax		7,832	7,485	7,839	7,497	7	0%	12	0%
81	Placer High Country		6,437	11,217	6,438	11,220	1	0%	4	0%
85	El Dorado Hills		30,987	33,041	30,901	33,044	-87	0%	3	0%
86	Cameron Pk – Shingle Sprgs		23,547	22,838	23,543	22,777	-4	0%	-61	0%
87	Pilot Hill		5,015	3,102	5,018	3,096	3	0%	-5	0%
88	Coloma – Lotus		9,614	3,952	9,611	3,943	-4	0%	-9	0%
89	Diamond Springs		12,816	7,623	12,813	7,612	-3	0%	-11	0%
90	West Placerville		5,957	13,459	5,957	13,450	0	0%	-9	0%
91	South Placerville	El Dorado	7,542	29,203	7,544	29,162	2	0%	-41	0%
92	East Placerville		3,819	3,691	3,821	3,689	2	0%	-2	0%
93	Pollock Pines		13,895	10,667	13,896	10,656	1	0%	-11	0%
94	Mt Aukum – Grizzly Flat		7,701	4,115	7,703	4,113	2	0%	-2	0%
95	Georgetown		7,594	4,763	7,593	4,760	-1	0%	-3	0%
96	El Dorado High Country		2,220	2,795	2,219	2,792	0	0%	-3	0%
		REGION	**1,303,712**	**1,747,813**	**1,303,939**	**1,748,036**	**226**	**0%**	**224**	**0%**

Source: MEPLAN runs by DKS, Michael Clay and John Abraham based on land availability from SACOG, 2007

Table 4:
Change in 2040 Regional Development Allocation Due to Placer Parkway for Alternative 1 with Watt Avenue Interchange

MEPLAN Zone			No-Build		Alternative 1 With Watt Ave. Interchange		Difference			
							Households		Jobs	
RAD	RAD Name	County	Households	Jobs	Households	Jobs	Number	Percent	Number	Percent
1	North Natomas	Sacramento	52,338	21,252	52,593	21,254	255	0%	2	0%
2	Rio Linda – Elverta		11,460	12,811	11,440	12,861	-19	0%	50	0%
3	North Highlands		34,297	68,854	34,284	68,984	-13	0%	131	0%
4	Citrus Heights		52,007	44,696	52,004	44,654	-3	0%	-42	0%
5	Orangevale		16,807	12,778	16,808	12,746	1	0%	-32	0%
6	Folsom		25,788	49,598	25,777	49,481	-11	0%	-117	0%
7	South Natomas		20,435	39,911	20,415	39,965	-20	0%	54	0%
8	North Sacramento		24,990	65,483	24,966	65,441	-24	0%	-42	0%
9	Arden Arcade		51,585	78,879	51,559	78,839	-25	0%	-41	0%
10	Carmichael		28,474	18,967	28,455	18,933	-19	0%	-34	0%
11	Fair Oaks		18,564	16,029	18,556	16,010	-8	0%	-19	0%
12	Rancho Cordova		72,854	147,124	72,805	146,687	-48	0%	-437	0%
13	Downtown		18,300	152,615	18,289	152,375	-11	0%	-240	0%
14	Land Park – Pocket		57,274	45,312	57,235	45,256	-39	0%	-56	0%
15	East Sacramento		54,802	73,085	54,775	72,922	-27	0%	-163	0%
16	South Sacramento		61,169	86,279	61,119	85,995	-50	0%	-283	0%
17	Vineyard		22,166	17,478	22,090	17,449	-76	0%	-28	0%
18	Laguna		34,858	25,503	34,748	25,413	-110	0%	-91	0%
19	Elk Grove		24,526	25,866	24,501	25,731	-25	0%	-135	-1%
20	Delta		11,449	10,506	11,384	10,497	-65	-1%	-9	0%
21	Galt		10,533	9,948	10,514	9,929	-19	0%	-19	0%
22	Cosumnes		8,170	7,500	8,159	7,473	-11	0%	-27	0%
23	Southeast County		8,783	5,782	8,748	5,762	-35	0%	-20	0%
24	Rancho Murieta		5,487	2,040	5,481	2,035	-6	0%	-4	0%
25	Antelope		15,977	4,542	15,974	4,545	-3	0%	4	0%
26	Franklin		2,304	2,395	2,295	2,385	-8	0%	-10	0%
30	South Sutter – North	Sutter	0	3,466	0	3,548	0	0%	82	2%
60	South Sutter – South		8,867	3,069	8,978	3,358	111	1%	289	9%
31	Meridian – Robbins		1,373	1,620	1,360	1,614	-13	-1%	-6	0%

Table 4:
Change in 2040 Regional Development Allocation Due to Placer Parkway for Alternative 1 with Watt Avenue Interchange

MEPLAN Zone			No-Build		Alternative 1 With Watt Ave. Interchange		Difference			
							Households		Jobs	
RAD	RAD Name	County	Households	Jobs	Households	Jobs	Number	Percent	Number	Percent
32	Sutter		2,283	991	2,280	988	-3	0%	-3	0%
33	Live Oak		6,447	3,721	6,433	3,704	-13	0%	-17	0%
34	Tudor		2,245	1,076	2,242	1,070	-3	0%	-6	-1%
36	Yuba City		39,862	51,549	39,856	51,386	-6	0%	-163	0%
40	Plumas – Arboga	Yuba	9,935	2,840	9,957	2,843	22	0%	3	0%
41	Olivehurst		5,198	2,008	5,195	1,992	-3	0%	-16	-1%
42	Linda		10,606	26,600	10,595	26,714	-11	0%	114	0%
43	Beale		7,434	3,894	7,448	3,876	14	0%	-18	0%
44	Wheatland		5,832	3,291	5,886	3,296	53	1%	6	0%
45	Marysville		6,223	15,266	6,225	15,177	2	0%	-89	-1%
46	Loma Rica		10,596	7,824	10,613	7,779	17	0%	-45	-1%
47	Foothills		6,809	1,485	6,815	1,478	6	0%	-7	0%
50	West Sacramento	Yolo	26,038	47,240	25,999	47,139	-39	0%	-101	0%
51	Woodland		25,380	48,262	25,285	48,330	-95	0%	68	0%
52	Davis		31,631	50,944	31,563	51,069	-68	0%	126	0%
53	Clarksburg		1,100	1,627	1,097	1,623	-3	0%	-4	0%
54	Esparto – Capay		4,002	5,853	3,989	5,863	-14	0%	10	0%
55	Winters		4,669	5,016	4,651	5,013	-18	0%	-3	0%
56	Dunnigan-Knight's Landing		3,439	4,047	3,421	4,055	-18	-1%	8	0%
57	Yolo Causeway		0	0	0	0	0	0	0	0
70	Roseville	Placer	48,085	108,042	48,139	108,349	54	0%	307	0%
71	Rocklin – East		29,743	28,156	29,801	28,317	58	0%	161	1%
63	Rocklin – West		458	4,628	520	4,794	62	14%	166	4%
61	West Placer – North	Placer	2,120	9	2,253	9	132	6%	0	0%
62	West Placer – Central		122	1	130	1	8	7%	0	4%
72	Lincoln		39,751	29,183	40,133	29,815	382	1%	631	2%
73	West Placer – South		17,996	10,171	18,060	10,394	64	0%	223	2%
74	Sheridan		7,195	1,796	7,287	1,886	93	1%	91	5%
75	North Auburn		9,636	12,282	9,644	12,350	8	0%	67	1%

Table 4:
Change in 2040 Regional Development Allocation Due to Placer Parkway for Alternative 1 with Watt Avenue Interchange

MEPLAN Zone			No-Build		Alternative 1 With Watt Ave. Interchange		Difference			
							Households		Jobs	
RAD	RAD Name	County	Households	Jobs	Households	Jobs	Number	Percent	Number	Percent
76	Auburn		15,093	34,744	15,110	34,761	17	0%	18	0%
77	Loomis		9,472	14,246	9,484	14,329	12	0%	83	1%
78	Granite Bay		10,276	6,847	10,281	6,840	5	0%	-7	0%
79	Foresthill		3,423	2,839	3,422	2,844	-1	0%	4	0%
80	Colfax		7,832	7,485	7,837	7,504	5	0%	19	0%
81	Placer High Country		6,437	11,217	6,437	11,222	0	0%	5	0%
85	El Dorado Hills		30,987	33,041	30,898	33,005	-89	0%	-36	0%
86	Cameron Pk – Shingle Sprgs		23,547	22,838	23,537	22,790	-10	0%	-48	0%
87	Pilot Hill		5,015	3,102	5,015	3,101	0	0%	-1	0%
88	Coloma – Lotus		9,614	3,952	9,615	3,948	0	0%	-4	0%
89	Diamond Springs		12,816	7,623	12,808	7,613	-9	0%	-10	0%
90	West Placerville		5,957	13,459	5,955	13,444	-2	0%	-14	0%
91	South Placerville	El Dorado	7,542	29,203	7,542	29,180	0	0%	-23	0%
92	East Placerville		3,819	3,691	3,820	3,688	1	0%	-3	0%
93	Pollock Pines		13,895	10,667	13,892	10,661	-3	0%	-6	0%
94	Mt Aukum – Grizzly Flat		7,701	4,115	7,702	4,114	1	0%	0	0%
95	Georgetown		7,594	4,763	7,591	4,758	-2	0%	-5	0%
96	El Dorado High Country		2,220	2,795	2,219	2,793	-1	0%	-2	0%
		REGION	**1,303,712**	**1,747,813**	**1,303,996**	**1,748,045**	**283**	**0%**	**233**	**0%**

Source: MEPLAN runs by DKS, Michael Clay and John Abraham based on land availability from SACOG, 2007

Table 5:
Change in 2040 Regional Development Allocation Due to Placer Parkway for Alternative 5

MEPLAN Zone			No-Build		Alternative 5		Difference			
							Households		Jobs	
RAD	RAD Name	County	Households	Jobs	Households	Jobs	Number	Percent	Number	Percent
1	North Natomas	Sacramento	52,338	21,252	52,609	21,189	272	0%	-63	0%
2	Rio Linda – Elverta		11,460	12,811	11,444	12,844	-16	0%	33	0%
3	North Highlands		34,297	68,854	34,272	68,926	-25	0%	73	0%
4	Citrus Heights		52,007	44,696	51,982	44,651	-25	0%	-46	0%
5	Orangevale		16,807	12,778	16,803	12,754	-4	0%	-24	0%
6	Folsom		25,788	49,598	25,775	49,481	-12	0%	-117	0%
7	South Natomas		20,435	39,911	20,419	39,949	-16	0%	38	0%
8	North Sacramento		24,990	65,483	24,960	65,444	-30	0%	-39	0%
9	Arden Arcade		51,585	78,879	51,542	78,891	-43	0%	11	0%
10	Carmichael		28,474	18,967	28,447	18,937	-27	0%	-30	0%
11	Fair Oaks		18,564	16,029	18,558	16,009	-6	0%	-20	0%
12	Rancho Cordova		72,854	147,124	72,803	146,798	-51	0%	-325	0%
13	Downtown		18,300	152,615	18,282	152,367	-18	0%	-248	0%
14	Land Park – Pocket		57,274	45,312	57,225	45,224	-49	0%	-88	0%
15	East Sacramento		54,802	73,085	54,771	72,976	-32	0%	-108	0%
16	South Sacramento		61,169	86,279	61,126	86,020	-43	0%	-258	0%
17	Vineyard		22,166	17,478	22,094	17,425	-73	0%	-53	0%
18	Laguna		34,858	25,503	34,755	25,433	-103	0%	-70	0%
19	Elk Grove		24,526	25,866	24,493	25,761	-34	0%	-105	0%
20	Delta		11,449	10,506	11,385	10,481	-64	0%	-25	0%
21	Galt		10,533	9,948	10,514	9,924	-19	0%	-25	0%
22	Cosumnes		8,170	7,500	8,159	7,478	-11	0%	-22	0%
23	Southeast County		8,783	5,782	8,758	5,762	-26	0%	-21	0%
24	Rancho Murieta		5,487	2,040	5,485	2,035	-1	0%	-5	0%
25	Antelope		15,977	4,542	15,973	4,546	-4	0%	5	0%
26	Franklin		2,304	2,395	2,297	2,389	-7	0%	-6	0%
30	South Sutter – North	Sutter	0	3,466	0	3,518	0	0%	51	1%
60	South Sutter – South		8,867	3,069	8,932	3,370	66	0%	300	10%
31	Meridian – Robbins		1,373	1,620	1,368	1,617	-5	0%	-3	0%

Table 5:
Change in 2040 Regional Development Allocation Due to Placer Parkway for Alternative 5

MEPLAN Zone			No-Build		Alternative 5		Difference			
							Households		Jobs	
RAD	RAD Name	County	Households	Jobs	Households	Jobs	Number	Percent	Number	Percent
32	Sutter		2,283	991	2,280	989	-3	0%	-2	0%
33	Live Oak		6,447	3,721	6,437	3,709	-10	0%	-12	0%
34	Tudor		2,245	1,076	2,248	1,077	3	0%	1	0%
36	Yuba City		39,862	51,549	39,883	51,437	21	0%	-113	0%
40	Plumas – Arboga	Yuba	9,935	2,840	9,977	2,852	42	0%	12	0%
41	Olivehurst		5,198	2,008	5,205	1,985	7	0%	-22	-1%
42	Linda		10,606	26,600	10,618	26,713	12	0%	113	0%
43	Beale		7,434	3,894	7,449	3,862	15	0%	-33	-1%
44	Wheatland		5,832	3,291	5,871	3,276	39	0%	-15	0%
45	Marysville		6,223	15,266	6,233	15,147	9	0%	-119	-1%
46	Loma Rica		10,596	7,824	10,595	7,758	-1	0%	-65	-1%
47	Foothills		6,809	1,485	6,805	1,477	-4	0%	-7	0%
50	West Sacramento	Yolo	26,038	47,240	26,004	47,164	-34	0%	-76	0%
51	Woodland		25,380	48,262	25,315	48,309	-64	0%	46	0%
52	Davis		31,631	50,944	31,580	51,043	-51	0%	100	0%
53	Clarksburg		1,100	1,627	1,097	1,625	-3	0%	-2	0%
54	Esparto – Capay		4,002	5,853	3,988	5,922	-15	0%	69	1%
55	Winters		4,669	5,016	4,655	5,015	-14	0%	-1	0%
56	Dunnigan-Knight's Landing		3,439	4,047	3,423	4,073	-15	0%	26	1%
57	Yolo Causeway		0	0	0	0	0	0	0	0
70	Roseville	Placer	48,085	108,042	48,131	108,195	46	0%	153	0%
71	Rocklin – East		29,743	28,156	29,789	28,330	46	0%	174	1%
63	Rocklin – West		458	4,628	516	4,765	58	1%	137	3%
61	West Placer – North	Placer	2,120	9	2,223	9	103	0%	0	1%
62	West Placer – Central		122	1	128	1	6	-1%	0	2%
72	Lincoln		39,751	29,183	40,066	29,820	315	0%	636	2%
73	West Placer – South		17,996	10,171	18,037	10,410	41	0%	239	2%
74	Sheridan		7,195	1,796	7,258	1,876	63	0%	80	4%
75	North Auburn		9,636	12,282	9,642	12,347	5	0%	65	1%

Table 5:
Change in 2040 Regional Development Allocation Due to Placer Parkway for Alternative 5

MEPLAN Zone			No-Build		Alternative 5		Difference			
							Households		Jobs	
RAD	RAD Name	County	Households	Jobs	Households	Jobs	Number	Percent	Number	Percent
76	Auburn		15,093	34,744	15,103	34,764	10	0%	21	0%
77	Loomis		9,472	14,246	9,488	14,320	16	0%	75	1%
78	Granite Bay		10,276	6,847	10,279	6,837	2	0%	-9	0%
79	Foresthill		3,423	2,839	3,422	2,842	-1	0%	3	0%
80	Colfax		7,832	7,485	7,836	7,500	4	0%	15	0%
81	Placer High Country		6,437	11,217	6,437	11,221	0	0%	4	0%
85	El Dorado Hills		30,987	33,041	30,977	33,005	-10	0%	-35	0%
86	Cameron Pk – Shingle Sprgs		23,547	22,838	23,548	22,764	1	0%	-74	0%
87	Pilot Hill		5,015	3,102	5,016	3,096	1	0%	-6	0%
88	Coloma – Lotus		9,614	3,952	9,615	3,941	1	0%	-11	0%
89	Diamond Springs		12,816	7,623	12,802	7,594	-15	0%	-29	0%
90	West Placerville	El Dorado	5,957	13,459	5,956	13,452	-1	0%	-7	0%
91	South Placerville		7,542	29,203	7,539	29,247	-3	0%	44	0%
92	East Placerville		3,819	3,691	3,820	3,693	1	0%	2	0%
93	Pollock Pines		13,895	10,667	13,896	10,665	0	0%	-2	0%
94	Mt Aukum – Grizzly Flat		7,701	4,115	7,703	4,113	3	0%	-1	0%
95	Georgetown		7,594	4,763	7,592	4,762	-2	0%	-1	0%
96	El Dorado High Country		2,220	2,795	2,219	2,792	-1	0%	-3	0%
		REGION	**1,303,712**	**1,747,813**	**1,303,930**	**1,747,990**	**218**	**0%**	**178**	**0%**

Source: MEPLAN runs by DKS, Michael Clay and John Abraham based on land availability from SACOG, 2007

Table 6:
Change in 2040 Regional Development Allocation Due to Placer Parkway for Alternative 5 with Watt Avenue Interchange

MEPLAN Zone			No-Build		Alternative 5 With Watt Ave. Interchange		Difference			
							Households		Jobs	
RAD	RAD Name	County	Households	Jobs	Households	Jobs	Number	Percent	Number	Percent
1	North Natomas	Sacramento	52,338	21,252	52,582	21,225	244	0%	-28	0%
2	Rio Linda – Elverta		11,460	12,811	11,448	12,865	-12	0%	54	0%
3	North Highlands		34,297	68,854	34,284	68,985	-13	0%	131	0%
4	Citrus Heights		52,007	44,696	51,994	44,625	-13	0%	-72	0%
5	Orangevale		16,807	12,778	16,803	12,742	-4	0%	-36	0%
6	Folsom		25,788	49,598	25,780	49,528	-8	0%	-71	0%
7	South Natomas		20,435	39,911	20,419	39,990	-16	0%	80	0%
8	North Sacramento		24,990	65,483	24,965	65,482	-25	0%	-1	0%
9	Arden Arcade		51,585	78,879	51,552	78,777	-33	0%	-103	0%
10	Carmichael		28,474	18,967	28,461	18,942	-13	0%	-25	0%
11	Fair Oaks		18,564	16,029	18,564	16,018	1	0%	-11	0%
12	Rancho Cordova		72,854	147,124	72,793	146,598	-61	0%	-526	0%
13	Downtown		18,300	152,615	18,288	152,483	-11	0%	-132	0%
14	Land Park – Pocket		57,274	45,312	57,220	45,294	-53	0%	-18	0%
15	East Sacramento		54,802	73,085	54,828	72,973	26	0%	-111	0%
16	South Sacramento		61,169	86,279	61,127	85,993	-43	0%	-285	0%
17	Vineyard		22,166	17,478	22,109	17,399	-58	0%	-79	0%
18	Laguna		34,858	25,503	34,811	25,438	-47	0%	-65	0%
19	Elk Grove		24,526	25,866	24,507	25,698	-20	0%	-168	-1%
20	Delta		11,449	10,506	11,407	10,490	-42	0%	-16	0%
21	Galt		10,533	9,948	10,515	9,924	-18	0%	-24	0%
22	Cosumnes		8,170	7,500	8,160	7,474	-11	0%	-26	0%
23	Southeast County		8,783	5,782	8,757	5,769	-26	0%	-14	0%
24	Rancho Murieta		5,487	2,040	5,481	2,047	-6	0%	7	0%
25	Antelope		15,977	4,542	15,977	4,549	-1	0%	7	0%
26	Franklin		2,304	2,395	2,298	2,386	-6	0%	-10	0%
30	South Sutter – North	Sutter	0	3,466	0	3,519	0	0%	53	2%
60	South Sutter – South		8,867	3,069	8,949	3,400	83	1%	331	11%
31	Meridian – Robbins		1,373	1,620	1,369	1,607	-4	0%	-13	-1%

Table 6:
Change in 2040 Regional Development Allocation Due to Placer Parkway for Alternative 5 with Watt Avenue Interchange

MEPLAN Zone			No-Build		Alternative 5 With Watt Ave. Interchange		Difference			
							Households		Jobs	
RAD	RAD Name	County	Households	Jobs	Households	Jobs	Number	Percent	Number	Percent
32	Sutter		2,283	991	2,289	986	6	0%	-5	-1%
33	Live Oak		6,447	3,721	6,442	3,723	-5	0%	2	0%
34	Tudor		2,245	1,076	2,244	1,076	-1	0%	-1	0%
36	Yuba City		39,862	51,549	39,892	51,318	29	0%	-232	0%
40	Plumas – Arboga	Yuba	9,935	2,840	9,963	2,837	28	0%	-3	0%
41	Olivehurst		5,198	2,008	5,201	1,993	3	0%	-14	-1%
42	Linda		10,606	26,600	10,608	26,761	2	0%	161	1%
43	Beale		7,434	3,894	7,464	3,886	30	0%	-9	0%
44	Wheatland		5,832	3,291	5,876	3,298	44	1%	7	0%
45	Marysville		6,223	15,266	6,225	15,189	2	0%	-77	-1%
46	Loma Rica		10,596	7,824	10,593	7,749	-3	0%	-75	-1%
47	Foothills		6,809	1,485	6,809	1,473	-1	0%	-12	-1%
50	West Sacramento	Yolo	26,038	47,240	25,976	47,148	-62	0%	-91	0%
51	Woodland		25,380	48,262	25,300	48,278	-80	0%	15	0%
52	Davis		31,631	50,944	31,570	51,093	-61	0%	149	0%
53	Clarksburg		1,100	1,627	1,098	1,627	-2	0%	0	0%
54	Esparto – Capay		4,002	5,853	3,984	5,895	-19	0%	42	1%
55	Winters		4,669	5,016	4,654	5,018	-15	0%	2	0%
56	Dunnigan-Knight's Landing		3,439	4,047	3,420	4,060	-19	-1%	13	0%
57	Yolo Causeway		0	0	0	0	0	0	0	0
70	Roseville	Placer	48,085	108,042	48,116	108,327	30	0%	285	0%
71	Rocklin – East		29,743	28,156	29,761	28,322	18	0%	166	1%
63	Rocklin – West		458	4,628	516	4,773	57	13%	145	3%
61	West Placer – North	Placer	2,120	9	2,247	9	127	6%	0	-1%
62	West Placer – Central		122	1	129	1	7	6%	0	3%
72	Lincoln		39,751	29,183	40,109	29,794	358	1%	611	2%
73	West Placer – South		17,996	10,171	18,052	10,414	56	0%	244	2%
74	Sheridan		7,195	1,796	7,277	1,877	82	1%	82	5%
75	North Auburn		9,636	12,282	9,642	12,333	6	0%	50	0%

Table 6:
Change in 2040 Regional Development Allocation Due to Placer Parkway for Alternative 5 with Watt Avenue Interchange

MEPLAN Zone			No-Build		Alternative 5 With Watt Ave. Interchange		Difference			
							Households		Jobs	
RAD	RAD Name	County	Households	Jobs	Households	Jobs	Number	Percent	Number	Percent
76	Auburn		15,093	34,744	15,102	34,779	9	0%	35	0%
77	Loomis		9,472	14,246	9,486	14,324	14	0%	78	1%
78	Granite Bay		10,276	6,847	10,282	6,844	6	0%	-3	0%
79	Foresthill		3,423	2,839	3,423	2,843	0	0%	4	0%
80	Colfax		7,832	7,485	7,838	7,500	5	0%	15	0%
81	Placer High Country		6,437	11,217	6,438	11,224	1	0%	7	0%
85	El Dorado Hills		30,987	33,041	30,839	32,960	-149	0%	-81	0%
86	Cameron Pk – Shingle Sprgs		23,547	22,838	23,541	22,796	-6	0%	-42	0%
87	Pilot Hill		5,015	3,102	5,014	3,102	-1	0%	0	0%
88	Coloma – Lotus		9,614	3,952	9,610	3,946	-4	0%	-6	0%
89	Diamond Springs		12,816	7,623	12,808	7,601	-9	0%	-22	0%
90	West Placerville	El Dorado	5,957	13,459	5,952	13,438	-5	0%	-21	0%
91	South Placerville		7,542	29,203	7,544	29,197	2	0%	-6	0%
92	East Placerville		3,819	3,691	3,819	3,688	0	0%	-4	0%
93	Pollock Pines		13,895	10,667	13,890	10,657	-6	0%	-10	0%
94	Mt Aukum – Grizzly Flat		7,701	4,115	7,697	4,114	-4	0%	-1	0%
95	Georgetown		7,594	4,763	7,594	4,763	0	0%	0	0%
96	El Dorado High Country		2,220	2,795	2,219	2,790	-1	0%	-4	0%
		REGION	**1,303,712**	**1,747,813**	**1,303,993**	**1,748,037**	**281**	**0%**	**224**	**0%**

Source: MEPLAN runs by DKS, Michael Clay and John Abraham based on land availability from SACOG, 2007

Table 7:
Change in 2040 Household Allocation in Local Project Vicinity by RAD due to Placer Parkway

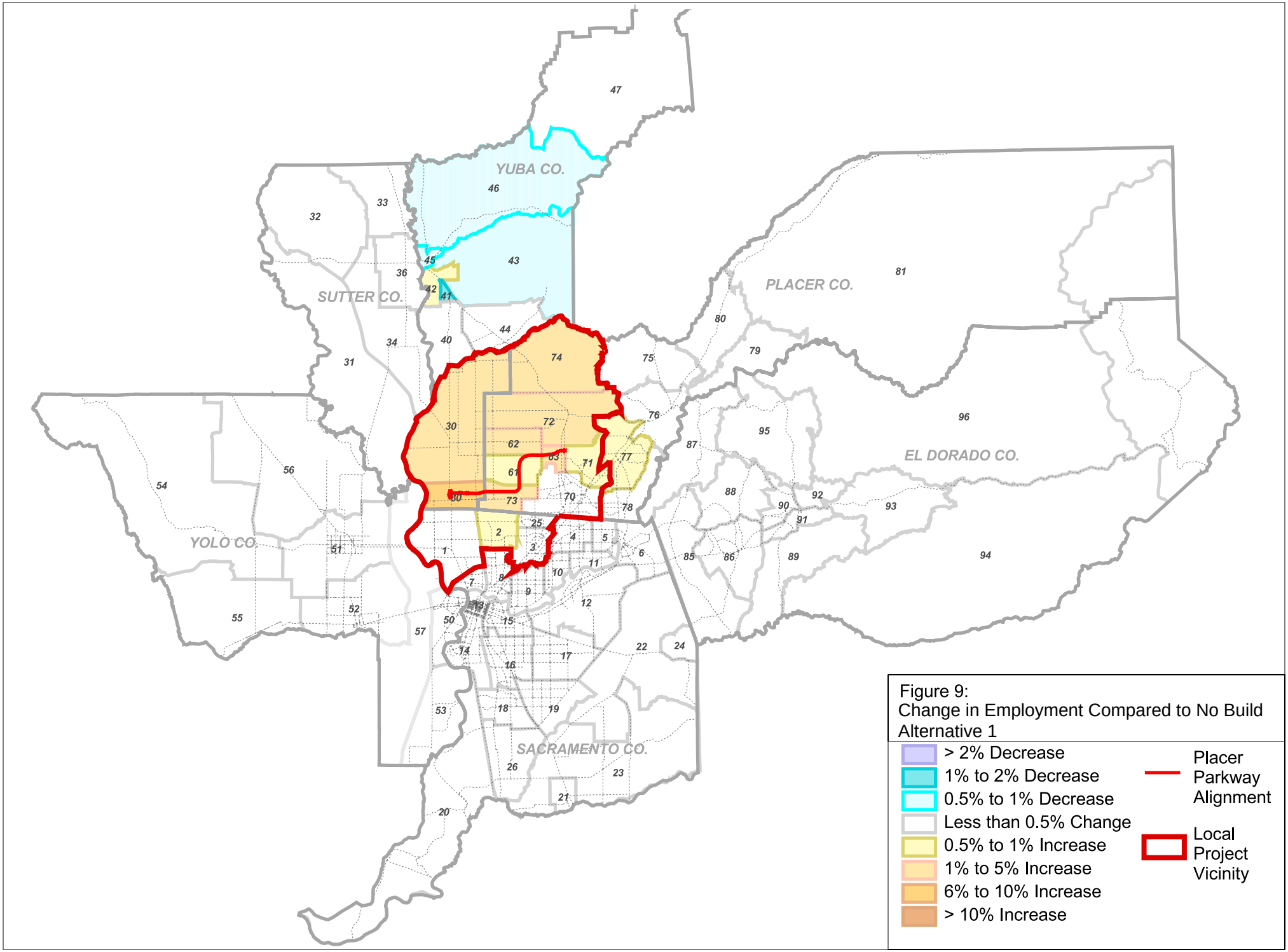
RAD	2040 Households					Difference from No-Build			
	No-Build	Alt 1	Alt 1 with Watt	Alt 5	Alt 5 with Watt	Alt 1	Alt 1 with Watt	Alt 5	Alt 5 with Watt
70 Roseville	48,085	48,124	48,139	48,131	48,116	39	54	46	30
71 Rocklin – East	29,743	29,776	29,801	29,789	29,761	33	58	46	18
63 Rocklin – West	458	510	520	516	516	52	62	58	57
72 Lincoln	39,751	40,085	40,133	40,066	40,109	334	382	315	358
61 West Placer – North	2,120	2,219	2,253	2,223	2,247	99	132	103	127
62 West Placer – Central	122	130	130	128	129	7	8	6	7
73 West Placer – South	17,996	18,061	18,060	18,037	18,052	65	64	41	56
74 Sheridan	7,195	7,261	7,287	7,258	7,277	66	93	63	82
Subtotal Placer Co.	**145,471**	**146,165**	**146,324**	**146,149**	**146,205**	**695**	**853**	**679**	**735**
1 North Natomas	52,338	52,611	52,593	52,609	52,582	273	255	272	244
2 Rio Linda/Elverta	11,460	11,443	11,440	11,444	11,448	-17	-19	-16	-12
3 North Highlands	34,297	34,269	34,284	34,272	34,284	-28	-13	-25	-13
25 Antelope	15,977	15,979	15,974	15,973	15,977	1	-3	-4	-1
Subtotal Sacramento Co.	**114,072**	**114,302**	**114,291**	**114,298**	**114,290**	**230**	**219**	**227**	**219**
30 South Sutter – North	0	0	0	0	0	0	0	0	0
60 South Sutter – South	8,867	8,943	8,978	8,932	8,949	76	111	66	83
Subtotal Sutter Co.	**8867**	**8943**	**8978**	**8932**	**8949**	**76**	**111**	**66**	**83**
Total – Local Project Vicinity	**268,409**	**269,411**	**269,593**	**269,380**	**269,445**	**1,001**	**1,183**	**971**	**1,036**
Total – Remainder of Region	**1,035,303**	**1,034,528**	**1,034,403**	**1,034,550**	**1,034,548**	**-775**	**-900**	**-753**	**-755**

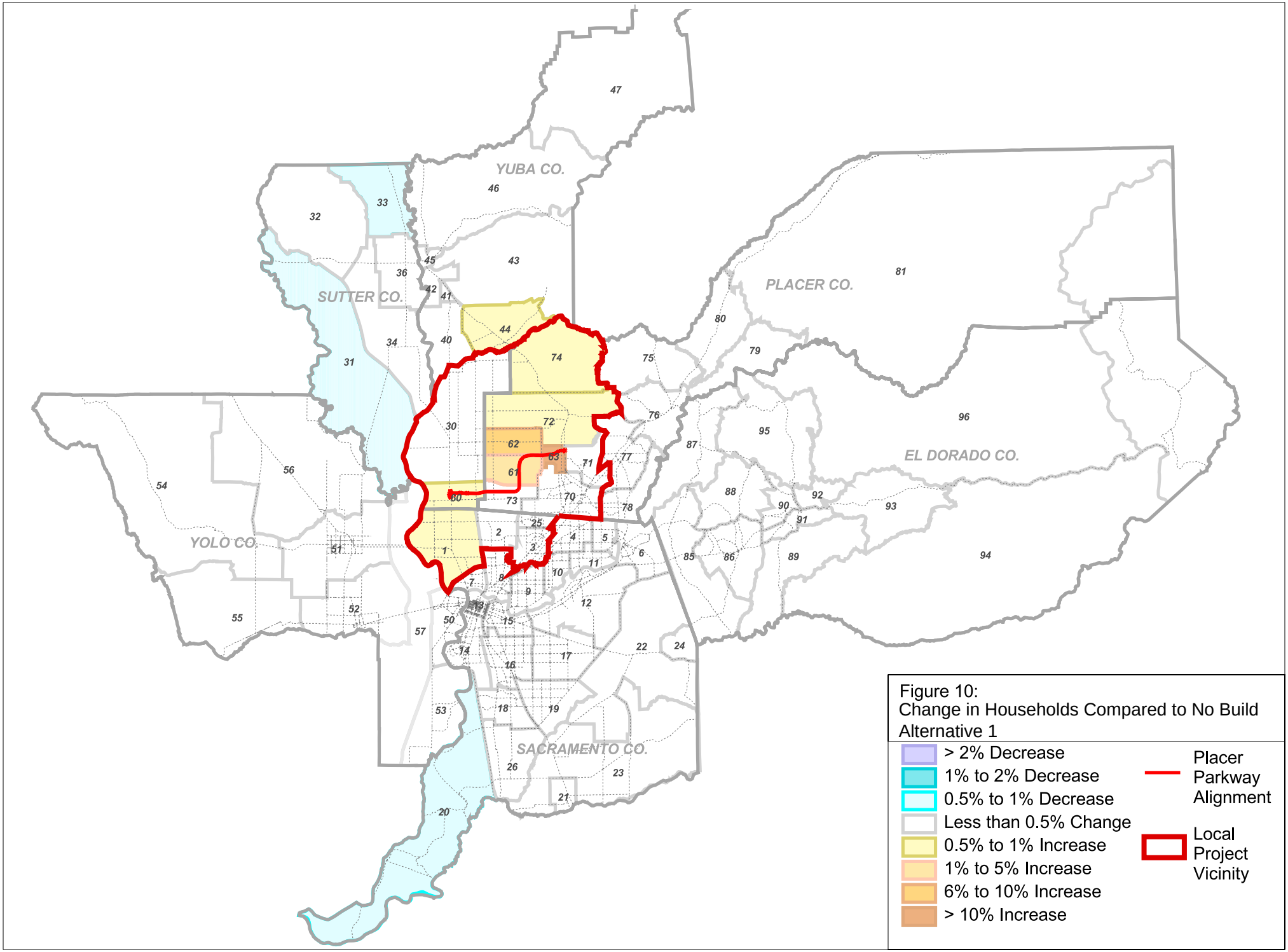
Source: MEPLAN runs by DKS, Michael Clay and John Abraham based on land availability from SACOG, 2007

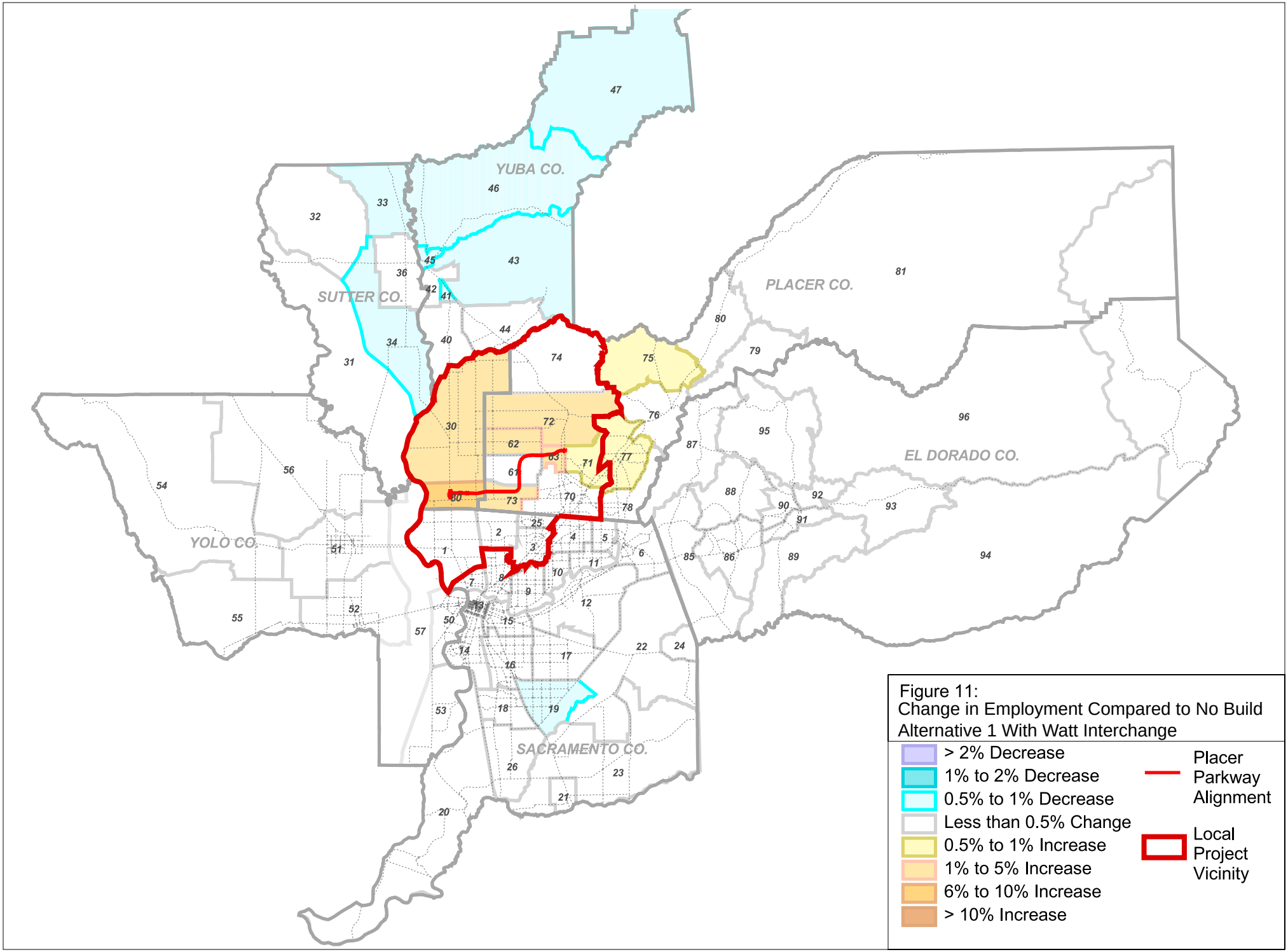
Table 8:
Change in 2040 Job Allocation in Local Project Vicinity by RAD due to Placer Parkway

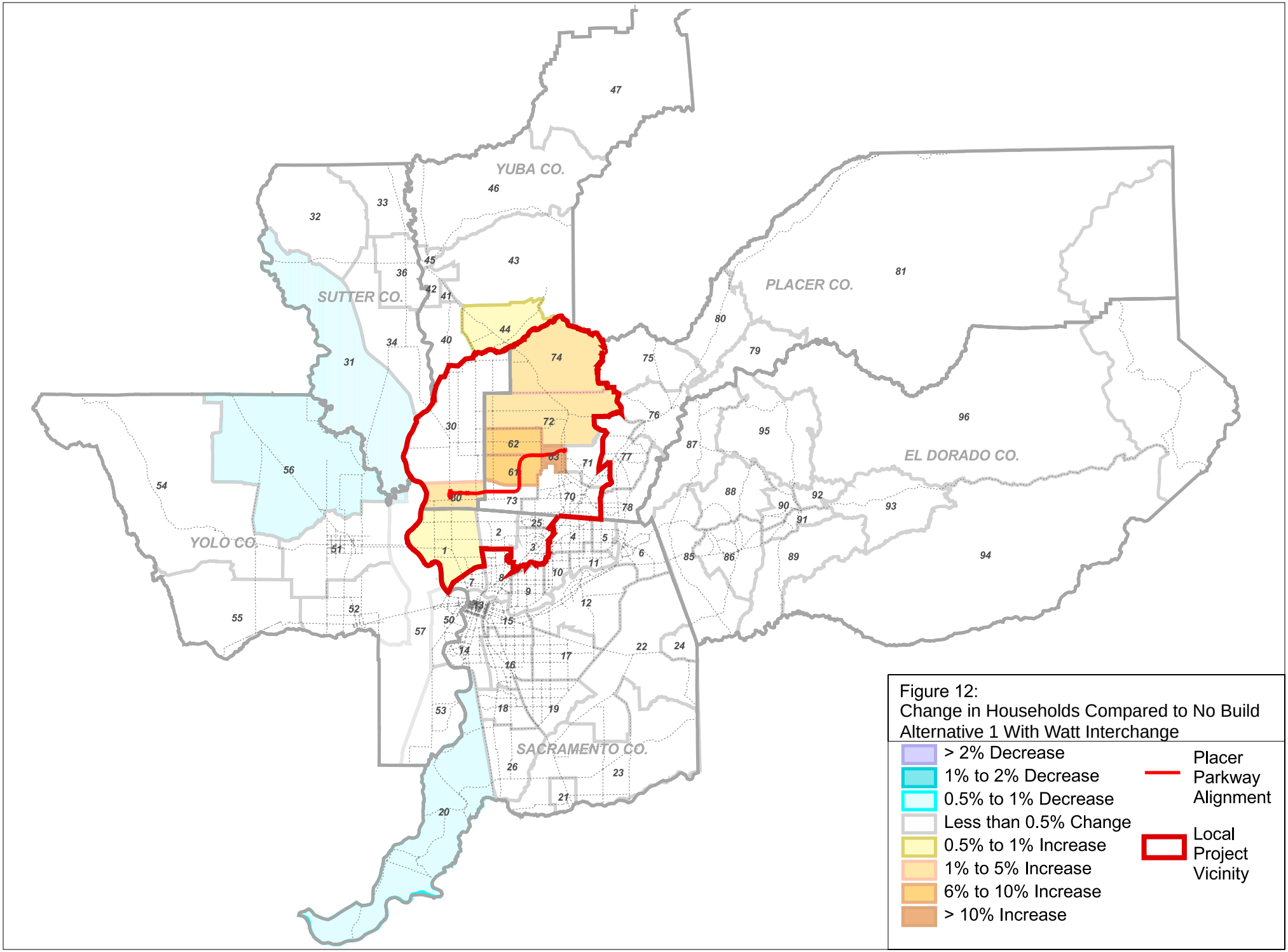
	2040 Households					Difference from No-Build			
	No-Build	Alt 1	Alt 1 with Watt	Alt 5	Alt 5 with Watt	Alt 1	Alt 1 with Watt	Alt 5	Alt 5 with Watt
70 Roseville	108,042	108,192	108,349	108,195	108,327	150	307	153	285
71 Rocklin – East	28,156	28,356	28,317	28,330	28,322	200	161	174	166
63 Rocklin – West	4,628	4,753	4,794	4,765	4,773	125	166	137	145
72 Lincoln	29,183	29,816	29,815	29,820	29,794	632	631	636	611
61 West Placer – North	9	9	9	9	9	0	0	0	0
62 West Placer – Central	1	1	1	1	1	0	0	0	0
73 West Placer – South	10,171	10,396	10,394	10,410	10,414	225	223	239	244
74 Sheridan	1,796	1,880	1,886	1,876	1,877	84	91	80	82
Subtotal Placer Co.	**181,985**	**183,401**	**183,565**	**183,404**	**183,517**	**1,416**	**1,580**	**1,420**	**1,533**
1 North Natomas	21,252	21,241	21,254	21,189	21,225	-12	2	-63	-28
2 Rio Linda/Elverta	12,811	12,879	12,861	12,844	12,865	68	50	33	54
3 North Highlands	68,854	68,970	68,984	68,926	68,985	116	131	73	131
25 Antelope	4,542	4,556	4,545	4,546	4,549	14	4	5	7
Subtotal Sacramento Co.	**107,459**	**107,645**	**107,645**	**107,505**	**107,623**	**186**	**186**	**46**	**165**
30 South Sutter – North	3,466	3,526	3,548	3,518	3,519	60	82	51	53
60 South Sutter – South	3,069	3,346	3,358	3,370	3,400	277	289	300	331
Subtotal Sutter Co.	**6536**	**6873**	**6906**	**6887**	**6919**	**337**	**371**	**351**	**383**
Total – Local Project Vicinity	**295,979**	**297,918**	**298,116**	**297,796**	**298,060**	**1,939**	**2,137**	**1,817**	**2,081**
Total – Remainder of Region	**1,451,834**	**1,450,118**	**1,449,929**	**1,450,194**	**1,449,977**	**-1,716**	**-1,905**	**-1,640**	**-1,856**

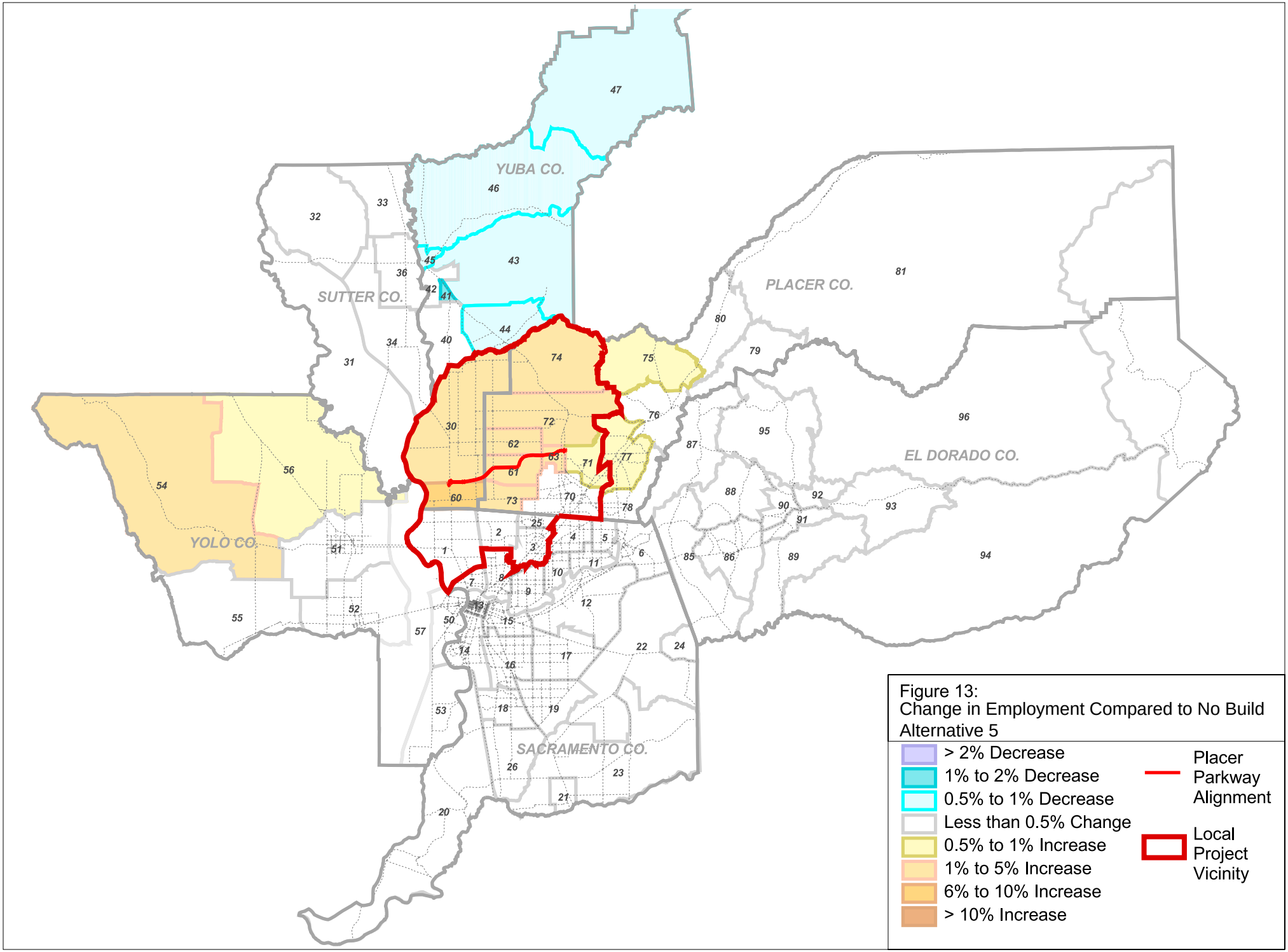
Source: MEPLAN runs by DKS, Michael Clay and John Abraham based on land availability from SACOG, 2007

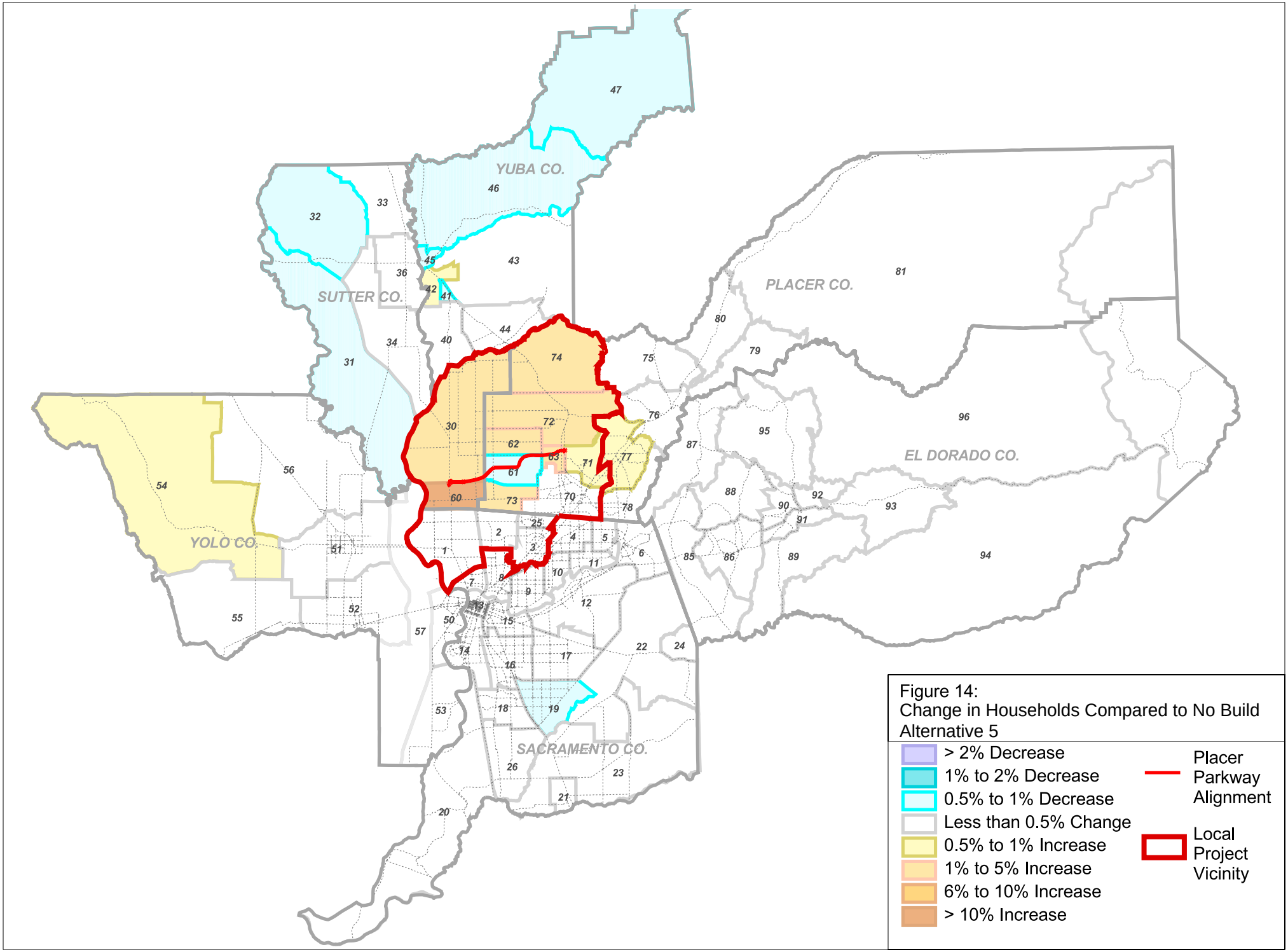

YUBA CO.
SUTTER CO.
PLACER CO.
EL DORADO CO.
YOLO CO.
SACRAMENTO CO.
Figure 9:
Change in Employment Compared to No Build Alternative 1
> 2% Decrease
1% to 2% Decrease
0.5% to 1% Decrease
Less than 0.5% Change
0.5% to 1% Increase
1% to 5% Increase
6% to 10% Increase
> 10% Increase
Placer Parkway Alignment
Local Project Vicinity

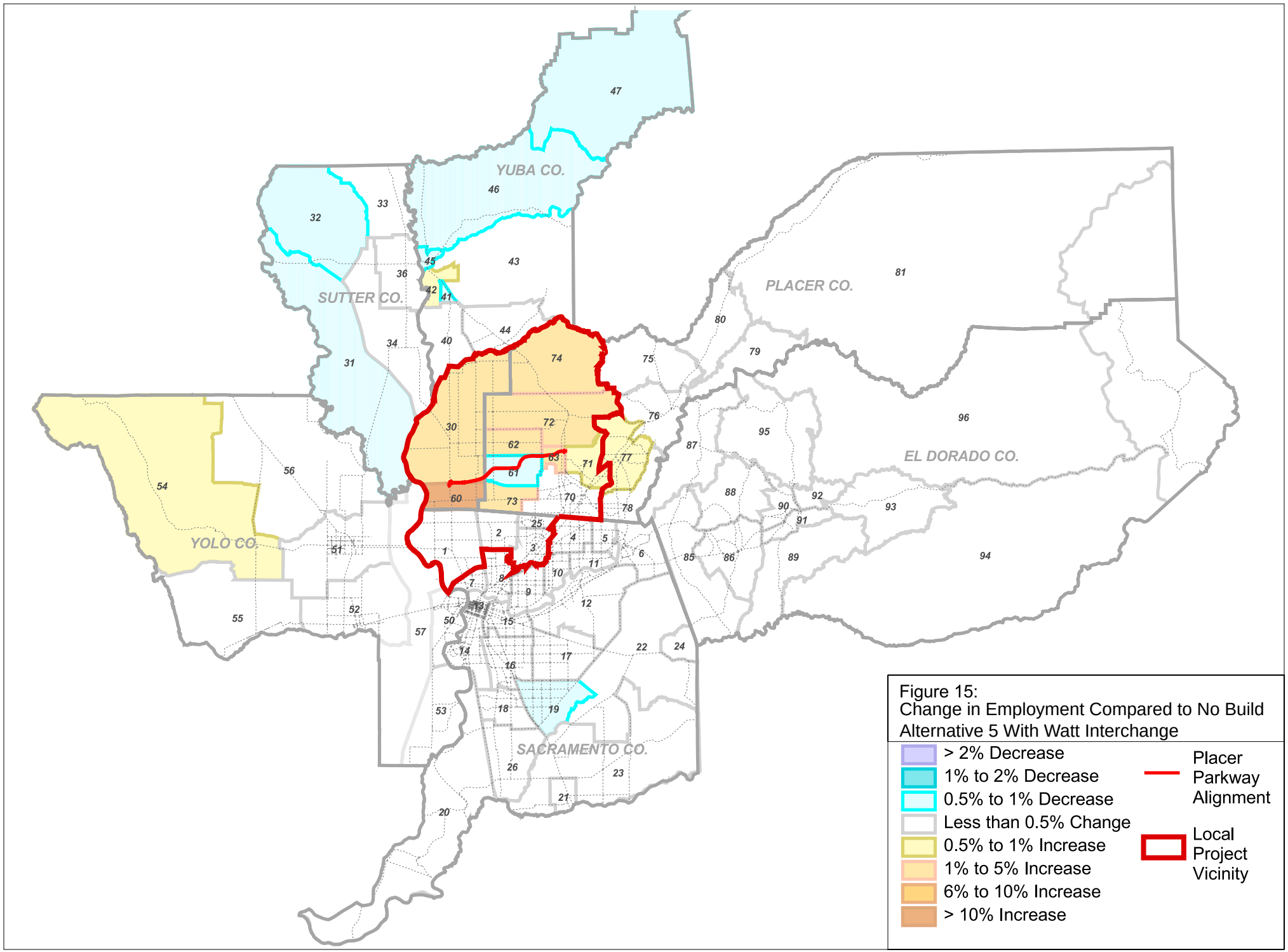

YUBA CO.
SUTTER CO.
PLACER CO.
EL DORADO CO.
YOLO CO.
SACRAMENTO CO.
Figure 10:
Change in Households Compared to No Build Alternative 1
> 2% Decrease
1% to 2% Decrease
0.5% to 1% Decrease
Less than 0.5% Change
0.5% to 1% Increase
1% to 5% Increase
6% to 10% Increase
> 10% Increase
Placer Parkway Alignment
Local Project Vicinity

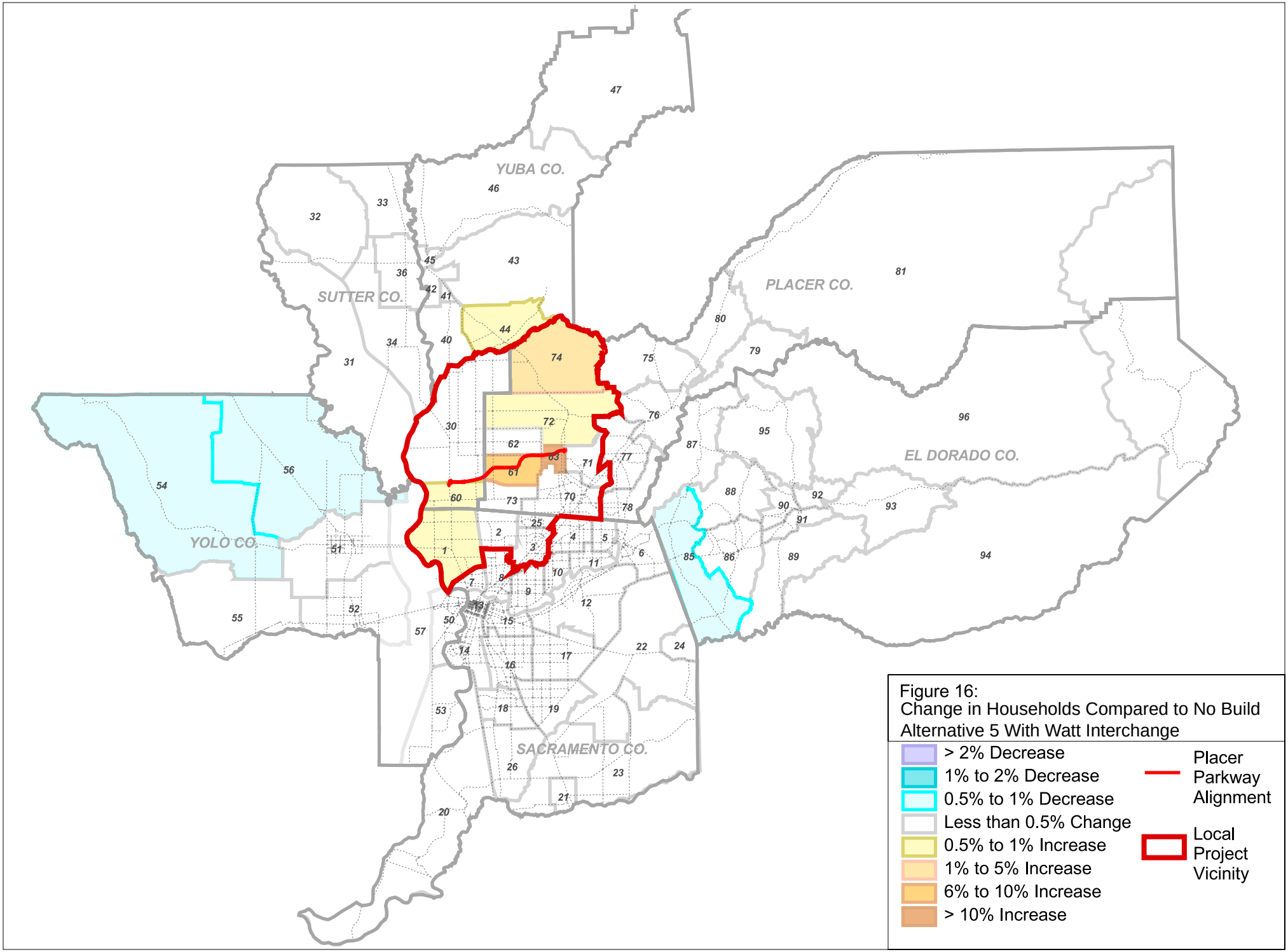

YUBA CO.
SUTTER CO.
PLACER CO.
EL DORADO CO.
YOLO CO.
SACRAMENTO CO.
Figure 11:
Change in Employment Compared to No Build
Alternative 1 With Watt Interchange
> 2% Decrease
1% to 2% Decrease
0.5% to 1% Decrease
Less than 0.5% Change
0.5% to 1% Increase
1% to 5% Increase
6% to 10% Increase
> 10% Increase
Placer Parkway Alignment
Local Project Vicinity


YUBA CO.
SUTTER CO.
PLACER CO.
EL DORADO CO.
YOLO CO.
SACRAMENTO CO.
Figure 12:
Change in Households Compared to No Build
Alternative 1 With Watt Interchange
> 2% Decrease
1% to 2% Decrease
0.5% to 1% Decrease
Less than 0.5% Change
0.5% to 1% Increase
1% to 5% Increase
6% to 10% Increase
> 10% Increase
Placer Parkway Alignment
Local Project Vicinity


YUBA CO.
SUTTER CO.
PLACER CO.
EL DORADO CO.
YOLO CO.
SACRAMENTO CO.
Figure 13:
Change in Employment Compared to No Build
Alternative 5
> 2% Decrease
1% to 2% Decrease
0.5% to 1% Decrease
Less than 0.5% Change
0.5% to 1% Increase
1% to 5% Increase
6% to 10% Increase
> 10% Increase
Placer Parkway Alignment
Local Project Vicinity


YUBA CO.
SUTTER CO.
PLACER CO.
EL DORADO CO.
YOLO CO.
SACRAMENTO CO.
Figure 14:
Change in Households Compared to No Build Alternative 5
> 2% Decrease
1% to 2% Decrease
0.5% to 1% Decrease
Less than 0.5% Change
0.5% to 1% Increase
1% to 5% Increase
6% to 10% Increase
> 10% Increase
Placer Parkway Alignment
Local Project Vicinity


YUBA CO.
SUTTER CO.
PLACER CO.
EL DORADO CO.
YOLO CO.
SACRAMENTO CO.
Figure 15:
Change in Employment Compared to No Build
Alternative 5 With Watt Interchange
> 2% Decrease
1% to 2% Decrease
0.5% to 1% Decrease
Less than 0.5% Change
0.5% to 1% Increase
1% to 5% Increase
6% to 10% Increase
> 10% Increase
Placer Parkway Alignment
Local Project Vicinity


YUBA CO.
SUTTER CO.
PLACER CO.
EL DORADO CO.
YOLO CO.
SACRAMENTO CO.
Figure 16:
Change in Households Compared to No Build
Alternative 5 With Watt Interchange
> 2% Decrease
1% to 2% Decrease
0.5% to 1% Decrease
Less than 0.5% Change
0.5% to 1% Increase
1% to 5% Increase
6% to 10% Increase
> 10% Increase
Placer Parkway Alignment
Local Project Vicinity

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PLACER PARKWAY
CORRIDOR PRESERVATION

DRAFT
NATURAL ENVIRONMENT STUDY

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR

June 29, 2007

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

Caltrans

FHWA

Prepared by

URS Corporation

for
South Placer Regional Transportation Authority
California Department of Transportation
Federal Highway Administration

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Draft

NATURAL ENVIRONMENT STUDY

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR
Placer and Sutter Counties, California

June 2007

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LIST OF ACRONYMS

Caltrans	California Department of Transportation
CARP	County Aquatic Resources Plan
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CNPS	California Native Plant Society
CWA	Clean Water Act
dbh	Diameter at breast height (~4 feet)
ESA	Endangered Species Act
ESU	Evolutionary Significant Unit
FHWA	Federal Highway Administration
ft	foot/feet
FWS	Fish and Wildlife Service
GIS	geographic information systems
HCP/NCCP	Natural Communities Conservation Plan/Natomas Basin Habitat Conservation Plan
km	kilometer(s)
KP	kilometer post
LEDPA	Least Environmentally Damaging Practicable Alternative
m	meter(s)
mi	mile(s)
MOU	Memorandum of Understanding
NBC	Natomas Basin Conservancy
NBHCP	Natomas Basin Habitat Conservation Plan
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA Fisheries	National Marine Fisheries Service
PCCP	Placer County Conservation Plan
PCTPA	Placer County Transportation Planning Agency
PM	post mile
SAC	Study Advisory Committee
SACOG	Sacramento Council of Governments
SOI	Sphere of Influence
SPRTA	South Placer Regional Transportation Authority
SR	State Route
TAZ	traffic analysis zone
Tier 1 EIS/EIR	Tier 1 Environmental Impact Statement/Program Environmental Impact Report
U.S. EPA	U.S. Environmental Protection Agency
UPRR	Union Pacific Railroad
USCOE	U.S. Army Corps of Engineers
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service

NATURAL ENVIRONMENT STUDY
PLACER PARKWAY CORRIDOR PRESERVATION TIER 1 EIS/ PROGRAM EIR

1.0 INTRODUCTION

1.1 TIER 1 EIS/PROGRAM EIR

The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the South Placer Regional Transportation Authority (SPRTA) propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking State Route (SR) 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1).

The planning for Placer Parkway involves two phases: (1) the present action, selection of a corridor (titled the Placer Parkway Corridor Preservation Project), and (2) the future selection of a precise alignment within the corridor and a decision whether or not to build the Parkway. If a build alternative is selected and pursued after the second phase, the ultimate Placer Parkway project would be constructed and operated. Throughout this document the term "Proposed Action" is used to describe the selection of a corridor to preserve. The document generally uses the term "Parkway" to mean the ultimate roadway, including construction and operation, except where context indicates otherwise.

As stated, the action to be considered based on this Tier 1 analysis involves only the selection of a corridor to preserve, which has limited environmental effects by itself. However, the ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. In order to describe the effects of the ultimate Placer Parkway project to the greatest extent feasible at this early stage, the Tier 1 EIS/EIR also addresses the potential effects of construction and operation of the future roadway. This discussion of the roadway is necessarily limited, however, because only the general concepts of the roadway design and location are known at this time. If a corridor is selected and preserved at Tier 1, a subsequent Tier 2 analysis will evaluate the Parkway itself in detail—the specific roadway "footprint" within the selected corridor, including construction and operation of the roadway.

Since the inception of the environmental planning process in 2003, the Placer County Transportation Planning Agency (PCTPA) has been committed to developing Placer Parkway following an ecosystem approach, as described in recent guidance from the U.S. Department of Transportation, called *Eco-Logical: An Ecosystem Approach to Developing Infrastructure Projects* (Brown, 2006).

Eco-Logical presents a guideline for mitigating infrastructure projects with the goal of preserving ecosystems, as opposed to individual resources, while facilitating the public projects that encourage economic growth and stabilize communities through interagency cooperation. The document was approved by many federal agencies including, but not limited to, U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Transportation (USDOT), and the U.S. Environmental Protection Agency (U.S. EPA). The guidelines for ecosystem mitigation proposed in the document stress the importance of conserving large-scale, multi-resource areas, reducing habitat fragmentation, following through with negotiated mitigation measures and increasing public and stakeholder involvement at key stages throughout projects. Examples of the ecosystem approach are highlighted in the following sections: increased transparency in communication with stakeholder groups and agencies (Section 3.3); protection of larger scale, multi-resource ecosystem and reduction of habitat fragmentation (Section 5.5);

and predictability, including the knowledge that commitment made by all agencies will be honored (Section 6.1).

1.2 CORRIDOR SELECTION AND PRESERVATION

The concept for the Placer Parkway is over a decade old. Placer County's 1994 General Plan depicts a "plan line" for it. Two planning studies helped to refine the concept:

- DKS Associates, 2000, Placer Parkway Interconnect Study/Conceptual Plan
- DKS Associates, 2001, Project Study Report (Project Development Support) for Placer Parkway

Placer Parkway is cited as a high priority regional transportation project by the Sacramento Area Council of Governments (SACOG) 2025 Metropolitan Transportation Plan and the 2027 Placer County Regional Transportation Plan. The project vicinity and surrounding area include some of the fastest growing communities in the Sacramento region. A number of large urban development proposals are being considered by Placer and Sutter counties. New development is expected to add a significant amount of residential, commercial, industrial, and educational uses.

A 2½-year screening and public outreach program that involved local jurisdictions (the Technical Advisory Committee); regional, state, and federal agencies; stakeholder groups that included representatives from planning and public works departments of all affected cities and counties, environmental, business, agricultural, development, and homeowner interests (the Study Advisory Committee); and elected officials (the Policy Advisory Committee), resulted in the identification of five potential corridors for the Parkway. The Tier 1 Environmental Impact Statement/Program Environmental Impact Report will analyze these five corridor alternatives along with a No-Build Alternative.

Other potential transportation modes such as bus rapid transit may be developed in the corridor in the future, although they are not proposed as part of the current project. The corridor for the Placer Parkway is to vary from approximately 500 feet wide in the Eastern and Western segments to approximately 1,000 feet wide in the Central Segment. Depending upon the alternative, the corridor's length ranges from a minimum of 14.2 miles to a maximum of 16.2 miles. The selected corridor would contain the roadway, including the median, travel lanes, shoulder, associated access ramps and a no-development buffer zone.

Corridor acquisition may not be completed until after Tier 2, as funding becomes available. Portions of the selected corridor will be preserved as a no-development buffer zone. The buffer would be maintained as a zone where development is either not permitted or is severely restricted. This is intended to restrict access to the proposed interchanges, protect the rural character of agriculturally designated areas in the vicinity of the Parkway as far as possible subject to future development, and to maximize opportunities to incorporate adjacent sensitive areas. It is intended that the buffer would be owned and managed in the future to achieve these objectives. For subsequent Tier 2 (project-level) environmental reviews, the size of this buffer zone could be considered flexible for agriculturally designated land undergoing urban development. In the Tier 2 environmental review, the specific buffer size and location would be determined. This determination would be based on performance standards on a case-by-case basis, depending on the land use needs of future approved development, and taking into account the primary objective of restricting future access to the Parkway.

Project proponents are considering employment of several land management and control mechanisms in order to ensure that the buffer would be effectively maintained as an area where development would either not be permitted, and where construction of any additional access onto the Parkway would not be allowed. These mechanisms could include land use controls, land purchase/leases, general plan

amendments, zoning/overlay zoning changes, covenants/deed restrictions, agricultural/conservation easements, urban growth boundaries, etc. "Layering" or using several of these methods would provide more assurance the buffers would be permanent, or at least more difficult to undo.

1.3 TECHNICAL STUDY OBJECTIVE

This Natural Environment Study has been prepared to support the Tier 1 Environmental Impact Statement/Program Environmental Impact Report. It presents a Tier 1/Program level assessment of potential impacts related to natural resources for five corridor alternatives and the No-Build Alternative as described in Chapter 2.

The scope of work performed for this report is based on the Caltrans Natural Environment Study Template (Caltrans, 2005a), as modified for purposes of Tier 1/Program analysis by agreement of the California Department of Transportation (Caltrans), the Caltrans Highway Design Manual (HDM) (Caltrans, 2001b), and the Caltrans Environmental Handbook (Caltrans, 2005b) on preparing a Natural Environment Study. In addition, the evaluation considered guidance from the Federal Highway Administration (FHWA), Environmental Checklists for Draft and Final Environmental Documents (FHWA, 1998a; FHWA, 1998b).

This report is organized as follows:

Chapter 2: The Proposed Action
Chapter 3: Study Methods
Chapter 4: Environmental Setting
Chapter 5: Biological Resources, Discussion of Impacts and Mitigation
Chapter 6: Regulatory Requirements and Additional Analyses
Chapter 7: References

This report also includes figures and tables, which show the project location, each build alternative, and pertinent technical information prepared to evaluate the build alternatives.

Throughout this document, the Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report is referred to as the Tier 1 EIS/EIR.

2.0 THE PROPOSED ACTION

The Proposed Action for the Placer Parkway Corridor Preservation Project is to select and preserve a 500- to 1,000-foot-wide corridor in the project study area, within which the future four- or six-lane Placer Parkway may be constructed. The ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction, and operation of the Parkway. Although the action taken at Tier 1 on the Placer Parkway Corridor Preservation Project is limited, the underlying project whose effects are studied in this document is the Placer Parkway. To the extent feasible at this early stage, the Tier 1 EIS/EIR addresses the potential effects of construction and operation of the future roadway.

2.1 THE PROJECT STUDY AREA

The project study area is an area of approximately 33,460 acres located in Placer and Sutter Counties, with a small section located in Sacramento County (see Figures 1-1 and 2-1). It extends from SR 70/99 in the west to SR 65 in the east, with the northern boundary extending to Sunset Boulevard West and the southern boundary located adjacent to Baseline and Riego roads. The portion of the study area in Sacramento County is located in the extreme southwest corner of the study area and does not include any of the proposed corridor alignment alternatives.

For the purposes of the analysis the study area is divided into three segments:

- Western Segment: the Western Segment extends from SR 70/99 to Pleasant Grove Road in Sutter County.
- Central Segment: the Central Segment extends from Pleasant Grove Road in Sutter County to approximately 2,300 feet north of Pleasant Grove Creek in Placer County.
- Eastern Segment: the Eastern Segment extends from approximately 2,300 feet north of Pleasant Grove Creek to SR 65 in Placer County.

2.2 CORRIDOR ALTERNATIVES

The following subsections describe the corridor alternatives, which are depicted on Figure 2-1, and are numbered according to location from south to north in the study area.

2.2.1 The No-Build Alternative

In this alternative, the project would not be implemented. A Placer Parkway corridor would not be selected/preserved, and the future Placer Parkway would not be constructed.

2.2.2 Alternative 1 – the Red Alternative

Alternative 1 would extend from SR 70/99 approximately ½ mile north of Riego Road, eastward approximately 1 mile north of Baseline Road to approximately Watt Avenue, proceeding north and transitioning in an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 16.2 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.3 Alternative 2 – the Orange Alternative

Alternative 2 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed northeast, then in a northerly direction south of Pleasant Grove Creek, transitioning to an easterly direction before it reaches Sunset Boulevard West, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.4 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.4 Alternative 3 – the Blue Alternative

Alternative 3 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed north along the Sutter/Placer County Line, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.6 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.5 Alternative 4 – the Yellow Alternative

Alternative 4 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.3 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.2.6 Alternative 5 – the Green Alternative

Alternative 5 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 4,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.2 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.3 PARKWAY DESIGN ASSUMPTIONS

Although the Parkway would be designed and construction-level impacts analyzed during Tier 2, for the purpose of this report and the Tier 1 EIS/Program EIR, several assumptions have been made about potential design and configuration concepts. These assumptions would be subject to further development and refinement, and specific decisions about design of the roadway would be made during the Tier 2 process. For example, the number, location, and design of over-crossings would be determined at the time of final Parkway design, in consultation with local jurisdictions. The following sections outline assumptions for the future roadway.

Preliminary costs estimates for the Parkway range from $600 to $650 million (2005 dollars). This includes costs for right-of-way, design, construction, and environmental mitigation for the four- to six-lane facility. The funding situation has spurred interest in exploring other more creative funding options.

These include a county-wide sales tax, more developer contributions, and tolling facilities. The Technical Report and Tier 1 EIS/EIR do not make any assumptions about funding sources.

2.3.1 Conceptual Roadway Configuration

The Parkway would be a high-speed, limited access roadway. Depending upon the timing of adjacent urban development proposals and funding, the Parkway may be designed and constructed incrementally in segments. These could be built as a four-lane (interim) roadway until a six-lane segment is warranted, or as the full six-lane facility. A preliminary conceptual cross section (see Figure 2-2) was developed to facilitate the Tier 1/Program evaluation. It illustrates both four-lane (two lanes in both directions) and six-lane (three lanes in both directions) configurations within the 500- to 1,000-foot corridor widths. The roadway would include a central median approximately 100 to 134 feet wide, depending on local conditions and reflecting Caltrans safety guidance. The Parkway would be designed and constructed to Caltrans standards, unless specific design exceptions are granted. For the purposes of the Tier 1 EIS/Program EIR, the Parkway's opening year is assumed to be 2020.

Access would be provided at the western and eastern ends of the Parkway, where existing areas of dense development are already located or planned. Access would be restricted for the 7-mile Parkway Central Segment. The analysis assumes no interchanges in this segment. (A possible future extension of Watt Avenue or another nearby roadway may be considered in the Central Segment as a separate project.)

2.3.2 Conceptual Roadway Elevation

As the study area is comprised of relatively flat terrain, the majority of the future Placer Parkway is assumed to be at-grade. As necessary, bridges would be used to would span certain features and improvements such as the Union Pacific Railroad tracks along Industrial Boulevard, Pleasant Grove Creek, the Natomas East Main Drainage Canal, and floodplains. Generally, the approximate height of bridges is expected to range from 10 feet above streams to 30 feet above the railroad. Culverts would be used at smaller creek crossings as appropriate, depending on local conditions and permit requirements. The Pleasant Grove Creek floodplain would be crossed by bridges (one in each direction) supported by abutments located approximately 800 feet on either side of the creek to avoid the riparian habitat associated with the creek.

Within the 100-year floodplain, the roadway would be elevated such that the bottom of any new bridges would be above the 100-year water surface elevation. The roadway support structures and bridges would be designed to minimize environmental impact, not impede stream and flood flows, and allow for the unobstructed passage of potential future streamside uses such as maintenance equipment, bikeways, or trails.

Throughout the project study area, the assumptions for creek and floodplain crossings include typical engineering specifications:

- a maximum bridge span of approximately 150 feet;
- for bridge spans exceeding 150 feet, assume one column, approximately 4 feet in diameter, every 150 feet; and
- all columns placed outside of the ordinary high water (OHW) level.

To maintain existing and future local roadway connectivity (for emergency access, farming operations, and community access), over-crossings would be constructed to convey traffic over the Parkway. These

over-crossings would not connect to the Parkway. Parkway access would be via the interchanges described below.

2.3.3 Interchange Concepts

The analysis assumes that the location of interchanges (see Figure 2-1) is as follows.

- SR 70/99 (at ½ mile north of Riego Road or at Sankey Road)
- One or two locations to be determined in southern Sutter County
- Fiddyment Road
- Foothills Boulevard
- SR 65 at Whitney Ranch Parkway

The following discussion outlines concepts and assumptions for the six interchanges that could potentially serve Placer Parkway.

2.3.3.1 Western Segment

Within the Western Segment of the Parkway, a high-speed, freeway-to-freeway type interchange would connect the Parkway with SR 70/99 at one of following potential locations depending on the project alternative (see Section 2.2). Placer Parkway would terminate at SR 70/99.

- **Placer Parkway/SR 70/99 Interchange at North of Riego Road.** This alternative concept uses "braided" ramps to eliminate weaving problems or conflicts with the future SR 70/99 at Riego Road interchange being developed by Sutter County and Caltrans.

- **Placer Parkway/SR 70/99 Interchange at Sankey Road.** Under this alternative concept, the existing two-lane Sankey Road would be realigned to the south of Placer Parkway and the proposed freeway-to-freeway interchange, extending from approximately ¼ mile west of SR 70/99 to approximately ¼ mile east of the Union Pacific railroad tracks. There would be no direct access to SR 70/99 or Placer Parkway from the realigned Sankey Road.

Depending on the final alignment selected, one or two additional interchanges would also be located in south Sutter County. Conceptual locations are identified for purposes of this Tier 1/Program analysis (see Figure 2-1). The actual location of these interchanges would be developed in the Tier 2 phase, based on Sutter County requirements.

2.3.3.2 Central Segment

Within the Central Segment of the Parkway, there would not be any access proposed as part of the project in the 7-mile segment between Fiddyment Road and Pleasant Grove Road. Please see Section 2.4 regarding a potential connection to a future extension of Watt Avenue (Figure 2-3) which could be proposed and constructed by others in the Central Segment; such an interchange is not part of the Placer Parkway.

2.3.3.3 Eastern Segment

Within the Eastern Segment of the Parkway, a signalized high-speed freeway-to-freeway and local access interchange would connect the Parkway to SR 65 at Whitney Ranch Parkway (Figure 2-1). From SR 65 eastward Placer Parkway would terminate and become Whitney Ranch Parkway east of the SR 65 exit ramp intersection. Traffic signals would be provided at the exit ramp terminals. This interchange would

be approximately 1 mile north of a planned SR 65/Sunset Boulevard interchange and 1.2 miles south of the existing Twelve Bridges interchange.

As part of this interchange, auxiliary lanes would be required on SR 65 in both directions to enhance traffic operations on the north side of the future SR 65/Sunset Boulevard interchange. The southbound SR 65 exit-ramp at Sunset Boulevard is being designed to accommodate an additional auxiliary lane required for the future Placer Parkway/Whitney Ranch Parkway interchange to minimize the reconstruction of this ramp in the future. Within the Eastern Segment of the Parkway, from SR 65 westward, two interchanges with local roadways would be constructed, one at Foothills Boulevard and one at Fiddyment Road, as depicted on Figure 2-1.

The future interchange on Placer Parkway at Fiddyment Road would be located near the existing intersection of Fiddyment Road and Sunset Boulevard West. To provide acceptable traffic operations, additional distance needs to be provided between the Fiddyment Road/Sunset Boulevard West intersection and the Fiddyment Road/Placer Parkway westbound off-ramp intersection. Therefore, Sunset Boulevard West will need to be realigned to the north as it nears Fiddyment Road.

2.3.4 Landscaping Concept

For the purposes of this environmental analysis, preliminary landscaping concepts have been developed for Placer Parkway. These are entirely conceptual and would be subject to further refinement during the Tier 2 environmental process. It is anticipated that landscaping would be used to reflect local topography and vistas in the study area and complement the varying character of land adjacent to the Parkway corridor. Landscape design would vary within the Parkway's three segments depending on corridor width and type and density of surrounding land uses. Landscaping would be used within the median and the Parkway buffer zone to enhance the aesthetics of the Parkway, and would be used to provide screening and enhance local and long distance views. Where appropriate, more concentrated plantings would be considered to buffer the Parkway from future adjacent land uses that may be incompatible with the Parkway concept, and to prevent unwanted intrusion into shoulder or median areas. Landscape design would likely include a mix of compatible native and non-native plants that may require some irrigation. Wherever possible, native plant species would be used in line with Caltrans policy. Where possible and depending on availability, feasibility and cost, recycled water would be used for irrigation.

During a future design phase, lighting elements would be designed for safety and would consider the proposed landscaping plan in order to minimize potential aesthetic impacts (e.g., shielding lighting elements, using lower-voltage lighting, and proposing lighting fixtures that conform with the visual character of the area).

2.4 POTENTIAL WATT AVENUE INTERCHANGE

The Placer County General Plan includes a number of new roadways that may be needed in Placer County, according to travel demand forecasts. An extension of Watt Avenue to Placer Parkway (from Baseline Road to a new Blue Oaks Boulevard Extension) is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto the Placer Parkway via a new interchange (see Figure 2-3). A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. It would be subject to independent future environmental analysis and review and is not being fully evaluated within this Technical Report or Tier 1 EIS/Program EIR. However, the connection of Placer Parkway to a potential Watt Avenue extension could affect future travel patterns in the area, including use of the Parkway. Based on direction from previous planning studies, this Technical Study and the Tier 1 EIS/Program EIR will evaluate each corridor alternative with and without a Watt Avenue interchange. This evaluation does not predetermine the construction or alignment of a potential

Watt Avenue or nearby roadway extension or the precise locations of any potential interchanges to Placer Parkway.

2.5 AGENCY PERMITS AND APPROVALS

The Proposed Action would preserve a preferred corridor for a future transportation facility. In the future, permits and approvals would be obtained from appropriate agencies prior to construction of the Parkway. These permits and approvals may include specific design or mitigation requirements that would be incorporated into the project.

2.6 SUBSEQUENT TIER 2 INFORMATION

As noted earlier, the design and construction of Placer Parkway—including its interchanges and over-crossings, and ancillary features such as stream crossings, safety devices, stormwater management structures, and similar improvements—would be evaluated in a subsequent Tier 2 environmental review process once a corridor has been identified. Chapter 6 provides more detailed information regarding Tier 2 studies.

3.0 STUDY METHODS

3.1 REGULATORY SETTING

Both NEPA and CEQA require consideration of impacts to biological resources. A general discussion of NEPA and CEQA requirements is provided in Chapter 1 of this Tier 1 EIS/EIR. In addition, other types of legislation address biological resources. Relevant laws and guidelines are described below.

Pre-project coordination among agencies and stakeholders has been extensive and is modeled after the *Eco-Logical* approach described by Brown (2006).

3.1.1 Federal Regulations

Federal regulations that apply to biological resources include the federal Endangered Species Act (ESA), Sections 404 and 401 of the federal Clean Water Act, and the Migratory Bird Treaty Act.

3.1.1.1 Federal Endangered Species Act

The federal ESA prohibits take of endangered or threatened species. Take is defined to include harassing, harming (including substantially modifying or degrading habitat), pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (16 USC 1532, 50 CFR 17.3). Actions that result in take can result in civil or criminal penalties. If a proposed project would result in a take of a federally listed species, the Applicant is required to acquire a take permit under Section 10 or a biological opinion under Section 7 of the Act. A Section 7 consultation and biological opinion is typically pursued through the nexus of the USCOE as the lead federal permitting agency (see below).

3.1.1.2 Sections 404 and 401 of the Federal Clean Water Act

The USCOE and the U.S. EPA regulate the discharge of dredged and fill material into "waters of the United States" (waters) under Section 404 of the Clean Water Act. USCOE jurisdiction over nontidal waters encompasses navigable waters and their tributaries, and wetlands adjacent to these waters that will either be directly or indirectly affected by a proposed project.

Section 401 of the Clean Water Act requires any Applicant receiving a Section 404 permit from the USCOE to obtain a Section 401 water quality certification from the state. The Central Valley Regional Water Quality Control Board (CVRWQCB) is the state agency responsible for issuance of water quality certifications in West Placer County. A water quality certification is issued when an Applicant can demonstrate that a project will comply with state water quality standards and other aquatic resource protection requirements. Conditions of the 401 Certification become conditions of the federal permit.

3.1.1.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 USC § 703 712) prohibits the take of any migratory bird. Under this act, it is unlawful to take, possess, import, export, transport, sell, offer for sale, purchase, or barter any migratory bird, or any part, nest, or eggs of any such bird except under the terms of a valid permit. Under this act, take is defined as the action of or attempt to pursue, hunt, shoot, collect, or kill.

3.1.2 State Regulations

3.1.2.1 California Endangered Species Act

The California ESA is similar to the federal ESA but pertains only to state threatened and endangered species. The California ESA requires state agencies to consult with the California Department of Fish and Game (CDFG) when preparing documents under CEQA to ensure that the actions of the state lead agency do not jeopardize the continued existence of listed species. The California ESA prohibits take of state-listed plant and animal species. CDFG may authorize take if there is an approved habitat management plan or management agreement that avoids or compensates for impacts on listed species. The California ESA requires agencies to consult with the CDFG on projects or actions that could affect listed species, directs the CDFG to determine whether jeopardy to listed species would occur, and allows the CDFG to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. Agencies can approve a project that affects a listed species if the agency determines that there are overriding considerations; however, the agencies are prohibited from approving projects that would cause the extinction of a listed species.

Mitigating impacts to state-listed species involves avoidance, minimization, and compensation. Unavoidable impacts on state-listed species are typically addressed in a detailed mitigation plan prepared in accordance with CDFG guidelines. The CDFG exercises authority over mitigation projects involving state-listed species, including those resulting from CEQA mitigation requirements.

3.1.2.2 Fish and Game Code Section 1600: Streambed Alteration Agreements

Under Chapter 6 of the CDFG Code, CDFG is responsible for the protection and conservation of the state's fish and wildlife resources. Section 1600 et seq. of the Code defines the responsibilities of CDFG and the requirements for public and private project proponents to obtain an agreement to "divert, obstruct, or change the natural flow or bed, channel or bank of any river, stream, or lake designated by the department in which there is at any time an existing fish or wildlife resources or from which those resources derive benefit, or will use material from the streambeds designated by the department." Public agencies file 1602 applications, and private parties file 1603 applications for streambed alteration agreements.

The regional office of the CDFG typically has responsibility for issuing streambed alteration agreements in coordination with the local warden and the unit biologist. These agreements usually include specific requirements related to construction techniques and remedial and compensatory measures to mitigate for adverse impacts. CDFG may also require long-term monitoring as part of an agreement to assess the effectiveness of the proposed mitigation.

3.1.2.3 Native Plant Protection Act

The Native Plant Protection Act of 1977 designates rare and endangered plants and provides specific protection measures for identified populations.

3.1.2.4 Porter-Cologne Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) of 1970 grants the State Water Resources Control Board (SWRCB) and its regional offices power to protect water quality and is the primary vehicle for implementation of California's responsibilities under Section 401 of the federal Clean Water Act. The Porter-Cologne Act grants the SWRCB authority and responsibility to adopt plans and policies, regulate discharges to surface and groundwater, regulate waste disposal sites, and require cleanup of discharges of hazardous materials and other pollutants.

3.1.3 General Plans and Policies

3.1.3.1 Sutter County General Plan

The Sutter County General Plan, which was adopted in 1996, contains policies to preserve open space, agricultural and natural resources, the most relevant of which are listed below.

Goal 4.B To protect wetland and riparian areas throughout Sutter County.

Goal 4.C To protect and enhance habitats that support fish and wildlife species.

Goal 4.D To preserve and protect the vegetation resources of Sutter County.

Goal 4.E To conserve, protect and enhance open space lands and natural resources in Sutter County.

Specific policies and implementation objectives related to the achievement of each of these goals are included in the General Plan.

3.1.3.2 Placer County General Plan and Legacy Open Space and Agricultural Conservation Program

The Placer County General Plan, adopted in 1994, contains policies to preserve open space, agricultural and natural resources, the most relevant of which are listed in this section. In December 1997, the Placer County Board of Supervisors directed the Planning Director to initiate a program to provide for long-term preservation of open space in Placer County. In April 1998, the Board of Supervisors formed a citizen advisory committee and initiated an open space implementation program in accordance with specified goals, elements, and measures of success. This program became the Placer Legacy Program. The specific objectives of the Placer Legacy Program are to:

- Maintain a viable agricultural segment of the economy;
- Conserve natural features and necessary access to a variety of outdoor recreation opportunities;
- Retain important and historic areas;
- Preserve the diversity of plant and animal communities;
- Protect Endangered and other special-status plant and animal species;
- Separate urban areas into distinct communities; and
- Ensure public safety.

Based on input and analysis from the Scientific Working Group, the Citizens Advisory Committee and the public, the County identified guidelines for preparation of a joint Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP). These guidelines have been incorporated into the Placer Legacy Program's implementation documents, the Placer Legacy Program Summary Report (June 2000), and the Placer Legacy Program Implementation Report (June 2000).

The parties listed above and other public agencies have entered into the "Framework Agreement regarding the Planning, Development and Implementation of the Placer Legacy Program," which established a framework for cooperation and collaboration among state and federal agencies and local governments in the development and implementation of the Placer Legacy Program. It describes opportunities for partnership and collaboration among the County, cities in the County, the Placer County Water Agency, and the state and federal regulatory and land management agencies in the development of the Placer Legacy Program. At present, the Placer Legacy Program is not complete or active.

3.1.4 Placer County Conservation Plan

The PCCP is a proposed strategy and regulatory framework designed to guide and streamline permitting for large-scale development in western Placer County over the next 50 years while establishing a network of conservation areas to protect and conserve sensitive species and natural communities. The PCCP covers approximately 221,000 acres in western Placer County, including important natural communities such as stream environments, vernal pool grasslands, grasslands, blue oak and valley oak woodlands, and agricultural lands such as rice. Many stream and wetland resources found in the western part of Placer County are regulated under the federal Endangered Species Act (ESA) and the Clean Water Act (CWA) because they provide aquatic habitat for threatened and endangered species. The goal of combining these regulatory frameworks is a streamlined permitting process and greater environmental benefits. SPRTA has indicated its intention to become a participating agency with the Parkway as a covered activity.

3.1.4.1 The Natomas Basin Habitat Conservation Plan

A large portion of the Western Segment of the study area falls within Sutter County and northern Sacramento County. These areas are part of a geographic region called the Natomas Basin. The Natomas Basin Habitat Conservation Plan (NBHCP) was established in 1997 as a multi-species conservation program to mitigate the expected loss of habitat values and incidental take of protected species that would result from urban development, operation of irrigation and drainage systems, and rice farming. The Natomas Basin Conservancy (NBC) manages the implementation of the NBHCP.

3.1.4.2 Placer County Tree Ordinance

The Placer County Tree Ordinance applies to any project with the potential to affect protected trees. Protected trees are defined as any native tree species with a diameter at breast height (DBH) of 6 inches or greater. The Placer County Tree Ordinance acknowledges the County's value for native trees and their preservation. This ordinance prohibits the removal of landmark trees, including stands or groves of native trees, native tree corridors, and other important native tree habitats. In addition, trees that are designated for preservation and avoidance are not to be damaged, and damage penalties of up to $50,000 per scar can be assessed by the County.

3.2 STUDIES REQUIRED

The study area was evaluated from existing field studies and reports, aerial photography and geographic information systems (GIS) data. Limited field visits were conducted to verify aerial photography and GIS data. The aerial photography of the study area was flown in 2004 (AirPhoto USA, 2004). GIS data were compiled from a variety of sources, primarily Placer County and the California Department of Fish and Game. GIS coverage includes special-status species from the California Natural Diversity Data Base (CDFG, 2006) and Natomas Basin Conservancy (CH2M Hill, 2003), vernal pools (CDFG, 1998a; Placer County, 2003a), wetlands (CDFG, 1997), and riparian areas (CDFG, 1997; Placer County, 2003a). Existing environmental studies for large portions of the study area were reviewed for pertinent information on biological resources as follows:

- City of Roseville Retention Basin Project Draft Environmental Impact Report (URS and PWA, 2002a)
- Roseville Energy Facility Application for Certification (URS, 2001)
- West Roseville Specific Plan Draft Environmental Impact Report (EIP Associates, 2003)
- Placer Legacy Open Space and Agricultural Conservation Program (Placer County, 2000, 2003c; 2004; PRBO, 2006)

- Natomas Basin Conservancy (Estep, 2002, 2003; Wylie and Martin, 2002; Wylie et al., 2004)
- Sierra Vista Specific Plan Preliminary Constraints Map (City of Roseville, 2005a)
- Creekview Specific Plan Preliminary Constraints Map (City of Roseville, 2005b)
- Placer Ranch wetland delineation (ECORP, 2005)
- Placer Vineyards DEIR (Placer County, 2006)
- Pleasant Grove and Curry Creek Ecosystem Restoration Plan (Foothill Associates, 2005)

3.3 PERSONNEL AND SURVEY DATES

A field verification survey was carried out on March 8, 2006, with the objective of verifying the approximate geographic limit of wetlands, stream crossings and sensitive habitats in the study area and characterizing these resources. Field surveys were limited to areas with public access or visible from public roadways. Field surveys were also used to verify that existing aerial photography (Airphoto USA, 2004) and GIS data are current and accurate.

3.4 AGENCY COORDINATION AND PROFESSIONAL CONTACTS

Additional details about public participation activities conducted for the Placer Parkway Tier 1 EIS/EIR are provided in the Placer Parkway Public Participation Methodology Report, available on the PCTPA website.

In addition, FHWA, Caltrans, and PCTPA agreed in spring 2004 to participate with the U.S. Army Corps of Engineers (USCOE) and the U.S. EPA in a modified National Environmental Policy Act (NEPA)/404 process.

3.5 LIMITATION THAT MAY INFLUENCE RESULTS

The majority of the land in the study area is privately owned. A complete ground reconnaissance of the biological resources within the study area was not feasible, nor is one appropriate at the Tier 1 level of environmental analysis. However, this NES includes evaluation of extensive GIS mapping of resources in the area that has been developed over a number of years in conjunction with several other projects, such as the proposed Placer County Conservation Plan (PCCP) and Natomas Basin Habitat Conservation Plan efforts, and various Specific Plans in the eastern area of the study area. In addition, recent (2004) high-quality aerial photographs were reviewed for the entire study area.

4.0 ENVIRONMENTAL SETTING

This chapter describes the physical and biological characteristics of the study area and the vicinity.

4.1 DESCRIPTION OF THE EXISTING BIOLOGICAL AND PHYSICAL CONDITIONS

4.1.1 Physical Conditions

The study area is located in a transitional zone between the Sierra Nevada foothills and the lowlands of the Central Valley (Placer County, 2000). Undeveloped areas support a mix of cultivated rice fields, grasslands, agricultural fields, intermittent streams, riparian woodland, freshwater marsh, vernal pools and other seasonal wetlands. Developed areas are located intermittently throughout the study area (Figure 2-1). Large commercial developments are generally found in the southwestern and northeastern corners of the study area, and rural residential development is scattered throughout. The Western Segment of the study area is partly located within the former floodplain of the Sacramento River. The low, floodplain areas are predominately in rice cultivation. Rice fields are typically inundated by irrigation water during the growing season and by rainwater during the winter as well as from upstream runoff from urban development.

4.1.2 Habitats and Natural Communities

Rice fields and irrigation channels are used by flocks of wintering and migratory waterfowl. The eastern side of the Western Segment and the entire Central Segment of the study area are comprised of a patchwork of seasonally flooded habitat and drier annual grasslands/agricultural areas, which are either dry-farmed, irrigated for crops, or used for livestock grazing. As the study area transitions to the foothills of the Sierra-Nevada in the Eastern Segment of the study area, habitat is almost entirely comprised of grassland/cultivated types that favor foraging raptors and other grassland birds and terrestrial wildlife. The patchwork of these two predominant habitat types within the study area is depicted in Figure 4-1. Other important habitat types, such as freshwater marsh wetlands and vernal pool complexes, are spread throughout the entire study area. Descriptions of each habitat type are provided below.

Cultivated Rice Fields and Other Seasonally Flooded Habitat. Rice fields in the study area are leveled and terraced to facilitate seasonal inundation. Fields are typically inundated during the growing season from late May to early August. Some fields may be flooded again during the winter months to attract waterfowl. Vegetation along the margins of rice fields is typically dominated by ruderal[1], non-native species. Many species of migratory waterfowl use rice fields during the winter, depending on flooding cycles and management practices. Typical species include snow goose *(Chen caerulescens)*, greater white-fronted goose (*Anser albifrons*), northern shoveler (*Anas clypeata*), bufflehead (*Bucephala albeola*), and ruddy duck (*Oxyura jamaicensis*) (Placer County, 2003c).

Other Agricultural Habitats. Non-irrigated pasture and/or irrigated croplands comprise the majority of other agricultural habitats in the study area. These may include a mix of perennial grasses and legumes which may be used for grazing of livestock or seed producing grasses such as barley, rye and wheat which are planted in the fall and harvested in the spring. Many species of birds and rodents have adapted to use these habitats, and as a result larger birds of prey (hawks, falcons) also use them as foraging grounds.

Annual Grassland. Annual grassland is comprised of upland areas that have not been previously cultivated. This habitat type is made up of non-native and native species including ryegrass (*Lolium* sp.), barley (*Hordeum* sp.), ripgut brome (*Bromus diandrus*), and filaree (*Erodium* sp.). Annual grassland provides habitat for wildlife species such as western meadowlark (*Sturnella neglecta*), red-tailed hawk (*Buteo jamaicensis*), killdeer (*Charadrius vociferous*), western fence lizard (*Sceloporus occidentalis*),

[1] ruderal; def. a plant that grows in disturbed areas, poor land, or waste

voles (*Microtus* sp.), deer mice (*Peromyscus maniculatus*), coyote (*Canis latrans*), and other species. Annual grasslands in the study area are often associated with vernal pool wetlands.

Vernal Pools and Other Seasonal Wetlands. Vernal pools and other seasonal wetlands are typically located within a larger matrix of annual grasslands that are collectively referred to in this document as a "vernal pool complex." Figure 4-2 depicts the known vernal pools complexes, as well as wetlands and other waters of the United States, and riparian zones within the study area. The density and size of the vernal pools varies depending upon the location but the area of uplands is typically more than five times greater than the area of wetlands in a vernal pool-grassland complex. Vernal pools are shallow, seasonally inundated depressions that are underlain with a subsurface layer that limits water infiltration. The seasonal ponding and drying associated with vernal pools supports a unique community of plants and animals. Vernal pool vegetation in the study area is dominated by species such as coyote thistle (*Eryngium vaseyi*), popcorn flower (*Plagiobothrys stipitatus*), downingia (*Downingia* spp.), goldfields (*Lasthenia* spp.), quaking grass (*Briza minor*) and buttercup (*Ranunculus bonariensis*). Invertebrates, including listed vernal pool fairy shrimp (*Branchinecta lynchi*) and vernal pool tadpole shrimp (*Lepidurus packardi*) may occupy vernal pools and other seasonal wetlands in the study area.

Two types of vernal pools occur in Placer County: northern volcanic mudflow vernal pools (Brussard, 1999) and northern hardpan vernal pools. Northern volcanic mudflow types have an average pool size that is typically small (<100 m^2); the pools are irregularly spaced and do not form large pool complexes. Northern mudflow vernal pools have characteristically shallow soils, less than 30 cm deep, and are underlain by impervious mudflow welded tuff. They have a "flashy hydrology," which means they undergo filling and refilling many times over the wet season. Northern hardpan pools are typically found in complexes in areas of hummocky ground on old river terraces above the recent river floodplains and below the foothills. These pools are often larger than mudflow pools, and may be over 1 acre in size. The hydrology of hardpan vernal pools is less flashy and the pools remain filled longer than mudflow vernal pools (CDFG, 1998b).

Two primary sources were used to identify vernal pool complexes in the study area: mapping developed for the PCCP was used for portions of the study area in Placer County and the more general vernal pool habitat mapping available from the CDFG website (CDFG, 1998a) was used for the portions of the study area within Sutter and Sacramento counties that are not covered by PCCP data. Both of these data sources identify complexes (or groups) of vernal pools, not individual pools. The upland areas surrounding these pools are integral to the ecological community and are treated equally within the vernal pool complex. The CDFG vernal pool complex data for Sutter and Sacramento counties was augmented based on a review of 2002 aerial photographs (Airphoto USA, 2002).

Seasonal and Perennial[2] Streams. The study area is located within the Sacramento River Basin, which is bounded by the Sierra Nevada to the east, the Coast Ranges to the west, the Cascade Range and Trinity Mountains to the north, and the Delta-Central Sierra area to the south. The majority of the study area is east of the Natomas Basin and is within the watersheds of Pleasant Grove Creek, Curry Creek, and the Natomas East Main Drainage Canal (a.k.a., Steelhead Creek). A small portion of the study area in the northeastern corner is within the Auburn Ravine watershed (Figure 4-3).

Pleasant Grove Creek and Curry Creek drain into the Pleasant Grove Creek Drainage Canal that in turn drains to the Sacramento River via the Cross Canal in southern Sutter County. Steelhead Creek south of Curry Creek drains into the Natomas East Main Drainage Canal that also drains to the Sacramento River near the confluence with the American River. Some stretches of these streams have been channelized and the hydrology has been modified by the addition of urban and agricultural irrigation runoff during the dry season. All of the major creeks have deep indentations or have stretches that have deep indentations (Foothill Associates, 2005). These conditions are generally worse in the lower reaches of these watersheds.

[2] A seasonal stream is one that carries water only in certain times of the year (i.e., will have water in the winter and spring and will be dry in the summer and fall). A perennial stream is one that carries water throughout the year.

Prior to development within the watershed, Pleasant Grove Creek and its tributaries were seasonal streams; however, summer flows are now maintained by irrigation runoff from urban areas and cultivated fields (URS and PWA, 2002b). Pleasant Grove Creek has the largest drainage network within the study area. It originates in the far Eastern Segment of the study area and flows westward where it terminates in the Pleasant Grove Creek Drainage Canal (see more information about this canal below). Sections of Pleasant Grove Creek in the Central Segment support a mature riparian forest, as described in the riparian woodland section, below. Fish species likely to occur in Pleasant Grove Creek include California roach (*Lavinia symmetricus*), Sacramento sucker (*Catostomus occidentalis*), smallmouth bass (*Micropterus dolomieui*), and spotted bass (*Micropterus punctulatus*) (URS, 2002a).

Curry Creek has several tributaries that originate in the southeastern corner of the study area near Fiddyment Road and flow to the west. Curry Creek drains into the Pleasant Grove Creek Drainage Canal in the Western Segment of the study area, which in turn drains into the Sacramento River via the Cross Canal. Some segments of Curry Creek and its tributaries have been channelized and the bed of the stream is largely composed of fine sediment (URS, 2002b). Close to the boundary between Sutter and Placer counties, Curry Creek is approximately 25 feet wide with sparse woody riparian vegetation.

The Natomas East Main Drainage Canal Watershed south of Curry Creek originates near the southern edge of the study area near Baseline Road and drains into the Natomas East Main Drainage Canal, north of the confluence with Dry Creek. This creek drains into the Sacramento River via the Natomas East Main Drainage Canal and a pumping station that discharges the water near the confluence of the Sacramento and American rivers.

The Natomas East Main Drainage Canal is a constructed flood control facility that intersects the southwestern portion of the study area. This canal is accessible to migrating anadramous fish species, although it is considered unlikely that anadromous fish would successfully spawn or reside in any of the tributaries north of Dry Creek (GANDA, 2006). It flows from north to south in the Western Segment of the study area and drains into the Sacramento River just north of the City of Sacramento. The Pleasant Grove Creek Canal runs south to north in the Western Segment of the study area, north of Sankey Road, and flows into the Cross Canal.

Riparian Woodland. Riparian woodland borders most of the central reaches of Pleasant Grove Creek. Less developed riparian areas (with fewer large trees) occur adjacent to tributaries of Pleasant Grove Creek and limited areas of Curry Creek (Figure 4-2). Typical woody species include Goodding's willow (*Salix gooddingii*), Fremont cottonwood (*Populus fremontii*), and Valley oak (*Quercus lobata*). Large trees in or adjacent to riparian areas are considered habitat for state-listed Swainson's hawk. Understory riparian vegetation containing elderberry bushes (*Sambucus* sp.) is considered habitat for federally threatened Valley elderberry longhorn beetles (*Desmocerus californicus dimorphus*). This established riparian woodland supports a high diversity of resident and migratory bird species, such as scrub jay (*Aphelocoma coerulescens*), black-crowned night heron (*Nycticorax nycticorax*), ruby-crowned kinglet (*Regulus calendula*), Wilson's warbler (*Wilsonia pusilla*), Lincoln's sparrow (*Melospiza lincolnii*), great horned owl (*Bubo virginianus*), and Bullock's oriole (*Icterus bullockii*). The extent of riparian areas in the study area was identified based upon GIS databases provided by the CDFG (1997) and Placer County (2003b).

Freshwater Marsh Wetlands and Other Waters of the U.S. (Excluding Stream Channels). The most common wetland type in the study area after vernal pools and other seasonal wetlands is freshwater marsh. Freshwater marsh habitats are characterized by saturated or periodically flooded soils that support some combination of rushes (*Juncus* spp.), sedges (*Cyperus* spp.), cattail (*Typha* spp.), and bulrush (*Scirpus* spp.). Bird species such as mallard (*Anas platyrhynchos*), American widgeon (*Anas americana*) and red-winged blackbirds (*Agelaius phoeniceus*) can be found in freshwater marsh habitat throughout the project site. Wetlands were identified with GIS data provided by CDFG (1997), USFWS (2003), ECORP

(2003a), CH2M Hill (2003), and URS (2003) and are identified in Figure 4-2. Vernal pools are a particular subset of seasonal wetlands, and have been described separately previously in this section due to their unique nature and tendency to be used as habitat by numerous special-status species.

Conservation Areas. Three privately owned conservation areas have been identified in the study area, where they comprise approximately 522 acres (see Figure 4-2). These areas are lands that have been preserved or set aside in some manner to protect wetlands or special-status species and their habitat. These areas include differing forms of land use or management restrictions. Two of these conservation areas have been established as mitigation banks for the giant garter snake as part of the Natomas Basin Habitat Conservation Plan (NBHCP). Both occur in the Western Segment of the study area. The northernmost of these areas is being considered for transfer to private ownership (Roberts, 2006) although this transaction is pending at this time. The third conservation area is located in the Central Segment of the study area and is under private management.

4.2 REGIONAL SPECIES AND HABITATS OF CONCERN

The following species are included in this NES because suitable habitat for the species is present in the study area, there is a nearby record of the species, or the species has been previously recorded in the study area. Species that are listed as threatened or endangered under the federal or California endangered species act, California Fully Protected species, or a candidate for listing are described below. Other special-status species are described separately in a subsequent section.

Regional species and habitats of concern were identified based upon a review of occurrence records from the California Natural Diversity Data Base (CDFG, 2006), the U.S. Fish and Wildlife Service list of endangered, threatened, species of concern or candidate species that may occur in Sacramento, Sutter, or Placer County (Appendix A), and a review of the California Native Plant Society's Electronic Inventory (CNPS, 2006). Table 4-1 and Table 4-3 summarize the regional species that are evaluated in this Natural Environment Study report. Table 4-2 lists the species that were eliminated from consideration based on the absence of suitable habitat in the study area. A list of regional species of concern is provided in Appendix B. The table in Appendix B presents the status, and preferred habitat for the special-status species addressed in this report. Figure 4-4 shows CNDDB records within the study area.

Table 4-1
Listed and Proposed Threatened/Endangered Species Potentially Occurring or Known to Occur in the Study Area

Scientific Name	Common Name
Branchinecta lynchi	vernal pool fairy shrimp
Lepidurus packardi	vernal pool tadpole shrimp
Desmocerus californicus dimorphus	Valley elderberry longhorn beetle
Buteo swainsoni	Swainson's hawk
Elanus leucurus	white-tailed kite
Grus canadensis tabida	greater sandhill crane
Haliaeetus leucocephalus	Bald eagle
Riparia riparia	Bank swallow
Thamnophis gigas	giant garter snake
Gratiola heterosepala	Boggs Lake hedge hyssop

Table 4-2
Listed and Proposed Threatened/Endangered Species with Low Potential to Occur in the Study Area

Scientific Name	Common Name
Aquila chrysaetos	golden eagle
Coccyzus americanus occidentalis	Western yellow-billed cuckoo
Laterallus jamaicensis coturniculus	California black rail
Hypomesus transpacificus	Delta smelt
Oncorhynchus mykiss	Central valley steelhead
Oncorhynchus tshawytscha	Central valley spring-run chinook
Oncorhynchus tshawytscha	Central valley winter-run chinook
Ambystoma californiense	California tiger salamander, central population
Rana aurora draytonii	California red-legged frog

Each of the species listed in Table 4-1 is described briefly below.

4.2.1.1 Listed, Proposed, and Fully Protected Species

Vernal Pool Branchiopods. Two federally listed branchiopods are known to occur in the study area and the vicinity. Vernal pool fairy shrimp (*Branchinecta lynchi*) and vernal pool tadpole shrimp (*Lepidurus packardi*) are known to occur in seasonally ponded depressions in the study area. These species hatch from resting eggs when the pools become inundated by runoff from fall and winter rains. The resting eggs, called cysts, remain in the bottom of the dry pool through the summer. Branchiopods can complete their life cycle in as few as 10 to 12 days to take advantage of short-lived vernal pools, swales, or puddles (Eriksen and Belk, 1999). These species use artificial depressions, tire tracks, and other sites that pond water only during the winter.

The vernal pool fairy shrimp is a federally listed threatened species. This species is widely distributed through the grasslands of California, from Shasta County south to Riverside County. Populations of vernal pool fairy shrimp are often small, and this species tends to be outnumbered by other co-occurring species. Vernal pool fairy shrimp occur in a wide variety of pool types, but are most commonly found in small swales, or vernal pools in unplowed grasslands (Eriksen and Belk, 1999).

The vernal pool tadpole shrimp is a federally listed endangered species. This species is found mainly in the northern and eastern portions of the Central Valley, in vernal pools and swales containing highly turbid water, often in unplowed grasslands. Suitable habitat for both species exists within the study area, as shown in Figure 4-2. There is no critical habitat for vernal pool branchiopods in the study area.

Valley Elderberry Longhorn Beetle. The Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) is a federally threatened species that occurs exclusively in elderberry shrubs (*Sambucus mexicanus*). The beetle's range extends throughout California's Central Valley, and elderberry shrubs occur most often in riparian areas. The riparian areas in the study area may be suitable for the beetle, if elderberry shrubs are present. Figure 4-5 shows the distribution of riparian habitat that is potentially suitable for elderberry shrubs. This habitat includes substantial portions of the main branch of Pleasant Grove Creek and small areas along its tributaries. Some areas along Curry Creek appear to support vegetation that could contain elderberry plants. Elderberry shrubs could also occupy other upland habitats. However, no elderberry shrubs have been documented in the study area.

Swainson's Hawk. Swainson's hawk (*Buteo swainsoni*) is listed as threatened under the California Endangered Species Act (ESA). In California, Swainson's hawks nest in the Central Valley of California and in the juniper woodlands of Modoc County. Nests are typically found in scattered trees or along riparian corridors adjacent to annual grasslands, pastures, alfalfa, and other crops that provide foraging habitat (CDFG, 1994). Areas of known nesting and foraging habitat are shown on Figure 4-6. Swainson's hawks also nest in urban areas, although the reproductive success of pairs in urban areas has been shown to be lower than that of birds that nest in rural areas (England et al., 1995). The current population of nesting Swainson's hawks in California is believed to be 10 percent of historic numbers due to loss of breeding habitat in the state and wintering habitats in Mexico, Central, and South America. Elimination of breeding habitat is the result of several land conversion activities, including loss of small farms with shelterbelts and tree plantings to larger agribusiness, increasing development of woody perennial crops (i.e., orchards and vineyards), and urban development (England et al., 1997).

Swainson's hawks forage primarily on small rodents and reptiles during the breeding season and on insects during the non-breeding period (England et al., 1997). Agricultural areas are most often used by Swainson's hawks for foraging following harvest or irrigation activities that reduce vegetation cover and make prey populations more visible (Smallwood, 1995). Potential foraging habitat for Swainson's hawk in the study area is shown in Figure 4-6.

Swainson's hawks have been recorded nesting in solitary trees adjacent to riparian areas within the study area Central Segment (CDFG, 2006) (Figure 4-4). Swainson's hawks have also been recorded nesting in the study area, along Pleasant Grove Creek nearby the site of the existing Roseville Waste Water Treatment Facility (ESA, 1996) and in the near vicinity (URS, 2001). They have also been recorded nesting just outside of the western boundary of the study area, in the Natomas Basin (Estep, 2002, 2003). A large nesting population exists along the banks of the Sacramento River approximately 3 miles west of the study area.

White-Tailed Kite. The white-tailed kite (*Elanus leucurus*) is designated as a fully protected species under the California Fish and Game Code. White-tailed kites are year-round residents of the Central Valley and typically forage in agricultural areas, feeding on small mammals, birds, and reptiles (CPIF, 2000). They nest in tall trees near grassland or agricultural areas where this species forages. In the study area, white-tailed kites may use agricultural habitat and grassland for foraging. Large trees, including those around riparian areas, may be suitable nesting habitat.

Greater Sandhill Crane. The greater sandhill crane (*Grus canadensis tabida*) is listed as threatened under the California ESA and is a fully protected species under the California Fish and Game Code. Sandhill cranes breed in the northeast counties of California and winter in the Sacramento and San Joaquin valleys where they forage in open grassland habitats, wetlands, and grain fields (corn, rice, and wheat). They typically occur in very localized areas, foraging in flooded fields in the study area during the winter. This species has potential to occur in the winter foraging in inundated rice fields and in riparian/wetland habitat.

Bald Eagle. The bald eagle (*Haliaeetus leucocephalus*) is a federally threatened species and a state endangered species. In the winter bald eagles are typically found throughout California at lakes, reservoirs, rivers, and some rangelands and coastal wetlands. They generally breed in northern California in areas with mountains, foothill forests, and woodlands near sources of water such as reservoirs, lakes, and rivers. Their nests can be found in the upper reaches of tall trees throughout their breeding habitat (CDFG, 2006). Bald eagles eat small animals, fish, waterfowl, and the carrion of deer and cattle.

Bank Swallow. The bank swallow (*Riparia riparia*) is a California threatened species. It is a colonial nester, which nests primarily in riparian and other lowland habitats. It requires vertical banks/cliffs with fine textured/sandy soils near streams, rivers, lakes, or ocean to dig nesting holes for nesting. This species has been recorded in CNDDB (CDFG, 2006) in the vicinity of the study area. Such habitat is not present in the study area, and the species is unlikely to be present.

Giant Garter Snake. The giant garter snake (*Thamnophis gigas*) is listed as threatened under federal and state endangered species acts. This mostly aquatic snake is the largest of the garter snake genus, *Thamnophis*, and is endemic to the valley floors of the Sacramento and San Joaquin valleys (USFWS, 1993). Giant garter snakes can be found in rice fields, canals, and irrigation ditches where their preferred habitat, freshwater marsh and low-gradient streams, has been depleted. They prey on small fish, tadpoles, and frogs throughout the year. Giant garter snakes hibernate in underground burrows in upland areas adjacent to aquatic habitats during the winter from October through March. During this period they are susceptible to harm from earth-moving activities.

Habitat for the giant garter snake occurs primarily in the Western Segment of the study area. They are known to occur within drainage ditches in low-lying areas in Sutter County with a high occurrence of seasonally flooded habitat. Giant garter snakes have not been documented from Placer County (CDFG, 2006). This fully aquatic garter snake was probably not historically present east of the Natomas East Main Drainage Canal and the Pleasant Grove Drainage Canal because these areas would have lacked the continuous marsh and open-water aquatic habitats associated with this species. However, it is possible that the expansion of rice cultivation and the construction of the drainage canals may provide dispersal corridors and habitats that would support the giant garter snake. Figure 4-7 identifies specific sightings of giant garter snake from the CNDDB (CDFG, 2006) and Natomas Basin Conservancy (CH2M Hill, 2003).

Boggs Lake Hedge-Hyssop. Boggs Lake hedge-hyssop (*Gratiola heterosepala*) is a state listed endangered species. It is also a CNPS 1B species. This annual herb is endemic to vernal pool habitats with clay soils, and has been recorded in 13 Central Valley counties. Boggs Lake hedge-hyssop blooms from April to June. There are no recorded sightings of this species in the study area; however, vernal pool complexes identified in Figure 4-2 would be considered suitable habitat.

4.2.1.2 Other Special-Status Species

Table 4-3 summarizes species that are considered species of concern but are not formally listed under the federal or California endangered species acts or fully protected under the California Fish and Game Code.

Table 4-3
Other Special-Status Species with Potential to Occur in the Study Area

Scientific Name	Common Name
Invertebrates	
Linderiella occidentalis	California linderiella
Birds	
Agelaius tricolor	tricolor blackbird
Ammodramus savannarum	grasshopper sparrow
Asio flammeus	short-eared owl
Athene cunicularia hypugea	western burrowing owl
Baeolophus inornatus	oak titmouse
Buteo regalis	ferruginous hawk
Carduelis lawrencei	Lawrence's goldfinch
Charadrius montanus	mountain plover
Circus cyaneus	northern harrier
Dendroica petechia	yellow warbler

Table 4-3 (Continued)
Other Special-Status Species with Potential to Occur in the Study Area

Scientific Name	Common Name
Eremophila alpestris actia	horned lark
Falco columbarius	Merlin
Icteria virens	yellow-breasted chat
Lanius ludovicianus	loggerhead shrike
Melanerpes lewis	Lewis' woodpecker
Melospiza melodia mailliardi	Modesto song sparrow
Numenius americanus	long-billed curlew
Picoides nuttallii	Nuttall's woodpecker
Plegadis chihi	white-faced ibis
Progne subis	purple martin
Sphyrapicus ruber	red-breasted sapsucker
Toxostoma redivivum	California thrasher
Reptiles	
Emys marmorata[*]	northwestern pond turtle
Phrynosoma coronatum frontale	California horned lizard
Amphibians	
Scaphiopus hammondii	western spadefoot
Mammals	
Myotis ciliolabrum	small-footed myotis bat
Myotis yumanensis	Yuma myotis bat
Corynorhinus townsendii townsendii	Pacific western big-eared bat
Eumops perotis californicus	greater western mastiff bat
Fish	
Oncorhynchus tshawytscha	Fall-Run Chinook Salmon
Pogonichthys macrolepidotus	Sacramento splittail
Plants	
Downingia pusilla	dwarf downingia
Legenere limosa	Legenere
Balsamorhiza macrolepis var. *macrolepis*	big scale balsamroot
Cordylanthus mollis ssp. *hispidus*	Hispid bird's-beak
Juncus leiospermus var. *ahartii*	Ahart's dwarf rush
Sagittaria sanfordii	Sanford's arrowhead
Juncus leiospermus var. *leiospermus*	Red Bluff dwarf rush

[*]Formerly *Clemmys marmorata marmorata*, also called *Actinemys marmorata marmorata*.

Each of the species listed in Table 4-3 is briefly described in the following subsections.

California Linderiella. California linderiella (*Linderiella occidentalis*) is a federal species of concern and is typically associated with seasonal pools found in unplowed grasslands. The life history of this species is similar to the listed branchiopods discussed above in the Threatened and Endangered Species section. This species is known from many sites within Placer County (CDFG, 2006). Suitable habitat for California linderiella in the study area includes vernal pools (Figure 4-2).

Tricolor Blackbird. Tricolor blackbird (*Agelaius tricolor*) is a state and federal species of concern. This species is a colonial nester that occurs throughout the Central Valley in emergent wetlands large enough to support 50 or more breeding pairs. During the winter, large flocks disperse from breeding grounds and forage in pastures and other agricultural fields. Populations of tricolor blackbirds have decreased due to loss of large wetlands. There are no known breeding records of tricolor blackbirds in the study area, although there are a few wetland areas that may be large enough to support a breeding population (Figure 4-2). This species could occur sporadically throughout the study area during the winter in agricultural habitats.

Grasshopper Sparrow. The grasshopper sparrow (*Ammodramus savannarum*) has the potential to occur in California in the summer months. This species can be found in savannahs, prairies, and grassy fields. Grasshopper sparrows make their nests on the ground in small depressions hidden by surrounding grasses. This species may occur in agricultural fields throughout the study area.

Short-Eared Owl. The short-eared owl (*Asio flammeus*) is a federal and state species of concern. This species is a winter resident of the Central Valley, especially in the western Sierra Nevada foothills, and locally in the southern desert region (CDFG, 2006). It forages for small mammals over grassland, irrigated croplands, and occasionally marshes. This species has the potential to occur on the study area in winter, and use cultivated rice fields, grasslands and marshes as foraging habitat.

Western Burrowing Owl. The western burrowing owl (*Athene cunicularia hypugea*) is a federal and state species of concern. Burrowing owls prefer annual and perennial grasslands, typically with sparse or nonexistent tree or shrub canopies. In California, they are found in close association with California ground squirrel burrows (*Spermophilus beecheyi*), which provide them with year-round shelter and seasonal nesting habitat. Burrowing owls also use human-made structures such as culverts, debris piles, or openings beneath pavement as shelter and nesting habitat (CDFG, 1995). Burrowing owl populations are declining due to diminishing habitat and burrowing mammal control (including extermination of small mammals and closure of burrows). Burrowing owls exhibit a high degree of nest site fidelity. Burrowing owl nests are known from two locations within the study area, including the West Roseville Specific Plan area and the Natomas Basin (CDFG, 2006) (Figure 4-4).

Oak Titmouse. The oak titmouse (*Baeolophus inornatus*) is a federal species of concern. This species is a year-round resident of oak woodlands. The oak titmouse requires secondary cavities in mature trees for breeding. In the study area, oak titmouse has the potential to occur in established riparian habitat with oak trees, and in area of oak woodland where streams are not present.

Ferruginous Hawk. The ferruginous hawk (*Buteo regalis*) is a state and federal species of concern. This species is a wide ranging winter migrant in the Central Valley of California. It forages individually over grassland and some agricultural habitats where small mammals, birds and reptiles are commonly caught as prey items. Trees, utility poles and fenceposts are used as perches for roosting and hunting. This species is not known to breed in the study area. It has the potential to occur during the winter in the study area.

Lawrence's Goldfinch. Lawrence's goldfinch (*Carduelis lawrencei*) is a federal species of concern. It has a highly variable distribution, and within California is found in the foothills surrounding Central Valley from spring through fall. Lawrence's goldfinch breeds in open oak or other arid woodland and chaparral, near water (CDFG, 2006). This species forages for seeds and to a lesser extent, invertebrates in grassland or other herbaceous habitat. There is low potential for this species to occur in the study area.

Mountain Plover. The mountain plover (*Charadrius montanus*) is a federal and state species of concern. The mountain plover is a winter resident of California that is locally common in the Central Valley from Sutter and Yuba counties southward, and in the foothill valleys west of the San Joaquin Valley. Mountain plovers prefer heavily grazed native rangelands and recently cultivated croplands (Knopf and Rupert, 1995) for foraging for invertebrates (Knopf, 1998). Alkali flats, now virtually nonexistent, were historically a common foraging habitat for mountain plovers. Upland grass habitats in the study area have the potential to provide foraging habitat for wintering mountain plover, in areas that are not inundated with water.

Northern Harrier. The northern harrier (*Circus cyaneus*) is a state species of concern. It nests in scattered locations throughout California, in grasslands, marshes, fallow agricultural fields, and open rangelands (CDFG, 2006). Nests are often in emergent wetlands along rivers or lakes, but it may also nest in grassland or grain fields several miles from water. This species may occur in the study area, either nesting in emergent wetlands or foraging in cultivated rice fields and grassland habitats.

Yellow Warbler. The yellow warbler (*Dendroica petechia*) is a state species of concern. They typically use moist areas including riparian areas with willows, cottonwoods, and sycamores in which to make their nests (CDFG, 2006). The yellow warbler may also be found in agricultural and suburban areas in the proximity of preferred habitat. This species has potential to occur within the study area.

Horned Lark. The horned lark (*Eremophila alpestris actia*) is a state species of concern. This species prefers open areas lacking dense vegetation such as grasslands and meadows. Horned larks are found in coastal regions from Sonoma to San Diego, in the San Joaquin Valley, and east to the foothills (CDFG, 2006). Nests are found on the ground hidden by grasses and are shaped like an open cup. This species has the potential to occur in the agricultural fields within the study area.

Merlin. Merlins (*Falco columbarius*) are migratory birds that are found in California during the winter in open woodlands, savannahs, on the edges of grasslands, deserts, and farms. Although this species is a state species of concern, it is not known to breed in California (CDFG, 2006). The merlin has the potential to occur near farmland, agriculture, and grassland areas in the study area where there is light tree cover.

Yellow-Breasted Chat. The yellow-breasted chat (*Icteria virens*) is a state species of concern. This species will nest during the summer months in riparian areas characterized by willows and other brushy tangles near sources of water. It will nest low to the ground where it will also forage (CDFG, 2006). This species has the potential to occur within the riparian areas in the study area.

Modesto Song Sparrow. The Modesto song sparrow (*Melospiza melodia mailliardi*) was listed as a state species of concern in 2001 but has since lost that status. Several of its close relatives retain a status of special concern by the state such as the Suisun song sparrow (*Melospiza melodia maxillaries*) (CDFG, 2006). This species prefers riparian areas and may be found within the study area.

Purple Martin. The purple martin (*Progne subis*) is a state species of concern. It can be found nesting in woodlands and low elevation coniferous forests where it will generally nest in cavities created by woodpeckers. They will also inhabit human made nesting structures (CDFG, 2006). This species may be found within woodlands in the study area.

Loggerhead Shrike. The loggerhead shrike (*Lanius ludovicianus*) is a federal and state species of concern. It is a year-round resident of the Central Valley lowland and foothills, occurring most frequently in open habitats (CDFG, 2006). This species prefers areas with perches such as shrubs, trees, fences, or utility lines. Loggerhead shrikes build nests in shrubs or trees, and forage primarily for insects from a stationary perch. This species has the potential to occur in the study area.

Lewis' Woodpecker. Lewis' woodpecker (*Melanerpes lewis*) is a federal species of concern. It is an uncommon local winter resident of the Central Valley that uses open oak savannas, deciduous woodland, and coniferous forest habitats (CDFG, 2006). There is moderate potential for this species to occur on the study area in the riparian woodlands adjacent to creek areas.

Long-Billed Curlew. The long-billed curlew (*Numenius americanus*) is a federal and state species of concern. It is locally common during winter in the Central Valley and it breeds in northeast California. Large numbers of non-breeding individuals have occurred in the Central Valley during the summer in some years (Cogswell, 1977). This species forages for invertebrates in grasslands and croplands, and could use grassland areas of the study area for winter foraging.

Nuttall's Woodpecker. The Nuttall's woodpecker (*Picoides nuttallii*) is a federal species of concern. This species is a year-round resident of oak woodlands. The Nuttall's woodpecker nests in cavities that the male of the species excavates. In the study area, this species has the potential to occur in established riparian habitat with oak trees, and in area of oak woodland where streams are not present.

White-Faced Ibis. The white-faced ibis (*Plegadis chihi*) is a state and federal species of concern. This species prefers shallow, grassy marshes for breeding. Its breeding range has drastically decreased in California and does not include the study area. The white-faced ibis roosts among dense stands of freshwater emergent vegetation, near shallow water or muddy fields for foraging. It has the potential to occur sporadically throughout the study area during the winter, particularly in flooded rice fields.

Red-Breasted Sapsucker. The red-breasted sapsucker (*Sphyrapicus ruber*) is a federal species of concern. This species most commonly occurs in coniferous forests, but can also be found in mixed riparian woodlands. In California, it is a winter migrant, occurring in sporadic locations. In the study area, this species has the potential to occur in established riparian corridors with mature trees.

California Thrasher. The California thrasher (*Toxostoma redivivum*) is a federal species of concern. This species is a year-round resident of oak woodlands. The California thrasher requires dense underbrush for breeding. In the study area, California thrasher has the potential to occur in well riparian habitat, and also in area of oak woodland where streams are not present.

Northwestern Pond Turtle. The northwestern pond turtle (*Clemmys marmorata*) is a state and federal species of concern. In California, this subspecies of western pond turtle occurs throughout the mountains and valleys of northern California. The pond turtle is found in ponds and streams within grasslands, meadows, wetlands, woodlands, forests, and brushlands. It lays its eggs in upland areas. This species has declined due to loss and alteration of aquatic and wetland habitats, loss of breeding areas near aquatic habitats, and habitat fragmentation. This species has the potential to occur throughout the study area in permanent sources of water such as slow moving sections of creeks and emergent wetlands.

California Horned Lizard. The California horned lizard (*Phrynosoma coronatum frontale*) is a federal and state species of concern, and is protected under the California Fish and Game Code. This lizard typically inhabits foothill woodland and riparian habitat with scattered grassland. In Placer County, it is known from more mountainous regions in the central portion of the county (CDFG, 2006). There is small potential for the California horned lizard to occur in riparian habitat within the study area (Figure 4-2).

Western Spadefoot. The western spadefoot (*Scaphiopus hammondii*) is a federal and state species of concern. This amphibian occurs in the central and southern Coast Ranges, the Central Valley, and the foothills of the Sierra Nevada (Stebbins, 1985). Western spadefoot has lost substantial portions of its breeding habitat to urban and agricultural development. The western spadefoot primarily inhabits washes, floodplains of rivers, alluvial fans, playas, and alkali flats in the foothills and mountain valleys up to 3,000 feet. It prefers areas of open vegetation and short grasses where the soil is sandy or gravelly (Stebbins, 1985). Breeding habitat consists of seasonally inundated pools or occasionally low-gradient, seasonal streams (Jennings and Hayes, 1994). Spadefoots are strictly nocturnal. For most of the year during the day and during long dry periods they hide in deep, almost vertical burrows which can be up to 36 inches deep (Stebbins, 1972). Western spadefoot has been documented from a seasonal stream immediately east of the City of Roseville Wastewater Treatment Plant on Phillip Road and two additional locations immediately southeast (CDFG, 2006) (Figure 4-4). Vernal pools and other seasonal wetlands in the study area may provide suitable habitat for this species.

Bats. The following special-status bat species are known to occur in California and could occur in the vicinity of the study area:

- Yuma myotis bat (*Myotis yumanensis*), a federal species of concern;
- Small-footed myotis (*Myotis ciliolabrum*), a federal species of concern
- Pacific western big-eared bat (*Corynorhinus townsendii townsendii*); and
- Greater western mastiff bat (*Eumops perotis californicus*), a state and federal species of concern.

These bat species are generally widespread throughout many regions of California. Bats are commonly found in association with open forests and woodlands where they forage over water bodies. Suitable roosting and nesting areas include caves, mines, tree snags, buildings, and other human-made structures. In California, these species generally mate during the late fall and give birth to their young between early May and the end of July (Jameson and Peeters, 1988).

The bat species listed above could use parts of the study area for foraging, particularly wet areas such as rice fields, vernal pools, and seasonal drainages. Potential roosting sites may also be present within developed land in rural areas, such as houses and barns. Dead trees or snags within riparian areas may also provide potential roosting site for special-status bats.

Central Valley Fall-Run Chinook Salmon. Chinook salmon (*Oncorhynchus tshawytscha*) is a federal candidate for listing and historically ranged from the Ventura River in California to Point Hope, Alaska (Federal Register, 2000). The general life history of the anadromous Chinook salmon includes both freshwater and oceanic phases of development. Incubation, hatching, and emergence occur in freshwater, followed by migration to the ocean, at which time smoltification (adaptation from freshwater to saltwater life cycle) occurs. Maturation is initiated and completed upon return to freshwater habitats. Once maturation is complete, spawning occurs in natal streams.

See Appendix C for a Special-Status Fish Assessment report. The Central Valley Fall Run Evolutionary Significant Unit of Chinook has the potential to occur in the study area. The Fall Run ESU uses the Natomas East Main Drainage Canal as migratory habitat in order to reach spawning habitat in Dry Creek (GANDA, 2006, Appendix C). This ESU does not spawn in the study area (NMFS, 2006). The Natomas East Main Drainage Canal is not considered critical habitat for the Fall Run ESU (Calfish, 2006).

Sacramento Splittail. This species (*Pogonichthys* macrolepidotus) was removed from listing as a federal threatened species in 2003; however splittail is still a California species of concern. Sacramento splittail occurs in the lower delta of the Sacramento and San Joaquin rivers where it spawns over shoreline

vegetation or over gravel in creek tributaries of large rivers during spring high water levels. There is one record of this species from the vicinity of the study area in the CNDDB (CDFG, 2006). The lack of suitable habitat makes it very unlikely that this species occurs in the study area.

Dwarf Downingia. Dwarf downingia (*Downingia pusilla*) has no federal or state status, but this species is included on the California Native Plant Society (CNPS) List 2. This small herb is generally found on clay soils in mesic valley and foothill grasslands, and vernal pools. It has been recorded from Merced, Mariposa, Napa, Placer, Sacramento, Shasta, San Joaquin, Solano, Sonoma, Stanislaus, Tehama, and Yolo counties. This species typically occurs in vernal pools with low overall vegetative cover. It is known to occur in Placer County (CDFG, 2006) and known records are shown in Figure 4-4.

Legenere. Legenere (*Legenere limosa*) is a USFWS Species of Concern and is included on CNPS List 1B. Generally found in pristine vernal pool habitat, this species' range has been greatly reduced over the past several decades. Legenere is documented in eleven counties, from Tehama County in the north to San Mateo County in the south. This species is known to occur in Placer County (CDFG, 2006), but not in the study area. Vernal pools in the study area may provide suitable habitat for this species (Figure 4-2).

Big Scale Balsamroot. Big scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*) has no federal or state status, but is included on the CNPS List 1B. Typically found in valley and foothill grasslands, including serpentine grassland, this species is known from Tehama County in the north to Santa Clara County in the south. There are three known occurrences in Placer County in the project vicinity (CDFG, 2006). However, this species has a low potential to occur in the study area due to the absence of undisturbed grasslands. Some higher quality or undisturbed grasslands in the vicinity of the study area may provide habitat for this species.

Hispid Bird's-Beak. Hispid bird's-beak (*Cordylanthus mollis* ssp. *hispidus*) has no federal or state status, but is included on the CNPS List 1B. Typically found in grasslands and a wet meadow associated with alkaline soils, this species' distribution is limited to five counties, including Placer. Hispid bird's beak has been recorded in the CNDDB in the vicinity of the study area (CDFG, 2006). Due to the degraded conditions of most wetlands in the study area, this species is unlikely to be present although it could occur in higher quality or undisturbed wetlands.

Ahart's Dwarf Rush and Red Bluff Dwarf Rush. Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*) and Red Bluff dwarf rush (*Juncus leiospermus* var. *leiospermus*) have no federal or state status, but these two subspecies are both included on the CNPS List 1B. Both rush species are herbs typically found along the edges of vernal pools and have limited distributions. Ahart's dwarf rush occurs in only five counties in California: Butte, Calaveras, Placer, Sacramento and Yuba (CDFG, 2006). There is one occurrence of Ahart's dwarf rush in Placer County near the Town of Lincoln, which is approximately 8 miles north of the study area (CDFG, 2006). Red Bluff dwarf rush is only known from four California counties: Butte, Shasta, Tehama, and Placer. Only one occurrence of Red Bluff dwarf rush is known from Placer County. Both species are typically observed in high-quality vernal pools and have some potential to occur in the study area.

Sanford's Arrowhead. Sanford's arrowhead (*Sagittaria sanfordii*) has no federal or state status, but is included on the CNPS List 1B. A large herb, this species is generally found in shallow water associated with freshwater marsh habitat and occasionally drainage ditches. Found from Del Norte County in the north to Orange County in the south, it is not know from Placer County, but has been documented in adjoining Sacramento County near the Placer County line (CDFG, 2006). Due to the disturbed nature of most wetlands in the study area it has a low potential to occur there.

5.0 BIOLOGICAL RESOURCES, DISCUSSION OF IMPACTS AND MITIGATION

This chapter evaluates potential direct, indirect and cumulative effects of the Parkway on sensitive biological resources. Direct and indirect effects are described below. Cumulative effects are described in Section 5.3.1.

Direct and indirect effects are defined as follows:

- **Direct Effect:** The National Environmental Policy Act (NEPA) Regulations define direct effects as those "which are caused by the action and occur at the same time and place." Resources lost under the footprint of the action are obvious direct effects, such as filling a wetland to build a highway. Less obvious direct effects might be where a natural process has been blocked, such as blocking a migration corridor or disrupting a breeding cycle.

- **Indirect Effect**: As defined in the NEPA regulations indirect effects are those "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems."

The analysis of potential impacts on sensitive biological resources in this Tier 1 document is based on a relative comparison of the sensitive biological resources within each corridor alignment alternative. Analysis of impacts is based on existing data sources, with a limited amount of ground level reconnaissance efforts. Due to the generalized nature of existing data and consistent with the ecosystem approach described in *Eco-Logical* by Brown (2006), sensitive biological resources have been grouped into six categories — three general habitat types (vernal pool, riparian, and other wetlands) and three species-specific habitat types (giant garter snake, Swainson's hawk, and Valley elderberry longhorn beetle). The general habitat types were selected because they are under the regulatory jurisdiction of one or more natural resource agencies and/or they are the preferred habitat for multiple special-status species. The three species-specific habitat types were selected because these species are currently state or federally listed and have a high likelihood of occurring in the study area. Impacts on sensitive biological resources are discussed in Section 5.1.3; resource categories are described as follows:

- **Wetlands resources** potentially regulated under the federal Clean Water Act or the Porter-Cologne Act.

- **Riparian habitat** is a habitat closely associated with streams or rivers. It usually includes trees and other vegetation that helps to stabilize banks and often provides shade to part or all of the adjacent water body.

- **Vernal pool complexes.** This habitat category is used by multiple special-status species, including vernal pool fairy shrimp, vernal pool tadpole shrimp, Boggs lake hedge-hyssop, dwarf downingia, and legenere. Vernal pool complexes also include an upland environment favored for many other species such as white-tailed kite, burrowing owl, and other raptors.

- **Potential giant garter snake habitat** includes rice fields, canals, irrigation ditches, freshwater marshes and low-gradient streams primarily associated with the areas west of the Union Pacific Railroad ROW. Giant garter snake habitat represents seasonally

flooded areas that are suitable for many other types of wildlife, such as wintering waterfowl.

- **Potential Swainson's hawk nesting habitat.** This habitat includes all riparian areas with established woodland that includes mature trees. It also includes groups of large trees within one mile of a riparian area. Swainson's hawks require mature trees for nesting.

- **Valley elderberry longhorn beetle habitat.** This habitat category corresponds to riparian areas that have an understory shrub component.

Potential direct and indirect impacts are described and evaluated in the following sections.

5.1 DIRECT EFFECTS

Analysis of direct effects for the Parkway is based on tabulation of resources within the proposed corridors, because the actual limits of direct disturbance that would result from the transportation facility are not known. This is a conservative approach and actual direct effects are expected to be less than stated as the Parkway footprint would be approximately 350 feet in width, while the analysis considers a proposed corridor width ranging from 500 to 1,000 feet. A road design would be developed as part of the Tier 2 analysis process that would facilitate a detailed assessment of direct effects in the Tier 2 level.

5.1.1 Natural Communities and Special-Status Species Habitats

This section provides information on the acreage of sensitive natural communities within each corridor alignment. This information is intended to provide a comparison of the types and extent of habitat in each alternative corridor alignment alternative. The precise area and location of ground-disturbing activities will not be analyzed as part of this document; however, a general comparison between the resources found within each corridor will provide a general basis for an evaluation of potential impacts at the Tier 1 level.

The project build alternatives will in some way cause the loss, fragmentation, and/or degradation of some habitat. This is unavoidable. Each of the build alternatives presented in the following sections was developed to minimize the adverse effects of the project. In the Tier 2 phase more specific design measures will be developed that will address such concerns as the obstruction of free movement of wildlife, and the fragmentation of habitat.

Direct effects of each build alternative are discussed below, by segment and by resource. Locations of wetlands resources and riparian habitat are shown on Figure 4-2. Vernal pool complexes are shown on Figure 4-2. Potential habitat for Valley elderberry longhorn beetle, Swainson's hawk, and giant garter snake are shown on Figures 4-5, 4-6, and 4-7, respectively. Potential stream crossings are shown on Figure 5-1.

5.1.2 No-Build Alternative

Under the No-Build Alternative, land for the future construction of Placer Parkway would not be acquired and the Placer Parkway would not be constructed. No impacts to natural communities of special concern, or to threatened, endangered, candidate, or fully protected species would occur as a result of the No-Build Alternative.

5.1.3 Alternative 1 – the Red Alternative

5.1.3.1 Alternative 1 – Western Segment

Natural Communities of Special Concern

Wetland Resources: In the Western Segment, wetlands (excluding vernal pool complexes) are primarily associated with areas around the Pleasant Grove Creek Canal and the Natomas East Main Drainage Canal. Alternative 1 in the Western Segment has 0.3 acre of wetland resources within the corridor alignment. Impacts to wetland resources would include direct loss of habitat due to fill associated with the construction of the Parkway.

Riparian Resources: No riparian habitat is located within the Western Segment of Alternative 1.

Vernal Pool Complexes: Alternative 1 bisects a large vernal pool complex in the Western Segment. The corridor's alignment through this complex is comprised of 23.1 acres of this sensitive habitat. Impacts to vernal pool complexes would include direct loss of habitat due to fill associated with the construction of the Parkway.

Threatened, Endangered, Candidate, and Fully Protected Species

Potential Giant Garter Snake Habitat: Much of the Western Segment is comprised of potential giant garter snake habitat, due to its location in the low-lying Natomas Basin. Alternative 1 has 340.8 acres of potential giant garter snake habitat within the corridor alignment. Impacts to giant garter snake habitat would include loss of potential breeding, foraging, and migratory habitat, which would be removed as a result of construction of the Parkway.

Potential Swainson's Hawk Nesting and Foraging Habitat: No Swainson's hawk nesting habitat is located within the Western Segment of Alternative 1. Alternative 1 would impact 85 acres Swanson's hawk foraging habitat in the Western Segment.

Potential Valley Elderberry Longhorn Beetle Habitat: No Valley elderberry longhorn beetle habitat was identified during reconnaissance surveys within the Western Segment of Alternative 1. Focused surveys should be conducted during Tier 2 to specifically identify potential impacts to the Valley elderberry longhorn beetle.

Potential Stream Crossings: Although this segment would not cross any streams, it would cross the Natomas East Main Drainage Canal. The width of this canal at this crossing and its associated wetlands is estimated to be greater than a standard bridge span of 150 feet and the bridge would therefore need to be supported by columns. In addition, a railroad ROW is located very close to the canal; this railroad ROW would also need to be spanned. The columns would be placed outside the ordinary high water elevation of the canal, to the extent practical. The bridges would be designed and constructed to minimize potential impacts to the canal. There are no stream crossings along this segment.

Impacts to biological resources as a result of the bridge crossing at the Natomas East Main Drainage Canal would include loss of stream bottom and/or riparian habitat where columns are placed. A 150-foot-wide section of the canal would be shaded where the bridge crossing is placed.

Conservation Lands

There are no conservation areas present within the Western Segment of Alternative 1.

5.1.3.2 Alternative 1 – Central Segment

Natural Communities of Special Concern

Wetlands: Alternative 1 has 15.5 acres of wetlands in the Central Segment. Impacts to wetland resources would include direct loss of habitat due to fill associated with the construction of the Parkway.

Riparian Resources: Alternative 1 has 5.9 acres of riparian habitat in the Central Segment. Impacts to riparian resources would include loss of riparian trees, shrubs, and other vegetation due to fill from the roadway and its associated facilities. Where the roadway would cross stream or canal crossings, shading from the bridge may change the composition of the remaining vegetation.

Vernal Pool Complexes: The Central Segment of Alternative 1 has 5.5 acres of vernal pool complexes. Impacts to vernal pool complexes would include direct loss of habitat due to fill associated with the construction of the Parkway.

Threatened, Endangered, Candidate, and Fully Protected Species

Potential Giant Garter Snake Habitat: Garter snakes have historically been absent from this segment of the project area and there are no documented occurrences of the giant garter snake east of the Natomas East Main Drainage Canal or the Pleasant Grove Creek Canal (CDFG, 2006). However, the wetland and riparian areas within this segment may provide habitat for the giant garter snake. Focused habitat assessments should be conducted during Tier 2 to evaluate potential impacts to the giant garter snake.

Potential Swainson's Hawk Nesting and Foraging Habitat: The central alignment of Alternative 1 passes through several patches of potential Swainson's hawk nesting habitat, associated with Steelhead Creek and the main Branch of Pleasant Grove Creek. The total amount of habitat is 6.0 acres. Impacts to this habitat include loss of trees used for nesting that would be removed due to construction of the Parkway. This alternative would also impact 387 acres of Swanson's hawk foraging habitat in the Central Segment.

Potential Valley Elderberry Longhorn Beetle Habitat: Potential Valley elderberry longhorn beetle habitat comprises 1.9 acres of the Central Segment of Alternative 1. Impacts to beetle habitat would include direct loss of the host plant of this species, elderberry shrubs, which would be removed as a result of the construction of the Parkway.

Potential Stream Crossings: There are nine stream crossings within this segment: four on Steelhead Creek, three on Curry Creek, and two on Pleasant Grove Creek. This segment crosses approximately 7,000 feet of Steelhead Creek longitudinally. Depending on the alignment of the road within the corridor, realignment of this section of Steelhead Creek may be required. Culverts may be used at smaller creek crossings. Where creek crossings coincide with floodplain crossings, the road would be elevated on a bridge.

Any hard-bottomed structure such as a culvert would have the potential to create a drop in elevation (particularly at the downstream end) that may become a barrier to fish migration and may also significantly alter the morphology and fluvial dynamics of the channel (Garcia and Associates, 2006; Appendix C). Under higher flow conditions, such stream crossing may cause water to back up behind the crossing, trapping sediment and debris at the upstream end, thereby exacerbating flooding and possibly further destabilizing stream banks (Foothill Associates, 2005). Such small-scale or localized changes in stream morphology can affect fluvial dynamics to produce significant impacts on fish habitat (Garcia and

Associates, 2006; Appendix C). Bridge crossings could result in stream channel loss and/or loss of riparian habitat.

This segment does not cross any existing canals; therefore, there would be no potential impacts to canals.

Conservation Lands

No conservation areas are present within the Central Segment of Alternative 1.

5.1.3.3 Alternative 1 – Eastern Segment

Natural Communities of Special Concern

Wetlands: Within the Eastern Segment, 20.0 acres of wetlands are located within the corridor alignment. Impacts to wetland resources would include direct loss of habitat due to fill from the construction of the Parkway.

Riparian Resources: No riparian habitat is located within the Eastern Segment of Alternative 1.

Vernal Pool Complexes: Within the Eastern Segment, 94.1 acres of vernal pool complexes are located within the corridor alignment. Impacts to vernal pool complexes would include direct loss of habitat due to fill from the construction of the Parkway.

Threatened, Endangered, Candidate, and Fully Protected Species

Potential Giant Garter Snake Habitat: No potential giant garter snake habitat is located within the Eastern Segment of Alternative 1.

Potential Swainson's Hawk Nesting and Foraging Habitat: Within the Eastern Segment, 0.4 acre of potential Swainson's hawk nesting habitat is located within the corridor alternative. Impacts to this habitat include loss of nesting trees that would be removed due to construction of the roadway and associated facilities. This alternative would impact 552 acres of Swainson's hawk foraging habitat in the Eastern Segment.

Potential Valley Elderberry Longhorn Beetle Habitat: No Valley elderberry longhorn beetle habitat was identified during reconnaissance surveys within the Eastern Segment of Alternative 1. Focused surveys should be conducted during Tier 2 to specifically identify potential impacts to the Valley elderberry longhorn beetle.

Potential Stream Crossings: Six new stream crossings are within this segment: four on tributaries of Pleasant Grove Creek and two on tributaries of Orchard Creek. All of these crossings are in the headwaters of the creeks; therefore, culverts would be used at these crossings. In addition, this segment includes three existing stream crossings along SR 65. These crossings would require modifications, such as extension of existing culverts, as part of adding auxiliary lanes to the Parkway.

Any hard-bottomed structure such as a culvert would have the potential to create a drop in elevation (particularly at the downstream end) that may become a barrier to fish migration and may also significantly alter the morphology and fluvial dynamics of the channel (Garcia and Associates, 2006; Appendix C). Under higher flow conditions, such stream crossing may cause water to back up behind the crossing, trapping sediment and debris at the upstream end, thereby exacerbating flooding and possibly further destabilizing stream banks (Foothill Associates, 2005). Such small-scale or localized changes in

stream morphology can affect fluvial dynamics to produce significant impacts on fish habitat (Garcia and Associates, 2006; Appendix C).

This segment does not cross any existing canals; therefore, there would be no potential impacts to canals.

Conservation Lands

No conservation areas are located within the Eastern Segment of Alternative 1.

5.1.4 Alternative 2 – the Orange Alternative

5.1.4.1 Alternative 2 – Western Segment

The Western Segment of Alternative 2 is the same as that for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.1.4.2 Alternative 2 – Central Segment

Natural Communities of Special Concern

Wetlands: Alternative 2 has 10.6 acres of wetland habitat in the Central Segment. Impacts to wetland habitat would include direct loss of habitat due to fill from the construction of the Parkway.

Riparian Resources: Alternative 2 has 12.3 acres of riparian habitat in the Central Segment. Impacts to riparian resources would include loss of riparian trees, shrubs, and other vegetation due to fill from the roadway and its associated facilities. Where the roadway would cross stream or canal crossings, shading from the bridge may change the composition of the remaining vegetation.

Vernal Pool Complexes: Alternative 2 has 6.9 acres of vernal pool complexes in the Central Segment. Impacts to vernal pool complexes would include direct loss of habitat due to fill from the construction of the Parkway.

Threatened, Endangered, Candidate, and Fully Protected Species

Potential Giant Habitat: Garter snakes have historically been absent from this segment of the project area and there are no documented occurrences of the giant garter snake east of the Natomas East Main Drainage Canal or the Pleasant Grove Creek Canal (CDFG, 2006). However, the wetland and riparian areas within this segment could provide habitat for the giant garter snake. Focused habitat assessments should be conducted during Tier 2 to identify potential impacts to the giant garter snake.

Potential Swainson's Hawk Nesting and Foraging Habitat: The Central Segment of Alternative 2 has 7.5 acres of potential Swainson's hawk nesting habitat. Impacts to this habitat include loss of nesting trees that would be removed due to construction of the Parkway. This alternative would impact 315.3 acres of Swanson's hawk foraging habitat in the Central Segment.

Potential Valley Elderberry Longhorn Beetle Habitat: Potential Valley elderberry longhorn beetle habitat comprises 1.3 acres of the Central Segment of Alternative 2. Impacts to beetle habitat would include direct loss of the host plant of this species, elderberry shrubs, which would be removed due to the construction of the Parkway.

Potential Stream Crossings: Five stream crossings are within this segment: two on Steelhead Creek, two on Curry Creek, and one on Pleasant Grove Creek. Culverts may be used at smaller creek crossings. Where creek crossings coincide with floodplain crossings, the road would be elevated on a bridge.

Any hard-bottomed structure such as a culvert would have the potential to create a drop in elevation (particularly at the downstream end) that may become a barrier to fish migration and may also significantly alter the morphology and fluvial dynamics of the channel (Garcia and Associates, 2006; Appendix C). Under higher flow conditions, such stream crossing may cause water to back up behind the crossing, trapping sediment and debris at the upstream end, thereby exacerbating flooding and possibly further destabilizing stream banks (Foothill Associates, 2005). Such small-scale or localized changes in stream morphology can affect fluvial dynamics to produce significant impacts on fish habitat (Garcia and Associates, 2006; Appendix C). Bridge crossings could result in stream channel loss and/or loss of riparian habitat.

This segment does not cross any existing canals; therefore, there would be no potential impacts to canals.

Conservation Lands

No conservation areas are present within the Central Segment of Alternative 2.

5.1.4.3 Alternative 2 – Eastern Segment

The Eastern Segment of Alternative 2 is the same as that for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.1.5 Alternative 3 – the Blue Alternative

5.1.5.1 Alternative 3 – Western Segment

The Western Segment of Alternative 3 is the same as that for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.1.5.2 Alternative 3 – Central Segment

Natural Communities of Special Concern

Wetland Resources: Alternative 3 has 11.7 acres of wetlands in the Central Segment. Impacts to wetlands would include direct loss of habitat due to fill from the construction of the Parkway.

Riparian Resources: Alternative 3 has 4.8 acres of riparian habitat in the Central Segment. Impacts to riparian habitat would include loss of riparian trees, shrubs, and other vegetation due to fill from the construction of the Parkway. Where the roadway would bridge stream or canal crossings, shading from the bridge may change the composition of the remaining vegetation.

Vernal Pool Complexes: Alternative 3 has 10.4 acres of vernal pool complexes in the Central Segment. Impacts to vernal pool complexes would include direct loss of habitat due to fill from the construction of the Parkway.

Threatened, Endangered, Candidate, and Fully Protected Species

Potential Giant Garter Snake Habitat: Garter snakes have historically been absent from this segment of the project area. There are no documented occurrences of the giant garter snake east of the Natomas

East Main Drainage Canal or the Pleasant Grove Creek Canal (CDFG, 2006). However, the wetland and riparian areas within this segment may provide habitat for the giant garter snake. Focused habitat assessments should be conducted during Tier 2 to identify potential impacts to the giant garter snake.

Potential Swainson's Hawk Nesting and Foraging Habitat: The Central Segment of Alternative 3 has 4.2 acres of potential Swainson's hawk nesting habitat. Impacts to this habitat include loss of nesting trees that would be removed due to the construction of the Parkway. This alternative would impact 352 acres of Swainson's hawk foraging habitat in the Central Segment.

Potential Valley Elderberry Longhorn Beetle Habitat: Potential Valley elderberry longhorn beetle habitat comprises 1.2 acres of the Central Segment of Alternative 3. Impacts to beetle habitat would include direct loss of their host plant, elderberry shrubs, which would be removed for the construction of the Parkway.

Potential Stream Crossings: Four stream crossings are within this segment: one on Steelhead Creek, one on Curry Creek, and two on Pleasant Grove Creek. Culverts or a bridge could be used at the Steelhead Creek crossing. The Curry Creek and Pleasant Grove Creek crossings coincide with floodplain crossings; therefore, the road would be elevated on a bridge. Any hard-bottomed structure such as a culvert would have the potential to create a drop in elevation (particularly at the downstream end) that may become a barrier to fish migration and may also significantly alter the morphology and fluvial dynamics of the channel (Garcia and Associates, 2006; Appendix C). Under higher flow conditions, such stream crossing may cause water to back up behind the crossing, trapping sediment and debris at the upstream end, thereby exacerbating flooding and possibly further destabilizing stream banks (Foothill Associates, 2005). Such small-scale or localized changes in stream morphology can affect fluvial dynamics to produce significant impacts on fish habitat (Garcia and Associates, 2006; Appendix C). Bridge crossings could result in stream channel loss and/or loss of riparian habitat.

This segment does not cross any existing canals; therefore, there would be no potential impacts to canals.

Conservation Lands

No conservation areas are present within the Central Segment of Alternative 3.

5.1.5.3 Alternative 3 – Eastern Segment

The Eastern Segment of Alternative 3 is the same as that of Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.1.6 Alternative 4 – the Yellow Alternative

5.1.6.1 Alternative 4 – Western Segment

Natural Communities of Special Concern

Wetlands: Alternative 4 has 0.3 acre of wetlands in the Western Segment. Impacts to wetland resources would include direct loss of habitat due to fill from the construction of the Parkway.

Riparian Resources: There is no riparian habitat in the Western Segment of Alternative 4.

Vernal Pool Complexes: Alternative 4 has 8.9 acres of vernal pool complexes in the Western Segment. Impacts to vernal pool complexes would include direct loss of habitat due to fill from the construction of the Parkway.

Threatened, Endangered, Candidate, and Fully Protected Species

Potential Giant Garter Snake Habitat: Alternative 4 has 268.2 acres of potential giant garter snake habitat in the Western Segment. Impacts to giant garter snake habitat would include loss of potential breeding, foraging, and migratory habitat.

Potential Swainson's Hawk Nesting and Foraging Habitat. There is no potential Swainson's hawk nesting habitat in the Western Segment of Alternative 4. This alternative would impact 60.7 acres of Swanson's hawk foraging habitat in the Western Segment.

Potential Valley Elderberry Longhorn Beetle Habitat. No Valley elderberry longhorn beetle habitat was identified during reconnaissance surveys within the Western Segment of Alternative 4. Focused surveys should be conducted during Tier 2 to specifically identify potential impacts to the Valley elderberry longhorn beetle.

Potential Stream Crossings: There are no stream crossings within this segment.

This segment would cross the Pleasant Grove Creek Canal. The canal is within the 100-year floodplain, and as such, this portion of the road would be elevated on a bridge. The columns to support the bridge would be placed outside the ordinary high water elevation of the canal. The approximate width of the canal at this crossing is on the order of 150 to 200 feet.

Impacts to biological resources as a result of the bridge crossing at the Pleasant Grove Creek Canal would include loss of stream bottom and/or riparian habitat where columns are placed. A 150- to 200-foot-wide section of the canal would be shaded where the bridge crossing is placed.

Conservation Lands

A small portion of conservation area previously owned and managed by the Natomas Basin Conservancy is located in the Western Segment of Alternative 4. This property was traded for land west of SR 70/99 in the fall of 2006 and is no longer a conservation area.

5.1.6.2 Alternative 4 – Central Segment

Natural Communities of Special Concern

Wetlands: Alternative 4 has 8.0 acres of wetland habitat in the Central Segment. Impacts to wetland resources would include direct loss of habitat due to fill from the construction of the Parkway.

Riparian Resources: Alternative 4 has 4.8 acres of riparian habitat in the Central Segment. Impacts to riparian resources would include loss of riparian trees, shrubs and other vegetation due to fill from the construction of the Parkway. Where the roadway would bridge stream or canal crossings, shading from the bridge may change the composition of the remaining vegetation.

Vernal Pool Complexes: Alternative 4 has 3.7 acres of vernal pool complexes in the Central Segment. Impacts to vernal pool complexes would include direct loss of habitat due to fill from the construction of the Parkway.

Threatened, Endangered, Candidate, and Fully Protected Species

Potential Giant Garter Snake Habitat: Garter snakes have historically been absent from this segment of the project area. There are no documented occurrences of the giant garter snake east of the Natomas

East Main Drainage Canal or the Pleasant Grove Creek Canal (CDFG, 2006). However, the wetland and riparian areas within this segment could provide habitat for the giant garter snake. Focused habitat assessments should be conducted during Tier 2 to identify potential impacts to the giant garter snake.

Potential Swainson's Hawk Nesting and Foraging Habitat: The Central Segment of Alternative 4 has 2.9 acres of potential Swainson's hawk nesting habitat. Impacts to this habitat include loss of trees used for nesting that would be removed due to construction of the Parkway. This alternative would impact 250.8 acres of Swanson's hawk foraging habitat in the Central Segment.

Potential Valley Elderberry Longhorn Beetle Habitat: Potential Valley elderberry longhorn beetle habitat comprises 1.2 acres of the Central Segment of Alternative 4. Impacts to beetle habitat would include direct loss of their host plant, elderberry shrubs, as a result of vegetation removal for the construction of the Parkway.

Potential Stream Crossings: Three stream crossings are within this segment: one on Curry Creek and two on Pleasant Grove Creek. The Curry Creek and Pleasant Grove Creek crossings coincide with floodplain crossings; therefore, the road would be elevated on a bridge. Any hard-bottomed structure such as a culvert would have the potential to create a drop in elevation (particularly at the downstream end) that may become a barrier to fish migration and may also significantly alter the morphology and fluvial dynamics of the channel (Garcia and Associates, 2006; Appendix C). Under higher flow conditions, such stream crossing may cause water to back up behind the crossing, trapping sediment and debris at the upstream end, thereby exacerbating flooding and possibly further destabilizing stream banks (Foothill Associates, 2005). Such small-scale or localized changes in stream morphology can affect fluvial dynamics to produce significant impacts on fish habitat (Garcia and Associates, 2006; Appendix C). Bridge crossings could result in stream channel loss and/or loss of riparian habitat.

This segment does not cross any existing canals; therefore, there would be no potential impacts to canals.

Conservation Lands

No conservation areas are present within the Central Segment of Alternative 4.

5.1.6.3 Alternative 4 – Eastern Segment

The Eastern Segment of Alternative 4 is the same as that for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.1.7 Alternative 5 – the Green Alternative

5.1.7.1 Alternative 5 – Western Segment

The Western Segment of Alternative 5 is the same as that for Alternative 4. Therefore, the potential impacts for this segment are the same as discussed for Alternative 4.

5.1.7.2 Alternative 5 – Central Segment

Natural Communities of Special Concern

Wetland Resources: Alternative 5 has 7.7 acres of wetland habitat in the Central Segment. Impacts to wetland resources would include direct loss of habitat due to fill from the construction of the Parkway.

Riparian Resources: Alternative 5 has 4.9 acres of riparian habitat in the Central Segment. Impacts to riparian resources would include loss of riparian trees, shrubs, and other vegetation due to fill from the construction of the Parkway. Where the roadway would bridge stream or canal crossings, shading from the bridge may change the composition of the remaining vegetation.

Vernal Pool Complexes: Alternative 5 has 21.0 acres of vernal pool complexes in the Central Segment. Impacts to vernal pool complexes would include direct loss of habitat due to fill from the construction of the Parkway.

Threatened, Endangered, Candidate, and Fully Protected Species

Potential Giant Garter Snake Habitat: Garter snakes have historically been absent from this segment of the project area. There are no documented occurrences of the giant garter snake east of the Natomas East Main Drainage Canal or the Pleasant Grove Creek Canal (CDFG, 2006). However, the wetland and riparian areas within this segment could provide habitat for the giant garter snake. Focused habitat assessments should be conducted during Tier 2 to identify potential impacts to the giant garter snake.

Potential Swainson's Hawk Nesting and Foraging Habitat: The Central Segment of Alternative 5 has 3.2 acres of potential Swainson's hawk nesting habitat. Impacts to this habitat include loss of trees used for nesting that would be removed due to construction of the Parkway. This alternative would impact 146.7 acres of Swainson's hawk foraging habitat in the Central Segment.

Potential Valley Elderberry Longhorn Beetle Habitat: Potential Valley elderberry longhorn beetle habitat comprises 1.2 acres of the Central Segment of Alternative 5. Impacts to beetle habitat would include direct loss of their host plant, elderberry shrubs, which would be removed as a result of construction of the Parkway.

Potential Stream Crossings: Three stream crossings are within this segment: two on Curry Creek and one on Pleasant Grove Creek. The Curry Creek and Pleasant Grove Creek crossings coincide with floodplain crossings; therefore, the road would be elevated on a bridge. Any hard-bottomed structure such as a culvert would have the potential to create a drop in elevation (particularly at the downstream end) that may become a barrier to fish migration and may also significantly alter the morphology and fluvial dynamics of the channel (Garcia and Associates, 2006; Appendix C). Under higher flow conditions, such stream crossing may cause water to back up behind the crossing, trapping sediment and debris at the upstream end, thereby exacerbating flooding and possibly further destabilizing stream banks (Foothill Associates, 2005). Such small-scale or localized changes in stream morphology can affect fluvial dynamics to produce significant impacts on fish habitat (Garcia and Associates, 2006; Appendix C). Bridge crossings could result in stream channel loss and/or loss of riparian habitat.

This segment does not cross any existing canals. Therefore, there would be no potential impacts to canals.

Conservation Lands

No conservation areas are present within the Central Segment of Alternative 5.

5.1.7.3 Alternative 5 – Eastern Segment

The Eastern Segment of Alternative 5 is the same as that for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.1.8 Description of Impacts to Special-Status Species

Impacts to threatened, endangered, candidate, and fully protected species are evaluated here in relation to the amount of habitat available to each species within the alignment alternatives. Based on the preliminary analysis of such impacts in this NES, additional evaluation of impacts would occur during Tier 2 of the project reflecting specific project design details and results of more extensive habitat and species surveys. Preliminary evaluations of potential direct effects to threatened, endangered, candidate, and fully protected species are discussed below.

White-Tailed Kite and Swainson's Hawk. Construction of the Parkway would potentially remove habitat used by the white-tailed kite and Swainson's hawk (see Figure 4-6 for potential Swainson's hawk habitat). The affected habitat would include large trees that are potential nest sites for the white-tailed kite and the Swainson's hawk, agricultural, and grassland habitats where these two raptor species forage, and disturbance of nests during construction activities. The proposed study corridors for Alternatives 4 and 5 have the least amount of habitat potentially suitable for nesting and foraging Swainson's hawks and white-tailed kites (Table 5-1). The study corridors for Alternatives 1 and 3 have the largest area of these habitat types. Most of the nesting habitat is located within the Central Segment of the study area but most of the potential foraging habitat, approximately 550 acres, is located within the Eastern Segment.

Table 5-1
Sensitive Resources Potentially Impacted by Each Build Alternative
(acres)

Resource Category	Alternative				
	1	2	3	4	5
Wetlands	35.8	30.9	32.0	28.3	28.0
Riparian Habitat	5.9	12.3	4.8	4.8	4.9
Vernal Pool Complex	122.7	124.1	127.6	106.7	124.0
Potential Giant Garter Snake Habitat	340.8	340.8	340.8	268.2	268.2
Potential Swainson's Hawk/White-Tailed Kite Nesting Habitat	6.4	7.9	4.6	3.3	3.6
Potential Swainson's Hawk Foraging Habitat	1,024.0	952.3	989.0	863.5	759.4
Potential Valley Elderberry Longhorn Beetle Habitat	1.9	1.3	1.2	1.2	1.2

Greater Sandhill Crane. Construction of the Parkway would result in the loss of seasonally flooded habitats that are potentially used by the migrating and wintering greater sandhill cranes. The loss of this habitat would also affect other non-listed species of waterfowl and wading birds that occur in the study area. However, seasonally flooded habitat is extensive in the vicinity of the proposed Placer Parkway corridors compared to the amount of habitat that would be potentially affected. Approximately 660 to 760 acres of seasonally flooded habitat is present within each of the corridor alternatives.

Giant Garter Snake. The extensive rice fields and drainage channels within the Western Segment of the study area are considered potentially suitable habitat for giant garter snake (see Figure 4-7). This habitat includes seasonally flooded areas such as rice fields, drainage channels and adjacent upland areas. It is

likely that a much smaller portion of that area would actually support a population of the giant garter snakes. Because giant garter snakes have limited dispersal capacity, focused habitat assessments would be conducted as part of the Tier 2 process to determine how much habitat would be directly impacted.

Alternatives 4 and 5 have the smallest amount of potential giant garter snake habitat within the proposed study corridors, approximately 268.2 acres, as compared to Alternatives 1, 2, and 3, which have a approximately 340.8 acres of this habitat category (Table 5-1). All of the giant garter snake habitat is located within the Western Segment of the proposed corridor alternatives so the proposed corridor is reduced to two alignments with generally similar areas of this habitat type, although the area within the northern alignment (Alternatives 4 and 5) is 8 percent larger than the southern alignment area.

Fall-Run Chinook Salmon and Central Valley ESU Steelhead. Listed salmonids such as the Central Valley ESU steelhead trout and fall-run Chinook salmon (candidate species) are known to occur seasonally in both the Auburn Ravine/Coon Creek watershed immediately to the north of the Parkway study area and the Dry Creek watershed immediately to the south, including the Natomas East Main Drainage Canal (Placer County, 1999; ECORP, 2003b; GANDA, 2001, 2005). See Appendix C for a Special-Status Fish Assessment report. However, fall-run Chinook salmon and steelhead are unlikely to use the streams in the study area due to the absence of instream habitat features required to support sustainable populations of these species (GANDA, 2006). Steelhead and salmon require gravel and cobble riffle areas for spawning, and cool-water rearing habitats for successful recruitment. Juvenile salmon leave freshwater and enter the ocean by spring; however, juvenile steelhead may remain resident in natal streams for several years before going to sea. Resident steelhead require perennially cool water for summer rearing. The major streams in the Placer Parkway study area, Pleasant Grove Creek, Curry Creek and Steelhead Creek lack the cool-water rearing habitats and the riffle areas required for spawning steelhead and salmon.

Construction of the Parkway is unlikely to adversely affect steelhead or fall-run Chinook salmon as these species are not likely to be present in the study area except for occasional transient occurrences via the two drainage canals. Crossings of major streams and drainage canals would be accomplished via bridges that would be constructed to avoid impedance of fish passage. Best management practices to control erosion and minimize degradation of water quality would be implemented during construction of a future road facility at the water crossings to protect aquatic habitats in the streams.

Vernal Pool Species. Vernal pool complexes occupy large parts of the study area. These complexes contain a mosaic of upland/grassland habitat and vernal pool wetlands. Vernal pool wetlands are potential habitat for several special-status species, including:

- Vernal pool fairy shrimp;
- Vernal pool tadpole shrimp;
- Boggs Lake hedge hyssop;
- Legenere;
- Western spadefoot; and
- Dwarf downingia.

Vernal pool complexes would be directly impacted as a result of construction of the Parkway, which could adversely impact populations of these special-status species.

Alternative 3 has the largest area of vernal pool complex habitat within the study area and Alternative 4 has the smallest area of this habitat category (Table 5-1). However, approximately 70 to 90 percent of the total vernal pool complex habitat within each of the corridor alignment alternatives is located within the Eastern Segment (approximately 94 acres) and therefore does not vary by alternative.

Valley Elderberry Longhorn Beetle. The host plant of the Valley elderberry longhorn beetle, blue elderberry shrubs (*Sambucus mexicana*), is uncommon in the study area. Elderberry shrubs are typically associated with the understory of riparian habitats. Construction of the Parkway would potentially remove or disturb riparian habitats and associated elderberry shrubs. Areas of riparian habitat have been identified for this NES, and additional field surveys would need to be completed during the Tier 2 process in order to precisely locate elderberry shrubs.

All of the potential Valley elderberry longhorn beetle habitat within each of the alternative corridors is located within the Central Segment, but the total area does not vary significantly between alternatives (see Figure 4-5). Alternative 1 has the largest area of potential Valley elderberry longhorn beetle habitat within the study area but this area is only about 0.6 acre larger than the area within the corridor for Alternative 2, and 0.7 acre larger than the area within the corridors for Alternatives 3 through 5, which contain the smallest area of this habitat (Table 5-1).

5.1.9 Comparison of Alternatives

A comparison of the Parkway build alternatives indicates differences between alternatives with respect to biological resources. The wetlands acreage is slightly larger for Alternatives 1, 2, and 3 due to the presence of a greater number of wetlands in the Western Segment. The greatest difference is between Alternative 1, which has 35.8 acres, and Alternative 5, which has 28 acres. Alternative 2 has more than double the amount of riparian habitat than other build alternatives due to the presence of an area of riparian habitat along Curry Creek in the Central Segment. Stream crossings are highest for Alternative 1, because it bisects several reaches of Steelhead Creek in the Central Segment (Table 5-2).

Table 5-1 summarizes the amount of sensitive habitat within each alternative corridor alignment. Alternatives 4 and 5 could impact approximately 72.6 acres less potential giant garter snake habitat than Alternatives 1, 2, and 3. The area of mature riparian trees available to Swainson's hawk for nesting in Alternatives 1 and 2 is greater than any of the other alternatives. The area of vernal pool complex potentially affected is highest for Alternative 3 and lowest for Alternative 4 in comparison to the other build alternatives. The amount of potential Valley elderberry longhorn beetle habitat is similar for all build alternatives, and is less than 2 acres in all instances.

Table 5-2 summarizes the number of new waterway crossings of each alternative. Figure 5-1 shows the location of each stream crossing by alternative.

Table 5-2
Number of New Waterway Crossings Potentially Impacted by Each Build Alternative

Alternative	No. of Stream Crossings	Canal Crossings
1	15	1
2	11	1
3	10	1
4	9	1
5	9	1

5.2 SECONDARY AND INDIRECT IMPACTS

Recent FHWA, U.S. EPA, and Caltrans guidance on growth inducement (Mare Island Accord, 2006) advises that analysis of potential impacts associated with growth should include an evaluation of the effects of growth on resources of concern. The following discussion presents a qualitative evaluation of

potential secondary and indirect impacts of Anticipated Growth (see below for definition) on human and environmental resources in the study area.

The Council on Environmental Quality (CEQ) provided clarification of the terminology "indirect impacts" when it issued the National Environmental Policy Act in 1978. Secondary and indirect impacts are defined as impacts "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." Moreover, indirect effects ". . . may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems."

A key term used in this section is "Anticipated Growth." This is defined as the growth that is anticipated in the study area as described in the relevant General Plans and adopted regional forecasts, such as the SACOG Blueprint scenario (as detailed in the Community Impact Assessment [Mara Feeney & Associates and DKS Associates, 2007]), including additional growth that may occur as a result of major new development proposals that have not yet been formally approved. It is possible that this additional growth may accelerate the rate of buildout in the study area, but it is not ultimately expected to result in any greater levels of development than is presented in adopted regional forecasts.

The following discussion considers secondary and indirect impacts on biological resources that may occur as a result of direct impacts associated with the Parkway, and as a result of anticipated growth.

5.2.1 Growth Inducement Scenario

The study area for the analysis of secondary and indirect impacts is shown in Figure 5-2. NEPA and CEQA both require environmental analyses to consider the effects of a project on growth. Caltrans defines growth inducement as the relationship between a proposed project and the resulting direct and indirect effects on growth (State CEQA Guidelines Section 15126[d]). This section summarizes the relationship between the Placer Parkway Corridor Preservation project and regional growth, and discusses potential secondary and indirect effects of the project related to growth inducement.

Placer Parkway would be growth inducing, as a component of the rapidly evolving urban matrix in western Placer County. While the project study area is predominately undeveloped at this time, parts of the study area are within local General Plan designations allowing urban growth. In addition, numerous proposals for major new development projects in and around the study area depicted on Figure 5-2 are currently in various stages of the approval and entitlement process. Portions of the surrounding area (especially northern Sacramento County and southwestern Placer County) have developed very rapidly over the past several decades. This has occurred as a result of many factors, including continuing net population growth statewide, strong employment growth in the Sacramento region, relative housing affordability, and location amenities.

Population and employment growth projections for California and the Sacramento Region in general, and for south Sutter County and southwestern Placer County in particular (described in detail in the Tier 1 EIS/EIR Community Impact Assessment), indicate that development pressures in the project vicinity will remain relatively intense, irrespective of the Parkway. Between 1950 and 2000, the California population more than tripled. During the same period, population in the six-county SACOG region increased by more than 800 percent (DOF, 2006). Projections and established goals and policies from a wide range of sources, including SACOG, Placer, Sacramento, and Sutter counties, and the Cities of Roseville, Rocklin and Lincoln, confirm that relatively high rates of population and employment growth and housing and commercial development are anticipated in the six-county region by 2050. Between 2000 and 2050, California's population is expected to increase from approximately 34 million to 55 million. During the same time period, SACOG projects that the region's growth will double, from 1.9 million in 2000 to 3.95 million in 2050, with the Roseville-Rocklin-Lincoln area remaining one of the fastest growing areas in the region (Levy and Doche-Boulos, 2005; SACOG, 2006).

Placer Parkway would be growth inducing because it would help support changes in the amount of growth beyond current general plan levels, and could influence the pace and location of some development. It is likely that Placer Parkway could help to implement the various specific development proposals in the study area, since it would serve to relieve traffic congestion associated with these proposals. Furthermore, the Parkway could affect the timing of development in the vicinity of the proposed interchange locations, particularly those proposed near vacant land adjacent to rapidly developing areas or areas now proposed for urban development. However, as the Parkway would be a limited-access road located in an area that is already undergoing extensive and rapid urbanization, its potential to facilitate growth that would not have otherwise occurred is limited. It could result in different land uses, or more intensive land uses, in the vicinity of interchanges where land use plans are still being developed and have not yet been approved. Also, it could hasten the buildout of planned commercial and industrial uses, especially in the Sunset Industrial Area and proposed Placer Ranch Specific Plan area, as well as in the proposed Sutter Pointe Specific Plan area.

In the longer term, improved access provided to lands in the Western and Eastern segments could be a factor in stimulating additional growth and development in areas west of SR 70/99 not protected by the NBHCP, or north of the Sutter Pointe Specific Plan area, or north of Sunset Boulevard West in Placer County. Although growth is anticipated in these areas over time (as reflected in SACOG's preferred Blueprint scenario, the Sutter County General Plan, and the City of Lincoln General Plan), such development is not reflected in general plans at present and has not been formally proposed by landowners. By providing improved access to adjacent areas, Placer Parkway could be one of many factors that would encourage growth in these areas sooner than this might otherwise occur.

The factors influencing growth in the region are complex. The Parkway is one of several major urban development proposals in the region. While Placer Parkway would contribute to regional growth, including growth beyond the level identified in current general plans, it is not feasible to quantify the amount of its contribution. A single new transportation facility such as the Parkway is only one of the many factors contributing to regional growth, and it is speculative to assign a particular quantity of growth to any one factor.

Furthermore, several factors serve to limit the likely effect of the Parkway on growth, including the following:

- No interchanges are proposed for any areas that are not already approved or proposed for development;
- All approved and proposed residential development that has not already been built is projected to be built out prior to 2020, when the Parkway is proposed to open; and
- Real estate market pressures in the area have been and continue to be intense without the Parkway, and local government jurisdictions have been supportive of processing development applications in spite of anticipated regional transportation challenges.

It is unlikely that the choice of one Placer Parkway build alternative over another would substantially change expected patterns of growth and development in the project study area and the surrounding region. In the Western Segment, all corridor alignment alternatives would provide new access to an area that is currently undeveloped farmland, but that is proposed for mixed use urban development. The three more southerly alignments (Alternatives 1, 2, and 3) would provide two interchanges in the Sutter Pointe Specific Plan area, while the more northerly alignments (Alternatives 4 and 5) would provide only one interchange in this area, approximately one mile farther north of the more southerly alignments in the Western Segment. Since none of the alternative alignments would include any intersections in the Central Segment, there would be little difference in growth inducement effects among the alternatives in this segment. In the Eastern Segment, two interchanges are proposed within the existing Sunset Industrial Area Plan, in an area proposed for the Placer

Ranch Specific Plan. While these interchanges would provide new access to a currently undeveloped area, this area is planned for growth. In the Eastern Segment all alternatives would follow an identical alignment, so there would be no differences in growth inducement effects among the alternatives.

A future interchange at Watt Avenue could be growth inducing, because it would provide major new regional access to a portion of the project study area that is currently rural and undeveloped, although both conceptual interchange locations are now surrounded by formal development proposals or land controlled by development interests. A Watt Avenue interchange is not proposed as part of the project.

5.2.2 Secondary and Indirect Effect Evaluation

5.2.3 No-Build Alternative

Under the No-Build Alternative land for Placer Parkway would not be acquired and the Parkway would not be constructed. There would not be any secondary or indirect impacts on biological resources under the No-Build Alternative.

5.2.4 Build Alternatives

Construction and operation of the Parkway and anticipated growth could result in secondary and indirect impacts on biological resources.

Anticipated growth would be expected to result in different land management and uses in the study area that would most likely not have occurred in the absence of such growth. Increased areas of impervious surface, habitat fragmentation, and hydrological changes could adversely affect biological resources. These impacts would be direct impacts of other projects not associated with Placer Parkway, and would be required to be analyzed as part of independent environmental review.

It is not feasible to perform a detailed evaluation of these projects at this stage because specific design details are not known. However, potential impacts of these projects are addressed in the Placer Parkway 2040 Cumulative analysis (see Section 5.3). This analysis evaluates a 2040 cumulative scenario, which is considered to be an appropriate projection of future development. This scenario includes full residential build-out in Placer County west of Sierra College Boulevard, including general plan areas and major developments, and employment and population growth in line with SACOG forecasts. It assumes levels of growth and development will occur at the higher end of a potential feasible range, and therefore represents a reasonable maximum development scenario for which cumulative and secondary and indirect impacts have been analyzed.

Although it is not possible to predict with any certainty where such impacts might occur, it is reasonable to assume that they would occur within the secondary and indirect impact analysis study area (Figure 5-2). The general nature of such impacts is discussed below.

Preservation of a future transportation corridor has the potential to indirectly affect biological resources if management of the land within the corridor is modified. Such impacts could also occur within the secondary and indirect impact analysis study area as a result of anticipated growth. However, initially there should be little change to land use as the land is expected to be leased back to its previous owners. However, land use in the corridor is likely to change if adjacent areas are converted to urban development and current agricultural land uses become less feasible. Effects that may be expected when the land use of the transportation corridor changes might include the fallowing of existing rice fields that are currently flood irrigated during the growing season or vernal pool complexes that are currently grazed. Potential effects might include the loss or degradation of habitat for species that benefit from the current land management practices. Examples of affected habitats might include agricultural areas used by foraging Swainson's hawks, greater sandhill cranes, wintering waterfowl, giant garter snakes, and burrowing owls,

as well as grazed vernal pool areas occupied by rare plants. A decrease in land management activities might also benefit nesting Swainson's hawks and white-tailed kites, the Valley elderberry longhorn beetle, and riparian habitats that are adversely affected by intensive land management activities.

Indirect impacts would primarily occur during Tier 2. The Tier 2 activities associated with all of the build alternatives would result in approximately the same type and degree of indirect impacts, as discussed below. These impacts are discussed collectively. Where a distinguishing factor can be identified for a given alternative, it is discussed separately.

The existence of a new roadway would adversely affect the surrounding natural communities and special-status species in a variety of ways. In particular, the remaining habitat immediately adjacent to the roadway would likely be considered of lower value and function for wildlife. The increased noise and lights associated with the roadway would likely decrease the value of that habitat for nesting and foraging causing disturbance and potentially affecting natural breeding cycles and behavior. The increased light and noise may also attract wildlife to the roadway, causing higher rates of mortality from vehicle strikes.

Construction of the Parkway and anticipated growth would both result in various indirect effects associated with habitat fragmentation. All of the project build alternatives are major linear features that cross three watersheds (Pleasant Grove Creek, Curry Creek, and Steelhead Creek [Figure 4-3]). Riparian areas associated with creeks are particularly valuable in providing foraging, nesting, and migratory habitat for wildlife species. In comparison to surrounding grasslands or agricultural areas, riparian corridors can provide water, shade, and a multi-level canopy of vegetation in which to forage and rest. In addition, species can use these corridors to travel between other suitable but geographically isolated patches of habitat. A 350-foot-wide roadway across a riparian corridor would potentially be a significant barrier to wildlife dispersal. All of the alternatives cross at least two of the watersheds mentioned above. In addition, all alternatives cross several tributary reaches of Pleasant Grove Creek in the Eastern Segment, where all alternatives follow the exact same alignment. Alternative 1 also crosses three additional reaches of the unnamed creek and three additional reaches of Curry Creek in the Central Segment. Alternative 2 crosses two additional reaches of Curry Creek in the Central Segment.

Vernal pool complexes would also be susceptible to the effects of fragmentation caused by a new roadway and also as a result of anticipated growth. Development can have effects on the hydrology of vernal pools that are not directly impacted. The coverage of land surfaces with concrete and/or deep ripping of the hardpan layer can affect the amount and quality of water available to the perched water tables characteristic of vernal pool areas. Changes to the perched water table can lead to alterations in the rate, extent, and duration of inundation (water regime) of remaining habitat (USFWS, 1996). Survival of vernal pool branchipods is directly linked to the water regime of their habitat. Roads in or near vernal pool habitat areas can lead to additional impacts through the introduction of chemically laden runoff (i.e., petroleum products). Development may also produce conditions that are favorable for exotic predators such as bullfrogs, and mosquito fish (USFWS, 1996). The U.S. Fish and Wildlife Service typically considers any ground-disturbing activities within 250 feet of a vernal pool to comprise an indirect impact. All alternatives would have indirect impacts on vernal pools to some extent. In the Eastern Segment, the study area narrows significantly and direct and indirect impacts to vernal pools would not be avoidable for any of the alternatives. In the Western Segment, Alternatives 1, 2, and 3 pass directly through the middle of a fairly large vernal pool complex west of the Union Pacific Railroad. Indirect impacts due to changes in hydrology and fragmentation would likely be the most significant for those alternatives. Alternatives 4 and 5 also intersect the edges of several smaller vernal pool complexes in the Western and Central segments. There would be potential to minimize the level of indirect impacts to vernal pools for Alternatives 4 and 5 during the siting of the roadway within the corridor (Tier 2).

Landscaping would be installed within the Parkway's no-development buffer zone, i.e., the portions of the 500- and 1,000-foot-wide corridors not used as part of the roadway cross section, as well as within the median. The landscaping would provide some degree of buffer between the roadway and adjacent vegetation; however, there is also the potential for the spread of non-native landscaping materials. If the appropriate species were used, the potential for the spread of non-native landscaping materials would be reduced. Native vegetation currently within the buffer area would be especially vulnerable to the introduction and spread of weedy or aggressively spreading species that are not dependent on supplemental irrigation.

5.3 CUMULATIVE IMPACTS

5.3.1 Cumulative Impacts Scenario

Analysis of cumulative impacts is required under NEPA and the California Environmental Quality Act (CEQA). Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that are the focus of cumulative impact analysis. The Council on Environmental Quality's (CEQ's) regulations (CEQ, 1987) explicitly state that cumulative impacts must be evaluated along with the direct and indirect effects of each alternative.

CEQA defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, §15355). Stated another way, "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the environmental document together with other projects causing related impacts" (CEQA Guidelines, §15130). Although a project may cause an individually limited or individually minor incremental impact that, by itself, is not significant, the increment may be "cumulatively considerable" and thus significant. The federal Endangered Species Act defines cumulative impacts as those effects of "future State or private activities, not including Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation" (USFWS and NMFS, 1998).

FHWA has requested that cumulative conditions for the analysis of project alternatives in the EIS/EIR for Placer Parkway be based on development levels that are 20 years beyond the projected opening of the Parkway. For planning purposes, PCTPA has identified 2020 as the opening year of the Parkway. Cumulative impacts are therefore being evaluated for the year 2040. The 2040 scenario includes the following projects (see Figure 5-2):

- Full build-out of all residential land in Placer County west of Sierra College Boulevard, including current general plan areas and the following major development proposals in West Placer County:
  - The Creekview and Sierra Vista Specific Plan areas in Roseville's Memorandum of Understanding (MOU) Remainder Area
  - The Sphere of Influence (SOI) expansion areas of Lincoln
  - The Placer Vineyards, Regional University and Community, and Placer Ranch Specific Plans in unincorporated Placer County
  - The Curry Creek Community Plan area
- Growth in retail employment in Placer County that balances the growth in residential development by matching SACOG's countywide estimate of about 0.32 employee per dwelling unit from their 2025 forecasts.

- Growth in total employment levels in Placer County that balances the growth in residential development by matching SACOG's 1.3 employees per dwelling unit from their 2025 forecasts.

- Full build-out of the residential development in the proposed Sutter Pointe Specific Plan area along with a non-residential development level that balances the residential development in that area.

- Estimated 2040 developments in all other portions of SACOG's six-county region based on assuming a constant rate for the development growth between 2005 levels and the 2050 Preferred Blueprint scenario for each of SACOG's traffic analysis zones (TAZs).

Past and present projects that are considered in the cumulative impact scenario include existing regional transportation facilities such as SR 70/99, SR 65, and the Union Pacific Railroad (UPRR). Past and present projects also include the relatively dense residential development to the east and south of the project study area boundary.

5.3.2 Cumulative Impacts Evaluation

Placer Parkway would incrementally contribute to the projected loss of natural vegetation and sensitive natural communities within western Placer County. However, the majority of potentially impacted areas from the alternatives overlap areas that are already planned or proposed for development or other land uses prior to 2040. The combined effects of the conversion of native vegetation and farmland to suburban residential, commercial/industrial, and regional roadways associated with past, present, and future projects could exacerbate adverse impacts associated with Placer Parkway through habitat fragmentation and cumulative loss of habitats used by special-status species and sensitive natural communities. Indirect effects may also be increased as a result of decreased quality of the remaining areas of habitat as a result of habitat fragmentation and adverse effects of increased proximity to urban land uses, such as stormwater run-off, noise, and disturbance.

Past development within western Placer County has substantially increased the area of developed land in the county. Approximately 2,600 acres were urbanized during the two-year period from 1996 to 1998. Between 1998 and 2000, the California Department of Conservation estimated that 3,800 acres of western Placer County were urbanized. In 2004, the West Roseville Specific Plan authorized the development of approximately 3,162 acres of vernal pool and upland habitats in the vicinity of the Placer Parkway alternatives, which is now under construction. It is anticipated that substantial additional development is likely to occur in the vicinity of the project. Examples of this anticipated future development, either proposed or anticipated (and based on input from jurisdictions), is listed in Table 5-3. Approximately 50,000 acres of development is currently planned or anticipated in the vicinity of Placer Parkway. The Parkway would occupy approximately 500 to 600 acres[3] depending upon the alternative that is selected, approximately 1 percent of the total area that is anticipated for development in this portion of western Placer County. A substantial portion of the Parkway corridor would include areas already proposed for developments (Table 5-3).

3 The developed area of the Placer Parkway corridor is estimated based upon an average developed highway corridor width of 312 feet and does not include the undeveloped areas within the corridor at the outer margins of the proposed corridor.

Table 5-3
Estimated Area of Proposed Development in the Vicinity of Placer Parkway

Proposed Development	Acres
3D North	46
3D South	65
Aiken Property	156
Brookfield Property	681
City of Lincoln Sphere of Influence (overlaps other proposed developments)	19,773
City of Roseville Retention Basin	1,741
Creekview Specific Plan Area	587
Curry Creek Community Plan	1,463
Curry Creek Community Plan	312
Dry Creek - West Placer Community Plan	3,236
Foskett Ranch	300
Landfill Expansion Area	456
Lincoln 270	352
Lincoln Crossing	1,097
Lincoln Highlands	59
Meadowlands	45
Measure “M” Area	7,892
Placer Ranch Specific Plan	2,216
Placer Vineyards Specific Plan	5,259
Regional University Specific Plan	1,095
Riolo Vineyards Specific Plan	521
Sierra Vista Specific Plan Area	2,130
Sterling Pointe	138
Whitney Ranch	1,282
Total	**50,901**
Source: Mara Feeney and Associates, 2006	

The additional development that is anticipated by 2040 would substantially reduce and fragment remaining habitats within western Placer County and south Sutter County. The combination of the Parkway and other planned and proposed development would decrease habitat availability for sensitive species and decrease the area of sensitive habitats such as wetlands, vernal pool complexes, and riparian areas. Habitat fragmentation would increase, with areas in the south and east of the study area being particularly affected. Development in the south and east of the study area would result in an almost continuous stretch of urbanization from I-80 in the south to the alignment of Alternative 5 (Figure 5-2) in the north.

The Parkway would primarily be located within areas already proposed for future urban uses. Therefore, the potential for the Parkway to cause a cumulative increase in habitat fragmentation and isolation would be limited to those few areas where development would not be likely to occur except for the proposed Parkway. These areas are associated with proposed crossings of major streams that currently provide important habitat linkages. For example, all of the alternatives would cross Pleasant Grove Creek immediately upstream of the City of Roseville's proposed Reason Farms Retention Basin. Proposed development east of the Parkway will fragment and isolate other portions of the wildlife corridors along Pleasant Grove Creek and its tributaries. The construction of this new crossing of Pleasant Grove Creek would result in additional fragmentation of the linkage between proposed open space within the West Roseville Specific Plan area and the open space areas within the Reason Farms Retention Basin site.

Although the percentage of contribution of impacts from the Placer Parkway alternatives would be small compared to the overall impacts of the projects anticipated in western Placer County by 2040, the impacts on waters of the U.S. and associated vernal pool and riparian habitats may be important in the context of the amount of disturbance that has occurred historically in the area. For example, the U.S. Fish and Wildlife Service recovery plan for vernal pool species specifies the preservation of at least 85 percent of the remaining vernal pool habitat within western Placer County as the recovery goal (USFWS, 2005). As such, the cumulative contribution of the Placer Parkway to further reduction of these sensitive habitats is considered substantial.

The earlier development of regional transportation facilities such as SR 70/99 and SR 65 have resulted in habitat fragmentation with barriers to wildlife movement in an east/west direction. Placer Parkway would result in an additional barrier to wildlife movement, but in a north/south direction. However, the east-west orientation of the Parkway minimizes potential cumulative effects on wildlife movement as existing stream and riparian corridors are also generally located in an east-west orientation within western Placer County, which minimizes the crossings by the proposed road corridor.

Areas of contiguous open space comprising agricultural land and pasture and undeveloped land would only remain within the north and west side of the study area following the development of the Parkway and other planned and proposed development in the study area. The remaining open space within the developed areas would be highly fragmented and therefore of significantly lower quality than what currently exists. There would likely be declines in the diversity of animal, plant and wildlife populations due to adverse effects of habitat fragmentation and isolation of remaining populations. Remaining habitat would be of less value than similar contiguous habitat.

As a result, the potential adverse impacts on sensitive biological resources associated with Placer Parkway are considered cumulatively considerable. Mitigation for impacts to sensitive biological habitat would be provided by a combination of fees paid to the Natomas Basin Habitat Conservation Plan, and either fees paid to the PCCP or a combination of avoidance, minimization, and compensation. Mitigation strategies for direct impacts are discussed further in Section 5.5.

5.4 POTENTIAL WATT AVENUE INTERCHANGE

The potential future interchange with Watt Avenue would be an interchange located at the far eastern edge of the Central Segment. Figure 2-3 shows each conceptual interchange location. Alternative 1 has two options for interchange location, one to the north (Option Two) and one to the south (Option One). Option Two would also be the location of the interchange for Alternative 2. Alternatives 3 and 4 share the same interchange location. It is estimated any interchanges could result in approximately 65 acres of potential direct habitat impacts. The type and amount of sensitive biological resources that would be impacted would be evaluated as part of the Tier 2 process. Direct impacts would include loss of general wildlife habitat but there would not likely be any impacts to potential giant garter snake habitat, potential

Swainson's hawk nesting habitat, or potential Valley elderberry longhorn beetle habitat as a result of a potential Watt Avenue interchange.

The proposed interchange locations for Alternative 1 (Option One) would impact approximately 9 acres of wetlands beyond the alignment corridor. The interchange for Alternative 1 (Option Two) and Alternative 2 would affect less than 1 acre of wetlands. However, both these alternatives could affect approximately 11 acres that have been mapped as vernal pool complex for the Placer Legacy planning effort. The proposed interchange location for Alternatives 3 and 4 would impact approximately 6 acres of additional wetland habitats beyond the study corridors for these alternatives. The interchange option for Alternatives 3 and 4 would also potentially affect 3 acres of vernal pools. The interchange for Alternative 5 would impact approximately 1 acre of wetlands but would not affect any vernal pool complexes. No additional stream crossings would occur as a result of the potential Watt Avenue interchange.

5.5 AVOIDANCE, MINIMIZATION AND MITIGATION

Under the Modified NEPA/404 MOU (discussed below in Section 6.1) Concurrence Point #5 states that the mitigation framework for Tier 1 will describe in general terms the processes that PCTPA will use to maximize opportunities for successful mitigation, including long-term mitigation and management of resources. The MOU states that the mitigation framework should identify the following:

- Mitigation options available for creation, restoration, enhancement and preservation of aquatic resources (e.g., land dedication, acquisition of conservation easements, in lieu of fees for acquisition, mitigation banks), and potential mitigation sites;
- Wildlife/environmental friendly design including but not limited to, low impact development standards, maintaining or creating environmental corridors, and construction of bridges over stream crossings;
- Opportunities to build upon existing or planned conservation efforts of other agencies and non-governmental organizations for the purposes of protecting and restoring large, intact landscapes; and
- Institutions and instruments for long-term management of mitigation sites.

A screening level evaluation of the conceptual corridor alignments identified in the Project Study Report (PSR) (DKS Associates, 2001) along with a number of other potential alternatives was conducted from 2003 to 2005. The purpose of the screening level evaluation was to:

- Develop preliminary engineering, transportation, and screening criteria,
- Identify "fatal flaws" or issues of substantial impact associated with these corridor alignments, and
- Identify opportunities for adjusting them to minimize or eliminate fatal flaws, and reduce impacts to biological resources.

The results of the screening level evaluation were published in a Technical Memorandum in 2004 (URS, 2004). The results of the environmental screening of PSR alternatives identified areas where slight modifications to the alignments would significantly reduce potential impacts to biological resources. Those modifications were implemented. For instance, a large wetland and conservation area along the main branch of Curry Creek was avoided by changing Alternative 3 to curve north. Also, vernal pool

complexes in the eastern part of the Central Segment, and in the western part of the Eastern Segment were modified to be avoided by all Tier 1 corridor alignments.

Future (Tier 2) efforts to site the alignment within the selected corridor will also place a high priority on avoiding impacts to sensitive biological resources. Activity-specific avoidance and minimization measures would be developed during the Tier 2 process to protect sensitive biological resources during construction and operation of the Parkway. Examples of potential avoidance and minimization measures that might be implemented to protect special-status fish species are provided in Appendix C.

The following sections describe the proposed mitigation strategies for Sutter County and Placer County. The proposed mitigation would be implemented during the Tier 2 phase of the project when specific impacts have been identified. Where HCP options exist, the biological resource impacts identified during the Tier 2 phase would be mitigated according to the requirements of the specific plan. In areas where an HCP option is not available, the Tier 2 mitigation would be implemented according to the strategies outlined below.

5.5.1 Mitigation Strategy for Sutter County

5.5.1.1 Mitigation Strategy under the Natomas Basin Habitat Conservation Plan

A large portion of the Western Segment of the study area falls within Sutter County and northern Sacramento County. These areas are part of a geographic region called the Natomas Basin. The NBHCP was established in 1997 as a multi-species conservation program to mitigate the expected loss of habitat values and incidental take of protected species that would result from urban development, operation of irrigation and drainage systems, and rice farming. The Natomas Basin Conservancy (NBC) manages the implementation of the NBHCP. To meet the mitigation goals of the NBHCP, a mitigation fee is paid to the NBC by developers of projects when they apply for building permits. The NBC then uses the mitigation fees to acquire, restore, and manage mitigation lands to provide habitat for protected species and maintain agriculture in the basin (NBC, 2006). The required fees would be paid to the NBC to mitigate for Parkway impacts to special status species in the NBHCP service area.

5.5.1.2 Mitigation Strategy for Impacts Not Within the Natomas Basin Habitat Conservation Plan

The mitigation strategy that would be pursued for impacts to areas within Sutter County but not in the Natomas Basin would include a combination of avoidance, minimization, and compensation. Measures to avoid and minimize potential impacts would include scheduling construction activities to minimize disturbance during sensitive life cycle phases of wildlife species; monitoring construction activities to limit disturbance, vegetation removal, and habitat damage; and implementing an environmental awareness training program for all construction personnel. In keeping with the strategy presented in *Eco-Logical* (Brown, 2006), compensation would include some combination of habitat preservation, restoration, and creation developed in coordination with federal, state, and local agencies with the goal of protecting larger, connected habitat rather than protecting fragmented areas of a single resource.

The framework for conservation efforts established by the NBHCP would be implemented to the extent feasible to mitigate for impacts resulting from Placer Parkway.

Efforts to conserve, restore, or create compensatory habitat would be focused within the Pleasant Grove Creek watershed, or areas to the north. Areas to the south are less preferred because of existing and proposed future development. Preservation of large blocks of habitat or linkages between existing conservation areas would be preferred to the acquisition of smaller habitat areas.

Mitigation for impacts to vernal pool species would be consistent with the Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon. The Plan presents an ecosystem-level strategy for recovery and conservation because all covered species occur in the same natural ecosystem. The five key elements of the recovery strategy are as follows: habitat protection; adaptive habitat management, restoration and monitoring; status surveys; research; and participation and outreach. The Placer Parkway project may contribute to the recovery effort primarily through habitat protection through the establishment of conservation areas and reserves that will maintain or enhance species habitat values.

Existing USFWS and CDFG mitigation guidelines for giant garter snake, Valley elderberry longhorn beetle, and Swainson's hawks would be used.

5.5.2 Mitigation Strategy for Placer County

The proposed Placer County Conservation Plan (PCCP) is a Placer County program consisting of a Natural Community Conservation Plan (NCCP) and a Habitat Conservation Plan (HCP) that seeks to protect Placer's diverse open-space and agricultural resources. It also seeks to promote viable economic opportunities within the County. The PCCP is being developed under the Placer Legacy. An HCP is a plan that permits the removal of habitat for federally listed species in designated areas and specifies measures for conserving and enhancing habitat for these species in open space preserves. An NCCP identifies and provides for the regional or area-wide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity.

The PCCP is currently under development and the timing of its completion is uncertain. It may or may not be adopted by the time that mitigation is implemented for Placer Parkway. Because a goal of the mitigation framework is to use regional opportunities to build on existing or planned conservation efforts, the conceptual mitigation for Placer Parkway must include the goals of the PCCP, and use (if available) its established mechanisms for conservation. At the same time, conceptual mitigation for Placer Parkway must provide for suitable alternatives should the PCCP not be functional in time to serve this project's mitigation needs.

Under either scenario, the avoidance and minimization of impacts is the preferred strategy for Placer Parkway, as identified in *Eco-Logical* guidance from the U.S. Department of Transportation (Brown, 2006). Consistent with the *Eco-Logical* strategy, required mitigation will be implemented so that it would complement and expand existing conservation and open space areas in the project vicinity. A number of opportunities for restoration and conservation are identified in the draft Ecosystem Restoration Plan for the Pleasant Grove Creek and Curry Creek watersheds (Foothill Associates, 2005). Although variation exists in the amount of direct impacts of the roadway, each alternative would have approximately the same order of magnitude except the No-Build Alternative, which would have no direct impacts. However, during the Tier 2 process, the exact location of the roadway will be identified within the corridor preserved during Tier 1. During this siting process, a more detailed, ground based evaluation of sensitive biological resources will be completed, including a jurisdictional wetland delineation and sensitive species surveys. Results of ground surveys will be used to avoid, to the extent feasible, the placement of the roadway alignment directly within areas of sensitive resources.

The following sections describe a conceptual mitigation framework for areas within western Placer County both with and without the PCCP.

5.5.2.1 Mitigation Strategy Under the Placer County Conservation Plan

The PCCP is a proposed strategy and regulatory framework designed to guide and streamline permitting for large-scale development in western Placer County over the next 50 years while establishing a network of conservation areas to protect and conserve sensitive species and natural communities. The PCCP

covers approximately 221,000 acres in western Placer County, including important natural communities such as stream environments, vernal pool grasslands, grasslands, blue oak and valley oak woodlands, and agricultural lands such as rice. Many stream and wetland resources found in the western part of Placer County are regulated under the federal Endangered Species Act (ESA) and the Clean Water Act (CWA) because they provide aquatic habitat for threatened and endangered species. The goal of combining these regulatory frameworks is a streamlined permitting process and greater environmental benefits.

SPRTA has coordinated with Placer County since 2003 on becoming a Participating Agency with the Placer Parkway as a "covered" activity. A draft Planning Agreement is being finalized for consideration by SPRTA, Placer County, and resource agencies. If the PCCP is approved it would likely require mitigation based on acres of undeveloped lands that are developed rather than on a habitat-specific basis. Two options compensating for project impacts are under consideration:

- In-lieu fee payment, or
- Acquisition of conservation lands by the project developer.

Both of these options would provide conservation of larger, consolidated areas of land that are consistent with the *Eco-Logical* approach advocated by Brown (2006). The in-lieu fee payment option would rely on a set payment per acre of undeveloped land converted to development. No value for the in-lieu payment has been assigned at this time pending the adoption of a conservation area strategy. However, the small area of vernal pool habitat remaining in western Placer County has complicated this effort. Proposed strategies would provide a minimum of 3:1 compensation for vernal pool habitat that would consist of 2:1 preservation and 1:1 creation. The U.S. Fish and Wildlife Service has suggested a much higher ratio in order to achieve 85 percent preservation of the remaining habitat as proposed under the recovery plan for vernal pool species (2005).

Another part of the County's planning effort is the development of the County Aquatic Resources Plan (CARP), which will protect sensitive aquatic resources and is intended ultimately to allow the County to authorize projects under CWA Section 404. However, unlike the PCCP, which has no upper limit on the size of project that the County can authorize, under CARP the County would only be able to authorize projects that have impacts of up to 3 acres of waters of the United States.

The U.S. Environmental Protection Agency and U.S. Army Corps of Engineers (USCOE) have proposed a streamlined process for obtaining CWA Section 404 authorizations for western county projects with 3 acres or more of impacts. These projects would be able to tier from the NEPA and CWA analyses that will be performed for the PCCP and CARP, provided that they otherwise meet the conditions established in the PCCP and CARP. This should eliminate the need for additional off-site alternatives analysis at the project level, provide project proponents with greater flexibility with regard to on-site avoidance, and generally result in expedited processing of individual permit applications for such projects.

5.5.2.2 Mitigation Strategy Without the Placer County Conservation Plan

The mitigation strategy that would be pursued if the PCCP were unavailable by the time the Placer Parkway project is implemented would be based upon the mitigation guidelines presented in *Eco-Logical* (Brown, 2006). This strategy would include a combination of avoidance, minimization, and compensation. Compensation would include some combination of habitat preservation, restoration, and creation developed in coordination with federal, state, and local agencies. Compensation areas would be selected that meet the following criteria:

1. Contiguous with existing open space or high value habitat;

2. Compatible with existing watershed and regional plans such as the Pleasant Grove/Curry Creek Ecosystem Restoration Plan (Foothill Associates, 2005) and the USFWS Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon (USFWS, 2005); and

3. Acceptable to the federal, state, and local agencies with regulatory jurisdiction over the affected resources.

A recent USFWS memorandum to Placer County stated that preservation of existing high-quality vernal pool habitat is preferable to creation; however, if creation is required to satisfy other regulatory requirements, the USFWS prefers creation in areas that are not currently vernal pool habitat (Sanchez, 2006).

Compensatory habitat mitigation in the absence of the PCCP would be implemented according to the strategies outlined for Sutter County in Section 5.5.1.2. The Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon set a goal of preserving at least 85 percent of the remaining vernal pool critical habitat in western Placer County (USFWS, 2005). The Plan presents an ecosystem-level strategy for recovery and conservation because all of the covered species occur in the same natural ecosystem. The five key elements of the recovery strategy are as follows: habitat protection, adaptive habitat management, restoration and monitoring, status surveys, research, and participation and outreach. The project may contribute to the recovery effort through habitat protection and the establishment of conservation areas and reserves that will maintain or enhance species habitat values.

Under the Recovery Plan, western Placer County contains designated "core areas" of vernal pool habitat, some of which falls within the Placer Parkway study area. Core areas are designated as zone 1, 2, or 3. The zone designation will be used to determine the order of their overall priority for recovery. It is anticipated in the Recovery Plan that a number of the covered species can be recovered primarily through the protection of areas designated as zone 1. All of the core areas in western Placer County are zone 2, which are areas where the most widely distributed species occur (Figure 4-2). Protection of zone 2 core areas will significantly contribute to recovery of these species, and if sufficient, might offset the need to protect some lands within zone 1 core areas (USFWS, 2005). In general, the USFWS considers recovery recommendations in zones 2 and 3 core areas to be more flexible than zone 1, and recovery criteria specific to those zones may be modified on a case-by-case basis based on future information (USFWS, 2005).

6.0 REGULATORY REQUIREMENTS AND ADDITIONAL ANALYSES

6.1 REGULATORY REQUIREMENTS FOR TIER 1

FHWA, Caltrans, and PCTPA have participated with the USCOE and the U.S. EPA in a modified NEPA/404 process. A formal process is usually initiated by the submittal of an application for a Section 404 permit under the Clean Water Act to the USCOE. It focuses on identification of a Least Environmentally Damaging Practicable Alternative (LEDPA). This process ensures federal agency agreement that the preferred alternative is the LEDPA necessary to obtain permits prior to project construction.

The Tier I EIS/EIR process for the project does not require a Section 404 permit or any permits from any federal agencies. Therefore, a LEDPA determination is not necessary in the current process. However, all parties have participated in a modified NEPA/404 process that has provided increased certainty that the corridor alignment identified as the preferred alternative in the Final EIS/Program EIR will meet the criteria of Section 404 of the Clean Water Act. This will help to address significant LEDPA issues during the Tier 2 process, and is intended to result in an ultimate project that will receive a Section 404 permit. The establishment of the modified MOU has increased the level of predictability for long-term project planning and has increased the likelihood that commitments by agencies will be honored, as discussed in *Eco-Logical* (Brown, 2006).

No additional biological resource studies or analyses are proposed for the Tier 1 process. Detailed design information required for further studies will be not be available until the Tier 2 stage of the project.

6.2 ANALYSIS TO BE UNDERTAKEN IN TIER 2

Additional studies will be required for the Tier 2 EIS/EIR and permitting process. Detailed habitat mapping would be conducted using a combination of GIS data, aerial photography, and field reconnaissance. Focused surveys for special-status species may also occur within the chosen corridor alternative. This would include vernal pool branchipods, giant garter snake, Valley elderberry longhorn beetle, listed plants, and any other species that become listed prior to the Tier 2 document. Results of focused surveys and habitat mapping would be included (if applicable) in a Biological Assessment in support of Section 7 consultation with the USFWS, NOAA Fisheries, and/or California State Endangered Species Consultation. Focus surveys and mapping would also be used to site the roadway within the chosen corridor alternative in a manner that least affects special-status species and sensitive habitat.

A formal wetland delineation would be conducted for the U.S. Army Corps of Engineers and California Regional Water Quality Control Board permitting requirements under Section 404/401 of the Clean Water Act.

Pre-construction surveys would likely also be completed after the Tier 2 EIS/EIR document but prior to construction for species such as Swainson's hawk, white-tailed kite, and other nesting birds.

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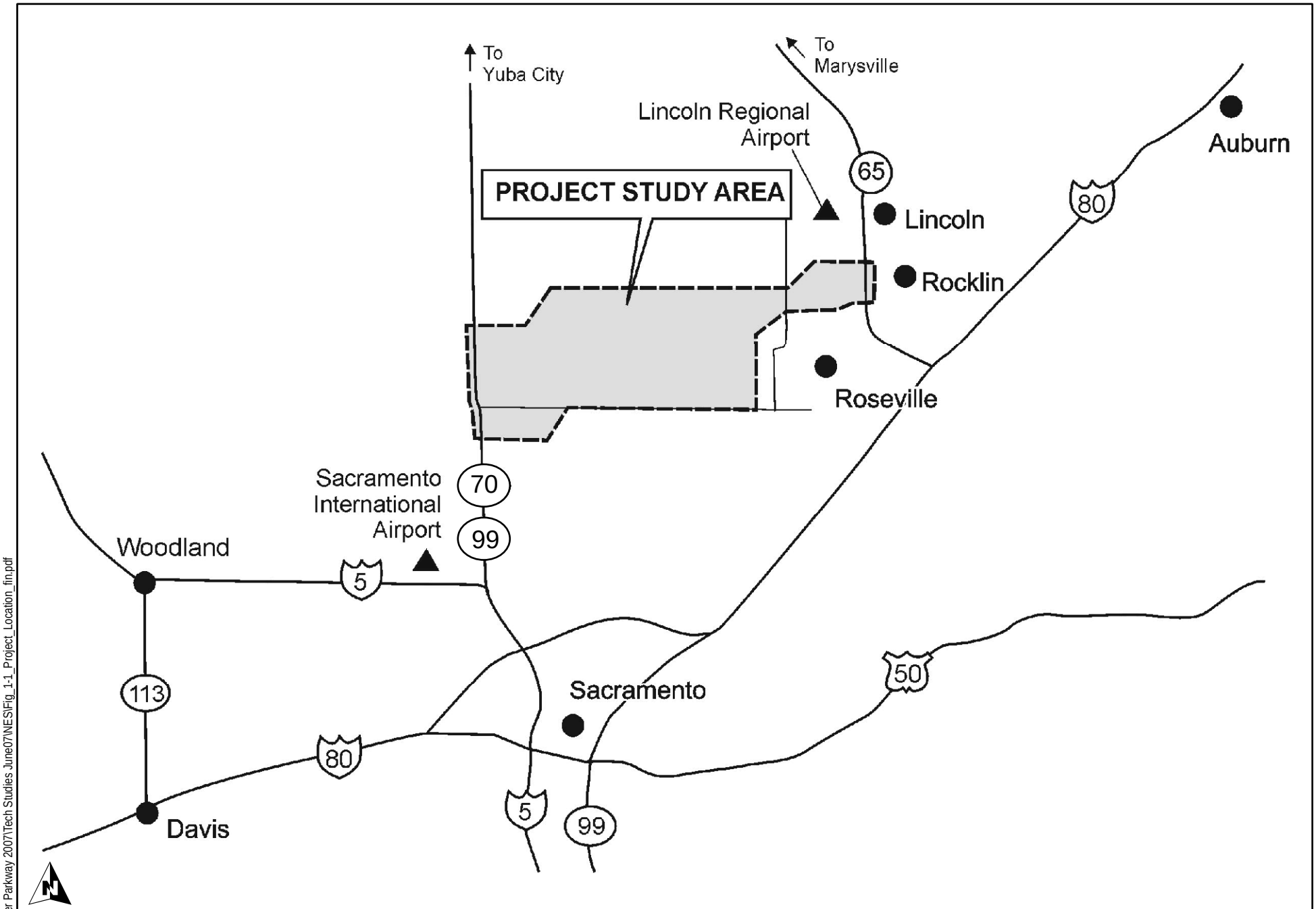
Figures



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PLACER PARKWAY

Tier 1 EIS/EIR
Natural Environment
Study

Project Location

Figure 1-1

June 2007

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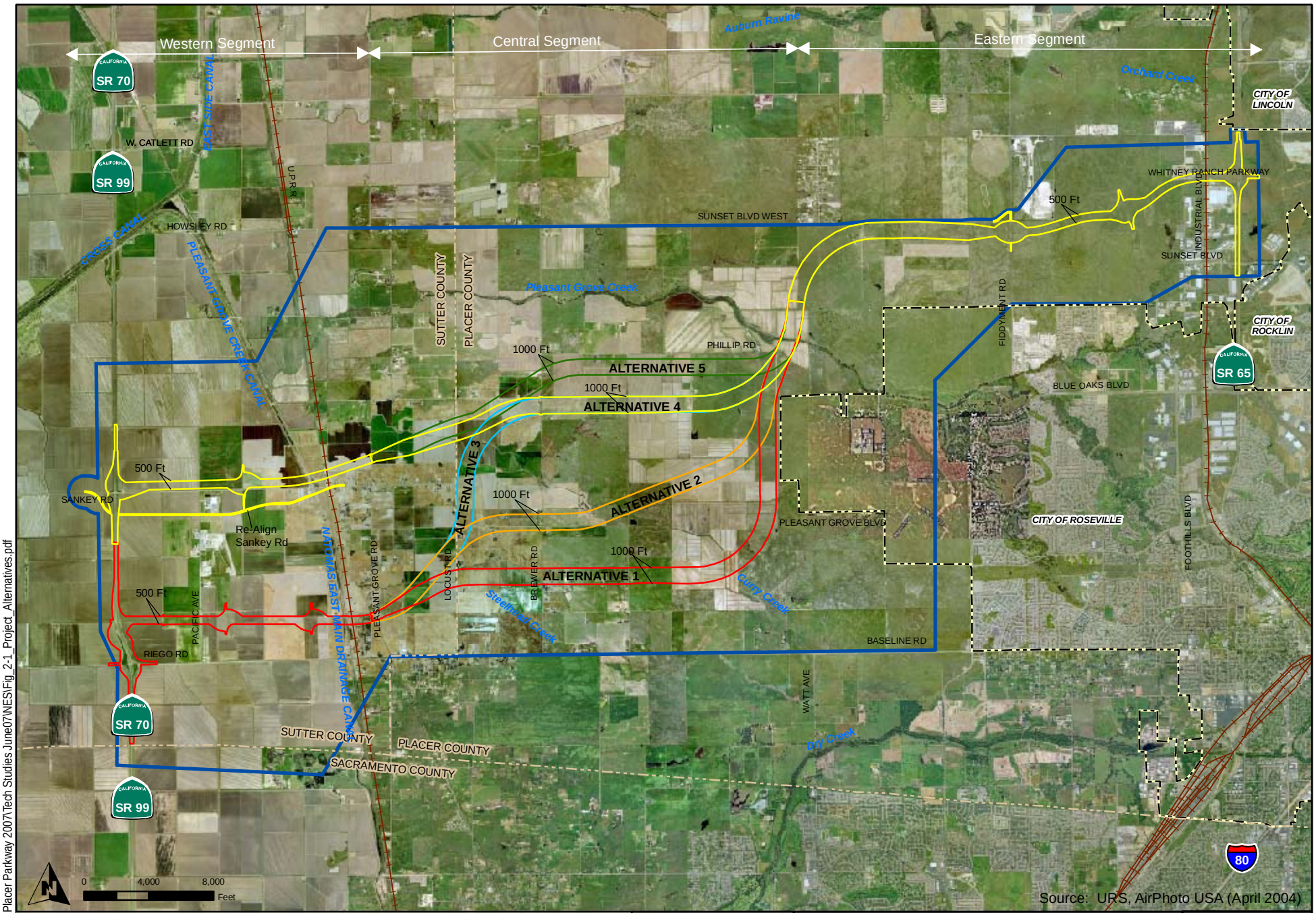

Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary

PLACER PARKWAY

Tier 1 EIS/EIR
Natural Envorinment
Study

Project Alternatives

Figure 2-1

June 2007

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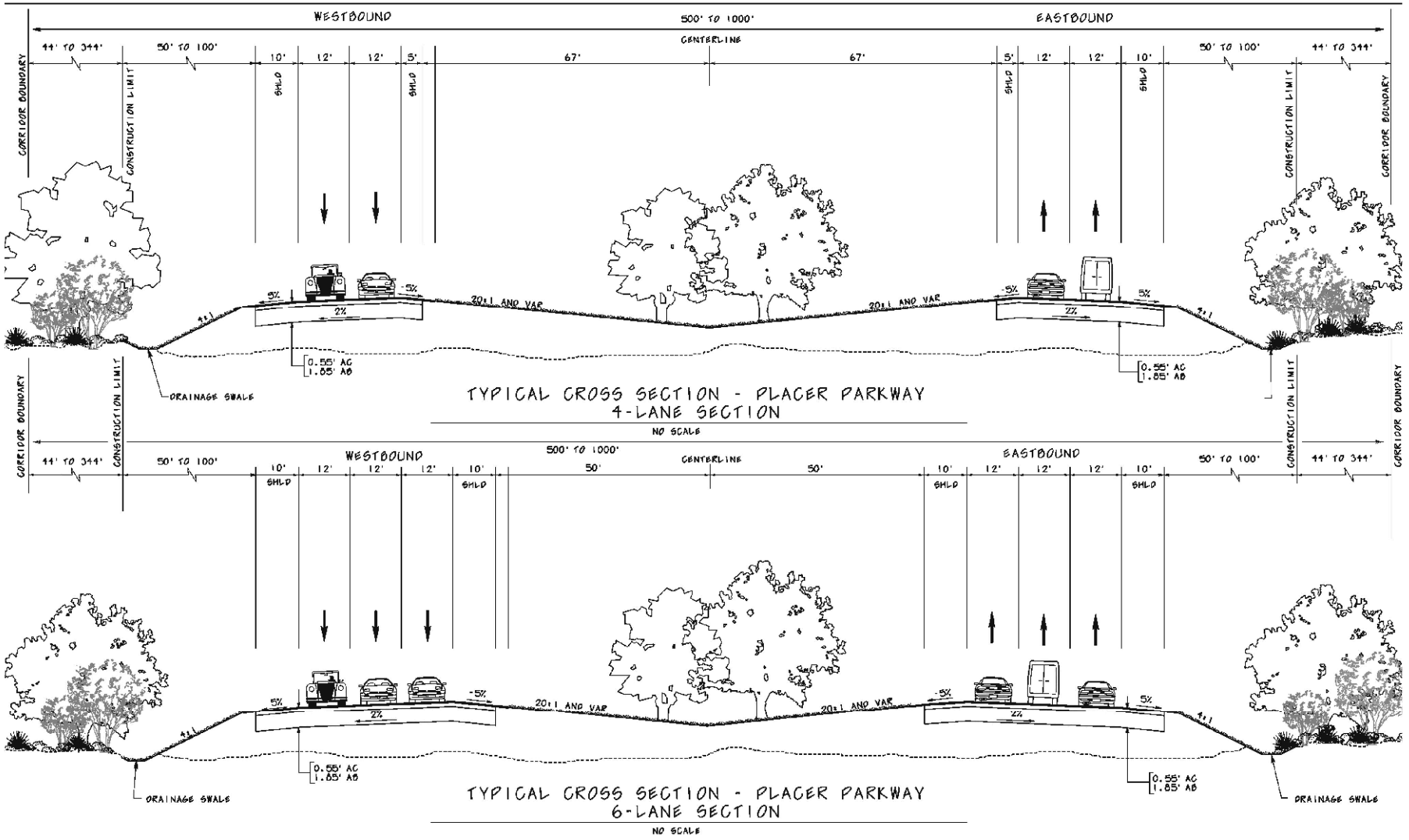

PLACER PARKWAY	Tier 1 EIS/EIR Natural Environment Study	Typical Cross Section (Conceptual)	***Figure 2-2*** ***June 2007***

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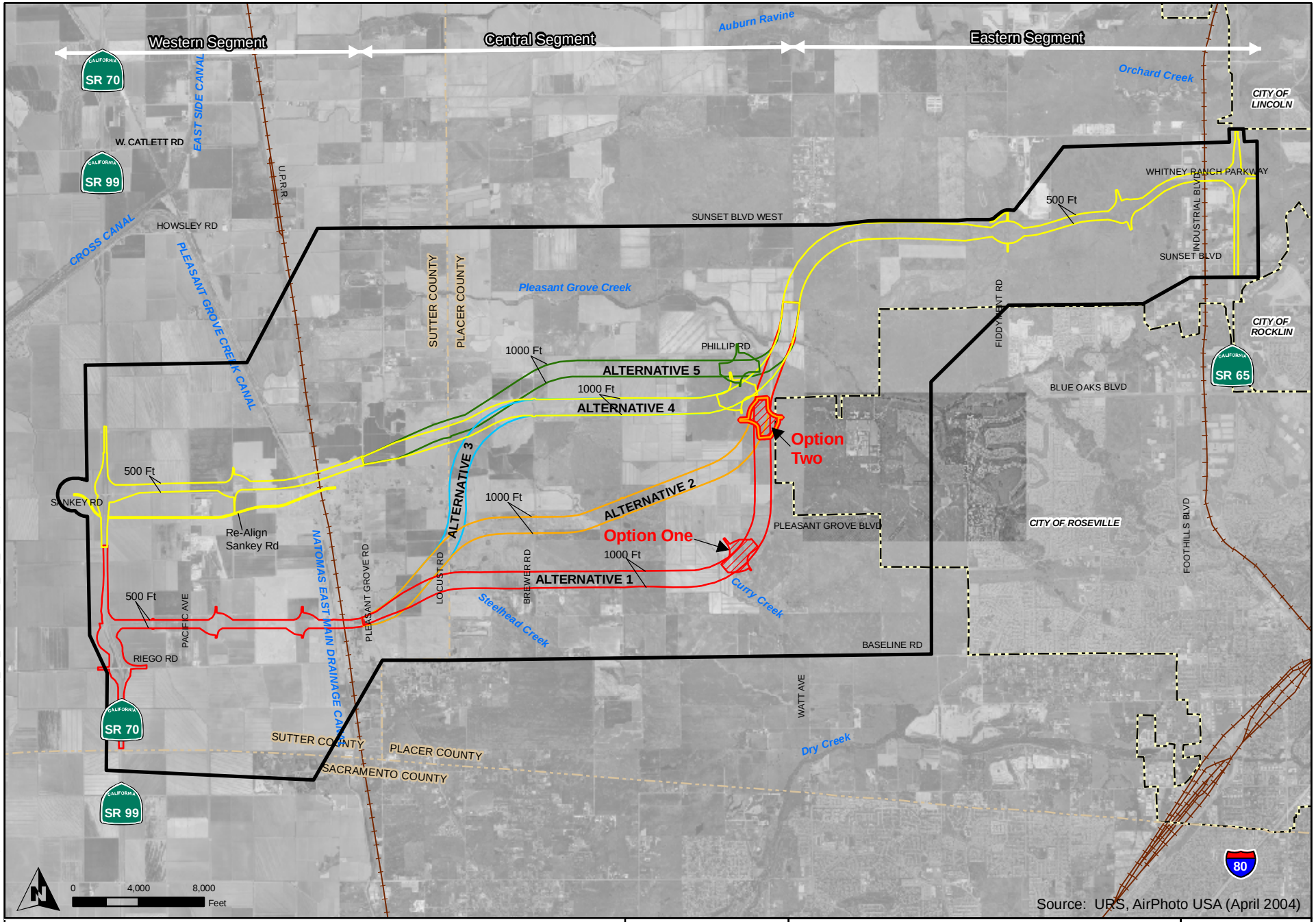
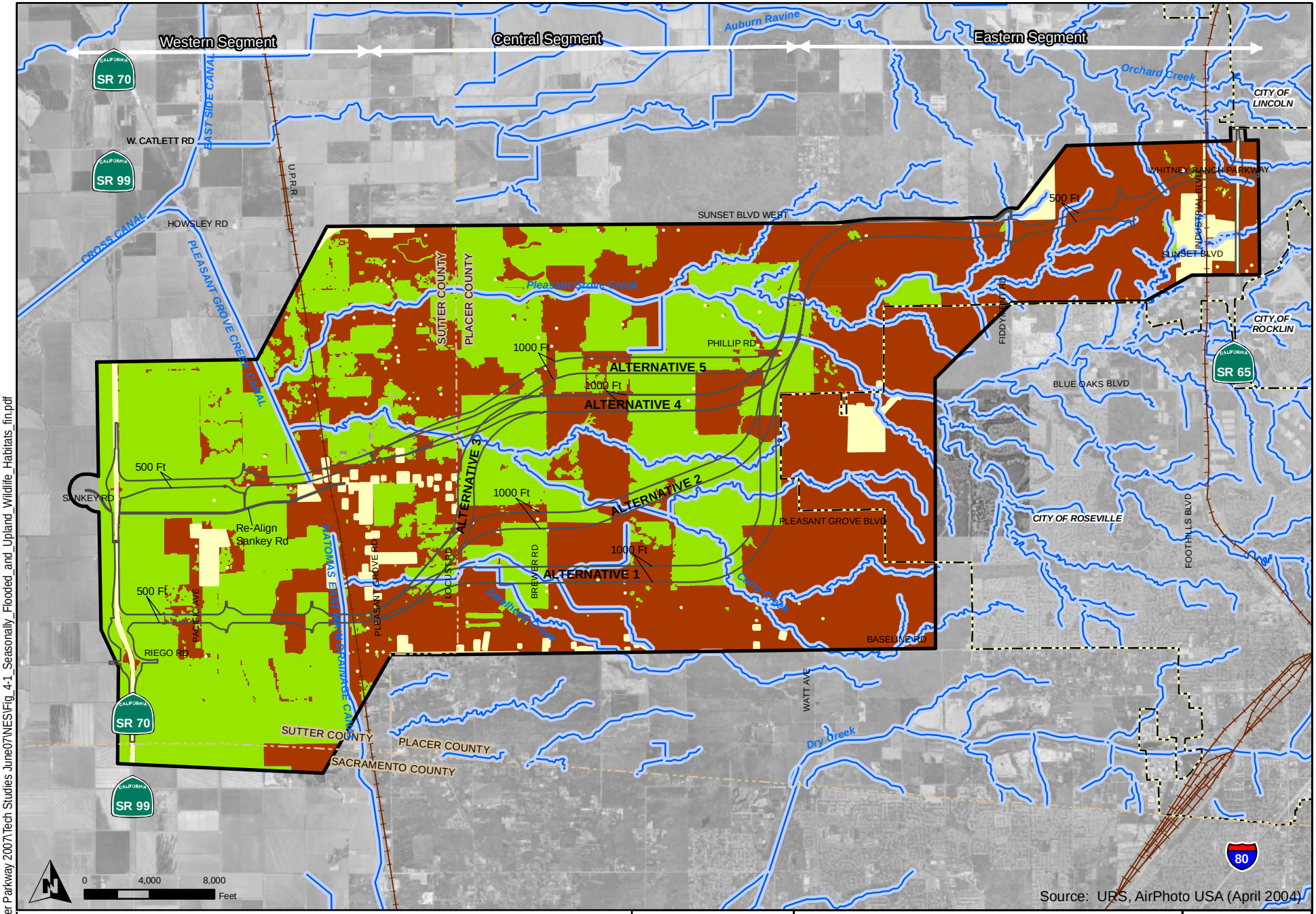


Tier 1 EIS/EIR
Natural Environment Study

Potential Watt Avenue Interchange

Figure 2-3

June 2007



Tier 1 EIS/EIR
Natural Environment Study

Seasonally Flooded and Upland Wildlife Habitats

Figure 4-1

June 2007

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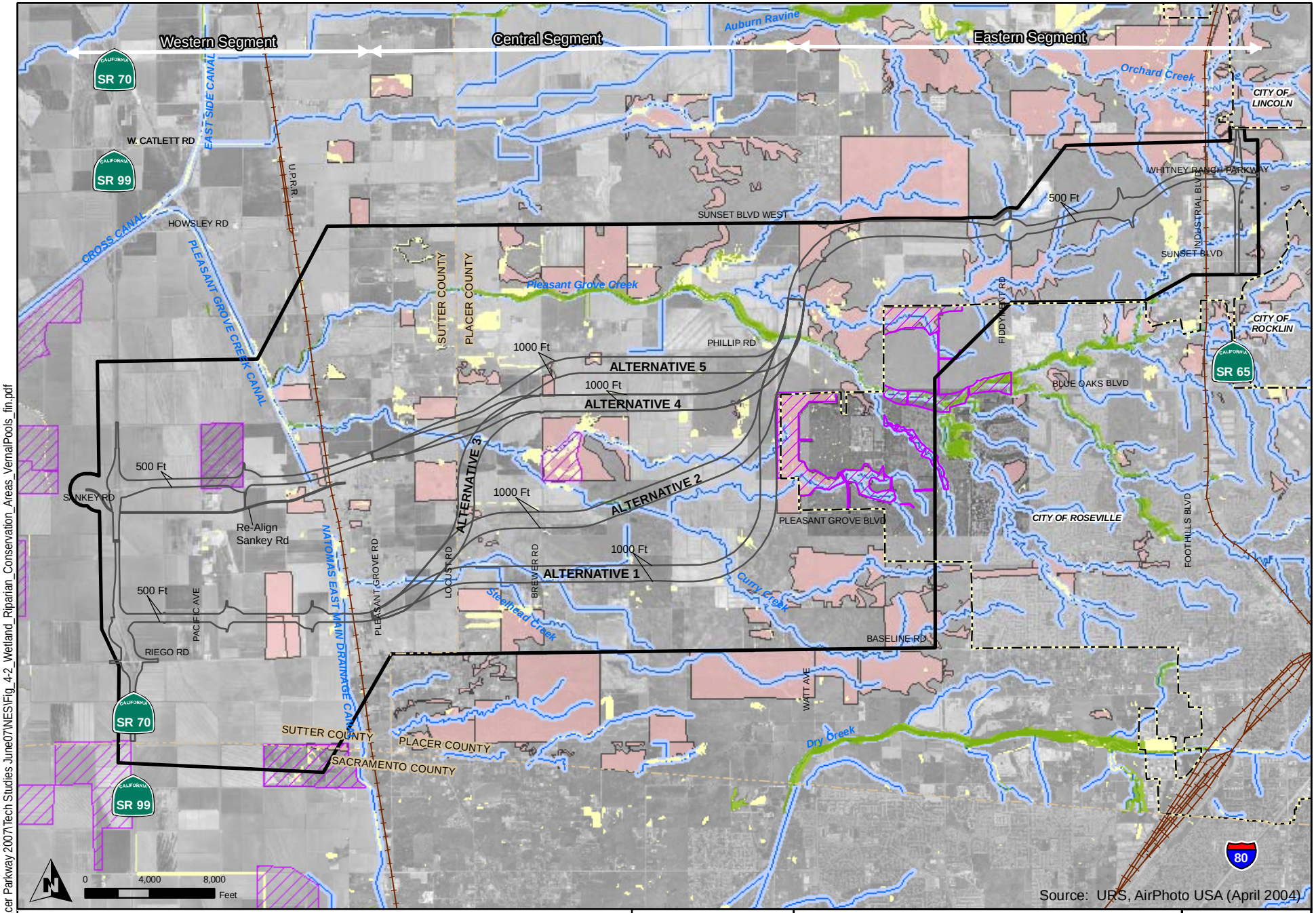

Tier 1 EIS/EIR
Natural Environment Study

Wetland, Riparian, Conservation Areas, and Vernal Pool Complexes

Figure 4-2

June 2007

6/15/07 ..\rkT\Placer Parkway 2007\Tech Studies June07\NES\Fig_4-2_Wetland_Riparian_Conservation_Areas_VernalPools_fin.pdf

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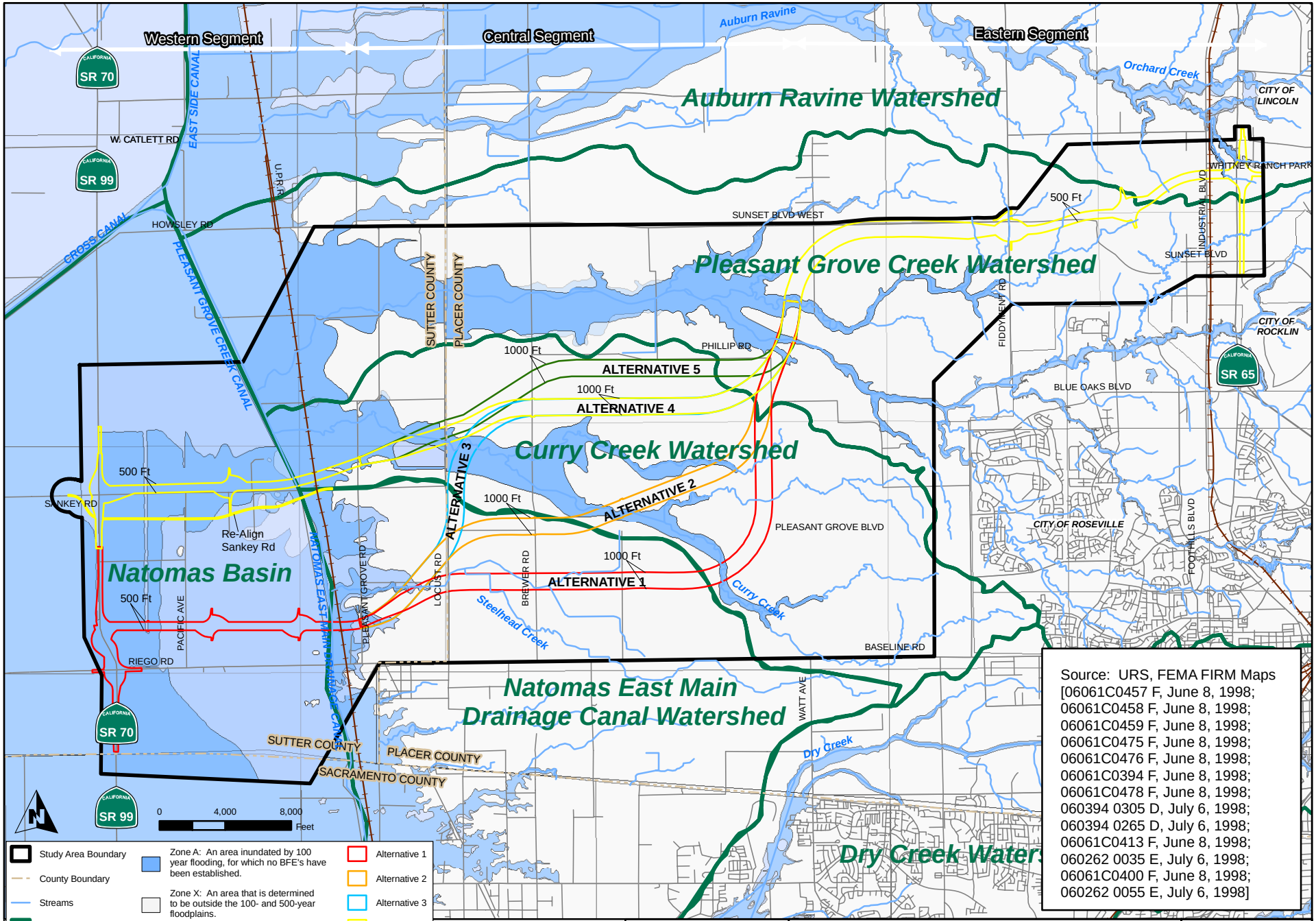

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PLACER PARKWAY

Tier 1 EIS/EIR
Natural Environment Study

Watershed Boundaries

Figure 4-3

June 2007

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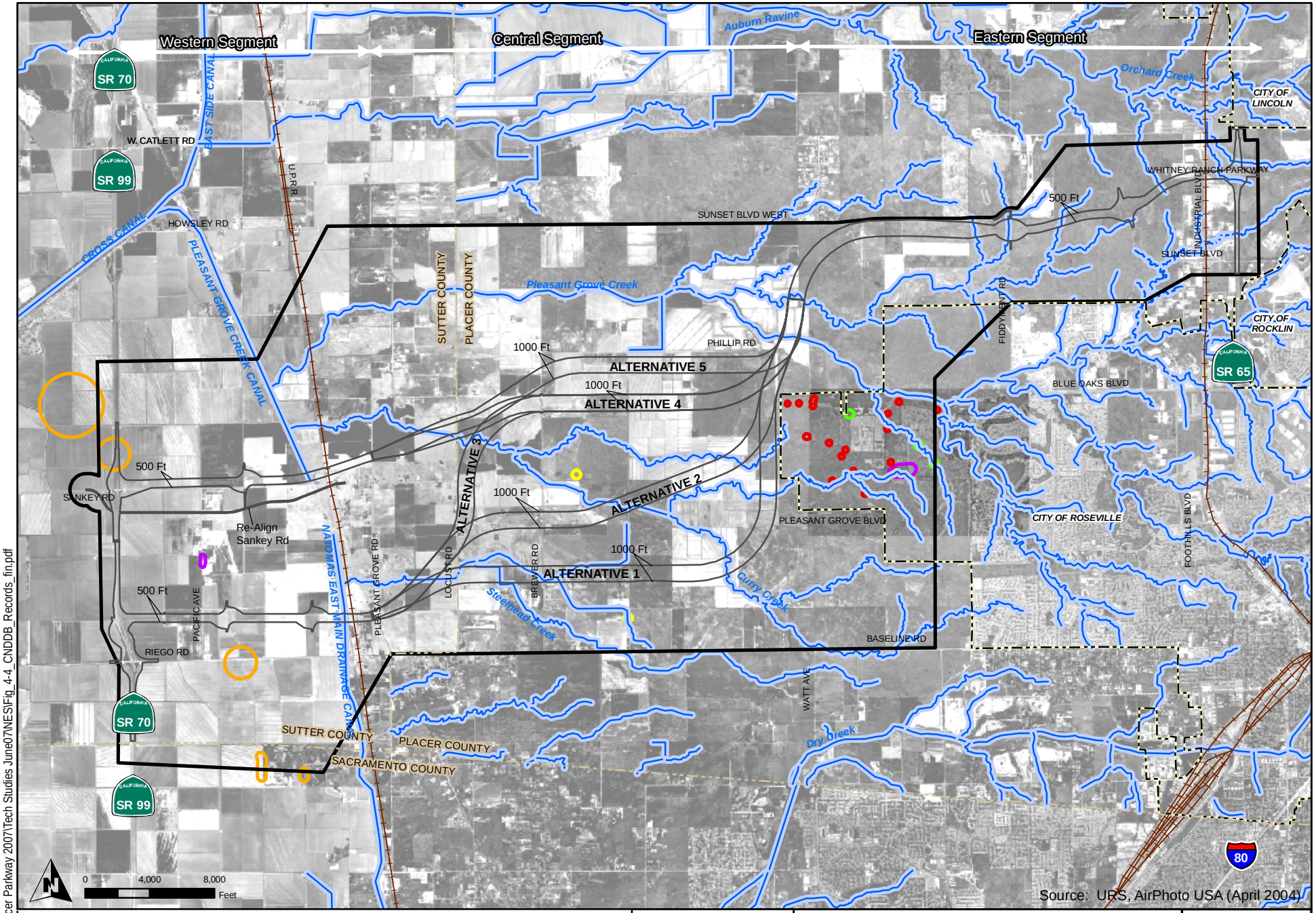

Alternative
Study Area Boundary
County Boundary
City Boundary
Stream
Swainson's hawk
Burrowing owl
Dwarf downingia
Giant garter snake
Western spadefoot

PLACER PARKWAY

TIER 1 EIS/EIR
Natural Environment
Study

California Natural Diversity Database Records

Figure 4-4

June 2007

6/18/07 ..\hkT:\Placer Parkway 2007\Tech Studies June07\NESFig_4-4_CNDDB_Records_fin.pdf

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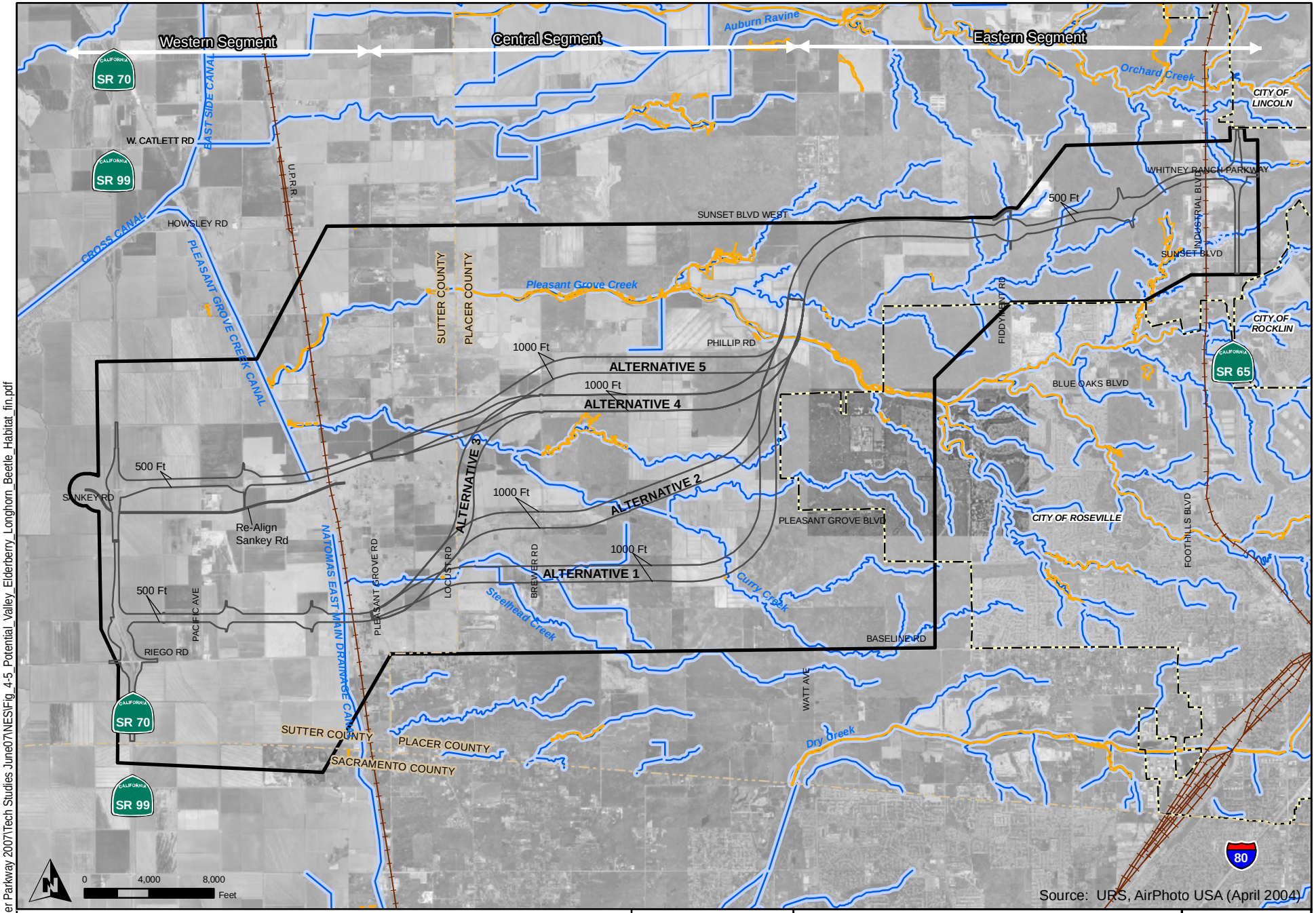

Alternative
Study Area Boundary
County Boundary
City Boundary
Stream
Potential Valley Elderberry Longhorn Beetle Habitat

PLACER PARKWAY

Tier 1 EIS/EIR
Natural Environment Study

Potential Valley Elderberry Longhorn Beetle Habitat

Figure 4-5

June 2007

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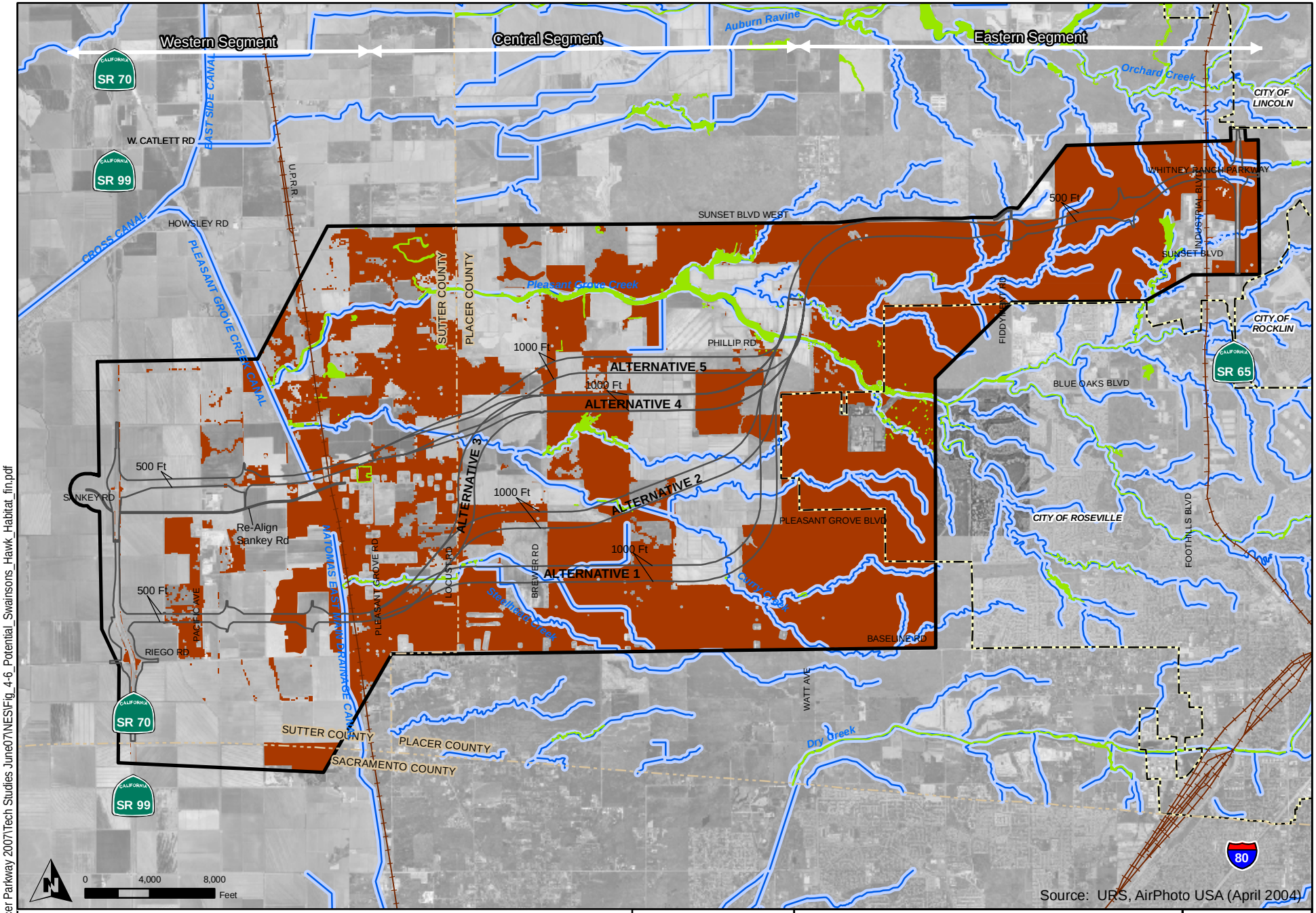

Tier 1 EIS/EIR
Natural Environment Study

Potential Swainson's Hawk Habitat

Figure 4-6

June 2007

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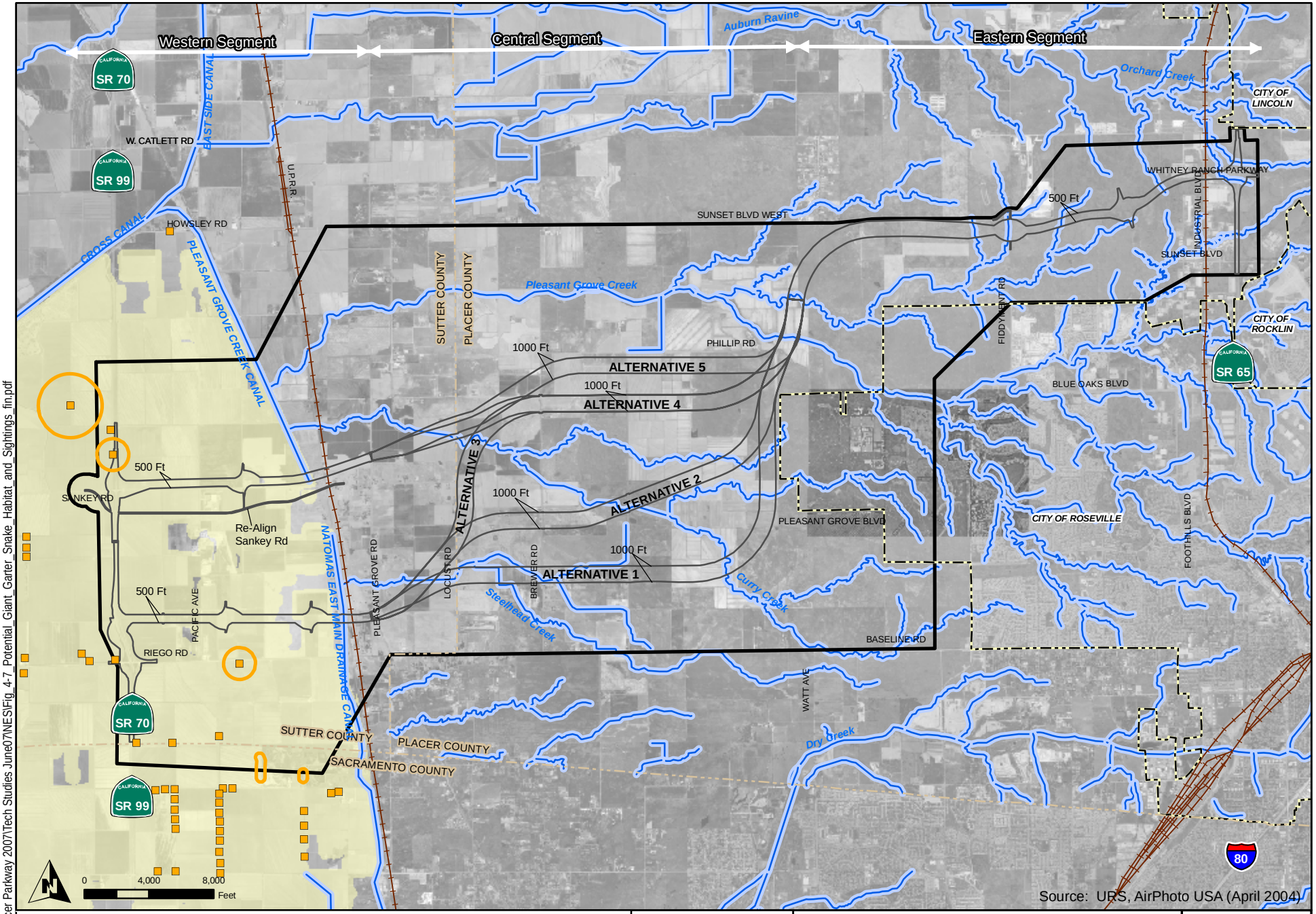

Tier 1 EIS/EIR
Natural Environment Study

Potential Giant Garter Snake Habitat and Sightings

Figure 4-7

June 2007

6/15/07 ..\K\T:\Placer Parkway 2007\Tech Studies June07\NES\Fig_4-7_Potential_Giant_Garter_Snake_Habitat_and_Sightings_fin.pdf

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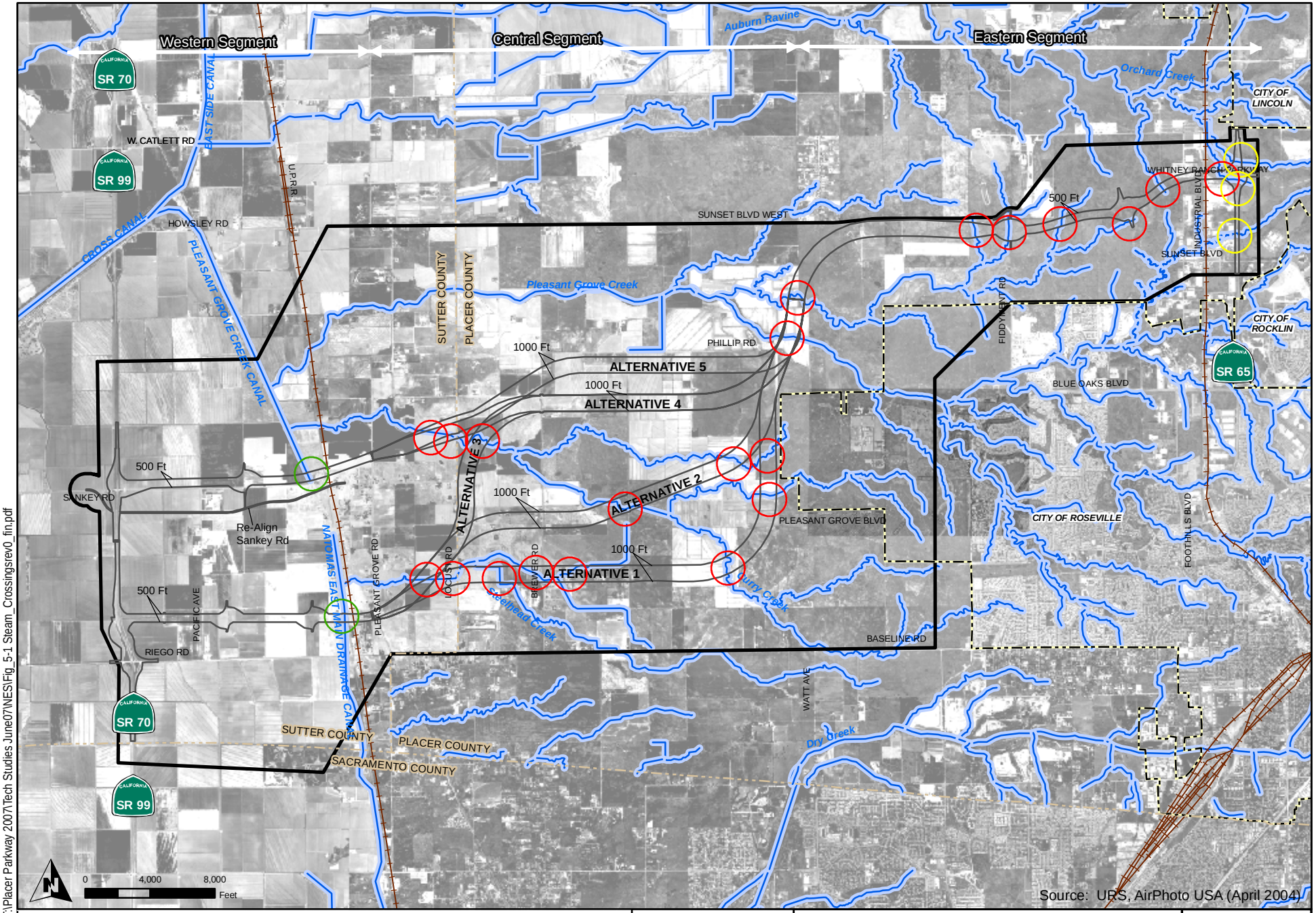

TIER 1 EIS/EIR
Natural Environment Study

Stream Crossings

Figure 5-1

June 2007

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Cities/Towns:

A - Woodland
B - Sacramento
C - Citrus Heights
D - Folsom
E - Roseville
F - Rocklin
G - Loomis
H - Lincoln
I - Wheatland
J - Auburn

Planned/Proposed Development Areas:

1 - Natomas Joint Vision Area
2 - Rio Linda and Elverta Community Plan Area
3 - McClellan Redevelopment Project Area
4 - Measure M / Sutter Pointe
5 - Placer Vineyards Specific Plan Area
6 - Riolo Vineyards Specific Plan Area
7 - Sierra Vista Specific Plan Area
8 - Curry Creek Community Plan Area
9 - Regional University Specific Plan Area
10 - Creekview Specific Plan Area
11 - Brookfield Property
12 - Placer Ranch Specific Plan Area
13 - City of Lincoln SOI Expansion Area

Nicolaus Road
Feather River
Sacramento River
Sacramento International Airport
SR 99
SR 70
SR 65
I-5
I-80
CROSS CANAL
EAST SIDE CANAL

0 8,000 16,000 Feet

County Boundary
Railroads
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Existing and Approved Development
Planned / Proposed Development (including future conservation areas)
Existing Conservation Areas
Developed Unincorporated Areas
Municipal Facilities
Study Area for Secondary and Indirect Impacts
Project Study Area Boundary
100 Year Floodplain Areas

Source: North Fork Associates;Mara Feeney Associates; Sutter County Planning Division; County of Sacramento Planning and Community Development Department; City of Sacramento Development Services Department; Sunset Industrial Area Plan; City of Lincoln Community Development Department; Natomas Basin HCP;Placer County Planning Deptartment; City of Sacramento; City of Roseville

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Natural Environment Study

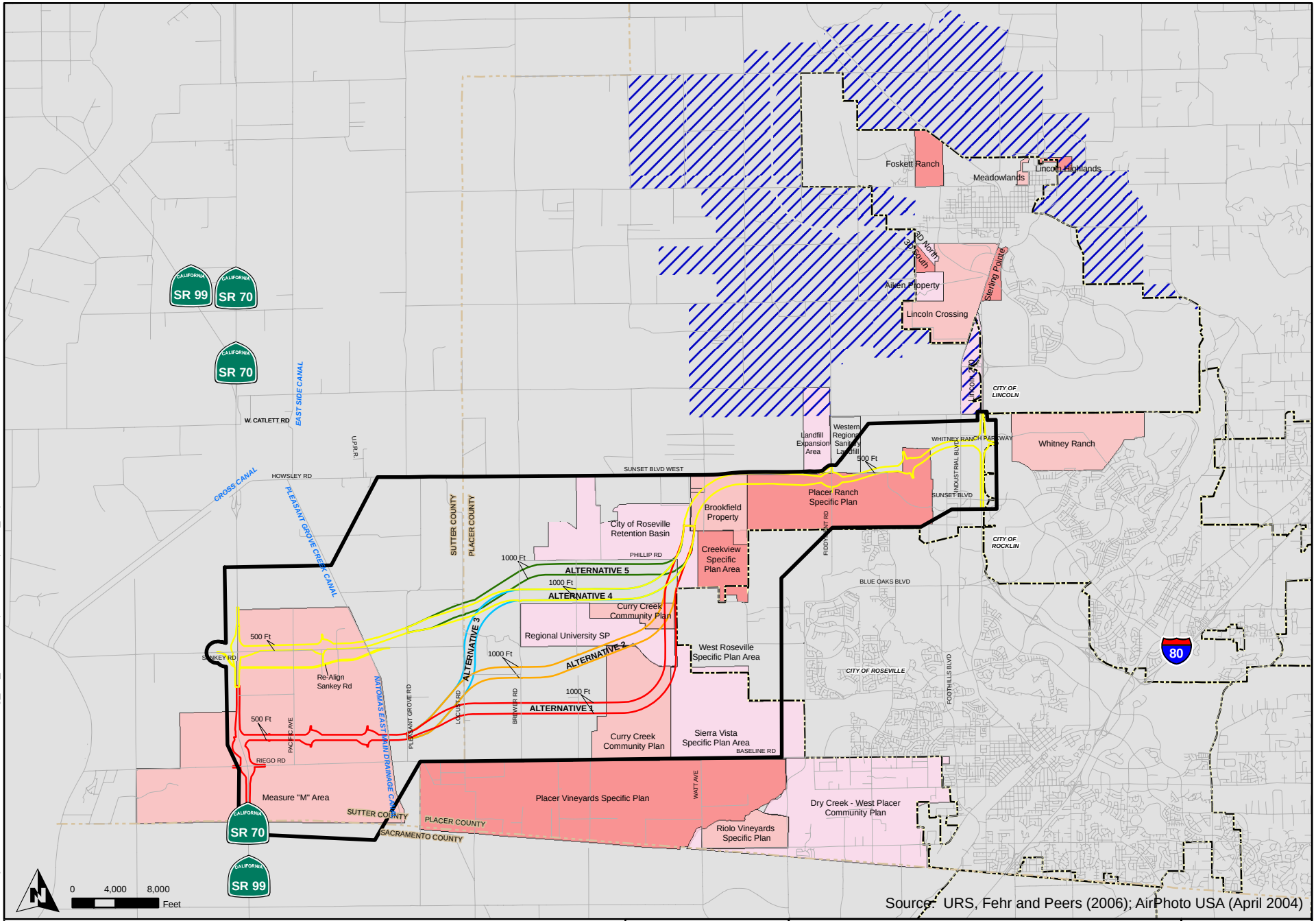
Secondary and Indirect Impact Analysis Study Area

Figure 5-2

June 2007

6/13/07 ..rk\T:\Placer Parkway 2007\Tech Studies June07\NES\Fig_5-2_Secondary_and_Indirect_Impact_Analysis_Study_Area.pdf

URS Corporation L:\Projects\PlacerParkway2007_28066595\MXD\Current Working Documents\EIS\Chapter_3-0_Analysis_Framework\Fig_3-1_Secondary_and_Indirect_Impact_Analysis_Study_Area.mxd Date: 2/23/2007 12:55:17 PM Name: akkeele0



Study Area Boundary
City Boundary
County Boundary
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
City of Lincoln Sphere of influence
Planned/Proposed Development

PLACER PARKWAY CORRIDOR PRESERVATION

TIER 1 EIS/EIR
Natural Environment Study

Planned / Proposed Development

Figure 5-3

June 2007

6/13/07 .rk\T:\Placer Parkway 2007\Tech Studies June07\NES\Fig_5-3_PlannedProposedDevelopment_fin.pdf

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Appendices

APPENDICES

TABLE OF CONTENTS

Appendix A

Letter From the U.S. Fish and Wildlife Service
Dated February 10, 2006

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825

June 16, 2006

Document Number: 060616035203

Jennifer Pretare, Ph.D.
URS Corporation
1333 Broadway, Suite 800
Oakland, CA 94612

Subject: Species List for Placer Parkway Corridor Preservation

Dear: Dr. Pretare

We are sending this official species list in response to your June 16, 2006 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey 7½ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area *and also ones that may be affected by projects in the area*. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be September 14, 2006.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found at www.fws.gov/sacramento/es/branches.htm.

Endangered Species Division

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 060616035203
Database Last Updated: May 5, 2006

Species of Concern - The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. See www.fws.gov/sacramento/es/spp_concern.htm for more information and links to these sensitive species lists.

Red-Legged Frog Critical Habitat - The Service has designated final critical habitat for the California red-legged frog. The designation becomes final on May 15, 2006. See our map index.

Species

Listed Species

Invertebrates

Branchinecta lynchi
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Lepidurus packardi
vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)
Critical habitat, Central Valley steelhead (X) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
Critical Habitat, Central Valley spring-run chinook (X) (NMFS)
Critical habitat, winter-run chinook salmon (X) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Ambystoma californiense
California tiger salamander, central pppulation (T)

Rana aurora draytonii
California red-legged frog (T)

Reptiles

Thamnophis gigas

giant garter snake (T)

Birds

Haliaeetus leucocephalus

bald eagle (T)

Candidate Species

Fish

Oncorhynchus tshawytscha

Central Valley fall/late fall-run chinook salmon (C) (NMFS)
Critical habitat, Central Valley fall/late fall-run chinook (C) (NMFS)

Birds

Coccyzus americanus occidentalis

Western yellow-billed cuckoo (C)

Selected Quads

RIO LINDA (512B) TAYLOR MONUMENT (513A) PLEASANT GROVE (528C) ROSEVILLE (528D) VERONA (529D)

County Lists

No county species lists requested.

Key:

(E) *Endangered* - Listed as being in danger of extinction.
(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.
(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.
(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.
Critical Habitat - Area essential to the conservation of a species.
(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.
(C) *Candidate* - Candidate to become a proposed species.
(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the nine surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.

  During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

  Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our critical habitat page for maps.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be September 14, 2006.

Appendix B

Listed, Proposed Species, Species of Concern, and Candidate Species That May Occur in the Vicinity of the Placer Parkway Corridor Preservation Project Study Area

Table B-1
Listed, Proposed, Species of Concern and Candidates for Listing That May Occur in the Vicinity of the Placer Parkway Corridor Preservation Study Area

Scientific Name COMMON NAME	Federal/ State Listing[1]	CNPS/ R-E-D[2]	Preferred Habitat	Likelihood That Species May Occur in Study area
LISTED, PROPOSED, AND CANDIDATE SPECIES				
Elanus leucurus (nesting) white-tailed kite	None/ FP	–	Low rolling foothills, valley margins with scattered oaks and river bottomlands or marshes adjacent to deciduous woodland; dense-topped trees for nesting and perching	Observed in the study area; has nested in the vicinity
Buteo swainsoni (nesting) Swainson's hawk	None/ T	–	Breeds in stands with few trees in juniper-sage flats, riparian areas, oak savannahs, with adjacent suitable forage areas such as grasslands, or alfalfa or grain fields supporting rodent populations	Known to occur; mature trees suitable for nesting in the study area
Grus canadensis tabida (nesting and wintering) greater sandhill crane	None/ T, FP	–	Winters in the Central Valley; prefers wide open habitats, including mesic grasslands, mesic croplands, and large freshwater marshes	May occur in the study area during winter. Not in breeding range
Thamnophis gigas giant garter snake	T/ T, P	–	Prefers freshwater marsh and low gradient streams, has adapted to drainage canals and irrigation ditches	Known to occur in the study area
Oncorhynchus tshawytscha Central Valley fall-run chinook salmon	C/ None	–	Pacific Ocean, spawn in large, permanent coastal streams and rivers, over gravel beds	Uses Natomas East Main Drainage Canal for migration; does not breed in study area
Branchinecta lynchi vernal pool fairy shrimp	T/ None	–	Vernal pools, inhabit small, clear-water sandstone depression pools and grassed swale, earth slump, or basalt-flow depression pools	May occur in the study area
Lepidurus packardi vernal pool tadpole shrimp	E/ None	–	Seasonal pools in unplowed grassland with old alluvial soils underlain by hardpan or in sandstone depressions, water in the pools has very low alkalinity and conductivity	May occur in the study area
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	T/ None	–	Occurs only in the Central Valley, in association with blue elderberry shrubs, prefers to lay eggs in elderberries 2 to 8 inches in diameter, some preference for "stressed" elderberries	May occur in the study area
Gratiola heterosepala Boggs Lake hedge-hyssop	None/ E	1B/ 1-2-2	Marshes and swamps (freshwater), vernal pools; clay soils; usually in vernal pools, sometimes on lake margins; 10 to -2,375 meters	May occur in the study area

Table B-1
Listed, Proposed, Species of Concern and Candidates for Listing That May Occur in the Vicinity of the Placer Parkway Corridor Preservation Study Area

Scientific Name COMMON NAME	Federal/ State Listing[1]	CNPS/ R-E-D[2]	Preferred Habitat	Likelihood That Species May Occur in Study area
SPECIES OF CONCERN				
Myotis yumanensis Yuma myotis bat	SC/ None	–	Forests and woodlands with sources of water over which to feed, roosts in buildings, mines, caves, crevices, occasionally under bridges	May occur in the study area
Myotis ciliolabrum small-footed myotis bat	SC/ None	–	Arid woody or brushy uplands, near water, west and east sides of Sierra Nevada; 0 to 2,700 meters	May occur in the study area
Corynorhinus townsendii townsendii Pacific western big-eared bat	SC/ SC	–	Prefers mesic areas; roosts in caves or similar structures	May occur in the study area
Eumops perotis californicus greater western mastiff bat	SC/ None	–	Open, arid grassland and sparse woodland, often using cliffs for breeding and roosting	May occur in the study area
Agelaius tricolor (nesting colony) tricolored blackbird	SC/ SC	–	Open water, protected nesting substrate such as blackberry brambles or emergent vegetation sufficient to accommodate at least fifty nesting pairs	May occur in the study area
Athene cunicularia hypugea Western burrowing owl	SC/ SC	–	Grassland, sparse shrubland use abandoned burrows of ground squirrel, and other burrowing mammals, for shelter and nesting	May occur in the study area
Buteo regalis (wintering) ferruginous hawk	SC/ SC	–	Grasslands or desert with elevated structure for nest; uncommon winter resident and migrant in Central Valley	May occur in the study area
Baeolophus inornatus Oak titmouse	SC/ None	–	Oak woodlands and riparian areas	May occur in the study area
Charadrius montanus mountain plover	SC/ SC	–	Central Valley (winter resident) prefers grassland for foraging	May occur in the study area
Plegadis chihi white-faced ibis	SC/ SC	–	Roosts among dense stands of freshwater emergent vegetation, near shallow water or muddy fields for foraging, currently known to the Central Valley as a rare summer visitor	May occur in the study area
Asio flammeus short-eared owl	SC/ SC	–	Nests in marsh habitats; during winter uses grasslands, marshes, and agricultural habitats	May occur in the study area

Table B-1
Listed, Proposed, Species of Concern and Candidates for Listing That May Occur in the Vicinity of the Placer Parkway Corridor Preservation Study Area

Scientific Name **COMMON NAME**	**Federal/ State Listing[1]**	**CNPS/ R-E-D[2]**	**Preferred Habitat**	**Likelihood That Species May Occur in Study area**
Carduelis lawrencei Lawrence's goldfinch	SC/ None	–	Oak and pine riparian woodland, chaparral, piñon/juniper woodland, arid weedy areas near water	May occur in the study area
Lanius ludovicianus loggerhead shrike	SC/ SC	–	Throughout California in grasslands, woodlands, and agricultural areas	May occur in the study area
Melanerpes lewis Lewis' woodpecker	SC/ None	–	Year-round resident of the Central Valley, found in open woodland or forest, including oaks and riparian areas	May occur in the study area
Numenius americanus long-billed curlew	SC/ SC	–	Large coastal estuaries; upland herbaceous areas and cultivated fields in the Central Valley	May occur in the study area
Picoides nuttallii Nuttall's woodpecker	SC/ None	–	Year round resident of the Central Valley; found in oak woodlands and riparian areas	May occur in the study area
Sphyrapicus ruber Red-breasted sapsucker	SC/ None	–	Year round resident of the Central Valley; found in oak woodlands and riparian areas	May occur in the study area
Toxostoma redivivum California thrasher	SC/ None	–	Year round resident in the Central Valley; found in oak woodlands	May occur in the study area
Circus cyaneus northern harrier	None/ SC	–	In the Central Valley, occurs in meadows, grasslands, rangelands, fresh and saltwater emergent wetlands	Observed in the study area
Phrynosoma coronatum frontale California horned lizard	SC/ SC, P	–	Valley-foothill hardwood, conifer, and riparian habitats, as well as pine-cypress, juniper, and annual grass habitats, basks on low boulders or rocks, burrows into soil or under objects for cover and hibernation	May occur in the study area
Clemmys marmorata northwestern pond turtle	SC/ SC, P	–	Ponds, marshes, rivers, streams, irrigation ditches, need basking sites such as partially submerged logs or rocks, and suitable upland habit (sandy banks or grassy open fields) for egg laying	Observed in the study area
Scaphiopus hammondii Western spadefoot	SC/ SC	–	Grassland and valley-foothill hardwood woodlands, vernal pools are essential for breeding and egg laying	May occur in the study area
Linderiella occidentalis California linderiella	SC/ None	–	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan, or in sandstone depressions; water has very low alkalinity, conductivity and total dissolved solids	May occur in the study area

Table B-1
Listed, Proposed, Species of Concern and Candidates for Listing That May Occur in the Vicinity of the Placer Parkway Corridor Preservation Study Area

Scientific Name **COMMON NAME**	**Federal/ State Listing[1]**	**CNPS/ R-E-D[2]**	**Preferred Habitat**	**Likelihood That Species May Occur in Study area**
Legenere limosa legenere	SC/ None	1B/ 2-3-3	Vernal pools; in beds of vernal pools; many historic occurrences are extirpated	May occur in the study area
Downingia pusilla dwarf downingia	None/ None	2/ 1-2-1	Valley and foothill grassland (mesic), vernal pools; 1 to 445 meters	Observed in the study area

[1] Federal and State Listing Codes:
- E = Endangered
- T = Threatened
- C = Candidate
- D = Delisted
- PT = Proposed Threatened
- P = Protected
- FP = Fully Protected
- SC = Species of Concern

[2] Source: CNPS, 2001. California Native Plant Society's Inventory of Rare and Endangered Plants of California, 6th Edition. David P. Tibor, Editor. Sacramento, California.

CNPS List:
- 1B. Rare or Endangered in California and elsewhere
- 2. Rare or Endangered in California, more common elsewhere

CNPS Rarity – Endangerment – Distribution key:

R – Rarity
- 1 Rare in California but found in sufficient numbers and distributed widely enough that the potential for extinction is low at this time.
- 2 Distributed in a limited number of occurrences in California, occasionally more if each occurrence is small.
- 3 Distributed in California in one to several highly restricted occurrences, or present in such small numbers that it is seldom reported.

E – Endangerment
- 1 Not very endangered in California
- 2 Fairly endangered in California
- 3 Seriously endangered in California

D – Distribution
- 1 More or less widespread outside California
- 2 Rare outside California
- 3 Endemic to California

Appendix C

Placer Parkway Special-Status Fish Assessment (Garcia and Associates, 2006)

Placer Parkway Special-Status Fish Assessment

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9 June 2006

J483

GANDA

1.0 Introduction

This report describes the likely historic and current distribution of special-status fish species in the vicinity of the proposed Placer Parkway Project (Project). This information is being provided in support of a Tier 1 EIS/EIR for the Project consistent with California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) requirements. Available information pertaining to fisheries resources in the vicinity of the Project was reviewed, including the draft ecosystem restoration plan (ERP) for Pleasant Grove and Curry creeks (Foothill Associates 2005), the Draft Environmental Impact report (EIR) for the adjacent Placer Vineyards Project (Quad Knopf 2006), the coordinated resource management plan (CRMP) for the Dry Creek Watershed (ECORP 2003), and Garcia and Associates' (GANDA) reports and project files for multi-year fisheries, water temperature monitoring, and flow measurement work conducted in Cirby, Linda, Pleasant Grove, and Kaseberg creeks (GANDA 2001, 2005). Also reviewed were the California Department of Fish and Game (CDFG) California Natural Diversity Data Base (CNDDB 2006) and the U.S. Fish and Wildlife Service (USFWS) special-status species list (USFWS 2006) for 7.5-minute series quadrangles that encompass and surround the Project area (PA). Some limited site reconnaissance was also performed as part of this assessment (i.e., a one-day field visit by a GANDA biologist, 12 May 2006); however, no sampling of fish populations in the PA was performed as part of this assessment.

2.0 Watershed Hydrology of the Project Area

The Placer Parkway Project is located in the southeastern Sacramento Valley near the boundary of western Placer, eastern Sutter, and northern Sacramento counties (Figure 1). Elevation ranges from a high of approximately 150 feet above sea level in the eastern segment of the PA to a low of approximately 30 feet above sea level in the western segment. The majority of the PA is within the lower Pleasant Grove Creek/Curry Creek watershed, which is bordered to the north by the Auburn Ravine/Coon Creek watershed and to the south by the Dry Creek watershed. In the western segment of the PA, Pleasant Grove Creek and Curry Creek empty into the Pleasant Grove Canal that flows north and drains into the Sacramento River via the Cross Canal. The southwestern corner of the PA encompasses the area drained by the upper portion of the Natomas East Main Drainage Canal (NEMDC), also known as "Steelhead Creek." South of the PA, the NEMDC also empties into the Sacramento River, downstream of Dry Creek's confluence with the NEMDC.

Pleasant Grove Creek and Curry Creek

Pleasant Grove and Curry creeks were historically dry or very nearly dry in the summer months, but are now more perennial due to excess surface water contributed by urban runoff and rice farming (Foothill Associates 2005). Pleasant Grove Creek originates east of the PA at an elevation approximately 400 feet just north of the city

of Rocklin. Along with Kaseberg Creek (its major tributary), Pleasant Grove Creek drains the western portions of the cities of Rocklin and Roseville (east of the PA). Smaller Curry Creek originates near the southeast corner of the PA at a lower elevation (approximately 130 feet) and drains an area about one-third the size of the Pleasant Grove Creek watershed. Curry Creek has little riparian habitat compared to Pleasant Grove Creek and a smaller duration of annual flow.

Within the PA, both Pleasant Grove and Curry creeks are low-gradient channelized streams flowing through agricultural lands with minimal riparian vegetation. Channel incision resulting from urban and agricultural development in the watershed is evident. Pleasant Grove and Curry creeks tend to have higher water temperatures and lower dissolved oxygen (DO) concentrations than neighboring systems; this is primarily due to lower channel gradient and a consequent lack of oxygenating riffle habitats, little-to-no groundwater contributions, and a loss of riparian shade caused by urbanization and agricultural practices that contributes to solar warming of the stream (Foothill Associates 2005). Bed substrates in both streams are almost entirely mud and sand throughout the PA. Earthen streambanks are actively eroding in some locations, particularly where excessive down-cutting of the streambed has occurred as a result of channel confinement.

During our site visit on 12 May 2006, many locations in the eastern and central segments of the PA had visible surface flow, while the more channelized agricultural portions of these streams (e.g., in the western segment of the PA) had more stagnant surface water. Average wetted channel widths (on 12 May 2006) were 1-5 meters in Pleasant Grove Creek and 1-2 meters in Curry Creek within the PA; however, some locations near the headwaters of Curry Creek had surface water present only at road crossings (i.e., under bridges and at culvert mouths).

In the western segment of the PA, both streams empty into the Pleasant Grove Canal. This canal is approximately 20-30 meters wide from levee to levee. At the time of our site visit, the canal was wetted across portions of this width, although no flow was apparent. The Pleasant Grove Canal empties into the Cross Canal to the north which drains into the Sacramento River.

The Upper NEMDC

The upper NEMDC drains the north Natomas area including the southwest portion of the PA. Runoff in the upper NEDMC (from the Sankey Road levee south to the confluence with Dry Creek) is controlled by Sacramento County Pump Station No. D15 located immediately upstream of the Canal's confluence with Dry Creek (Resources Agency 2003). South of the PA (and below the Dry Creek confluence), the NEDMC empties into the Sacramento River near its confluence with the American River.

The upper NEMDC in the PA is very similar in size and character to the Pleasant Grove Canal. At the time of our site visit, the upper NEMDC was also wet in isolated sections across the majority of its width. The unnamed tributary in the PA that crosses the proposed Alternative 1 alignment at Locust Road and at Brewer Road (see Figure 1) also drains to the upper NEMDC. At the time of our field visit, the wetted channel width in this tributary was 1-2 meters at the Locust Road crossing; however, both the north and south forks of this tributary were dry just upstream at the Brewer Road crossing.

3.0 Fish Resources in the Project Area

Field sampling of fish populations was not performed as part of this assessment. Therefore, the following list of fish species that may occur in the PA was compiled based on environmental documentation prepared for other projects in the vicinity of the PA (e.g., Placer County 1999, ECORP 2003, Foothill Associates 2005, Quad Knopf 2006), results of the CNDDB and USFWS special-status-species queries, as well as regional knowledge and previous fish sampling experience in adjacent watersheds (GANDA 2001, 2005).

Generally, the fish fauna observed in a given region is determined by the numerous zoogeographic, physiological, ecological, and behavioral factors that structure fish assemblages. Moyle (2002) recognizes four fish assemblages that typically occur in streams of the Central Valley. From higher elevation/cooler water streams to lower elevation/warmer water streams, these fish assemblages include: (1) the rainbow trout assemblage, (2) the California roach assemblage, (3) the pikeminnow-hardhead-sucker assemblage, and (4) the deep-bodied fishes assemblage. Moyle (2002) also notes that overlap among "zones" or regions with these distinct fish assemblages can be fairly broad in tributaries of the Sacramento River.

The Placer Parkway PA is mainly within the deep-bodied fishes zone, but may also include a portion of the pikeminnow-hardhead-sucker assemblage (*sensu* Moyle 2002). Habitat and flow conditions for fishes of these assemblages have been heavily altered by urbanization and agriculture. In many low-elevation Central Valley streams, fish are largely confined to channelized ditches and sloughs. In the PA, specifically, low-to-intermittent flow conditions, high summer temperatures, low DO concentrations, channelization and sedimentation of streams, and a lack of access to productive floodplain habitats has tended to favor introduced warm-water fishes such as bass, sunfishes, catfishes, and carp over the native minnows and suckers of the deep-bodied fishes assemblage.

Warm-water fishes that potentially occur in the PA include introduced species such as western mosquitofish (*Gambusia affinis*), bluegill and green sunfishes (*Lepomis* spp.), brown and black bullhead catfish (*Ameiurus* spp.), golden shiner (*Notemigonus*

crysoleucas), spotted and largemouth bass (*Micropterus* spp.), and common carp (*Cyprinus carpio*).

Cool-water fishes that potentially occur in the PA include native species such as Sacramento sucker (*Catostomus occidentalis*), Sacramento pikeminnow (*Ptychocheilus grandis*), and hitch (*Lavinia exilicauda*). It is also possible that several special-status native species may occur in the PA (see below).

Special-Status Fishes in the Project Area

Special-status fishes discussed below include: those species and races listed under the federal Endangered Species Act (federal ESA) as "endangered," "threatened," or as candidates for federal listing (i.e., federal Species of Concern): those species and races listed under the California Endangered Species Act (state ESA) as "endangered" or "threatened;" and CDFG Species of Special Concern, recently delisted species, and other unlisted species of special interest (e.g., anadromous lampreys). Considering geographic range alone, special-status fish species that could potentially occur in the PA would include steelhead trout (*Oncorhynchus mykiss*), Chinook salmon (*Oncorhynchus tshawytscha*), Pacific lamprey (*Lampetra tridentata*), Delta smelt (*Hypomesus transpacificus*), Sacramento splittail (*Pogonichthys macrolepidotus*), and hardhead minnow (*Mylopharodon conocephalus*).

However, existing habitat conditions in the PA effectively limit or preclude the occurrence of several of these species. For example, Delta smelt, which is listed as "threatened" under the state and federal ESAs, typically occurs in estuaries and mainstem rivers as opposed to tributary streams. Hardhead minnow, which is listed as a CDFG Species of Special Concern, is generally confined to cooler waters with deep, rock-bottomed pools which are not available in the PA. Therefore, neither Delta smelt nor hardhead would be expected to occur in the PA. The potential occurrence of steelhead trout, Chinook salmon, Pacific lamprey, and Sacramento splittail in the PA is discussed below.

The USFWS special-status species list for the quadrangles encompassing the PA (Verona, Pleasant Grove, Roseville, Taylor Monument, and Rio Linda) and the quadrangles surrounding the PA (Sutter Causeway, Nicolaus, Sheridan, Lincoln, Gold Hill, Rocklin, Knights Landing, Grays Bend, Citrus Heights, Folsom, Davis, Sacramento West, and Sacramento East) included three fish species: steelhead trout, Chinook salmon, and Delta smelt. Three distinct salmonid races were specified: the Central Valley Evolutionarily Significant Unit (ESU) steelhead trout (listed as "threatened" under the federal ESA), Central Valley ESU spring-run Chinook salmon (listed as "threatened" under the state and federal ESAs), and Central Valley ESU winter-run Chinook salmon (listed as "endangered" under the state and federal ESAs). The CNDDB query resulted in no listed fish species for the quadrangles encompassing or surrounding the PA; however, the CNDDB is typically an incomplete source of information regarding the occurrence of listed fish species.

Among the special-status salmonids listed above, only the Central Valley ESU steelhead trout (federally threatened) has some potential to occur in the PA (on a seasonal basis). Fall/late-fall-run Chinook salmon (considered a candidate for federal listing and a CDFG Species of Special Concern) also has some potential to occur in the PA (on a seasonal basis).

Generally, the PA and associated upper watershed do not provide adequate habitat to support or sustain salmonid populations of any kind. Indeed, it is unlikely that Pleasant Grove or Curry creeks supported salmonids even historically due to intermittent flow conditions, high water temperatures, and a general lack of suitable spawning and rearing habitat. Steelhead and salmon require gravel and cobble riffle areas for spawning, and cool-water rearing habitats for successful recruitment, both of which are lacking in the PA. Juvenile salmon leave freshwater and enter the ocean by spring; however, juvenile steelhead may remain resident in natal streams for several years before going to sea. As such, resident steelhead require perennially cool water (i.e., for summer rearing) which is not available in the PA or even in the upstream portions of the Pleasant Grove Creek watershed. Therefore, recruitment of steelhead from the Pleasant Grove and Curry creeks is not possible, and any occurrence of steelhead in the PA would be limited only to the occasional stray adult fish attempting to spawn in surrounding watersheds.

Steelhead and fall/late-fall-run Chinook salmon are known to occur seasonally in both the Auburn Ravine/Coon Creek watershed immediately to the north of the PA, and the Dry Creek watershed immediately to the south of the PA, including the NEMDC, a.k.a. "Steelhead Creek" (Placer County 1999; ECORP 2003; GANDA, 2001, 2005). The PA encompasses the upper portion of the NEMDC, which is connected to Dry Creek. Therefore, it may be possible for the occasional stray steelhead or salmon from Dry Creek to occur in the upper NEMDC. However, the confluence of Dry Creek with the NEMDC is well downstream (i.e., approximately 7 miles south) of the PA, and access to the upper NEMDC from downstream of this confluence may be impeded by the presence of Sacramento County Pump Station No. D15 (which is located in the Canal immediately upstream of the confluence; see Figure 1). Furthermore, the upper NEMDC itself does not offer suitable spawning or rearing habitat for steelhead or salmon, and predators of juvenile salmonids such as bullfrogs and introduced warm-water fishes are abundant. Thus, the occurrence of migratory steelhead or salmon in the PA is likely limited to fish that stray temporarily into the upper portion of the NEMDC.

It remains unclear whether or not any stray steelhead or salmon could accidentally make their way into the Pleasant Grove Canal and eventually reach the upper portions of Pleasant Grove or Kaseberg creeks (i.e., upstream of the PA). Spawning habitat is still very limited in the relatively low-elevation headwater portions of these streams, thus it unlikely that spawning efforts would be successful in these areas even if fish could reach them. In addition, predation by bullfrogs and other exotic

predators would greatly limit the survival of any juvenile salmonids. During our site visit (12 May 2006), bullfrogs were observed in nearly all waters of the PA that were visited.

However, fall/late-fall-run Chinook salmon found in adjacent watersheds often do stray from natal streams and, in some instances, use seasonal streams for spawning. Spawning salmon have consistently been observed in low numbers in Cirby Creek, a low-elevation tributary of Dry Creek with sandy substrates and similar habitat characteristics to Pleasant Grove Creek (GANDA 2005). However, Pleasant Grove Creek originates at the base of the Sierra foothills near the valley floor, whereas the headwaters of Dry Creek are higher in elevation where more adequate spawning and rearing habitat is available. Thus, salmon are not likely to be as attracted to Pleasant Grove Creek as they are to Dry Creek and its higher-elevation tributaries.

Because juvenile Chinook salmon remain resident in natal streams for only between one and seven months (Moyle 2002), they are not limited by high water temperatures and low flow conditions during summer months. Thus, salmon would be better able to utilize seasonally adequate habitats in the PA and upper watershed than steelhead (although note that this scenario remains unlikely still). As discussed above, spawning and seasonal rearing habitats for salmon in the PA and upper Pleasant Grove Creek watershed are poor to marginal (at best). Therefore, the occurrence of Chinook salmon in this portion of the PA is unlikely.

Pacific lamprey is the other anadromous species that could potentially occur in the PA. This species is not federally listed, but has received increased attention by fisheries scientists and federal and state agencies due to dwindling populations throughout the Central Valley. Like salmonids, lampreys spawn in riffle areas with swift currents, which are notably lacking in the low-gradient streams within the PA and the relatively low-elevation headwater areas in the Pleasant Grove/Curry Creek watershed. Thus, spawning conditions in the PA and upper watershed are suboptimal for lamprey as well. Pacific lampreys are normally absent from highly polluted and altered streams (Moyle 2002), but they have persisted in some streams that have been highly altered (e.g., Putah Creek and the Santa Clara River). Ammocoetes (the larval/juvenile life stage for lampreys) prefer areas of mud and sand for rearing (which are abundant in the PA) and may remain in freshwater streams for up to seven years before maturing to adulthood and going to sea (i.e., this species may potentially be present year-round). However, because there is probably no spawning of Pacific lampreys in the upper watershed, ammocoetes are not likely to utilize waters of the PA that may be suitable for juvenile life stages. Pacific lampreys are known to occur in Dry Creek (ECORP 2003) and may therefore occur in the upper NEMDC; however, their presence in the PA and in the upstream portions of Pleasant Grove Creek is currently unknown.

As stated above, the CNDDB query resulted in no *listed* fish species for the quadrangles encompassing or surrounding the PA. However, a secondary CNDDB

query for *all* fish species resulted in a single occurrence of Sacramento splittail, which was delisted in 2003 as "threatened" under the federal ESA, but is still considered a CDFG Species of Special Concern. Sacramento splittail are known to inhabit tidal sloughs and slow-moving waters of the Sacramento-San Joaquin estuary and the lower Sacramento River and its tributaries. During winter/spring spawning, splittail prefer shallow-water, low-salinity habitats; therefore they may occasionally be present in the NEMDC (ECORP 2003) and/or the Pleasant Grove Canal. Splittail move upstream during high flow periods in the spring to spawn on flooded vegetation (Moyle 2002). For example, the Yolo Bypass area approximately 15 miles southwest of the PA, is considered to be an important spawning and rearing area for splittail. Thus, while their occurrence in the PA is currently unknown, splittail could be present in the NEMDC or the Pleasant Grove Canal during high-flow periods in the spring.

4.0 Proposed Measures to Minimize Potential Impacts to Fish

Phase I (the current phase) of the Placer Parkway Project consists of route identification and right-of-way acquisition for the proposed project alignments. Therefore, the specific actions and associated designs of individual stream crossings within these alternatives have yet to be determined. In years to come, these actions will be proposed and evaluated as part of Phase II of the Project. Thus, while future impacts to fish cannot be discussed specifically, several key measures to minimize potential impacts to fish can be identified.

Construction of the Project will likely result in various impacts to local watershed hydrology and stream morphology in the PA. Such impacts will result from the construction of bridges, roads, associated utilities, and the conversion of vegetated land cover in the PA to impermeable road surfaces. Direct impacts such as stream crossings and channel realignments are most likely. Thus, in order to minimize potential impacts to fish, all perennial watercourses should be crossed by spans or bridges as opposed to culverts or other hard-bottomed structures. Any such hard-bottomed structure will have the potential to create a drop (particularly at the downstream end) that may become a barrier to fish migration and may also significantly alter the morphology and fluvial dynamics of the channel. Under higher flow conditions, an improperly designed stream crossing may cause water to back up behind the crossing, trapping sediment and debris at the upstream end, thereby exacerbating flooding and possibly further destabilizing stream banks (Foothill Associates 2005).

In terms of channel realignment, every effort should be made to avoid channel confinement. Even small-scale or localized changes in stream morphology can affect fluvial dynamics to produce significant impacts on fish habitat. Thus, to the greatest extent possible, channelizing and straightening of stream courses should be avoided in favor of realignments that emphasize channel stability as well as proper geomorphic

function. Associated loss of shading or degradation of riparian vegetation should be also avoided where possible and mitigated where such impacts are unavoidable. In this sense, channel realignments associated with implementation of the Project may be viewed as an opportunity for stream restoration in the PA, and should be coordinated with future restoration plans (see below).

In the Pleasant Grove/Curry Creek watershed, direct impacts on streams are most likely to occur on the smaller creeks and drainages. Setbacks are required for development adjacent to ephemeral and perennial streams; however, many of the smaller drainages that exist in the PA may not be classified as ephemeral creeks. Therefore, cumulative impacts to these minor drainages could result in significant effects on overall hydrology (Foothill Associates 2005).

Standard mitigation measures including the development of erosion control and pollution control plans will be also required. These should include the use of Best Management Practices (BMPs) for erosion control such as the use of straw bales, silt fences, revegetation measures, control of spillage, and storage of potentially toxic substances. Monitoring of turbidity and inspections by an environmental monitor should eventually be considered.

Additionally, some "ground truthing" of the fish resources in the PA (as described herein) should be performed in the form of quantitative or qualitative fish population sampling. Even limited sampling efforts could provide valuable information regarding actual fish species composition, distribution, and relative abundance, which in turn would provide guidance for avoiding or minimizing potential impacts to fish as a result of implementing the Project.

Conclusions Regarding Potential Impacts to Special Status Fishes

No significant impacts to special-status fishes are anticipated if the avoidance and minimization measures described above are implemented. Generally, the PA and associated upper watershed do not provide adequate habitat to support or sustain populations of special-status fish species as described above. It is therefore likely that these species would only be present if they stray into the PA (i.e., in very small numbers on a mostly seasonal basis). However, in the future, better documentation of existing fish communities in the PA and upper watershed (i.e., field surveys) would be useful for determining whether proposed avoidance and minimization measures are adequate. As planning for the next phase of project development proceeds, further consultation with USFWS, NOAA and CDFG should be implemented. A Biological Assessment should be developed prior to the final phase of project design and development that would formally address potential effects on federally-listed fish species.

5.0 Future Restoration Efforts

Finally, planning and construction of the Project should be coordinated to the greatest extent possible with future restoration efforts planned for the Pleasant Grove/Curry Creek watershed. This coordination will include ensuring that likely future conditions at build-out of the Project are aligned with the greater vision, goals, and objectives outlined in the Pleasant Grove/Curry Creek ERP (Foothill Associates 2005). The ERP's vision statement reads:

> *"The Pleasant Grove/Curry Creek Watershed sustains a variety of healthy native upland and riparian habitats situated within an economically sustainable matrix of carefully planned and implemented mixed use communities and agricultural lands." (p. 24)*

The goals and objectives that further articulate this vision statement could serve as guidelines for avoiding potential impacts during implementation of the Placer Parkway Project. However, because this ERP does not address fish species *per se*, some attention must be paid to the extending the vision, goals, and specific objectives to cover fish resources and the potential occurrence of special-status fishes in the Placer Parkway PA. As mentioned above, the various actions and mitigations that will be associated with the Project may present excellent opportunities for integration with future restoration efforts, particularly in terms of planning concerted efforts to rehabilitate stream channels and provide bank stabilization in the PA. Indeed, protection of sensitive species and the restoration of degraded habitats are identified as specific goals of the ERP.

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PLACER PARKWAY
CORRIDOR PRESERVATION

DRAFT PUBLIC PARTICIPATION METHODOLOGY REPORT

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR

June 29, 2007

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

Caltrans

FHWA

Prepared by

Moore Iacofano Goltsman (MIG), Inc.
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for
South Placer Regional Transportation Authority
California Department of Transportation
Federal Highway Administration

The preparation of this report was financed in part through a planning grant from the Federal Highway Administration

PUBLIC PARTICIPATION METHODOLOGY REPORT

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR
Placer and Sutter Counties, California

Prepared by:

Moore Iacofano Goltsman (MIG), Inc.
in association with
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June 2007

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1.0 INTRODUCTION

The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the South Placer Regional Transportation Authority (SPRTA) propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking State Route (SR) 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1).

The planning for Placer Parkway involves two phases: (1) the present action, selection of a corridor (titled the Placer Parkway Corridor Preservation Project), and (2) the future selection of a precise alignment within the corridor and a decision whether or not to build the Parkway. If a build alternative is selected and pursued after the second phase, the ultimate Placer Parkway project would be constructed and operated. Throughout this document the term "Proposed Action" is used to describe the selection of a corridor to preserve. The document generally uses the term "Parkway" to mean the ultimate roadway, including construction and operation, except where context indicates otherwise.

As stated, the action to be considered based on this Tier 1 analysis involves only the selection of a corridor to preserve, which has limited environmental effects by itself. However, the ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. In order to describe the effects of the ultimate Placer Parkway project to the greatest extent feasible at this early stage, the Tier 1 EIS/EIR also addresses the potential effects of construction and operation of the future roadway. This discussion of the roadway is necessarily limited, however, because only the general concepts of the roadway design and location are known at this time. If a corridor is selected and preserved at Tier 1, a subsequent Tier 2 analysis will evaluate the Parkway itself in detail—the specific roadway "footprint" within the selected corridor, including construction and operation of the roadway.

A 2½-year screening and public outreach program that involved local jurisdictions (the Technical Advisory Committee); regional, state, and federal agencies; stakeholder groups that included representatives from planning and public works departments of all affected cities and counties, environmental, business, agricultural, development, and homeowner interests (the Study Advisory Committee); and elected officials (the Policy Advisory Committee), resulted in the identification of five potential corridors for the Parkway. The Tier 1 Environmental Impact Statement/Program Environmental Impact Report will analyze these five corridor alternatives along with a No-Build Alternative. Throughout this document, the Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report is referred to as the Tier 1 EIS/EIR.

2.0 PUBLIC PARTICIPATION PROGRAM

The Public Participation Methodology Report was prepared to document the project's public outreach program undertaken as part of the Placer Parkway Tier 1 EIS/EIR. The intent of the Public Participation Program is to ensure that community stakeholders, including community interest groups and the public, are aware of the project, and are involved and engaged in the planning process.

The Public Participation Program for the Placer Parkway Tier 1 EIS/EIR was designed to actively involve project stakeholders in the planning process. Its goal was to obtain input to develop a range of corridor

alternatives to be considered in the Tier 1 EIS/EIR and to select a corridor for the future construction of Placer Parkway. Program objectives included:

- Addressing public and community interest group issues and concerns;
- Continuing ongoing stakeholder coordination; and
- Involving federal, state, regional, and local agencies.

3.0 PARTICIPANT GROUPS

The following participant groups were targeted in the public participation program.

3.1 PROPERTY OWNERS

The project team ensured that the property owners in the study area were informed about and involved in the planning and environmental review process. Placer County Transportation Planning Agency (PCTPA) developed a mailing list of property owners in the project study area from the Assessor's Offices of Placer, Sacramento, and Sutter counties. This list and subsequent updates were used for distributing meeting notices and newsletters, in addition to other methods for outreach, described below, to keep the property owners engaged and informed. Property owners in the study area (based on the assessor information and individual requests) were informed about public meetings and received project-related information at key project milestones.

3.2 KEY STAKEHOLDERS

The Placer Parkway Corridor Preservation Project is of interest to a wide range of key stakeholders, including business and industry, environmental, agricultural, neighborhoods, community, and special interest groups, public agencies, and local jurisdictions. A variety of methods were developed to engage these groups through interviews, meetings, and other outreach activities described in Chapter 4.

3.3 LOCAL, STATE, AND FEDERAL AGENCIES

Coordination for the Placer Parkway Corridor Preservation Project is being carried out with a number of public agencies and organizations, including:

- Federal Highway Administration (FHWA)
- California Department of Transportation (Caltrans)
- U.S. Army Corps of Engineers – Sacramento District
- U.S. Environmental Protection Agency – Region IX
- U.S. Fish and Wildlife Service
- California Department of Fish and Game
- Sacramento Area Council of Governments (SACOG)
- Natomas Basin Conservancy

3.4 LOCAL JURISDICTIONS

The following local jurisdictions were directly involved in the planning process:

- Placer County
- Sacramento County
- Sutter County
- City of Lincoln
- Town of Loomis

- City of Rocklin
- City of Roseville
- City of Sacramento

4.0 PUBLIC PARTICIPATION PROGRAM METHODS

4.1 COMMUNITY STAKEHOLDER INTERVIEWS

The project team conducted interviews with 30 community stakeholders between May and July 2003 to identify issues, concerns, and potential benefits regarding the proposed project. Interviewees included representatives from public agencies, businesses, the agricultural sector, environmental groups, and local government. Interviews were conducted in person or by telephone.

The identities of the interviewees are confidential. Copies of the questionnaires (without interviewee identification) are available for review at PCTPA, 299 Nevada Street, Auburn, California, 95603 (Telephone: 530.823.4030; email: pctpa@pctpa.org). A September 2003 summary report is posted on PCTPA's website.

The results of these interviews were organized into the following categories:

- Project purpose and goals
- Perceived benefits of the project
- General issues and concerns about the project
- Planning process

The interview results helped to focus subsequent public presentations and meetings with local jurisdictions and agencies. They were considered part of the public scoping process. In addition to the interviews, written and verbal scoping comments were received from the general public (at public meetings and through newsletters), from meetings with jurisdictions and agencies, from responses to the Notice of Intent/Notice of Preparation, and from the Technical Advisory, Study Advisory, and Policy Advisory Committees established for the project as discussed below.

4.2 ADVISORY COMMITTEES

Building on the public outreach programs for the Placer Parkway Interconnect Study Conceptual Plan and the 2001 Project Study Report for Placer Parkway (both prepared by DKS Associates), the project re-established the advisory committees program. In May 2003, the SPRTA Board approved the membership structure for the project's Study Advisory Committee and the Policy Advisory Committee. The membership for the Technical Advisory Committee included staff representatives from local jurisdictions and regional, state, and federal agencies. The purpose and role of each advisory committee are described below.

4.2.1 Technical Advisory Committee

A Technical Advisory Committee (TAC) was established to advise and assist PCTPA and its consultants with the technical aspects of the project. Membership of the TAC consisted of staff representatives from local jurisdictions and regional, state, and federal agencies. TAC representatives provided knowledge of environmental resources, planning, and transportation.

The role of the TAC was to provide non-binding recommendations to PCTPA and consultants on the following areas:

- Identifying local jurisdiction's or agency's concerns, issues, and preferences;

- Identifying and analyzing alternatives;
- Characterizing existing and future conditions with and without the project;
- Assessing the environmental impact of the proposed project;
- Complying with FHWA and Caltrans requirements for a Tier EIS/EIR; and
- Additional technical matters that arose during the planning process.

The TAC met eight times from May 2003 to August 2005. Meeting agendas and minutes are available via PCTPA.

4.2.2 Study Advisory Committee

A Study Advisory Committee (SAC) was established to assist in the identification of project issues and solutions. Representatives from the following key community interest groups were invited to be members of the SAC:

- Staff representatives from all local jurisdictions in the study area, including Placer County, Sacramento County, Sutter County, and the cities of Lincoln, Loomis, Rocklin, and Roseville.

- Staff representatives from regional, state, and federal agencies such as Sacramento Area Council of Governments (SACOG), Placer County Air Pollution Control District, the California Department of Transportation (Caltrans), California Department of Fish and Game, Federal Highway Administration, U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency.

- Representatives from environmental and neighborhood groups such as the Roseville Coalition of Neighborhood Associations, the Sun City Roseville Homeowners Association, the Lincoln Municipal Advisory Council, the West Placer Metropolitan Advisory Council (MAC), the Sierra Club, the Friends of Placer County Communities, the Environmental Council of Sacramento, and the Agricultural Commissions from Placer and Sutter counties.

- Representatives from business and industry groups including the Building Industry Association, area developers (such as West Roseville Specific Plan, Placer Ranch Specific Plan, KT Development) and several Chambers of Commerce.

The SAC provided a high level of communication between PCTPA and community, environmental, agricultural, development, and other interest groups, in addition to public agencies and local jurisdictions. Each stakeholder organization or group designated a representative to the SAC. As specific issues were raised, interested individuals and those with special interests in the project were invited to attend SAC meetings. A SAC goal was to be as inclusive as possible, while keeping a balance of interests so that no one group dominated the process.

The role of the SAC was to:

- Represent the concerns, issues, and preferences of community interest groups and public agencies.
- Provide nonbinding recommendations to PCTPA's staff and consultants on project issues and concerns.
- Accurately convey project information to their constituencies.

The SAC met six times from June 2003 to August 2005. For meeting agendas and minutes from SAC meetings, see Appendix A.

4.2.3 Policy Advisory Committee

A Policy Advisory Committee (PAC) was established to provide advice and assistance in identifying project issues and solutions. Membership of the PAC consisted of:

- Placer County (2 elected officials)
- Sacramento County (1 elected official)
- Sutter County (2 elected officials)
- City of Lincoln (1 elected official)
- City of Rocklin (1 elected official)
- City of Roseville (1 elected official)
- Placer County Executive Officer (ex officio)
- Sutter County Chief Administrative Officer (ex officio)
- Caltrans District 3 District Director (ex officio)

The role of the PAC was to provide two-way communications with elected officials from jurisdictions directly affected by the proposed project. The PAC's primary role was to provide the technical staff with policy recommendations related to the needs of various jurisdictions in the project study area. The PAC provided policy guidance and recommendations in the following areas:

- Issues of concern to the public, political jurisdictions, and government agencies,
- Project alternatives,
- Characterizing existing and future conditions with and without the project,
- Assessing of environmental impacts from the Parkway, and
- Complying with FHWA and Caltrans requirements for a Tier 1 EIS/EIR.

PAC members received meeting notice and information via email and regular mail. Meeting notices were emailed to any member of the public who requested the notice. The meeting notices were included in status reports to PCTPA/SPRTA Boards and on the website. Notices were faxed to the following:

- Placer County: Placer County Clerk of the Board, Placer County Library – Auburn, Roseville Library, and City/Town Halls of Lincoln, Loomis, Rocklin, and Roseville
- Sacramento County: Sacramento County Clerk of the Board and Sacramento County Library – Sacramento – Main
- Sutter County: Sutter County Clerk of the Board and Sutter County Library – Yuba City – Main

The PAC met four times from September 2003 to August 2005. For meeting agendas and minutes from PAC meetings, see Appendix B.

4.3 PROJECT DEVELOPMENT TEAM

A Project Development Team (PDT) functioned as the steering group to provide input on the course of project studies, monitor project progress, and to solve problems. The PDT was initially made up of representatives of the National Environmental Policy Act (NEPA) lead agency (FHWA), Caltrans, the California Environmental Quality Act (CEQA) lead agency, SPRTA as represented by PCTPA, Sutter County, and the consultant team preparing the Tier 1 EIS/EIR (URS Corporation, DKS Associates, Mara Feeney & Associates, others as required).

By November 2005, most regular TAC meetings were completed, and a representative from each of the local jurisdictions was invited to attend the PDT meetings for continued involvement and input as the project progressed through completion of technical studies and Tier 1 EIS/EIR coordination.

The PDT met 16 times from September 23, 2003 through September 21, 2006, and will continue to meet throughout the duration of the project.

The PDT addressed several major project issues such as:

- NEPA and CEQA requirements and review process
- Goal and policy clarifications
- Modified NEPA/404 process
- Indirect/cumulative impact assessment including growth inducement

For a summary of agenda topics and key decisions, see Appendix C. PDT meeting minutes are on file at PCTPA's offices in Auburn, California.

4.4 MODIFIED NEPA/404 PROCESS

The goal of the modified NEPA/404 process undertaken for the Placer Parkway Tier 1 EIS/EIR process was to ensure that Tier 1 decisions reflect careful consideration of the 404(b)(1) Guidelines (40 CFR 230), which are binding, substantive regulations implementing the Clean Water Act. Federal Highway Administration, Caltrans, PCTPA, the U.S. Army Corps of Engineers, and the U.S. Environmental Protection Agency agreed to engage in a modified NEPA/404A federal coordination process, based on the NEPA/404 process set forth in the 1993 Memorandum of Understanding between federal agencies[1], modified for Tier 1 to reflect decisions made at Tier 1, and to anticipate the permit application requirements at Tier 2.

The modified process for Tier 1 commits the agencies to seek concurrence on five points:

1. Purpose and Need
2. Criteria for Selecting the Range of Alternatives
3. Range of Alternatives
4. Alternative(s) Most Likely to Contain the Least Environmentally Damaging Practicable Alternative (LEDPA)
5. Mitigation Framework

Three years of working through this process has resulted in concurrence on the Purpose and Need, the Criteria for Selecting the Range of Alternatives, and the Range of Alternatives evaluated in this Draft Tier 1 EIS/EIR. Formal requests for concurrence were made by the Federal Highway Administration (acting on its own behalf, Caltrans, and PCTPA acting on behalf of SPRTA), and concurrence letters were received from the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency.

Sixteen meetings have been held to date.

For a summary of agenda topics and key decisions, see Appendix D.

1. Signed by Federal Highway Administration, Federal Transit Administration, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Transportation, Arizona Department of Transportation, Nevada Department of Transportation (1993).

5.0 PUBLIC NOTICE TO PREPARE A TIER 1 EIS/PROGRAM EIR AND PUBLIC SCOPING MEETINGS

On September 18, 2003, Notice of Intent was published in the Federal Register and a Notice of Preparation was submitted to the State Clearinghouse. These documents described the proposed project and solicited agency and public comment on the scope and content of the EIS/EIR. Copies of these documents were mailed to 58 federal, state, and local agencies. Twenty comment letters were received and are included in the Draft EIS/EIR. The lead agencies considered these comments when determining the appropriate information to include in the Draft EIS/EIR.

In October 2003, the Placer County Transportation Planning Agency held two scoping meetings (one in Placer County and one in Sutter County) as part of its comprehensive public participation program. The purpose of the meetings was to provide an opportunity for community members, community interest groups, and public agencies to provide input on the overall scope and content of the Tier 1 EIS/EIR. These meetings were the first in a series of three rounds of public meetings planned throughout the project. An October 2003 Scoping Meetings and Scoping Process Summary Report is available at PCTPA. A copy is posted on PCTPA's website.

5.1 NOTICES

Informational notices (Appendix E) for both meetings were mailed to community members in the project study area, including businesses, community leaders, agency staff, environmental groups, project advisory committee members, local elected officials, property owners, and the general public. More than 1,300 notices were mailed.

5.2 NEWSPAPER DISPLAY ADVERTISEMENTS

Print advertisements (Appendix F) were placed in the following newspapers to provide additional information and publicity for the meetings:

- Appeal Democrat (Sutter County)
- Lincoln News Messenger, Placer Herald and Roseville Press-Tribune (Placer County)
- Sacramento Bee (Sacramento County)

5.3 PRESS RELEASES

A press release (Appendix G) was distributed to local media outlets (radio, television, and newspapers) in Placer, Sutter, and Sacramento counties, providing an overview of the project and information on the scoping meetings. Media outlets contacted are listed below:

Print Outlets

- Auburn Journal
- Lincoln News Messenger
- Colfax Record
- Loomis News
- Placer Herald
- Roseville Press Tribune
- Sierra Heritage
- Tahoe Bonanza
- Tahoe World
- Sacramento Bee

News and Business Journals

- Sacramento Business Journal
- Sacramento News and Review

Radio and Television Outlets

- KAHI Radio
- KCRA-TV
- KOVR-Channel 13
- KXTV-TV

6.0 SCOPING MEETINGS

The public scoping meetings were held on Monday, October 6, 2003, at the Maidu Community Center in Roseville, from 4:00 to 8:00 p.m., and Thursday, October 9, 2003, at the Pleasant Grove School, from 4:00 to 8:00 p.m. Approximately 25 people attended the Roseville meeting and approximately 100 people attended the Pleasant Grove meeting.

Meeting handouts included an information guide, comment sheet, project newsletters (Appendix H), corridor maps, fact sheet (Appendix I), basic project information, and project schedule. Both meetings had an open house format with a series of stations where participants could obtain information about the project and provide feedback. Project team members staffed the stations to answer questions and provide additional information to meeting participants. Three times during the open house, the project team made a brief presentation on the project, using the same information for each presentation.

The presentations provided information on project background, purpose, need, schedule and environmental process. A stenographer was present at both meetings to record comments from the participants.

Information and display boards were organized in the following categories:

- *Planning Approach* – provided information on the environmental review process.
- *Work Program and Project Schedule* – included information on the project scope and timeline.
- *Natural Environment* – included maps of the study area and natural resource elements.
- *Human Environment* – included maps of the study area and human and social elements.
- *Corridor Alternatives* – included the three concept alignments (north, central, and south) identified in the Project Study Report (PSR) and a blank map of the study area: "Other Corridor Alternatives." Participants were provided a copy of this map to identify additional potential alignments.
- *Do You Live or Work in the Study Area* – included a map of existing parcels, farms, businesses, and residences in the project study area. Participants were provided a handout of this map to allow them to identify where they lived or worked in the project study area and to list potential impacts.

- *How to Stay Involved* – provided information on how to stay involved and informed about the project.

- *For the Record* – staffed by a certified stenographer to record verbal comments.

Scoping meeting comments were organized in the following categories:

- Corridor Alignments
- Community Impacts
- Environmental Impacts
- Land Use Impacts
- Agricultural Impacts
- Funding
- Traffic Analysis

The project team followed up on a number of issues that were raised at the public scoping meetings, including:

- *Meeting format*. For subsequent public meetings, changed the "open house" format to a more traditional presentation and question/answer session.

- *Farmland map*. No resource maps identified "working" farm operations. A map was developed with advice from the Placer and Sutter County Agricultural Commissioners to identify farming operations in the study area.

- *Power lines map*. No resource maps identified existing or proposed power lines in the project area. A map was developed to identify these existing and proposed facilities.

- *Policy review*. Several concerns were shared on existing project policies related to Central Segment access and the corridor's no-development buffer. These policy issues were reviewed with each advisory committee. Each re-affirmed the need for these policies.

- *Project area expansion*. Based on scoping input, the project area was expanded from an area north of Baseline/Riego Road to the south of the roadway.

- *Notice list*. The notice area was enlarged to include abutting areas outside of the project area, including Amoruso Acres.

In addition to comments received at these meetings, letters in response to the Notice of Intent and Notice of Preparation were received from agencies, jurisdictions, and members of the public. These letters were considered in the lead agency's determination of the appropriate scope and content of the Draft Tier 1 EIS/EIR, and will be included in that document's appendices.

7.0 PUBLIC MEETINGS

In August 2004, PCTPA held two public meetings (one in Placer County and one in Sutter County) as part of its comprehensive community outreach program. The purpose of the meetings was to obtain feedback from area residents and other community members on four potential corridor alignment alternatives being considered for evaluation in the Tier 1 EIS/EIR. These meetings were the second in a series of three rounds of public meetings planned throughout the project. An August 2004 Public

Meetings Summary Report (Moore Iacofano Goltsman [MIG], 2004)is available at PCTPA. A copy is posted on PCTPA's website.

7.1 PUBLICITY AND NOTICING

7.1.1 Newsletter

The July 2004 newsletter, which included a meeting notice, was mailed in early August 2004 to property owners (within and just outside the study area), interested community organizations, public agencies, and individuals to inform them about the public meeting. More than 1,700 newsletters were mailed.

Newsletters were mailed to the following local governments and agencies:

- Lincoln City, Loomis Town, Rocklin City, Roseville City, and Sacramento City Council
- Placer, Sacramento, and Placer County Board of Supervisors
- SACOG Board of Directors

Newsletters were sent to the following agencies:

- City of Lincoln and Rocklin Community Development Departments
- City of Roseville Planning and Redevelopment
- County of Placer Planning Department
- County of Sacramento Planning and Community Development Department
- County of Sutter Community Services Department

Newsletters were delivered to the following organizations/businesses:

- Pleasant Grove School (300 copies)
- Riego Market (300 copies)
- Sun City Community Center, Roseville (500 copies)

7.1.2 Newspaper Display Advertisements

Print ads were placed in the following newspapers to provide additional publicity for the meetings:

- Wednesday, August 11, 2004:
  - Lincoln News Messenger
  - Placer Herald
  - Roseville Tribune

- Sunday, August 15, 2004:
  - Appeal-Democrat
  - Auburn Journal
  - Sacramento Bee

The public meetings were held on Monday, August 23, 2004, at the Roseville Corporation Yard, from 6:00 to 8:00 p.m., and Thursday, August 26, 2004, at the Pleasant Grove School, from 6:00 to 8:00 p.m. Approximately 35 people attended the Roseville meeting and 120 people attended the Pleasant Grove meeting.

Meeting materials included an agenda, list of Advisory Committee members, speaker card, comment sheet, and a map with alignment alternatives for the Placer Parkway.

Both meetings began with an open house period where participants reviewed information displayed on boards and asked questions. The project team made a presentation on the work program, project schedule, technical analysis, outreach, the corridor alignment alternatives, and status of the project (see Appendix J).

The presentation was followed by a discussion of issues and concerns. The meeting then returned to an open house format, which provided an additional opportunity for participants to interact with project team members. Comments from these meetings were summarized in the following categories:

- Planning Process
- Corridor Alignment
- Community Impacts
- Environmental Impacts
- Agricultural Impacts
- Funding
- Traffic and Access
- Property Acquisition

The meetings are summarized in PCTPA's August 2004 Public Meetings Summary Report (MIG, 2004), which contains meeting comments for both meetings. Followup work by the project team included distributing CDs with resource mapping, right-of-way acquisition process, and subsequent meetings with concerned property owners.

7.1.3 Board Action and Review

As part of publicly noticed meetings, the various boards considered the following project issues:

PCTPA Board

- October 23, 2002 — Re-Affirmed PSR's Concept Corridor Alignment Alternatives
- December 4, 2002 — Authorized Staff to Negotiate and Award the Consultant Contract

SPRTA Board

- February 26, 2003 — Memorandum of Understanding with PCTPA on Funding and Lead Agency
- May 28, 2003 — Study and Policy Advisory Committee Membership and Direction
- February 28, 2004 — Project Update Presentation
- March 1, 2005 — Range of Reasonable Alternatives
- April 6, 2005 — Funding for New Alignments Screening
- May 25, 2005 — Toll Road Concept Feasibility Study Contract
- September 28, 2005 — Corridor Alignment Alternatives Selection

- December 7, 2005 Placer County Conservation Plan – Planning Agreement and Allocation

Sutter County Board of Supervisors

- November 30, 2004 Study Session – Potential Corridor Alignment Alternatives

Project status reports have also been provided to the PCTPA and SPRTA Boards on an almost monthly basis since 2003. These are included in board meeting agenda packets, which are posted on PCTPA's website.

The status reports have also been mailed to the Sutter County Board of Supervisors. They have been mailed to the city managers of Lincoln, Rocklin, and Roseville, as well as to the county administrators of Placer and Sacramento counties.

8.0 PROJECT WEBSITE

A website (www.pctpa.org/placerparkway/index.htm) provided relevant information on project background, the project description, corridor alignment alternatives, the environmental review process, funding, key milestones of the planning process, a project library with posted project documents, and public meeting dates and materials. The website was linked to PCTPA's existing website. The project website will remain active through the duration of the planning process. Members of the public were able to access information on the website and learn how to stay involved.

The project website expanded outreach and provided an alternative means for dissemination of project related information (see Appendix K for selected pages from the website).

9.0 OUTREACH MATERIALS

In 2003, the project team developed a fact sheet with key project information for distribution to members of the public. The team also developed three newsletters to keep vicinity property owners as well as interested agencies, organizations, and individuals informed about the project and to solicit comments/questions.

The first two newsletters were developed to coincide with the 2003 scoping and the 2004 public meetings. A third newsletter, in August 2005, provided information on two additional corridor alignment alternatives being considered. The SPRTA Board directed that these two be screened for potential inclusion in the range of reasonable alternatives. The newsletter also provided notice of the September 28, 2005 SPRTA Board meeting to determine the alternatives to be evaluated in the Tier 1 EIS/Program EIR. The newsletters and fact sheet and are included in Appendices H and I.

A newsletter mailing list was developed based on the county assessor's property owner information described above. This mailing list was updated based on new assessors' information as well as requests to be added based on public response to newspaper articles, public notices/meetings, website inquiries, etc.

10.0 PUBLIC HEARINGS

PCTPA will hold public hearings in spring 2007 to obtain public comments on the Draft Tier 1 Environmental Impact Statement/Program Environmental Impact Report. The public meetings will be held at two locations, one each in Placer and Sutter counties. The project website will post updates on

meeting dates and locations. Notices for these hearings will be distributed in a variety of ways, including newspapers, Federal Register, news release, newsletter, and website.

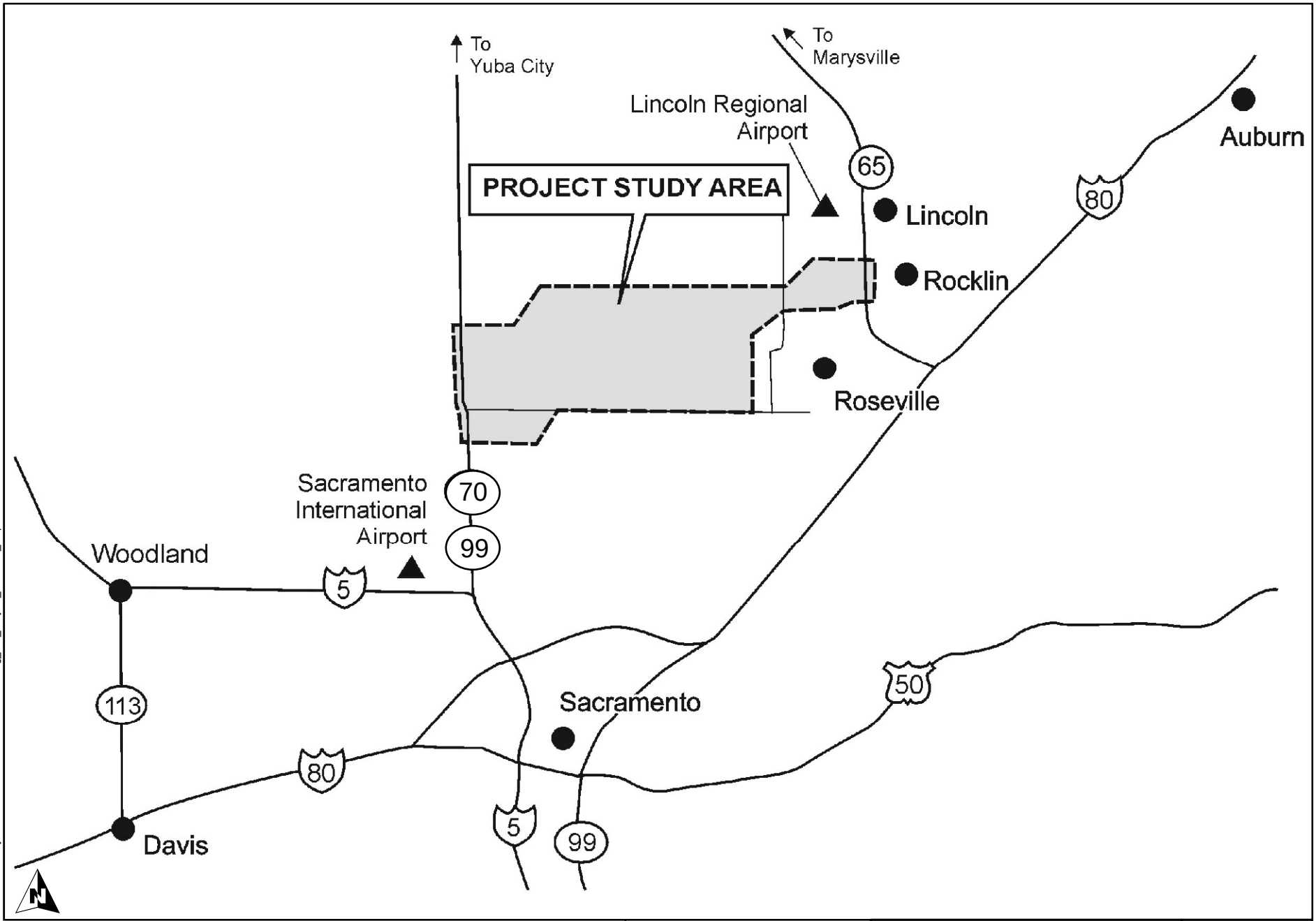
11.0 PROJECT STATUS REPORTS

Regular Project Status Reports were prepared and submitted to the PCTPA and SPRTA Boards of Directors, with copies to the Sutter County Board of Supervisors. These documents provided information on progress of the project, issues, and major decisions.

12.0 OTHER MEETINGS WITH INDIVIDUALS, AGENCIES AND COMMUNITY MEMBERS

In addition to Advisory Committee meetings, Project Team Development (PDT) meetings, and modified NEPA/404 meetings conducted with federal resource agencies, PCTPA staff and consultants also met with individuals, agencies and community members for project updates, coordination, and input. A list of such meetings is attached in Appendix L.

Figures



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PLACER PARKWAY

Tier 1 EIS/EIR
Public Participation
Methodology Report

Project Location

Figure 1-1

June 2007

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Appendix A
Study Advisory Committee (SAC) Meeting Summaries

PLACER COUNTY TRANSPORTATION PLANNING AGENCY

Meeting Minutes & Action Items **Final 11.03.03**

Meeting Description: Placer Parkway Corridor Preservation – Study Advisory Committee Meeting #1
Meeting Date June 27, 2003
Minutes **Location:** City of Roseville Corporation Yard
Date: October 10, 2003

Persons Attending			
Name	**Affiliation**	**Name**	**Affiliation**
Wendy Gerig	Roseville Chamber of Commerce	Tom Christofk	Placer County Air Pollution Control District
Joseph Cruz	Sacramento Metro Area Chamber of Commerce	Tom Brinkman	Placer County, Public Works
Jack Wallace	Roseville Coalition of Neighborhood Assoc.	George Musallam	Sutter County, Public Works
Joan Powell	Sun City Roseville Homeowners Assoc.	Steve Healow	FHWA, Engineering and Environmental
George Alves	Rural Lincoln Municipal Advisory Committee	Steve Propst	Caltrans, Local Assistance
Loren Clark	Placer County, Planning and Placer Legacy HCP/NCCP	Pat McAchren	Caltrans, Environmental
Jeff Finn	California Department of Fish and Game	Scott Sauer	Caltrans, Planning
Alan Green	Sierra Club, Placer County	Celia McAdam	PCTPA, Executive Director
Julie Hanson	KT Development	Stan Tidman	PCTPA, Project Manager
Jack Ritchie	South Sutter County Specific Plan	Ken Van Velsor	Environmental Consultant
John Tallman	Proposed West Roseville Specific Plan	Denise Heick	URS, Project Manager
Eric Bryant	Proposed Placer Ranch Specific Plan	Fritts Golden	URS, Environmental
Jeff Clark	Sacramento County, Public Works	John Long	DKS Associates, Traffic
Ken Hough	SACOG, Planning	Daniel Iacofano	MIG, Inc., Public Outreach
		Vikrant Sood	MIG, Inc., Public Outreach

Minutes

I. INTRODUCTION

The first Study Advisory Committee (SAC) meeting was held on June 27th, 2003 at the City of Roseville Corporation Yard. The purpose of this meeting was to initiate the SAC for the Tier 1 EIS/EIR for the Placer Parkway Corridor Preservation Project.

Celia McAdam, PCTPA's Executive Director, welcomed the SAC members and provided an overview of the meeting's purpose. This overview included the need for the SAC – to provide information and feedback to PCTPA's staff and consultant team and to represent their organization's views on the project. Each SAC member was asked to introduce themselves and their affiliation. The PCTPA and URS consultant team introduced themselves and their roles. Meeting facilitator Daniel Iacofano (MIG – URS sub-consultant in charge of public outreach) provided an overview of the planning process, meeting purpose and agenda for the meeting. The following handouts were distributed to the SAC at the sign-in table:

- Fact Sheet
- Tier 1 EIS/EIR Project Milestone Schedule

- Study Advisory Committee Charter
- Concept Alignments from the 2001 Project Study Report (PSR) -map
- Conceptual Plan

Stan Tidman, Project Manager for PCTPA, Denise Heick, Project Manager for URS Corporation (URS), and D. Iacofano presented information on the following topics, followed by a facilitated discussion:

- Project Background
- SAC Membership and Role
- Study Goals
- Work Plan Approach
- Opportunities for Input

II. PROJECT BACKGROUND

S. Tidman familiarized the SAC with the project need, purpose, history, and potential issues/impacts.

Overview

Placer Parkway is a multi-modal, high priority regional transportation project that will connect rapidly growing western Placer County with Sutter County industrial development and the airport to the west. It will link State Route 65 with State Route 70/99, with interchanges at either end. There are three (3) segments of the project: western (SR 70/99 to county line), central (county line to Fiddyment Road), and eastern (Fiddyment Road to SR 65) segments. The project is estimated, based on preliminary planning studies, to cost approximately $200-300 million. Funding is not anticipated until 2015 or later. At this point, the project is to locate, preserve, and acquire a corridor for the future Parkway.

Need

The project is needed because of growth -- this area is one of the fastest growing areas in the state. SACOG's 2000 population and employment projections for 2025 suggest a near doubling of numbers. In addition, there are a number of pending or anticipated urban developments proposed in or around the project area, which if approved would increase traffic and lead to greater congestion. These trends are likely to have potential environmental and economic impacts on the region.

Purpose

The purpose of this project is to be a connector. It would improve access to jobs and accommodate growth, maximize mobility, avoid inducing urban growth, minimize environmental impacts, and reduce impacts on local streets.

History

There have been two preliminary planning efforts:

1) A Conceptual Plan completed in 2000 - It established a public participation program (PAC/TAC/SAC) and defined the scope, preliminary policy, guidelines, and funding possibilities for the Placer Parkway project.

2) A Project Study Report (PSR) completed in 2001 - It identified preliminary engineering and environmental issues, clarified policy direction, and identified and evaluated alignment alternatives. Several policies were outlined, including the concept of a controlled access facility, preservation of the study area's rural character, identification of no- development buffers, and no access to the Parkway from Pleasant Grove Road to Fiddyment Road. The PSR was a key document for programming purposes and for environmental funding.

The Conceptual Study and the PSR were both adopted by PCTPA and SACOG boards.

Issues
Several key issues were identified that the study must address along with potential solutions. Key issues include concerns that the Parkway and pending development proposals for the area are on different completion timelines. The Placer Parkway Tier 1 EIS/EIR will likely be on a much slower timeline than this pending development. It is unclear how the two will relate. The consultant team has worked with local agency staff and encouraged them to show at least one feasible Parkway corridor in each development proposal.

Alan Green of the Sierra Club expressed concern that a recommended alignment was shown in the Placer County General Plan. It was clarified that a recommended alignment was shown in the PSR for programming purposes only. The central segment alignment is depicted as a general planning line in Placer County's General Plan. It was emphasized that no corridor alignment has been or can be selected until this environmental review is completed.

Both S. Tidman and D. Heick clarified that the Tier 1 process is a broad-brush environmental review process to identify a corridor that can be acquired to preserve future right-of-way. The purpose of a Tier 1 analysis is not at a project- or construction-level of detail.

A. Green also referred to identification of Parkway buffers in the PSR. He asked whether the potential Watt Ave. extension would be required to have the same buffer criteria. Ken Hough of SACOG reminded the group that the Policy Advisory Committee (PAC) had decided it should have the same characteristics – but concluded it would be a future consideration. C. McAdam and S. Tidman acknowledged that Watt Avenue is a complex issue. As part of the Placer Parkway corridor preservation environmental review, impacts would be evaluated 'with' and 'without' a Watt Ave. connection. C. McAdam indicated that no decision on the extension had been made yet. Steve Propst, Caltrans, said that during the PSR process, the potential for a Watt Ave. extension was separated from the Parkway project. The decision about whether or not to extend Watt Avenue is not a part of the Placer Parkway project.

A. Green said that some of the potential urban development projects were moving ahead. This project needed to be aware of them.

III. SAC MEMBERSHIP AND ROLE

D. Iacofano provided an overview of the SAC membership, duties, responsibilities, and meeting procedures. Membership includes representation from local jurisdictions, regional/state/federal agencies, environmental and neighborhood groups, and business and industry groups.

Duties encompass identifying concerns, issues and preferences, providing non-binding recommendation and advice to PCTPA, and accurately representing the project and its activities to respective constituents. Responsibilities include attendance at SAC meetings, active participation, responsiveness, and advocacy of the interests of respective agencies or jurisdictions at the meetings. He encouraged questions and input anytime during the meeting.

IV. STUDY GOALS

D. Heick identified the project's three goals:

1) Identify corridor alternatives that would meet the project's purpose and need as well as being mindful of the need for a future LEDPA determination (Least Environmental Damaging Practicable Alternative) for federal permits prior to construction.
2) Identify a preferred corridor via a Tier 1 EIS/EIR.
3) Complete a Record of Decision (ROD) and certify the EIR, which will allow for corridor preservation and/or acquisition.

Subsequently, Tier 2 environmental review will be undertaken when funding becomes available for design and construction. The Tier 2 process will evaluate a range of alternative alignments and features within the selected corridor.

Loren Clark, representing Placer County Planning Department and the Placer Legacy HCP/NCCP, inquired whether the project would consider entitlements or land dedications. He also asked if land acquisition would happen before the certification process is complete. D. Heick acknowledged the project would try to take advantage of entitlements. But, the lead agencies would not have authority to acquire land prior to completion of the certification process.

V. WORK PLAN APPROACH

D. Heick said the consultant team and PCTPA are working with FHWA and Caltrans to continue to identify appropriate guidelines to complete the work. The work plan approach includes two main phases:

(1) Identify Alternatives for the Tier 1 EIS/EIR analysis. Screening and evaluation of the PSR's concept alternatives would be completed to identify any fatal flaws. Other corridor alternatives would then be identified and screened. This would consist of modifying PSR concept alternatives or developing entirely new ones.
(2) Prepare and complete the EIS/EIR.

Schedule and Key Milestones

D. Heick provided an overview of the schedule and key milestones, emphasizing the critical role of the advisory committees in the beginning of the process, allowing for maximum consultation and input before key decisions are made.

- Screen PSR Alternatives ('fatal flaw') — End of 2003
- Identify/Screen Other Alternatives — February 2004
- Identify Final Alternatives — May 2004
- Draft EIS/EIR for Public Review — September 2005
- Final EIS/EIR — End of 2006

L. Clark inquired whether the consultant team is budgeted to fill data gaps. D. Heick clarified that the team is budgeted to collect data necessary for the purpose of Tier 1 analysis. Since most of the study area is covered by Habitat Conservation Plans or pending Specific Plans, there are only a few apparent data gaps, such as parts of the northwest portion of the study area. The data will be analyzed in GIS and will also be available for future Tier 2 analysis. D. Heick encouraged the SAC to share available environmental data for specific projects with the consultant team. There was an inquiry as to whether the available data is seasonal. D. Heick said the team is getting metadata for each GIS data layer to track sources, dates, and other data attributes, and that the aerial maps include a set taken in fall and a set taken in April.

Pat McAchren, Caltrans Environmental Division, commented that the advisory committee meetings seemed to be clustered in the project's earliest phase. D. Heick said these meetings were planned that way to ensure issues were identified and discussed before early consultation was completed and before decisions were finalized. She said that additional PAC/TAC/SAC meetings are built into the administrative review process as a final screening point before moving to the next stage. P. McAchren suggested getting advisory committee input on the Administrative DEIR.

Tier 1 Process

D. Heick reminded the SAC that the Tier 1 process is not well understood by the general public. Few have been prepared in California. The Tier 1 process will not result in an identified roadway alignment. It will only identify a corridor within which an alignment will be designed and constructed at a later stage. There are some guidelines for preparation of Tier 1 or programmatic environmental documents available from FHWA, Caltrans and CEQA. These guidelines emphasize regional impacts. She emphasized it is important to remember that the outcome of this Tier 1 process will be different (less detail) than a project-level EIS/EIR document.

D. Heick explained that the process would focus on relative differences among corridor alternatives (broad area and general level of detail) and broad issues (general location, mode choice, and regional, indirect, and cumulative impacts). The process will identify mitigation strategies that would be applied to the Tier 2 environmental process.

A. Green inquired about whether the Tier 1 process would identify "fatal flaws." D. Heick answered, it would. Data collection information and mapping would be provided at the next SAC meeting. She reminded the SAC that identification of fatal flaws will focus on corridor-level analyses.

Eric Bryant, representing the proposed Placer Ranch Specific Plan, asked about the corridor's width in the central segment. D. Heick said it was identified as a 1,000-foot-wide corridor in the Project Study Report. Land within the corridor would be acquired to preserve it for the future transportation facility and to minimize impacts on agricultural land and/or adjacent resources.

Alternatives Development and Screening
D. Heick informed the SAC that the traffic model was being updated to help develop screening criteria for evaluating the PSR alternatives. Transportation screening will be segment-based, and will consider three (3) scenarios:

1) No Project (existing)
2) Year 2025/2030 (based on SACOG's 2025 Metropolitan Transportation Plan)
3) an "extended" future scenario (the MTP plus pending/anticipated urban development proposals)

L. Clark asked if the third scenario would be a horizon-based or land use-based forecast. D. Heick said it would be more land use-based, with additional criteria being developed by the TAC.

A. Green commented about a serious fuel shortage by 2030. He asked if this shortage would be included as part of the scenarios. D. Heick responded that the alternatives analysis would include mode choice. A. Green suggested using the shortage as an assumption.

All assumptions made in developing the forecasts will be available to the SAC for review. She clarified that there were no hard lines drawn for PSR alternatives at this time. The identification of a preferred corridor with a defined width will be the outcome of the Tier 1 process.

Environmental screening is currently anticipated to involve analyses of the following issues:
- Existing/Planned Land Uses
- Williamson Act Contracts/Important Farmlands
- Community Disruption/Displacement/Relocation
- Recreation Lands
- Cultural/Native American Resources
- Biological/Wetland Resources
- Hazardous Materials/Waste
- Floodplain/Hydrology
- Soils
- Potential for Growth Inducement

A. Green asked about the species that data were being collected on. D. Heick said that information was being collected on special status species. A. Green suggested that migratory birds also be studied, since they were protected even if they did not have special status. D. Heick agreed, and indicated that the project could also help to further the goals of the Placer Legacy and Natomas Basin HCPs. She said data collection and mapping efforts were ongoing.

D. Heick finished this discussion by identifying that the boundary for the transportation model extends beyond the study area to more accurately reflect traffic impacts. The PSR's conceptual alternatives will first undergo environmental impact review and then transportation screening. Any new alternatives identified will first undergo transportation screening and then environmental review.

VI. OPPORTUNITIES FOR INPUT

D. Iacofano informed the SAC that opportunities for input are built into the process through PAC/TAC/SAC meetings, public workshops at key milestones, "stakeholder" interviews, and through the formal environmental review process. The advisory committees and stakeholder interviews were helping to identify key issues early in the process. Additional opportunities for information and input will be available through the project web site and newsletter, scheduled for distribution by Fall 2003.

VII. ISSUES AND DESIRED OUTCOMES

D. Iacofano invited the SAC members to identify issues and desired outcomes related to the Placer Parkway project. The following comments were made during this discussion:

- Tom Christofk, Placer County Air Pollution control District, suggested comparing air quality impacts for the no-build alternative vs. the other alternatives.
- Eric Bryant, Placer Ranch Specific Plan, said all of the PSR corridors crossed his project development. He suggested greater coordination between proposed development and the Placer Parkway project.
- Ken Hough, SACOG, mentioned that this project has been a regional priority for SACOG for the past five years. He said that the open space buffer is a big issue. He suggested studying the draft working paper on the Dixon/Vacaville greenbelt. These cities have purchased land along the greenbelt corridor and leased them back to farmers.
- P. McAchren, Caltrans, stated that The American Farmland Trust (AFT) in Davis runs a program to promote protection of agricultural land. He suggested reviewing the Oakdale/Riverbank Open Space Plan.
- Steve Propst, Caltrans, mentioned that this project would benefit the region by relieving traffic congestion. Caltrans wants to see a good transportation project result from this process, one that meets the needs of all stakeholders. He expects a good quality document focused on long-term planning that will identify a corridor for preservation. He said that a Tier 1 process can be a good prototype for Caltrans, and believes it is the wave of the future.
- Julie Hansen, KT Development, represents a central segment landowner that just submitted a recent development application to Placer County. She is mindful of the Placer Parkway project, and commented that coordination between development proposals and the Placer Parkway project is desirable.
- L. Clark, Placer Legacy, reminded the SAC of the Lincoln By-pass project (SR 65) and controversy over the LEDPA for that project. He suggested addressing each alternative's growth inducing and cumulative impacts early in the process, since these issues are relevant to the identification of a LEDPA alternative. It is important to understand these issues early to try and avoid problems later.
- A. Green, Sierra Club, emphasized the need to preserve as much open space as possible, particularly vernal pools and other irreplaceable resources, but also bird habitat. He said this vicinity was a part of the third largest migratory bird/raptor habitat in the country even with working farms in the area. In terms of data, he suggested contacting the Audubon Society. He said that he is not opposed to some kind of a connector; but the project had to consider the LEDPA process. L. Clark noted a Christmas bird survey conducted by the Audubon Society. Jones & Stokes (consulting firm) is completing a wintering bird survey.
- Jeff Finn, California Department of Fish and Game, expressed the need to acquire land beyond the immediate corridor, for protection and preservation - as mitigation. He advised that identification and protection of mitigation lands as part of the Tier 1 process would be helpful. He said that restoration identified as mitigation should be performed before the project is constructed – before the "take". Fritts Golden, URS, pointed out that Federal and State agencies have to reach consensus about locations for mitigation. L. Clark reminded the SAC that a Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) for Placer Parkway is being prepared, and that a conservation strategy will be developed by Fall 2003.

- Rob Jensen, City of Roseville Public Works, expressed concerns about increasing traffic and congestion on local streets in the City of Roseville due to growth in the region. He said that there was less traffic benefit the further north the Parkway is located. The Parkway would be an opportunity to 'funnel' traffic away from the city.
- Jack Wallace, Roseville Coalition of Neighborhood Associations, supports establishment of the Parkway. He said it would reduce congestion and air quality concerns. However, he was concerned about long-term growth inducement. He said the Parkway would allow for more development. There is a lack of regional cooperation to deal with growth issues.
- George Alves, Rural Lincoln MAC, said he had never been involved in a discussion about the Placer Parkway. He was eager to take back this information to the MAC for information and feedback.
- Joseph Cruz, Sacramento Metro Area Chamber of Commerce, identified several economic benefits of the Parkway such as moving goods, positively impacting job growth in Sacramento and around the airport, improving the quality of life, as well as safety (moving traffic off local roads).
- Joan Powell, Sun City Roseville Homeowners Association, suggested that improved public transit is a concern. There seems to be a lot of attention paid to environmental issues but not very much to transit.

VIII. NEXT STEPS

D. Iacofano concluded the meeting and announced the following next steps:

- PCTPA and consultants will consider input from TAC/SAC,
- Complete the traffic model
- Gather existing environmental data
- Bring screening criteria and data to the next SAC meeting to be held on August 14, 2003 from 1:30 to 3:30pm

PLACER COUNTY TRANSPORTATION PLANNING AGENCY

Meeting Minutes & Action Items **Final 11.03.03**

Meeting Description: Placer Parkway Corridor Preservation – Study Advisory Committee Meeting #2
Meeting Date August 14, 2003
Minutes Date: October 13, 2003 **Location:** City of Rocklin's Sunset Community Center – 2650 Sunset Blvd.

Persons Attending			
Name	**Affiliation**	**Name**	**Affiliation**
William Morebeck	Placer County Agricultural Commission	Ron Dondro for Tom Brinkman	Placer County, Public Works
Wendy Gerig	Roseville Chamber of Commerce	James McLeod for John Pedri	City of Lincoln, Public Works
Joan Powell	Sun City Roseville Homeowners Assn.	Scott Gandler for Rob Jensen	City of Roseville, Public Works
Howard Rudd for George Alves	Rural Lincoln Municipal Advisory Committee	Spencer Short for Perry Beck	City of Loomis
Loren Clark	Placer County, Planning and Placer Legacy HCP/NCCP	Pat McAchren	Caltrans, Environmental
Jeff Finn	California Department of Fish and Game	Celia McAdam	PCTPA, Executive Director
Alan Green	Sierra Club, Placer County	Stan Tidman	PCTPA, Project Manager
Ed Pandolfino	Environmental Council of Sacramento (ECOS) and Audubon Society	Denise Heick	URS, Project Manager
Julie Hanson	KT Development	Fritts Golden	URS, Environmental Manager
Jack Ritchie	South Sutter County Specific Plan	John Long	DKS Associates, Traffic
Susan Rohan for John Tallman	Proposed West Roseville Specific Plan	Daniel Iacofano	MIG, Inc., Public Outreach
Jeff Clark	Sacramento County, Public Works	Sharon Kyle	MIG, Inc., Public Outreach
Mike Lee for George Musallam	Sutter County, Public Works		
Minutes			

I. INTRODUCTIONS

The second Study Advisory Committee (SAC) meeting was held on August 14th, 2003 at the Sunset Community Center (City of Rocklin). The purpose of the meeting was to update the SAC on project progress, discuss issues and get feedback regarding transportation modeling, and the alternatives screening process and criteria.

Celia McAdam, Executive Director for the Placer County Transportation Planning Agency (PCTPA) welcomed SAC members to the meeting. She then invited SAC members to introduce themselves. Next, she turned the meeting over to Daniel Iacofano, of Moore, Iacofano, Goltsman, who explained his role as meeting facilitator and reviewed the agenda and meeting format. He turned the meeting over to Denise Heick (URS Project Manager).

D. Heick summarized the information presented and discussed at the first SAC meeting on June 27, 2003. She began with a description of the project limits, generally between SR 65 -- SR70/99 and Sunset Boulevard/Howsley Road – Baseline Road/Riego Road. She identified the three project area segments:

- western (SR 70/99 to county line)
- central (county line to Fiddyment Road)
- eastern (Fiddyment Road to SR 65)

No access is planned in the central area between Fiddyment and Pleasant Grove Roads.

She then explained the primary project need for the project as: population and employment growth, anticipated urban development, and increased travel demand with resulting greater congestion. She emphasized that PCTPA and SACOG, through both the 2000 Conceptual Plan and the 2001 Project Study Report (PSR), have adopted the project concept.

Next, she described the public involvement portion of project. This includes advisory committee meetings (TAC, SAC and PAC), public meetings, stakeholder interviews, newsletters and a project website. She reviewed the SAC's overall duties and responsibilities:

- to identify concerns, issues, and preferences
- to provide non-binding recommendations and advice to the project team
- to attend and participate in meetings
- to represent each member's interests, jurisdiction, or agency and accurately represent the project and its activities to them.

Next, D. Heick briefly reviewed the three study goals:

(1) identify corridor alternatives to be studied in the Tier 1 EIS/EIR, which meet the project's purpose and need as well as being mindful of resource agency concurrence and a future determination of the Least Environmentally Damaging Practicable Alternative (LEDPA)
(2) identify the preferred corridor alternative through the Tier 1 EIS/EIR process
(3) complete a Record of Decision (ROD) for the EIS and certify the EIR so that corridor preservation and/or acquisition could commence.

She explained that data gathered in the Tier 1 process would assist with permitting activities following the subsequent Tier 2 process. No permits are needed for the Tier 1 phase. She stressed that, in a Tier 1 process, attention is focused on general information and characteristics in the study area, emphasizing relative differences among corridor-level alternatives. In this phase, mitigation strategies are also developed that will be applied in future Tier 2 documents. She stressed that the overall objective of the Tier 1 process is to preserve a corridor as soon as possible. When funding is available, PCTPA will identify specific alignments within the selected corridor via the Tier 2 environmental review process.

D. Heick also reviewed key project milestones—from initial screening for fatal flaws, to preparation of the final Environmental Impact Statement/Report (EIS/EIR). D. Heick mentioned that information identified in public meetings and agency meetings would also be folded into the project development process. She stated that at this point in the project, the primary focus is on screening criteria and development of a baseline transportation model.

Finally, she reviewed the steps involved in the alternatives development process, which include: transportation screening, environmental screening, focus on identification of fatal flaws, and determining alternatives for study in EIS/EIR.

II. TRANSPORTATION MODELING

John Long, DKS Associates, delivered a presentation on transportation modeling.

Travel Forecast Process—The presentation began with an overview of the travel forecasting process. The overview covered three areas:

- Development of travel forecast for Need and Purpose and for alternatives screening
- A broadly defined travel forecast to adequately address project impacts
- A second forecast to expand existing (SACOG) 2025 data to consider potential future development within the study area

J. Long stated that the travel forecast process would help refine the project's need and purpose statement and would be applied to the alternatives screening process. He said that it was critical that travel forecasts address a broad area in order to accurately consider all the variables included in the project study area. He said the project team felt it important to ask the question—What is the horizon year for this project? He stated that generally a horizon is 20 years out, but the project team will be looking at 2025 to 2030 conditions. SACOG's Metropolitan Transportation Plan has a 2025 horizon year. The 2025 development forecasts for the region were adopted by SACOG in 2001. J. Long explained that the future roadway system in the Metropolitan Transportation Plan (MTP) reflects local Capital Improvement Programs and "funding-constrained" improvements. The MTP is important to this process because it is a collaborative effort with all regional agencies to forecast transportation needs.

It has been recommended by the project team that a second future scenario be developed to forecast the unique growth pressures and potential development characteristic of the project study area that are not captured in the MTP. J. Long mentioned that CEQA guidelines require that projects consider "reasonably foreseeable" development in the planning process (this helps anticipate a broader range of future conditions), which could affect the selection of a project alternative.

Loren Clark, Placer County Planning and Placer Legacy HCP/NCCP, asked if the second cumulative development scenario would be based on a 2025 horizon. J. Long said he'd be discussing this momentarily in the presentation.

J. Long said that this second cumulative development scenario would be important because this additional development could influence the selection of project alternatives. He stated that the criteria used to include projects were based on parameters consistent with the MTP. He reviewed the criteria developed (by the TAC and project team) with the SAC. Proposed screening criteria include:

1. Pending/anticipated urban development
2. Projects located within 5 miles of the corridor area
3. Projects not included in current General Plans must be more than 1,000 acres of urban development

The proposed criteria for including pending/anticipated urban development are:

1. All projects with accepted development applications
2. All potential projects determined by the relevant jurisdiction to be pertinent
3. All remaining residential capacity included in current approved General Plans within Placer and South Sutter counties west of Sierra College Boulevard

Next, J. Long discussed the list of Major Proposed Developments in project study area. They include the following:

- West Roseville Specific Plan
- Placer Vineyards Specific Plan
- South Sutter County Specific Plan

- Placer Ranch Specific Plan
- De La Salle University and Community
- Metro Air Park
- McClellan Park
- Elverta Villages
- West Lincoln

He noted that this list (which was developed in discussions with the TAC) was an initial list, and others projects may also weigh into project considerations. He also added that since most existing development projections don't include full build-out scenarios, additional information would need to be captured for the second cumulative development scenario. The second cumulative development scenario would assume full build-out of the residential land uses west of Sierra College Boulevard, including residential uses proposed in the major proposed developments, and an increase in employment proportional to growth in housing.

Based on the above parameters, the second cumulative development scenario would add approximately:

- 49,100 dwelling units
- 12,300 retail employees
- 53,500 non-retail employees
- 10,000 to 15,000 college students

to the SACOG 2025 development forecasts.

Neighborhood retail employment would be allocated within the major proposed developments. Non-retail employment would be allocated throughout South Sutter, South Placer, and North Sacramento counties. Sensitivity tests would be performed to determine how the allocation of non-retail employment would affect travel forecasts.

The following initial travel model forecasts would be prepared:

	2025 SACOG Development Forecasts	**Second Cumulative Development Scenario**
No Project Alternative	1	1
Screening of Corridor Alternatives	Several	Several

SAC Feedback & Questions

Ed Pandolfino, Environmental Council of Sacramento (ECOS) and Audubon Society, asked why the project was so focused on potential development. He also asked if the project was realistically focused on constraints, including current State population/housing projections, availability of water, and quality of life issues. He stated that the area is a hot growth area -- with a very attractive quality of life -- but this is quickly deteriorating because of a number of issues such as poorer air quality. He concluded by stating that the project may be basing forecasts on the incorrect information – would growth continue based on these constraints?

J. Long indicated the project approach was to 'bracket' these scenarios. SACOG's MTP would be considered less optimistic about growth. It is based on State- and local jurisdiction-level data, while the proposed "second cumulative

development scenario" would be more optimistic about regional growth. The second scenario would be based on a longer time frame than the MTP and include potential urban development described previously. He said the project team is trying to be realistic about proposed future growth. D. Iacofano asked if J. Long was indicating that the project is being overly aggressive about projections based on development/growth indicators. E. Pandolfino indicated he was suspicious about it. He thought it might be a developer "wish list." Rick Dondro, Placer County Public Works, said he didn't want the data to drive the project. D. Heick said that the project is being careful not to do this. The team was using the best available data and recognizes it will change over time. A. Green pointed out that SACOG data provides good "floor" for baseline information. J. Long added that the SACOG plan would be updated in 2005 and this will be helpful to the accuracy of project data.

William Morebeck, Placer County Agricultural Commission, asked for clarification about "undeveloped land". He was interested whether it was reflective of current general plans or land that was actually vacant. He commented that there is a perception that agricultural land is merely a "land bank" for future urban development. J. Long explained that in general plans there are areas that are identified for particular purposes, although no specific projects may be formally identified for that area.

R. Dondro cautioned that the project should not go beyond adopted general plans. The project needed to be careful about how scenarios were named/dated or labeled. The scenario should be carefully explained. It should be pointed out that it is not approved and the project was not proposing it. He said it should be clear with all assumptions outlined.

L. Clark said that these proposed developments were very geographically specific with a lot of data. He asked two questions:

(1) How would the scenario avoid including the 'next' development proposal that would expand the 'bracket'. He said we would have to close the door sometime. D. Heick said the project data would be revisited more than once during the process, in order to refine information as new data comes in from sources (SACOG and others). She thought this would happen as the alternatives were being screened and then again during the Tier 1 EIS/EIR analysis.

(2) How would the residential to employment ratio be determined? For example, the potential De LaSalle University development, because of its specific use, would have a better-defined ratio. D. Heick said that the process would identify where this data was coming from -- the source -- for the regional bracket. J. Long added that the TAC was considering this. They would be providing input shortly. D. Iacofano clarified that the project team's "rule of defining data" has to be realistic.

Spencer Short, Town of Loomis, A. Green, asked about the central segment having no access and whether it was logical. D. Heick said this decision was based on policy direction adopted by SACOG and PCTPA Boards .J. Long clarified that the "no access" direction was based on the preliminary planning documents -- the Conceptual Plan and Project Study Report. He added that the only potential connection in this segment would be if Watt Ave. were extended.

R. Dondro said he thought this is contradictory. He was concerned about generalizing the project description by saying that no access will happen in an area and then saying there could be a Watt Ave. connection. He mentioned the following potential alternatives: a project without a future extension of Watt Avenue, a project with a future extension of Watt Avenue, plus two land use alternatives.

J. Long clarified this would actually result in four scenarios to evaluate: with- and without a Watt Avenue extension (with the project evaluating an interchange in the event one is eventually constructed as part of a separate project) for both the SACOG 2025 MTP development scenario and for the proposed second cumulative development scenario.

S. Short asked why property in the proposed corridor wasn't being purchased now – particularly in the east and west segments near the State highways. C. McAdam said that property couldn't be purchased until the Tier 1 study was

complete. During the Tier 1 study, all jurisdictions and property owners in a study area will be informed about potential impacts of the Placer Parkway project.

Wendy Gerig, Roseville Chamber of Commerce, asked if the "no access area" in the central segment could be defined as a fatal flaw. D. Iacofano said no—this was a design consideration. E. Pandolfino thought it was a fatal flaw that would be growth inducing. He said the no access-provision does not realistically factor in development. J. Long said that it actually is a policy recommendation. He said that the "no access" zone would stay in place (for now) based on previous direction. D. Heick said at some point this issue might go to decision-makers to be revisited.

III. ALTERNATIVES SCREENING PROCESS & CRITERIA

A. ENVIRONMENTAL PROCESS & SCREENING

D. Iacofano directed SAC members, who were grouped at several tables, to look at the maps at each table. He instructed SAC members to work in groups to review information on the maps and mark up changes or additions needed as appropriate. Next, D. Heick asked everyone to take a look at the meeting handout entitled *Development of Environmental Screening Criteria*. She briefly explained the screening process as a quick assessment method to help identify, avoid, and minimize fatal flaws. She stated that the screening process would assist with prioritization related to analysis occurring during this phase of the project. She explained that the screening process would use "differentiators" -- a way to distinguish relative differences among corridor alternatives for a particular resource or issue area.

D. Heick asked the SAC members to turn to Table 2 in the handout (on pages 5-8), where a matrix labeled *Draft Environmental Screening Criteria* identified various resources/issues, assessed differentiators, and listed criteria. She explained that the associated diagram would assist SAC members with reviewing the screening process. She identified the criteria to be applied by the project team to each resource/issue area. She noted that the process and criteria were also being reviewed by the TAC. She asked the SAC to provide input as they worked through the maps during this session.

SAC members divided up into work groups, and discussed the various categories of resources/issues for the western, central, eastern segments of project. Project environmental screening covered the following categories:

- Existing/Planned Land Uses
- Williamson Act Contracts/Important Farmlands
- Community Disruption/Displacement/Relocation
- Recreation Lands
- Cultural/Native American Resources
- Biological/Wetland Resources
- Hazardous Materials/Waste
- Floodplain/Hydrology
- Soils
- Potential for Growth Inducement

SAC members noted issues, questions, and recommendations on project maps. This information will be evaluated by project team and assessed for use in developing project screening criteria. The following items were specifically identified:
(Note to attendees – it was difficult to capture all comments regarding the maps and the screening criteria during this very dynamic portion of the meeting. If substantive comments are not captured below, please annotate and return an annotated version so that our final summary will be complete. Thanks!)

Special Status Species
Identify species based on "habitat"

Refer to NCCP/HCP process, which has new data on land cover that may be useful

Wetlands
Map rice fields
Determine if more current data is available

Vernal Pools
No changes to this map

Waterfowl
Why is waterfowl separate from other species (e.g., wintering raptors)?
Important to use new data

Land Use
Identify waterfowl habitat areas
Identify public and private parcels in areas

Cultural Resources
Identify what is known and unknown

FEMA Floodplains
Consider adding a Reclamation District representative to SAC
Move color differentiation on blue area

Hazardous Materials
No changes to map

Farmland
Look at soils types
Define "prime" farmland
Identify value

General Soils
Not a differentiator

Roadfill Soils
Not a differentiator

Subsequent to the meeting (August 18, 2003), Rick Dondro provided additional comments by e-mail:

> "Since I was not able to stay to the end of the SAC meeting please find some comments below on the environmental screening process.
>
> 1) On page 6 Hazardous Waste in the Eastern Segment it says no - few sites - I would think this should be a yes due to the proximity to the landfill.
> 2) Page 7 Noise in the Central and Eastern it says No - I strongly disagree with this. There are many receptors in Roseville (e.g. Del Webb) that are within range of the Bypass - These sources are very sensitive. In addition the alignment should include noise impacts on the future

West Plan. The noise impacts on the West Plan residents could be the driving political criteria for selecting an alignment.
3) Page 7 Land Use - Eastern Segment - This area is all designated Industrial or Industrial reserve - I would say No
4) Page 8 Growth Inducement - for what its worth my opinion is Yes for all segments

Please pass on these comments to the appropriate parties
Thanks Rick"

B. ENGINEERING PROCESS & SCREENING

Gary Horton (URS, Engineer) presented the proposed process and engineering criteria for the alternatives screening process. He described the following five-steps:

- Establish Design Standards
- Prepare GIS-Level Geometric Studies
- Evaluate Off-Site Engineering Impacts
- Develop Initial Matrix to Evaluate Engineering Impacts
- Refine Alternatives for Draft EIS/EIR

G. Horton explained that conceptual design standards would consider facility type, design standards (speed, radius), access standards, and safety standards. He suggested that the facility could be a divided controlled access highway. The project team is still assessing the range of potential interchange configurations at SR70/99 (including a local interchange or a two-level trumpet interchange) and at SR 65 (including a local interchange or partial freeway to freeway interchange). Recommended traffic speeds would range from 55 mph to 70 mph. Speed would in turn provide direction on optimum curve radii. He stated the type of access control would be another key. The degree of access control is still being evaluated (limited to full access control). He said the facility type would also help to determine access control. He discussed safety standards, which determine the amount of space needed to safely recover in the event of an incident (this will influence shoulder and median widths). He said that conceptual engineering criteria would be developed to be consistent with the PSR policy direction.

He stated that once conceptual standards are set, GIS Level Geometric studies to establish a visual representation of the interchange configuration will be developed - including sufficient right of way. There will be no full physical design of a roadway or interchange within the corridor. He mentioned that issues related to drainage would be factored in, as will flood plain encroachments. In conclusion, he said the next step will be to develop a matrix to evaluate engineering impacts—this will ultimately assist with the creation of design criteria for the project.

IV. CONCLUSIONS & NEXT STEPS

Transportation Modeling

1. The proposed second travel forecast (SACOG's MTP plus potential future development proposals) generated several comments and questions. These included:

   a) Be sure that all forecasts are based on comprehensive and factual data including State and local jurisdiction data.
   b) Consider regional water availability and quality of life issues in these forecasts.
   c) Carefully explain the proposed second travel forecast and its assumptions. Be careful of labeling and dates. Point out that the potential development is not approved and this project is not endorsing it.

d) Detail how:
- Transportation screening criteria would address future proposed urban developments beyond those listed.
- Residential to employment ratio would be determined.

2. The PSR's "no access" provision created a number of comments:

a) Is this provision logical?
b) Is it contradictory if a Watt Ave. connection is to be studied?
c) Could this restriction be considered a 'fatal flaw', which does not realistically factor in development?

3. Modeling work will continue with the TAC input and SAC feedback. Updated information regarding development of the Second Cumulative Development Scenario would be shared with the SAC at the October 23 meeting.

Environmental Screening

1. Data collection will continue and mapping work will be updated to reflect TAC input and SAC feedback.

2. Input will be solicited from an interagency meeting with staff from State and federal resource agencies. This information will be updated and discussed at the October 23 meeting.

The next SAC meeting will be held on Thursday, October 23, 2003 from 2:00 to 4:00 p.m. at the City of Roseville's Corporation Yard.

PLACER COUNTY TRANSPORTATION PLANNING AGENCY

Meeting Minutes & Action Items — Final 11-19-03

Meeting Description: Placer Parkway Corridor Preservation – Study Advisory Committee Meeting #3
Meeting Date October 23, 2003
Minutes Date: November 19, 2003
Location: City of Roseville Corporation Yard – Rooms #2 and #3 – Hilltop Circle

Persons Attending			
Name	**Affiliation**	**Name**	**Affiliation**
Mark Quisenberry	Placer County Agricultural Commission	Tom Brinkman	Placer County, Public Works
Dave Vintze and Tom Christofk	Placer County Air Pollution Control District	Grace Keller for Jack Wallace	Roseville Coalition of Neighborhood Associations
Joan Powell	Sun City Roseville Homeowners Assn.	Jeff Finn	California Department of Fish and Game
Steve Healow	FHWA, Engineering & Environment	George Alves	Rural Lincoln Municipal Advisory Committee
Loren Clark	Placer County, Planning and Placer Legacy HCP/NCCP	Brian Fragiao for Perry Beck	City of Loomis, Town Engineer
Terry Lowell for Eric Bryant	Proposed Placer Ranch Specific Plan	Joe Cruz	Sacramento Chamber of Commerce, Alliance for Jobs
Alan Green	Sierra Club, Placer County	Stan Tidman	PCTPA, Project Manager
Ed Pandolfino	Environmental Council of Sacramento (ECOS) and Audubon Society	Denise Heick	URS, Project Manager
Steve Propst	Caltrans, Local Assistance	John Long	DKS Associates, Traffic
Scott Sauer	Caltrans, Planning	Daniel Iacofano	MIG, Inc., Public Outreach
Jeff Clark	Sacramento County, Public Works	Chad Markell	MIG, Inc., Public Outreach
Harold Assenza	Resident - 301 Marie Ct/Roseville 95661	Steve Kokodas	MIG, Inc., Community Viz

Minutes

MEETING SUMMARY

Purpose

The meeting purpose was to update the SAC on project progress, discuss issues and get feedback on modeling, and the environmental screening criteria and preliminary data for PSR alternative.

Reports on Recent Meetings

Denise Heick summarized the October 6th and 9th Scoping Meetings and informed the SAC members that the Placer County Board of Supervisors recommended that the application process for the De La Salle and Placer Ranch projects should not be delayed.

Environmental Screening Criteria and Preliminary Data for PSR Alternatives

D. Heick began with a discussion of the environmental screening criteria and preliminary data for PSR alternatives, emphasizing that the process was primarily a review of the transportation and environmental screening conducted related to the project thus far. D. Heick asked the SAC members to review this material, stating that it would be used to help identify and avoid fatal flaws. She noted that the resources/issues were differentiated by type and amongst the western, central and eastern segments. The following is a list of the

areas were covered: Air Quality, Biology: Special Status Species, Biology: Wetlands / Riparian/ Vernal Pools, Biology: Waterfowl Habitat, Community Socio-Economics, Municipal Facilities, Public Services, Historical Resources, Floodplains, Hazardous Waste, Land Use: Agriculture, Noise, and Land Use: Planned Development.

Modeling Tool Demonstration
Steve Kokotas (MIG) explained that the Arc View and Community Viz tools utilized all of the data just reviewed. He went on to explain that as different alternative Parkway routes are identified it is possible to automatically calculate specific impacts. Additionally, the program can give a comparative analysis of impacts among different route alternatives. A real time demonstration of the program was presented.

Transportation Modeling
J. Long discussed the traffic assumptions for the no build alternative and Cumulative Scenario A. He also discussed future development scenarios. He noted that overall it is believed that the new Parkway will increase Vehicle Miles Traveled (VHT) and decrease Vehicle Hours Traveled (VHT). He also explained that two new colleges are being proposed in the project study area, a branch of California State University at Sacramento in the Placer Ranch Specific Plan area, and De La Salle University in the De La Salle Specific Plan area. This could result in the addition of 49,100 dwelling units, 13,3000 retail jobs, 53,500 non-retail jobs, and 10,000 to 15,000 college students.

Conclusions and Next Steps
The meeting concluded with D. Iacofano briefly recapping the agenda/discussion items and highlighting the main questions raised during the meeting and topics noted for further investigation. He then went on to discuss the next steps including the upcoming informal NEPA/404 consultation, continuing screening of the PSR Alternatives, and the continuing environmental and engineering assessments. The next SAC meeting will be take place on February 12, 2004.

I. INTRODUCTIONS

The third Study Advisory Committee (SAC) meeting was held on October 23rd, 2003 at the City of Roseville Corporation Yard (City of Roseville). The purpose of the meeting was to update the SAC on project progress, discuss issues and get feedback on modeling, the environmental screening criteria, and preliminary data for screening of PSR alternatives.

Denise Heick welcomed SAC members to the meeting. She then turned the meeting over to Daniel Iacofano, who invited SAC members to introduce themselves. He then explained his role as meeting facilitator and reviewed the agenda and meeting format. He turned the meeting back over to D. Heick. She briefly reviewed the project, including the three main corridors identified in the PSR to connect SR 65 to SR 70/99. She also went over the purpose of the project, noting: access to jobs; accommodating growth; maximizing mobility; minimizing impacts. The project concept has been adopted by PCTPA and SACOG. She also reviewed the duties and responsibilities of the SAC, the Tier 1 process, key project milestones, and the alternatives development process.

II. REPORTS ON RECENT MEETINGS

Scoping Meetings

Approximately 30 people attended the Scoping Meeting held in Roseville on October 6th. Attendees were generally supportive of the project, and strong preferences for or against the corridor locations were not generally expressed at this meeting. Approximately 100 people attended a much livelier meeting at the Pleasant Grove School on October 9th. At this meeting, attendees expressed the opinion that the entire corridor along Pleasant Grove Road is considered by residents to be a community with no distinct boundaries. There was an emphasis on the cohesion of this community as well as the viability of continued farming in Sutter County. Attendees were generally not happy with the project and professed strong preferences regarding corridor locations. Most attendees were not in favor of the northern corridor alignment since it would have the most impact on active farming. Many individuals from the areas that in Sutter County that would be affected by a northern alignment alternative were in attendance.

Placer County Board of Supervisors Meeting

The Placer County Board of Supervisors met on October 20th. Direction was provided to the Planning Department to proceed to process applications for the De La Salle and Placer Ranch Specific Plans, and that the application processes should be coordinated concurrently with the Placer Parkway corridor identification process. General support was expressed for one or more universities (each of these Specific Plans proposes a university). BOS members said it would be possible to resolve many issues presented by these Plans by modifying the current proposals.

III. ENVIRONMENTAL SCREENING CRITERIA AND PRELIMINARY DATA FOR PSR ALTERNATIVES

Screening Criteria

D. Heick began her presentation with a discussion of environmental screening criteria and preliminary data for PSR alternatives by reviewing the transportation and environmental screening conducted to date. She described the process as a quick assessment method to help identify, avoid and minimize fatal flaws. The draft screening criteria were the subject of previous TAC and SAC meetings, and were revised based on input received at these meetings. She informed the SAC members that she had taken a revised *Draft Environmental Screening Criteria* back to the Technical Advisory Committee (TAC) for review and that the SAC should also review this document in order to add their feedback. A revised *Draft Environmental Screening Criteria* matrix (discussed at the SAC #2 meeting) was provided to the SAC.

Preliminary Draft Date for Use in Screening PSR Alternatives

The following information was employed in the next discussion:

- Large maps on the wall, each showing a different resource within the study area,
- Illustrative figures showing the intersection of PSR corridor alignment alternatives with the different resources, shown in a PowerPoint presentation and provided in hard copy to attendees, and
- The revised *Draft Environmental Screening Criteria* matrix.

Information regarding the accuracy and completeness of the resource data on these maps and figures was solicited from the SAC. The *Draft Environmental Screening Criteria* matrix was then discussed, in the context of each of the figures showing the intersection of PSR alternatives and resources, where applicable, and potential conflicts were identified.

The following resource areas were covered:

- Air Quality
- Biology: Special Status Species
- Biology: Wetlands / Riparian/ Vernal Pools
- Biology: Waterfowl Habitat
- Community Socio-Economics
- Municipal Facilities
- Public Services
- Historical Resources
- Floodplains
- Hazardous Waste
- Land Use: Agriculture
- Noise
- Land Use: Planned Development

Air Quality
D. Heick began discussion of this topic by informing the group that there were no differentiators in the Air Quality criteria yet.

Dave Vintze, Placer County Air Pollution Control District, asked if the Vehicle Miles Traveled (VMT) had been calculated for each of the corridor options. He noted that this information was vital for two reasons. First, the closer the Parkway is to development the less likely growth inducement will occur and overall fewer cars that would need to be accounted for. Second, a calculated VMT is necessary for the assessment of emission particulates to be assessed.

John Long, DKS Associates, responded to the question by saying that at present the VMT is just being addressed for the overall area. The first task was to calculate emission for the region and then later on the project will focus on the specific corridor segments.

Tom Brinkman, Placer County Public Works Department, asked about taking congestion into consideration. He said emissions should be calculated to take into account not only total VMT but also the duration of travel time due to congestion. He also asked if there was a way to account for growth inducement as well.

D. Heick responded, saying that calculations can be made but will depend upon the alignment, input from the TAC and SAC members, and the methodology used.

Biology: Special Status Species
D. Heick indicated that this resource/issue would be looked at carefully. Several Special Status Species figures was displayed for review: Giant Garter Snake Habitat, Potential Swainson's Hawk Nesting Habitat, and Potential Valley Elderberry Longhorn Beetle Habitat. She noted that vernal pool special status species are presumed present in vernal pools for purposes of this initial evaluation (vernal pools are discussed separately below).

Giant Garter Snake Habitat

D. Heick reviewed garter snake habitat in the context of looking at the different alignments. Overall, it appears that the north alignment has the fewest impacts to this species' habitat. Ed Pandolfino, Environmental Council of Sacramento and Audubon Society, asked if this calculation takes into account the lengthening of Watt Ave (and if not, how would it be addressed)? D. Heick responded by saying that at present calculations do not address Watt Avenue. The Parkway Project does not include a Watt Avenue extension. It will analyze the impacts of a Parkway interchange with a future Watt Avenue extension that might be constructed by others. Jeff Finn, California Department of Fish and Game, wanted to know which categories were going to be used in making the decision? D. Heick told the SAC members that all possible and available categories will be incorporated into the final decision making process.

Swainson's Hawk Habitat
D. Heick reviewed Swainson's Hawk habitat in the context of looking at the different alignments. J. Finn said that this data was a good start but lacking in detail as these birds can nest anywhere. He noted that you could use land cover data but the project team would need to know more specifics about which categories would be used to make decisions. E. Pandolfino suggested that updated survey data could be collected using trees at certain sites.

Valley Elderberry Longhorn Beetle Habitat
D. Heick reviewed Valley Elderberry Longhorn Beetle habitat in the context of looking at the different alignments. There was no discussion.

Biology: Wetlands / Riparian / Vernal Pools
D. Heick stated that there is potential waterfowl habitat in all three-segment areas. She went onto mention that this was an area of concern at a previous SAC meeting, mainly because this is a rest area for migratory birds and a feeding area due to the rice farms in the area. She also mentioned that there were vernal pools in all three project segments. Additionally, she mentioned that fisheries would also be assessed as an area of interest.

Wetlands / Riparian
D. Heick reviewed riparian and wetland areas in the context of looking at the different alignments. She indicated that the PSR's central alignment has the biggest impact on wetlands and that it will be necessary to gather more current data if it is available.

Vernal Pools
D. Heick reviewed vernal pool areas and vernal pool critical habitat in the context of looking at the different alignments. Two figures were reviewed, one showing the location of vernal pools or "clusters" of vernal pools identified as part of the Placer Legacy project, and the other show US Fish& Wildlife Service designated Vernal Pool Critical Habitat. She identified that the PSR's southern alignment has the biggest impact on vernal pools and vernal pool critical habitat.

Tom Christofk, Placer County Air Pollution Control District, asked why the central segment is located where it is. Is it based on resource mapping or just dashes on a map? D. Heick and J. Long both said that it is based on a Placer County General Plan line, and was identified as a potential alignment in the PSR. We are now going through a more thorough environmental evaluation that may result in revising the alignment.

Biology: Waterfowl/Upland Habitat

D. Heick reviewed waterfowl and upland habitats in the context of looking at the different alignments. These figures were developed based on input from J. Finn at the last SAC meeting. D. Heick briefly explained that waterfowl habitat is being considered separately from other species. The project team is in the process of better identifying waterfowl habitat areas.

Community Conditions/Socio Economics
D. Heick stated that the team is trying to get more specific nuances of communities and connection issues related to the project. She said that there were some issues related to schools and 4F-classified properties.

Potential Residential Communities
D. Heick reviewed the potential residential communities in the context of looking at the different alignments. There are no formal boundaries of communities in the study area. This data identifies clusters of residences and community services.

Employment Centers
D. Heick reviewed the employment centers in and around the study area in the context of looking at the different alignments. She noted that there is a real difference between the east and west segments related to employment types.

Municipal Facilities
D. Heick reviewed the municipal facilities in and around the study area in the context of looking at the different alignments. She asked the SAC to identify any facilities that were not accounted for.

Homes and Businesses
D. Heick reviewed the location of homes and businesses in the study area in the context of looking at the different alignments. Loren Clark, Placer County Planning and Placer Legacy HCP/NCCP, asked how the information regarding the locations of all the homes and businesses was generated. D. Heick stated that this was done by visual analysis using aerial photography, correlated to the other socioeconomic maps and using some county parcel data.

Community Services
D. Heick reviewed the location of community services in the study area in the context of looking at the different alignments. There was no discussion.

Public Services
Public services in the study area do not present differentiators in any segment area. There was no map data for this parameter.

Cultural Resources
For cultural resources, it was noted that data were only available in areas where cultural resource surveys have been conducted. A large part of the study area has not been surveyed. There should be no inference that certain alignments avoid cultural resources in these areas that have not been surveyed.

Archaeological Resources
D. Heick reviewed the location of known archaeological resources in the study area in the context of looking at the different alignments. There was no discussion.

Historical Resources
D. Heick reviewed the location of known historic resources in the study area in the context of looking at the different alignments. Known historic resources were identified in three categories: structures and bridges, an historic ranch complex, historic linear resources such as canals and roadways, and an historic district. All alignments affect the historic district – Reclamation District 1000; there would be no way to avoid this district with the PSR corridor alternatives as it encompasses both sides of SR 70/99. The southern alignment affects the historic ranch complex.

Floodplains
D. Heick reviewed the location of 100-year and 500-year floodplains in the study area in the context of looking at the different alignments. D. Heick noted that Sutter County plans to close the gap around some of their 100-year floodplain areas (and this could impact the central segment).

Hazardous Materials/Waste
D. Heick reviewed the location of known and potential hazardous materials/wastes sites of concern in the study area in the context of looking at the different alignments. The sites were identified based on review of a commonly used database (EDR) and evaluated for their potential to be an issue. The data only identify four potential sites of concern in or adjacent to the study area. There was a question as to what item identified as "3A" was. Future feedback indicates it is Valley Rock, a closed solid waste disposal site.

Farmland
D. Heick reviewed the location of Prime Farmland and Farmland of Statewide Importance in the study area in the context of looking at the different alignments. D. Heick also mentioned that there was concern about breaking up farms, but the data was not complete yet. A. Green asked if this map breaks down the soil by type? D. Heick said that it does not. There is a separate map that breaks down soils by type.

Noise
D. Heick reviewed the location of potential noise-sensitive receptors in the study area in the context of looking at the different alignments. The figure combined previously-reviewed data showing the locations of potential residential communities, homes and businesses, and the Del Webb Community Plan Area. D. Heick said that the analysis would need to add additional areas that could be affected. Noise experts say that on flat land, noise from Placer Parkway would likely travel about 1, 350 feet. This means that the project could be required to construct berms and other sound barriers. She went on to say that current criteria is insufficient and new criteria would need to be created.

Land Use: Future Development
D. Heick reviewed the location of planned or potential future development in the study area in the context of looking at the different alignments. All PSR corridor alignments intersect the locations of such future development. L. Clark asked if the proposed landfill should be added to the maps as it could have an impact. D. Heick agreed and said that this will be added to the map.

Summation
D. Heick reminded the SAC members that presently all this information is still in preliminary form. It will be refined for the alternatives screening process. She reminded them that this is why their immediate feedback is

crucial, as this information will be shared with the EPA and Corps of Engineers. D. Heick went on to say that in terms of growth inducement, screening factors were still under review.

IV. MODELING TOOL DEMONSTRATION

D. Iacofano introduced the next agenda topic—modeling tools. He explained how this demonstration was to be used to take the lid off the "black box" and reveal how the Arc View and Community Viz tools work. At this point D. Iacofano turned the conversation over to Steve Kokotas, MIG.

S. Kokotas began by explaining that the Arc View and Community Viz tools utilize all of the data D. Heick reviewed with the SAC. He noted that, as different corridor alternatives were identified, it was possible to automatically calculate specific impacts. Additionally, the program could give a comparative analysis of impacts among different route alternatives. A real time demonstration of the program was provided. After the presentation, D. Heick, reiterated that this tool was extremely effective at helping to refine the decision making process. She continued that this tool would be used to refine all of the PSR alternative and the respective impacts. Once this process was completed, the refined results would be brought to the advisory committees for review.

E. Pandolfino asked how many layers of data were going to be used in the refinement process? D. Heick responded that all physical environmental and socio-economic factors would be used in making the calculations. At present, there will be no weighting of the criteria.

In a follow up question, E. Pandolfino asked if the model showed growth inducement? D. Heick answered that they were not sure yet if that was entirely possible but the project team was working on adding in aspects of growth inducement. Someone asked if the program was able to factor in construction costs. D. Heick responded that construction cost factors can be built in as well, although the team is not using this aspect of the model for screening.

A. Green asked what impact the high-tension power lines would have and if they were incorporated in the maps? D. Heick responded that the power lines were not included in the maps and that the major impact they would have is on the farms that were located next to both the power line and the Parkway. This would have an impact on being able to use crop dusters. The existing and proposed power lines will be added to the mapping.

. TRANSPORTATION MODELING

J. Long discussed four topics: development scenarios, future conditions for a no build alternative, induced travel demand, and forecasts for PSR alternatives.

Development Scenarios

J. Long explained that the study area and immediate vicinity is expecting to add 49,100 dwelling units, 13,3000 retail jobs, 53,500 non-retail jobs, and 10,000 to 15,000 college students in two proposed new colleges.

Future Conditions – No Build Alternative

J. Long explained that currently two model plots for congestion were being examined. The first was based on SACOG 2025 data for the No Build alternative. The No Build model shows that 2 to 3 hours of LOS F would

occur in 2025 on segments of I-80 and SR 65, and on segments of Watt Avenue and Walerga Road. The second was Cumulative Scenario A, which adds the increasing growth development scenario to the SACOG 2025 data. Cumulative Scenario A shows that 2 to 3 hours of LOS F would occur on additional segments of I-80, SR 65, Watt Avenue, and Walerga Road, and would also occur on Baseline/Riego Road.

Induced Travel Demand

Using detailed graphic images and poster charts, J. Long went on to discuss induced travel demand. He informed the SAC members that a major new transportation facility would not only impact route choice but the distribution of trips. This will ultimately give people a wider array of travel options for getting to their destinations. He then went on to discuss how induced travel demand can come from changes in trip generation, trip distribution and mode choice. The SACMET (SACOG model) captures all but trip generation through feedback loops. This is in line with current best practices and modeling systems. Induced demand in the model shows that traffic will move from I-80 to Placer Parkway, but that the relief on I-80 will induce others to "fill up" the reduced congestion, resulting in less than would be expected improvements to I-80 traffic. Overall, it is believed that the Parkway will increase VMT and decrease VHT. This would be confirmed when VMT's have been fully calculated and the modeling of VHT has incorporated possible travel delay scenarios.

Forecasts for PSR Alternatives

J. Long explained that the southern PSR alignments would have highest volumes of traffic while northern alignments would have the lowest volumes of traffic. There would be substantially higher volumes of traffic under Cumulative Development Scenario A than under the SACOG 2025 scenario. Volumes on the Parkway east of Watt Avenue would be higher with the addition of an interchange at Watt Avenue. Ultimately the highest volumes would occur on the east and west ends of the Parkway. Southern and central alignments show the biggest reduction on I-80 and Baseline/Riego Roads and the biggest increase on SR 70/99. A Watt Avenue interchange would reduce traffic volumes in Western Roseville and portions of Baseline Road. Additionally, a Watt Avenue interchange would cause modest increases on Watt Avenue at the Sacramento County line.

D. Vintze asked if the forecast assessments account for different traffic speeds since a more accurate measure of VMT is calculated from speed. J. Long indicated that they do. In a follow up question D. Vintze wanted to know how this would impact the overall amount of emissions, because it seems to that this is just moving congestion around? J. Long indicated that the project team would be looking into the impact of overall emissions.

A. Green wondered if, with the assumption of new development, this model would be capable of capturing (this type of) development or long-term differences in land use? J. Finn added to this by asking if having a southern route was better than a northern route since it would curb growth inducement. He also wanted to know if this would reduce overall VMT and VHT. E. Pandolfino added that if Scenario A were adopted, the there would definitely be more interchanges added (how would this be accounted for?).

D. Heick and J. Long both addressed these concerns my mentioning that the models are based on SACOG projections, and on proposed development scenarios only, and that no additional interchanges are proposed added to the project study area.

T. Christofk wanted to know if you could account for different types of vehicles in the VMT since a large portion of vehicles using the Parkway would be trucks traffic. J. Long said that the SACOG model does have a

component to account for trucks—part of this design process for the Parkway was intended to relieve truck traffic on I-80.

VI. CONCLUSIONS AND NEXT STEPS

D. Iacofano briefly recapped the agenda items key topics of discussion reviewed during the meeting with SAC members. He encouraged additional feedback on both the screening criteria and the preliminary environmental data presented at the meeting. He then went on to discuss project next steps including the upcoming: 1) informal NEPA/404 consultation, 2) continuing screening of the PSR Alternatives, and 3) the continuing environmental and engineering assessments.

Future Actions

Environmental Screening Criteria and Preliminary Data for PSR Alternatives

Meeting Materials Review and Comments—SAC members were asked to review the project materials they were given during the meeting and return comments to the project team within two weeks.

Biology/Special Species Category—Additional information will need to be gathered on Swainson's Hawk habitat. SAC members suggested using land cover data and updated survey data collected using trees in specific site areas.

Land Use/Planned Development—SAC member suggested that proposed landfill be added to this map because it could have a notable impact on the project.

Finally, D. Heick reminded all the SAC members that the next meeting would be taking place on February 12, 2004.

Meeting adjourned at 4:00 PM.

PLACER COUNTY TRANSPORTATION PLANNING AGENCY

Meeting Minutes & Action Items FINAL 4-6-04

Meeting Description: Placer Parkway Corridor Preservation – Study Advisory Committee Meeting #4
Meeting Date February 12, 2004
Minutes Date: April 6, 2004 **Location:** City of Roseville Corporate Yard

Persons Attending			
Name	**Affiliation**	**Name**	**Affiliation**
Mark Quisenberry	Placer County Agricultural Commission	Clay Loomis	Brookfield Community Plan representative
William Morebeck	Sutter County Agriculture Department	Ken Friedman	Property Owner & Blue Oaks Community Plan representative
George Alves	Rural Lincoln Municipal Advisory Committee	David Wade	Brookfield Community Plan representative
Loren Clark	Placer County, Planning and Placer Legacy HCP/NCCP	Celia McAdam	PCTPA, Executive Director
Eric Bryant	Proposed Placer Ranch Specific Plan	Stan Tidman	PCTPA, Project Manager
Lisa Wilson	Sutter County Planning Department	Fritts Golden	URS, Environmental Manager
Ed Pandolfino	Environmental Council of Sacramento (ECOS) and Audubon Society	Denise Heick	URS, Project Manager
Mike Lee for George Musallum	Sutter County Public Works	John Long	DKS Associates, Traffic
Jack Ritchie	Proposed South Sutter County Specific Plan	Daniel Iacofano	MIG, Inc., Public Outreach
Susan Rohan	Public Attendee	Sharon Kyle	MIG, Inc., Public Outreach

Minutes

MEETING SUMMARY

Purpose

The meeting was convened to review the Draft PSR Screening Evaluation Technical Memorandum, to get gather feedback on its recommendations, and to obtain input for the Tier 1 EIS/EIR alternatives.

Draft Technical Memorandum Overview

D. Heick reviewed the draft Technical Memorandum: Screening Evaluation of PSR Alternatives, which had been made available to SAC members prior to the March 12 meeting. D. Heick explained that the Technical Memorandum presented the results of the screening process used to analyze the conceptual Placer Parkway corridor alignment alternatives identified in the Project Study Report. She reviewed the organization and contents of each chapter and encouraged the SAC to provide input, correct information, and ask detailed questions.

Conclusions & Recommendations

During the meeting, the following items in **bold** were considered. SAC concurrence or recommendations are noted in *italic*.

A. Eliminating or Adjusting PSR Corridor Alignments

1. **Reroute central and southern alignments north of the current alignment to avoid a large vernal pool complex located immediately northeast of the West Roseville Specific Plan area.**

   - *SAC concurred in general with this recommendation.*

2. **Eliminate the northern corridor alignment between SR 70/99 and approximately Amoruso Acres.**
   - *SAC concurred with this recommendation. Staff and its consultants were advised to document the justification for eliminating this corridor alignment.*

3. **Modify the central corridor alignment:**

   a. Minimize encroachment into large wetland/vernal pool conservation areas at Curry Creek.

   - *SAC concurred with shifting the central corridor alignment north as described.*

   b. Adjust alignment in western segment to avoid Pleasant Grove/Sankey community and designated conservation area.

   - *SAC concurred in shifting the central corridor northward, as described, and in avoiding Sysco and working with Natomas Basin Conservancy. Some SAC members suggested eliminating the Sankey Road connection. Staff explained that since the technical memorandum recommends eliminating the north of Sankey and south of Riego connections, eliminating the Sankey Road connection would leave but one connection to SR 70/99 to be evaluated in the EIS/EIR. Studying more than one alternative connection in the EIS/EIR will provide additional or helpful information to the decisionmakers in selecting a connection to SR 70/99.*

4. **Modify the southern corridor alignment**

   a. **At eastern end, extend it west before descending south, avoiding an historic ranch complex, vernal pool areas, and future Section 4(f) properties in West Roseville Specific Plan (WRSP).**
   - *SAC concurred with adjusting the southern corridor westward to avoid these resources.*

   b. **At southern edge (parallel to Baseline Road), avoid large man-made waters and one rural residential community by moving corridor north or south**
   - *SAC concurred with gathering additional information on wetland status of water body and its potential as a mitigation site. Some SAC members recommended that the southern alignment "hug" Baseline Road.*

c. Move corridor closer to Baseline Road to minimize growth inducement

- *See Baseline Road discussion below.*

5. Work with Sutter and Placer County staff to identify working farm units; the evaluation of corridors using this information.

- *SAC concurred in recommendation to identify working farms and use in screening.*

B. Additional SAC Input

Connections to State Routes

- *Eliminate Sunset Boulevard as a potential connection to SR 65. All alternative corridor termini would be at Whitney Avenue. This direction was based on the Whitney connection having fewer environmental impacts, and TAC's observation that a full freeway interchange could not be accommodated at Sunset. Any potential connection between SR 65 and the Parkway along Sunset would be via local expressway or arterial that connected to the Parkway at Fiddyment Road or Foothills Boulevard.*

- *Eliminate the south of Riego connection at SR 70/99 -- only after discussions with Sacramento and Sacramento County. Sutter County staff recommended its elimination. Issues involve potential growth inducement and an urban separator. One SAC member suggested keeping this connection alternative until policy direction is more definitive, and to have further discussions with Sacramento County and City, and Natomas Basin Conservancy regarding their development buffer objectives in this area and whether they were compatible with a Parkway connection.*

- *The TAC agreed that direction to eliminate the western portion of the northern corridor alignment alternative (discussed in A above) would eliminate the North of Sankey connection.*

Other Direction

- Alternate diagonal southern route between Phillip Road and Baseline Road.
- Two scenarios for Baseline Road separator: 1-mile; closer to Baseline. Look at impact on farm units.
- Coordinate with Natomas Basin Conservancy re: property on Riego Road.
- Consider future SR 70/99 traffic levels and the effect on the number of lanes needed – how far apart to construct bridge abutments on SR 70/99.

SAC concurred with the following recommendations provided by the TAC:

- *Consider an alternate to the revised southern corridor alignment between Phillip Road and Baseline Road. This alternate leg of the alignment would angle cross the study area in a southwesterly direction, rather than in a north/south direction (a modification of 4a above). No additional SAC input on this item.*

- *Review two scenarios for Baseline Road/corridor separation: 1) a one mile separation between Baseline and the corridor and 2) one with a corridor closer to Baseline. The review was to be based, at least partially, on farm unit impacts. Some SAC members expressed a preference for an alignment closer to Baseline Road.*

- *Coordinate with the Natomas Basin Conservancy regarding how to avoid or mitigate a conflict with designated but undeveloped conservation property on Sankey Road north of the Sysco distribution center (same as 3b above). No additional SAC input on this item.*

- *Consider future SR70/99 traffic levels and the effect on the number of lanes needed and how far apart to construct bridge abutments. No additional SAC input on this item.*

C. Goal/Policy Issues

No Access – Fiddyment Road to Pleasant Grove Road – with the exception of a potential Watt Avenue extension.

- *SAC concurred with the TAC recommendation of not making any changes to this provision. Additional comments asked the project to consider if the no access policy would really be enforceable (due to planned development in the vicinity). Concern was expressed regarding whether the project would be able to accurately estimate the environmental affects of future interchanges.*

No Development Buffer

- *SAC concurred with the TAC recommendation of not making any changes to this provision. Agreed that the buffer size and location should be flexible (especially in the western and eastern segments) and related to performance standards. Additional comments included: The project should coordinate with county contacts regarding what current plans area were in place that could impact the original intent of this provision.*

I. INTRODUCTIONS

The 4th Study Advisory Committee (SAC) was held on February 12, 2004 at the City of Roseville Corporation Yard. Celia McAdam, Executive Director of the Placer County Transportation Agency opened the meeting and welcomed the group. Next, she asked the project team to introduce themselves to the SAC members. She turned the meeting over to Daniel Iacofano, MIG (meeting facilitator), who reviewed the agenda with the SAC. He also stressed the importance of the SAC's input at this point in the project in order to get feedback on the potential modifications, share recommendations related to goals/policies, suggest other modifications to the alignments, and identify needed corrections to information.

II. DRAFT TECHINCAL MEMORANDOM OVERVIEW

Next, Denise Heick, URS asked the SAC if they had received the project materials that were sent in advance of the meeting, and if anyone had questions before her discussion commenced. No SAC questions.

She began with a review of the Draft Technical Memorandums table of contents. D. Heick briefly described the following information in Chapters 1-3:

- Chapters 1 – Introduction/Purpose of Technical Memorandum
- Chapter 2 – Project Background
- Chapter 3 – Alternatives Identification Process. This section also covered detail about the Tier 1 Process, Screening Evaluation Process, Engineering Screening Criteria, and Least Environmentally Damaging

Alternative (LEDPA) considerations. D. Heick explained that this was a fairly elaborate process, designed to show full detail to agencies involved in review.

Next, D. Heick reviewed the project schedule with the SAC. She explained the status of critical milestones related to both current and upcoming technical assessments/advisory meetings, public outreach activities and the preparation of the Environmental Impact Statement/Environmental Impact Report (EIS/EIR). D. Heick noted that the project planned to have a public meeting in fall 2004, to share the recommendations generated from the Technical Advisory Committee and (TAC) and the SAC. The team would then take the input generated in the public meetings and the TAC and SAC project recommendations to the fall Policy Advisory Committee (PAC) meeting.

She continued with review of format of technical memorandum, reviewing Chapters 4 and 5.

- Chapter 4 – Transportation Analysis of PSR Alignments (growth projections/development scenarios/travel forecasting).
- Chapter 5 – Environmental Screening (data collection/screening criteria/data analysis of existing conditions).

D. Heick stressed that she wanted to spend the majority of meeting discussion time on Chapter 6. She asked the SAC if they had questions about what had been presented thus far. No SAC questions. She continued with brief review of Chapter 6.

- Chapter 6 – PSR Corridor Alternative Screening Summary and Recommendation. D. Heick reviewed the significant sections in Chapter 6, providing the following overview:

  Potential Fatal Flaws – D. Heick explained that project defined a fatal flaw as any condition that would render the project infeasible. She noted that the project found no fatal flaws in any of the alternative, but identified the West Roseville Specific Plan (WRSP) as presenting significant constraints. Specific issues were found in the southern alignment area relative to historic ranches, several vernal pools, and potential future recreation areas.

- Compatibility with Goals and Policies – D. Heick briefly reviewed the six goals and policies of the project with the SAC:
  Goal 1 – Create a controlled access highway.
  Goal 2 – Maximize mobility and accommodate planned growth.
  Goal 3 – Avoid growth inducement and protect rural character of agriculturally designated areas.
  Goal 4 – Minimize environmental impact.
  Goal 5 – Improve safety and minimize hazards.
  Goal 6 – Achieve feasible and equitable financing.

SAC Comments/Questions During Chapters 1-6 Overview
William Morebeck, Placer County Agricultural Commission asked for clarification on whether the potential adjusted alignments (on the map overlay used during the meeting) were created by URS. D. Heick responded that these "draft lines" were developed cooperatively among the project technical team of URS (environmental consultant) and DKS (traffic analysis consultant). W. Morebeck then asked who had made changes to the alignment since the previous SAC meeting (on October 23, 2003). D. Heick explained that the changes to the

alignment lines were the result of several rounds of internal team assessments, and the input of various resource/interest groups (along with a myriad of technical considerations). D. Iacofano added that this was an update from last round of data screenings. He said that it was very important for the SAC to respond to this information at this meeting. D. Iacofano said input from the SAC was needed to help the project team begin to set some parameters for what would be studied in more detail going forward with the Tier 1 process.

E. Pandolfino had a question about Chapter 5, Environmental Screening of PSR Alignments (Section 5.5.2, page 5-10, Riparian Areas) regarding the section on the Swainson's hawk Habitat. He felt the memo only discussed trees, and that foraging was also an issue and that additional information focused on this element of the species was very important and should be considered by the project. D. Heick noted that foraging habitat covered much of the study area and could not differentiate among alternatives; she invited E. Pandolfino to provide what additional input he might have.

III. POTENTIAL MODIFICATIONS TO PSR CORRIDOR ALIGNMENT ALTERNATIVES

Next, D. Heick proceeded with a discussion of potential modifications to the PSR corridor alignment alternatives.

Potential Modification #1 – Reroute central and southern alignments to the north for connections at Whitney Boulevard to avoid a large vernal pool complex located immediately northeast of the West Roseville Specific Plan area.

D. Heick noted that after assessment of this area, the team recommended moving the central and southern alignments north to avoid vernal pools in the vicinity. She added that the project was restricted in how it could move the alignment so as not to impact other vernal pools in the area. Eric Bryant, Placer Ranch Specific Plan, asked if Reason Farm was located in the area. D. Heick said that it was located just below this area. She said aquatic resources in the area also had to be taken into consideration with any proposed modifications. D. Heick added that another variable was avoiding City of Roseville retention basin -- the City had requested that the line be moved more easterly to avoid the basin.

SAC Comments/Questions During Potential Modification #1 Overview

D. Iacofano asked the SAC for comments on Potential Modification #1.

E. Pandolfino asked if the new alignment could run south of the vernal pools instead of north. D. Heick said a southern placement would intersect the West Roseville Specific Plan area. She added that the WRSP had been approved and there were a large number of potential 4(f) properties in this area that would create issues for an alignment.

E. Pandolfino noted that an early alignment alternative considered ran very close to Fiddyment Road, but had been eliminated because of potential impacts to the Sun City community. Jack Ritchie, South Sutter County Specific Plan, asked about the location of the "no access" area. D. Heick said that it was located between Fiddyment Road and Pleasant Grove Road. M. Quisenberry, Sutter County Agriculture Department, asked what other obstacles worked against the PSR alternatives. D. Heick said the historic ranch properties in the area could be affected. M. Quisenberry felt that if the idea were to move people more efficiently, a Fiddyment alternative would not help with traffic-flow problems in this area.

D. Heick asked J. Long to address traffic issues in this area. J. Long said that based on development planned in this vicinity, access points would be needed in order to navigate through the area (e.g., Blue Oaks and Pleasant Grove Blvd). He added that the project would have to be mindful that these access points were adequately spaced, in order to accommodate other interchanges in the area. J. Long said due to access and spacing issues identified earlier on in the project, this Fiddyment alignment had been ruled out. D. Iacofano asked J. Long to provide more detail on why it was opposed. J. Long said that pressure on policy makers from Del Webb development was the primary reason it was eliminated.

M. Quisenberry said that some of the traffic originating north of SR 65 was creating traffic issues, and he didn't believe the north routes solutions would resolve this issue.

D. Iacofano asked the SAC if other than access issues there other negatives related to this modification. M. Quisenberry said he felt the destruction of farmland was a problem. D. Iacofano said the further north the alignment pushed the more of an issue - this becomes, based on potential development.

D. Iacofano asked Fritts Golden, URS, to show (on the potential development map) which developments would be impacted by any Fiddyment Road considerations. F. Golden pointed out the following planned developments: Placer Ranch, West Roseville Specific Plan, Roseville retention basin, Roseville sphere of influence. E. Bryant asked, while considering the Least Environmentally Damaging Practical Alternative (LEDPA) and the WRSP's approval, if anything else could restrict the alignment from going any further north. E. Pandolfino said that the WRSP was not a "done deal" (he added that LAFCO would make the final decision) and that it may have to accommodate the Parkway related to this modification. D. Heick said that this would not be the best location because of overwhelming environmental issues. She added that this area was being preserved because of natural resources and would be scrutinized very closely in connection with any area plans.

E. Bryant asked J. Long about related traffic issues in this location. J. Long said that recent studies generally concluded that the northern alignments had the least traffic benefit, followed by the central alignments, and then the southern alignments, which appear to have the most traffic benefit. He added that projections identified heavy traffic volumes would be coming from several locations in the project area, such as Lincoln and Roseville. J. Long said that the most direct route had the most benefits (the project team assumed no connections at Pleasant Grove). He said that this assumption was influenced by the project's policy direction. W. Morebeck asked if less policy restrictions would open up other alternatives. J. Long responded yes to this question.

Recommendation for Potential Modification #1 *– SAC concurred in general with this recommendation. (There was discussion by some SAC members as to why the southern alignment shouldn't be located adjacent to Fiddyment Road. Staff explained that in addition to the proposed West Roseville Specific Plan, there were a number of vernal pools and an historic ranch complex that would be impacted by such an alignment* (see also No. 4 below*). Some SAC members also expressed concern about the ability to enforce the "no access" policy in the central segment of the Parkway and about the potential disruption to farming in the area.*

D. Heick reviewed the second potential modification with the SAC:

Potential Modification #2 – Eliminate northern corridor alignment from SR 70/99 to Amoruso Acres and transition it to a central and/or southern route at this location.

SAC Comments/Questions During Potential Modification #2 Overview

E. Pandolfino said he supported eliminating the northern alignment, because of growth inducement issues and other associated negative elements. E. Bryant asked if the reason for eliminating this alignment was based on impacts to Amoruso Acres. D. Heick responded no to this question. She went on to say that a straight line was assumed for any Watt Avenue extension. D. Heick said if a Watt Avenue connection happened the extension of Watt Avenue is not part of this project. A Watt connection at a more southerly location would likely reduce potential impacts related to growth inducement. She went on to say that the team was still assessing comprehensive transportation impacts in this area.

D. Heick asked if there were any SAC members who thought the northern alternative should be carried forward. E. Bryant asked if there would be other alignments considered. D. Heick said yes, but this alignment had some potential community impacts (J. Long also added traffic issues). E. Bryant asked if it were removed this early in the screening process, whether agencies might question its elimination. D. Heick said that she would be hesitant to drop it completely if agency contacts identified other merits (e.g., aquatic resources less impacted with this option). D. Iacofano added that based on this discussion it appeared that the alternative had both merits and defects, so it may need to be further assessed by several other interested parties before reaching a final decision. E. Pandolfino asked if this assumed that all the environmental resources would be preserved sufficiently with this alternative. D. Heick said no, but the project wanted to show that it made a real effort to be attentive to existing habitats and resources in this area. D. Iacofano said the project had tools available that would allow for careful evaluation of various resources and identify how to mitigate potential impacts.

Recommendation for Potential Modification #2 - *SAC concurred with this recommendation. Staff and its consultants were advised to document the justification for eliminating this corridor alignment.*

D. Heick reviewed Potential Modifications 3a and 3b:

Potential Modification #3a – Minimize encroachment into large wetland/vernal pool conservation area at the confluence of two main branches of Curry Creek to reduce habitat fragmentation and impacts.

D. Heick noted that the team recommended moving the central alignment somewhat north before it turned south to avoid habitat in area. D. Heick asked for any comments. SAC had no comments.

Potential Modification #3b – Adjust alignment in western segment to avoid Pleasant Grove/Sankey community and designated conservation area.

D. Heick explained that this modification to the central alignment was designed to avoid 1) existing housing in the Pleasant Grove community and 2) Natomas Basin Conservancy regarding mitigation impacts to their conservation area. She said that Natomas Basin Conservancy representatives said that they had no concerns about project impacts to the existing designated conservation area, as the site was undeveloped, and the HCP had a procedure to deal with impacts to such areas.. D. Heick said Sutter County wanted the project to stay to the north side of Sankey Road to avoid the existing Sysco facility.

SAC Comments/Questions During Potential Modification #3a-3b Overview
E. Pandolfino asked if the project would consider eliminating the Sankey Road connection. D. Heick said that the project was recommending the elimination of the northern alignment (and its connection to SR 70/99) based on screening. J. Long added that Sutter County wanted two connections along Sankey (with one mile spacing) because it considered this a major business hub. He went on to say that the project had various reasons for not eliminating this alignment at this point in time. D. Iacofano said from a planning vantage point it was optimum to have a robust selection of alternatives to substantiate that a wide range of considerations had been evaluated.

J. Ritchie asked if the Sankey Road and the North of Riego Road would be impacted by these two interchanges along the Parkway in this vicinity. D. Heick (supported by J. Long) said there was room for two interchanges, but it became more a design issue regarding how to make this work around the existing facilities (e.g., Sysco). J. Ritchie asked if the project could add an interchange located further east to maintain the one-mile spacing in the area. D. Heick said this could be done. J. Long said local conditions would have to be evaluated in order to fully assess this issue. J. Ritchie asked if there were problems in the area north of Riego (in general). D. Heick said that it came down to how much room was available to move interchanges and spacing in this area. She asked if there was any more input on this modification. There were no additional comments from the SAC.

Recommendation for Potential Modification 3a-3b
a. *SAC concurred with shifting the alignment north, as described.*

b. *SAC concurred in shifting the central corridor northward, as described, and in avoiding Sysco and working with Natomas Basin Conservancy. Some SAC members suggested eliminating the Sankey Road connection. Staff explained that since the technical memorandum recommends eliminating the north of Sankey and south of Riego connections, eliminating the Sankey Road connection would leave but one connection to SR 70/99 to be evaluated in the EIS/EIR. Studying more than one alternative connection in the EIS/EIR will provide additional or helpful information to the decisionmakers in selecting a connection to SR 70/99.*

D. Heick reviewed Potential Modifications 4a-4c:

Potential Modifications 4a-4c:
- **4a – Avoid historic ranch complex, large vernal pool areas, and future Section 4(f) properties in the West Roseville Specific Plan Area at the eastern end**
- **4b – Avoid large man-made water of the U.S. and rural residential community along the southern edge**
- **4c – Move the corridor closer to Baseline Road to minimize growth inducement**

SAC Comments/Questions During Potential Modification #4a-4c Overview
E. Bryant noted that one of the modifications (4a) paralleled the hypothetical extension of Watt Avenue. D. Heick located this area for the group on the posted map, confirming the location for E. Bryant.

D. Iacofano asked if there were any additional comments on these modifications. E. Pandolfino asked if the remaining alternatives would be located in the lower portion of the project study area. J. Long said that the "north of Baseline" alternative had not been finalized at this point in the project. D. Heick said the team was

still working with Placer County and the Agricultural Commission on this particular alignment issue. She added that the TAC recommended an adjustment of this modification. Under 4, TAC recommended eliminating the 'bulge' north, over the 'water ski park' by shifting the entire corridor north. Under 4c, TAC recommended considering another alternate to the revised southern corridor alignment in the area between Phillip Road and Baseline Road. TAC also suggested two scenarios for the part of the southern alignment parallel to Baseline Road: 1) a one-mile separation between Baseline and the corridor and 2) an alignment corridor very close to Baseline. D. Heick said that Placer County was developing a community plan for the area south of Curry Creek to the county line (Curry Creek Community Plan), and this effort might help the project with defining some parameters.

D. Iacofano asked if there were any possibilities below Baseline Road. D. Heick said no, because there was another development project planned for that area. J. Long said the PAC felt that there might be a need to establish some space between a Parkway and the community nearby. J. Ritchie asked if this area had specific conditions that required separation. J. Long said that the project was currently less restricted with spacing requirements in this area.

D. Heick asked for any additional comments.

Additional Comments/Questions During Potential Modification #4a-4c Overview

M. Quisenberry said it appeared that the least amount of impacts occurred in the southern corridor, and the most impacts in the northern corridor. He went onto say that the Placer Vineyards project south of Baseline Road would transport water into adjacent farm areas in the central part of project to mitigate irrigation problems in the area. M. Quisenberry said he felt that the central corridor detracted from this water plan. He added that the alignment line should be as close to Baseline as possible, to avoid cutting through farmland. D. Heick said she was familiar with the agricultural zoning in the area, but felt that the project needed more information related to the working farm units. W. Morebeck said that the Williamson Act contracts were very useful in defining locations of farm boundaries (D. Heick said the project was currently using this as a resource). W. Morebeck said that project must look into non-renewed parcel contracts (re Williamson Act land) to see the real status of farm properties. D. Iacofano said W. Morebeck would be a good resource to the project for locating the most accurate information.

Recommendations for Potential Modifications 4a-4c

a*. SAC generally concurred in this adjustment.*

b. *SAC concurred in gathering additional information on wetland status of water body and its potential as a mitigation site. Some SAC members recommended that the southern alignment "hug" Baseline Road.*

c. See Baseline Road Discussion below.

The SAC recommended the following additional direction:
The project should ensure adequate access for the Sutter Industrial area. It should also be mindful of the potential impacts to farmland being more severe in the central rather than southern alignment areas.

D. Heick reviewed the fifth potential modification with the SAC:

Potential Modification #5 – Work with Sutter and Placer County staff to more specifically identify farm units, and evaluate corridor alignments using this information to minimize impacts.

SAC Comments/Questions During Potential Modification #5 Overview
J. Ritchie asked for more information regarding the last leg of the southern alignment. D. Heick showed him on the acetate map all the remaining southern alignment variations being considered for the project. J. Ritchie asked if the re-aligned central alignment now would be altered. D. Heick showed a slight modification on the map (to the SAC). D. Iacofano recapped the alignment variations by noting that the central alignment had three scenarios, while the southern alignment had two scenarios.

Recommendation for Potential Modification #5 *- SAC concurred in recommendation to identify working farms and use in screening.*

IV. ADDITIONAL INPUT

D. Iacofano began a brief review of topics for additional input by the SAC. They included the following four discussion points:

- **Retain Sunset Boulevard connection?**
- **Retain north of Sankey connection?**
- **Retain south of Riego connection?**
- **The distance of the southern alignment from Baseline Road.**

SAC Comments/Questions During Additional Input Discussion
J. Long had a comment regarding whether to retain the south of Riego connection. He said that there were issues related to this connection being discussed as part of a joint visioning process between Sacramento County and the City of Sacramento. E. Pandolfino said he understood that the south of Riego interchange was not a preferred interchange. W. Morebeck noted that this connection was not located in an overly developed area (north of Del Paso Road). J. Long said that a buffer was being considered by Sacramento in this area. W. Morebeck said he thought that Elkhorn Blvd. to the Sacramento County Line was the correct buffer area. He said that this area was identified as a potential growth area and both the city and county would probably be recommending a buffer. W. Morebeck said he favored this alignment. J. Long said that it handled traffic most efficiently. E. Pandolfino said he felt that the south of Riego connection shouldn't be eliminated while the County and City visioning process was still underway. D. Heick asked E. Pandolfino if he was recommending keeping it alive until policy direction was clearer (he said yes.). He said that preserving the industrial area in Sutter County was important and it appeared the county preferred this alignment. The SAC recommend more discussions with the county (and discouraged eliminating this connection at this point in the project).

D. Heick shared a comment made by Rick Dondro, Placer County Public Works, at the last TAC meeting regarding the southern alignment as it headed toward Baseline Road. R. Dondro had suggested that a more diagonal direction be considered for this alignment (it would be angled across the study area in a southwesterly direction). D. Heick said the project team told him they would study this recommendation and get back to him. E. Pandolfino asked if R. Dondro had discussed this potential modification with Placer County Planning. (D. Heick said she expected him to be at the upcoming PAC meeting to discuss this in further detail.)

W. Morebeck said the he felt the main intent of the project was moving people efficiently from north to south. J. Long said he understood this concern and noted that the project was assessing this issue. D. Iacofano asked J. Long if he had a map (of the project study area) that he could share with SAC to aid this discussion. J. Long said that this area was still being studied, and he didn't have a map of the area that could be shared with the SAC during this meeting. W. Morebeck said that the original policy direction indicated that efficient movement of goods and services along I-80 was an issue. He added that the Sacramento airport primarily used this route, but currently didn't move a large volume of goods/services. W. Morebeck added that he felt this policy was based on flawed thinking and should be revisited.

D. Iacofano said that this issue should be mapped out so it can be studied with more precision. J. Long said that the project data came from current information collected from counties in the study area related to growth and traffic projections. G. Alves, Rural Lincoln MAC, noted the project needed to carefully scrutinize the reality of the current growth statistics in the vicinity of the major interchanges. D. Iacofano said it was important to get a handle on this issue and verify the existing data. He felt the project would need some clarity in order to determine if it was fully and correctly evaluating this matter (in other words, could there be any other way to look at this issue).

Other Comments/Questions
E. Pandolfino asked about the issue of prohibiting off ramps (D. Heick said that this would be discussed later during the meeting).

E. Bryant asked what the TAC recommendations where related to this topic. D. Heick shared the following information:

- TAC recommended Sunset Boulevard connection no longer be considered.
- TAC recommended a north of Sankey Road connection no longer be considered (as it is eliminated when the northern alignment is eliminated).
- TAC recommended waiting to make a final decision on the south of Riego Road connection. pending discussions with Sacramento County and the City of Sacramento.
- TAC recommended considering two Baseline Road alternatives for the southern alignment – one a mile north and one hugging Baseline.

Recommendations Related to Additional Input – The SAC concurred in the TAC recommendations below, except as noted:

- *Eliminate Sunset Boulevard as a potential connection to SR 65. All alternative corridor termini would be at Whitney Avenue. This direction was based on the Whitney connection having fewer environmental impacts, and TAC's observation that a full freeway interchange could not be accommodated at Sunset. Any potential connection between SR 65 and the Parkway along Sunset would be via local expressway or arterial that connected to the Parkway at Fiddyment Road or Foothills Boulevard.*

- *Eliminate the south of Riego connection at SR 70/99 -- only after discussions with Sacramento and Sacramento County. Sutter County staff recommended its elimination. Issues involve potential*

growth inducement and an urban separator. One SAC member suggested keeping this connection alternative until policy direction is more definitive, and to have further discussions with Sacramento County and City, and Natomas Basin Conservancy regarding their development buffer objectives in this area and whether they were compatible with a Parkway connection.

- *The TAC agreed that direction to eliminate the western portion of the northern corridor alignment alternative (discussed in A above) would eliminate the North of Sankey connection.*

V. OTHER POTENTIAL MODIFICATIONS

D. Iacofano began a brief review of topic of other potential modifications discussed at the TAC. They included the following topics:

- **Alternate diagonal southern alignment route between Phillip Road and Baseline Road**
- **Two scenarios for Baseline Road separator: a) 1-mile and b) closer to Baseline. Look at impact on farm units.**
- **Coordinate with Natomas Basin Conservancy re: property on Riego Road**
- **Consider future SR 70/99 traffic levels and the effect on the number of lanes needed – how far apart to construct bridge abutments on SR 70/99**

D. Iacofano asked if the SAC had additional comments. No additional comments from the SAC, beyond what was said earlier.

Recommendations Related to Other Potential Modifications *- SAC concurred with the following recommendations provided by the TAC:*

- *Consider an alternate to the revised southern corridor alignment between Phillip Road and Baseline Road. This alternate leg of the alignment would angle cross the study area in a southwesterly direction, rather than in a north/south direction (a modification to 4a above). No additional SAC input on this item.*

- *Review two scenarios for Baseline Road/corridor separation: 1) a one mile separation between Baseline and the corridor and 2) one with a corridor closer to Baseline. The review was to be based, at least partially, on farm unit impacts. Some SAC members expressed a preference for an alignment closer to Baseline Road.*

- *Coordinate with the Natomas Basin Conservancy regarding how to avoid or mitigate a conflict with designated but undeveloped conservation property on Sankey Road north of the Sysco distribution center (same as 3b above). No additional SAC input on this item.*

- *Consider future SR70/99 traffic levels and the effect on the number of lanes needed and how far apart to construct bridge abutments. No additional SAC input on this item.*

VI. GOALS/POLICY ISSUES & INPUT

Stan Tidman provided background on why particular policies existed, and asked the SAC to revisit various goals and policy issues. He explained that the purpose of this discussion was to generate feedback to bring forward to the PAC and the PCTPA Board. S. Tidman provided an update on questions and comments generated by the PAC at their last meeting in September 2003:

- Several PAC members expressed skepticism about if "no access" would be enforceable or be appropriate to handle traffic/land issues. Others questioned if the "no development" buffer would actually limit development and mitigate growth inducement.
- Sierra Club and ECOS both sent letters to PCTPA asked the project to analyze an alternate with more access in the central segment.
- SACOG was concerned whether the project could ensure a "no development" policy and access restrictions through use of the buffer zone.
- Peter Hill met with the project team and expressed his concern related to issues of access and growth inducement (specifically the Watt Avenue connection and growth implications related to Sacramento).

S. Tidman reported that the TAC recommended not altering any policy (and supported all goals). He went on to say that the TAC recommended revising the language of the "no access" concept in the goals and policies so it would be less ambiguous. He added that regarding the "no development" buffer issue, the TAC agreed that the buffer size and location needed to be flexible and should be related to performance standards.

SAC Comments/Questions During Goals/Policy Issues & Input Overview

"No Access" – Fiddyment to Pleasant Grove (except potential Watt Avenue)
E. Pandolfino said he felt it was unrealistic to think there would never be any on/off ramps in the central segment. He added that this would only inconvenience community members and not mitigate growth, and it seemed the entire project is resting on SACOG 's desire that this no access provision be included in the project. He concluded that the most important project goal was choosing the best route. D. Iacofano asked whether there was a method to analyze access-related impacts to come to a definitive decision regarding on/off ramps.

J. Long noted that the project currently had 4 local interchanges to consider and if a multitude of interchanges were open for assessment, the project could end up with another potential 7 options—and that this dialogue was purely speculative without clear policy direction/discussion.

There was general discussion regarding the need for a technical assessment of interchanges. D. Heick stated that the Federal Highway Authority (FHWA) stressed that a thorough technical assessment was a process that needed to be worked through diligently. J. Long said this also touched on another real challenge, related to potential traffic accommodation and growth inducement implications in the project area. He said this could potentially be difficult to accommodate. W. Morebeck concurred with E. Pandolfino (and his earlier point) and felt that everything would ultimately hinge on the final location of the alignment. D. Iacofano asked if the SAC favored the southern alignment (to alleviate traffic). E. Bryant said that the project wouldn't know where the connections would be until the final alignment was adopted. J. Ritchie cautioned that if you limited access this might be a disincentive to people using the Parkway. G. Alves said he'd be in favor of looking at additional interchanges as long as it didn't jeopardize the project process.

Recommendation Related to No Access – *SAC concurred with the TAC recommendation of not making any changes to the 'No Access except a potential Watt Avenue connection' policy. Additional comments asked the project to consider if the no access policy would really be enforceable (due to planned development in the vicinity).*

The SAC shared these additional comments: Concern was expressed regarding the project's ability to accurately evaluate the environmental affects of future interchanges.

"No Development" Buffer

D. Heick said when the project was first conceived there was little development planned in the project area, but now this has changed. Now a consideration was whether the buffer still made sense in areas where development is planned nearby. D. Heick said that the TAC recommended not making any changes to the provision, but suggested adding performance measures to implement this policy in areas where additional development is planned. E. Pandolfino said if you had development in the vicinity, it wouldn't work. He added that the wide buffer didn't make sense from a highway or environmental vantage point if there is development planned. E. Pandolfino said he did not recommend the buffer. E. Bryant said this ran counter to the existing policy.

D. Iacofano reviewed several of the original project goals with the SAC: 1) visual design, 2) habitat value that could be created, and 3) preserving the central corridor area's open space area. J. Long said that these goals were based on development in the industrial area and potential future access needs. He went on to say that FHWA required that a buffer be considered as part of the Tier 1 process since it was in the MTP. E. Bryant said that the project should check with Placer County on what current plans might possibly affect the project's goals related to the buffer. E. Pandolfino suggested that perhaps some areas could be flexibly designed to include easements in potentially impacted areas. D. Heick said she recently attended a meeting with Placer County, and they asked if the project could be flexible about the size of the buffer. J. Ritchie said maybe the buffer should conform more realistically to the existing area. D. Heick said that everyone must be mindful that this was a Tier 1 process. She noted that the project wanted to be flexible without having to re-open a policy issue.

D. Iacofano asked if the corridor could preserve a particular buffer zone (say 1000 foot) to leverage larger acreages so that from a habitat design perspective this would be a more acceptable approach. This would provide an opportunity to work with local resource agencies (this could happen later in the project, during Tier 2 or the design phase). He went onto say that if it were framed this way, it would provide more advantages for the project related to future negotiations. J. Long said the project would need to clearly define the costs of land acquisition for the buffer. E. Bryant asked who would own this right of way. Celia McAdam, Executive Director of PCTPA, said that since this is only a Tier 1 process, that hasn't been fully determined. She said it might be the South Placer Regional Transportation Authority (SPRTA) or Placer County, or perhaps a land trust entity. C. McAdam said that after Tier 1, the project would be allowed to begin the process of land acquisition or easements. She said an important concern was acquiring the right of way as soon as feasible because of escalating costs.

Recommendation Related to No Development Buffer - *SAC concurred with the TAC recommendation of not making any changes to this policy. Agreed that the buffer size and location should be flexible and related to performance standards of meeting other policy objectives.*

VII. OTHER ITEMS/CORRECTIONS

D. Heick asked that the SAC transmit to her any additional comment or corrections to the Technical Memorandum. No corrections or additional comments were made during this point in the meeting.

VIII. CONCLUSIONS & NEXT STEPS

a. Summary of Decisions – See Meeting Summary at beginning of Meeting Minutes.
b. Future Actions – SAC (and TAC) recommendations to be taken to PAC for direction. Other alternatives to be evaluated.
c. Other Issues – None raised.

Meeting adjourned at 4:00 PM.

PLACER COUNTY TRANSPORTATION PLANNING AGENCY

Meeting Minutes & Action Items — Final 8-04-04

Meeting Description: Placer Parkway Corridor Preservation – Study Advisory Committee Meeting #5
Meeting Date June 3, 2004
Minutes Date: August 4, 2004 **Location:** City of Roseville Corporate Yard

Persons Attending			
Name	**Affiliation**	**Name**	**Affiliation**
Tom Brinkman	Placer County Public Works Department	Jack Ritchie	Lennar Properties
William Morebeck	Placer County Agricultural Commission	Julie Hanson	KT Development (proposed De La Salle University)
Scott Gandler	City of Roseville Public Works	Celia McAdam	PCTPA, Executive Director
Carl Walker	City of Lincoln Public Works Department	Stan Tidman	PCTPA, Project Manager
Gordon Garry	SACOG, Research & Analysis	Fritts Golden	URS, Environmental Manager
Leland Dong	FHWA, Engineering & Environmental	Denise Heick	URS, Project Manager
David Wade	Public Attendee representing Brookfield (proposed University Park)	Garry Horton	URS, Engineering Task Manager
Ernie McPherson	Roseville Coalition of Neighborhood Associations (RCONA)	John Long	DKS Associates, Traffic
Jack Wallace	Roseville Coalition of Neighborhood Associations (RCONA)	Daniel Iacofano	MIG, Public Outreach
Jeff Clark	Sacramento Department of Public Works - Transportation	Sharon Kyle	MIG, Public Outreach
Joan Powell	Sun City Roseville Homeowners Association	Vikrant Sood	MIG, Public Outreach
Eric Bryant	Proposed Placer Ranch Specific Plan	Markus De Luca	Member of the Public, representing De La Salle University
Gary Sweeten	FHWA, Environmental	Tim Kwan	Member of the Public – property owner near the landfill
John Tallman	West Roseville Specific Plan		
Minutes			

Purpose

To provide feedback on potential corridors and interchanges to study in the EIS/EIR.

I. INTRODUCTIONS

C. McAdam welcomed SAC members and people in the audience. She asked everyone to introduce themselves before beginning the meeting.

II. ADDITIONAL DATA REQUESTED BY ADVISORY COMMITTEES

S. Tidman gave an overview of the discussion and recommendations developed at previous TAC, SAC, and PAC meetings on the Technical Memorandum – Screening Evaluation of PSR Alternatives and goal/policy review items. The

May 17 Status Report sent to all advisory committee members focused on the following topics and project team follow-up:

Water Ski/Catfish Farm Research—TAC asked the project team to determine if this property (located half-mile north of Baseline Road and immediately east of Locust Road) qualified as a Section 404 jurisdictional wetland (protected by the federal Clean Water Act). Based on an aerial photos (1962 and 1975) evaluation, the project team's biologists concluded (see Attachment C) that the water feature may have originally been constructed in a seasonal wetland that is isolated by approximately 0.5 miles from the nearest stream. The U.S. Army Corps of Engineers will make a final determination.

Baseline Road Segment Analysis—SAC and TAC requested that two corridor scenarios be evaluated parallel to Baseline Road: 1) a corridor alignment immediately north, and 2) a corridor alignment approximately one-mile north (see Figures 1 and 2). The one closer to Baseline Road had more potential environmental impacts than the one further to the north. These impacts were to vernal pools and Country Acres (an existing rural residential community). Two additional variations of the one-mile north scenario were also evaluated: a) corridor centerline – one mile north of Baseline, and b) north corridor edge – one mile north. The northern-most corridor had the least amount of potential environmental impacts.

Working Farm Units—A recommendation in the Technical Memorandum (and with a concurrence of the advisory committees) stressed the need for better information on working farm units and the screening process. The project team coordinated with the staffs of Placer and Sutter County Agricultural Departments. A working farm unit is defined as "a distinct agricultural property (that may consist of multiple parcels of land) that is being farmed or managed by one individual, family or company." The working farm boundaries are shown on the map mailed out with the May 21 Status Report follow-up. This information will be used in screening process.

Growth Inducement Definition—The PAC requested a definition of "growth inducement" and clarifications in the Technical Memorandum. The project team used Caltrans guidance (Caltrans Environmental Handbook). Attachment D summarizes this. This will be added to the Technical Memorandum along with growth inducement clarifications.

South of Riego Parkway Connection with SR 70/99—The Technical Memorandum recommended that the potential SR 70/99 connection -- south of Riego Road be eliminated. The TAC agreed only if the City of Sacramento and the County of Sacramento concurred. The project team met with City and County representatives. They agreed that potential connection should be eliminated because of their pending general plan amendment -- Natomas Vision. It would create a one-mile-wide 'urban separator' south of the Sacramento/Sutter County Line. They felt that a potential SR 70/99 connection would be growth inducing.

Clarification of the "No Access" and "No Development Buffer" Goals/Policies.—Concerns were raised by several advisory committee members and developers about two project provisions: 1) the access restriction between Fiddyment and Pleasant Grove Roads and 2) the width of the no development buffer along the future Parkway. Starting last January, the project team outlined and discussed these with each of the three advisory committees. Based on TAC input to maintain consistency with SACOG's MTP, each advisory committee agreed these provisions should not be revisited during the course of the Corridor Preservation project. However, the advisory committees agreed that several clarifications would improve the meaning of these provisions. Attachment E contains the original goal/policy text and suggested clarifications based on advisory committee direction. This includes PAC discussion on potential locations and greater flexibility for a Watt Ave. connection.

E. Bryant (proposed Placer Ranch Specific Plan representative) asked about the no development buffer clarification in Attachment E. He noted the revised access information -- but did not see anything on the potential for a narrower buffer. S. Tidman referred him to the goal on growth-inducement. He said additional clarifying information would be added on the proposed urban development in agricultural areas and the potential for reduced buffer widths.

III. MODIFIED NEPA 404 PROCESS UPDATE

S. Tidman summarized a series of meetings with the U.S. Army Corps of Engineers (USACOE) and U.S. Environmental Protection Agency (USEPA) to coordinate and consult on Clean Water Act Section 404 issues related to aquatic resources. The goal was to ensure early coordination/consultation to address as many issues as possible during the Tier 1 process. This work should streamline later environmental reviews by adding some certainty for permitting future Parkway design/construction phases.

He summarized two recent meetings. An April l agreement was reached on the process to review, clarify, and concur on key project milestones, such as the Purpose and Need Statement. At this meeting, the project team made it clear to USACOE and USEPA that the project objective was to identify one corridor and it needs to be the LEDPA (Least Environmentally Damaging Practicable Alternative). USACOE and USEPA acknowledged this objective – but indicated they could not guarantee that there would be one LEDPA corridor – there may be more than one. A May meeting addressed the draft Purpose and Need Statement. It outlines the problem and ways to solve it. During this work, the project team has worked to help USEPA San Francisco staff to understand regional transportation problems and growth issues. There is a meeting on June 7 to complete this review. Monthly meetings are set through August to address additional milestones. USACOE and USEPA concurrence on these milestones is key to maintaining the project schedule and budget.

G. Garry (SACOG) asked about EPA and ACOE staff turnover and, if any, had it affected the process to date. S. Tidman said there had been none to date.

IV. CORRIDOR ALIGNMENT ALTERNATIVES

4(a) – Modified PSR Corridors
4(b) – Additional Potential Corridors Identified
4(c) – Potential Corridors to Study in the EIS/EIR

D. Heick gave an overview of the 3-step corridor alternatives process. She noted the May 17 Status Report emailed to SAC members. Attachment A contains TAC, SAC, and PAC comments/direction on the Technical Memorandum – Screening Evaluation of PSR Alternatives. She also described the May 21 supplemental information, mailed to SAC members, including the Revised Environmental Screening Data spreadsheet and Figures 1 (Draft Potential Corridor Alternatives for EIS/EIR Evaluation) & 2 (Additional Corridor Alternatives Evaluated). The spreadsheet lists the three sets of corridor alternatives and calculates the affected acreages of the screening data contained in the Technical Memorandum (biological resources, socioeconomic resources, cultural resources, floodplains, farmland, and hazardous materials/wastes).

a) "Modified PSR Alternatives". Eleven combinations of corridor alternatives and State Highway connections from the 2001 PSR were evaluated by screening them through the environmental screening data (see the spreadsheet) by GIS layer. To illustrate the process, she showed (via Power Point and CommunityViz) how the PSR corridor alternatives were adjusted north and west to avoid or minimize vernal pool impacts.

b) "Additional Potential Corridors Identified". Based on this work and advisory committee direction (Attachment A), 11 more combinations of corridor alternatives and State Highway connections were identified. For example the potential Sunset connection at SR 65 (identified in the PSR) was eliminated. She used biological resources and community resource data parameters, the spreadsheet, and Figure 2 to review each corridor alternative.

c) "Potential Corridors to Study in the EIS/EIR". Three corridor alternatives were identified and evaluated (see Figure 1 and the spreadsheet). Two more issues were used to focus these: 1) Least Environmentally Damaging Practicable Alternative (LEDPA), satisfying the Purpose and Need Statement and identifying the

least impacts on waters of the U.S., and 2) new Caltrans interchange direction that will result in larger right-of-way areas to accommodate high-speed, free-to-freeway connections.

G. Garry asked if the interchange direction was a state-wide standard. G. Horton responded that it was based on a meeting with John Steele, Caltrans HQ geometrician. The direction is based on capacity and safety concerns.

G. Garry inquired about the effect on SR 70/99 interchanges. D. Heick provided a brief description of the effects, based on Caltrans direction. The North of Riego interchange shifted southward, to avoid conflicting with an interchange at Sankey Road. This would put the North of Riego interchange closer to the future Riego Road interchange. However, the Parkway and 70/99 interchange could be 'braided' to avoid conflict. She said the project team was still working through the issues with Sutter County. Before identifying an interchange solution, a possible (assumed) local roadway network would have to be developed.

E. Bryant asked if this Caltrans direction would eliminate the future interchange at Riego Road. D. Heick said no. However, there would be no Parkway access from the Riego Road interchange. Access to the Parkway from Riego Road would be via the local road system to one of the 'local' Sutter County interchanges.

There was a discussion regarding potential additional development areas to the north identified by the Blueprint process. D. Heick said based on the team's understanding of work by Placer Legacy (Alternative Conservation Opportunities Area Plan) and Placer County's Visioning Plan, neither indicated development occurring north of the northern most Parkway project alignment.

SAC member John Tallman, asked whether shifting the North of Riego – North of Baseline alternative onto Riego Road should be done to avoid congestion at SR 70/99. J. Long said this would affect local circulation, and that the PAC had long ago rejected this idea.

D. Heick indicated the current set of corridor alternatives no longer consider a potential SR 70/99 connection south of Riego. The project team, following advisory committee direction, met with City of Sacramento and Sacramento County. The City and the County staff recommended the connection be eliminated because of its growth-inducing potential. The City and County are processing the Natomas Vision that would create a one-mile urban separator south of the Sutter/Sacramento County line.

She also mentioned an approximate 20-acre 'wetland' feature near the Placer/Sutter County line that appears to be actively farmed. The project team would explore this and, if not a wetland, would revise the spreadsheet. It would bring the "North of Riego – North of Baseline" corridor alternative's wetland impact total more in line with the other two alternatives.

D. Heick shared TAC direction to explore another segment on the "Sankey – North of De LaSalle" corridor alternative. This would eliminate the Sankey connection with a north-south segment along the Placer/Sutter County line (Locust Rd.) to north of Riego Rd. The spreadsheet ("North Riego – North of De LaSalle") shows this option.

J. Ritchie (Lennar Properties) asked why the potential North of Riego interchange was moved south (closer to Riego Rd.) and not to the north. D. Heick said that moving it north would create spacing problems along SR 70/99 with a Sankey Rd. interchange.

D. Heick then compared the three "Draft Potential Corridor Alternatives for EIS/EIR Evaluation" to the following environmental data map layers (with specific comments on some):

- Special Status Species Habitat
- Riparian, Wetland and Conservation Areas

- Vernal Pool Critical Habitat (most corridors avoid)
- Vernal Pool Complexes (only minimum impacts)
- Socioeconomic Resources (clips HydroPower site, minimizes Reason Farm impacts and much of the vicinity vernal pool complexes, need more information on Roseville's Swainson's Hawk mitigation area, impacts scattered residences, allows only one 'local' interchange along Sankey, and allows two locals along the north of Riego segment)
- Cultural Resources
- Floodplains (there appear to be no definitive "Sankey Gap" closure plans, which would result in expensive improvements in the 100-year floodplain)
- Hazardous Waste
- Farmland Designations (each corridor alternative does a better job of preserving farmland)
- Potential Major Development Areas (affects the west edge of the adopted West Roseville Specific Plan, pretty consistent with proposed Placer Ranch Specific Plan's features and constraints, two corridor alternatives affect the proposed De LaSalle University project area, potential proposed Brookfield and Blue Oaks involve vernal pool concerns)

G. Garry summarized SACOG's Blueprint project. The Blueprint scenario likely to be adopted by the SACOG Board shows more urban development north of Baseline/Riego. He asked if this additional development should be considered for the Parkway project.

D. Heick noted that the North of De LaSalle corridor alternative segment was similar to Placer County's proposed 'growth boundary'. This boundary, from the proposed Habitat Conservation Plan and the Natural Communities Conservation Plan, would foster conservation opportunity areas to the north and urban development opportunities to the south. She added that PCTPA and member jurisdictions have participated in the Blueprint process. However, the Blueprint's "Placer Parkway" has several varying options such as a southern alignment with more access points on the central segment. This arrangement is not consistent with adopted PCTPA or SACOG Board policies for the Parkway project. It would conflict with the project's purpose and need, including its intent to be a high-speed and limited access regional transportation facility.

C. McAdam said PCTPA has had an on-going dialogue with SACOG about the Blueprint and environmental constraints. She described the Blueprint project as a visioning process. Before final approval, it would need environmental clearance. She said the Blueprint scenarios show Parkway options that we already know are not environmentally sound. SACOG wants to move forward.

D. Iacofano asked how SACOG saw the Blueprint process coordinating with the Parkway's corridor preservation planning efforts. G. Garry said the SACOG Board was scheduled to adopt the Blueprint in December 2004. It would be a land use plan supported by transportation policies and priorities. A number of roadway and transit options were designed to test major facilities like the Placer Parkway. The Blueprint was not laying out an alignment – but providing land use and transportation priorities. He said the Blueprint would only be a success if local jurisdictions adopted and implemented it.

D. Heick said she understood a Blueprint scenario included a more northerly Parkway alignment. G. Garry said yes. D. Heick said the project's corridor alternatives screening process recommended elimination of the northern PSR corridor alternative.

D. Iacofano asked what the Blueprint's vision is for the Placer Parkway. G. Garry said there was no consensus. Two visions have been discussed: 1) to act as a buffer between open space and urban development or 2) as a 'main street' for pending western Placer County development with multiple access points especially if there were to be development north

of the Parkway. D. Heick re-iterated her point about the inconsistency with the project's purpose and need and goals/policies.

M. De Luca (public attendee -- De LaSalle University and Community Specific Plan) mentioned the County's proposed Curry Creek Community Plan and potential development south of Pleasant Grove Creek. He questioned whether the Parkway's limited access policy in this segment was realistic.

D. Heick re-counted the extensive policy review just completed by the three advisory committees on limited access between Fiddyment Rd. and Pleasant Grove Rd. The direction was clear – there would be no more than one potential connection along in the central segment.

D. Iacofano remarked that, with good coordination between the Blueprint and Parkway corridor preservation projects, the "business-as-usual" approach to development with urban sprawl could be avoided. The Blueprint's land use scenarios and the Parkway's limited access provisions in this area could be a unique opportunity for something better.

L. Dong said that while there had been no discussion of the Curry Creek Community Plan, local roadways could cross over the Parkway without having direct access. D. Heick indicated the community plan would have a local circulation plan and could address Parkway restrictions.

G. Garry said one of the Blueprint's vision for the Parkway was for a potential 'main street' – a larger facility – up to 6 lanes. D. Heick said the Parkway was initially planned to be 4-lanes and could be expanded to 6 lanes. More access, such as may be implied by a "main street" did not meet the purpose and need or advisory committee direction.

D. Iacofano asked if any SAC member could identify any 'fatal flaws' with the alternatives. J. Tallman thought the Parkway corridor should be on or closer to Baseline/Riego. He felt that none of the potential alternatives addressed current traffic problems on Baseline/Riego. And, if Parkway traffic merged with Baseline/Riego traffic from Placer Vineyards and the West Roseville Specific Plan, it would create a horrific traffic situation.

J. Long said through the Conceptual Plan and PSR processes, the PAC gave staff clear direction not to have the Parkway on the Baseline/Riego alignment. They directed that it should be to the north – but did not specify how far north. They wanted to maintain Baseline and Riego for local traffic. He said having multiple interchanges at SR 70/99 would be better for traffic flows. He said the two connected interchanges would be 'braided' with adequate distances for decision making. He added that Baseline eventually would be 6 lanes with access points every ½-mile or so.

D. Heick added that the Purpose and Need Statement emphasized the Parkway connection between SR 65 and SR 70/99. The Parkway is not intended for local circulation. T. Brinkman said there was no local roadway plan for the proposed Curry Creek Community Plan. D. Heick said the Blueprint scenarios proposed a lot of urban development in this area. The proposed community plan could be a part of it. The Tier 1 process would take 2 to 3 more years to complete. By that time, there would be more certainty about development. She stressed the need to preserve reasonable corridors through the area so the Parkway would not be precluded by urban development.

J. Tallman indicated he thought the potential Parkway interchange north of Riego and the future Riego Rd. interchange were too close. J. Long did not agree. More information would be provided. G. Horton said the two interchanges would have adequate merge/weave lanes and would be much more efficient. J. Long said access to Sutter County's future industrial area was a major consideration. The County felt that one interchange would limit accessibility.

E. Bryant asked if there would be any difference in travel time and whether cost differences had been estimated. J. Long said the Technical Memorandum had travel time information. He said the latest set of alternatives would have fairly little travel time variation. No costs had been identified to date. D. Heick mentioned that the potential Sankey Rd. interchange and segment to the east would be more costly because of the floodplain.

M. De Luca raised concerns with the yellow alignment ("North Riego – South De LaSalle") corridor alternative. He said the proposed development was to be a pedestrian-oriented community with high residential densities. Planning this development would be hard to do with a 6-lane highway going through the community. He asked about the PSR's northern corridor alternative (parallel to Sunset Blvd. West and then connected with SR 70/99 north of Sankey Rd.).

D. Heick recapped action on the PSR northern corridor alternative. It had been evaluated and eliminated based on the Technical Memorandum and advisory committee direction. She said the latest current corridor alternatives were all better. M. De Luca felt the "yellow alignment" did not address biological resource and drainage problems. D. Heick used the CommunityViz program to illustrate vicinity resources and impacts – particularly the number and location of stream crossings. She followed up by saying the advisory committees specifically asked for more 'direct' routes between SR 65 and SR 70/99. She noted that neither the proposed Placer Ranch nor De LaSalle projects had been permitted. Placer County was trying to preserve options for a Parkway corridor.

J. Hanson said the yellow corridor alignment was most problematic for De LaSalle. The developer was trying to observe Blueprint objectives of greater densities and 'walkability'. It would go through the central plan area. She said Placer County was trying to bridge the gap. In meetings, the County wants to preserve alignments through the proposed project. The blue ("Sankey – North De LaSalle") corridor alternative would be the least "awful."

W. Morebeck (Placer County Agricultural Commission) preferred the southern alignment because it had less impact on agriculture. His first preference would be for the corridor to be on Baseline Rd. He added that having two interchanges near Riego would be a nightmare. One interchange would be better than two. He asked where an example existed and if it worked.

J. Clark said if I-80 and Truxel Rd. had braided ramps, traffic would be much better. J. Long said one major interchange would not be good for traffic flow. He said Caltrans preferred less concentration.

D. Heick referred to the active farming units map and said that in Sutter County, Sankey Rd. acted as a dividing line between farms. A potential connection there would have no affect. In the southwest, a Parkway connection north of Riego would divide farms – but much of this area is already zoned for commercial/industrial uses. D. Iacofano noted that no one corridor alternative meets all criteria – each is a series of trade-offs. Joan Powell (Sun City – Roseville Homeowners Association) thought the northern corridor alternative ("Sankey – North of De LaSalle") would be better for commuters.

E. Bryant said Riego would carry more traffic than Sankey. He asked why the 70/99 connection could not be moved north – closer to Sankey. D. Heick used CommunityViz to illustrate Pleasant Grove community impacts if this option were pursued.

4(d) -- Potential Interchange at Watt Ave.

D. Heick introduced the project team's approach to explore a potential Watt Ave. connection. The environmental review would have to analyze the impacts of a potential connection in the central segment. The question was where such a connection might occur. The project team wants to identify the limits of reasonable locations and present the 'worst' case. She re-iterated that identifying and evaluating a Watt Ave. extension is not a part of the project.

J. Long summarized the proposed process. He said there would be a lot of uncertainty. The environmental review would identify a minimum number of possible locations where Watt Ave. might connect to each corridor alternative. To do this, assumptions for a local roadway system will have to be made. The TAC would help to make the estimation of this system. Then, sensitivity tests would be conducted for the various potential connections based on the assumed local circulation system. Changes in travel time would then be determined. The project team will meet with Roseville and Placer County staff. The results would be shared with the TAC and then the SAC.

M. De Luca felt if the Watt connection were too far north, there would be biological resource concerns.

V. CONCLUSIONS AND NEXT STEPS

Summary of Decisions and Future Action

- More TAC and SAC meetings will be scheduled. Each member will be notified.
- There will be August 23 and 26 public meetings in Roseville and Pleasant Grove to review the corridor alternatives to be evaluated in the EIS/EIR.
- The project team was directed to coordinate with SACOG's Blueprint scenario for the Parkway as a "main street" concept and the southern alignment (consistent with adopted Parkway goals).
- The project team was directed to further assess conflicts from the diagonal alignment relative to De La Salle versus a "more direct alignment."
- The project team was directed to get more information on the 70/99 interchange's proximity to Riego Road (with respect to potential traffic congestion at this location).
- The project team was directed to continue discussion with Placer County Agricultural Commission regarding potential agricultural issues.
- The project team promised to keep the SAC informed regarding all upcoming project developments.

PLACER COUNTY TRANSPORTATION PLANNING AGENCY

Meeting Minutes & Action Items — Final: 05-26-06

Meeting Description:	Placer Parkway Corridor Preservation – Study Advisory Committee Meeting #6		
Meeting Date:	August 25, 2005	**Location:**	Roseville Corporation Yard

Persons Attending

Name	Affiliation	Name	Affiliation
SAC Members:			
Bill Moore	City of Roseville Public Works Department	Dan Mason	Sacramento Metro Chamber
Rob Jensen	City of Roseville Public Works Department	Joan Powell	Sun City CRC Representative
Lisa Wilson	Sutter County Planning Department	Dave Butler	Sacramento Metro Chamber of Commerce
William Morebeck	Placer County Agricultural Commission	Eric Tattersall	US Fish and Wildlife Service
Ernie McPherson	Roseville Coalition of Neighborhood Associations	Julie Hanson	KT Development
John Costa	Building Industry Association – Superior California	Terry Davis	Sierra Club of Placer County
Eric Bryant	Proposed Placer Ranch Specific Plan	Jack A. Ritchie	Proposed South Sutter County Specific Plan
John Deeter	Environmental Council of Sacramento	Loren Clark	Placer County Planning Dept.
Jeff Finn	California Department of Fish and Game	Tom Brinkman	Placer County Public Works Department
Staff:			
Celia McAdams	PCTPA, Executive Director	Stan Tidman	PCTPA, Project Manger
Joanne Koegel	Koegel & Associates	Denise Heick	URS, Project Manager
John Long	DKS Associates, Traffic Task Manager	Gary Horton	URS, Engineering Task Manager
Vikrant Sood	MIG, Public Outreach		
Interested Parties:			
Jim Williams	Williams and Paddon	Gunther Boccius	Public – Centex Homes
Marcus Lo Duca	Representing KT Communities	Kyriakos Tsakopoulos	KT Communities
Ed Armstrong	Foothill Associates	Deanne Green	Brookfield Land
Kate Kirsh	Foothill Associates	Mark Rayback	Wood Rodgers
Ken Whitney	Foothill Associates		

1. Meeting Purpose

The purpose of the meeting was to obtain SAC input and recommendations on the screening results for the two Foothill Associates' alignments along with TAC input and recommendations, the draft revised second cumulative development scenario for the EIS/EIR analysis, and an update on coordination with federal resource agencies.

Placer County Transportation Planning Agency (PCTPA) staff and consultants provided the following handouts at the meeting (these handouts were also made available on URS Corporation's (URS) ftp site before the meeting):

- Benefits and Drawbacks of Foothill Alignments and TAC Recommendations
- Foothill Associates Report, December 10, 2004
- Environmental Screening Data (matrix)
- Foothill Alignment Alternatives (map)
- PCTPA and Foothill Associates corridors (map)
- Draft Planned and Programmed Major Transportation Improvements and Development Projects (map)
- Draft Development Scenarios for Western Placer County EIRs (matrix)
- Purpose and Need
- Screening Criteria for modified NEPA/404 process
- Current EPA Proposals for Avoidance Alternatives

Celia McAdams, Executive Director, PCTPA, opened the meeting and welcomed the members to the 6th SAC meeting. Joanne Koegel, meeting facilitator, asked for introductions and provided an overview of the agenda. Stan Tidman did a brief project update including purpose and need; environmental review; the four recommended corridor alignment corridors (August 2004), and project issues (tiering, resource agency coordination, pending urban development proposals, and scheduling).

2. Foothill Associates Alignment Screening

A. Background

Denise Heick (URS) explained how she would address this agenda item – background, TAC meeting and results, specific benefits/drawbacks, and then ask for SAC input. She began, using a map, by orienting the SAC to the four recommended corridor alignment alternatives via the 2003/2004 screening process and the additional ones evaluated by Foothill Associates (Foothill).

The four corridor alignment alternatives recommended for analysis in the Tier 1 EIS/EIR by the Advisory Committees, via the 2003/2004 screening, are numbered 1 to 4, as follows (mapped colors):

#1 – (red) is the southernmost, one mile north of Baseline Road, connecting to SR 70/99 north of Riego

#2 – (orange) is the diagonal connecting to SR 70/99 north of Riego

#3 -- (blue) is just north of the proposed Regional University and Community Specific Plan, connecting to SR 70/99 north of Riego

#4 -- (yellow) is just north of the proposed Regional University and Community Specific Plan, connecting to SR 70/99 at Sankey

The four corridor alignment alternatives identified in the Foothill Associates report are identified as follows (marked in black dotted line):

- Foothill alignment 1N is their northerly alignment just south of Sunset Blvd. West, connecting to SR 70/99 at Sankey
- Foothill alignment 1S is their northerly alignment just south of Sunset Blvd. West, connecting to SR 70/99 north of Riego

- Foothill alignment 2N is their more southerly alignment just south of the City of Roseville Retention Basin, (near Phillip Rd.) connecting to SR 70/99 at Sankey
- Foothill alignment 2S is their more southerly alignment just south of the City of Roseville Retention Basin, (near Phillip Rd.) connecting to SR 70/99 north of Riego)

Ms. Heick referred to the Environmental Screening Data matrix that provides detailed results from the 2003/2004 and Foothill screening analysis. She clarified that the focus of the meeting was to discuss the significant comparative differences in impacts of the Foothill alignments with comparable alternatives already recommended for Tier 1 EIS/EIR analysis by the Advisory Committees.

Ms. Heick clarified that the red lines on the map (over the black dotted lines) show the 4,600-foot curve radii (screening criteria). The green lines (over the Foothill 2 alignment) over Pleasant Grove Creek and south of the retention basin indicate an alignment that would accommodate a minimum design speed of 70 mph. Ms. Heick clarified that based on TAC input, Foothill alignments 2N and 2S were modified to meet a minimum design speed of 70 mph, and then screened for impacts.

Ms. Heick informed the SAC that Foothill Associates had submitted their report to the South Placer Regional Transportation Agency (SPRTA) on December 10, 2004. The report offered a different screening analysis of the four recommended corridor alignment alternatives along with the additional Foothill alignments. The SPRTA Board directed PCTPA to evaluate the Foothill alignments at the March 1, 2005, board meeting, and notice to proceed was given on April 6, 2005.

Ms. Heick explained that the staff and consultants had worked with Foothill Associates on data validation and screening of the new proposed alignment alternatives. The results were provided on the Environmental Screening Data matrix. Ms. Heick informed the SAC that there was agreement with Foothill Associates on GIS data except for minor differences as noted on the matrix. This conclusion was made after appropriate adjustments were made to the December 2004 numbers originally provided by Foothill.

Ms. Heick informed the SAC that the data validation/screening work identified two other issues for SAC input and comments:

- In some locations, Foothill alignments did not use the 4600-foot curve radius identified as screening criteria for engineering parameters for the project; and,
- The Parkway connection with a future Watt Avenue extension.

B. August 10, 2005 TAC Meeting Background

Ms. Heick summarized the screening methodology and results from the August 10 meeting. She covered in some detail the 4,600-foot curve radius and the potential Parkway connection to a future Watt Ave. extension.

(1) 4,600-Foot Curve Radius

D. Heick introduced the discussion on curve radius and design speed. She said the 4,600-foot curve radius and 70 mph design speed were the engineering screening criteria used for all of the alternatives to date. These criteria were based on Caltrans concerns with safety and flexibility, and so as to not restrict where within the corridor an alignment could be placed.

She said the Foothill alignments did not use this criterion. For example, the Foothill Nos. 2N and 2S alignments near the Pleasant Grove Creek used a curve radius less than 4,600 feet which would result in a lower design speed. It also would create more encroachment into the future retention basin plus create more environmental impacts. The reduced curve radii on Foothill Nos. 1 and 2 alignments would have additional impacts to Swainson's hawk nesting habitat, Valley Elderberry Longhorn Beetle habitat, wetlands, and riparian areas. She said the TAC directed the project team to determine if an alignment could be developed based on a minimum 70 mph design speed. Garry Horton added that the 4,600-foot curve radius would allow greater flexibility for siting future roadway alignment in the corridor. A 4,600-foot curve radius would allow for a design speeds between 75 and 80 mph – depending upon alignment location.

Ms. Heick said that the screening for the adjusted (to the 4,600-foot curve radius) north and south curves on Foothill Alignment Nos. 1N and 1S showed no substantial changes to resources impacts. The project team focused on adjusting Foothill Alignment Nos. 2N and 2S to meet the 70 mph design speed. The resulting alignments showed no significant changes to vicinity resources compared to the original one. And, it avoided the greater effects to the retention basin. Rob Jensen commented that the adjustments were exactly what the TAC wanted.

Ms. Heick asked the SAC if this work was clear and asked for input. Julie Hanson, KT Communities, indicated the approach reflected the past TAC discussion and thought it was good. Kate Kirsh from Foothill Associates asked about the 4,600-foot radius curve slide and its reference to greater impacts on resources. She thought it would lower Swainson's Hawk impacts. Ms. Heick clarified that while there was reduced impact on some resources, other resources would be impacted more.

(2) Potential Connection to Future Watt Avenue Extension

D. Heick introduced this item by re-iterating that the Corridor Preservation project would not include an analysis of a future Watt Ave. extension. The project's environmental document would analyze a potential future Watt Ave. connection to the Parkway, if one were proposed by others. To do this, Placer County and Roseville Public Works staffs assumed a potential roadway network for this portion of the study area. – for analysis purposes only. An assumed Watt Ave. interchange for each Parkway corridor alternative (identified to date) has been initially reviewed.

Ms. Heick summarized the TAC discussion. The Foothill Alignment Nos. 1N and 1S could potentially make a connection with a Watt Ave. extension. However, it was determined that this alignment had the least traffic benefits due to its northern location. The Foothill Alignment Nos. 2N and 2S might have some benefit because the potential connection would be shifted north and west from PCTPA's Alternative 4's (yellow) connection point. This would be a logical location for an extension of Blue Oaks Blvd. Rob Jensen from the City of Roseville Public Works Department agreed.

(3) TAC Direction & Recommendations Summary

D. Heick referred to the Benefits/Drawbacks handout and summarized TAC action:

- Foothill Alignment Nos. 1N and 1S – eliminate it.

- Foothill Alignment Nos. 2N and 2S – relax the 4,600-foot curve radius, re-draw a corridor alignment to meet the 70 mph design speed criterion, and re-screen the resultant corridor alignment.

To describe the basis for the TAC action, she used the following natural and man-made environment slides to illustrate the screening process/general conclusions along with the following important screening notes:

- ✓ No attempt was made to 'weight' one environmental parameter with another.

- ✓ The Foothill alignments screening, like the previous screening process (2003/2004), had a bias to avoid/minimize impacts to aquatic resources. It was important for LEDPA and future Section 404 permitting considerations.

- ✓ Vernal pool critical habitat was recently removed from consideration a recent U.S. Fish and Wildlife Service decision. However, this screening criterion was retained to be consistent with the 2003/2004 screening.

- ✓ Data collected for the screening work is at a Tier 1 level – based on GIS data layers. It is not detailed, on-the ground – specific data. It is appropriate for the screening process and Tier 1 analysis combined

with the project team's knowledge of the area (Reasons Farms EIR, West Roseville Specific Plan peer review, ENRON Energy Park).

- ✓ Similar Foothill alignments were compared to similar PCTPA alternatives. These comparisons of 'like' alternatives seemed to be a logic way to compare the alignments and alternatives. For example, Foothill Alignment No. 2N (SR 70/99 connection at Sankey) was compared to PCTPA No. 4 (yellow) alternative.

- ✓ If a difference of 10% or more for resource impacts resulted between the Foothill alignment and PCTPA alternatives, it was reported (see benefits/drawbacks list). Otherwise, the impact was not considered substantial. The Engineering Screening Data spreadsheet (matrix) provides the specific detail. Ms. Heick summarized the comparison of Foothill alignments to the PCTPA alternatives:

  - Waterfowl and Other Upland Wildlife Habitat. All but Foothill Alignment No. 1N have less impacts to Upland Wildlife Habitat; all but Foothill Alignment No. 1N have more impacts to Waterfowl Habitat.
  - Potential Special Status Species Habitat. Foothill Alignment No. 1N has less Giant Garter Snake impacts. All of the Foothill alignments have less VELB impacts. Foothill Alignment Nos. 1S and 2S have less impacts to Swainson's Hawk nesting habitat.
  - Riparian, Wetland and Conservation Areas. All Foothill alignments have more impacts.
  - Vernal Pool Critical Habitat. Foothill Alignment Nos. 2N and 2S have less impacts.
  - Vernal Pool Complexes. All Foothill alignments have more impacts.
  - Socioeconomic Resources. Foothill Alignment Nos. 1N and 1S have more impacts to farms and homes.
  - Identified Cultural Resources. No substantial difference between Foothill alignments and PCPTA alternatives.
  - Floodplains. 100-year – roughly similar. 500-year – Foothill Alignment Nos. 1N and 2N (those with a Sankey connection) have less impacts.
  - Hazardous Waste Sites of Potential Concern. Similar to the PCTPA alternatives, the Foothill alignments have no impacts.
  - Farmland Designations. All Foothill alignments have less impacts to Farmland of Statewide Importance. Foothill Alignment Nos. 1S and 2N have more impacts to Prime Farmland.
  - Working Farm Units and Power lines. No substantive difference.

Ms. Heick stopped at this point and asked for SAC member questions. She stated the screening work was an honest attempt for an open and even-handed screening process. There were no SAC member questions.

C. TAC Benefits/Drawbacks Summary

Ms. Heick then described specific benefits and drawbacks to each of the Foothill alignments along with TAC direction/recommendations.

Ms. Heick listed the draft benefits and drawbacks. She qualified draft drawbacks item on aquatic resources with asterisks by noting that there had always been a bias to NEPA/404 issues through the first screening. Ms. Heick also clarified that vernal pool critical habitat was still a screening criteria and had not been dropped from the impact analysis.

Ms. Heick explained that the screening process applied to the Foothill alignments was the same as applied to previously considered alignments. There was no ranking/weighting in the process. The only priority was a bias toward aquatic resources, since that was the focus of the permitting agencies. All the values are reflected in the matrix.

The comparisons (i.e., benefits and drawbacks) were made to the four already identified potential alignment alternatives on the basis of which alignments were most alike. The Foothill alignments connecting at Sankey were compared to the potential alignment alternative connecting to SR 70/99 at Sankey (#4 – yellow), the Foothill Alignment 2S was compared to the potential alignment alternative north of the proposed Regional University and

Community Specific Plan area connecting to SR 70/99 north of Riego (#3 – blue), and the Foothill Alignment 1S was compared to all potential alignment alternatives connecting to SR 70/99 north of Riego.

- **Foothill Alignment No. 1N**

  The listed benefits and drawbacks were cited. Ms. Heick emphasized that, via Placer County's Conservation Plan (PCCP) process, the federal resource agencies indicated that any alignment north of Peasant Grove Creek would be considered a problem. She described PCTPA Alternative No. 4 (yellow) as being drawn based on coordination with the draft PCCP – the fuzzy dividing line between conservation/open space opportunities to the north and development opportunities to the south. She also said that the TAC had offered more explicit reasons to the drawback related to reduced traffic benefits. These reasons were that the alignment would be used less by Roseville travelers, and there would be no connection to a potential Watt Ave./Blue Oaks Blvd. interchange. She asked Rob Jensen for input. He said the summary was correct – Roseville wants help for the local roadway system. This northern alignment would provide no benefit.

  There were no SAC comments or questions.

- **Foothill Alignment No. 1S**

  D. Heick said that generally the list of benefit/drawbacks for this alignment was similar for #1N.

  SAC discussion followed. William Morebeck from Placer County Agricultural Commission asked for a clarification on what benefits and drawbacks were. Ms. Heick answered that the list of benefits and drawbacks showed how the Foothill Alignments compared to similar PCTPA alternatives. He then asked whether soil data was used to determine farmland designations. Ms. Heick clarified that the consultants used data provided by the State Department of Agriculture. She referred to the Technical Memorandum and its series of maps. Mr. Morebeck cited the case of Toad Hill in the northern part of the study area that is not designated as Prime Farmland but is in fact cultivated as a rice field. He wondered how a road would benefit farming operations, and suggested adding 'Relative' to the Benefits and Drawbacks heading.

- **Foothill Alignment No. 2N**.

  D. Heick reviewed the benefits and drawbacks list.

  SAC Discussion followed. W. Morebeck asked if the analysis involved using soils. D. Heick answered that the analysis was based on Prime Farmland and Farmland of Statewide Importance. The soils work completed for the Technical Memorandum did not result in any substantial differentiation.

  J. Hanson asked about vernal pool comparisons. D. Heick said the Foothill Alignments were compared to similar PCTPA alternatives. In this case, this alignment was compared to the PCTPA corridor alternative that connected to Sankey Rd. at SR 70/99 (No. 4 – yellow).

  Kate Kirsh from Foothill Associates pointed out that impacts to Prime Farmlands was incorrectly listed as a drawback. Ms. Heick acknowledged that this was a mistake and would be corrected.

  K. Whitney, Foothill Associates, asked why the alignments were not compared to all of the PCTPA alternatives. D. Heick responded that an analysis like this would result in false comparisons. The data in the spreadsheet identified whether there would be any problems. This screening process tried to make comparisons based on like resources/conditions.

- **Foothill Alignment No. 2S**

  D. Heick reviewed the draft potential benefits and drawbacks list. Ms. Heick pointed out that a connection to a future Watt Ave. extension (mentioned earlier) would be a benefit. She also pointed out that the alignment had been adjusted to meet the design speed of 70 mph engineering screening criterion and minimized encroachment into the Roseville retention basin area, as per TAC recommendation.

  SAC discussion followed. Terry Davis from the Sierra Club pointed out that just as the TAC recommended eliminating Foothill Alignment Nos. 1N and 1S because it was north of the draft PCCP's Conservation

Opportunity Area boundary, Foothill Alignment Nos. 2N and 2S should also be eliminated. He commented that this alignment would also have more vernal pool impacts. He asked if there were any agency concerns.

J. Finn, California Dept. of Fish and Game said that the USACOE and USEPA agreed with the TAC direction to eliminate Foothill Alignment Nos. 1N and 1S. He said there was more flexibility to the south. T. Davis asked if the agencies had looked at Foothill Alignment Nos. 2N and 2S for concerns. J. Finn responded they had not.

Ms. Heick said this alignment is south of Pleasant Grove Creek. It had some benefits as well as more drawbacks – specifically to vernal pool/wetlands. She indicated it did not rise to a fatal flaw level.

Jack Ritchie, Lennar Communities, asked if the TAC resolution didn't solve all these issues. Tom Brinkman, Placer Co. Public Works, responded that the adjustment was not really a benefit or drawback. D. Heick clarified that this alignment would be less flexible (less than the 4,600-foot curve radius); however, it would meet minimum safety standards via more engineering. If the 70 mph design speed criterion were maintained, FHWA and Caltrans TAC members supported it. If this alignment were forward on to the Tier EIS/EIR for analysis, this issue might be treated as something else – not a benefit or drawback. Julie Hanson from KT Development said that the whole point was screening and to determine whether it was worthy to recommend as an alternative to the PAC and SPRTA Board like the four PCTPA ones. She agreed that the alignment should not be eliminated at this point.

Mr. Jensen suggested another clarification. Drawbacks are not an issue here – it is not a safety issue. The TAC concluded that if an alignment could be drawn using the 70 mph design speed – that the alignment would be safe. It would just be less flexible than the 4,600-foot curve radius.

D. SAC Review -- Benefits/Drawbacks

J. Koegel said that SAC direction and recommendations were needed for PAC consideration. She indicated this direction and recommendation did not have to be similar to the TAC's. But, she asked for a confirmation of the process – whether everyone was in agreement that the process was fair and accurate. She stressed the need for SAC comments. SAC review focused on the following items.

Other benefits or drawbacks. J. Koegel asked the SAC whether there were other benefits and drawbacks to be considered. The SAC did not identify any more.

Foothill Alignment #1. J. Koegel reminded the SAC that the TAC recommended eliminating it. She said that she realized a vote was not necessary – but the SAC's position was needed. E. Bryant said he was fine with eliminating it. J. Koegel asked if the SAC agreed. The group indicated agreement. There was no disagreement. There was not audience disagreement.

Foothill Alignment #2. J. Koegel asked if there were any discussion on the adjusted alignment based on the TAC's direction to develop an alignment that would maintain a minimum 70 mph design speed and then re-screen it. E. Bryant asked about a concern with an 'apples-to-apples' comparison – using the same design speed for all screening. If different ones were used the analysis could be confusing. D. Heick responded that the 70 mph design speed was the screening criteria for all the work. The TAC directed the project team to re-examine the other four (PCTPA) corridor alternatives to determine whether additional resources could be avoided via a reduced curve radius. No substantial changes to resource impacts resulted.

Mr. Davis felt that both Foothill Alignment No. 2N and PCTPA Alternative No. 4 (yellow) were very close to each other and that only one of the two alternatives should be selected for further analysis. Mr. Davis pointed out that since the Foothill Alignment No. 2 has a higher impact on vernal pools, it should be eliminated from further review. Mr. Morebeck agreed and pointed out the in addition to impacts on vernal pools, Foothill alignment 2 also has a higher impact on farmlands.

Mr. Whitney pointed out that PCTPA Alternative No. 4 (yellow) has a higher impact on vernal pool critical habitat than the Foothill Alignment No. 2N. He said the critical habitat designation was gone because of economic vs. habitat reasons.

Ms. Hanson pointed out that Foothill Alignment No. 2N has significantly fewer impacts on Prime Farmland and Farmland of Statewide Importance. With regard to vernal poll complexes, she said that if Foothill Alignment No. 2S were eliminated – then all of the PCTPA corridor alternatives should be eliminated. Ms. Heick clarified that all alignments with a SR 70/99 connection north of Riego will have higher vernal pool impacts in general than the Sankey Road connection.

E. Bryant asked what the next step would be – more analysis? D. Heick answered – yes. He asked if some of the identified impacts could change or be refined. D. Heick said the screening work was done on baseline data. A more complex analysis would be completed with the Tier 1 EIS/EIR. E. Bryant asked if keeping more alternatives in the analysis would make the final one more apparent. Ms. Heick noted that PCTPA and the consultants are looking for a reasonable range of alternatives to study in the EIS/EIR. Having more alternatives at this stage will not be an issue.

John Costa from the Building Industry Association said if there would more analysis – then all alternatives should go forward. John Deeter agreed they were worthy of study. G. Carpenter said to add the one with the Sankey Road connection. Sutter County wants it.

Tom Brinkman from Placer County Public Works Department suggested carrying forward Foothill Alignment Nos. 2N and 2S. J. Koegel asked if there were any objections. Ms. Hanson inquired whether eliminating Foothill Alignment No. 2S at this stage would prevent it from being studied in the future. Ms. Heick explained that PCTPA and the consultants have the data on this alignment and it can be formulated in the analysis at a later stage, but clarified that if Foothill Alignment No. 2S seems a reasonable alternative then it should be studied as a complete alignment, not in pieces.

Jeff Finn from the Department of Fish and Game said the agencies have not analyzed Foothill Alignment #2. If Foothill Alignment #1 is eliminated, then the wildlife agencies would defer to USACOE/USEPA on wetlands vs. habitat issues.

Mr. Brinkman also pointed out that while Sutter County is opposed to an alignment that connects north of Riego that alone is not reason enough to eliminate 2S.

SAC members took a vote on this issue. The majority of SAC members voted to keep both Foothill Alternative Nos. 2N and 2S in the range of alternatives. Two members (Julie Hanson and Tom Brinkman) voted to only keep 2N in the range of alternatives and to eliminate alignment 2S. Three members (John Deeter, Terry Davis and William Morebeck) voted to eliminate both alternatives from further analysis.

T. Davis, Sierra Club stated he wanted to indicate a strong dissenting objection. He said PCTPA corridor Alternative No. 4 (yellow) and Foothill Alignment No. 2N were so close together.and the PCTPA alternative avoids more vernal pool complexes. So, it was reasonable not to consider Foothill Alignment Nos. 2N or 2S. J. Deeter, ECOS, and W. Morebeck, Placer Co. Agricultural Commission agreed.

SAC Recommendations:

1. ***Eliminate Foothill Associates' Alignment Nos. 1N and 1S from further consideration.***

2. ***Retain Foothill Associates' Alignment Nos. 2N and 2S, as adjusted to a 70 mph design speed within a 1,000-foot-wide corridor as an alternative for analysis in the Tier 1 EIS/EIR.***

3. Draft Revised Second Cumulative Development Scenario

John Long, DKS Associates (DKS), explained that staff and consultants are developing a revised second cumulative development scenario (CDS) for the study area to evaluate cumulative impacts of the proposed project in the environmental document. Mr. Long explained that two cumulative development scenarios were developed for the screening process – 1) based on SACOG's 2025 MTP and 2) the MTP plus recently approved and pending urban developments in western Placer County.

Since FHWA requirements dictate that a planning horizon be 20 years beyond the date when the project becomes operational, which is 2020 by PCTPA estimates, the horizon has shifted out to 2040. So the environmental document must define and analyze a second cumulative development scenario that reflects reasonable 2040 conditions.

Mr. Long explained that staff and consultants are looking at two sources of information for the second CDS. The first source is the Sacramento Area Council of Government's (SACOG) Blueprint Project that has a planning horizon of 2050. In October 2004, the TAC agreed to use 80% of the 2000 to 2050 growth in the Blueprint as a way to arrive at 2040 growth projections outside of the immediate study area, plus residential buildout (and a corresponding amount of non-residential build-out) for the projects identified by the TAC in the more immediate study area. Since that time, Placer County, Lincoln, Roseville, and Rocklin and consultants have been separately working to define a cumulative development scenario for western Placer County. This scenario would be used to evaluate a number of specific plan EIRs and Lincoln's general plan update.

Mr. Long referred to a transportation improvements map and a table summarizing development levels that help describe this cumulative development scenario.

Mr. Long informed the SAC that a comparison of development levels under SACOG's 2050 Blueprint and second CDS suggests that there is little difference in aggregate numbers at the county level, but that there is a difference in how the development is distributed. The total development in the cities under the County's CDS is close to those in the 2050 Blueprint.

While the Blueprint allocates more development in the proposed major development project in the West County area, the Placer County CDS allocates more development in other unincorporated areas of the county. Mr. Long concluded that the draft Placer County CDS numbers will not change much and seemed reasonable to use.

Mr. Long said the TAC recommended the use of the Placer County/Cities CDS as the basis for the project's revised second CDS in the Tier 1 EIS/EIR. He asked for SAC input and comments.

SAC Recommendation:

Agree with TAC recommendation.

4. Federal Resource Agency Coordination

Mr. Tidman informed the SAC that PCTPA has been working for two years with federal resource agencies to address their concerns regarding aquatic resources related to the Tier 1 process. Mr. Tidman explained that PCTPA is engaged in a modified NEPA/404 process and has made significant progress with the agencies.

Mr. Tidman said that the agencies approved a Purpose and Need Statement for the proposed project in January 2005, and the screening criteria for identifying the range of alternatives for EIS/EIR analysis in May 2005. Since June 2005, staff and consultants have been developing the range of reasonable alternatives.

Mr. Tidman explained that the range of alternatives would likely include one or two 'avoidance' alternatives proposed by the Environmental Protection Agency (EPA) with agreement from the U.S. Army Corps of Engineers. In addition, separate from the alternatives, PCTPA will study the effects of a different land use scenario combined with Transportation System Management (TSM) in the vicinity of the project. This study would test the effects of more dense land uses than proposed by the Blueprint process in the vicinity of Baseline Road. This study will be undertaken and a discussion will be included in the EIS/EIR.

The two avoidance alternatives currently proposed by the federal agencies include:

- A shorter Parkway with TSM; and
- An expanded buffer and restrictive conservation easements to protect aquatic resources.

Mr. Tidman added that the modified NEPA/404 process has reached agreement that the four recommended corridor alignment alternatives are appropriate for inclusion in the range of alternatives for Tier 1 EIS/EIR analysis.

5. Next Steps

Mr. Tidman listed the following next steps in the planning process and closed the meeting:

- Review and discuss the Foothill Associates' alignments with the Policy Advisory Committee on August 31, 2005.
- Request approval from the SPRTA Board on the alternatives to be studied in the Tier-1 EIS/EIR, at the September 28, 2005, board meeting.
- Distribute a newsletter to all property owners in the study area, and to the broader mailing list, with information on the Foothill Associates' alignments and the current process.
- Work with EPA and FHWA to develop and screen avoidance alternatives.
- Re-initiate the technical studies.
- Schedule Project Development Team (PDT) meetings to share information and updates.

Appendix B
Policy Advisory Committee (PAC) Meeting Summaries

PLACER COUNTY TRANSPORTATION PLANNING AGENCY

Meeting Minutes & Action Items — Final 12.05.03

Meeting Description: Placer Parkway Corridor Preservation – Policy Advisory Committee Meeting #1
Meeting Date September 11, 2003
Minutes Date: 12.12.03 **Location:** City of Roseville Corporation Yard

Persons Attending			
Name	**Affiliation**	**Name**	**Affiliation**
Bill Santucci	Placer County Board of Supervisors	Celia McAdam	Executive Director, PCTPA
Robert Weygandt	Placer County Board of Supervisors	Stan Tidman	Project Manager, PCTPA
Dennis Nelson	Sutter County Board of Supervisors	Denise Heick	URS, Project Manager
Tom Cosgrove	Lincoln City Council	Fritts Golden	URS
Peter Hill	Rocklin City Council	Gary Horton	URS
Gina Garbolino	Roseville City Council	Sharon Kyle	MIG, Inc.
Jan Christofferson	Placer County -- County Executive Officer Ex-Officio Member	Daniel Iacofano	MIG, Inc.
Larry Combs	Sutter County – Administrative Officer Ex-Officio Member	Others Attending Listed Below as Observed (did not sign in so list is incomplete)	
Jody Lonergan	Caltrans District 3 – Ex-Officio Member	John Marin	Tom Brinkman
		Rick Dondro	Marcus LoDuca

Minutes

MEETING SUMMARY

Purpose
The meeting purpose was initiate the Policy Study Advisory Committee (PAC), to review and confirm project goals, discuss issues, and obtain feedback on the project and the Tier 1 EIS/EIR process.

Introductions
Daniel Iacofano acted as meeting facilitator and welcomed the group. He asked for self-introductions from the meeting attendees. He reviewed the meeting purpose and agenda, and mentioned the relevant discussion materials contained in meeting information packets.

PAC Membership and Role

D. Iacofano provided the PAC with direction regarding their roles and responsibilities, serving as an information conduit between project staff, PCTPA and elected officials from jurisdictions directly impacted by the project. He emphasized that their active participation and involvement was important to the success of the project planning effort. He concluded by stating the PAC's primary role would be to provide policy recommendations related to the needs of the various jurisdictions within the project study area.

Project Background

Celia McAdam provided a project overview, identifying the parkway as a multi-modal corridor, and high priority regional transportation project which would connect western Placer County with Sutter County's industrial development area and airport to the west. The total estimated project cost is between $200 – 300 million. Funding is not anticipated until 2015 or later.

The project need was based on regional projections that the SR 65 corridor would be among the fastest growth areas in the state over the next 20 years. This predicted increase in population pointed to a parallel increase in travel demands, and the need to improve the existing transportation corridor connections. The project's purpose is to improve access and mobility, reduce congestion associated with urban growth, minimize environmental impacts, and ease congestion impacts on local roadways.

A Conceptual Plan, completed in 2000, established the advisory committee input process, defined initial project scope, outlined policy guidelines, and developed funding scenarios. A Project Study Report (PSR), completed in 2001, identified preliminary engineering and environmental issues, clarified policy direction, and evaluated alignment alternatives. PCTPA and SACOG Boards adopted both documents.

Placer Parkway Goals -- Identified in the Conceptual Plan & PSR

There are six goals and accompanying policies. PAC feedback was solicited for each goal:

- *Goal 1 – Create a Controlled-Access Highway. The PAC acknowledged the work of previous studies on this goal and supporting policies. PAC members generally agreed with the goal, but raised questions about whether the goal was realistic or achievable. They indicated several issues (access, ownership/operation, and funding) need clarification during remaining project phases.*

- *Goal 2 - Maximize Mobility and Accommodate Planned Growth. There was general consensus from the PAC regarding this goal and its supporting policies. Specific issues to clarify include Baseline/Riego impacts at SR 70/99 and potential Watt Ave. extension/interchange.*

- *Goal 3 – Avoid Growth Inducement and Protect Rural Character of Agriculturally Designated Areas. PAC members generally agreed with the goal, but raised questions about whether it was realistic or achievable. There are questions about the buffer and no-access provisions and how they would be implemented.*

- *Goal 4 - Minimize Environmental Impacts. There was general consensus from the PAC regarding this goal and its supporting policies.*

- *Goal 5 - Improve Safety/Minimize Hazards. The PAC agreed with this goal and its supporting policies.*

- *Goal 6 – Achieve Feasible and Equitable Funding. The PAC agreed in principle with this goal but raised implementation concerns.*

Work Plan Approach

The project's work plan was outlined with information on the project goals, Tier 1 environmental review, proposed schedule, and key milestones. The three primary project goals for the environmental review are:

1) *Identify Alternatives for study in the Tier 1 EIS/EIR*
2) *Identify Preferred Corridor*
3) *Complete a Record of Decision (EIS)/Certify the EIR to allow corridor land acquisition*

The Tier 1 process would identify relative differences among corridor-level alternatives based on a broad/general level of detail. The Tier 1 process is not a well-defined one. It is not a process that is familiar to the general public. Because of this uncertainty, the project team is soliciting input from the project's Technical Advisory Committee (TAC) and its Study Advisory Committee (SAC) as well as engaging in early coordination with federal and State reviewing agencies.

The project's schedule and key milestones are:

- *Screen PSR Alternatives ("fatal flaws")* *End of 2003*
- *Identify/Screen Other Alternatives* *February 2004*
- *Identify Final Alternatives* *May 2004*
- *Draft EIS/EIR for Public Review* *September 2005*
- *Final EIS/EIR* *End of 2006*

Highlights from the Alternatives Identification and Screening Process included travel model forecasts, pending/anticipated major development projects, and data collection/mapping. Transportation modeling information is being updated from the 2001 PSR. Three forecasts would be prepared:

1) *No Project (existing conditions)*
2) *Year 2025/2030 (based on SACOG's 2025 Metropolitan Transportation Plan)*
3) *Second Cumulative Development Scenario (the MTP plus several pending/anticipated urban development proposals)*

The following proposed developments were identified for possible inclusion in the screening process:

- *West Roseville Specific Plan*
- *Placer Vineyards Specific Plan*
- *South Sutter County Specific Plan*
- *Placer Ranch Specific Plan*
- *De La Salle University & Community*
- *Metro Airpark*
- *McClellan Park*
- *Elverta Villages*
- *West Lincoln*

The Resource Mapping for Environmental Screening will be based on existing GIS-based data to distinguish relative differences among corridor alternatives for a particular resource or issue area. This information is being reviewed by the TAC, the SAC and resource agencies.

PSR Concept Alternatives

Concept alignments from the 2001 PSR were described. The project team, based on PSR guidance, data collection/mapping work and limited fieldwork, refined the concept alignments. The map in the PAC packets provided at the meeting illustrated the 500'- and 1,000'-wide corridor widths and potential interchange locations.

Project Issues

Several project issues – most of which were addressed during the staff presentation and PAC discussion, included:

- *Pending/anticipated development proposals – timing and effects on corridor alternative alignments*
- *Corridor alternatives – there would likely be no "preferred" corridor alternative identified until the Tier 1 process was completed.*
- *Tier 1 – first of its kind in northern California and need for early/continuing coordination with FHWA, Caltrans, and federal/State resource agencies*
- *Potential environmental impacts & LEDPA – agriculture, biological resources, growth-inducement, and addressing federal concerns*

Opportunities for Input

Public outreach includes:

- *Ongoing advisory committee meetings to assess data and policy issues*
- *Stakeholder interviews conducted with diverse community, business, agency, and environmental contacts*
- *Community meetings*
- *Development of project newsletters*
- *Creation of dedicated project web site*
- *Upcoming public scoping meetings on October 6, October 9*

INTRODUCTIONS

The first Policy Advisory Committee (PAC) meeting was held on September 11th, 2003 at the City of Roseville's Corporation Yard. The purpose of the meeting was to initiate the Policy Advisory Committee, to discuss issues, and get feedback on the proposed project and its Tier 1 EIS/EIR.

Daniel Iacofano, who acted as the meeting facilitator, began the meeting by welcoming the group, and asking for self-introductions from the participants. D. Iacofano also reviewed the meeting agenda, and discussed material in the meeting information packets.

I. PAC MEMBERSHIP AND ROLE

D. Iacofano provided the PAC with specific direction regarding their roles and responsibilities. He stated that the PAC's primary role was to serve as an information conduit between project staff, PCTPA and among elected officials from jurisdictions directly impacted by the project. He stressed that their active participation and involvement was very important to the success of the project planning efforts. Project planning would be an open process and no decisions have been set in stone. He said the PAC's role would be to provide the technical staff with policy recommendations related to the needs of the various jurisdictions within the project study area. He also mentioned that PAC meetings would be facilitated and comments would be recorded through meeting minutes. An "issues bin" would document comments not called out on the agenda.

II. PROJECT BACKGROUND

Overview

Celia McAdam provided a project overview, identifying the parkway as a multi-modal corridor, and high priority regional transportation project which would connect western Placer County with Sutter County's industrial development area and airport to the west. The Parkway study area is divided into three segments: western segment (SR 70/99 to the county line), central segment (county line to Fiddyment Road), and eastern segment (Fiddyment Road to SR 65). She estimated the project cost as between $200 – 300 million, and stated that the funding was not anticipated until 2015 or later.

Need

C. McAdam stated that the need for the project was based on regional projections that the SR 65 corridor would be among the fastest growth areas in the state over the next 20 years. She went on to say that this predicted increase in population pointed to a parallel increase in travel demands, and the need to improve the existing transportation corridor connections.

Purpose

C. McAdam identified that the purpose of the project was to improve access and mobility, reduce congestion associated with urban growth, minimize environmental impacts, and ease congestion impacts on local roadways.

History

C. McAdam provided a brief project history, stating that a Conceptual Plan, completed in 2000, established the advisory committee input process, defined initial project scope, outlined policy guidelines, and developed funding scenarios. A Project Study Report (PSR), completed in 2001, identified preliminary engineering and environmental issues, clarified policy direction, and evaluated alignment alternatives. The PSR also clarified several policies: 1) controlled access, 2) need to preserve rural character of agriculturally-designated land in the area, and 3) the delineation of a 1,000-foot no-development buffer zone. She noted that both the Conceptual Plan and PSR were developed and adopted through the cooperation of regional and local planning entities. PCTPA and SACOG Boards adopted both documents.

III. PROJECT GOALS

Goals Identified in Conceptual Plan and the PSR

C. McAdam outlined the six goals and associated policies. She encouraged questions and comments on each.

1. Create a Controlled-Access Highway
2. Maximize Mobility and Accommodate Planned Growth
3. Avoid Growth Inducement and Protect Rural Character of Agriculturally Designated Areas
4. Minimize Environmental Impacts
5. Improve Safety/Minimize Hazards
6. Achieve Feasible and Equitable Funding

Goal 1- Create a Controlled-Access Highway

This goal is to connect SR 65 and SR 70/99. Supporting policies are to:

- identify a precise alignment and preserve right-of-way as soon as possible
- carefully evaluate development proposals that might preclude potential alignments

PAC Feedback

Larry Combs (Sutter County, Chief Administrative Officer) asked if the controlled access feature was shown on the project alignment alternatives corridor map. Fritts Golden (URS) commented that the entire project would likely become a controlled access facility.

Jody Lonergan (Caltrans District 3) said Caltrans considers controlled access as a facility that includes the purchase of access control when right-of-way is purchased.

L. Combs asked about facility ownership and whether it would be built to State standards to maintain all options.

Peter Hill (City of Rocklin) requested more information on the "no access" provision in the middle of the project.

Dennis Nelson (Sutter Co.) asked if the driveways in controlled access would also be restricted. C. McAdam said she believed this would be worked out upon purchase of property near the parkway.

L. Combs inquired about whether a joint powers authority would operate and maintain the facility vs. counties.

Tom Cosgrove (City of Lincoln) -- there was a lot of discussion about facility ownership and standards early on in the project. He said that issues of this nature probably need to be revisited by the PAC. He also said that agricultural concerns were a key to the access issue in earlier studies – particularly ways to preclude urban development and ways to be less growth-inducing.

Rick Dondro (Placer County Public Works) said that the facility was to be at-grade initially and up-gradable for future interchanges.

Gina Garbolino (City of Roseville) thought J. Lonergan's definition was the appropriate one for controlled access.

C. McAdam said controlled access also referred to restrictions in the type of usage allowed for the facility. She explained the 500'-wide corridor for the eastern and western segments and the 1,000'-wide corridor between Fiddyment and Pleasant Grove Roads.

T. Cosgrove thought the controlled access concept was created to protect farmland. He said the concept was created to protect agricultural uses with the Parkway buffer.

G. Garbolino said that Placer County jurisdictions may agree on the buffer, but was concerned about Sutter County and industrial development near SR 70/99. D. Nelson agreed with G. Garbolino that this issue would have to be worked out to accommodate county development plans.

D. Iacofano said some adjustments would have to be made in segments, but a design standard would need to be set. D. Nelson said this would have to be worked out to work with real traffic issues in each county. G. Garbolino said the public envisions or sees a throughway vs. a lot of potential interruptions. T. Cosgrove said the eastern/western segments were always understood to be accessible, only the central segment would not.

P. Hill asked if the map in the meeting packet identified all current alternatives -- or just potential alternatives – and what the status of interchanges were. C. McAdam said that the PSR alternatives were conceptual. Others would also be identified. One of the purposes of the PAC was to provide policy direction to help define them.

R. Dondro said that the project was moving from theoretical alternatives to actual alternatives. He said that the alternatives, and other project elements, are being discussing by entities like Placer Legacy related to their planning efforts.

Jan Christofferson (Placer County Executive Officer) noted that there will be a Placer County Board of Supervisors meeting on October 20 to discuss potential urban development projects in western Placer County as well as the Placer Parkway project.

D. Heick (URS) said that the potential major development map in the information packet would be discussed in detail later in the meeting (PSR Alternatives). She said this map was a starting point to move forward with existing alternatives related to land use issues, resource issues, traffic modeling, etc. She said that the assessment of alternatives was happening now, and all elements are being considered. She added that the project team was open to all suggestions, and input from the PAC was very important.

J. Lonergan addressed the question about whether Parkway ownership and operation could be given to Caltrans. She said possibly. She said it could potentially be considered a segment of SR 102. State adoption would require a petition and construction to Caltrans standards.

Goal 1 - Conclusion: The PAC acknowledged the work of previous studies on this goal and supporting policies. PAC members generally agreed with the goal, but raised questions about whether the goal was realistic or achievable. They indicated several issues (access, ownership/operation, and funding) need clarification during remaining project phases.

Goal 2- Maximize Mobility and Accommodate Planned Growth

This goal is to provide a free-flowing regional facility that will accommodate growth under existing general plans. Supporting policies are to:

- Provide a high-speed, very limited access facility
- Maintain a Level of Service (LOS) C
- Maintain or improve travel times between SR 65 and SR 70/99

C. McAdam stated that it was important to address growth/mobility. She went onto say that there was a need to improve the speed and level of service in the corridor area.

PAC Feedback

L. Combs asked if the EIR would address growth inducement issues and potential urban development – specifically the reality of potential development. He had discussed these issues with J. Christofferson. He was particularly concerned about Baseline Road and Riego Road. The project needed to address Baseline/Riego expansion and how the Parkway would affect traffic. The project needed to deal with the reality of traffic at SR 70/99. He said that Sutter County would be on the receiving end of traffic issues.

C. McAdam said the Baseline/Riego issues are a reason that a Watt Avenue extension is still a consideration. Bill Santucci (Placer County) said Sacramento will have the same problem at SR 70/99.

Robert Weygandt (Placer County) said the visioning meeting (Placer County Board of Supervisors) on October 20 would focus on growth issues in the project area. The first step would be to obtain direction from the County. (This is the same meeting referred to by J. Christofferson.)

R. Weygandt said that urban standards may need to be adjusted to address access. L. Combs asked if this meant no other north/south connection besides Watt. R. Weygandt said if the Board approved a Watt Avenue element (with no other west interchange alternative indicated), another connection would need to be identified in the area.

T. Cosgrove has studied the alternatives map and thinks that Baseline and Riego Roads will have heavy traffic no matter what the connection. Because of the project's long timeline, the Baseline/Riego issues will have to be addressed now.

P. Hill said that if the northern corridor alignment were chosen, there would be no close connection to the Parkway. This corridor would not be utilized by Sacramento for traffic going north/east. T. Cosgrove thought that even if the final alternative were out-of-the-way, people would still use it to avoid traffic congestion. B. Santucci said that the final alternative has to be efficient in order to be used by most people.

L. Combs asked if the Parkway would reduce traffic on Baseline Road by taking traffic from the north. R. Dondro said that traffic studies show that people will go out of their way to get off I-80 – particularly near Rocklin and areas to the north. South of Roseville, however, people would not.

Goal 2 - Conclusion: There was general consensus from the PAC regarding this goal and its supporting policies. Specific issues to clarify include Baseline/Riego impacts at SR 70/99 and potential Watt Ave. extension/interchange.

Goal 3: Avoid Growth Inducement/Protect Rural Character of Agriculturally-Designated Areas
Supporting polices are:

- No access in areas currently designated for agriculture
- Create a no-development buffer zone along the Parkway
- Control signage along the corridor

C. McAdam asked the PAC if they felt that the "no access" policy in the central segment would assist with this goal.

PAC Feedback

T. Cosgrove said that in order for the project to get support, it will need to address how to mitigate growth inducement and access. This will be a complex area to navigate, since local jurisdictions will weigh in on project-related decisions.

G. Garbolino asked how the project would enforce the no access feature. John Marin said this wouldn't be a problem for some properties in the area.

G. Garbolino asked about how many acres were in the central segment? T. Cosgrove said approximately 37,000 acres.

C. McAdam asked all PAC members to review the map carefully, and to relay questions to the project team.

P. Hill said the "no development" buffer would work well until the first interchange was built. Interchanges would all have some development adjacent to them. He thought developers would work around this issue to get people to facilities. D. Iacofano asked P. Hill if this related to whether the no access concept would actually work, pointing to the possibility of developers simply building facilities at the end of the access area. T. Cosgrove said this issue was discussed at the last PSR PAC meeting (several years ago). During that discussion, it was suggested that developers be allowed some access to the area (either at the beginning/or end) of the corridor. He said that when this decision was made years ago to limit access, less development existed and less development was being proposed. P. Hill said he did not have problems with access at both ends of the corridor – he would be concerned if no access was the objective for the entire corridor.

T. Cosgrove said that vicinity land uses are controlled by several local jurisdictions. The question was whether the local jurisdictions would inhibit growth or not. The local jurisdictions would determine this.

B. Santucci asked what the original idea for the buffer along the central segment was. C. McAdam said the idea was to limit growth. R. Weygandt said the "no access" feature was created to efficiently handle traffic and land issues. T. Cosgrove said some visual/aesthetic issues were also factors. Design features such as a wide median would be more pleasing.

P. Hill indicated he did not agree with the approach to reduce growth-inducing effects. He described how I-80 when initially constructed through Rocklin had no traffic. Then Roseville began to grow. J. Lonergan cited I-5 (Colusa to Glenn Co.) as an example of a limited access facility that did not induce growth. P. Hill said the no access issue could be setting-up future elected officials with a lot of problems. T. Cosgrove suggested that community preference could play a role.

Goal 3 – Conclusion: PAC members generally agreed with the goal, but raised questions about whether the goal was realistic or achievable. There are questions about the buffer and no-access provisions and how they would be implemented.

Goal 4: Minimize Environmental Impacts
Policies supporting this goal are to:

- Avoid existing homes
- Avoid high value agricultural operations
- Avoid streams, creeks, riparian corridors, and sensitive habitat

PAC Feedback:

L. Combs asked if detailed information on existing habitat is shown on maps. C. McAdam referred to the maps hanging in room.

D. Iacofano said that one of the goals of the project was to minimize as many environmental impacts as possible. Realistically, the project could not avoid all impacts. So, impacting as few as possible would be an objective. T. Cosgrove pointed out that if one alignment avoided one habitat it could affect another.

L. Combs asked if Placer County had a Habitat Conservation Plan in place to help address environmental mitigation. He said Sutter Co. and the City of Sacramento completed the Natomas Basin HCP. It covers a portion of the project study area. D. Heick said that the Placer County HCP/NCCP was not yet complete. The project team was working with data from both the Natomas Basin HCP and the Placer Legacy HCP/NCCP.

Goal 4 – Conclusion: There was general consensus from the PAC regarding this goal and its supporting policies.

Goal 5: Improve Safety/Minimize Hazards
Policies supporting this goal are:

- Improve emergency response times and evacuation options during natural disasters
- Provide a high design level to avoid potential safety issues

PAC Feedback:

There was no PAC feedback.

Goal 5 – Conclusion: The PAC agreed with this goal and its supporting policies.

Goal 6: Achieve Feasible and Equitable Funding
Policies supporting this goal are:

- Require development in areas served by the corridor to finance a share of the Parkway
- Identify and pursue all existing and potential public and private funding sources for planning, design, and construction

PAC Feedback:

Marcus LoDuca said there would be an equity issue that would be inconsistent with this goal. If developers have no access to the Parkway, would it be fair to assess them for improvements? He said this could also affect developer-based financing.

C. McAdam agreed that lack of access could turn away some developer interest. But, anticipated growth in the general area that does have access would make up for the loss of potential funding in the central segment area. L. Combs said this would not hurt developers who do not build in the area.

T. Cosgrove said that the issue of who pays for the facility was crucial. He indicated that industrial development in the eastern and western segments probably should not have to pay for central segment improvements. The Parkway needs to be viewed as a regional corridor including the airport. It will more than a Sutter County and Placer County facility. C. McAdam acknowledged that honoring this goal would definitely be a challenge.

C. Iacofano— there would be pockets of opportunities related to this project goal.

Goal 6 – Conclusion: The PAC agreed in principle with this goal but raised implementation concerns.

IV. WORK PLAN APPROACH

D. Heick provided the PAC with an overview of the work plan approach. She started with a description of the Tier 1 process. She emphasized the process would identify relative differences among corridor-level alternatives at a broad level of detail. She also pointed out that the Tier 1 process was not a well-defined one. It is not a process familiar to the general public. Because of this uncertainty, the project team was soliciting input from a variety of sources including the TAC and SAC as well as early coordination with federal and State reviewing agencies. The project was now undergoing a process to identify corridor alternatives to eventually study in the Tier 1 EIS/EIR. This process involved assessment at a GIS-level (Geographic Information System) of detail to identify general location, mode choice, etc. The Tier 1 process would help identify strategies for mitigation, which would be applied in the Tier 2 (project-level) environmental process.

C. McAdam added that the Tier 1 process was designed to speed up the process of addressing the need to preserve land for a future facility.

Project Goals

D. Heick reviewed the three primary project goals for the Tier 1 EIS/EIR:

(1) The first goal is to identify corridor alternatives for study in the Tier 1 EIS/EIR, consistent with the project's purpose and need, and LEDPA requirements.

B. Santucci asked if the LEDPA would be identified in the second tier of environmental documentation, and what did it stand for? D. Heick said that LEDPA stands for "Least Environmentally Damaging Practicable Alternative." Prior to

construction, a Section 404 permit will be required from the U.S. Army Corps of Engineers (ACOE), and a determination needs to be made during that process that the project selected for construction is the "LEDPA" alternative. In this current Tier 1 project, no permit is required. However, the project team is in early consultation with the ACOE, EPA and other agencies to discuss and get direction to complete the Tier 1 process as well as to facilitate subsequent Tier 2 reviews. Even though the formal LEDPA process would not be required for the Tier 1 review, the ACOE and EPA are interested in assisting the project team in developing a LEDPA-like process for corridor identification. This would be helpful for the overall success of the project, and could avoid corridor LEDPA issues being raised during the Tier 2 process.

D. Heick said that she didn't know for sure when the LEDPA-like process would be completed, as the project team is meeting with the Corps and EPA to work out the details. The formal LEDPA process would be completed prior to obtaining permits from the ACOE after the later Tier 2 process.

(2) The second project goal is to identify a preferred corridor.

D. Heick said that alternatives evaluation would happen later in the project process, after the SAC/TAC reviewed more refined data. She also said public meetings would help to get further input.

L. Combs outlined two vicinity habitat conservation plans (HCPs) – the recently completed Natomas Basin HCP and one being developed for the SR 70/99 area with Yuba County. He asked if an HCP had to be completed before urban development and transportation facilities were built. R. Weygandt said that Placer Legacy is an HCP now underway and the Parkway is one of the proposed improvements being assessed in it. L. Combs said that Placer Legacy would be helpful in getting the Parkway project approved. D. Heick said that the project team would consult with the Natomas Basin and Placer Legacy HCPs regarding environmental/conservation planning. The Parkway project would attempt to work in concert with both HCPs.

(3) D. Heick identified that the third project goal is to obtain a (federal) Record of Decision and (CEQA) Certification of the EIR, to start corridor acquisition and preservation.

Schedule

D. Heick reviewed project schedule milestones:

- Screen PSR Alternatives ("fatal flaws") End of 2003
- Identify/Screen Other Alternatives February 2004
- Identify Final Alternatives May 2004
- Draft EIS/EIR for Public Review September 2005
- Final EIS/EIR End of 2006

D. Heick noted that draft alternatives identified for the Tier 1 EIS/EIR analysis would be reviewed with the PAC. L. Combs asked whether the Placer/Sutter Boards of Supervisors had weighed in on the project as it stands. D. Heick indicated the PAC's role was to provide input and to represent their jurisdictions by attending meetings. Several PAC members stated that the full Boards of Supervisors and each affected City Council need to weigh in on the project. D. Iacofano suggested that the project team conduct briefings and schedule presentations to these groups to get consensus on project elements. D. Heick said the PAC could also request individual briefings to bring folks up to speed. L. Combs suggested that the project not wait until the end of the planning process to speak with these groups. E-mailing progress reports would be helpful.

Alternatives Development & Screening Process

D. Heick discussed the Alternatives Development/Screening process. She reviewed the various transportation modeling, environmental, and engineering screening processes and timeline for pivotal activities. Initial findings related to PSR

alternatives screening would be discussed with the TAC/SAC in October. Other potential corridor alternatives would subsequently be identified.

Initial Travel Model Forecasts

Heick explained that the transportation modeling information was being updated from the 2001 PSR. Three forecasts would be prepared:

- No Project
- Year 2025/2030 (based on SACOG's 2025 Metropolitan Transportation Plan)
- Second Cumulative Development Scenario (the MTP plus several pending/anticipated urban development proposals)

She referred to a list (below) and a map of Major Proposed Developments in the project area. These potential projects would affect growth and employment projections in the study area. The project team is developing a second travel forecast model based on this more robust condition. The specifics of this model are being developed with TAC input.

T. Cosgrove asked whether there was a plan to make this information available on the project web site. D. Heick said that a dedicated Placer Parkway web site was being developed, and that this information would be made available. PCTPA also has information posted on its web site.

T. Cosgrove asked whether SACOG's developing Blueprint model would be considered a for alternatives analysis. D. Heick—said that perhaps some information would be used, such as revised land use forecasts, at later stages in the process. The schedule for the Tier 1 process is to identify corridor alternatives before the Blueprint process is completed.

Major Proposed Developments

D. Heick identified and briefly reviewed the following list of proposed developments. She asked for PAC feedback on how to realistically evaluate them for possible screening consideration.

- West Roseville Specific Plan
- Placer Vineyards Specific Plan
- South Sutter County Specific Plan
- Placer Ranch Specific Plan
- De La Salle University & Community
- Metro Airpark
- McClellan Park
- Elverta Villages
- West Lincoln

There were no PAC comments.

Resource Mapping for Environmental Screening

Next, D. Heick went on to review the process of resource mapping for environmental screening. D. Heick referenced the various resource/issue maps on the wall for detail. She went on to explain that the process takes existing GIS-based data, and it is then reviewed by the TAC, SAC and other resource agencies, for review for accuracy, and to identify various differentiators among environmental topics. The project team will then apply the data and screen the PSR alternatives, and then identify potential other alternatives.

There were no comments from the group on this topic.

IV. PSR CONCEPT ALTERNATIVES

D. Heick referred to the PSR alignment alternatives map in the meeting information packets. The project team has refined the conceptual alignments according to PSR guidance, data collection/mapping work, and limited fieldwork. She pointed out the 500- and 1000-foot corridor widths and the placement of potential interchanges. She asked the group for feedback regarding the refined concept alternatives.

L. Combs noted that potential Pleasant Grove Road interchanges would be a problem for Sutter County. His concern focused on high-speed travel associated with the amphitheater to the north in Yuba County. He stated that the Board of Supervisors hadn't discussed this issue formally, but he wanted to point this out to the project team. He suggested consulting the Sutter County General Plan and Zoning Ordinance map. He said that an alternative interchange location further west of Pleasant Grove would work more efficiently. He went on to say that if the Parkway crossed Riego Road, there might be associated problems. He also noted that there might be environmental implications to locating an alternative along Sankey Road because of potential Natomas Basin HCP habitat areas.

D. Heick noted that based on comments generated by the PAC, the map will be revised, and distributed for review to the TAC for comment prior to being displayed at the upcoming public scoping meetings.

P. Hill asked about the number of bridges to be built and if any local ones would be needed to protect sensitive areas and to provide access to farms? D. Heick responded that was early in the project planning process, but these questions would be assessed for consideration. Local access would need to be maintained.

VI. PROJECT ISSUES

Stan Tidman reviewed the topic of project issues – most of which had been addressed during the staff presentation and PAC feedback. These issues included:

- Pending/anticipated development proposals – timing and effects on corridor alternative alignments
- Corridor alternatives – there would be no "preferred" corridor alternative identified until the Tier 1 process was completed
- Tier 1 – first of its kind in northern California and need for early/continuing coordination with FHWA, Caltrans, and federal/State resource agencies
- Potential environmental impacts & LEDPA – agriculture, biological resources, growth-inducement, and addressing federal concerns

T. Cosgrove asked if the map shown on page 11 of the PSR (showing very specific alignment alternative locations) could be perceived as the final project alternative. S. Tidman responded that the PSR concept alignments were preliminary. They were based on input developed during the PSR process (preliminary engineering and environmental studies). They were for programming purposes and to develop preliminary cost estimates. The project team understands that the PSR alternatives will need to be put in proper context for the general public, and to continue to reiterate that the entire study area is being considered for appropriate alternatives.

P. Hill raised a concern about the 1,000'-width for the central segment and whether any options had been taken on this land.
D. Heick responded that the project had the most current public information from each jurisdiction related to development/general plans, parcel ownership, etc., but not information at the level of detail that would identify options on individual parcels.

C. McAdam agreed that the project would work with the existing land uses that jurisdictions have assigned. She stressed that the project needed to be aware that information about development would have to come from county contacts in order to continue to get the most accurate picture regarding future land use plans.

G. Garbolino asked if it would be easier to get Parkway approvals for the environmental review and then worry about development as a secondary issue. Another (unidentified) PAC member stated that this dilemma could be an opportunity for the project team to coordinate with County staff on how to plan realistically, related to development.

T. Cosgrove said the project needs the ability to look at the corridor and accurately predict the best method to assess existing conditions, mitigate growth inducement, and consider development plans.

VII. OPPORTUNITIES FOR INPUT

D. Iacofano reviewed public outreach efforts that have been planned or conducted in relation to the project:

- Meetings with TAC, SAC, and PAC members to assess project data and policy issues
- Stakeholder interviews conducted with diverse community groups, businesses, agencies, and environmental contacts
- Community meetings
- Development and distribution of project newsletters
- Creation and launch of a dedicated project web site

VIII. NEXT STEPS

D. Iacofano reviewed future planned project milestone activities related to the project.

- Complete traffic model
- Finalize resource mapping and screening criteria
- Screen PSR alternatives
- Identify/screen other alternatives
- Conduct public scoping meetings on October 6, and October 9

He urged the PAC (and other advisory committee members) to attend the October 6 and October 9 public scoping meetings, if possible.

D. Iacofano stated that the next PAC meeting was scheduled for February 2004. D. Heick added that since that was many months from now, a special meeting may be scheduled between now and February. D. Iacofano stated that the PAC would be communicated with through email regarding any project-related news and information.

Future Actions

- The PAC recommended that the project team schedule briefings and/or project updates for Placer and Sutter County Boards of Supervisors and the cities of Lincoln, Rocklin, and Roseville. Each of these jurisdictions would eventually take action on the proposed project.
- The project team will complete the preliminary identification of alternatives and share them with the PAC.
- Another PAC meeting may be scheduled (before spring of 2003) -- depending upon the outcome of the Placer County Board of Supervisors' West Placer Land Use Visioning Workshop on October 20, or other events.

Close

Meeting adjourned at 3:40 PM

PLACER COUNTY TRANSPORTATION PLANNING AGENCY

Meeting Minutes & Action Items **FINAL 5-26-0**

Meeting Description: Placer Parkway Corridor Preservation –Policy Advisory Committee Meeting #2
Meeting Date March 4, 2004
Minutes Location: City of Roseville Corporate Yard – Rooms #2 and #3
Date: Hilltop Circle

	Persons Attending		
Name	**Affiliation**	**Name**	**Affiliation**
Bill Santucci	Placer County Board of Supervisors (District #1)	Jeff Clark	Sacramento Public Works Agency – Transportation
Robert Weygandt	Placer County Board of Supervisors (District #2)	Tom Brinkman	Placer County Public Works
Jennifer Pereira	Placer County Board of Supervisors	Larry Combs	Sutter County, County Administrative Officer
Dennis Nelson	Sutter County Board of Supervisors (District 2)	Steve Propst	Caltrans Local Assistance
Dan Silva	Sutter County Board of Supervisors (District #5)	Celia McAdam	PCTPA, Executive Director
Tom Cosgrove	City of Lincoln, City Council	Stan Tidman	PCTPA, Project Manager
Peter Hill	City of Rocklin, City Council	Fritts Golden	URS, Environmental Manager
Gina Garbolino	City of Roseville, City Council	Denise Heick	URS, Project Manager
Jody Lonergan	Caltrans District #3	John Long	DKS Associates, Traffic
Rick Dondro for Jan Christofferson	Placer County Executive Officer	Gary Horton	URS, Traffic Manager
Rob Jensen	City of Roseville Public Works Department	Sharon Kyle	MIG, Inc., Public Outreach
Minutes			

MEETING SUMMARY

Purpose

The meeting was convened to review with the PAC the Technical Memorandum on the Screening Evaluation of PSR Alternatives, and to receive PAC feedback on the Memorandum's recommendations and direction on goal/policy issues.

Technical Memorandum Overview

Stan Tidman reviewed the Technical Memorandum, which had been made available to PAC members prior to the meeting along with a briefing package that included combined TAC/SAC recommendations. He explained that the Technical Memorandum had been prepared to present the results of the screening process used to analyze the conceptual Placer Parkway corridor alignment alternatives identified in the 2001 Project Study Report (PSR). He reviewed the organization and contents of each chapter, and encouraged the PAC to provide input, correct information, and ask detailed questions. Recommended potential modifications

were included in the Technical Memorandum and discussed by the PAC.

Recommendations and Conclusions

During the PAC meeting, the following items in **bold** were considered. PAC actions and recommendations are noted in *italic*.

A. Potential Modifications Eliminating or Adjusting PSR Corridor Alignments

#1. Reroute central and southern alignments north of the current alignment to avoid a large vernal pool complex located immediately northeast of the West Roseville Specific Plan area.

PAC concurred with TAC/SAC to route the central and southern alignments north to avoid sensitive areas. Some PAC members expressed concern about the 'jogs' in the alignment and felt they might discourage use of the future Parkway.

#2. Eliminate the northern corridor alignment between SR 70/99 and approximately Amoruso Acres.

PAC concurred with dropping the northern corridor alignment between SR 70/99 and a point just east of Amoruso Acres on Sunset Boulevard West.

#3. Modify the central corridor alignment:

#3a. Minimize encroachment into large wetland/vernal pool area and conservation area at Curry Creek.

PAC concurred with TAC/SAC in shifting the central corridor alignment north in the vicinity of the confluence of two branches of Curry Creek. In response to a more southwesterly direction for the alignment, the PAC felt that this warranted further study.

#3b. Adjust alignment in western segment to avoid Pleasant Grove/Sankey community and designated conservation area.

PAC concurred in shifting the central corridor northward to avoid a part of the Pleasant Grove/Sankey community and the designated conservation area.

#4. Modify the southern corridor alignment

#4a. At eastern end, extend it west before descending south, avoiding an historic ranch complex, vernal pool areas, and future Section 4(f) properties in West Roseville Specific Plan.

PAC concurred with adjusting the southern corridor westward to avoid resources noted.

#4b. At southern edge (parallel to Baseline Road), avoid large man-made waters and one rural residential community by moving corridor north or south

PAC supported moving the alignment one mile north of Baseline Road and eliminating an alignment close to Baseline.

#4c. Move corridor closer to Baseline Road to minimize growth inducement

PAC recommended eliminating an alignment closer to Baseline Road.

#5. Work with Sutter and Placer County staff to identify working farm units; the evaluation of corridors using this information.

PAC concurred with the recommendation of continued coordination with Placer and Sutter County agricultural staff to identify working farms for use in evaluating alignments.

B. Other Potential Modifications

Recommendations for Other Potential Modifications

In response to a suggestion of a more southwesterly direction for the ascending portion of the southern alignment, the PAC felt that this warranted further study.

C. Additional Direction

Connections to State Routes

Sunset Boulevard Connection – *PAC concurred with eliminating this connection*.
North of Sankey Connection – *PAC concurred with eliminating this connection*.
South of Riego Road Connection – *PAC recommended eliminating this connection (due to potential growth inducing factors) after meeting and assessing it with the City of Sacramento and Sacramento County*.

D. Goal/Policy Issues & Input

No Access – Fiddyment Road to Pleasant Grove Road – with the exception of a potential Watt Avenue extension.

PAC reaffirmed that there would be one potential access point between Fiddyment Road and Pleasant Grove Road. The PAC requested that the project team define growth inducement in the Technical Memorandum and provide additional information to eliminate apparent inconsistencies, and to reexamine the Watt Avenue connection. The project team clarified that any future Watt Avenue extension would not be a part of the Placer Parkway project, but that the Parkway project would study a potential future connection with it.

No-Development Buffer

PAC stressed that the idea of the no-development buffer must be reaffirmed in terms of the current development situation. The PAC concurred that the buffer size and location should be flexible and related to performance standards, and should maximize opportunities to incorporate adjacent sensitive areas into the buffer. The Parkway should include a component protective of agriculture and it needs to be elastic, i.e., have the ability to expand if necessary.

MEETING NOTES

I. INTRODUCTIONS

The 2nd Policy Advisory Committee (PAC) was held on March 4, 2004 at the City of Roseville Corporation Yard. Celia McAdam, Executive Director of the Placer County Transportation Agency (PCTPA) opened the meeting and welcomed the group. After introductions around the room, she turned the meeting over to Stan Tidman, PCTPA Project Manager, to review project activities since that last PAC meeting in 2003.

S. Tidman provided an overview of the project purpose as a regional transportation facility; goals related to the 2000 Conceptual Plan/PSR; design and construction costs /timeline and the corridor preservation process (the environmental review process, Tier 1 process); and final property acquisition/project right-of-way. He also discussed issues reviewed the September 2003 PAC meeting, including:

- Tier 1 Environmental Review Process
- Coordination with Resource Agencies (Finding agreement related to the Least Environmentally Damaging Practicable Alternative)
- Goals/Policies (Access, No development buffer)
- Pending and Anticipated Development in Project Area—West Roseville Specific Plan, Placer Ranch Specific Plan, De Salle University and Community
- Curry Creek Community Plan
- Development of the Technical Memorandum (S. Tidman briefly discussed the discussions and recommendations related to the Memorandum from recent Technical and Study Advisory Committee meetings)

Project Schedule Review
S. Tidman discussed current project status related to overall schedule/activities. He briefly covered the status of critical milestones related to both completed and planned technical assessments/advisory meetings, public outreach activities (upcoming meetings planned in fall 2004) and the preparation of the Environmental Impact Statement/Environmental Impact Report (EIS/EIR), planned for fall 2005. S. Tidman mentioned that the team was closely coordinating with resource agencies (Army Corps of Engineers and Environmental Protection Agency) regarding the LEDPA, and the possibility that this could cause the schedule to slip slightly.

II. DRAFT TECHNICAL MEMORANDUM OVERVIEW

S. Tidman began with a review of the Technical Memorandum content:

Chapter 1 – Introduction/Purpose of Technical Memorandum
Chapter 2 – Project Background
Chapter 3 – Alternatives Identification Process.
Chapter 4 – Transportation Analysis of PSR Alignments (growth projections/development scenarios/travel forecasting).
Chapter 5 – Environmental Screening (data collection/screening criteria/data analysis of existing conditions).

Chapter 6 – PSR Corridor Alternative Screening Summary and Recommendation.

Potential Fatal Flaws

S. Tidman explained that for the project a fatal flaw was defined as anything that would stop the project or would not meet its purpose and need. He noted that during review of the corridor alignments, no fatal flaw had been revealed; however, some constraints had been identified.

Compatibility with Goals and Policies

S. Tidman briefly reviewed the six goals and policies of the project:

Goal 1 – Create a controlled access highway.
Goal 2 – Maximize mobility and accommodate planned growth.
Goal 3 – Avoid growth inducement and protect rural character of agriculturally designated areas.
Goal 4 – Minimize environmental impact.
Goal 5 – Improve safety and minimize hazards.
Goal 6 – Achieve feasible and equitable financing.

III. POTENTIAL MODIFICATIONS TO PSR CORRIDOR ALIGNMENT ALTERNATIVES

S. Tidman discussed potential modifications to the PSR corridor alignment alternatives. The five potential modifications were identified during the screening of the PSR alternatives, a process designed to reduce potential adverse impacts.

Potential Modification #1 – Reroute central and southern alignments to the north for connections at Whitney Boulevard to avoid a large vernal pool complex located immediately northeast of the West Roseville Specific Plan area.

Potential Modification #1 Comments

Jody Lonergan, Caltrans District 3, asked if the alignment map being referenced during the meeting (a large full color map of the project study area used to orient the PAC during alignment discussions) was included in the Technical Memorandum. She said she thought it would be helpful for all the PAC members to have such a map to refer to during the meeting. S. Tidman said the map was not in the Technical Memorandum, but he could provide a copy.

Peter Hill, City of Rocklin-City Council said he was confused about information presented in the Technical Memorandum and the potential modifications shown in the presentation map. He followed up by asking how the meeting briefing package materials distributed to PAC members prior to the meeting corresponded to information being presented during the meeting. J. Lonergan she was also confused by the PAC meeting briefing package information and how it correlated to the alignment map being used as a reference for the group discussion. S. Tidman clarified that the PAC was being asked to respond (with questions, adjustments, and additional recommendations) to the modifications being shown as part of the presentation, and as recommended in the Technical Memorandum. Denise Heick, URS Project Manager, responded that she understood how the information could be confusing, but the maps referenced during the

meeting were still conceptual and were not available for distribution until after they had been reviewed by the project's traffic engineers. They were sketches of how the recommendations in the Technical Memorandum would look.

Bill Santucci, Placer County Board of Supervisors (District 1), asked if modification #1 showed any changes to the central segment. D. Heick responded, yes; she indicated where resources were located that led to the recommended modification.

Larry Combs, Sutter County-County Administrative Officer, said the directness of the route was a primary concern to project area travelers. He was concerned that people might use local roads as alternatives to the Parkway if it were to twisting, and stressed that decisions related to alignment routes should be assessed in a simple and logical manner. L. Combs said that he wanted to review traffic analyses to see what impacts were projected as the area developed. John Long, DKS Associates (traffic consultant), responded that a series of scenarios had been analyzed for the project. He said there was environmental trade-offs related to the alignment scenario, and associated traffic implications.

L. Combs said he felt that the project analysis was projecting minor growth in Sutter County, and he thought this was inaccurate based on known plans and discussions with developers. He wondered how this would be reconciled. J. Long responded that the project team had developed additional scenarios working with the TAC, and then studied projections related to planned/existing development in each county located in the project area. One scenario was to use the MTP (which shows little development), the other was a scenario that tests greater growth and development.

Dan Silva, Sutter County Board of Supervisors, asked staff what was considered the most contentious project issues. C. McAdam responded that policy issues such as, no-development buffers and no access in the central segment except a possible Watt Ave. extension seemed to be the principal issues.

T. Cosgrove agreed that working through the issues related to access and the buffer zone would be one of the major project hurdles during agency coordination. He noted that these policies had been developed to address the issue of growth inducement.

C. McAdam stated that potential modification #1 was based primarily on avoiding vernal pools. She asked the group if they concurred with this premise. B. Santucci said he was curious about the jogs in the alignments and felt they might discourage use of the Parkway. To get a straighter alignment it may be necessary to look at potential impacts and offset them. He also expressed concern with the southern route that had a lengthy north/south segment. T. Cosgrove referenced the "Marconi Curve" project (SR 160 – north of Sacramento), which was designed to avoid a farm well and ended up becoming a concession that everyone had to live with. He asked if there was a benefit to using the corridor to acquire and protect environmentally sensitive areas.

Robert Weygandt, Placer County Board of Supervisors (District 2), said a meandering roadway was not a problem as long as it didn't compromise the speed of roadway users. T. Cosgrove said the project should think of the most convenient route for the alignment, otherwise people would find alternative routes on surface streets. A good alignment would make it more likely to be supported by the community. L. Combs said the Marysville area becoming a bottleneck, and commuters coming south on Highway 99 would be looking for an alternate route across to Highway 65. He said this would take people over Howsley and other east-west roads.

L. Combs stressed that the highway connections had to be convenient to users. B. Santucci agreed with T. Cosgrove and L. Combs that if the connections to the Parkway were not convenient people wouldn't use it. Part of the intent of the Parkway was to get people off Baseline.

J. Lonergan said, based on her experience on similar projects, agency agreement on the LEDPA was essential. She stressed that agencies could tie up the project if they don't agree that the LEDPA was identified. Gina Garbolino, City of Roseville-City Council, said that the project should seek to choose an alternative that best meets the transportation needs of the area, while acknowledging the agencies have influence.

D. Silva noted that this is a regional project, and he believed commuter connectivity to job centers would be an important issue for the project to address. He said the most practical route is one that moved travelers efficiently. T. Cosgrove said during the project's history the Parkway looked at centers of commerce and residences, plus the need to get people to Sacramento. He felt that EPA wasn't as concerned with commuter needs as other issues, but they could potentially stall the project if it didn't address environmental issues. C. McAdam said that addressing the various project needs continued to be challenging.

Recommendation for Potential Modification #1
PAC concurred with the TAC/SAC conclusions, and agreed to routing the central and southern alignments north to avoid sensitive areas.

Potential Modification #2 – Eliminate northern corridor alignment from SR 70/99 to Amoruso Acres and transition it to a central and/or southern route at this location.

S. Tidman noted that the alignment went through an agricultural area that is important to Sutter County. He said this alignment offered the least traffic benefits and had the greatest potential among the alternatives for growth inducement. However, it appeared to have the fewest environmental impacts to aquatic resources.

Potential Modification #2 Comments

D. Heick said that the elimination of the northern alignment should be tempered by the implications for identifying the LEDPA. She added that in the NEPA/404 process the environmental benefits of the route would need to be compared to the modified alignment scenarios (rather than to the original alignments). D. Silva said he was not yet in favor of dropping the alignment. J. Lonergan asked how large the environmental difference was. She made note of another project where they could not get EPA to agree to a less than 4 acre difference between alternatives. She pointed to her past experience with the EPA potentially stalling a project with questionable LEDPA impacts. D. Heick said there were no riparian impacts and about 31 acres of wetlands impacts on the alignment. Others had more, between 28-60 acres on other project alignments. T. Cosgrove concurred that EPA could be unyielding in its environmental impacts stance. J. Lonergan asked if proposed alignments were based on development and non-development scenarios. D. Heick responded that the project based the alignments on both development and non-development scenarios.

Rick Dondro, Placer County Dept. of Public Works (representing Jan Christofferson, Placer County Executive Officer), said he believed that this northern route was not very direct, and relieving Baseline Road wasn't optimal with this alignment. L. Combs asked if the northern alignment could continue across

on Howsley rather than dip down to Highway 70/99. G. Garbolino said this northern connection would be very inconvenient for anyone in the Roseville area. People headed south would see no travel benefits and would use Baseline Road.
T. Combs asked if the project could go outside of the study area in the northern area to consider other alignment modifications. J. Long said that during the project development, it was found that the areas to the north had the fewest traffic benefits. C. McAdam added that the spacing needed between interchanges also figured into the configuration of this alignment.

P. Hill asked about the downside of leaving this alignment in for another round of analysis. If this option was left in, would it be considered for evaluation during future environmental assessments? D. Heick said the choices were to leave it in for further review, or the PAC could agree to eliminate it. P. Hill said he didn't feel the northern alignment was of benefit to the cities of Roseville or Rocklin, so it should be eliminated. T. Cosgrove said he believed some agencies would prefer this alternative because of its environmental merits. We don't know if resource agencies will want it back in. G. Garbolino said she didn't care if agencies preferred the alignment, the point was to provide benefit to the communities. D. Heick said realistically the project team must work with the agencies in order for the project to move forward. Lack of cooperation could slow down the project. G. Garbolino suggested that perhaps there were other alternatives that could be reviewed and considered, since the evaluation process was still ongoing.

C. McAdam asked what the PAC's decision was regarding the northern alignment modification. She asked whether the PAC wanted additional information to assist with the decision making process. The project team could also bring back more information from upcoming agency meetings for the PAC to consider. G. Garbolino said she didn't support this alignment. B. Santucci said he didn't support this potential modification. R. Weygandt said the group must think strategically regarding demonstration of a thorough evaluation process for any alternative presented. L. Combs said the project must look at the alternatives in the context of current conditions, not merely based on past historic considerations that may have changed.

C. McAdams asked if there were any objection to adopting modification #2 eliminating the northern alignment. There was general consensus from the PAC to drop the alignment.

Recommendation for Potential Modification #2
PAC concurred with the elimination of the northern corridor alignment between 70/99 and a point just east of Amoruso Acres on Sunset Boulevard West.

S. Tidman then introduced potential modifications 3a and 3b.

Potential Modification #3a – Minimize encroachment into large wetland/vernal pool conservation area at the confluence of two main branches of Curry Creek to reduce habitat fragmentation and impacts.

Potential Modification #3b – Adjust alignment in western segment to avoid Pleasant Grove/Sankey community and designated conservation area.

There was general concurrence among PAC members to adopt these modifications.

Recommendation for Potential Modifications 3a-3b.
a. *PAC concurred with SAC/TAC regarding shifting the central corridor alignment north in the vicinity of*

the confluence of the two branches of the Curry Creek).

b. *PAC concurred with SAC/TAC regarding shifting the central corridor northward to avoid part of the Pleasant Grove/Sankey community and a conservation area.*

S. Tidman then introduced potential modifications 4a through 4c.

4a – Avoid historic ranch complex, large vernal pool areas, and future Section 4(f) properties in the West Roseville Specific Plan Area at the eastern end.

4b – Avoid large man-made water of the U.S. and rural residential community along the southern edge.

4c – Move the corridor closer to Baseline Road to minimize growth inducement.

Potential Modifications #4a-c Comments

D. Silva asked where the modification was located on the large presentation map. D. Heick indicated the locations in question.

R. Dondro noted that the water feature (water ski park/catfish pond) near Baseline Road was man-made, possibly constructed over an historic wetland area. The "community" above Baseline Road is very loosely defined. D. Heick said the TAC suggested that the project team undertake more research into this topic. The project team researched the history of the area and identified seasonal wetlands in historic air photos.

T. Cosgrove suggested that the closer the Parkway is to Baseline Road the less the traffic benefit would be to the area. G. Garbolino agreed. R. Dondro said two major transportation facilities next to each other would not provide traffic benefits to this area. B. Santucci said he didn't support having a Parkway next to Baseline, that it would create lawsuit after lawsuit, and that Placer Vineyards and other developers would probably oppose to this notion. J. Long added that a factor would be the location of future interchanges and efforts to avoid the community in this area. T. Cosgrove recommended moving the alignment be one-mile north of Baseline Road to optimize this route.

D. Heick added that other considerations related to this option include, the southern alignment hugging Baseline Road, along with development of the Sutter County community plan. She suggested that the outcome of the plan might be consistent with mitigating growth inducement in this area. T. Cosgrove added that the Parkway would cause some growth inducement (no matter where it was ultimately located); having it close to Baseline Road would be only a temporary "urban edge".

There was consensus among the PAC members for a 1-mile separation between Baseline Road and the alignment.

Recommendations for Potential Modifications 4a-4c
a*. PAC concurred with SAC/TAC regarding adjusting the southern corridor westward to avoid natural and cultural resources.*

***b.& c**. PAC supported moving the alignment paralleling Baseline Road one mile-north of the road and eliminate an alignment close to Baseline Road.*

S. Tidman then introduced modification #5.

Potential Modification #5: Work with Sutter and Placer County staff to more specifically identify farm units, and evaluate corridor alignments using this information to minimize impacts.

Potential Modification #5 Comments

P. Hill said he agreed with preserving working farms, but wanted some clarification on the definition of working farms. D. Heick said the working farms were single operations with features such as irrigation system connectivity and that contributed to agricultural viability. T. Cosgrove noted that some may claim to be "working farms" but were not contributing. D. Silva spoke of the need for connectivity for equipment usage and movement. D. Heick noted the intent was to understand what is happening in terms of farm units.

P. Hill asked when this determination needed to be finalized. D. Heick said within the year. T. Cosgrove said the project would have to make sure the working farms were legitimate entities.

Recommendation for Potential Modification #5
PAC concurred with the recommendation for continued coordination with Placer and Sutter County agricultural staff to identify working farms (and gathering more conclusive data).

IV. OTHER POTENTIAL MODIFICATIONS

S. Tidman next brought up the subject of other potential modifications that had not been discussed.

Other Potential Modifications Comments:

R. Dondro expressed concern with the north-south segment of the modified southern alignment being out-ofdirection for Parkway users. He briefly discussed what he felt was a better alignment -- a diagonal alignment that angled across the study area in a southwesterly direction before paralleling Baseline Road. He mentioned that this concept was discussed at TAC/SAC meetings and both concurred that this modification merited further study. It was recognized that there may be issues with farmlands and wetlands, and the proposed modified alignment was not yet set. S. Tidman said the TAC/SAC had agreed to consider such an alignment.
B. Santucci said it was worth study, and there was consensus on this.

S. Tidman mentioned that the project team had recently met with Sutter County and there had been a suggestion to mover the Parkway corridor north of Sunset Blvd. West. L. Combs said that people from Yuba City and Marysville would be looking for an alternate to Highway 65, and would take Highway 99 south and look for ways to get to Highway 65 lower down; he believed there was a need for a northern connector. R. Dondro said over time the surface roads would be improved and have the ability to connect east-west. This would supplement the Parkway. L. Combs noted that 12,000 new homes were scheduled to be built to the north.

J. Long said the issue was recognized. Development scenarios would be crafted to include what is not in the MTP. Perhaps traffic data (south Yuba county growth forecasts) that were not part of the initial SACOG forecasts would need to be assessed. He said that the project team would need to discuss this recommendation with the TAC, for feedback and discussion. L. Combs said he needed understand how it was all going to work together. R. Jensen explained that traffic volumes could be layered over existing traffic models and then updated and re-evaluated.

Recommendations Related to Other Potential Modifications *– In response to Rick Dondro's suggestion of a more southwesterly direction for the alignment, the PAC felt that this warranted further study.*

S. Tidman continued with a discussion related to additional connections, and direction from the PAC:

V. ADDITIONAL DIRECTION

- **Retain Sunset Boulevard connection?**

PAC Comments
R. Dondro shared that the TAC recommended eliminating the Sunset connection to the Parkway. A future connection to Sunset would be via a local road. P. Hill said that he supported eliminating this connection.

Recommendation Related to Retaining the Sunset Boulevard connection
PAC recommended eliminating this connection.

- **Retain north of Sankey connection? (which was western end of northern alignment)**

Recommendation Related to Retaining the north of Sankey connection
PAC recommended eliminating this connection.

- **Retain south of Riego connection?**

Comments
The project team shared that they had been in recent discussions with the city and county of Sacramento, and proposed eliminating this connection due to potential growth inducing factors.

Recommendation Related to Retaining south of Riego Road connection
The PAC suggested eliminating this connection (due to potential growth inducing factors), but only after the project team met with the City of Sacramento and Sacramento County for their views.

VI. GOALS/POLICY ISSUES & INPUT

C. McAdam facilitated a discussion regarding goals and policies, and asked for PAC feedback and recommendations. She said the project team was looking for reaffirmation of goals:

Policy: "No Access" – Fiddyment to Pleasant Grove (except potential Watt Avenue)

C. McAdam noted that the Sierra Club and others wanted a study of more access in the Central Segment, because they felt that it would eventually occur. SACOG said the project should be studied with the no

access concept. The TAC and SAC input on this issue was not to re-visit or consider any changes to this provision. The Parkway, with this provision, is in SACOG's MTP.

Comments Regarding No Access

P. Hill shared that he recently met with the project team to discuss concerns related to access. He said he thought the Watt Avenue would probably be connected at a future date. He went on to say he did not know what the "unwanted impacts" to Sacramento were related to a Watt Avenue connection were, and to be sure Sacramento did not have a veto. P. Hill said he wanted more discussion in the Memorandum on growth inducement. He said properly defining the term "growth inducement" would help reduce concerns by the environmental community. He noted a recent UC Berkeley paper that indicated highways redistributed growth rather than induced it. P. Hill referred to Chapter 5 (Environmental Screening for PSR Alignments), section 5 (5-3) of the Draft Technical Memorandum, which discusses implications related to growth inducement and impacts from each alignment. He said he felt that this section was confusing in how it referred to Watt Avenue. He asked G. Garbolino how she thought the Watt Avenue connection would impact the City of Roseville. P. Hill also wondered if there was flexibility in the project to move Watt Avenue west to provide better linkage with the parkway corridor, or if the connection could be with another road, not specifically Watt Avenue.

C. McAdam clarified that the project would not be studying a Watt Avenue extension. Although she agreed that the issue of defining an access point in the Central Segment would be very crucial and should be assessed.

J. Long shared that the project team had been in recent meetings with various jurisdictions regarding the implications of a Watt Avenue connection. He said the project team would have to work with the TAC, and factor in some sensitivity analysis to determine how this would impact recent assessments. P. Hill said he wanted to know more about Sacramento County's issues related to Watt Avenue. He referenced Chapter 6 (PSR Corridor Alternative Screening Summary and Recommendations), section 6.2, Compatibility with Goals and Principles (page 6-5) and the discussion of Growth Inducement and Watt Avenue.

D. Heick said she thought Chapter 5, section 5-3 related to growth inducement should be amended to address this issue related to Watt Avenue. P. Hill said he felt the term of growth inducement needed further clarification and a more direct link to show its potential project impacts, and he wanted to know what "increased growth pressure" was. T. Cosgrove said the project would need to coordinate closely with the EPA and FHWA to address issues related to growth inducement. He said he understood the definition to mean potential growth, independent of the project. T. Cosgrove said different agencies define growth inducement differently. He thought the EPA would attach growth inducement to the project's presence, but did not se if the is already potential for growth how the roadway could induce growth. R. Weygandt said that the project needed to carefully consider how to assess growth inducement.. He said the EPA didn't have the power to determine how local community growth would be determined, but we need to get on the same page with them; but we maybe bending over too much regarding growth. R. Weygandt reminded the project team that there were resources available to support the project (i.e., Sutter County community plan, Placer Legacy, etc.).

T. Cosgrove said the team should define the "highest possible use" of the project area related to growth inducement.

G. Garbolino said the project should clarify that it is trying to accommodate related predicted growth in

the area (and move away from the term 'growth inducement'). She also felt that a Watt Avenue extension and connection were needed to get the best use out of the Parkway.

C. McAdam clarified that the PAC was recommending that the team needed a definition of growth inducement, and not limit it to a Watt Avenue connection.

R. Weygandt wanted the project to mirror the environmental goals, but not be dictated to.

P. Hill requested additional information related to 'issues' of a Watt Avenue extension as they relate to Sacramento County.

J. Long said the Technical Memorandum addressed Watt Avenue and included a description from the Metropolitan Transportation Plan (MTP). He said the MTP stated that even with volume changes based on the introduction of the Parkway, no great impacts (traffic congestion) were predicted. The plan suggested that the largest differentiator would be based on predicted development in various county areas.

T. Cosgrove said his experience working with agencies on projects is that once you do good things with a project, they are put into the baseline conditions and you get no credit if you give too much in the beginning.

J. Clark said he believed any change in Watt Avenue would bring out opposition. R. Weygandt said perhaps calling the Watt Avenue connection something less specific, such as the "Central Connection" might avoid some objections.

Recommendations Related to Limited Access

- *PAC reaffirmed that there would be one potential access point between Fiddyment Road and Pleasant Grove Road.*
- *The PAC requested that the project team define growth inducement in the Technical Memorandum and provide additional information to eliminate apparent inconsistencies, and to re-examine the Watt Avenue connection.*

Policy: "No Development" Buffer

C. McAdams reminded the PAC that the no-development buffer concept was for a 500-foot wide corridor in the east and west segments, and a 1,000-foot corridor in the central segment. The TAC had recommended that in areas now planned for development, there be flexibility in its width.

Comments Regarding No-Development Buffer

T. Cosgrove said that "no development" as a concept, should to be defined with more flexibility in order to mitigate potential environmental issues. It could be used to maximize protection of sensitive areas. R. Weygandt agreed that this concept should be more flexible, and pointed to the county's community plan to help provide direction on this and several project-related issues in the study area. D. Silva said he felt that high value agriculture) needed to be considered, and farm related resources protected. He asked who would oversee the buffer in the long run. C. McAdam said this was still being assessed as part of the project planning process. D. Silva added that flexibility related to this concept was most important.

Recommendations Related to No-Development Buffer .

- *PAC stressed that the idea of the no-development buffer must be reaffirmed in terms of the current development situation.*
- *The PAC concurred that the buffer size and location should be flexible and related to performance standards, and should maximize opportunities to incorporate adjacent sensitive areas into the buffer. The Parkway should include a component protective of agriculture and it needs to be elastic, i.e., have the ability to expand if necessary.*

VII. OTHER ITEMS/CORRECTIONS

None.

VIII. CONCLUSIONS & NEXT STEPS

a. Summary of Decisions

D. Heick asked for PAC to review the draft meeting minutes carefully once they were distributed, to make sure all recommendations and nuances of the discussion were accurately captured.

b. Future Actions

D. Heick said the project team would send out an alignment map with modifications added by the PAC in approximately one month. C. McAdam said the PAC would be meeting later in 2004 after the fall public meetings. D. Heick said the team would be in touch with the PAC on an interim basis by email.

c. Other Issues

None.

Meeting adjourned at 12:05 PM.

PLACER COUNTY TRANSPORTATION PLANNING AGENCY

Meeting Minutes & Action Items **Final 11.22.04**

Meeting Description: Placer Parkway Corridor Preservation –Policy Advisory Committee Meeting #3
Meeting Date September 14, 2004
Minutes Date: November 3, 2004
Location: City of Roseville Corporate Yard – Rooms #2 and #3 – Hilltop Circle

Persons Attending			
Name	**Affiliation**	**Name**	**Affiliation**
Bill Santucci	Placer County Board of Supervisors (District #1)	Scott Gandler	City of Roseville
Robert Weygandt	Placer County Board of Supervisors (District #2)	Jennifer Pereira	Administrative Aide – District 2 Placer County
Tom Cosgrove	City of Lincoln, City Council	Jim Holmes	Candidate for Placer County Board of Supervisors
Gina Garbolino	City of Roseville, City Council	Eric Bryant	Bryant Properties
Jan Christofferson	Placer County Executive Officer	Celia McAdam	PCTPA, Executive Director
Larry Combs	Sutter County, County Administrative Officer	Stan Tidman	PCTPA, Project Manager
Dan Silva	Sutter County Board of Supervisors (District #5)	Denise Heick	URS, Project Manager
Jody Jones	Caltrans District 3	Garry Horton	URS, Traffic Manager
Sam A Okhadi	SACOG	Fritts Golden	URS, Environmental Manager
Cathy Chapin	Caltrans District 3	John Long	DKS, Traffic Manager
Loren Clark	Placer Legacy	Daniel Iacofano	MIG, Inc., Public Outreach
Yushuo Chang	Placer County APCD	Sharon Kyle	MIG, Inc., Public Outreach
Rick Dondro	Placer County DPW		
Minutes			

Purpose

To review and obtain feedback and direction on the four potential alternatives being considered for the Tier 1 EIS/EIR; to approve changes in previously discussed goal/policy clarifications; and to update coordination efforts with several other concurrent planning processes.

I. INTRODUCTIONS

Daniel Iacofano (MIG) noted that the meeting would focus on bringing the PAC up to date regarding project progress, including corridor alternatives and Tier 1 EIS/EIR efforts. He reviewed the meeting agenda and emphasized the importance of PAC member feedback on all items, particularly about the potential corridor alignment alternatives.

II. PROGRESS ON PHASE 1 – DEFINING ALTERNATIVES FOR STUDY IN TIER 1 EIS/EIR (INFORMATION/FEEDBACK ITEM)

Stan Tidman (PCTPA Project Manager) briefly oriented attendees to the project area map, and provided background on study boundaries and the west/central/east segments.

Placer Parkway – The Concept

S. Tidman reviewed the corridor concept, explaining that the Placer Parkway was designed to be a regional facility connecting State Route 65 and State Route 70/99. Sunset Boulevard West and Howsley Road bound the project area on

the north and Baseline Road and Riego Road on the south. He noted that earlier planning documents for the Parkway include a 'Conceptual Plan' and 'Project Study Report'.

Project Goals
S. Tidman explained that the earlier planning documents formed the basis for conceptual alignments, preliminary engineering/cost estimates, funding strategies, and six goals for the Parkway. The goals are:

1. Controlled access highway
2. Maximize mobility and accommodate planned growth
3. Avoid growth inducement/protect rural character
4. Minimize environmental impacts
5. Improve safety/minimize hazards
6. Feasible and equitable funding

He noted that at PAC meetings in September 2003 and March 2004, the second and third goals were discussed at length. The focus on these particular goals related to concerns about access in the central segment, planned development, and community-specific impacts.

Design and Construction
S. Tidman reiterated that the current estimated construction costs for the Parkway range from $200 million to $300 million (2000 dollars). Construction funding is anticipated in approximately 2015.

Purpose and Need
He next discussed the project's purpose and need statement, which is driven by current and projected rapid residential and employment growth in Placer and Sutter counties. These would yield significant transportation problems. The project solution would be to preserve a corridor for a future facility (to reduce congestion on local roads and accommodate planned employment growth).

Corridor Preservation
In light of the rapid growth occurring and projected in the region, and to ensure long-term mobility in the region, S. Tidman reiterated the importance of preserving a corridor for development of a future Parkway. The corridor would vary in width. It would be 500 feet wide in the east and west segments and 1,000 feet wide in the central segment. The primary objectives in this phase of the project are to identify corridor alternatives and complete the environmental review process. A tiered EIS/EIR approach is being used because it focuses on broad issues appropriate to the scale of the study and to the objective of this phase -- to preserve a corridor. The document also will include impact mitigation strategies. The design and construction of the Parkway would be reviewed in a Tier 2 document at a future date. He stated that based on the project's current schedule the Tier 1 EIS/EIR should be completed between 2006 and 2007.

Issues
S. Tidman noted the several recurring project issues:

- *Location of Corridor Alignment Alternatives*—Identification of potential corridor alignment alternatives to be considered in the Tier 1 EIS/EIR
- *Tier 1 Environmental Review*—Complex process designed to move the project process forward more expeditiously (continued project team coordination with associated project stakeholders, FHWA/Caltrans in particular)
- *Resource Agency Coordination*—Additional project step added to support the final project alignment decision process (through agency concurrence regarding the Least Environmental Damaging Practicable Alternative-LEDPA)
- *Pending and Anticipated Urban Development*—Issues (ongoing and emerging) related to timing and overlapping planning processes in various jurisdictions

II.(a) Potential Corridor Alignment Alternatives

S. Tidman outlined the screening process used to identify the four potential corridor alignment alternatives. This work began with the concept alignments from the 2001 Project Study Report (PSR). He noted that the project team evaluated these PSR conceptual alternatives using a transportation, engineering, and environmental screening process designed to detect major issues and fatal flaws. The results of the initial screening were described in a Technical Memorandum (January 2004). The Technical Memorandum also included several recommendations regarding the PSR concept alignments with respect to avoiding or minimizing impacts to resources and communities.

The alternatives refinement process took into consideration additional information provided by the advisory committees, as well as public meeting and NOI/NOP comments. He stated that the project team initiated a second round of the screening for the refined alignment alternatives. Through this refinement process and in meetings with the advisory committees and coordination with various city and county contacts, the project team identified additional potential corridor alignments for further evaluation, which resulted in identification of four potential alignment alternatives for Tier 1 EIS/EIR analysis.

S. Tidman illustrated the screening process by comparing the PSR concept alignments with the four potential corridor alignment alternatives. He used the following environmental issues/existing conditions criteria to make the comparison:

- Vernal pool complexes
- Riparian, wetland & conservation areas
- Socioeconomic resources (existing homes, businesses, farm buildings)
- Floodplains
- Working farm units/Power lines

These examples illustrated how resource avoidance led to the four potential corridor alignment alternatives.

Thematic Finding from Public Meetings

D. Iacofano reported on the August public meetings held in Placer County (Roseville) and Sutter County (Pleasant Grove). He explained that the purpose of the meetings was to review potential corridor alignment alternatives being considered for evaluation as part of the Tier 1 EIS/EIR, and to obtain feedback from interested stakeholders.

At the Roseville meeting, key public meeting comments were:

- *Explain the evaluation process that will determine the final alignment.*
- *Provide more detailed rationale for the "buffer areas" and what will happen to properties adjoining these areas.*
- *Provide an explanation about the land appraisal process and project timing related to appraisals.*
- *Ensure that property owners are justly compensated for their land.*
- *Indicate how the project timing relates to appraisals.*
- *Indicate how far outside the project study area impacts will be assessed.*

D. Iacofano reported that there was a great interest in impacts to property values, and the process in place to ensure fair compensation for land acquired by the project. Community members wanted to ensure that the project evaluation process was fair and complete. He noted that several people expressed concern about trade-offs between "people and species". An example of this expressed by community members was with regard to the status of working farms versus the value of biological resources (such as vernal pools and various species).

At the Pleasant Grove meeting, key public comments were:

- *Determine how traffic impacts generated by Placer County can be mitigated without negatively impacting Sutter County.*
- *Ensure that property owners play a role as major stakeholders in the project planning process.*
- *Clarify the status of parcels affected by the alignment alternatives, and how the project will determine fair market value for properties acquired.*
- *Maintain the integrity of farmlands and farm operations.*
- *Ensure the project doesn't negatively impact the quality of life in this community.*

D. Iacofano reported that people at the Sutter County meeting expressed concerns about the potential for proportionately larger project impacts to the Pleasant Grove community due to its being relatively more geographically isolated, and the perception that Sutter County would bear the burden of negative project impacts. He noted that the community also voiced frustration that, as they perceived it, traffic impacts from Placer County would be shifted to Sutter County. D. Iacofano added that community members stressed the importance of their becoming more actively involved in planning discussions as key stakeholders. Impacts to their general quality of life were a significant concern.

Discussion:
Gina Garbolino (City of Roseville) inquired why the North of Riego Road to South of De La Salle (diagonal) alignment went through the De La Salle property. Her concern was about potential negative impacts to De La Salle University and village concept being planned at this location.

S. Tidman responded that the topic of adjusting this alignment was discussed at length with the PAC (and other advisory committees). All parties agreed to the need to find a more direct (diagonal) route. This diagonal alignment is viable because it avoids many environmental resources in the area (e.g., vernal pools, conservation areas). This one would remain a viable choice unless there was a good reason to eliminate it.

Denise Heick (URS) added that it was clear that the more direct alignment would go through a prospective project area. It was noted that no construction has taken place and the project hasn't been formally approved or permitted (it is currently in the pre-application process).

Bill Santucci (Placer County Board of Supervisors) asked who would make the final decision regarding the status of this particular alignment as an alternative. D. Heick responded that PCTPA, the South Placer Regional Transportation Authority (SPRTA), and the Federal Highway Authority (FHWA) ultimately make the decision. The project needs to identify the Least Environmental Damaging Practicable Alternative (LEDPA) to satisfy future permitting requirements. She noted that, therefore, the project could not make a decision to eliminate a potential alignment that may include the LEDPA solely based on a development project that hasn't been approved or permitted.

G. Garbolino asked what would happen once the final alignment choice(s) had been concluded. She wondered if the project team would send the regulatory agencies one preferred alignment or four choices. D. Heick said the objective of the Tier 1 process was to identify one final corridor for preservation. She emphasized that the project still needed more input from PAC members, as well as continued coordination with Sutter County, Placer County, and resource agencies regarding the evaluation process. The project team needed to develop a choice of potential alternatives that would be considered seriously by the resource agencies. She added that presenting choices that wouldn't stand up to agency evaluation didn't make sense strategically for the project.

Robert Weygandt (Placer County Board of Supervisors) asked Jody Jones (Caltrans) how much power agencies had in determining or changing alignments. He stressed the importance of the Parkway project staying on schedule with its activities.

J. Jones noted that resource agencies do not necessarily care about what alternatives are presented to them. For a Willits project, Caltrans was directed to an alternative that was not even being considered. She added that the agencies do care that a particular alternative meets the LEDPA standards. They are very stringent about this process. The resource

agencies are more likely to develop their own alignment variation if they are not provided a thoroughly supported array to evaluate.

T. Cosgrove asked if the resource agencies made the final decision (about the alignment) what was the point of all the evaluation and array of choices the project team developed for consideration. D. Iacofano said that the project team was displaying detailed information (for the resource agencies) upon which further analysis could proceed. D. Heick noted that the project team was working with resource agencies to head off any issues based on lack of full disclosure of information. She said the project team hoped that early agency coordination in Tier 1 would lead to a suite of corridor alternatives from which to choose a preferred alternative.

G. Garbolino asked if the resource agencies knew about the corridor alignment alternative choices developed by the project team thus far. D. Heick answered yes, these are a matter of public information.

T. Cosgrove said that the resource agencies' role strengthened his belief that the De La Salle University project should be built as soon as possible. B. Santucci agreed, saying the Placer County had invested a great deal of effort on behalf of the university project (and that should be taken into consideration even if it is not yet 'on the books').

Celia McAdam (PCTPA Executive Director) added that her experience working on the Lincoln Bypass project enlightened her about the complexities of getting agency support for projects. She noted that even with compelling evidence that a project wouldn't cause major impacts, the permitting process was grueling. C. McAdam stressed the importance of early agency coordination and involvement in the alternatives assessment process (to increase the likelihood of agency support of the final alignment alternative during Tier 2).

R. Weygandt asked if the project team had been coordinating with county planning and conservation resource agencies regarding De La Salle University. He noted that the PCTPA project's final alignment won't be identified for at least one year, and stressed the importance of the PCTPA project staying on schedule so that the university planning efforts would not be negatively impacted. D. Heick responded that there had been ongoing coordination with the county planning department and with Placer Legacy (related to various areas within its Habitat Conservation Plan area) to assist with designing alignments that separate development from conservation areas. She added that this is an ongoing process.

T. Cosgrove felt that there needed to be some policy level discussion regarding project need and purpose in light of current planning efforts (to address whether some alignments such as the 'diagonal' one adequately served the purpose and need). D. Heick noted that the wording of the P/N was being discussed with the resource agencies, but was based on the project's own goals and policies. The question of what was regarded as 'development' was in flux. The distinction is made between what is currently planned (and approved) and what is 'future' development. With regard to whether there would be a preferred alternative, the Draft Tier 1 EIS/EIR might not indicate a preferred alternative, but the team would wait until the Final Tier 1 EIS/EIR to indicate a preferred alternative (when more information and public input is available).

B. Santucci asked what the difference was between the data gathering process related to planned development, and approved projects. D. Heick reiterated that the Parkway project acknowledged both existing general planning efforts, and potential future projects, but that potential projects could not be considered as having the same status as existing projects or areas currently planned for development. C. McAdam said that project must be mindful of not assuming any future decisions related to planning efforts. She added that PCTPA (and the project) couldn't presume any decision of the Board of Supervisors on any project.

Larry Combs (Sutter County Administrative Officer) said that he didn't have any major changes in perspective. He noted that the North of Riego Road alternative might not be acceptable if it affected the opportunity for developing an interchange at SR 70/99 and Riego Road itself. B. Santucci inquired as to the reasoning behind the spacing between the North of Riego alignment and Riego Road. D. Heick said the current location was based on direction from Caltrans with

regard to safety issues (associated with less than one mile weaving distance between Sankey Road and the earlier location of the North of Riego interchange). The alignment was moved south to provide the necessary distance between a North of Riego interchange and a Sankey Road interchange, and the design concept provides for braided ramps at a future Riego/70/99 interchange. This would change how SR 70/99, the Parkway, and Riego Road relate to each other with regard to access.

T. Cosgrove stated that in many ways the alignment alternatives look very similar, with variations. He added that it was his understanding that the alignment alternatives were to provide very distinct choices. He said he didn't feel there was a problem with the number of choices, he just noted little difference between how they were configured in the study area. D. Iacofano asked if the PAC had a problem with the array of alternatives overall.

The PAC answered that they were generally satisfied with the choice of alignment alternatives.

D. Heick noted that the project team's job was to document the process used to narrow the study area, and then work to get the alternatives defined, based on eliminating those that had problems associated with them. She added that as the project moved forward the team would provide detailed explanations regarding why certain alignments were included and why others were rejected. A technical memo may be needed to document this process in detail.

D. Silva asked whether a Sunset Boulevard West - Howsley Road alignment was considered. John Long (DKS) said initially there was such a corridor. The conceptual plan established the north project boundary. He noted that the project team couldn't take a corridor alignment too far north because of vernal pool impacts and problems connecting it with SR 65. Anything that far north also greatly reduced the Parkway's traffic benefit. D. Silva added that people traveling towards Yuba City have indicted that this would be the most direct way to get to Roseville.

R. Weygandt acknowledged the rationale behind the screening and refinement process, and the necessity for agency support (for both the methodology and alignment choices). He noted the importance of the project team coordinating closely with county planning officials. D. Heick responded that the project team has been involved in ongoing coordination efforts with Placer Legacy, County planning staffs, and local developers. Lines of communication are good.

L. Combs asked what agency representatives the project team consulted with regarding the decision about an earlier proposed southern alignment into northern Sacramento County. D. Heick said that in discussions with all the advisory committees, they supported dropping this alignment, but deferred to City and County of Sacramento planning representatives. The team met jointly with representatives from both jurisdictions who concurred with dropping this potential alternative.

II.(b) Next Steps

S. Tidman reviewed the project activities needed to move forward with the alternative selection process:

- Complete Alternatives Identification
- Account for Scheduling Considerations. The Modified NEPA/404 Process is slowing the process. The project team is aware that project delay will affect Placer County's work to process the proposed university specific plans. The Project Development Team would be consulted to discuss ways to stay on schedule and to continue resource agency coordination. He also noted that an upcoming Sutter County advisory ballot measure could affect the current general plan, potentially resulting in some residential use in commercial/industrial designated areas. This may affect project roadway components, alignment configurations, and connections to SR 70/99. The project team will be meeting with Sutter County Department of Public Works representatives and developers to discuss the implications of the ballot measure.
- Begin Tier 1 EIS/EIR
- Continue Public Outreach Process

III. GOALS AND POLICY CLARIFICATIONS (ACTION ITEM)

C. McAdam reminded the meeting participants that the project team addressed the topic of goals and policy clarification at the last PAC meeting (March 2004). Direction to clarify the wording of some goals and policies was provided at this earlier PAC meeting. Most were provided to the PAC in a May 17 Staff Report and again (with one addition) in the Staff Report for this meeting. No comments were received on either version of these clarifications. C. McAdam reviewed the clarifications and asked the PAC to provide confirmation/consensus on them.

- **Goal 2: Maximize mobility and accommodate growth under existing general plans**

1. Revise the third "Potential Implementation Mechanism:"

~~Do not allow~~ Restrict access in the 7-mile segment between Fiddyment Road and Pleasant Grove Road to one potential connection to a future extension of Watt Avenue or another nearby roadway extension. ~~but study the impacts of access at a Watt Avenue extension.~~ Study the impacts of Placer Parkway with and without such a connection.

- **Goal 3: Avoid growth inducement and protect rural character of agriculturally designated areas**

1. Revise the second Policy:

Create a no-development buffer zone along Parkway. This buffer zone is to be flexible for agriculturally-designated land undergoing urban development. The buffer zone is to be based on performance standards on a case-by-case basis. The buffer zone should maximize opportunities to incorporate adjacent sensitive areas.

2. Revise the first "Potential Implementation Mechanism:"

Request State legislature to adopt Parkway as State route and have legislation restrict access (i.e., allow only one potential ~~no~~ access between Fiddyment Road and Pleasant Grove Blvd ~~except~~ at an extension of Watt Avenue or another nearby roadway extension).

3. Revise the second Potential Implementation Mechanism:

Buy agricultural/conservation easements in areas along Parkway to prevent development within the buffer zone.

T. Cosgrove asked for clarification regarding the reference to "existing general plans". D. Heick responded that "existing general plans" referred to Board of Supervisors approved plans only. C. McAdam noted that the project team was aware of the nuances regarding the various planning efforts underway in Placer and Sutter counties, and continued to work with the respective jurisdictions and various developer representatives.

D. Silva expressed a concern about local road continuity across the Parkway and how this might affect emergency services. Several project team members responded that this topic had also been noted by several stakeholders, and that the project would restore local access. This would be evaluated in detail in Tier 2.

IV. MULTIPLE CONCURRENT PLANNING PROCESSES (INFORMATION ITEM)

S. Tidman cited ten different planning or development projects in or just outside of the corridor preservation's project area. Each had different issues, processes, and schedules. Most of these reviews and their accompanying environmental work would be done before the corridor preservation's Tier 1 EIS/EIR. He said there appeared to be a lot of confusion about how the Parkway project 'fit' with these as well as how they were being coordinated among several jurisdictions. He reported that the project team continued to meet with representatives for De La Salle University and Community, Placer Ranch, and local jurisdictions including Public Works departments to sort out various land use planning issues. He noted that the project team also met with SACOG (re. its Blueprint planning process and to review their vision of the Parkway project). S. Tidman noted at that meeting the intention to follow the Parkway project's stated goals and policies (as adopted by the SPRTA and SACOG boards) and to work through environmental permitting considerations. A 'Main Street' concept with multiple access in the central segment was not compatible with Parkway goals and policies. It was acknowledged that some local plans might not mesh with the more regional perspective SACOG takes. There was agreement between the project team and SACOG that the Blueprint's land use scenario and supporting transportation policies being put forward would mirror the Parkway project's goals and policies.

S. Tidman added that the project would continue its coordination efforts, with the primary focus being the development of a reasonable range of alternatives to satisfy federal requirements.

T. Cosgrove noted that many resource agencies had a very 'linear' review process that can prove time consuming. He suggested that the project team get all the resource agencies in a room at one time work through outstanding issues. C. McAdam shared that EPA and COE were meeting with the project team in the Modified NEPA/404 process. However, U.S. Fish and Wildlife Service (USFWS) had not been responsive to invitations, attending no NEPA/404 meetings to date. C. McAdam added that it was virtually impossible to convene all parties at once to discuss issues, and that resource agencies have there own way of working through their review processes. There is no guarantee as to what an 'agreement' would mean, as agencies sometimes change their minds later.

V. CONCLUSIONS AND NEXT STEPS

D. Heick noted that this would probably be the last general PAC meeting for this year—unless the PAC indicated a need to meet again. The Tier 1 EIS/EIR process may be initiated before the next PAC meeting. She stated that the project team would remain in contact with the PAC membership through email.

Rick Dondro, Placer County Public Works, asked if FHWA and the SPRTA Board would make final corridor alignment choices. D. Heick confirmed that this was the process, with input from Sutter County, Placer County, and resource agencies. She cautioned the PAC about not prematurely eliminating an alignment based on future planning decisions, as the resource agencies were interested in identifying a LEDPA, which could traverse potential future projects.

T. Cosgrove asked everyone to remember to temper final alignment recommendations, and not be influenced by uncertain future planning decisions. Also, to be aware that issues extended beyond only the environment. B. Santucci said that if the current project focus was to evaluate the range of alternatives, he could support where the project was in that process. There is a need to take into account all the pluses and minuses in the characteristics of each alternative.

PLACER COUNTY TRANSPORTATION PLANNING AGENCY

Meeting Minutes & Action Items **Final: 05-26-06**

Meeting Description:	Placer Parkway Corridor Preservation Study – Policy Advisory Committee Meeting #4		
Meeting Date:	August 31, 2005	**Location:**	McBean Pavilion, Lincoln

Persons Attending

Name	Affiliation	Name	Affiliation
Bill Santucci	Placer County Board of Supervisors (District #1)	Jan Christofferson	Placer County Executive Officer (Ex Offico Member)
Robert Weygandt	Placer County Board of Supervisors (District #2)	Celia McAdams	PCTPA, Executive Director
Dennis Nelson	Sutter County Board of Supervisors (District #2)	Stan Tidman	PCTPA, Project Manger
Tom Cosgrove	City of Lincoln, PCTPA Board, SACOG Representative	Joanne Koegel	Koegel & Associates
Peter Hill	City of Rocklin, SPRTA Board	Denise Heick	URS, Project Manager
Gina Garbolino	City of Roseville, PCTPA Board, SPRTA Board	John Long	DKS Associates, Traffic Task Manager
Jody Jones	Caltrans, District 3 Director (Ex Offico Member)	Gary Horton	URS, Engineering Task Manager
Larry Combs	Sutter County – County Administrative Officer (Ex Offico Member)	Vikrant Sood	MIG, Public Outreach

Note: Approximately 25 to 30 people were in the audience. These included project vicinity property owners, elected officials, several Technical and Study Advisory Committee members, and Foothill Associates' staff.

1. Meeting Purpose

The purpose of the meeting was to present information to the PAC and to get input on the following topics:

- Make a recommendation to the South Placer Regional Transportation Authority (SPRTA) on the screening analysis for the two Foothill Associates' alignments, considering the Technical Advisory Committee (TAC) and Study Advisory Committee (SAC) recommendations;
- Review and comment on the draft revised second cumulative development scenario; and
- Discuss and provide feedback on the modified NEPA/404 process.

The PAC recommendation is to be presented to the SPRTA Board on September 28, 2005. Placer County Transportation Planning Agency (PCTPA) staff and consultants provided the following handouts at the

meeting (these handouts were also made available on URS Corporation's (URS) ftp site before the meeting):

- Policy Advisory Committee Staff Report – Celia McAdam, PCTPA Executive Director – August 26, 2005
- Foothill Associates Report - December 10, 2004
- Environmental Screening Data – August 18, 2005 (matrix)
- Proposed and Modified Foothill Associates corridors Shown with PCTPA Potential Corridor Alignment Alternatives – August 18, 2005 (map)
- Relative Benefits and Drawbacks of Foothill Alignments and Recommendations made by TAC and SAC
- Planned and Programmed Major Transportation Improvements and Development Projects (map)
- Draft Development Scenarios for Western Placer County EIRs (matrix)
- Purpose and Need Statement
- Screening Criteria for Selection of Range of Alternatives
- Current USEPA Proposals for Avoidance Alternatives

Celia McAdams, Executive Director, PCTPA, opened the meeting and welcomed the members to the 4th PAC meeting. She introduced Joanne Koegel, meeting facilitator, who asked for self-introductions and provided an overview of the agenda. Stan Tidman provided a brief project update. This included a review of Placer Parkway basics; project objectives; process highlights (public outreach, the four recommended 2004 corridor alignment alternatives, and SPRTA Board direction to screen the Foothill alignments), and several project challenges.

2. Foothill Associates Alignment Screening

Denise Heick, URS, introduced the Foothill Alignment screening work by outlining the background (initial Foothill report, SPRTA Board direction, data validation, and screening) and results of the Foothill Alignments screening process (GIS data and adjustments, curve radius, and Watt Ave. connections). She referred to the handouts and slides showing the 2004 recommended corridor alignment alternatives and the Foothill alignments.

A. TAC Summary & Recommendations – August 10, 2005

Ms. Heick summarized this meeting's highlights. She reviewed some TAC issues including the 4,600-foot curve radius screening standard (safety/flexibility), a potential Parkway connection with an extension of Watt Ave., and screening methodology comments. The TAC's recommendations were to:

- Eliminate Foothill Alignment Nos. 1N and 1S (north of Pleasant Grove Creek).
- Re-draw Foothill Alignment Nos. 2N and 2S (south of Pleasant Grove Creek) based on a reduced curve radius (less than 4,600 feet) that would meet a minimum design speed of 70-mph and re-screen the revised alignment.

Peter Hill, City of Rocklin, asked for an explanation of the 70-mph design speed, 4,600-foot curve radius, and why the curve radius was relaxed. Ms. Heick answered that the design speed and curve radius were engineering screening standards to ensure safety and maximum flexibility to locate a future roadway within a corridor. Garry Horton, URS, added that the 4,600-foot curve radius standard was used for all of the potential corridor alignment alternatives. P. Hill asked if the relaxed curve radius for the revised Foothill Alignment Nos. 2a and 2b met the required 70 mph design speed. D. Heick responded yes – it did. Ken Whitney (Foothill Associates) asked if 70 mph was the minimum design speed. Ms. Heick responded that it was.

B. SAC Summary & Recommendations August 25, 2005

Ms. Heick summarized this meeting's highlights and the its recommendations:

- Eliminate Foothill Alignment Nos. 1N and 1S.
- Carry forward the revised Foothill Alignment Nos. 2a and 2b (reduced curve radius – meeting 70 mph design speed) with SR 70/99 connections at Sankey Rd and north of Riego Rd., respectively.

C. Overview of Benefits/Drawbacks – As Agreed to by TAC & Modified by SAC

Ms. Heick reviewed TAC/SAC conclusions, via the screening work, as benefits and drawbacks for each Foothill Alignment. She indicated that Foothill Alignments were compared with similar 2004 corridor alternatives:

- Foothill Alignments #1N and 1S were compared with 2004 corridor alternative #4 (yellow).
- Foothill Alignment #2S was compared with 2004 corridor alternative #3 (blue)
- Foothill Alignment #2N was compared with 2004 Corridor alternative #4 (yellow)

Foothill Alignment -- 1N

Relative Benefits:
- Giant Garter Snake
- Valley Elderberry Longhorn Beetle
- FEMA 500 yr. Floodplain
- Farmlands of Statewide Importance

Drawbacks:
- Aquatic Resources**
- Riparian Habitat
- Farms/Homes
- PCCP Conservation Opportunity Area: Significant Agency Opposition
- Reduced Traffic Benefits: Location would draw fewer users from local roadways; no connection to a potential Watt/Blue Oaks interchange

Foothill Alignment – 1S

Relative Benefits:
- Upland Wildlife Habitat
- Swainson's Hawk Nesting Habitat
- Valley Elderberry Longhorn Beetle
- Farmlands of Statewide Importance

Drawbacks:
- Aquatic Resources**
- Waterfowl, Riparian Habitat
- Farms/Homes
- Prime Farmland
- PCCP Conservation Opportunity Area: Significant Agency Opposition
- Reduced Traffic Benefits: Location would draw fewer users from local roadways; no connection to a potential Watt/Blue Oaks interchange

** Emphasis was placed on aquatic resources due to permitting concerns.

Ms. Heick re-stated each benefit and drawback for both of these alignments. Bill Santucci, Placer County Board of Supervisors, asked about SR 70/99 connections. Ms. Heick indicated these alignments had connections at Sankey Rd. (1N) and north of Riego Rd. (1S).

For both of these alignments, she emphasized resource agency concerns (U.S. Fish & Wildlife Service, U.S. Environmental Protection Agency, and California Dept. of Fish and Game) regarding the location north of Pleasant Grove Creek, substantial aquatic resources impacts, and reduced traffic benefits because of the northern location, fewer users, and problems with a potential Watt Ave. connection.

Foothill Alignment – 2S

Relative Benefits:
- Upland Wildlife Habitat
- Valley Elderberry Longhorn Beetle
- Farmlands of Statewide Importance
- Vernal Pool Critical Habitat**
- Connection to future Watt Ave. extension

Drawbacks:
- Vernal Pool Complexes**
- Waterfowl, Riparian Habitat
- Reduced Flexibility within Corridor Curve Radius

**Emphasis was placed on aquatic resources due to permitting concerns.

Ms. Heick indicated that these alignments could benefit a potential Watt Ave. connection. She said the vernal pool critical habitat designation in the area was removed by the U.S. Fish and Wildlife Service recently. However, the screening variable was retained for the Foothill alignment's screening to be consistent with the earlier screening process. She emphasized that there would be more vernal pool impacts for this alignment. Also, that there would be somewhat reduced flexibility with the reduced curve radius – but it would meet the 70 mph design speed.

Foothill Alignment – 2N

Relative Benefits:
- Upland Wildlife Habitat
- Valley Elderberry Longhorn Beetle
- Swainson's Hawk Nesting Habitat
- Farmlands of Statewide Importance
- Vernal Pool Critical Habitat**
- FEMA 500-year Floodplain
- Connection to future Watt Ave. extension
- Prime Farmland

Drawbacks:
- Vernal Pool Complexes**
- Waterfowl, Riparian Habitat
- Reduced Flexibility within Corridor Curve Radius

The benefits and drawbacks were similar to the ones listed for Foothill Alignment No. 2S.

Gina Garbolino from the City of Roseville inquired about the distance between the Sankey connection and the Riego Road interchange. Ms. Heick informed the PAC that the approximate distance between the two interchanges is 2 miles. Ms. McAdams informed the PAC that while the SAC voted to include Foothill Alignment Nos. 2N and 2S, there were 3 dissenting votes for eliminating both alternatives from the analysis and 2 votes to only include Foothill Alignment No. 2N in the analysis.

Bill Santucci from the Placer County Board of Supervisors inquired why some SAC members wanted to eliminate Foothill Alignment No. 2. Ms. Heick explained that the representative from the Agricultural Commission cited impacts on agricultural resources and the representative from the Sierra Club cited impacts to vernal pool complexes as the rationale for their decision.

Jody Jones from Caltrans District 4 pointed out that the data suggests that the alignment benefits farmlands. Ms. Heick clarified that while the data refers to farmland mapping information, the SAC member was referring to actual conditions on the ground.

Tom Cosgrove from the City of Lincoln inquired whether there was sufficient difference between Foothill Alignment No. 2 and the corridor alternative No. 4 (yellow) to justify studying both alignments. Ms. Heick stated that there was some difference between the two and that there was no fatal flaw in either alternative.

D. Public Comment

Ms. Koegel invited public comment before the PAC made a decision. In total, five members of the public provided oral comments at the PAC meeting.

Eric Hansen: Mr. Hansen informed the PAC that his family has owned an organic farm for 70 years that would be impacted by the alternatives near Pleasant Grove Rd. He said that while the State did not classify this land as good farmland, the alternative would destroy a productive operation.

Peter Hill from the City of Rocklin clarified to Mr. Hansen that the PAC is not making recommendations on alternative alignments at this meeting. It is only deciding which alignments to study further. Ms. Garbolino said that all public comments would become part of the official record.

Gaynell Gleason: Ms. Gleason informed the PAC that she owns a cattle ranch south of Sunset Boulevard West. She also indicated there are 200 homes in Amoruso Acres, to the north across Sunset Boulevard West. She pointed out that the Foothill Alignment No. 1 would impact all these properties. If the Parkway followed this alignment along Sunset Boulevard West, it would eliminate approximately 60% of these homes and farm operations. Ms. Gleason informed the PAC that she is against the alignment. She also pointed out that the analysis of these two additional alignments raised a conflict of interest since developers are funding the study. Ms. Gleason questioned why the alignment corridors are 1,000-feet wide. She also inquired why they could not be shifted to Phillips Road that did not have productive farmland around it. She said the right-of-way would be along the retention basin and would not have to take more land. Bill Santucci asked if the Yellow Alternative interfered with ranch operations. Ms. Gleason replied – no. Ms. Gleason agreed with TAC and SAC recommendations to eliminate Foothill Alignment Nos.1N and 1S.

Deborah Waterbury: Ms. Waterbury informed that PAC that she owns a 400-acre organic farm, south of Sunset Boulevard West and east of Locust that would be bisected by the Foothill Alignment Nos.1S and 1S. Ms. Waterbury agreed with Ms. Gleason about shifting the alignments to Phillips Road. Ms. Waterbury agreed with TAC and SAC recommendations to eliminate Foothill Alignment Nos. 1N and 1S.

Joel Neves: Mr. Neves agreed with TAC and SAC recommendations to eliminate the Foothill Alignment Nos. 1N and 1S. The alignment would impact his parcel in Amoroso Acres. Mr. Neves asked why the alignments could not be shifted to the south away from Amoroso Acres. Ms. Heick clarified that the alignments, as currently designed, minimize impacts on vernal pool complexes in the area.

George Carpenter: Mr. Carpenter introduced himself as the project manager for the proposed 7,500-acre South Sutter County Specific Plan. He pointed out that a recent study session, the Sutter County Board of Supervisors indicated their preference for a SR 70/99 connection at Sankey Road. This connection is assumed in the proposed specific plan. Mr. Carpenter asked the PAC to eliminate the north of Riego connection and not advance the southerly alignments for further analysis.

Mr. Tidman clarified that PCTPA is in communication with Sutter County staff for Parkway and specific plan coordination. He mentioned a November 2004 study session with the Board that outlined the two potential SR 70/99 connections (north of Riego and at Sankey). At that meeting, the Board indicated its preference for the Sankey Rd. connection and recognized the need to study more than one SR 70/99 connection.

Dennis Nelson, Sutter County Board of Supervisors, referred to the County's study session the previous night. He re-iterated that the Sutter County Board preferred the Sankey Road connection and would like to see both Foothill Alternative Nos. 1S and 2S eliminated. He said the plan for the proposed specific plan showed development over the area adjacent to the north of Riego connection. Ms. Heick said no decision had been made on the specific plan – it is still in process. She clarified that, at this point, elimination of alternatives can only happen through the screening process. Joanne Koegel asked Mr. Nelson if he had an objection. He said that he had no concern with the process – he could not stop it. He said he was opposed to all of the connections to the south.

Tom Cosgrove from the City of Lincoln said he appreciated Sutter County's position. He cited the Lincoln By-pass (SR 65) example. This environmental work was studied for 10 years. Because of this time, he said some of the options for various alignments were precluded by new development. The federal resource agencies did not agree that those alignments were precluded. They do not consider impacts on newly developed land. At one point, the alternative through the developed parts of the City was determined to be the least environmentally damaging practicable alternative (LEDPA) even though it was already built up.

E. PAC Recommendations

Joanne Koegel then asked for PAC comments and recommendations. She asked the PAC to start with Foothill Alignment Nos. 1N and 1S. Dennis Nelson indicated he only favored the alignment with the Sankey Rd. connection. There was general discussion. The PAC recommended taking out Foothill Alignment #1N and 1S, with Dennis Nelson indicating he did not want 1N eliminated.

A member of the public inquired whether there was a possibility of the Foothill Alignment Nos. 1N and 1S coming back into the environmental analysis later. Ms. McAdam clarified that after the SPRTA Board agrees to eliminate the alternative, the likelihood of that alternative coming back into the analysis is low. However, she added that PCTPA had to work with the federal resource agencies on alternatives – so it would be hard to predict the outcome of that process.

The PAC then discussed Foothill Alignment Nos. 2N and 2S. There was agreement to recommend Foothill Alignment No. 2N (Sankey Rd. connection) as an alternative.

Foothill Alignment No. 2S involved more discussion. Mr. Hill pointed out that he understood the concerns of Sutter County. But, he preferred keeping No. 2S in the range of alternatives since it would make the environmental analysis more robust. It would not limit the parameters of the study. Ms. Garbolino agreed. She pointed out that a large part of alignment 2S is already being studied via alternatives with SR 70/99 connection north of Riego Rd. The PAC agreed to recommend to the SPRTA Board that Foothill Alignment #2S be eliminated based on a split vote
Mr. Hill summarized the PAC recommendation to the SPRTA Board. The range of alternatives would include the original (2004) four corridor alternatives, and Foothill Alignment No. 2N. Ms. Heick reminded the PAC that the final range of alternatives would also include the avoidance alternatives that are being developed in coordination with the USEPA. Ms. McAdams informed the PAC that a final map of the range of alternatives will be distributed for information after the SPRTA Board meeting on September 28, 2005.

3. Draft Revised Second Cumulative Development Scenario

John Long, DKS Associates (DKS), a revised second cumulative development scenario (CDS) is being developed for the study area to evaluate cumulative impacts of the proposed project in the environmental document. He said that staff and consultants are looking at two sources of information for the second CDS. The first source is the Sacramento Area Council of Government's (SACOG) Blueprint Project that has a planning horizon of 2050. In October 2004, the TAC agreed to use 80% of the 2000 to 2050 growth in the Blueprint as a way to arrive at 2040 growth projections outside of the immediate study area, plus residential buildout (and a corresponding amount of non-residential build-out) for the projects identified by the TAC in the more immediate study area. Since that time, Placer County, Lincoln, Roseville, and Rocklin and consultants have been separately working to define a cumulative development scenario for western Placer County. This scenario would be used to evaluate a number of specific plan EIRs and Lincoln's general plan update.

Mr. Long informed the SAC that a comparison of development levels under SACOG's 2050 Blueprint and second CDS suggests that there is little difference in aggregate numbers at the county level, but that there is a difference in how the development is distributed. The total development in the cities under the County's CDS is close to those in the 2050 Blueprint. Mr. Long concluded that the draft Placer County CDS numbers will not change much and seemed reasonable to use.

Mr. Long said the TAC and SAC recommendations were that the proposed CDS was reasonable. Mr. Cosgrove pointed out that build-out could happen sooner than 2040 and these trends should be tracked to make a stronger case for the Placer Parkway. Ms. Koegel asked for PAC direction. The PAC agreed with the TAC and SAC recommendation to use the revised CDS.

4. Federal Resource Agency Coordination

Mr. Tidman summarized the progress on the modified NEPA/404 process with the federal resource agencies. The objective of this work was to address as many aquatic resource issues as possible during the Tier 1 EIS/EIR rather than wait until the Tier 2 design and construction phase. He said agreement was reached on the Purpose and Need Statement and the Screening Criteria for the Range of Alternatives.

Work is underway to identify the range of reasonable alternatives. This work was focusing on 'avoidance' alternatives proposed by the U.S. Environmental Protection Agency (USEPA). Concepts being discussed are a Shorter Parkway & Transportation System Management (TSM) and an Expanded Corridor Buffer to protect vicinity resources. The group agreed that a USEPA idea to analyze more intensive land uses

along Baseline Rd. along with greater TSM would be discussed in the Tier 1 EIS/EIR – not as a separate alternative.

Mr. Tidman added that the resource agencies agreed that the four (2004) recommended corridor alignment alternatives were appropriate to include in the range of alternatives for Tier 1 EIS/EIR analysis.

Ms. Garbolino inquired whether the avoidance alternatives would be included in the analysis and what would happen if the USEPA/Corps of Engineers alternative was not chosen as the final alternative. Mr. Tidman confirmed that these 'avoidance' alternatives would be considered equal to all other alternatives in the environmental analysis. Ms. McAdam clarified that if the EPA does not consider the final alternative as the least environmentally damaging practicable alternative (LEDPA), they will deny permits. Therefore PCTPA needs to work with USEPA and the Corps closely on choosing the final alternative.

Ms. Heick clarified that while the avoidance alternatives will be studied in the Tier 1 EIS/EIR, they still need to meet the project's Purpose and Need. Mr. Cosgrove cautioned the staff and consultants to make sure that the avoidance alternatives that get added to the range of alternatives are feasible alternatives. Mr. Cosgrove also raised the concern that federal resource agencies might consider an alternative that goes through urban areas as the LEDPA alternative. Jody Jones reinforced these comments. She said that each alternative carried forwarded into the EIS/EIR should be considered carefully because any one of them could result in the selected corridor. She urged the project team not to carry forward any alternatives that did not meet Purpose and Need.

Mr. Cosgrove asked the staff and consultants to resolve these issues early to avoid LEDPA related issues later in the process, like with the Lincoln Bypass project.

5. Next Steps

Mr. Tidman listed the following 'next steps' for the project: and closed the meeting:

- Request approval from the SPRTA Board on the alternatives to be studied in the Tier-1 EIS/EIR, at the September 28, 2005, board meeting.
- Continue to work with the resource agencies to refine avoidance alternative concepts.
- Re-initiate the technical studies.
- Schedule Project Development Team meetings to share information and updates.

Appendix C
Project Development Team (PDT) Meeting Summaries

SUMMARY OF PROJECT DEVELOPMENT TEAM MEETINGS

PDT MEETING #1 – September 23, 2003

Meeting participants included representatives from FHWA, Caltrans, Sutter County, PCTPA, URS Corporation, and DKS Associates. Agenda items included:

Lead/Cooperating Agency Status
Resource Agency Coordination
Type of Environmental Impact Report
Travel Demand Forecast Model
Data Collection and Mapping
FHWA/Caltrans Guidance
Alternatives Screening
Purpose and Need

Key decisions included:

- Confirmed FHWA as federal (NEPA) lead agency; Caltrans would not be a Co-Lead Agency or Responsible Agency.

- Caltrans memorandum of March 28, 2003 indicates simultaneous Caltrans HQ and legal review of the Draft EIS/EIR. Caltrans will be responsible for NEPA review for FHWA, endeavoring to process a clean document. It is then passed on to FHWA for review and approval of release.

- Sutter County expressed interest in being a CEQA Co-Lead Agency with SPRTA. A draft joint agreement between SPRTA and Sutter County was being reviewed.

- Positive feedback was provided regarding development of a modified NEPA/404 process with the U.S. Army Corps of Engineers (COE) and other federal agencies. The need for early consultation with federal and state resource agencies was stressed.

- The project team would coordinate with Lincoln and Rocklin TAC/SAC members, Pleasant Grove School principal, and others about any additional groups to include in the public outreach process.

- The EIR would be a "Program" EIR rather than a "Master" EIR.

- The project study area was expanded to include Baseline/Riego Roads.

PDT MEETING #2 – November 24, 2003

Meeting participants included representatives from FHWA, Caltrans, Sutter County, PCTPA, URS Corporation, DKS Associates, and Mara Feeney & Associates. Agenda items included:

Items from September 23, 2003 Meeting: Caltrans document review process and signatory input; Update on Sutter County CEQA co-lead agency status; Update on Resources Agency consultation; Status of Sunset Boulevard PSR re: Placer Parkway; Inclusion of other groups in Advisory Committee process; Additional input re: Master EIR, Tier 1 guidance, and scope of technical studies.

Purpose and Need

PSR Alternatives Screening: Transportation Model results; Environmental screening results; Schedule for draft report.

Key decisions included:

- Additional followup needed re: FEMA grant programs involving levee improvements, which could prohibit new floodplain impediments on fill; inquiries to date have not identified such a program.
- Decision to move ahead with a modified NEPA/404 process; determined that it would likely cause some delay in the overall project schedule but would be beneficial to the project in the long term.
- Caltrans and the consultant team will meet in early 2004 to obtain general agreement on the scope and content of technical work supporting the Tier 1 EIS/EIR.
- Caltrans to obtain internal feedback on future plans for widening SF 70/99

PDT MEETING #3 – January 30, 2004

Meeting participants included representatives from FHWA, Caltrans, Sutter County, PCTPA, URS Corporation, DKS Associates, and Mara Feeney & Associates. Agenda items included:

Carry-Over Items from Previous PDT Meetings: Co-Lead Agency status; Consultation/coordination update; State highway system effects and direction; Port of Sacramento origin/destination data

Purpose and Need

TAC #5 Meeting Input re: Adjustments to PSR Alternatives; Goals and Policy Issues

Next Steps for Corridor Alternatives Identification

Key decisions included:

- Confirmed that Caltrans will not be a signatory to the Tier 1 EIS/EIR.
- No record of FEMA funding could be found for areas within the study area; this topic was retired with the caveat that the project team continues to be aware of the concern in later project phases.
- Include EPA in notices for PDT meeting agendas and meeting summaries.
- The traffic report will include some origin/destination information; the select link analysis should include "with" and "without" Watt Avenue scenarios.
- The Technical Memorandum would include more information on effects to SR 65 and SR 70/99
- S. Propst and D. Azevedo (Caltrans) would meet with Caltrans staff to identify/recommend SR 70/99 improvements for the next MTP update.
- Revised internal draft of Purpose and Need Statement approved for sending to EPA.

- Based on review of TAC comments on Technical Memorandum, there was no PDT action identified except:

  – Potential Modification #1 re: rerouting central and southern PSR alignments to the north to avoid vernal pools and proposed West Roseville Specific Plan Area - Placer Parkway/Fiddyment Boulevard interchange creates a conflict with local roads. Placer County has indicated that there were three choices to solve this problem: (1) relocate Fiddyment Road (not preferred by Placer County); (2) leave Fiddyment as is (preferred by Placer County, or (3) realign other local roads to reduce the roadway's geometric problem. Project team to meet with Placer County staff to discuss.

  – Project team to consider developing a process to identify mitigation land and an early acquisition process.

  – Project team to get more information on and address the Sutter County suggestion to consider a more northerly corridor alignment – north of Sunset Boulevard West/Howsley Road.

  – Project team to contact Caltrans project manager of I-5/Arena Boulevard interchange for background of that project.

- Confirmed that TAC's no-development buffer would be flexible, especially for areas where potential urban development is being considered.

PDT MEETING #4 – March 11, 2004

Meeting participants included representatives from FHWA, Caltrans, Sutter County, PCTPA, URS Corporation, DKS Associates, and Mara Feeney & Associates. Agenda items included:

Carry-Over Items from Previous PDT Meetings: Co-lead agency status; Consultation/ coordination update; Port of Sacramento origin/destination study; Redrafted Purpose and Need Statement

Changes to Corridor Alignment Alternatives: Review status of alignments; Parkway/Fiddyment/ Sunset alignment; Parkway/Whitney/SR 65 Interchange; SR 70/99 Interchange; Process to identify mitigation land and an early acquisition process; Sutter County issues regarding relieving traffic from Marysville/Plumas Lakes area; Growth inducement issues

Goals/Policy Issues and Input: "No Access"; "No-Development Buffer"; Watt Avenue connection

Right of Entry Letters.

Key decisions included:

- Confirmed SPRTA would be sole CEQA lead agency; Sutter County would be responsible agency.

- S. Propst (Caltrans) met with Sutter County staff, and reported that a more northerly Parkway alignment would not meet the project's Purpose and Need.

- Agreed to study the geometrics and environmental impacts of shifting the Parkway farther onto the proposed Placer Ranch Specific Plan area.

- Placer Parkway project should show ultimate right-of-way required at Parkway/Whitney Boulevard interchange, and coordinate with Rocklin and the County.

- Plan for the largest interchanges with SR 70/99 and through local roads.

- Continue efforts to move forward with early mitigation acquisition strategy.

- Include information regarding new growth areas in the Marysville/Plumas Lakes areas in the traffic report.

- S. Propst reported that wherever the Parkway connects to SR 70/99, six traffic lanes would most likely be needed from that point south to I-5.

- Include definition of growth inducement in Technical Memorandum.

- The right-of-entry letter task was deleted from the work program as not required.

PDT MEETING #5 – April 27, 2004

Meeting participants included representatives from FHWA, Caltrans, Sutter County, PCTPA, URS Corporation, DKS Associates, and Mara Feeney & Associates. Agenda items included:

Carry-Over Items from Previous PDT Meetings: Consultation/coordination update; Port of Sacramento origin/destination data; Regional aboveground water storage facility; Identification of mitigation land and an early acquisition process; Traffic information re: SR 70/99 needed by Caltrans; Plumas Lakes EIR traffic information; Definition of growth inducement; Analysis of water-ski park

U.S. Army COE/EPA Modified NEPA/404 Process

Interchange Geometrics

Transportation Systems Management (TSM) Alternative

Corridor Alignment Alternatives

Key decisions included:

- Agreed to definition of growth inducement prepared by M. Feeney (Mara Feeney & Associates), to be added to the Technical Memorandum

- Agreed to accept the Modified NEPA/404 proposal as drafted by EPA, and that the discussion at the NEPA/404 meeting on April 12, 2004 clarifying the proposal would be recorded as a mutually agreed meeting summary, which would be part of the implementing guidance.

- Based on Caltrans HQ geometricians, preliminary concept drawings of the Parkway interchanges with the state routes were prepared. The interchange with SR 70/99 must be a high-speed connection. To accomplish this and provide a more direct route in Sutter

County, a new location for an interchange with SR 70/99 was identified; there would be no direct connection from Riego Road to Placer Parkway

- Sutter County indicated that they wanted two interchanges in Sutter County in addition to the Placer Parkway/SR 70/99 interchange.

- A new concept was identified for the Placer Parkway/SR 65 interchange. This would be a combined freeway-to-freeway connection for the southbound connections to SR 65, and a local interchange connection for the northbound connections to SR 65. It includes braided ramps to avoid conflicts with SR 65. It was agreed that this concept needed more discussion with Caltrans HQ before taking a final concept to Placer County and the City of Rocklin for discussion.

- J. Long (DKS) to develop traditional TSM alternative and additional alternative scenario based on improving existing roadways, and adding other components such as transit, for review.

PDT MEETING #6 – June 7, 2004

Meeting participants included representatives from FHWA, Caltrans, Sutter County, PCTPA, URS Corporation, DKS Associates, and Mara Feeney & Associates. Agenda items included:

Carry-Over Items from Previous PDT Meetings: Consultation and coordination update; Interchange geometrics; Port of Sacramento origin/destination study

U.S. Army COE/EPA – Modified NEPA/404 Process

TAC/SAC Feedback on Corridor Alternatives

Land Use Assumptions for Future Analysis

TSM Alternative

Key decisions included:

- In response to SAC input, the project team agreed to prepare potential interchange options for SR 70/99 at/near Riego Road prior to August 2004 public meetings.

- The project team will meet with Placer County and SACOG to ensure the project's goals are clear and that economic growth assumptions are consistent between the Parkway and the Blueprint process.

- The project team will meet with Placer County staff regarding alternatives crossing the proposed Regional University and Community Plan and agricultural impacts associated with corridor alignment alternatives.

- There was general discussion regarding the need to update the land use forecasts used in the traffic study, but no conclusions.

- Draft TSM Alternative information was provided to the group, who suggested various additional improvements, including six lanes on SR 65. The numbers were to be rerun. It was noted that future land use in the region remains a major issue; it will be important to sort out what are reasonable assumptions for the travel demand modeling based on the

RTP, the MTP, and Department of Finance assumptions and numbers. Coordination with SACOG was suggested.

PDT MEETING #7 – July 6, 2004

Meeting participants included representatives from Caltrans, Sutter County, PCTPA, URS Corporation, DKS Associates, and Mara Feeney & Associates. Agenda items included:

Carry-Over Items from Previous PDT Meetings: Consultation and coordination
Report on U.S. Army COE/EPA – Modified NEPA/404 Meeting
Status of South Sutter County Specific Plan
Status of State Route Interchanges with Placer Parkway
Public Meetings

Key decisions included:

- All Parkway traffic modeling needs to be based on SACOG's MTP. Cumulative traffic modeling will be based on 2040 projections; Placer County has engaged a consultant to develop its own projections.

PDT MEETING #8 – September 21, 2004

Meeting participants included representatives from FHWA, Caltrans, Sutter County, PCTPA, URS Corporation, DKS Associates, and Mara Feeney & Associates. Agenda items included:

Carry-Over Items from Previous PDT Meetings: Consultation/Coordination update; South Sutter Plans and Ballot Initiative; State route interchanges with Placer Parkway; Watt Avenue interchange locations for Tier 1 EIS/EIR analysis

Update on U.S. Army COE/EPA – Modified NEPA/404 Meeting

Report on Policy Advisory Committee Meeting – September 14, 2004

Moving Forward to Tier 1 EIS/EIR: Cost and schedule risk; Items needing input from TAC/SAC; Project description, Coordination with Caltrans and FHWA

Report on Public Meetings 2004

Key decisions included:

- The project team provided comments on a revised Purpose and Need statement, with direction to forward to EPA.

- In response to concerns that the "diagonal" alignment alternative would impact the proposed Regional University Specific Plan, FHWA advised that if it were viable, it should be left in the analysis.

- Input from the TAC and the SAC is required regarding the interchange concepts, the recommended Watt Avenue interchanges to be studied in the Tier 1 EIS/EIR, and the expanded TSM scenario, a revised transportation scenario, and generic roadway cross sections prepared for environmental analysis.

PDT MEETING #9 – November 17, 2004

Meeting participants included representatives from FHWA, Caltrans, Sutter County, PCTPA, URS Corporation, DKS Associates, and Mara Feeney & Associates. Agenda items included:

Carry-Over Items: Consultation/Coordination update; South Sutter County Plans/Initiative; Caltrans/URS team meeting re: technical reports; TAC Meeting #7

Update on U.S. Army COE/EPA – Modified NEPA/404 Process

Mitigation Strategy Planning

Projections for Travel Forecast Modeling

Project Description Items: Country Acres residential impacts; Interchange concepts; Typical roadway cross sections; Visual aspects; Operations and maintenance; SPRTA Board meeting December 1, 2004

Key decisions included:

- Detailed maps should not be produced during the Tier 1 process as it makes it appear that the Parkway alignments are already determined.
- If MEPLAN is used to assess future development and mitigation lands, EPA approval of this methodology should be obtained.
- The project description should generally identify in a conceptual way what is expected regarding buffer zones and median – landscaping, planting, etc.
- The potential corridor alignment alternatives will be taken to the next SPRTA Board meeting, while noting that they could be altered by the Modified NEPA/404 process.

PDT MEETING #10 – November 14, 2005

Meeting participants included representatives from FHWA, Caltrans, Sutter County, Placer County, the City of Roseville, PCTPA, URS Corporation, and DKS Associates. Agenda items included:

Project Update and Schedule: Addition of a fifth build alternative; Update on U.S. Army COE/ EPA – Modified NEPA/404 process; Initiation of technical studies; Travel forecast model

Project Description Items: Interchange concepts; Sankey Road relocation; Sunset Boulevard West relocation; Typical roadway cross sections; Fire/emergency access; Visual aspects; Operations and maintenance

Other Items: Coordination with New Development Projects; Toll Road Study; Mitigation Strategy; Standard Day/Time for Future Meetings

Key decisions included:

- The project team would find out more about MEPLAN and its potential use to measure growth inducement concerns and report back at the next meeting.
- P. McAchren (Caltrans) will check with Caltrans HQ regarding toxic air contaminants guidance.

- Because $PM_{2.5}$ guidance was expected from EPA in April 2006, this would need to be evaluated in the Parkway's environmental document.

- John Long (DKS) to attend meeting with local jurisdictions regarding cumulative scenarios, and then develop a draft cumulative roadway network for Placer County review.

- Placer County representative T. Brinkman indicated concurrence with the relocation of Sunset Boulevard West to allow access to Fiddyment Road once the Parkway/Fiddyment interchange was constructed.

- Advised Placer County to address the inconsistency between the Parkway corridor width in the vicinity of the Placer Ranch Specific Plan and the Placer Ranch applicant's proposal for an approximately 200-foot right-of-way.

- Work with Caltrans landscape architects to develop a landscaping plan that would not create prime habitat, and would allow for good aesthetics, drainage, safety, and ease of maintenance.

- Disclose information regarding the Toll Road Feasibility Study in the Tier 1 EIS/EIR.

PDT MEETING #11 – January 19, 2006

Meeting participants included representatives from FHWA, Caltrans, Placer County, the City of Roseville, City of Lincoln, PCTPA, SACOG (by phone for MEPLAN item), URS Corporation, and DKS Associates (by phone for MEPLAN item). Agenda items included:

Use of MEPLAN for Growth Inducement Analysis

Carry-Over Items: Travel forecast model – roadway assumptions; Sankey Road realignment – Sutter County input; Landscaping concepts for project description; Placer Ranch Specific Plan roadway; Air toxics

SPRTA PCCP Participation

Logical Termini

Key decisions included:

- MEPLAN was approved for use in developing the growth inducement analysis, if the project team can use the version of the model used by the Blueprint project, and customize it as necessary for the project's purposes. The process would be initiated, and FHWA will contact our NEPA/404 partners to present this approach and receive their feedback.

- The revised 2040 traffic forecast model will use the revised scenario being used for Placer Vineyard, with minor tweaks as suggested by Placer County.

- A. Sawyer (Sutter County) confirmed (by e-mail) that Sutter County is agreeable to the five corridor alignment alternatives, including the realignment of Sankey Road that extends over SR 70/99.

- G. Horton (URS) to check on whether auxiliary lanes would be required from the Placer Parkway/SR 65 interchange at Whitney Boulevard to the SR 65/Twelve Bridges interchange.

- Draft landscaping concepts presented to the PDT were approved.

- Placer County is asking that the proposed Placer Ranch project construct a four-lane roadway to serve their project, from SR 65 to Fiddyment Boulevard, and to reserve right-of-way for a Placer Parkway as indicated on the Parkway's alternatives map. They will evaluate an interchange at SR 65 at a project level based on the existing PSR for the eastern portion of that interchange, and evaluate the western part (including ramps and needed auxiliary lanes) at a program level based on the Placer Parkway alternatives map. The areas of impact are to be identified by G. Horton. Placer Ranch has been asked to do their best to ensure that the lanes are not "throw-away" lanes. In the event Placer Parkway is approved and constructed, Placer County would like to have done their best effort that the road would likely be within a future Parkway LEDPA alignment. It was emphasized that the Placer Ranch roadway is needed for their project, and it has independent utility without a Parkway, but that Placer County was taking account of the current Parkway planning process and wanted to be as efficient as possible.

- Include a qualitative discussion of potential toxic impacts by examining distances between the alignments and the closest sensitive receptors. Those distances will be compared with the buffers recommended in California Air Resources Board's "Air Quality and Land Use Handbook: A Community Health Perspective" dated April 2005.

- Include $PM_{2.5}$ in the scope of the Air Quality Technical Report.

- Reaffirmed that the logical termini are at the interchanges of the Parkway with the state routes, including needed ramps and auxiliary lanes.

PDT MEETING #12 – February 16, 2006

Meeting participants included representatives from FHWA, Caltrans, Sutter County, Placer County, the Cities of Roseville and Rocklin, PCTPA, URS Corporation, DKS Associates, and Mara Feeney & Associates. Agenda items included:

Carry-Over Items: Auxiliary lane north on SR 65, Air quality memo approval; South Sutter County local roadway assumptions

MEPLAN Meeting with SACOG – February 15, 2006

Modified NEPA/404 Process

Potential for Use of Context Sensitive Solutions (CSS)

Status of Technical Studies

Funding Deadline

Key decisions included:

- G. Horton (URS) reported that auxiliary lanes would be required between the Placer Parkway/SR 65 interchange at Whitney Boulevard and the SR 65/Twelve Bridges

interchange. The improvements were likely to be a pat of the SR 65/Twelve Bridges project. S. Propst (Caltrans) agreed unless SR 65 traffic generated by the Parkway greatly increased.

- In response to questions from the City of Rocklin, and several developers who have asked for information regarding the right-of-way requirements at SR/65 and Whitney Boulevard, G. Horton will provide an updated interchange concept drawing with a tentative "exclusion zone" (for parking areas and building setbacks) to be used for planning purposes. This drawing will be forwarded to L. Wing (City of Rocklin).

- It was reported that J. Gil (Caltrans) approved the scope of work for the Air Quality Technical Report, as amended by URS to include the approach to air toxic contaminants.

- Due to the lack of information regarding projected local roadway connections in Sutter County, J. Long (DKS) will develop reasonable assumptions, and proceed to use them in analyses with appropriate qualifications.

- After a report on the MEPLAN meeting with SACOG on February 15, 2006, the PDT directed that:

  – A "purpose/need" statement will be prepared to outline why MEPLAN is being used. It will include background that growth inducement is a very controversial environmental issue, and that there is no standard way to measure it. Because growth inducement discussions are typically qualitative, they are considered subjective. The use of MEPLAN would add a quantitative layer, which has been vetted by SACOG and local interests and is widely accepted as reasonable. In addition, EPA seems to be comfortable with its use. The use of MEPLAN will strengthen the Tier 1 growth inducement discussion via model output.

  – It is likely that the traffic model in MEPLAN would not produce results identical to the Transportation/Traffic Study that is being undertaken by J. Long for this project, as his model is more detailed and includes updated assumptions. MEPLAN's traffic model assumptions will be evaluated to be sure there are no significant differences on a regional level. This will be explained in the write-up of the process. The MEPLAN modeling exercise will focus on growth inducement, not traffic. Traffic will be addressed comprehensively in a separate technical report.

  – The work will be presented in a "stand-alone" technical report or in an appendix to the growth inducement discussion.

  – Initially, only the land use differences between the northern (#5) and southern (#1) corridor alternatives will be analyzed. This assumes that any growth inducement differences would be bracketed. However, if significant changes result between the two alternative corridors, then the middle ones would be analyzed.

- Direction was provided to include "Eco-Logical" concepts.

- Several steps were agreed upon regarding incorporating Context Sensitive Solutions: including a description in the Tier 1 EIS/EIR's project description, prepare a SPRTA Board memo describing this concept in the context of Placer Parkway, S. Propst will circulate information on a U.C. Berkeley-sponsored Caltrans workshop on CSS in March.

- S. Propst will check on funding deadline and use of any remaining funds.

PDT MEETING #13 – March 16, 2006

Meeting participants included representatives from Caltrans, Placer County, PCTPA, URS Corporation, DKS Associates, and Mara Feeney & Associates. Agenda items included:

Carry-Over Items from Previous PDT Meetings: MEPLAN Coordination with SACOG; Context Sensitive Solutions; Funding extension for Parkway Tier 1 EIS/EIR

Modified NEPA/404 Process

Technical Studies – Cultural Resources Update

Analysis Scenarios

Key decisions included:

- Confirmed that funding for this phase of the Tier 1 EIS/EIR could not be extended beyond February 2007.

- Direction was received from Caltrans to identify historic architectural direct impacts only under Criterion C, and to proceed with cultural resources investigations without SHPO concurrence on approach and methodology. SHPO will not be the approving agency during Tier 1.

- It was agreed that opening day conditions will be analyzed for 2020 for traffic, air, and noise, consistent with the memorandum of March 13, 2006 from J. Long, and that 2040 will be the future analysis year for cumulative impacts (all studies). The EIS/EIR will acknowledge that 2025 has been used as a future cumulative impact analysis year by other jurisdictions/projects in the six-county area. Its use is not appropriate for Placer Parkway due to (1) the atypical timeframe during which actual construction will begin, relative to those other projects; and (2) number of developments in that scenario that have not been approved. The Placer Parkway strategy is to bracket the range of conditions analyzed by including a scenario with only planned development in 2020 on the one hand, and the broader proposed development scenario for 2040. The 2020 land use scenario will only include approved projects. Placer Vineyards will be included for the first phase of 7,200 units. The 2040 scenario will include all proposed projects. This reflects the unpredictability of potential future development over a 35-year time frame and the Tier 1 analysis level.

- The Tier 1 EIS/EIR will analyze one additional year, 2027, for air quality only; this reflects the Air Quality Conformity analysis year.

- For the potential future Watt Avenue connection (not a part of the Placer Parkway project), this connection would not be included in the "No-Build" scenario. There was not agreement as to whether or not the analysis should include the presence of a Watt Avenue extension and Watt Avenue interchanges. This issue will be referred to the project's legal team. The 2040 analysis will analyze conditions both with and without the Watt Avenue connection.

- Reaffirmed the conceptual locations for interchanges along the Parkway in Sutter County.

PDT MEETING #14 – April 26, 2006

Meeting participants included representatives from Caltrans, Sutter County, Placer County, the Cities of Roseville and Rocklin, PCTPA, URS Corporation, and DKS Associates. Agenda items included:

Carry-Over Items: MEPLAN update; Context Sensitive Solutions; Watt Avenue connection/ Extension analysis; Mitigation strategy; Placer Ranch Specific Plan alignment
U.S. Fish & Wildlife Service Consultation
Traffic Analysis and Impacts
1st Administrative Draft Tier 1 EIS/EIR

Key decisions include:

- Based on input from the project's legal team, the Watt Avenue interchange and extension option would be included in the 2040 cumulative scenario as well as in the 2020 scenario, including the No Build Alternative.

- Endorsed the idea of continuing to explore feasible early mitigation options.

- Placer County staff will follow up with Placer Ranch Specific Plan representatives regarding their moving a portion of their roadway to SR 65 outside of the corridor alignment identified for Placer Parkway, as well as their proposed 50-foot medium and maximum 250-foot right-of way, all in conflict with proposed Parkway features.

- Meeting attendees to provide comment on the draft significance criteria for transportation, given that each jurisdiction evaluates traffic impacts by differing criteria. Also the draft traffic impacts and mitigation strategies.

- J. Long (DKS) to rerun traffic for Alternatives 1 and 5 with HOV lanes on SR 70/99, to bracket differences between the southernmost and northernmost alternatives.

PDT MEETING #15 – May 9, 2006

Meeting participants included representatives from FHWA, Caltrans, the City of Roseville, PCTPA, URS Corporation, and DKS Associates. Agenda items included:

Context Sensitive Solutions
Transportation/Traffic
Other Items: Secondary and Indirect Impacts; Schedule

Key decisions include:

- Caltrans and FHWA to work together to document Context Sensitive Solutions applications for Placer Parkway. C. Perez (FHWA) to ask for FHWA funding.

- Three potential mitigation strategies for SR 70/99 were identified: (1) adding two additional HOV lanes (eight lanes total); (2) adding parallel north-south facilities to serve shorter trips between Sacramento County's "northwest territories" and Sutter County's Measure M area. It was recognized that the proposed 'buffer' area between Sacramento and Sutter counties might complicate this potential mitigation strategy; and (3) transit. Transit would only work in addition to one or another of the potential strategies identified above.

- Caltrans requires that secondary and indirect impacts be treated in each technical report, not deferred to Tier 1 EIS/EIR.

PDT MEETING #16 – September 16, 2006

Meeting participants included representatives from FHWA, Caltrans, Sutter County, Placer County, the Cities of Roseville and Rocklin, PCTPA, URS Corporation, and DKS Associates. Agenda items included:

Carry-Over Items: Funding Deadline; Mitigation Strategy; Placer County Coordination

Schedule

Technical Report Status: Status of submittals/review comments; Transportation Technical Report comments and responses; MEPLAN update; Federal partner review

Key decisions included:

- Ways to extend the funding allocation have been exhausted. The project team will look at ways to implement appropriate early-action items.

- Local jurisdictions will perform a broad level review of technical studies, concurrent with Caltrans/PCTPA's more detailed review.

- Placer County asked if the Tier 1 EIS/EIR could provide information regarding the Placer Ranch Specific Plan (PRSP) roadway alignment lying outside the Placer Parkway corridor alignment in the eastern segment. Placer County would cooperate to identify the LEDPA location for their roadway and that Placer County staff would not support any alignment that was preferable with respect to right-of-way but which would not qualify as the LEDPA. The PDT agreed that it was possible that the PSRP's proposed roadway could become a component of the future Placer Parkway, if approved and permitted. The PDT provided direction to evaluate the proposed PSRP alignment as a separate discussion in the Tier 1 EIS/EIR, similar to the Watt Avenue interchange discussion, since it is not proposed by Placer Parkway. This will require work in all the technical reports and cause a project delay and increase in costs. The PDT also directed that the resources agencies by apprised of this situation in a timely manner.

- Placer County reported that Placer Ranch would be responsible for constructing a partial interchange at SR 65 in the same location as the conceptual Parkway interchange. At this time it is not planned to be built initially as a full freeway-to-freeway interchange. It would be built based on Caltrans traffic requirements and funding availability. At Foothills Boulevard and at Fiddyment Road, the Placer Ranch road would include temporary signalized intersections.

- The PDT supported the Placer County requirement that the PRSP develop an alternative land plan showing the Placer Parkway corridor alignment alternative including the required 500-foot and 1,000-foot corridor width requirements; the support was tempered by a concern to ensure the alternative would not be loaded with "fatal flaws" so that it could be easily dismissed. FHWA cautioned that reducing the corridor width would be a big issue with the resource agencies.

- The project team will offer the resources agencies the opportunity to review the technical studies prior to completion of the Tier 1 EIS/EIR.

Appendix D
Summary of Modified NEPA/404 Consultation for Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR through Concurrence Point #3

APPENDIX D
MODIFIED NEPA/404 PROCESS FOR PLACER PARKWAY

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LIST OF ATTACHMENTS

MODIFIED NEPA/404 PROCESS FOR PLACER PARKWAY

1.0 INTRODUCTION

As part of the planning process for the Placer Parkway Corridor Preservation Tier 1 EIS/EIR, the Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the Placer County Transportation Planning Agency (PCTPA) acting on behalf of the South Placer Regional Transportation Authority (SPRTA) have agreed to participate with the U.S. Army Corps of Engineers (U.S. Army COE) and the U.S. Environmental Protection Agency (EPA) in a *modified* National Environmental Policy Act/Clean Water Act Section 404 Integration Process (modified NEPA/404) process.[2] A formal process is usually initiated by the submittal of an application for a Section 404 permit under the Clean Water Act to the U.S. Army COE. It focuses on identification of a Least Environmentally Damaging Practicable Alternative (LEDPA). This process ensures federal agency agreement that the preferred alternative is the LEDPA necessary to obtain permits prior to project construction.

The Tier 1 EIS/EIR process for the Placer Parkway Corridor Preservation project does not require a Section 404 permit or any permits from any federal agency. Therefore, a LEDPA determination is not necessary in the current process, although the associated Tier 2 project will require a Section 404 Permit. To provide early direction to FHWA and PCTPA so that Tier 1 decisions reflect careful consideration of the Section 404(b)(1) Guidelines, and to accommodate future regulatory requirements, the usual NEPA/404 process has been modified for the Tier 1 EIS/EIR phase of the Placer Parkway project, the purpose of which is to identify and preserve a corridor for a future Placer Parkway. The modified process reflects the broad nature of Tier 1 environmental review while also anticipating the permit application requirements of Tier 2. The modified process is intended to ensure the following:

- Tier 1 decisions closely reflect 404 Guidelines;
- There is ongoing agency concurrence with Tier 1 decisions throughout the environmental review process;
- Decision making provides sufficient certainty that alternatives eliminated in Tier 1 are unlikely to need revisiting in Tier 2, although it is recognized among all parties that additional assessment of alternatives evaluated in Tier 1 may be necessary in Tier 2, depending on the outcome of the environmental review process;
- The corridor alignment identified as the preferred alternative in the Final EIS/EIR will most likely contain the LEDPA. This will help to address significant LEDPA issues during the Tier 2 process, and should result in an ultimate project that will receive a Section 404 permit; and
- The initial additional time required for agency review under this modified NEPA/404 process will ultimately result in a more streamlined environmental review process for the project overall, and one which is appropriate to a Tier 1 process.

This process has been memorialized in a Memorandum of Understanding (MOU) for the Placer Parkway Corridor Preservation Project (Attachment 1). The modified NEPA/404 MOU integrates requirements of the Clean Water Act into the NEPA environmental review, and facilitates the preparation of the Section 404 Permit at the end of the NEPA process (Tier 2).

[2] National Environmental Policy Act/Clean Water Act Section 404 Integration Process for Surface Transportation Projects Memorandum of Understanding" signed by Federal Highway Administration, Federal Transit Administration, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Transportation, Arizona Department of Transportation, and Nevada Department of Transportation, 1993.

The modified NEPA/404 Process MOU for Placer Parkway Corridor Preservation Project identifies five sequential Concurrence Points at which formal agency approval (U.S. Army COE and EPA) would be sought and obtained before the environmental review process proceeds to the next step. USFWS would not provide formal approval but would track this process.

The five Concurrence Points are:

1. Purpose and Need
2. Criteria for Selecting the Range of Alternatives
3. Range of Alternatives
4. Alternative(s) most likely to contain the LEDPA
5. Mitigation Framework

Concurrence Points 1 to 3 occur prior to completion of the Tier 1 Draft EIS. Concurrence Points 4 and 5 occur prior to completion of the Tier 1 Final EIS.

This report presents a summary to date of consultation under the modified NEPA/404 process. Meeting minutes are on file at PCTPA's offices in Auburn, California.

2.0 SUMMARY OF THE CONSULTATION PROCESS

On August 21, 2003, the Placer Parkway team participated in a meeting with the following agencies:

- U.S. Environmental Protection Agency (EPA)
- US. Army Corps of Engineers (U.S. Army COE)
- Central Valley Water Resources Control Board (CVWRCB)
- Federal Highway Administration (FHWA)
- California Department of Transportation (Caltrans)
- Placer County Transportation Planning Agency (PCTPA)

This meeting was intended as an introduction to the Placer Parkway Tier 1 EIS/EIR project, as early consultation. Since the Tier 1 process and subsequent land acquisition would not require a Section 404 permit, the team did not initially envision a formal NEPA/404 consultation process. Agencies, however, in particular U.S. Army COE and EPA, encouraged development of a modified NEPA/404 process, notwithstanding the lack of a permit application at Tier 1. General discussion among agencies at this and a subsequent meeting in October led to the development and circulation by EPA of a proposed modified NEPA/404 process in April 2004. A final modified NEPA/404 Process MOU was accepted at a meeting on April 12, 2004, the meeting notes for which elaborate on the process for NEPA/404 integration (see Attachment 1).

As of the date of this summary, agency concurrence has been obtained on Concurrence Points 1, 2, and 3 (see Attachment 2). The consultation process currently reflects the phase of the process between Concurrence Points 3 and 4; during which time the Draft Tier 1 EIS/Draft Program EIR is under preparation. As agreed, USFWS has not provided formal approval but has not voiced objections to the Concurrence decisions.

3.0 MEETING OBJECTIVES AND SUMMARIES

A series of subsequent meetings were held as part of the modified NEPA/404 process for the project. A summary of these meetings and major items discussed are presented below.

COORDINATION MEETING #1 – August 21, 2003

Meeting participants included representatives from Central Valley Water Resources Control Board, U.S. Army COE, California Department of Fish and Game, EPA, FHWA, Caltrans, PCTPA, and URS Corporation.

The meeting objective was to generally introduce the Placer Parkway Tier 1 EIS/EIR project to federal and state agencies, and receive information, input, and guidance. Agenda items included:

Introduction and Project Background
Study Goals
Tier 1 Process
Work Plan Approach
Review of GIS-Level Mapping
Questions and Comments

This initial meeting was convened to give an overview of and introduction to the project. The Tier 1 concept was presented. Federal resource agencies, in particular the U.S. Army COE and the EPA, encouraged PCTPA to consider how a modified NEPA/404 process could be implemented in the absence of any permit application.

General information regarding the *Conceptual Plan* (DKS, 2000) and *Project Study Report* (DKS, 2001) were provided. These documents are available on the PCTPA website. Information about the three project advisory committees (Technical Advisory Committee, Study Advisory Committee, and Policy Advisory Committee) was provided. Information was provided to the group regarding study goals, baseline information collected (maps), the project's work program and schedule. A conceptual alignment map from the *Project Study Report* and a project fact sheet were provided to attendees.

Key issues raised by participants included:

- The purpose and need of the project
- Multi modal transit options
- Project design, including options for access limitation
- Potential impacts on natural/biological resources
- Cumulative and indirect impacts are key components
- Need to factor into ROW acquisition high value resources such as vernal pools, as avoidance or mitigation
- EPA's expectation of a "Placer Legacy vision" to protect west Placer riparian corridors and to make this project a lever for conservation
- Implementation of a parallel "404-like" process

It was agreed that Erin Foresman (EPA) and Mike Jewell (U.S. Army COE) would coordinate with PCTPA to set up a meeting regarding LEDPA and the NEPA/404 process.

COORDINATION MEETING #2 – OCTOBER 23, 2003

Meeting participants included representatives from U.S. Army COE, EPA, FHWA, Caltrans, PCTPA, URS Corporation, DKS Associates, and Mara Feeney & Associates.

The meeting objective was to identify a clear process to apply the NEPA/404 integration to the Placer Parkway Corridor Preservation Tier 1 EIS/EIR, and to provide more information regarding the purpose and need for the project and planned and projected growth in the project study area. Agenda items included:

Introductions
Process for NEPA/404 Integration
Purpose and Need
Planned and Projected Growth
Data Availability Needs: types of information available; level of information required
Conclusions and Next Steps

This meeting was convened with the intention of identifying the details of the proposed process for NEPA/404 Integration within the Tier 1 EIS/EIR (with the objectives of ensuring that the ultimate corridor alignment includes the LEDPA, obtaining ongoing agency concurrence with environmental decision-making, and ensuring the likely success of the Tier 2 404 permit application). Additional information was also provided regarding the purpose and need for the project and planned and projected growth in the project study area. Environmental resource maps detailing the location of the conceptual alternative corridors from the *Project Study Report* (DKS, 2001) in relation to wetlands, vernal pool complexes, riparian and upland habitat, flood zones, and residential and commercial buildings were distributed. An October 23, 2003 Placer County Board of Supervisors' action was also reported. The Board directed the County staff to proceed with concurrent processing of two "university" proposals (Placer Ranch/California State University – Sacramento branch campus and the De La Salle University and Community) as well as the proposed Placer County HCP/HCCP in coordination with the proposed Placer Parkway.

The meeting participants agreed to the following:

- A modified NEPA/404 Integration Process MOU prepared by EPA/U.S. Army COE would be used for the Tier 1 evaluation of the project, subject to meeting participant comments and subsequent revision.

- Resource agencies will describe expectations for development of project purpose and need, alternatives selection criteria, and range of alternatives, and the level of information required to make a formal preliminary LEDPA determination.

COORDINATION MEETING #3 – APRIL 12, 2004

Meeting participants included representatives from U.S. Army COE, EPA, FHWA, Caltrans, PCTPA, URS Corporation, DKS Associates, and Mara Feeney & Associates.

The meeting objective was to review and finalize the process and timeline for a modified NEPA/404 process prepared by U.S. Army COE and EPA, including clearly identifying steps, data requirements, and schedule. Agenda items included:

Introductions
Brief Overview of Project Status
Review Draft Modified NEPA/404 Process
Identify Schedule and Data Needed for Each Step
Other Items: draft Purpose and Need Statement, EPA Notice of Intent (NOI) comment letter, PSR northern corridor alignment alternative (proposed to be dropped), workshop to provide and review environmental data
Conclusions and Next Steps

A draft process proposal for a modified NEPA/404 process (prepared by U.S. Army COE and EPA) was the primary focus of this meeting. The meeting reviewed and finalized the Memorandum of Understanding regarding the modified NEPA/404 process. The timeline was not finalized, pending further discussion.

The project team gave a brief project status update. A Draft Purpose and Need statement was distributed to the meeting for review and comment and preliminary questions regarding purpose and need were discussed.

Key issues raised by participants included:

- Identifying that Placer County is considering a new community plan area – south of Pleasant Grove Creek to the Placer/Sutter County line
- Clarifying the definition of "free-flowing" traffic
- Determining how a Watt Avenue interchange would be studied and what other access points would be considered in the 7-mile central segment
- Determining how much information is needed for a Tier 1 determination

COORDINATION MEETING #4 – MAY 3, 2004

Meeting participants included representatives from U.S. Army COE, EPA, FHWA, Caltrans, PCTPA, URS Corporation, DKS Associates, and Mara Feeney & Associates.

The meeting objective was to progress towards obtaining concurrence regarding the project's Purpose and Need. Agenda items included:

> Information Related to the Draft Purpose and Need Statement: project development background, traffic forecast data
> Response to Questions and Comments from U.S. Army COE and EPA
> Provide Clarification as Needed to U.S. Army COE and EPA
> Develop an Understanding of What Additional Information is Needed to Reach Concurrent on Purpose and Need

Steve Propst (Caltrans) provided a summary of the project history. John Long (DKS) provided additional traffic and Level of Service (LOS) information to support the project Purpose and Need. Tom Cavanaugh (U.S. Army COE) stated that the U.S. Army COE guidance under Section 404 is to presume there is a need, and defers to project's need, focusing more on the project purpose.

The meeting participants also discussed future development forecasts for the six-county SACOG region. Current development proposals, if approved, would have substantially more development in the study area than that included in SACOG's 2025 Metropolitan Transportation Plan (MTP). DKS provided four large-scale maps which graphically illustrated the projected Level of Service under a range of future Development Scenarios: (1) No Project – using SACOG's 2025 MTP forecasts based on development forecasts for the six-County SAOG region as of 2001; (2) Two Expanded Development Scenarios with additional development not included in SACOG's 2025 MTP. This would include approved and reasonably foreseeable additional land uses beyond the 2025 horizon. The two scenarios (Expanded Scenarios A and B) would reflect a different distribution of commercial/industrial development. Both scenarios assume buildout of all additional residential development, plus nonresidential development in an amount equal to the current jobs/housing ratio, which is relatively balanced. The two scenarios would reflect a different distribution of commercial/industrial development. It was noted that other factors come in to play when projecting future development, such as the ability of available mitigation and the ability to secure federal permits.

The need for the project, based on the traffic forecasting model as illustrated by the map, was identified. The following features on the maps were identified:

- The maps show that conditions will be much worse in the future than today

- The difference between SACOG 2025 and Expanded Development Scenario A is pronounced, with conditions much worse under the Expanded Development Scenario A.
- Local roadways will experience LOS F conditions for more than 1 hour.
- LOS conditions have a ripple effect, which will back up freeways extending for miles and multiple hours.

The model shows that a lot of that benefit occurs on the local roadway system. It was pointed out that the traffic forecasting model accounts for latent demand. This is why the improvement on I-80 is not as pronounced as would be seen if the traffic model did not include feedback loops to account for travel that would be redirected to I-80 because Placer Parkway would reduce the existing congestion.

Key issues raised by participants included:

- Study area boundary development.
- Likelihood that additional development identified in the Expanded Development Scenario would be approved.
- Clarification about how the employment outside of the study area was spread.
- Assumptions about the jobs/housing balance.
- Improvements included in SACOG's regional projects
- Difficulty of finding vernal pool mitigation sites within Placer County.
- Options for a multi-modal facility.
- Placer County planning processes, especially Curry Creek Community Plan.
- Time horizon, congestion over time, levels of service.
- I-80 effects.
- Goods movement.
- Economic development.
- Growth inducement.

This discussion was followed by more specific discussion related to the Purpose and Need Statement, with direction provided by U.S. Army COE and EPA and a schedule for agency review.

COORDINATION MEETING #5 – July 6, 2004

Meeting participants included representatives from EPA, FHWA, Caltrans, PCTPA, URS Corporation, DKS Associates, and Mara Feeney & Associates.

The meeting objective was to review prior comments and fine-tune the project's Purpose and Need Statement based on EPA comments on the draft received by the project team on May 17, 2004, and to discuss the potential Watt Avenue interchange. Agenda items included:

Purpose and Need for the Project
Watt Avenue Interchange
DKS Memorandum on TSM Alternatives

The meeting objective was to review and finalize the project Purpose and Need. A revised Purpose and Need Statement was sent to EPA and U.S. Army COE on June 4, 2004. Materials circulated for discussion included the following documents:

- EPA Comments on Draft Purpose and Need Statement

- Memorandum from Caltrans, June 4, 2004, responding to EPA comments and questions regarding project benefits, current and future congestion information, and further explanation with respect to SACOG's future growth projections

- A revised Draft Purpose and Need Statement (with comment-number annotation linking the revisions to the memorandum)

- Memorandum from John Long (DKS), June 21, 2004, explaining the analysis of a potential TSM alternative

- A map of the potential corridor alignment alternatives

A smaller group of meeting participants agreed to participate in a conference call (August 16, 2004) to finalize the Purpose and Need. [Note that EPA did not attend this call due to scheduling conflicts. During a subsequent call to URS from EPA on August 18, 2004, the conclusion was that the team would be in a position to request concurrence shortly, pending any additional input from Tom Cavanaugh. EPA would provide a bullet list of outstanding items for discussion at a future meeting.]

Key issues raised by participants included:

- Provide more information on project benefits and how long they would last
- Provide LOS information and more specific information on congestion relief, including on Interstate 80
- Basis of jobs numbers
- Sutter County industrial reserve area
- Geographic area of influence and traffic analysis study boundary, including relationship to employment projections
- Need to identify a "basic" purpose versus an "overall project purpose"
- SACOG Blueprint process and how Placer County relates to it
- Sufficiency of available mitigation

It was cautioned that given the continuing work on modeling and the evolving work by SACOG and others on growth numbers, any numbers in the Purpose and Need would be "place holders" for now. However, there should be little difference from the final numbers. Variation would depend on the Technical Advisory Committee direction, and SACOG Blueprint, Placer County Planning Department, and State of California Department of Finance numbers. Things seem to be pointing to 2040 as the future date to use for analysis. For screening, the project team needed to keep the approach reasonable and cannot wait for new numbers to emerge in the future.

The meeting participants discussed a potential future Watt Avenue Interchange with the Parkway. This potential future interchange is not a part of the Placer Parkway project, but very conceptual locations will be analyzed in the Tier 1 EIS/EIR for informational purposes, as set forth in the projects goals and policies. Both a future Watt Avenue extension and a potential connection to the Parkway would be separate projects, proposed by others. The conceptual potential connection would be analyzed for the range of Parkway corridor alignment alternatives.

The meeting participants discussed the opportunity for including a TSM alternative in the analyses. As set out in the memo circulated at the meeting (John Long, June 21, 2004), the Placer Parkway would provide a substantial benefit in travel times while a TSM alternative by itself would not offer any substantial improvement. Key issues raised by the participants included:

- Baseline Road improvements and whether it could be an expressway

- Other approaches to solve the traffic problem without a new facility
- Congestion pricing

COORDINATION MEETING #6 – August 24, 2004

Meeting participants included representatives from U.S. Army COE, EPA, FHWA, Caltrans, PCTPA, URS Corporation, DKS Associates, and Mara Feeney & Associates.

The meeting objective was to review and obtain feedback on screening criteria, environmental resource data used for Tier 1 screening, the screening process, and start a discussion on potential corridor alignment alternatives for evaluation in the Tier 1 EIS/EIR. Agenda items included:

Introductions
Reschedule Purpose and Need Conference Call
Screening Criteria
Environmental Resource Data and Screening Process
Potential Corridor Alignment Alternatives

EPA expressed concern that the Purpose and Need could prematurely narrow the range of alternatives, eliminating any TSM-like alternative (i.e., use of existing infrastructure). This was based on a concern regarding potential impacts to wetlands. U.S. Army COE was concerned that the potential alternatives maps appeared to "pancake" the alternatives into one general area.

The meeting participants reviewed screening criteria used in the screening evaluation conducted with the advisory committees (URS, 2004). Screening was used to distinguish among the PSR alternatives and to identify areas where they needed to be adjusted or avoided. The U.S. Army COE noted the importance of the LEDPA was emphasized over other screening parameters.

The environmental resource data and the screening process were reviewed in the context of project alternatives, utilizing an excel table showing the calculations of potential impacts on affected resources (waterfowl and other upland habitat; potential special-status species habitat; riparian, wetland, and conservation areas; vernal pool critical habitat and vernal pool complexes; socioeconomic resources; cultural resources; floodplains; hazardous waste; farmland designations; working farm units, and power lines). A map showing potential future development in and around the study area was also presented. Potential alternatives were discussed based on screening to date. The project team requested early input from agencies with respect to the suitability of the proposed screening criteria.

Key issues raised by participants included:

- Vernal pool data
- Evaluation and calculation of impacts
- Concern with eliminating a corridor alignment that might have more impacts overall but would have a roadway alignment with less impacts
- Emphasis on avoiding or minimizing impacts
- West Roseville Specific Plan area and vernal pools
- Concern to not prematurely eliminate a LEDPA
- Growth inducement – specifically related to interchange locations and alignment location
- Limiting Central Segment access (interchanges) and no-development buffer zone
- Screening criteria documentation
- USFWS attendance/participation

U.S. Army COE and EPA expressed concern that screening of alternatives was occurring prior to concurrence on the Purpose and Need, and agreed-upon screening criteria. This should be documented, as should the screening process.

EPA agreed to provide final comments on the Purpose and Need. The project team agreed to compile information fully explaining the process by which alternatives had been considered and either rejected or identified as appropriate for further evaluation.

EPA expressed concern that a new facility is assumed to be required. Other potential solutions to the transportation need were discussed, including building a shorter Parkway or widening Baseline Road.

COORDINATION MEETING #7 – October 21, 2004

Meeting participants included representatives from EPA, FHWA, Caltrans, PCTPA, URS Corporation, and DKS Associates.

The meeting objective was to discuss remaining issues on the draft Purpose and Need Statement and discuss the information EPA needs regarding the range of corridor alignment alternatives for evaluation in the Tier 1 EIS/EIR. Agenda items included:

Introduction
Purpose and Need Concurrence Process
EPA Input and Discussion: Assessment, Placer County vernal pools; SACOG Blueprint, and Range of Alternatives

Information provided to participants prior to the meeting included information regarding the broad range of alternatives that were initially considered during early project planning contained in the Study Area Definition for Placer Parkway Alternatives and an Analysis of a Shorter Parkway.

EPA staff provided an assessment of the project and its progress via the modified NEPA/404 process. This discussion focused on the importance of vernal pools in western Placer County, avoiding/minimizing impacts, and the project's indirect impacts. As part of this discussion, the project team reinforced key project provisions including limited access for the 7-mile segment between Fiddyment Road and Pleasant Grove Road along with the no-development buffer area within the corridor along the future roadway. Potential Watt Avenue connections (via a future extension of Watt Avenue) to the Parkway would be analyzed in the Tier 1 EIS/EIR. It was emphasized that the potential extension and/or interchange were not a part of the proposed project.

The list of outstanding issues on the draft Purpose and Need Statement was reduced to two related to Sacramento County references and the desired level of service. Minutes of this meeting were not prepared.

COORDINATION MEETING (Not Numbered) – January 25, 2005

Meeting participants included representatives from U.S. Army COE, EPA, FHWA, Caltrans, Placer County, and PCTPA.

The meeting purpose was to make agencies' management aware of concerns with the modified NEPA/404 process, to establish a framework to resolve issues, and to advance the project. Agenda items included:

Introductions
Background

Meeting Objectives – Framework to Advance the Project Collaboratively, Identify Agencies Objectives and Issues, and Identify Critical Issues
Summary and Action Items

For background, the Mare Island Accord (2002) was outlined. This is a partnership agreement among FHWA, Caltrans, and EPA to support collaboration in transportation and environmental planning processes. The Mare Island Accord group recognized that there are unresolved issues on the Placer Parkway project. Because the parties were "stuck," it was decided to convene a meeting.

Issues/concerns focused on the need for more efficient communications (identifying decision makers and the level of information required); Purpose and Need (clarifying "free-flowing traffic"); land use/conservation plan for southwest Placer County; project delay, and mitigation concerns (limited amount of available land).

Ideas/opportunities included investigating multi-modal opportunities, innovative planning (integrating resource avoidance/mitigation into land use and transportation planning processes), using a facilitator to track tasks, questions, and action items.

Understandings/agreements concluded that the current means of communications is not working well. The Purpose and Need Statement would be revised to include agreed-upon language concerning free flowing traffic. The group would be convened as needed.

Actions Items were:

- Placer County would prepare a presentation on Placer County Land Use and Conservation Planning in March.
- PCTPA would circulate a new draft version of the Purpose and Need Statement for review.
- FHWA, if there are no further concerns, would send a formal request for concurrence on this version of the Purpose and Need Statement.
- Caltrans would identify a facilitator for regular modified NEPA/404 meetings.

COORDINATION MEETING #8 – March 10, 2005

Morning Session

Meeting participants included representatives from U.S. Army COE, EPA, U.S. Fish and Wildlife Service, FHWA, California Department of Fish and Game, Caltrans, Placer County, PCTPA, Resources Law Group, URS Corporation, and DKS Associates.

The morning session of this two-part meeting focused on land use and conservation planning in Western Placer County. Agenda topics included:

Introductions
Land Use
Conservation
Input and Discussion

Loren Clark (Placer County) gave an overview of the Placer County Habitat Conservation Plan and Natural Communities Conservation Plan, collectively called the Placer County Conservation Plan

(PCCP). The PCCP would apply to Placer Parkway and would require mitigation for direct, indirect, and cumulative impacts from the Parkway with respect to Section 404 and Endangered Species Act impacts.

There was general discussion and questions regarding the PCCP. U.S. Army COE stated that the vernal pool complexes identified in the PCCP's GIS database is not a definitive identification of all vernal pools. It was noted that the "green" area shown as a conservation area in the PCCP map set is not intended to be a hard line, but a generalized area where development would be precluded/discouraged. EPA strongly encouraged the purchase of conservation lands now.

Placer Parkway is intended to be a covered activity under the PCCP, providing mitigation for direct and indirect take. California Department of Fish and Game expressed strong disagreement with adding alternatives north of Pleasant Grove Creek. He stated that a highway within the "green" conservation area would be a huge blockage to the conservation area, and a serious impediment to going forward with the HCP.

Afternoon Session

Meeting participants included representatives from U.S. Army COE, EPA, U.S. Fish and Wildlife Service, FHWA, Caltrans, Placer County, PCTPA, URS Corporation, and DKS Associates.

The objective of the afternoon session of this two-part meeting was to recapitulate the Purpose and Need Concurrence status as well as to review/discuss corridor alternatives screening criteria and the range of corridor alignment alternatives for evaluation in the Tier 1 EIS/EIR. A Caltrans facilitator provided guidance for this session. Agenda topics included:

Introductions
NEPA/404 Process Recap: Purpose and Need Concurrence; Next Steps: Criteria for Selecting Range of Alternatives, Range of Alternatives, Alternatives Most Likely to Contain LEDPA, and Mitigation Framework; Schedule
Discussion of Screening Criteria: Overview; Suggested Screening Criteria
Wrap Up
Future Meetings

Key decisions and/or issues raised by participants included:

EPA confirmed concurrence with the project Purpose and Need (March 7, 2005, see Attachment 2). U.S. Army COE confirmed they were in agreement and would provide a similar concurrence letter to this effect, pending any further comments following their final review of the Purpose and Need.

The meeting participants discussed the alternatives screening criteria, as included in the *Technical Memorandum, Screening Evaluation of PSR Alternatives (February 2005);* there was general agreement that these were valid. Potential additional screening criteria were identified; it was agreed that these would be integrated into the first set of screening criteria, and routed for review and comment. The meeting participants agreed that the screening criteria should not assume a roadway; to be consistent with the Purpose and Need, criteria should not preclude non-roadway alternatives. EPA wants to be sure that the screening criteria do not eliminate alternatives using existing roadways (in whole or in part) because a new roadway would be the most damaging. EPA is interested in working with local agencies to change densities, etc., to reduce vehicle miles traveled so that the Placer Parkway will not be needed. John Long (DKS) mentioned that *current* entitlements show the need for this project, without considering all the proposed and potential new growth beyond current general plans.

Caltrans summarized the public involvement process to date:

- *Placer Parkway Interconnect Study/Conceptual Plan* (DKS, 2000) was a policy document. This process included extensive public meetings, a newsletter and input from three advisory committees:

  – Policy Advisory Committee – made up of elected officials from affected jurisdictions and representatives from Caltrans, etc.
  – Study Advisory Committee – made up of a range of stakeholders
  – Technical Advisory Committee – made up of staff from affected jurisdictions, FHWA, Caltrans, SACOG, etc.

- *Placer Parkway Project Study Report* (DKS, 2001) identified eleven potential roadway configurations for Placer Parkway, based on earlier work and input from the three advisory committees.

- *Tier 1 EIS/EIR* process to date has also included the above committees, four public meetings, two newsletters, website, and numerous meetings with interested groups and individuals. Screening criteria identified in the *Technical Memorandum* were developed with input from all of these groups.

COORDINATION MEETING #9 – April 18, 2005

Meeting participants included representatives from U.S. Army COE, EPA, U.S. Fish and Wildlife Service, FHWA, Caltrans, PCTPA, URS Corporation, DKS Associates, and Koegel & Associates (meeting facilitator).

The meeting objective was to recap Purpose and Need concurrence status, complete discussion on corridor alternatives screening criteria, and begin discussion on the range of corridor alignment alternatives for evaluation in the Tier 1 EIS/EIR. Agenda items included:

Introductions
March 10 Meeting Recap and discussion: Purpose and Need; Criteria for Electing Range of Alternatives
Future Meetings

Information provided to participants prior to the meeting included Screening Criteria Information (annotated based on March 10 meeting input), Potential Screening Criteria Identified at the March 10 meeting, April 8 EPA comments, and Suggested Screening Criteria for non-Parkway Alternatives.

EPA and U.S. Army COE concurred with the Purpose and Need; the U.S. Army COE concurrent letter is still outstanding. U.S. Fish and Wildlife will stay involved in the process because Placer Parkway is a covered activity under the PCCP. A meeting to update USFWS was held on April 13, 2005.

EPA provided comments on the screening criteria and suggested that criteria should first be focused on determining the reasonable range of alternatives to advance to the Tier 1 DEIS/EIR for full analysis, with a separate, longer list (subject to input but not formal concurrence) for evaluating the alternatives in the Tier 1 DEIS/EIR. This is because EPA criteria are narrowly focused on Section 404, and the intent of the criteria should be to broaden the range of alternatives within this context. U.S. Army COE agreed.

It was explained that FHWA has to consider other aspects in addition to water. FHWA needs to make decisions in the overall context of a project, and needs to be sure that there are no fatal flaws in areas other than water. Caltrans agreed, and thought additional criteria should be added to EPA's suggested list. PCTPA is also responsible to their Board and as a regional transportation planning agency must be responsive to local planning policy and direction.

EPA's suggested list was discussed and a draft revision was identified:

The following criteria will determine the reasonable range of alternatives to advance to the DEIS/EIR. The range of alternatives can include both new roadway and non-roadway transportation solutions, e.g., expanding existing roads, a non-freeway facility, a Transportation System Management (TSM) alternative, a shorter Parkway alternative, or a combination of the aforementioned. Alternatives that are not consistent with this list of criteria should not be advanced to the DEIS/EIR for evaluation.

1. Meets the Project Purpose
2. Has no known irrefutable Clean Water Act Section 404 permitting obstacle[3]
3. Avoids or minimizes growth inducement in environmentally sensitive areas
4. Avoids or minimizes impacts to jurisdictional waters of the U.S., including wetlands
5. Avoids or minimizes effects to Section 4(f) resources
6. Is consistent with the intent of the objectives of the Placer County Conservation Plan
7. Has no conditions that would render the project infeasible, for the following reasons:[4]

    - It would not meet the purpose and need for the project;
    - It would not reasonably achieve the goals and policies adopted for the project;
    - It could not be permitted in subsequent Tier 2 processes; or,
    - It would not likely be supported by the project's Policy Advisory Committee (PAC) or the lead agencies.

    or

    - Two types of screening criteria that can be effective for Tier 1 decision-making are "project purpose"[5] and "fatal flaw" analyses. Under the Clean Water Act Section 404(b)(1) Guidelines, an alternative may be eliminated from consideration in the draft EIS if it does not meet the project purpose. Fatal flaws are unavoidable or unmitigatable impacts associated with an alternative that are so great that the project could never go forward.

It was agreed that Item 7 could be considered as an *option* in lieu of some of the other criteria listed above (some items are redundant). EPA has outstanding concerns about Item 5 concerning Section 4(f) and about the specific language of the last bullet under Item 7 (but not the general idea of the fatal flaw approach). This draft will need to be circulated within EPA for review and comment.

U.S. Army COE was not able to participate in the development of the final list. All other participants agreed with the items on the list, with the caveats described herein.

There was also discussion and confirmation that practicability of an alternative is considered in the decision of whether or not to advance an alternative to evaluation in the DEIS/EIR.

COORDINATION MEETING #10 – May 18, 2005

Meeting participants included representatives from U.S. Army COE, EPA, U.S. Fish and Wildlife Service, FHWA, Caltrans, PCTPA, URS Corporation, DKS Associates, and Koegel & Associates.

[3] Suggestion was made to change this to a more proactive statement.
[4] *Technical Memorandum, Screening Evaluation of PSR Alternatives* (February 2005)
[5] Modification of the National Environmental Policy Act/Clean Water Act Section 404 Integration Process for Surface Transportation Projects memorandum of Understanding (NEPA/404 MOU) for application to the Placer parkway Corridor Preservation Project (April 12, 2004)

The meeting objective was to complete discussion on screening criteria for selecting the range of alternatives, and identify how to proceed on identifying the range of alternatives for evaluation in the Tier 1 EIS/EIR. Agenda items included:

Introductions
Group Decision-Making Process and Schedule
Approval of Meeting Notes of April 18 Meeting
Action Items from April 18 Meeting
Screening Criteria for Selecting Range of Alternatives
Range of Alternatives
Next Steps and Next Meeting Dates

The group's purpose was affirmed:

Group's Purpose: Achieve concurrence on Concurrence Points 1 through 5 identified in the modified NEPA/404 process for Placer Parkway Corridor Preservation Tier 1 EIS/EIR, so that decisions made at Tier 1 will be consistent with requirements of the Clean Water Act Section 404. The five Concurrence Points were reiterated:

1. Purpose and Need
2. Criteria for Selecting the Range of Alternatives
3. Range of Alternatives
4. Alternative(s) Most Likely to Contain the LEDPA
5. Mitigation Framework

It was noted that there will be a time break between Concurrence Points 3 and 4 while the Draft EIS is being completed and circulated for public comment.

The current process requires formal letters of concurrence ("hard" concurrence) from USACE and EPA. USFWS wants to take a back seat but be involved in the process. USFWS will research if some written agreement on concurrence points (as opposed to formal concurrence) is feasible and report at the next meeting. EPA stated that there were no "red flags" in the Purpose and Need Concurrence Point.

Screening criteria were discussed. The meeting participants agreed that the following criteria should be used to determine a reasonable range of alternatives to advance to the Draft Tier 1 EIS/Program EIR:

1. Meets the Project Purpose
2. Avoids or minimizes direct, indirect and cumulative impacts to jurisdictional waters of the U.S., including wetlands
3. Avoids or minimizes growth inducement in environmentally sensitive areas
4. Avoids or minimizes effects to Section 4(f) resources
5. Is consistent with the intent of the objectives of the Placer County Conservation Plan

FHWA would formally ask U.S. Army COE and EPA to provide concurrence letters based on this list.

The meeting participants undertook a preliminary discussion of the range of alternatives to be evaluated. The meeting agreed to consider the corridor alignment alternatives already identified by PCTPA, as well as any new alternatives proposed by stakeholders, the public and/or agencies. This includes four alternatives already identified by a stakeholder.

EPA has a presumption that at least one avoidance alternative can be identified that meets the project's Purpose and Need and that would reduce the impacts of alternatives that represent a full freeway across the study area. This alternative could be a TSM, shorter Parkway, or combination of modes. DKS noted

that some work in analyzing such potential alternatives has been conducted and provided to the meeting participants, but this work needs discussion with the whole group in order to determine what such an alternative (or alternatives) would look like and if it (they) would meet Purpose and Need.

COORDINATION MEETING #11 – June 28, 2005

Meeting participants included representatives from U.S. Army COE, EPA, FHWA, Caltrans, PCTPA, URS Corporation, DKS Associates, and Koegel & Associates.

The meeting objective was to commence discussion on the range of alternatives. Agenda items included:

Introductions
Approval of Minutes of May 18 Meeting
Consultation Process Status
Action Items from May 18 Meeting
Range of Alternatives
PowerPoint Presentation of PCTPA's Four Potential Corridor Alignment Alternatives

Concurrence letters regarding screening criteria will be forthcoming from EPA and U.S. Army COE; a concurrence letter regarding purpose and need will be forthcoming from U.S. Army COE.

The meeting focused on discussion of the range of alternatives that could be evaluated during screening. There was a discussion of potential avoidance alternatives. EPA recommended concepts to apply to an avoidance alternative. These were as follows:

1. The focus in defining alternatives should be on habitat connectivity and aquatic connectivity.

2. The land use assumptions' cumulative development scenario should be as reasonable as possible, and should reflect where the region is going relative to the Blueprint project. EPA suggests that the cumulative development scenario be modified to apply Blueprint concepts and to better reflect the Section 404 perspective, i.e., change the land use assumptions to reflect more dense development and smaller project footprints.

3. EPA would like to see an array of ways to maximize the use of existing infrastructure, which they believe would be the best avoidance alternative.

EPA described four potential avoidance alternatives, as follows:

1. Combine the concepts for the TSM alternative and the "shorter parkway" alternative developed by PCTPA.

2. Expand the project's right-of-way to bring resources into conservation easements. These easements would be designed to protect aquatic resources.

3. Develop a multi-modal transportation corridor near Baseline Road. Put all transportation facilities in a narrow corridor to minimize the area of impact and to reduce growth-inducing effects.

4. Combine the TSM alternative with changed land use assumptions in the Baseline Road area. These land uses would be more intense than those identified to date, and would be more intense than identified in the Blueprint scenario – "a step beyond the Blueprint."

Key issues raised by participants included:

- Changing the land use assumptions in the future scenario was a concern to Caltrans and FHWA, particularly with respect to CEQA requirements. Concerns were raised about legal issues, local land use authority, speculation, and implementation. The land use assumptions used for screening were developed through the advisory committees and with input from all jurisdictions and SACOG. Changing these assumptions without buy-in from these groups may not be considered reasonably foreseeable. Also, for air quality conformity reasons, the project is required to use the same assumptions as SACOG for the 2025 analysis. It was agreed to think more about this, and get some legal input from FHWA and from Caltrans.

- DKS described the assumptions behind the TSM and "shorter parkway" alternatives, focusing on the limited capacity of Baseline Road using the future land use assumptions approved by the advisory committees.

- DKS described the assumptions in the No Project Alternative, which currently includes all projects in the 2025 MTP, plus new or expanded roadways that are reasonably foreseeable as a condition of future development. John Long asked what beyond that should be considered for the 2040 scenario to respond to EPA's input.

- The reasons for moving the PCTPA's proposed southern alternative one mile away from Baseline Road were identified: fewer impacts to aquatic resources, fewer impacts to communities, expressed desire by the advisory committees to place the parkway so that an adequate planning area along Baseline Road could be achieved, not precluding development along Baseline Road.

Meeting participants agreed to further discussion on these alternatives and concepts.

PCTPA presented a brief PowerPoint presentation that summarized the process through which the four potential corridor alignment alternatives were developed. This was illustrated through comparison of their impacts on aquatic resources, as compared to the concept alignments identified in the *Project Study* Report (DKS, 2004).

COORDINATION MEETING #12 – August 8, 2005

Meeting participants included representatives from U.S. Army COE, EPA, FHWA, Caltrans, PCTPA, URS Corporation, DKS Associates, and Koegel & Associates.

The meeting objective was to continue discussion on the range of alternatives. Agenda items included:

Introductions
Approval of Minutes of June 28, 2005 Meeting
Consultation Process Status
Action Items from May 18 and June 28 Meetings
Range of Alternatives

The meeting focused on ongoing discussion on the range of alternatives. The meeting participants agreed that the previous identification of a reasonable range of alternatives should be documented, with these alternatives then being screened against the screening criteria to demonstrate the generation of the list of alternatives identified to date. Both EPA and the U.S. Army COE agreed that the four potential corridor alignment alternatives already identified by PCPTA would be carried forward into the Draft EIS/R.

It was agreed that the development of avoidance alternatives should also be documented. Avoidance alternatives would be screened against the screening criteria, and would not necessarily be eliminated if

they did not meet the entire project Purpose and Need. EPA emphasized that all alternatives should include avoidance elements as reflected in the screening criteria.

The potential avoidance alternatives identified by EPA at the last meeting were discussed:

1. *Shorter Parkway with Transportation System Management (TSM)* – EPA emphasized that it should include the BRT Feasibility Study for South Placer County. There was considerable discussion about what could be done so that this alternative meets Purpose and Need. DKS said that the amount of traffic projected along Baseline/Riego would require adding new frontage roads to carry local traffic, or expanding new no-project rights-of-ways beyond the improvements identified in the earlier Shorter Parkway analysis. It was agreed that DKS would screen this alternative from a traffic perspective to see if it would meet Purpose and Need.

   There was some discussion about how a roadway with no access for 7 miles, with conservation easements to reduce the likelihood that this no-access feature would be retained, would induce growth.

2. *Corridor close to Baseline with expanded ROW (buffer) for conservation easements* – EPA said that the concept for this alternative was to provide the least amount of induced development to the west and north, with an expanded right-of-way for conservation easement to protect sensitive aquatic resources. When developing this alternative, PCPTA should look for opportunities to link up resources.

   It was noted that the West Roseville Specific Plan has included "preserves" and that they should be added to the map showing preserves within the study area. This Plan has a "buffer area" along its western boundary and this should be included in the "preserves" category. It was agreed that a separate meeting to include PCCP staff, CDFG, U.S. Army COE, EPA and USFWS should be held. This could help define conservation/linkage/connectivity opportunities. PCTPA noted that the project is time-limited and resource-limited, and that "the sky is not the limit" with respect to land acquisition. It was agreed that the concept of an expanded right-of-way for conservation easement to protect sensitive aquatic resources should be applied to all build alternatives, not just the one closest to Baseline/Riego Roads.

3. *Land use change alternative with TSM* – The concept for this alternative was to test whether denser land uses or more compact development could reduce the need for a new structure. It was understood that the transportation agencies cannot change land use. DKS suggested looking at the "super-cumulative" development scenario in development by Placer County, which is trending in a more "Blueprint-like" concept. EPA reiterated that they want to see this concept analyzed, focusing on high density, increased transit, and urban growth boundaries, to attempt to answer the question of what levels of these elements would be needed to meet the Purpose and Need without the Parkway. EPA said that they were not stuck on this being a formal alternative that could be considered a LEDPA candidate, but there must be some analysis and some discussion in the Draft Tier 1 EIS/Program EIR. The analysis should look at changed land use assumptions beyond what is planned or proposed by Blueprint or other processes.

   It was suggested that a sensitivity analysis could focus on density as the mechanism to get transit to work. It was agreed that such an analysis, using the same amount of development assumptions as Blueprint, but pushed closer together, would be undertaken, with the results presented in the Draft Tier 1 EIS/Program EIR.

COORDINATION MEETING #13 – October 6, 2005

Meeting participants included representatives from EPA, FHWA, Caltrans, PCTPA, URS Corporation, DKS Associates, and Koegel & Associates.

The meeting objective was to continue discussion on the range of alternatives. Agenda items included:

Introductions
Approval of August 8, 2005 Meeting Minutes
Action Items
Continue Discussion on Range of Alternatives
Avoidance Alternative Concept – Shorter Parkway and TSM
General Discussion

The concurrence letters from U.S. Army COE on Purpose and Need and Screening Criteria were still outstanding. Gary Sweeten will call USFWS and ask for their input regarding concurrence.

PCTPA reported that the SPRTA Board accepted the recommendation of the Policy Advisory Committee to include a fifth corridor alignment alternative, which was one of four brought forward by a stakeholder. The meeting participants agreed to include this corridor alignment as an alternative to be studied in the Draft Tier 1 EIS/EIR. This corridor alignment alternative would connect to SR 70/99 at Sankey, located between corridor alignment Alternative 4 and the City of Roseville Retention Basin. It would use the common alignment on the western portion of the study area.

The meeting participants discussed details of potential connections and alignments of the proposed alternatives, including the avoidance alternatives. EPA is committed to ensuring a broad range of alternatives is evaluated in the EIS to ensure that the LEDPA is included. Protections of water resources and habitat, and maintenance of habitat connectivity, were considered to be key issues.

Avoidance Alternative Concept – Expanded Corridor Areas: Nancy Levin (EPA) summarized EPA's idea behind this concept. EPA wants to be sure we have a broad enough range of alternatives to include the LEPDA. If there is not a broad enough range, potentially down the line the U.S. Army COE could identify an avoidance alternative that should have been looked at but was not. This concept builds on the PCTPA vision of the Parkway as a broad corridor with few interchanges. There may be certain areas where the corridor lines could be adjusted to protect habitat or provide better habitat connectivity. The idea is to look at where this might be possible and to adjust the alignments by including more areas where this occurs, and tighten up the corridor width in other areas where this opportunity did not exist, so that the result was the same total area preserved.

Project team representatives met with representatives of the Placer County Conservation Plan, to examine a map displaying the five potential corridor alignment alternatives superimposed on aquatic resources and preserve areas, for the purpose of identifying potential areas that would be good to include within the Parkway's potential corridors. Placer County staff felt that the team had done a good job of avoidance, and that there was little habitat value in preserving small, isolated wetland areas adjacent to the corridor alignments, especially given the likelihood of development in this area. The project team's biologist explained how there didn't seem to be other opportunities to make this avoidance concept workable, given the location of the corridors and the resources in the study area near them. He noted that the best resource in the study area proximate to the corridors is Pleasant Grove Creek. The Parkway would span the creek and thereby avoid habitat fragmentation. He also noted that the retention basin already is a preserve concept, so that areas immediately adjacent to the Parkway in this location are already protected. Potential habitat areas near the Parkway corridors were discussed. EPA noted that the idea of avoidance was related to indirect as well as direct impacts, and introduced the concept of potentially looking at downstream areas and protecting them against growth that would be induced by the project. FHWA

agreed to see if the concept of protecting a resource not directly impacted by the project, as an alternative, has ever been incorporated in a project, if it seems viable from FHWA's perspective, and if FHWA believes it meets purpose and need. EPA will also discuss it further internally. It was noted that it would be helpful to hear from the U.S. Army COE on this issue as well.

Avoidance Alternative Concept – Shorter Parkway: DKS Associates explained assumptions behind the analysis. The approach included:

- In the eastern portion of the study area, the roadway would be a new freeway, from SR 65 to Baseline Road;
- In the central and western portion of the study area, traffic would use Baseline/Riego Roads, under either an expressway or a full freeway concept.

Three 2040 scenarios were evaluated using a very robust multimodal model that can predict the worst 1-hour and also the worst 3-hour periods of congestion. Transit was the key component in all scenarios.

1. The No-Build scenario did not include a new roadway; it included PCTPA's Funding-Constrained Transit Alternative, and the Caltrans concept for SR 70/99 as a six-lane roadway with auxiliary lanes, with bus miles growing proportion to population. This scenario led to severe congestion on I-80 and local roads, including Baseline/Riego Roads. This scenario did not meet the Purpose and Need.

2. The expressway scenario for Baseline/Riego Roads assumed a new freeway between SR 65 and Baseline Road, some additional improvements on Baseline/Riego roads, and more Transportation Systems management features as compared to the No-Build scenario. This concept included the PCTPA Transit Emphases Alternative including light rail or high-grade BRT systems coming up Watt Avenue and into Placer County; walk to transit concepts; park and ride access, I-80 express bus service, more commuter rail, express bus service along Baseline/Riego Roads, and more transit bus miles. The analysis showed higher volumes without enough capacity. This concept identified up to 98,000 vehicles on key portions of Baseline Road. DKS noted that the freeway portion of this alternative concept puts more pressure on this segment. This alternative concept clearly did not work.

3. The freeway or freeway-equivalent scenario along the Baseline/Riego Road portion of this concept included a six-lane freeway with two- to four-lane frontage roads to the north and south, three additional interchanges (or an additional four- to six-lane arterials for short to mid-range traffic). This scenario violates the Parkway concept with limited access. The analysis indicated that there would be more volume on SR 70/99 with this concept than with any of the other Placer Parkway alternatives or the concepts identified above, with projected 113,000 ADT in the roadway segment between the potential Curry Creek development and potential development in Sutter County. This concept got good transit ridership (±1 percent), but not enough to offset increased traffic volumes. The interchange volumes at the Riego Road/SR 70/99 interchange would be problematic. It was noted that this concept takes up more right-of-way and includes more interchanges that any of the build alternatives for the Parkway. It would be very expensive (existing homes, an electric substation, vernal pools in the right-of-way) and the local jurisdictions would be adamantly opposed to it. Caltrans and FHWA do not believe that this alternative meets the purpose and need. For this reason, they recommended that this alternative not be carried forward. EPA noted that the purpose for evaluating this alternative was to try to identify an alternative that would reduce growth-inducing

impacts and minimize habitat fragmentation; i.e., keep the development envelope packed in and reduce development sprawl.

There were questions and discussion. Agencies agreed to review the information presented in the analysis, discuss alternatives internally and present their recommendations at the next meeting.

COORDINATION MEETING #14 – November 3, 2005

Meeting participants included representatives from EPA, FHWA, Caltrans, PCTPA, URS Corporation, DKS Associates, and Koegel & Associates.

The meeting objective was to complete discussion on the range of alternatives. Agenda items included:

Introductions
Approval of October 6, 2005 Meeting Minutes
Consultation Process Status
Action Items from previous Meetings
Range of Alternatives
Avoidance Alternative Concept – Shorter Parkway and TSM
General Discussion

U.S. Army COE concurrence letter on the Purpose and Need was received. There was no response from USFWS to FHWA phone calls regarding their agreement.

EPA noted that PCTPA had adequately explored the potential of non-freeway or non-full-freeway alternatives, and was in agreement that no viable such alternatives exist. The meeting discussed the importance of incorporating impact avoidance and minimization measures into the five alternatives that would be analyzed. In looking at avoidance and minimization, three components are important:

1. Direct impacts such as crossing Pleasant Grove Creek, other fill in wetlands;
2. Secondary impacts such as downstream segmentation of habitat, runoff affecting water quality, etc.; and
3. Indirect impacts, which tend to be associated with growth inducement.

All three areas should be considered in avoidance and minimization strategies. EPA wants to end up with clear understanding of alternatives with as much specificity as possible about how resources will be avoided. Strategies for protecting resources were discussed.

The avoidance alternative scenario and Pleasant Grove Creek projection discussion from the prior meeting was discussed. EPA agreed that this concept is not an avoidance alternative. It is a potential mitigation concept or avoidance concept. It is not a transportation alternative. FHWA reiterated that FHWA cannot fund an alternative that is not a transportation alternative. All participants agreed to drop the Shorter Parkway Plus TSM alternative.

EPA now believes that PCTPA has done a really good job of looking to see if there are other viable non-freeway or non-full-freeway alternatives. It does not seem that there are. EPA feels pretty satisfied that PCTPA has demonstrated that. The conclusion was that no avoidance alternatives will be carried forward for further evaluation in the Draft Tier 1 EIS/EIR.

Concurrence Point 3 was agreed to by participants and contained the following components:

1. The range of alternatives to be studied in the Draft EIS/EIR include the five build alternatives approved by the SPRTA Board plus the No-Build Alternative.

2. Build alternatives will include the following concepts to avoid and minimize direct and indirect impacts to aquatic resources and other natural resources

   - Quote buffer policy statement in Concept Plan/PSR
     - 500- and 1,000-foot corridors
     - access restrictions in the Central Segment
     - others
   - Project proponents will be working toward implementing the buffer policy, including such potential concepts as land use controls, land leases, general plans, zoning/overlay zoning, covenants/deed restrictions, conservation easements, urban growth boundaries.
   - Span Pleasant Grove Creek
   - BMPs

The project team also agreed to include an evaluation of alternate ways to meet the transportation need through land use changes and other mechanisms (Blueprint and beyond, tools identified in the Mineta Report, etc.). This was not a request for another alternative. The evaluation should reference the Mineta report, describe the range of tools, note that these tools are being used elsewhere, and identify what tools are incorporated into the proposed project. This will allow for this project to be put in perspective, and take credit for tools that are incorporated. EPA stated that the most value in performing this evaluation is to look at possible alternative futures in an unconventional way – looking at unconventional solutions to reducing VMTs. The goal of the evaluation is to describe what would need to happen to lower VMTs enough so that a freeway would not be needed. EPA stated that it is important to have a meaningful analysis in the EIS/EIR because it would provide additional disclosure and fulfill NEPA requirements to look at ways to meet the project Need even if the project sponsors do not have control over the tools.

COORDINATION MEETING #15 – March 1, 2006

Meeting participants included representatives from U.S. Army COE, EPA, FHWA, Caltrans, SACOG, PCTPA, URS Corporation, DKS Associates, and Mara Feeney & Associates.

The meeting objective was to provide background on the project team's approach to use MEPLAN to help measure potential growth inducing impacts and to get resource agency input. Agenda items included:

Introductions
MEPLAN

The project team's interest in using MEPLAN, an integrated land use and transportation program with an imbedded traffic model, was described. MEPLAN would be used to identify the potential for growth with and without the project, and to differentiate the potential for growth inducement among Placer Parkway Corridor Alternatives (with and without Watt Avenue interchange).

DKS provided information regarding MEPLAN. It is a program that is familiar to the Sacramento region. It was used in the Mineta Foundation Report prepared by U.C. Davis. Its primary purpose is to allocate development around the region in specific time increments via economic-based inputs. He said there is a concern whether there would be a difference in development by 2020 with or without the Placer Parkway. The MEPLAN work is to determine whether there would be a significant difference in growth and, if so,

where. Initially, the northernmost and southernmost corridor alternatives will be evaluated. If a significant change results between the two – the corridor alternatives between them will then be reviewed.

SACOG said MEPLAN is a decision-making model based on the competitive nature of builders (developers), land supply and growth policies. DKS explained that some MEPLAN adjustments have to be completed. However, the project team did not want to "constrain" the model to force a particular outcome.

EPA asked whether the model allows "available land" for any type of development and if areas identified for development were restricted to certain uses. DKS replied that SACOG's Base Case for the Blueprint used the MEPLAN model, in which there were no limits on growth and sprawl. The Parkway team will not constrain the types of land uses since the projects identified in the 2040 scenario propose all types of land uses. And, since the Base Case was developed, SACOG has received updated land availability information from local jurisdictions, and these data would be incorporated into the model.

Preliminary feedback from the federal resource agencies was very positive. Many questions were raised, including how inputs would be developed, how the model worked, how land prices were arrived at, allocation of growth and land supply information, if the model would capture isolated developments, and how the local roadway network would take account of new development over time.

COORDINATION MEETING #16 – October 23, 2006

Meeting participants included representatives from U.S. Army COE, EPA, USFWS (by phone), FHWA, National Marine Fisheries Service, California Department of Fish and Game, Caltrans, SACOG, Placer County, PCTPA, URS Corporation, and DKS Associates.

The meeting objective was to receive feedback from the resource agencies on two coordination issues. Resource agencies attendance will help to share: (1) concerns (and possible solutions) related to processing the proposed Placer Ranch Specific Plan and (2) ways to improve the environmental review process via early input by the resources agencies. Agenda topics included:

Introductions
Approval of March 2006 Meeting Minutes
Consultation Process Status and March 1 Meeting Action Items
Project Update
Placer County Coordination
Information Sharing and Early Input

All letters confirming EPA and U.S. Army COE concurrence on the first three Concurrence Points have been received. PCTPA provided an update on project progress.

PCTPA described a potential conflict between the Placer Parkway's proposed corridor alignment alternative in the Eastern Segment and a roadway from SR 65 to Fiddyment Road proposed by the Placer Ranch Specific Plan (PSRP) applicant. At an October 2003 Placer County Board of Supervisors' meeting, direction was given to staff to process both the Placer Parkway project and the PRSP concurrently. County staff preferred to identify the Placer Parkway corridor first and then process the PRSP. However, the Board was adamant about the concurrent process direction. One common Placer Parkway corridor alternative crosses over the proposed PRSP area. The PRSP needs a connection from SR 65, west to their site that would connect to Fiddyment Road, which runs north-south through the central portion of the PRSP site. Two Placer Parkway corridor issues are related to this potential PRSP roadway:

1. Roadway Alignment – East of Fiddyment Road

   The PRSP applicant is working with a proposed roadway alignment from SR 65 to Fiddyment Road that differs slightly from the Placer Parkway corridor alignment alternative. The PRSP alignment moves slightly south of the Parkway corridor alignment alternative in some areas in order to get as much of the roadway on to land they control, and to avoid the Rio Bravo (Ultra Power) site as much as possible. In order to move both projects forward, Placer County has asked if PCTPA could separately provide information about the PRSP roadway alignment areas that lie outside of the Placer Parkway corridor alignment alternative.

   Placer County explained that part of the condition of approval for the PRSP would be that it includes a roadway that may be integrated into the future Parkway, should the Parkway be approved. The PRSP schedule is to certify a Final EIR in 2007, while the Parkway's schedule reflects a Record of Decision in 2008. PRSP will be seeking approvals before the completion of the Tier 1 process for the Placer Parkway Corridor Preservation project. Phasing could be a key. There is to be no Placer Parkway construction as a result of the Tier 1 process. Placer County hoped the Tier 2 review for this critical segment (during which a LEDPA would be identified) could be completed for Placer Parkway before PRSP had to build the roadway.

   A possible solution (for the eastern roadway alignment issue) would be for the Placer Parkway Tier 1 EIS/EIR (possibly in an appendix) - to have information on potential impacts associated with the PRSP roadway alignment. Placer County does not want the Parkway and PRSP environmental documents to contain different or confusing information. Placer County's message to the PSRP applicant is they need to find a LEDPA alignment for their roadway. According to Placer County, PRSP would cooperate to identify the LEDPA. Placer County staff would not support any alignment that was preferable with respect to right-of-way acquisition but which would not qualify as the LEDPA.

   Concern was expressed regarding impacts, the narrow width of the PSRP right-of-way reservation, lack of existing information about impacts related to the proposed PSRP right-of-way, the potential to undermine the Parkway process.

2. Roadway Width – West of Fiddyment Road

   The PRSP applicants are proposing a reduced corridor width and buffer areas. Placer County said the PRSP applicant has indicated that it is quite a financial burden to reserve a 1,000-foot-wide area. The PRSP proposes to dedicate right-of-way for a future Placer Parkway, if approved, west of Fiddyment Road. PRSP has prepared two land plans:

   a. a "proposed" land plan with an approximate 250-foot-wide right-of-way for the road and land uses in the remainder of what would be the 1,000-foot-wide corridor, and

   b. a second land plan with a 1,000-foot-wide corridor as proposed by Placer Parkway, which would be studied as an alternative in the PSRP EIR.

   Placer County is trying to find a solution that respects the need to preserve open space and which also is more acceptable for development. U.S. Army COE cautioned that concurrence on the 1000-foot-wide corridor had already been achieved. Placer County acknowledged this; the staff was trying to make both projects better in the end, given the

Placer County Board of Supervisors' direction to proceed with both projects in a similar time frame.

The possibility of PRSP acquiring land off-site to the north to provide more buffer was discussed. U.S. Army COE again cited concurrence concerns. One option would use the existing corridor alignment area plus land outside of it.

U.S. Army COE stated that a potential solution for all the western Placer County development proposals was the Placer County conservation plan. However, this cannot be assumed, and the time frame is not consistent with PSRP time frame.

It is important to preserve the integrity of the Parkway's environmental review process through to the Tier 1 Record of Decision. Caltrans said that because of the concurrence process, it would be clearer to keep the PRSP analysis separate. Meeting participants agreed that information regarding the PRSP alignment that falls outside of the proposed Placer Parkway alignment should be of similar type and level of detail completed to date for the Tier 1 project. This would be presented in a separate section of the Draft Tier 1 EIS/EIR, as information.

PCTPA offered to share technical studies supporting the Draft Tier 1 EIS/EIR with the agencies. Resources agency representatives did not appear interested in providing early input based on existing workloads. The EPA representative said she would check in-house with EPA staff.

[Note: Subsequent to this meeting, the PRSP team completed their review of LEDPA issues within the proposed Parkway corridor and their proposed corridor, east of Fiddyment where the two diverged, and concluded that they would withdraw their proposed alignment, and work toward identifying a LEDPA alignment within the proposed Parkway corridor. They have still not agreed to reserve the full width identified by the proposed Parkway alignment through their Plan Area.]

Appendix E
Meeting Notices

PLACER PARKWAY
CORRIDOR PRESERVATION PROJECT

Public Scoping Meetings Scheduled for Placer Parkway Corridor Preservation Project

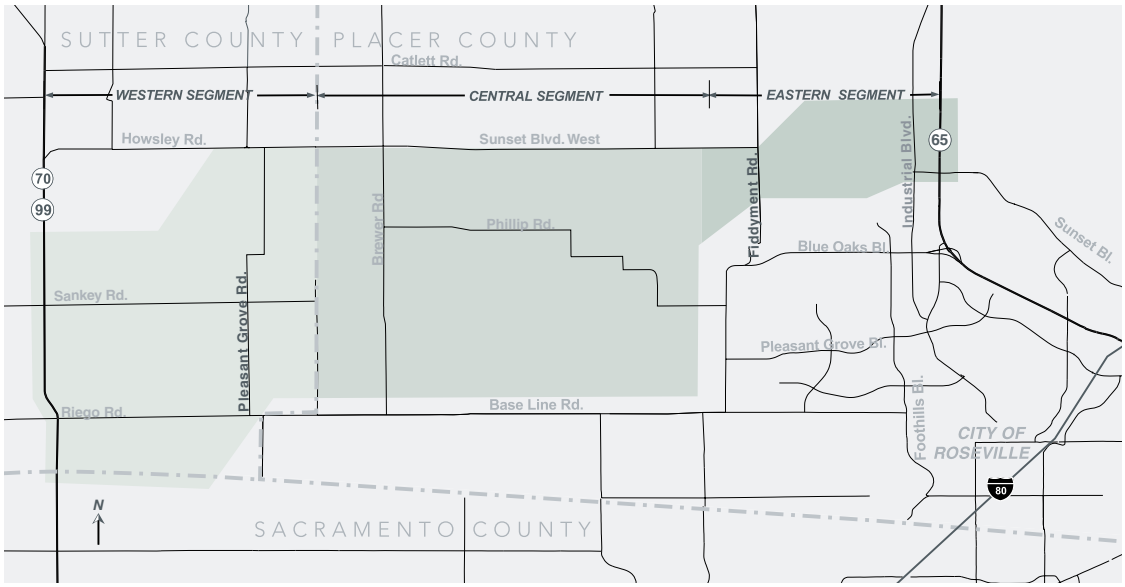
The project will identify a corridor and allow for the acquisition or preservation of right-of-way for a future Parkway connecting State Route 65 in Placer County, California and State Route 70/99 in Sutter County, California. This Parkway is identified in the Sacramento Council of Government's (SACOG) 2025 Metropolitan Transportation Plan (MTP) and the 2022 Placer County Regional Transportation Plan. Three corridor concepts connecting these routes were identified in a Project Study Report prepared in 2001: a northerly connection, a central connection and a southerly connection within the study area. These concepts, together with other feasible corridors that may be identified during the scoping process, will be evaluated to determine the alternatives that will be analyzed in a Tier 1 Environmental Impact Statement/ Environmental Impact Report (EIS/EIR).

The South Placer Regional Transportation Authority (SPRTA) is the lead California Agency for this project. Sutter County is in the process of formalizing an agreement to associate with SPRTA as a co-lead agency for the project. SPRTA has authorized the Placer County Transportation Planning Agency (PCTPA) to prepare the Tier 1 EIS/EIR. The Federal Highway Administration (FHWA) will be the federal lead agency, working in conjunction with the California Department of Transportation (Caltrans).

The formal comment period regarding the scope and content of the Tier 1 EIS/EIR ends on October 31, 2003. You may provide your comments in writing to Celia McAdam at the address on the back, provide comments in writing at one or both of the scoping meetings, and/or provide oral comments at the scoping meeting. If for some reason you can't attend and want more information, please contact us.

High-Priority Project

The Parkway is a high-priority regional transportation project. Employment, population growth, and traffic have become major issues for many people who live and work in the area. The amount of time and productivity lost has a real impact on the regional economy and our quality of life. At the same time, preserving agricultural open space and habitat is also critical.



PLACER PARKWAY CORRIDOR PRESERVATION PROJECT STUDY AREA

PCTPA | 550 High St., Suite 107 | Auburn, CA 95603 | tel 530-823-4030 | fax 530-823-4036 | web www.pctpa.org

learn more about the placer parkway corridor preservation project

Public Scoping Meetings are scheduled for:

Monday, October 6

4:00 - 8:00 pm
Maidu Community Center
1550 Maidu Dr.
Meeting Rooms 1 and 2
Roseville

Thursday, October 9

4:00 - 8:00 pm
Pleasant Grove School
3075 Howsley Rd.
Pleasant Grove

For more information, to put your name on the newsletter mailing list, or to send in your comments

Contact

Celia McAdam, Executive Director
Placer County Transportation Planning Agency
550 High Street, Suite 107
Auburn, CA 95603
Telephone: 530-823-4030
Fax: 530-823-4036
Email: cmcadam@pctpa.org

The public scoping meeting is a drop-in format where the public can discuss the project and its environmental review with staff and consultants. Public comments on the scope and content of the Tier 1 EIS/EIR will be accepted at the scoping meeting. Presentations about the project will be given at 4:30, 6:30 and 7:00 p.m. **Please join us!**

Placer County Transportation Planning Agency

550 High Street, Suite 107
Auburn, CA 95603
www.pctpa.org

PRSRT STD
US Postage Paid
TMR
Roseville CA

PLACER PARKWAY
CORRIDOR PRESERVATION

please join us for our
public meeting

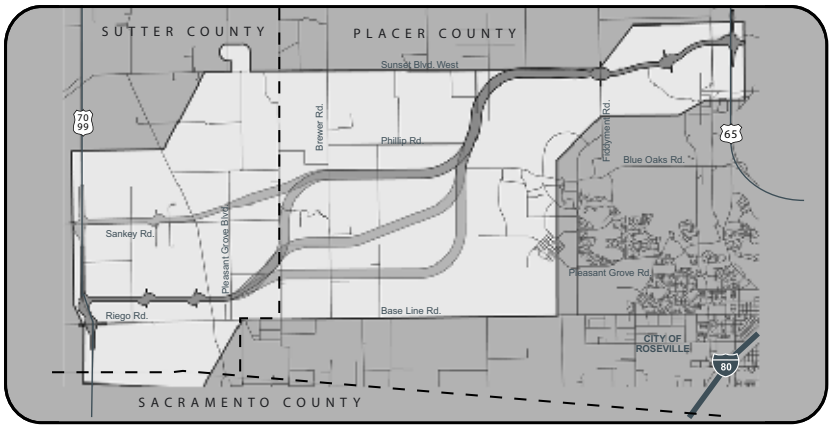
The public meeting will begin with an open house at 6:00 p.m., where the public can provide comments and ask questions regarding the presentation of the preliminary corridor alternatives for Tier 1 EIS/EIR analysis related to the Placer Parkway Corridor Preservation project with staff and consultants. A presentation about the project will begin at 6:30 p.m.

Please join us!

For more information visit:
www.pctpa.org

Placer County Meeting
Monday August 23, 2004
6:00 - 8:30 pm
Roseville Corpration Yard
2005 Hilltop Circle
Roseville

Sutter CountyMeeting
Thursday August 26, 2004
6:00 - 8:30 pm
Pleasant Grove School
3075 Howsley Rd.
Pleasant Grove



Potential Corridor Alignment Alternatives
Place Parkway Corridor Preservation Tier 1 EIS/EIR

Appendix F
Print Ads

public scoping meeting

PLACER PARKWAY
corridor preservation project

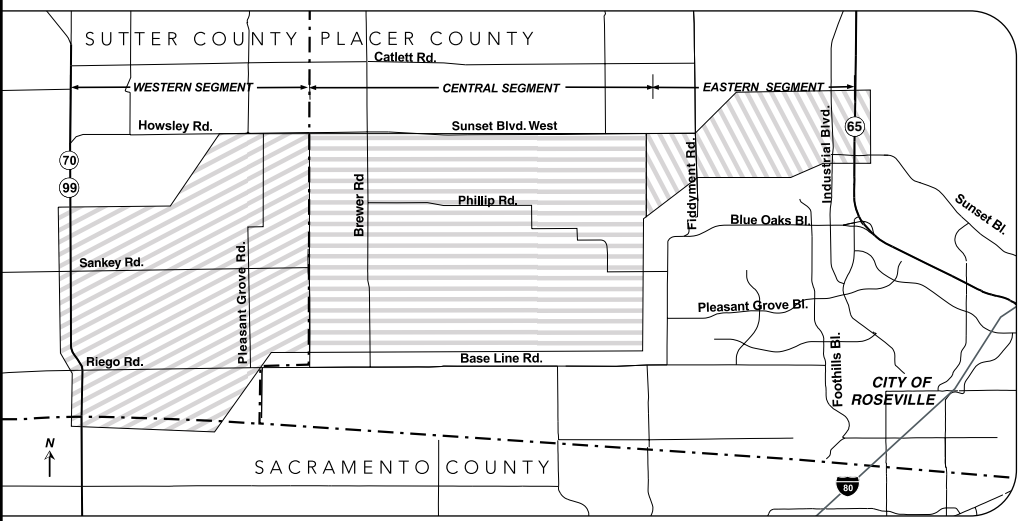
the project will identify a corridor and allow for the acquisition or preservation of right of way for a future Parkway connecting State Route 65 in Placer County, California and State Route 70/99 in Sutter County, California. This Parkway is a high priority regional transportation project identified in the Sacramento Council of Government's (SACOG) 2025 Metropolitan Transportation Plan (MTP) and the 2022 Placer County Regional Transportation Plan. Three corridor concepts connecting these routes were identified in a Project Study Report prepared in 2001: a northerly connection, a central connection and a southerly connection within the study area. These concepts, together with other feasible corridors that may be identified during the scoping process, will be evaluated to determine the alternatives that will be analyzed in a Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR). A Notice of Preparation is available through the Placer County Transportation Planning Agency.

Written comments and questions can be directed to Celia McAdam, Executive Director, Placer County Transportation Planning Agency, 550 High Street, Suite 107, Auburn, CA 95603. 530-823-4030
The formal comment period regarding the scope and content of the Tier 1 EIS/EIR ends on October 31, 2003.

learn more about the project and provide your comments and suggestions as to the scope and content of the Tier 1 EIS/EIR. Scoping meetings to gather comments and information from the public and agencies regarding the proposed project are scheduled:

placer county
Monday, October 6, 2003
4:00 to 8:00 p.m.
Maidu Community Center,
Meeting Rooms 1 & 2
1550 Maidu Drive, Roseville, CA

sutter county
Thursday, October 9, 2003
4:00 to 8:00 p.m.
Pleasant Grove School
3075 Howsley Road
Pleasant Grove, CA



PLACER PARKWAY CORRIDOR PRESERVATION PROJECT STUDY AREA

PLACER PARKWAY
CORRIDOR PRESERVATION

public meetings scheduled for august

Public meetings will be held by the Placer County Transportation Planning Agency (PCTPA) to review the potential corridor alignment alternatives being considered for evaluation in the Placer Parkway Corridor Preservation Tier 1 EIS/EIR, and to obtain community feedback.

The public is invited to review project maps and information starting at 6:00 pm. The project team will give a project overview at 6:30 pm. A question and answer session will follow.

Written comments and questions can be directed to Placer County Transportation Planning Agency, 249 Nevada Street, Auburn, CA 95603. Phone: 530-823-4030 Fax: 530-823-4036

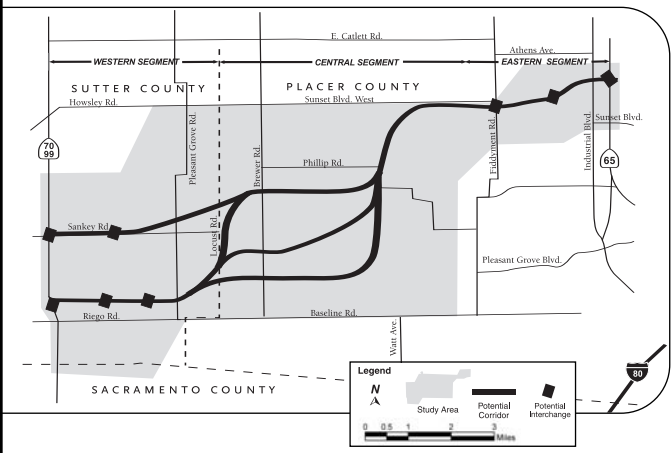
Placer County Meeting

Monday, August 23, 2004
6:00 - 8:30 p.m.
Roseville Corporation Yard
2005 Hilltop Circle
Roseville

Sutter County Meeting

Thursday, August 26, 2004
6:00 - 8:30 p.m.
Pleasant Grove School
3075 Howsley Rd.
Pleasant Grove

For more information visit: www.pctpa.org



PLACER PARKWAY CORRIDOR PRESERVATION PROJECT STUDY AREA AND POTENTIAL CORRIDOR ALIGNMENT ALTERNATIVES FOR TIER 1 EIS/EIR ANALYSIS

Appendix G
Press Releases

Press Release

Contact: Celia McAdam/Stan Tidman
Placer County Transportation Planning Agency
(530) 823-4033

[DATELINE]

PLACER PARKWAY CORRIDOR PRESERVATION PROJECT
SCOPING MEETINGS

October 6 and October 9, 2003, are the dates set by the Placer County Transportation Planning Agency for public meetings to help define corridor alternatives for the Placer Parkway Corridor Preservation project. The Parkway is a high priority regional transportation corridor that will eventually connect rapidly growing western Placer County with Sutter County industrial development areas, and the airport to the west. A previous Project Study Report recommended preservation of a 15-mile long, east-west transportation corridor linking State Highway 65 with State Highway 70/99.

"It is critical to preserve our ability to address our growing transportation needs. We are planning this future transportation corridor to reduce traffic congestion, improve access to Sacramento International Airport, and provide an alternative to Interstate 80 while promoting and preserving agricultural open space," said Celia McAdam, Executive Director of PCTPA.

To streamline the environmental review process, PCTPA will prepare a Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR), which will identify and preserve the land needed for the future transportation corridor. It will address federal and state environmental guidelines and provide

information to the public so that community members can play a part in selecting a corridor.

Three distinct advisory groups are reviewing the project, providing vital discussions of technical data, jurisdictional issues, preferences, community-specific elements and policy-related matters. The Technical and Policy Advisory Committees includes elected officials and staff. The Study Advisory Committee fosters communication between the community; environmental, agricultural, development, and other interest groups; public agencies; and local jurisdictions. .

The public can participate in the project by attending the public scooping meeting on October 6, at the Maidu Community Center, in Roseville and October 9, at the Pleasant Grove School in Pleasant Grove. There will be a dedicated project website for questions and comments from the public. Celia McAdam added, “PCTPA encourages the public to get involved and provide their input to ensure we incorporate the best ideas available.”

For more information regarding the Placer Parkway Corridor Preservation project please contact: Stan Tidman, Project Manager, PCTPA, (530) 823-4033.

###

Appendix H
Newsletters

PLACER PARKWAY
CORRIDOR PRESERVATION

Corridor Alignment Alternatives

public meetings

Placer County Meeting
6 p.m. – 8:30 p.m.
Mon., Aug. 23, 2004
Roseville Corporation Yard
2005 Hilltop Circle
Roseville, California

Sutter County Meeting
6 p.m. – 8:30 p.m.
Thurs., Aug. 26, 2004
Pleasant Grove School
3075 Howsley Road
Pleasant Grove, California

Public meetings will be held by the Placer County Transportation Planning Agency (PCTPA) to review the potential corridor alignment alternatives being considered for evaluation in the Placer Parkway Corridor Preservation Tier 1 EIS/EIR, and to obtain community feedback.

The public is invited to review project maps and information starting at 6:00 p.m. The project team will give a project overview at 6:30 p.m. A question and answer session will follow.

For more information visit: www.pctpa.org or call 530.823.4030.

The Parkway Concept

The Placer Parkway Corridor Preservation Project is in the process of identifying a 500-foot to 1,000-foot-wide corridor for future Parkway construction. The Placer Parkway is envisioned as an 15-mile long high-speed transportation facility connecting State Route (SR) 65 in Placer County and SR 70/99 in Sutter County. It will link existing and planned development in the two counties. It will also improve access to downtown Sacramento and to Sacramento International Airport. Other potential transportation modes, such as bus rapid transit, may be developed in the corridor.

The aim of the current project is to preserve a corridor for right-of-way acquisition in this rapidly growing area. Work to identify a corridor is underway now. However, funding for Parkway construction is not anticipated until approximately 2015.

Corridor Preservation Project

The Corridor Preservation project has two phases. Phase 1, currently underway, is to identify feasible corridor alignment alternatives (alternatives). Input has been collected from a wide range of sources. See *Corridor Alternatives Identification Process, inside*. Contributors to this process include standing technical, study, and policy advisory committees; local jurisdictions; landowners and the public; and federal, state and local agencies. The alternatives identified during Phase 1 will be evaluated in Phase 2.

Phase 2 is to complete a Tier 1 Environmental Impact Statement/ Environmental Impact Report (Tier 1 EIS/EIR) that will evaluate the alternatives and will lead to the selection of one corridor for right-of-way preservation. The Tier 1 EIS/EIR is a combined Federal/State environmental review document. There will be opportunities for the public to review and comment on it. The Tier 1 EIS/EIR will emphasize the relative differences among corridor alternatives with regard to potential impacts to allow for an informed choice among alternatives. It will focus on broad topics, such as general location, mode choice, area-wide air quality and land use, and other environmental issues. The Tier 1 EIS/EIR will also identify mitigation strategies to be used in later construction-related (Tier 2) environmental reviews. The Tier 2 review, relying on the work from the Tier 1 document, will provide a more detailed analysis of environmental impacts for specific alignments within the selected corridor.

Right-of-way acquisition for the corridor can begin only after the Tier 1 EIS/EIR process is completed.

CONTINUED INSIDE

modified

NEPA/404 process

PCTPA is committed to identifying and addressing environmental issues, including ones that could affect future federal permits required to construct the Parkway. So that these issues can be identified and satisfactorily dealt with, the Federal Highway Administration, Caltrans, and PCTPA are coordinating with the U.S. Army Corps of Engineers (USACOE) and the U.S. Environmental Protection Agency (USEPA). These agencies have agreed to modify the "NEPA/404 process." This process streamlines the review of projects subject to the National Environmental Policy Act (NEPA) that also require Section 404 permits under the Clean Water Act. The focus of the NEPA/404 process is wetlands and other "Waters of the U.S."

Normally, the process is initiated only when a permit application is made to the USACOE. The process was modified because there is no permit required for the Corridor Preservation Project. The parties have agreed to early consultation to identify environmental issues that could affect future construction permit approvals. The process will seek to reach concurrence on the Least Environmentally Damaging Practicable Alternative (the "LEDPA"), and to identify appropriate mitigation strategies. This effort will assist PCTPA to identify corridor alignment alternatives that will satisfy USACOE and USEPA environmental concerns.

CONTINUED FROM COVER

Future construction can start only after the Tier 2 construction-related environmental review is done.

Planning History

The concept of the Placer Parkway has been considered for over a decade. Placer County's 1994 General Plan depicts a 'plan line' for it. More detailed planning began in the late 1990s with a Conceptual Plan, published in 2000. Next, several conceptual corridor alternatives were identified in a 2001 Project Study Report (PSR). PCTPA and Sacramento Area Council of Governments (SACOG) Boards adopted the project goals and policies contained in these planning documents. The Placer Parkway is now an important component of SACOG's 2025 Metropolitan Transportation Plan.

Corridor Alignment Alternatives Identification for Tier 1 EIS/EIR Evaluation

Since 2003, PCTPA and its consultant team have worked with agencies, organizations, and individuals to identify potential issues and to collect and evaluate engineering, environmental, and transportation information for the study area. See *Technical Memorandum-Screening Evaluation of PSR Alternatives (www.pctpa.org)*. A number of environmental issues were identified while screening the PSR's conceptual alternatives. Consequently, a number of modifications to the corridors were recommended to reduce environmental impacts while remaining consistent with the project's adopted goals and policies.

The project's three advisory committees, local jurisdictions, and federal resource agencies reviewed these recommended modifications. They also provided additional direction and requested more information on specific issues. Advisory committee direction included:

- **Modify** each PSR corridor alignment alternative to avoid or minimize effects on resources such as vernal pools, existing communities, and agricultural lands.

Residents, community leaders and business repre

stay involved!

second round of pub

The Placer Parkway Corridor Preservation Project has recently completed identifying potential corridor alignment alternatives for analysis in a Tier 1 Environmental Impact Statement/Environmental Impact Report (Tier 1 EIS/EIR). Public meetings are scheduled on August 23 (Placer County) and August 26 (Sutter County), 2004 to

- **Eliminate** (1) the central and western segments of the PSR's northern corridor alignment alternative, (2) a potential Parkway connection with SR 65 at Sunset Boulevard, (3) a potential Parkway connection with SR 70/99 north of Sankey Road, and (4) a potential Parkway connection with SR 70/99 south of Riego Road, with concurrence of the City of Sacramento and Sacramento County.
- **Identify** and evaluate more direct corridor alignment alternatives across the study area.
- **Evaluate** two Baseline Road-vicinity scenarios (1) a corridor alignment immediately to the north, and (2) one approximately one mile farther north.

These recommendations resulted in 11 modified or new corridor alignment alternatives. They were evaluated and adjusted to further avoid or reduce impacts to environmental and other resources, and presented to the project's Technical Advisory Committee (May) and Study Advisory Committee (June). As a result of these meetings, four potential corridor alignment alternatives were identified for analysis in the Tier 1 EIS/EIR. Each would connect to SR 65 at Whitney Boulevard. Each alternative would extend westward, differing as shown on the map at right:

- **Connecting to SR 70/99 at Sankey Road**
- **Extending south along Locust Road, to connect to SR 70/99 north of Riego Road**
- **Extending diagonally to the southwest, to connect to SR 70/99 north of Riego Road**
- **Extending south, then west parallel to Baseline Road, to connect to SR 70/99 north of Riego Road**

Also, in the central segment of the study area, one potential connection with a future Watt Avenue extension will be evaluated in the Tier 1 EIS/EIR. The project's goals and policies limit access between Fiddyment Road and Pleasant Grove Road to this potential interchange. A future Watt Avenue extension is not a part of the Placer Parkway project.

Next Steps

These four potential corridor alignment alternatives to be considered for Tier 1 EIS/EIR analysis and subject to additional adjustments will be presented at public meetings on August 23 in Roseville and August 26 in Pleasant Grove. The purpose of these meetings is to review the alternatives and gather public comments. The project team is also working with the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency to address Clean Water Act requirements. (Please see sidebar describing the "*Modified NEPA/404 Process*.")

The final set of corridor alignment alternatives to be evaluated in the Tier 1 EIS/EIR will be determined with direction from the project's Policy Advisory Committee, South Placer Regional Transportation Authority (SPRTA), Sutter County, and the Federal Highway Administration, as well as public input.

sentatives are now discussing where to preserve a corridor for the future.

blic meetings has been scheduled

present this information to the community. This is the second in a series of public meetings to present information regarding project progress and to obtain community feedback. The meetings will include a presentation by project staff at 6:30 p.m., followed by an opportunity to ask questions and provide comments.

The first public meetings for the project were held in fall 2003 in Roseville and Pleasant Grove. The PSR corridor alignment alternative concepts identified in earlier studies were reviewed. The process to develop alternatives for study in the Tier 1 EIS/EIR was also described.

Community members, local groups, agency representatives and other interested stakeholders offered their comments and ideas about the proposed Placer Parkway Corridor Preservation Project. Areas of concern identified at the 2003 meetings included: alignment routes, impacts on residents/farming operations/ businesses, impacts to the environment, and the need for coordination among planning agencies.

placer parkway corridor preservation project

study area and potential corridor alignment alternatives

FOR TIER 1 EIS/EIR ANALYSIS

The project team, advisory committee members and other technical resource specialists incorporated feedback received at the meetings into the potential corridor alternatives described in this newsletter.

For more information on the August 2004 public meetings, see the PCTPA project website at: www.pctpa.org.

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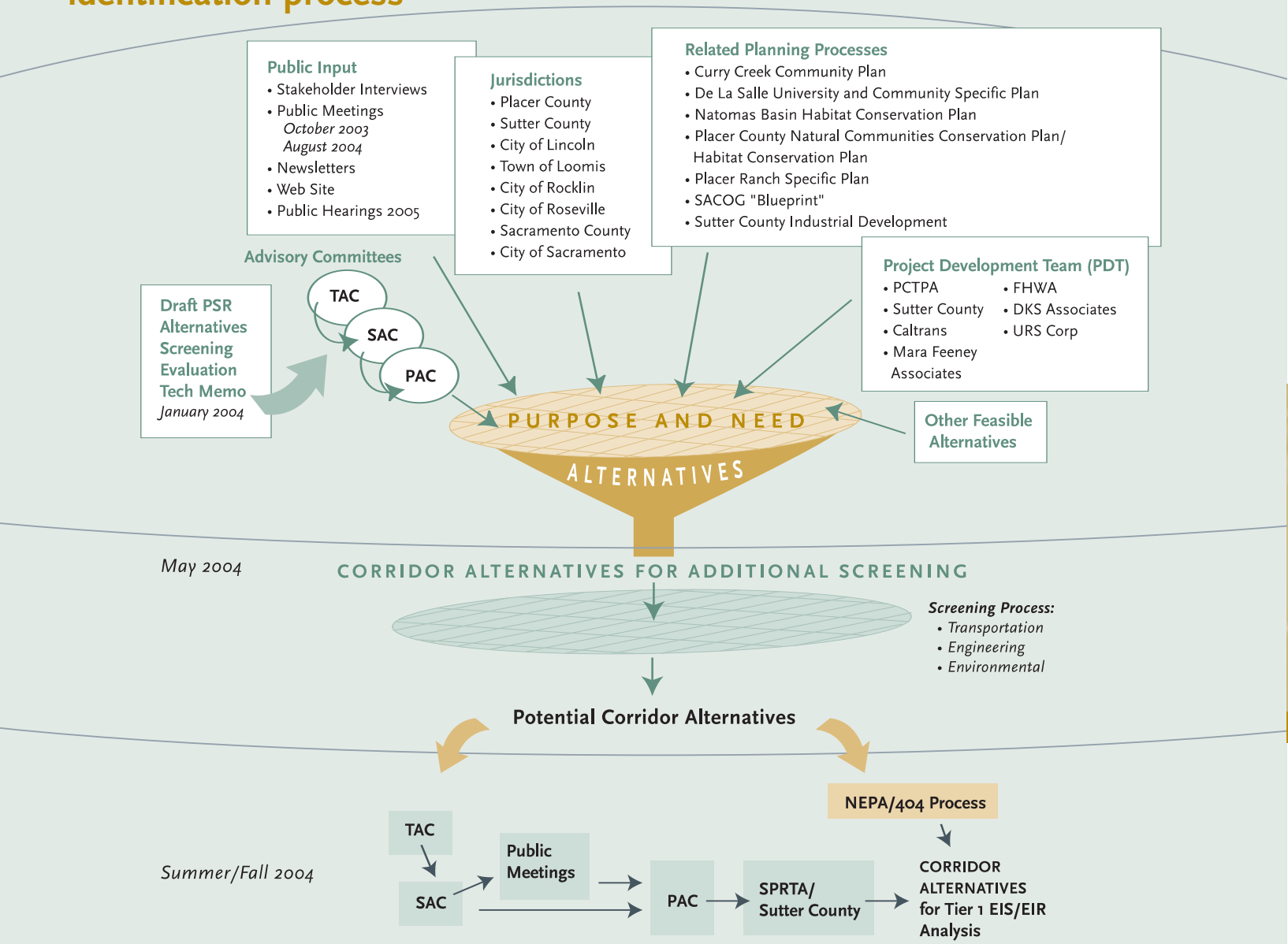
Celia McAdam, Executive Director
Placer County Transportation Comm
249 Nevada Street
Auburn CA 95603-9846

corridor alternatives
identification process



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☐ **Yes! Please add my name to the mailing list.**

☐ **Please remove my name from the mailing list.**

name _____

address _____

_____

_____

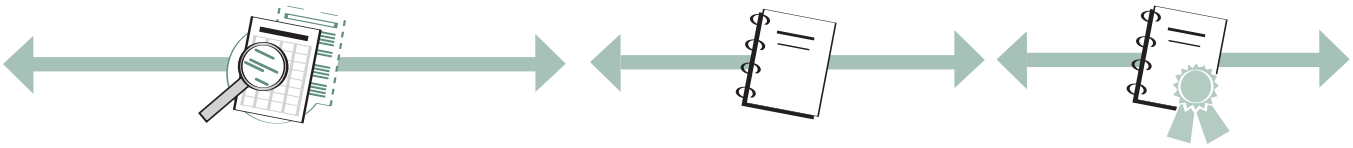
You can also contact us by phone or email to be added or removed from the mailing list: (530) 823-4030 or pctpa@pctpa.org

find out more and stay involved!

Placer County Meeting
6 p.m. – 8:30 p.m.
Mon., Aug. 23, 2004
Roseville Corporation Yard
2005 Hilltop Circle
Roseville, California

Sutter County Meeting
6 p.m. – 8:30 p.m.
Thurs., Aug. 26, 2004
Pleasant Grove School
3075 Howsley Road
Pleasant Grove, California

placer parkway corridor preservation project timeline



Data Collection & Alternatives Identification

Draft Tier 1 EIS/EIR

Final Tier 1 EIS/EIR

Public Meeting

Public Meeting

Public Hearing

2003 | 2004 | 2005 | 2006 | 2007

check us out online!

www.pctpa.org

PCTPA's website (**www.pctpa.org**) is home to information about the Placer Parkway Project. From the PCTPA home page, just click on [projects], then on Placer Parkway. There you will find project documents, newsletters, meeting notices and other relevant materials to keep you informed.

PLACER PARKWAY
CORRIDOR PRESERVATION

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Auburn, CA 95603

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Placer Parkway
Corridor Preservation

Additional Potential Alternatives

The Placer Parkway is envisioned as a 15-mile-long high-speed transportation facility, which will connect State Route (SR) 65 in Placer County and SR 70/99 in Sutter County. The facility will be constructed within a 500-foot- to 1,000-foot-wide corridor. It will reduce pressure on the existing transportation network, address anticipated future congestion on the local roadway system in southwestern Placer County and south Sutter County, and will improve regional accessibility for businesses and jobs. Other potential transportation modes, including bus rapid transit, may be developed in the corridor.

Need more information?
Want to express your opinion?

- Visit the PCTPA project website at www.pctpa.org/PlacerParkway
- E-mail PCTPA at pctpa@pctpa.org
- Call PCTPA at 530-823-4030
- Send comments to PCTPA 299 Nevada St. Auburn, CA 95603

Placer Parkway Corridor Preservation Update

The South Placer Regional Transportation Authority (SPRTA), through the Placer County Transportation Planning Agency (PCTPA), recently evaluated corridor alternatives based on environmental, transportation and engineering criteria. PCTPA collected input through scoping meetings and the project's Advisory Committees. In August 2004, PCTPA also hosted two public meetings in Roseville and Pleasant Grove to present information regarding potential corridor alignment alternatives. These four corridors are shown graphically on the map in this newsletter, in gold.

PCTPA and Caltrans are also coordinating with federal agencies to identify potential alternatives that will satisfy the Parkway's purpose while reducing the need for new facilities (e.g., Transportation Systems Management, a shorter Parkway, etc.). This modified NEPA/404 process is ongoing.

Additional Potential Alternatives Identified

In December 2004, Foothill Associates, on behalf of a local developer, KT Communities, identified two additional corridor alignments with SR 70/99 connections at Sankey Road or north of Riego Road. These additional potential corridor alignments are outlined in green on the map (reverse side).

In March 2005, SPRTA directed PCTPA staff to screen these alignments for potential inclusion in the reasonable range of alternatives for the Tier 1 environmental document (EIS/EIR).

PCTPA evaluated these alignments for data consistency and then screened them using a process similar to that used for the four PCTPA potential corridor alternatives. This screening identified benefits and drawbacks for each alignment. The results were presented to the Technical Advisory and Study Advisory Committees for their input and recommendations. The Policy Advisory Committee will evaluate this information at a meeting on August 31, 2005 in Lincoln. Information about the meeting is available on PCTPA's web site (www.pctpa.org/PlacerParkway).

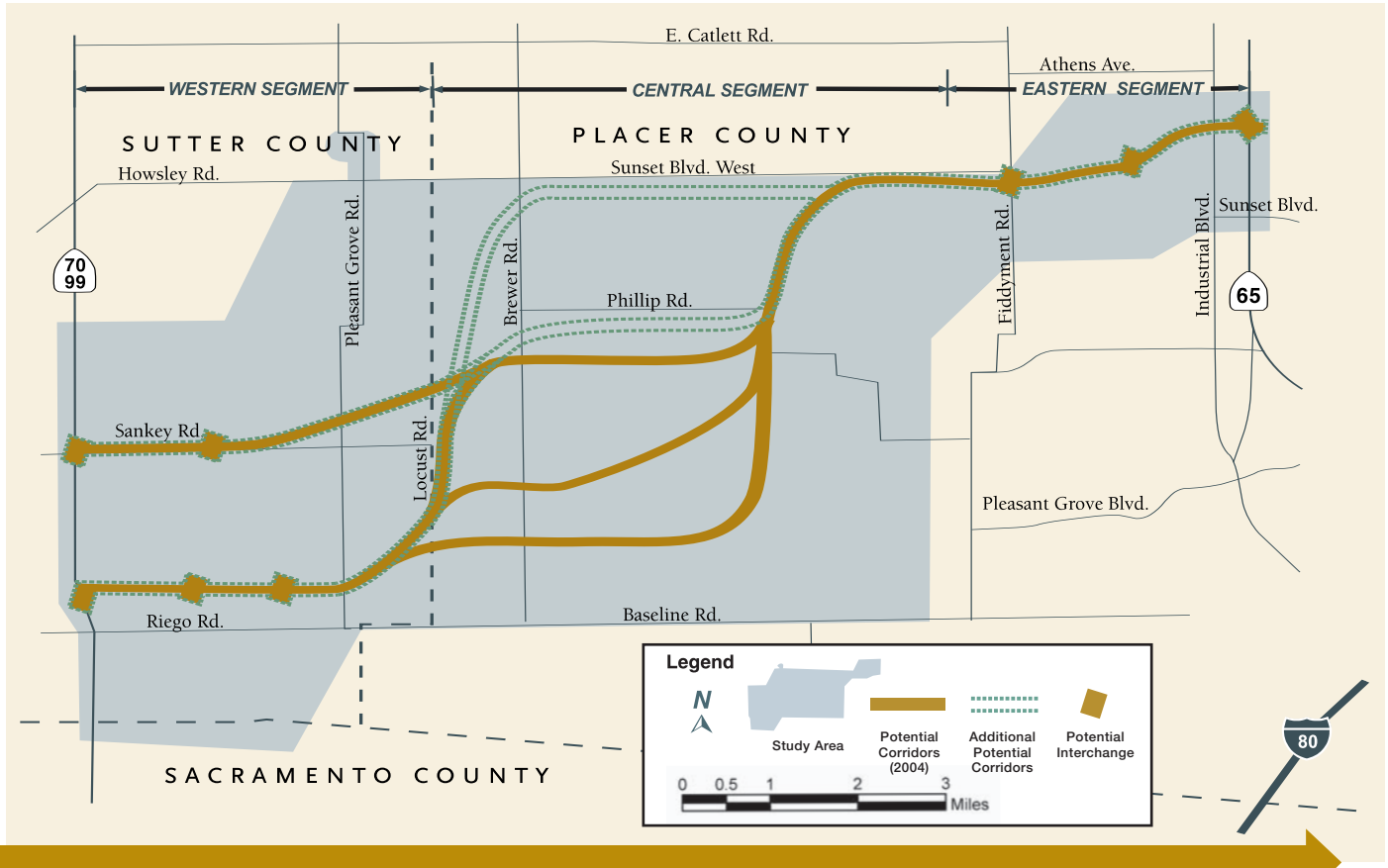
Next Steps

Input provided through the Advisory Committees will be presented to the SPRTA Board on September 28, 2005. The Board is expected to provide direction on which alternatives will be evaluated in the Tier 1 EIS/EIR. The Board will decide only which potential alternatives merit further study – it will not determine the location of the preferred alignment. Following this decision, preparation of the Tier 1 EIS/EIR will commence. According to the revised schedule, a public review draft will be published in fall 2006.

placer parkway corridor preservation project

study area and potential corridor alignment alternatives

FOR TIER 1 EIS/EIR ANALYSIS



PLACER PARKWAY
CORRIDOR PRESERVATION

PCTPA
299 Nevada Street
Auburn, CA 95603

Presorted
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U.S. Postage
PAID

Appendix I
Fact Sheet

PLACER PARKWAY
CORRIDOR PRESERVATION

LAND TO BE PRESERVED FOR FUTURE PLACER PARKWAY

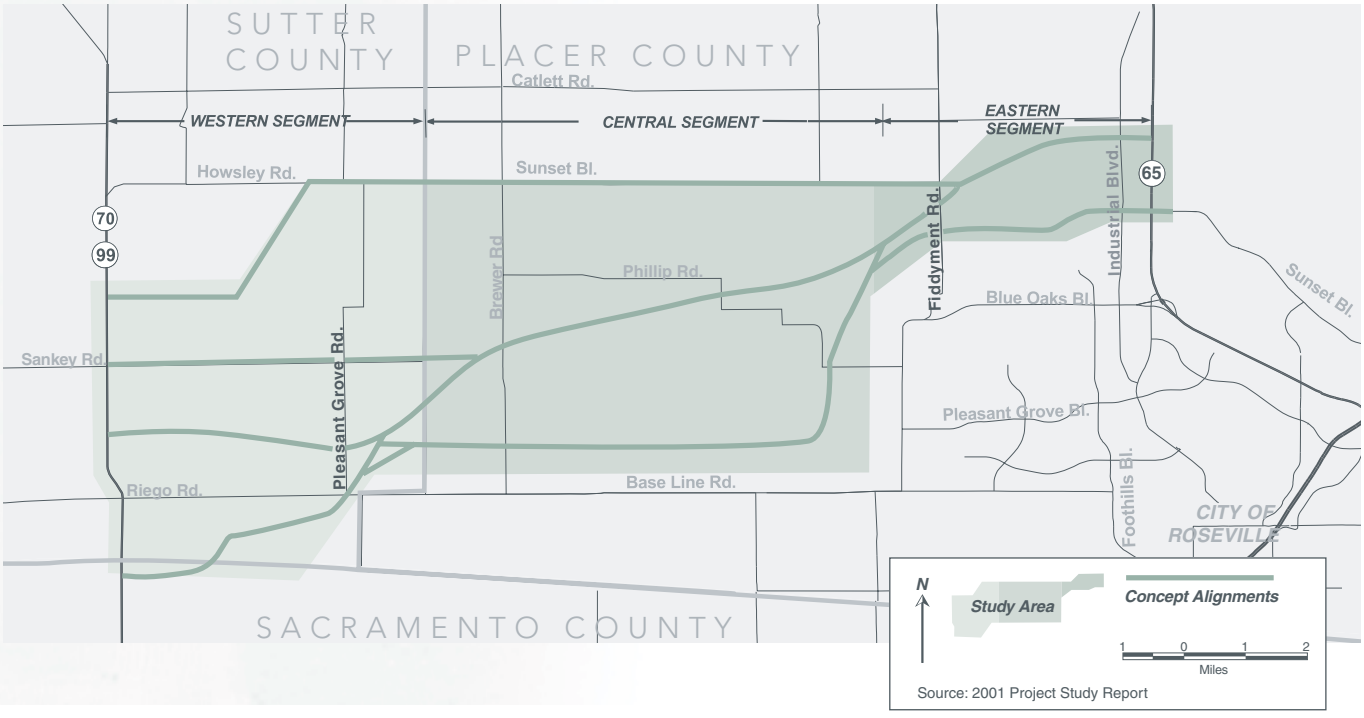
Placer Parkway is a proposed 15-mile long, east-west transportation corridor that will connect rapidly growing western Placer County with Sutter County industrial development and the airport to the west—linking State Highway 65 with State Highway 70/99 (see map). Residents, community leaders and business representatives are now discussing where to preserve a corridor for the future Parkway.

High-Priority Project

The Parkway is a high-priority regional transportation project. Employment, population growth, and traffic have become major issues for many people who live and work in the area. The amount of time and productivity lost has a real impact on the regional economy and our quality of life. At the same time, preserving agricultural open space and habitat is also critical.

The Placer Parkway Corridor Preservation will identify and preserve land for a future transportation corridor that will offer several key benefits:

- **Ease traffic and enhance the flow of people and goods**
- **Link rapidly growing areas of western Placer County and planned industrial development in south Sutter County**
- **Improve access to the I-5 corridor and the Sacramento International Airport**
- **Provide an alternative to heavily traveled Interstate 80**



PCTPA | 550 High St., Suite 107 | Auburn, CA 95603 | tel 530-823-4030 | fax 530-823-4036 | web www.pctpa.org

PLACER PARKWAY
CORRIDOR PRESERVATION

- **Promote agricultural open space to preserve and enhance natural resources**
- **Restrict access along an approximately 7-mile central segment between Fiddyment Road in Placer County and Pleasant Grove Road in Sutter County**

Preserving the Corridor

A key objective of the project is to preserve enough land for a 1,000-foot-wide central segment corridor and 500-foot-wide eastern and western segment corridors. Several concept corridors were identified via a previous study (see map).

Within the corridor, Placer Parkway would be divided into three segments:

- **Western: Highway 70/99 to the Sutter/Placer County line**
- **Central: Sutter/Placer County line to Fiddyment Road, with no access (preserving a 1,000-foot-wide, 7-mile-long corridor from Pleasant Grove Road to Fiddyment Road).**
- **Eastern: Fiddyment Road to Highway 65**

The Placer County Transportation Planning Agency (PCTPA) is administering the project for the South Placer Regional Transportation Authority (SPRTA) and Sutter County. PCTPA is the regional transportation planning agency for Placer County and its six cities. SPRTA consists of several PCTPA member jurisdictions in western Placer County.

Environmental Process

PCTPA will be preparing a Tier 1 Environmental Impact Statement/ Environmental Impact Report (EIS/EIR). A Tier 1 document is used for long-term projects and to streamline environmental review. This will help to ensure that the land needed for a future transportation corridor can be preserved now. The Tier 1 EIS/EIR will address state and federal environmental requirements and will outline public concerns in enough detail to make an informed choice about selecting a corridor alignment. A future Tier 2 environmental review would address design and construction issues for the specific alignment within the corridor.

SPRTA and Sutter County are co-lead agencies for California Environmental Quality Act compliance. Caltrans is acting on behalf of the Federal Highways Administration, lead agency for National Environmental Policy Act compliance.

Funding

PCTPA has programmed about $4.7 million to complete the required federal and State environmental review. SPRTA oversees a regional fee program that is expected to collect about $50 million for acquiring a corridor. Actual construction funding for the transportation facility is not anticipated until after 2015.

Public Involvement

There will be many opportunities for the public to provide input into this environmental review. For more information about the project and upcoming meetings, go to:

www.placerparkway.org

Or contact:
Celia McAdam, Executive Director,
PCTPA, 550 High Street, Suite 107,
Auburn, CA 95603.
Telephone: 530-823-4030
Fax: 530-823-4036
Email: cmcadam@pctpa.org

Appendix J
Public Meeting PowerPoint Presentation

PLACER PARKWAY
CORRIDOR PRESERVATION

WELCOME



Public Meeting
Monday, August 23, 2004
6:00 PM to 8:30 PM

Public Meeting August 2004

PLACER PARKWAY
CORRIDOR PRESERVATION

WELCOME



Public Meeting
Thursday, August 26, 2004
6:00 PM to 8:30 PM

Public Meeting August 2004

PLACER PARKWAY
CORRIDOR PRESERVATION

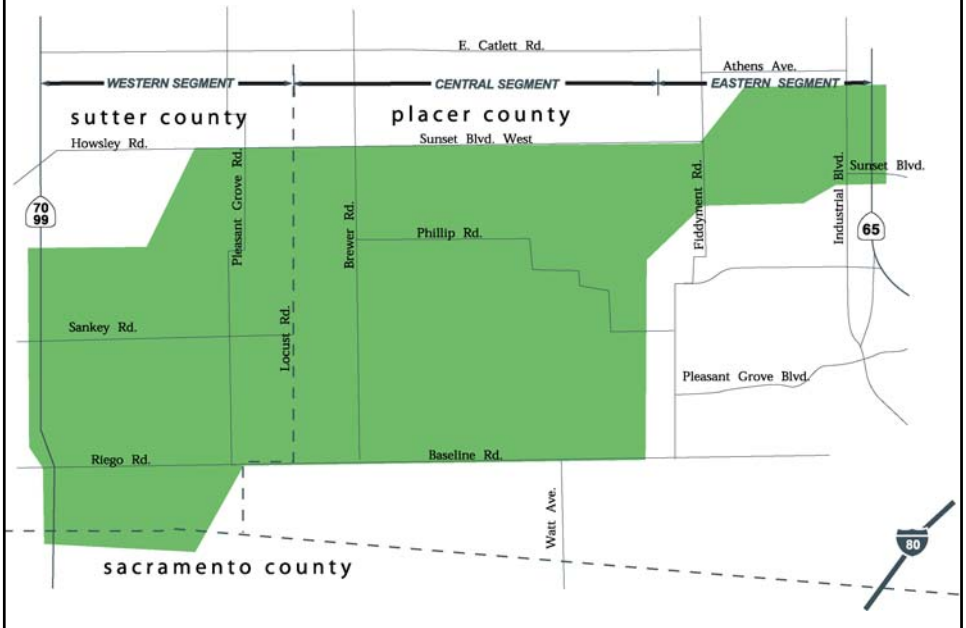
AGENDA



- Introductions
- Project Background
- Potential Corridor Alignment Alternatives
- What's Next
- Public Discussion

Public Meeting August 2004

Project Study Area



PLACER PARKWAY
CORRIDOR PRESERVATION

PLACER PARKWAY

(The Concept)



- **Regional Transportation Facility**
  - Connector – SR 65 & SR 70/99 between Sunset Blvd. W/Howsley and Baseline/Riego

Public Meeting August 2004

PLACER PARKWAY
CORRIDOR PRESERVATION

PLACER PARKWAY

(The Concept)



- **Regional Transportation Facility**
- **Parkway Goals (via 2000 Conceptual Plan & PSR)**
  - Controlled access highway
  - Maximize mobility and accommodate planned growth
  - Avoid growth inducement/protect rural character
  - Minimize environmental impacts
  - Improve safety/minimize hazards
  - Feasible and equitable funding

Public Meeting August 2004

PLACER PARKWAY
CORRIDOR PRESERVATION

PLACER PARKWAY

(The Concept)

- Regional Transportation Facility
- Parkway Goals (via 2000 Conceptual Plan & PSR)
- Design and Construction
  - $200 to $300 million
  - Construction funding – after 2015

Public Meeting August 2004

PLACER PARKWAY
CORRIDOR PRESERVATION

PLACER PARKWAY

(The Concept)

- Regional Transportation Facility
- Parkway Goals (via 2000 Conceptual Plan & PSR)
- Design and Construction
- Purpose and Need

Public Meeting August 2004

PLACER PARKWAY
CORRIDOR PRESERVATION

CORRIDOR PRESERVATION

(The Project)



- **Corridor Segments**
  - 500'-wide SR 70/99 to Pleasant Grove
  - 1000'-wide Pleasant Grove to Fiddyment
  - 500'-wide Fiddyment to SR 65

Public Meeting August 2004

PLACER PARKWAY
CORRIDOR PRESERVATION

CORRIDOR PRESERVATION

(The Project)



- **Corridor Segments**
- **Project Objectives**
  - Phase 1 – Identify Feasible Alternatives
  - Phase 2 – Complete the Tier 1 EIS/EIR
  - Record of Decision/Certification to Allow Corridor Preservation and Acquisition

Public Meeting August 2004

PLACER PARKWAY
CORRIDOR PRESERVATION

CORRIDOR PRESERVATION

(The Project)



- Corridor Segments
- Project Objectives
- Environmental Review – Tier 1 EIS/EIR

Public Meeting August 2004

PLACER PARKWAY
CORRIDOR PRESERVATION

CORRIDOR PRESERVATION

(The Project)



- Corridor Segments
- Project Objectives
- Environmental Review – Tier 1 EIS/EIR
- Tiering
  - Streamlining Tool
  - Tier 1
  - Tier 2

Public Meeting August 2004

PLACER PARKWAY
CORRIDOR PRESERVATION

CORRIDOR PRESERVATION

(The Project)



- Corridor Segments
- Project Objectives
- Environmental Review – Tier 1 EIS/EIR
- Tiering
- Acquire/Protect ROW

Public Meeting August 2004

PLACER PARKWAY
CORRIDOR PRESERVATION

ISSUES



- Location of Corridor Alignment Alternatives
- Tier 1 Environmental Review
- Resource Agency Coordination
- Pending and Anticipated Urban Development

Public Meeting August 2004

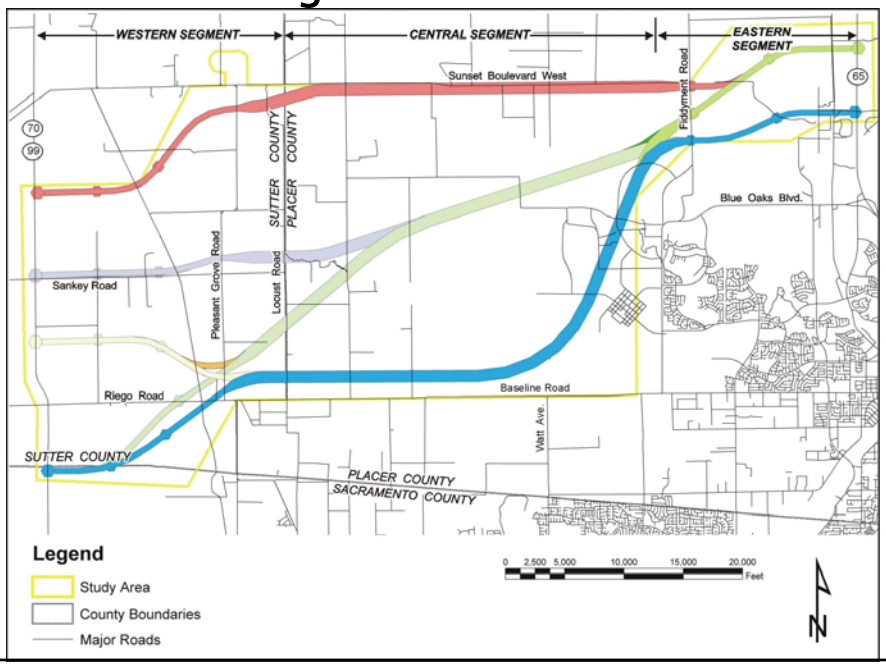
PLACER PARKWAY
CORRIDOR PRESERVATION



POTENTIAL CORRIDOR ALIGNMENT ALTERNATIVES

Public Meeting August 2004

PSR Corridor Alignments



PLACER PARKWAY
CORRIDOR PRESERVATION

SCREENING PROCESS



- Focus on Early Identification of Fatal Flaws

Public Meeting August 2004

PLACER PARKWAY
CORRIDOR PRESERVATION

SCREENING PROCESS



- Focus on Early Identification of Fatal Flaws
- Environmental Screening
  - Existing/Planned Land Uses
  - Williamson Act Contracts/Important Farmlands
  - Community Disruption/Displacement /Relocation
  - Recreation Lands
  - Noise
  - Cultural/Native American Resources
  - Biological/Wetland Resources
  - Hazardous Materials/Waste
  - Floodplain/Hydrology
  - Soils
  - Growth Inducement

Public Meeting August 2004

PLACER PARKWAY
CORRIDOR PRESERVATION

SCREENING PROCESS



- Focus on Early Identification of Fatal Flaws
- Environmental Screening
- Transportation Screening
  - Need and Purpose
  - Connections
  - Traffic Volumes

Public Meeting August 2004

PLACER PARKWAY
CORRIDOR PRESERVATION

SCREENING PROCESS



- Focus on Early Identification of Fatal Flaws
- Environmental Screening
- Transportation Screening
- Identify Impacts to Avoid or Minimize

Public Meeting August 2004

PLACER PARKWAY
CORRIDOR PRESERVATION

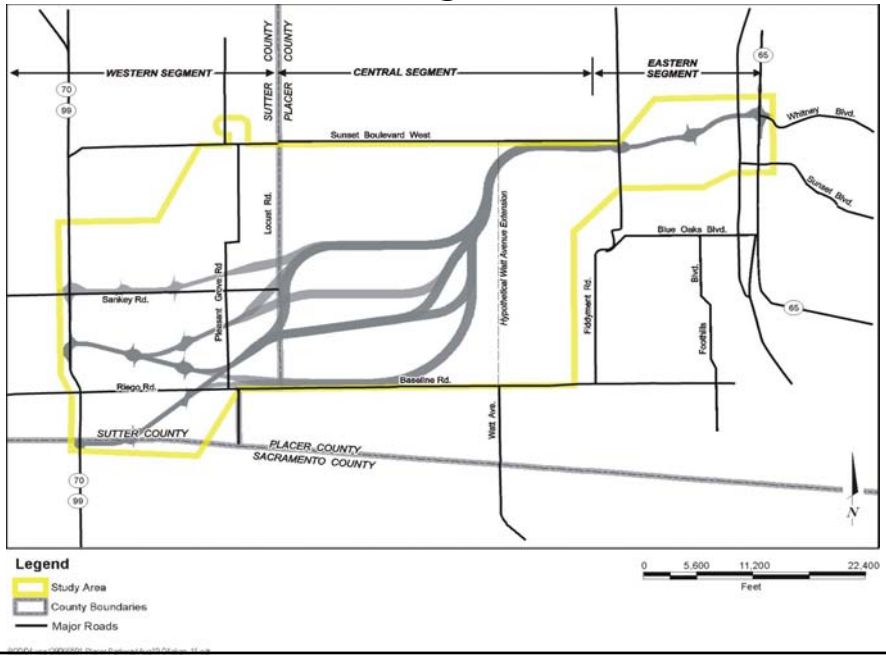
ALTERNATIVES REFINEMENT



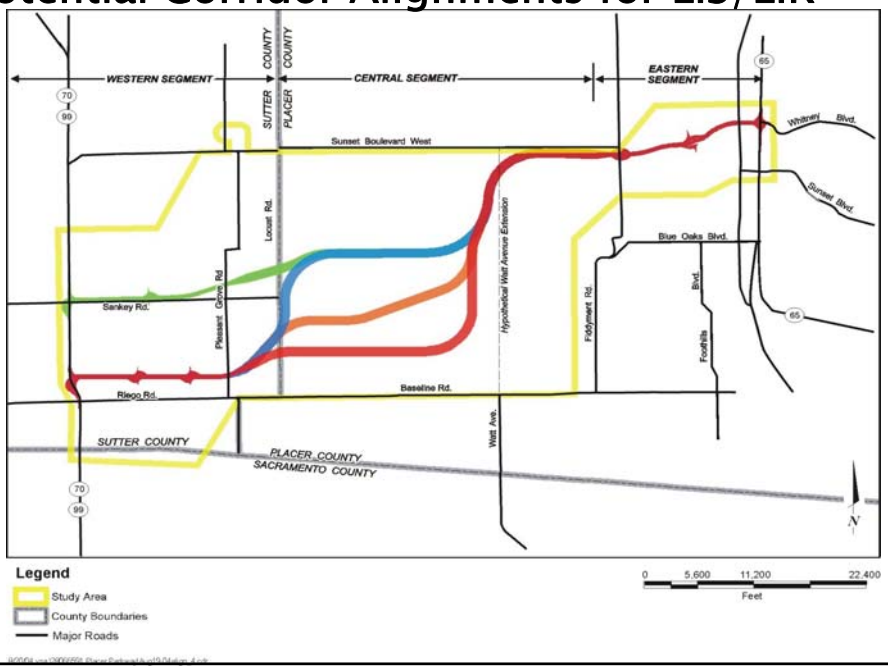
- Public Outreach
- NOI/NOP Comments
- Transportation Screening
- Environmental Screening
- NEPA/404 Process

Public Meeting **August 2004**

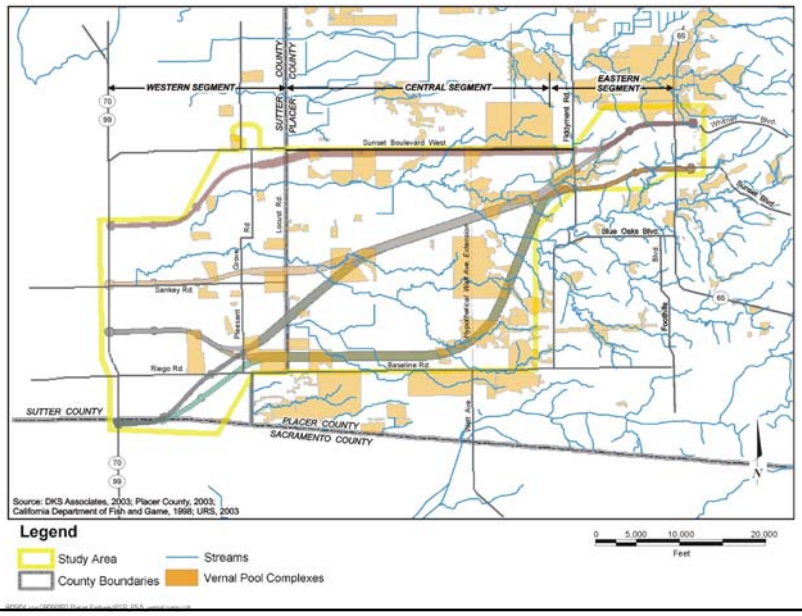
Additional Corridor Alignments Evaluated



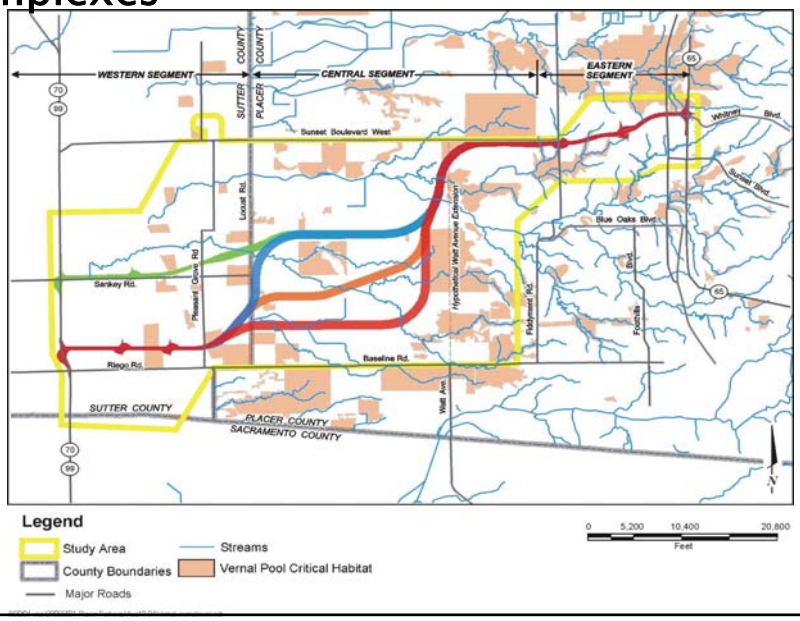
Potential Corridor Alignments for EIS/EIR



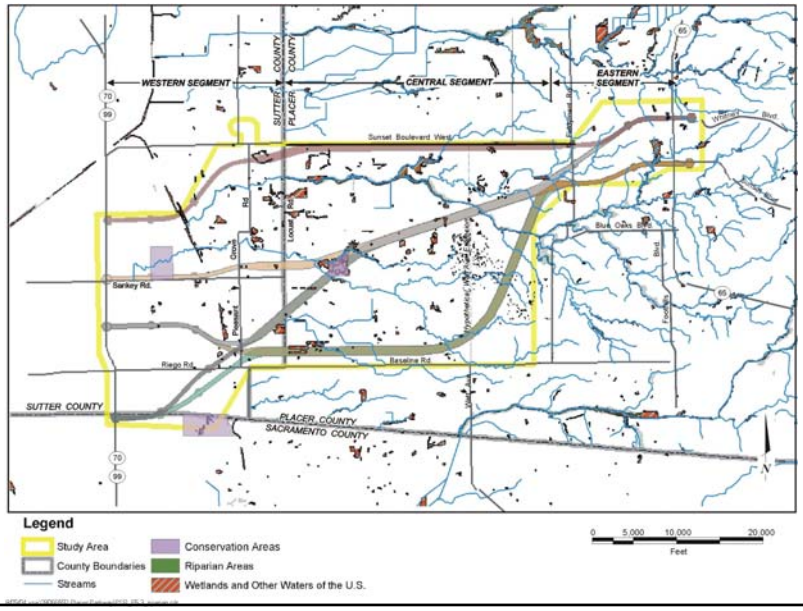
PSR: Vernal Pool Complexes



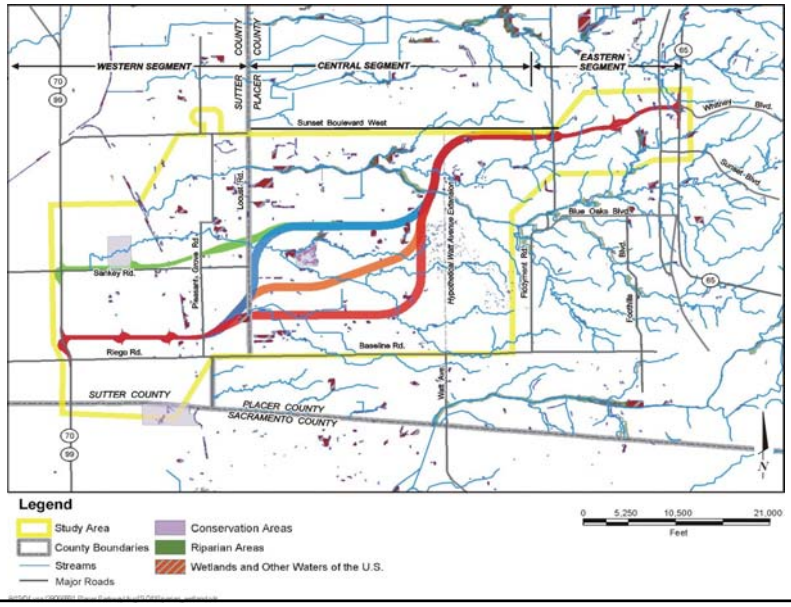
Potential Corridor Alternatives: Vernal Pool Complexes



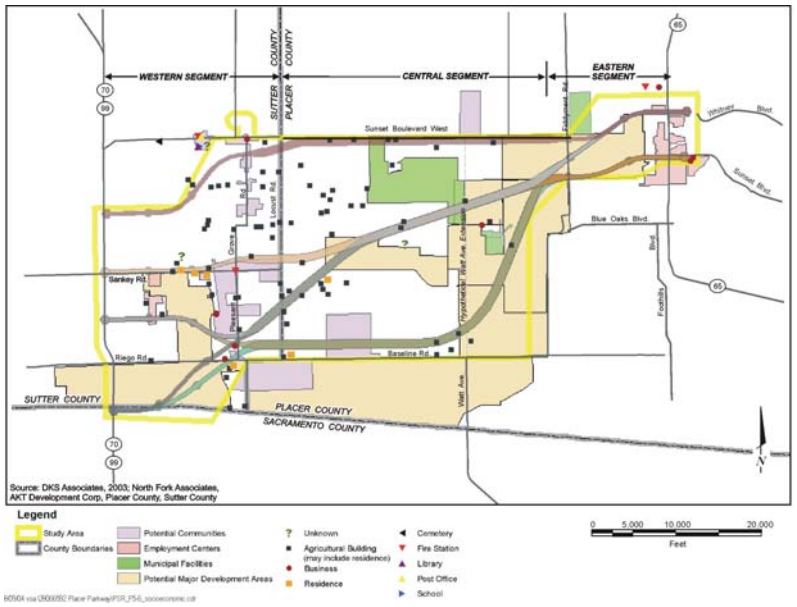
PSR: Riparian, Wetland, and Conservation Areas



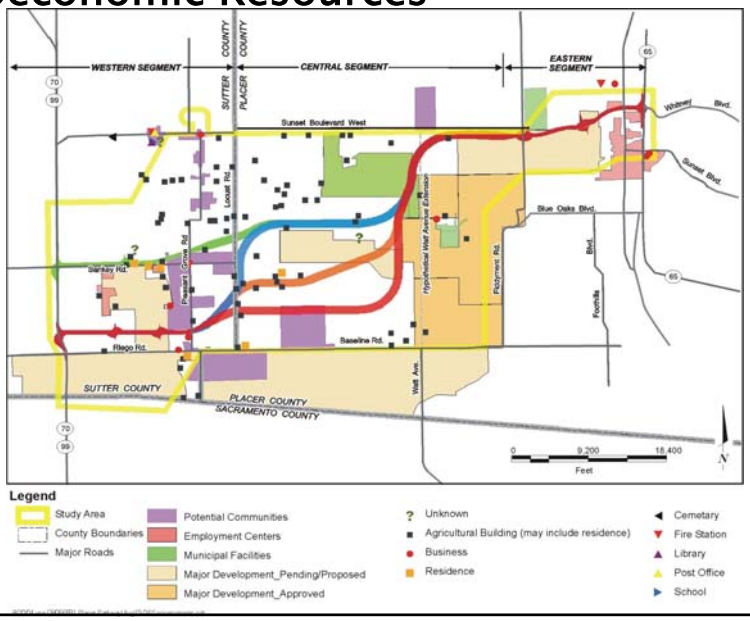
Potential Corridor Alternatives: Riparian, Wetland, and Conservation Areas



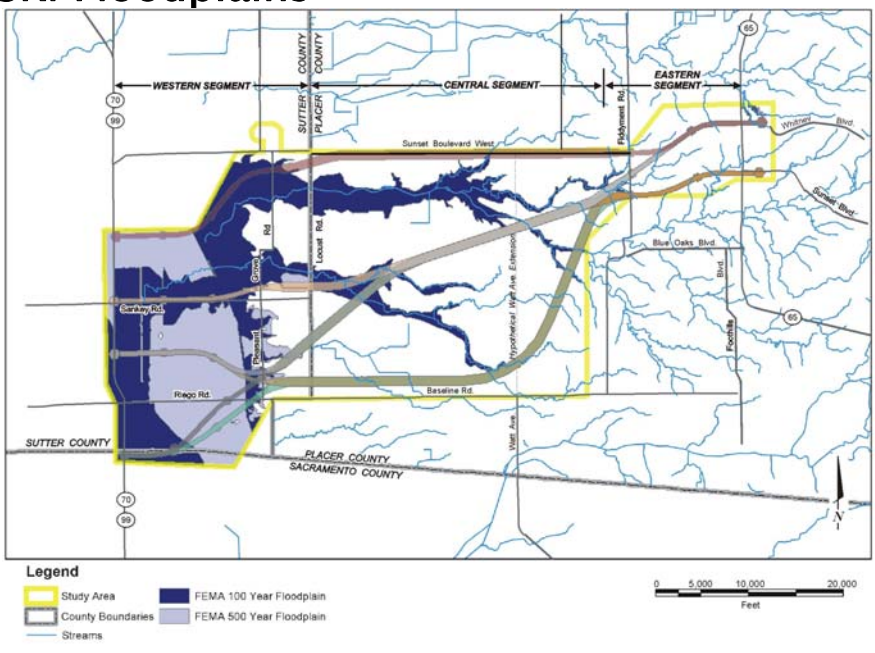
PSR: Socioeconomic Resources



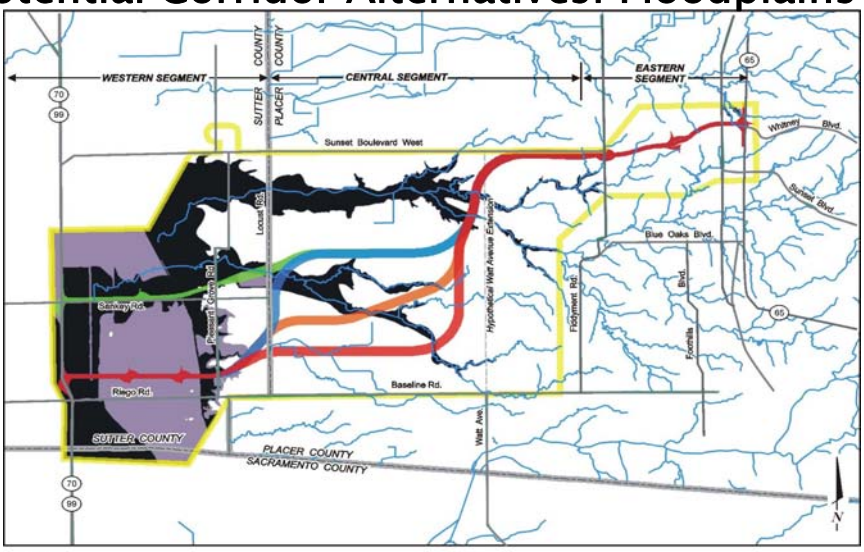
Potential Corridor Alternatives: Socioeconomic Resources



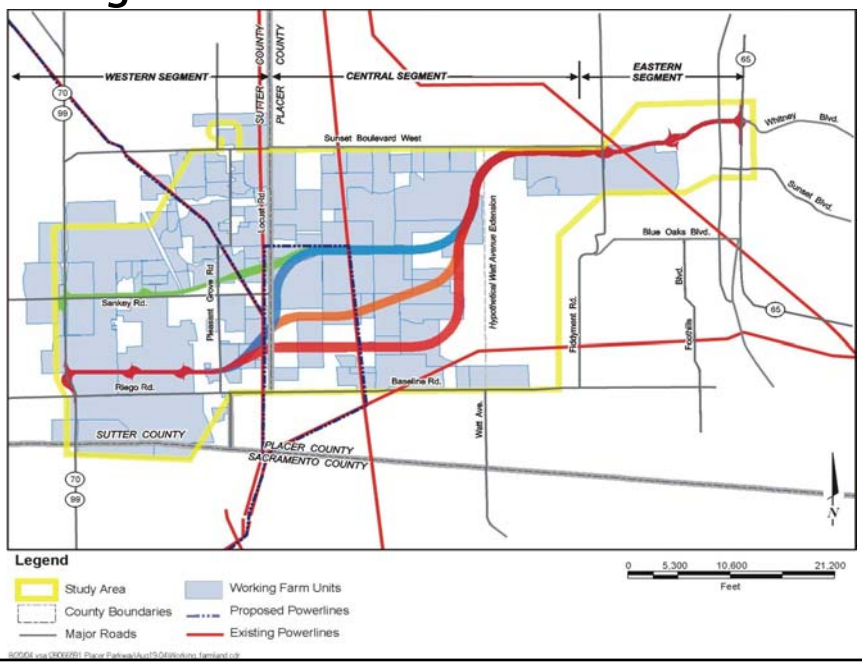
PSR: Floodplains



Potential Corridor Alternatives: Floodplains



Working Farm Units and Powerlines



PLACER PARKWAY
CORRIDOR PRESERVATION

NEXT STEPS



- Continue NEPA/404 Process
- Continue Public Outreach Process
- Identify Alternatives for Study in Tier 1 EIS/EIR
- Prepare Tier 1 EIS/EIR
- Start Preserving the Corridor!

Public Meeting August 2004

PLACER PARKWAY
CORRIDOR PRESERVATION

DISCUSSION



- Project and Planning Process
- New or Additional Information about the Project Study Area
- Comments on the 4 Potential Corridor Alignment Alternatives Presented
- Other Comments

Public Meeting August 2004

PLACER PARKWAY
CORRIDOR PRESERVATION

Thank You for Participating!

Public Meeting August 2004

Appendix K
Selected Pages from Project Website

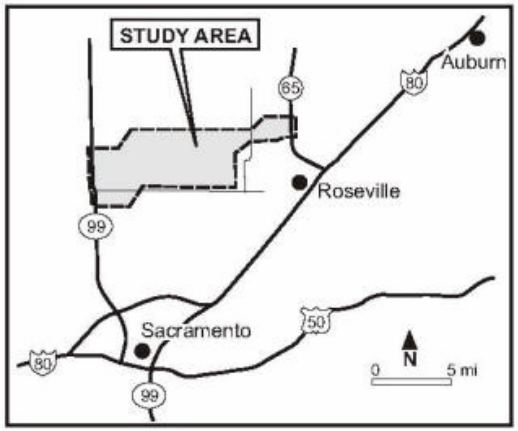
http://www.pctpa.org/placerparkway/index.htm

PLACER PARKWAY
CORRIDOR PRESERVATION

- Project Description
- Corridor Alternatives
- Environmental Review
- Funding
- Public Outreach
- Project Schedule
- Project Library
- Who to Contact

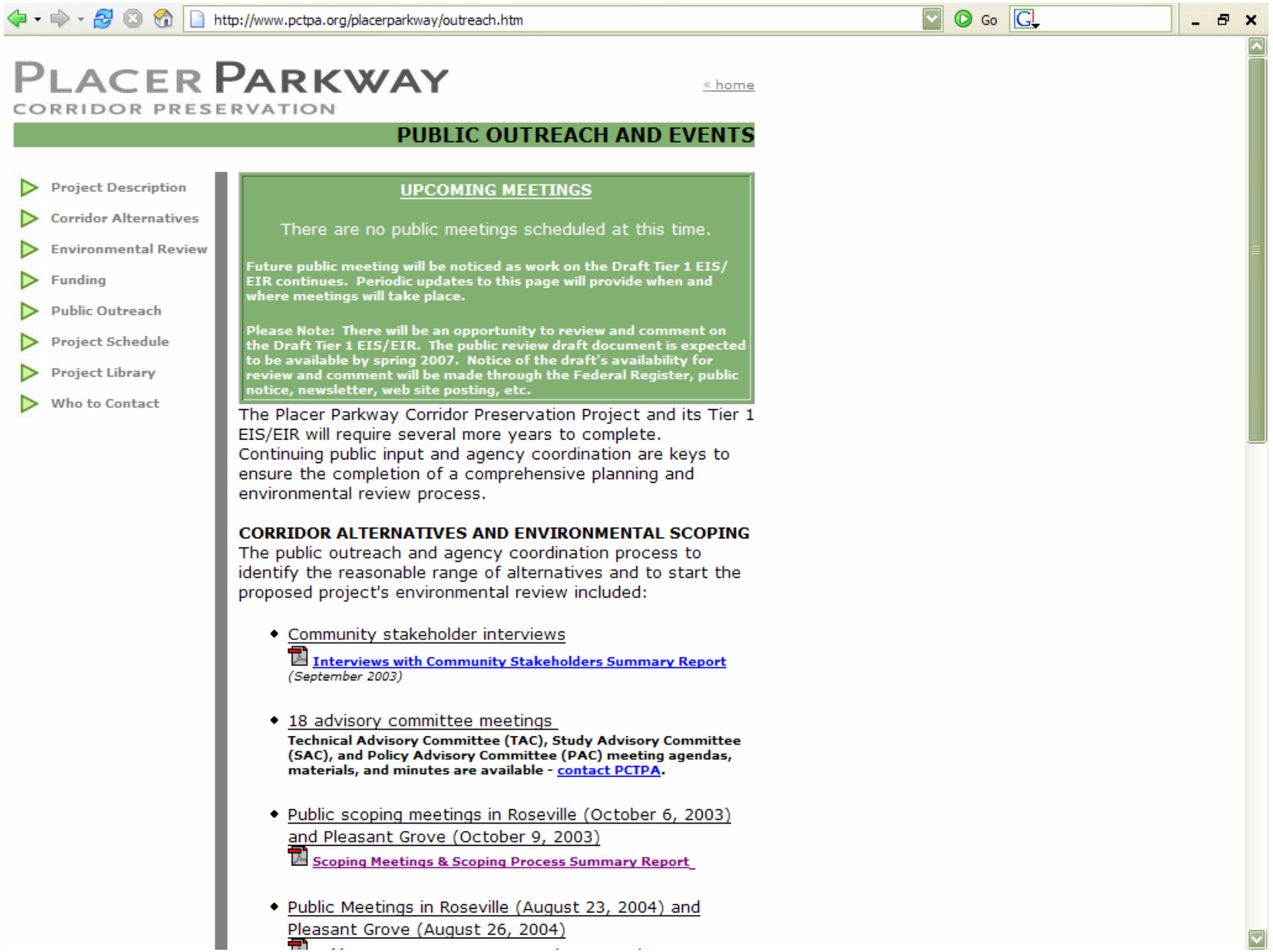
Welcome to the Placer Parkway Corridor Preservation Project!

The Placer Parkway is to be an approximate 15-mile long, high-speed transportation facility, which will connect State Route (SR) 65 in western Placer County to SR 70/99 in south Sutter County. It will link existing and planned development near some of the region's fastest growing communities while improving access to the I-5 corridor, downtown Sacramento, and the Sacramento International Airport.



Work, via two phases, is underway to identify and preserve a corridor for right-of-way acquisition.

Phase 1: Identify Corridor Alternatives
Completed – September 2005
» 5 Recommended Corridor Alternatives *(September 2005)*


http://www.pctpa.org/placerparkway/outreach.htm
Go
PLACER PARKWAY
CORRIDOR PRESERVATION
« home
PUBLIC OUTREACH AND EVENTS
Project Description
Corridor Alternatives
Environmental Review
Funding
Public Outreach
Project Schedule
Project Library
Who to Contact
UPCOMING MEETINGS
There are no public meetings scheduled at this time.
Future public meeting will be noticed as work on the Draft Tier 1 EIS/ EIR continues. Periodic updates to this page will provide when and where meetings will take place.
Please Note: There will be an opportunity to review and comment on the Draft Tier 1 EIS/EIR. The public review draft document is expected to be available by spring 2007. Notice of the draft's availability for review and comment will be made through the Federal Register, public notice, newsletter, web site posting, etc.
The Placer Parkway Corridor Preservation Project and its Tier 1 EIS/EIR will require several more years to complete. Continuing public input and agency coordination are keys to ensure the completion of a comprehensive planning and environmental review process.
CORRIDOR ALTERNATIVES AND ENVIRONMENTAL SCOPING
The public outreach and agency coordination process to identify the reasonable range of alternatives and to start the proposed project's environmental review included:
Community stakeholder interviews
Interviews with Community Stakeholders Summary Report
(September 2003)
18 advisory committee meetings
Technical Advisory Committee (TAC), Study Advisory Committee (SAC), and Policy Advisory Committee (PAC) meeting agendas, materials, and minutes are available - contact PCTPA.
Public scoping meetings in Roseville (October 6, 2003) and Pleasant Grove (October 9, 2003)
Scoping Meetings & Scoping Process Summary Report
Public Meetings in Roseville (August 23, 2004) and Pleasant Grove (August 26, 2004)

http://www.pctpa.org/placerparkway/schedule.htm

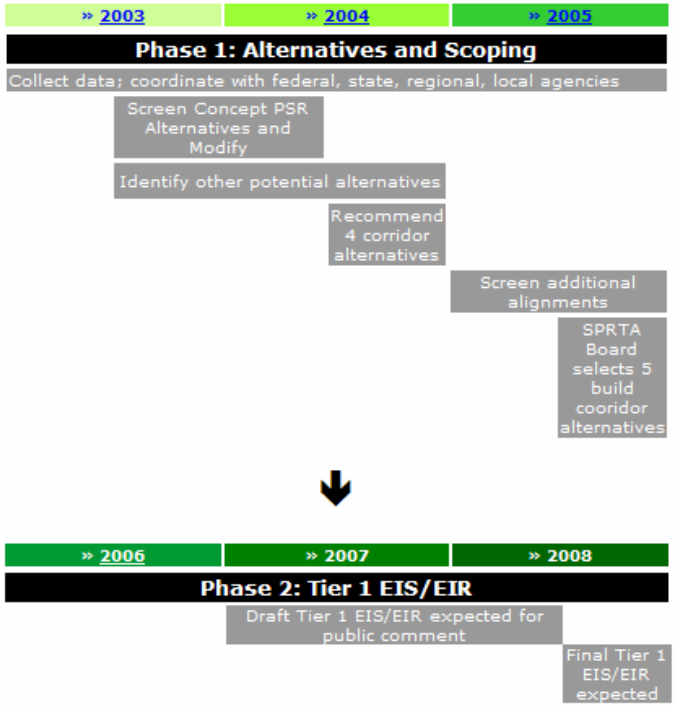
PLACER PARKWAY
CORRIDOR PRESERVATION

« home

PROJECT SCHEDULE

- Project Description
- Corridor Alternatives
- Environmental Review
- Funding
- Public Outreach
- Project Schedule
- Project Library
- Who to Contact

For additional details on public outreach and technical process events, click on any of the years in the schedule below.



The project has two phases and timelines for completion:

- **Identify Corridor Alternatives**
  Completed – ***September 2005***

- **Complete Tier 1 Environmental Impact Statement/Environmental Impact Report (Tier 1**

http://www.pctpa.org/placerparkway/library.htm

PLACER PARKWAY
CORRIDOR PRESERVATION

« home

LIBRARY

- Project Description
- Corridor Alternatives
- Environmental Review
- Funding
- Public Outreach
- Project Schedule
- Project Library
- Who to Contact

The Library is organized according to phases and general chronology of the project. If what you are looking for is not located in the Library or if you have difficulty viewing any of these documents, please contact PCTPA at (530) 823-4030 or pctpa@pctpa.org to obtain a copy.

Many of the documents contained in the Project Library are Adobe PDF files. To view PDF files, you will need Adobe Acrobat Reader.

Get Adobe Reader

Background Information

Project Location Map

Project Study Area Map

Project Summary Outline *(updated April 2006)*

Phase 1 - Corridor Alternatives Identification

Placer Parkway Interconnect Study/Conceptual Plan *(2000)*

Figure B

Appendix C

Placer Parkway Project Study Report *(2001)*

Interviews with Community Stakeholders – Summary Report *(September 2003)*

Technical Memorandum with Appendices A & B *(September 2004)*

Figures:

Project Location Map

PSR Concept Alignments

PSR Alternatives: Schematic Alignments

PSR Alignment Alternatives

Traffic Analysis Study Area of PSR Alternatives

Waterfowl and Other Upland Wildlife Habitat

Potential Special Status Species Habitat

Appendix L
List of Meetings with Individuals, Agencies, and Community Members

LIST OF MEETINGS
WITH INDIVIDUALS, AGENCIES, AND COMMUNITY MEMBERS

MEETINGS WITH INDIVIDUAL, AGENCIES, AND COMMUNITY MEMBERS	
DATE	**MEETING**
2002	
10.15.2002	TAC Meeting – *Overview and Alternative Alignments* Roseville Corporation Yard, 2005 Hilltop Circle, Roseville
11.26.2002	Placer Co. Staff Meeting – *Coordination (see 12.26 summary letter)* Placer Co. Public Works, DeWitt Center 11444 B Ave., Auburn
12.6.2002	Sutter Co. Staff Meeting – *Orientation (see 12.20 summary letter)* 1160 Civic Center Blvd., Yuba City
2003	
2.10.2003	Sun City – Roseville Community Assn. – *Project Overview* Roseville
3.10.2003	Placer County Agricultural Commission – *Update* Placer County Planning Commission Room, DeWitt Center, Auburn
4.10.2003	Placer Legacy and County GIS Coordination Meeting Placer Co. Planning, 11414 B Ave., DeWitt Center, Auburn
4.30.2003	Sutter Co. Staff Meeting – *Update* Sutter County Board of Supervisors Office, 1160 Civic Center Blvd, Yuba City
5.1.2003	FHWA/Caltrans/PCTPA/SACOG Meeting – *Traffic Analysis and Modeling* URS, 2520 Venture Oaks Dr., Sacramento
8.21.2003	Federal Resource Interagency Meeting #1 – *Study Goals, Work Plan Approach, and GIS Data for Alternatives Screening* U.S. Army Corps of Engineers, 1325 J St., Sacramento
9.19.2003	Placer Legacy HCP Interagency Resources Group Meeting Placer Co. Planning Commission Room, DeWitt Center, Auburn
9.22.2003	City of Roseville Staff Meeting – *Non-PSR Alternatives* Civic Center, 311 Vernon, Roseville
10.6.2003	Sutter Co. Agricultural Commissioner Meeting – *Orientation* 142 Garden Highway, Yuba City
10.6.2003	Sutter Co. Staff Meeting – Non-PSR Alternatives Sutter County Board of Supervisors Office, 1160 Civic Center Blvd, Yuba City
10.20.2003	Placer Co. Board of Supervisors – *West Placer Co. Land Use Workshop* Placer Co. Board of Supervisors – "The Domes," 175 Fulweiler Rd., Auburn

MEETINGS WITH INDIVIDUAL, AGENCIES, AND COMMUNITY MEMBERS	
DATE	**MEETING**
10.23.2003	Federal Resource Interagency Meeting #2 – *NEPA/404 Integration, Purpose and Need, and Planned and Projected Growth* U.S. Army Corps of Engineers, 1325 J St., Sacramento
11.5.2003	Placer Co. Staff Meeting – *Placer Ranch Specific Plan and De LaSalle University Proposals* Public Works, DeWitt Center 11444 B Ave., Auburn
11.17.2003	City of Roseville Staff Meeting – *WRSP and DEIR Comments* Civic Center, 311 Vernon St., Roseville
11.25.2003	Sutter Co. Staff Meeting – *CEQA Issues* Sutter County Board of Supervisors Office, 1160 Civic Center Blvd, Yuba City
12.2.2003	Placer Co. Agricultural Commissioner Meeting – *Ag. Issues* 11477 E Ave., DeWitt Center, Auburn
12.2.2003	Pleasant Grove/Curry Creeks Watershed Group Meeting – *Orientation* Civic Center, 311 Vernon St., Roseville
12.9.2003	PAC Member – P. Hill Meeting – Access and No-Development Buffer Policies PCTPA, 550 High St., Auburn
2004	
1.9.2004	United Auburn Indian Community of the Auburn Rancheria Meeting – Project Overview, Tier 1 EIS/EIR Process, Relevant Cultural Resources in the Study Area, Traditional Cultural Properties in the Study Area, Input or Concerns, and Casino/Parking Lot Issues Analytical Environmental Services -- 2021 N St., Sacramento
1.23.2004	Natomas Basin Conservancy Meeting – *Project Update, HCP Status Report, and HCP Resources Information* Sutter County Board of Supervisors Office, 1160 Civic Center Blvd, Yuba City
2.3.2004	Placer County Bicycle Advisory Committee – *Project Overview* Auburn City Hall, 1225 Lincoln Way, Auburn
2.4.2004	Roseville Staff Meeting -- *PSR Alternatives Screening Follow-up* Civic Center, 311 Vernon St., Roseville
2.19.2004	Placer County Staff Meeting – *PSR Alternatives Screening Follow-up* Public Works, DeWitt Center 11444 B Ave., Auburn
2.19.2004	Brookfield and Blue Oaks Developer Meeting PCTPA, 249 Nevada St., Auburn
2.24.2004	Loomis Staff Meeting – *PSR Alternatives Screening Follow-up* Town Hall, 6140 Horseshoe Bar Rd., Loomis

MEETINGS WITH INDIVIDUAL, AGENCIES, AND COMMUNITY MEMBERS	
DATE	**MEETING**
2.24.2004	Rocklin Staff Meeting – *PSR Alternatives Screening Follow-up* City Council Chambers, 3970 Rocklin Rd., Rocklin
3.9.2004	Lincoln City Staff Meeting – PSR Alternatives Screening Follow-up City Hall, 640 Fifth St., Lincoln
3.9.2004	Sutter Co. Staff Meeting – PSR Alternatives Screening Follow-up 1160 Civic Center Blvd., Yuba City
4.12.2004	Federal Resource Interagency Meeting #3 – *Project Status, Draft Modified NEPA/404 Process, Schedule/Data for Each Step, Draft Purpose and Need, EPA NOI comment Letter* U.S. Army Corps of Engineers, 1325 J St., Sacramento
4.12.2004	Placer Co. Agricultural Commission – *Project Update* Placer Co. Planning Commission Hearing Room, DeWitt Center, Auburn
5.3.2004	Federal Resource Interagency Meeting #4 – *Draft Purpose and Need, Project Development Background, Traffic Forecast Data, and Draft Modified NEPA/404 Process Agreement* U.S. Army Corps of Engineers, 1325 J St., Sacramento
5.5.2004	City of Sacramento and Sacramento County Staff Meeting – PSR *Alternatives Screening follow-up* 1231 I St., Sacramento
5.10.2004	Sutter Co. Staff Meeting – *SR 70/99 Interchanges* Sutter County Board of Supervisors Office, 1160 Civic Center Blvd, Yuba City
5.12.2004	City of Roseville Staff Meeting – *Watt Ave. and Local Roadway Network* Civic Center, 311 Vernon St., Roseville
5.18.2004	Brookfield (University Park) Developer Meeting *PCTPA, 249 Nevada St., Auburn*
6.9.2004	City of Roseville and Placer Co. Staff Meeting – *Watt Ave. and Local Roadway Network* Placer Co. Public Works, DeWitt Center 11444 B Ave., Auburn
6.18.2004	Placer Co. Planning and Public Works Staff Meeting – *Update* Placer Co. Public Works, DeWitt Center 11444 B Ave., Auburn
7.6.2004	Federal Resource Interagency Meeting #5 – *EPA Responses to Draft Purpose and Need, Watt Ave. Interchange, TSM Alternatives, Alternatives Input,* FHWA, 650 Capitol Mall, Sacramento
7.15.2004	SACOG Staff Meeting – *Update and Coordination* 1415 L St., Sacramento

MEETINGS WITH INDIVIDUAL, AGENCIES, AND COMMUNITY MEMBERS	
DATE	**MEETING**
8.9.2004	Sutter Co. Staff Meeting – *SR 70/99 Interchange Concepts and Local Roadway Assumptions* Sutter County Public Works, 1130 Civic Center Blvd, Yuba City
8.10.2004	Placer Co. Building Industry Association Meeting – *Update* 1536 Eureka Rd., Roseville
8.19.2004	Placer Co. Agricultural Commissioner Meeting – *Update* Placer Co. Public Works, DeWitt Center 11444 B Ave., Auburn
8.19.2004	Placer Co. Staff and De LaSalle University Developer Meeting – *Update* Placer Co. Public Works, DeWitt Center 11444 B Ave., Auburn
8.24.2004	Federal Resource Interagency Meeting #6 – *Purpose and Need, Screening Criteria, Environmental Resource Data and Screening Process, and Potential Corridor Alignment Alternatives* FHWA, 650 Capitol Mall, Sacramento
8.25.2004	Placer Architects, Geologists, Engineers and Surveyors (PAGES) – *Background, Issues, Potential Corridor Alignment Alternatives* Mary Belle's Restaurant, Auburn
8.26.2004	Sierra Club – SAC Member Meeting – *Update* URS, 1380 Lead Hill Blvd., Roseville
9.13.2004	Audubon Society/ECOS SAC Member Meeting – *Update* URS, 1380 Lead Hill Blvd., Roseville
9.13.2004	Public Meeting Follow-up – *Sankey Rd. Property Owner* URS, 1380 Lead Hill Blvd., Roseville
9.13.2004	Public Meeting Follow-up – *Country Acres' Property Owners* URS, 1380 Lead Hill Blvd., Roseville
9.16.2004	Placer Co. Planning Staff Meeting – *Placer County Conservation Plan* Placer Co. Planning, DeWitt Center 11414 B Ave., Auburn
10.1.2004	Sutter Co. Public Works Staff Meeting – *SR 70/99 and Local Roadway Assumptions* Sutter County Public Works, 1130 Civic Center Blvd, Yuba City
10.5.2004	De LaSalle University Developer Meeting – *Potential Corridor Alignment Alternatives* PCTPA, 249 Nevada St., Auburn
10.13.2004	City of Roseville – Visioning Committee Meeting – *Update* Roseville Corporation Yard, 2005 Hilltop Circle, Roseville
10.21.2004	Federal Resource Interagency Meeting #7 – *Purpose and Need, Screening Criteria/Process, EPA Input and Discussion* FHWA, 650 Capitol Mall, Sacramento

MEETINGS WITH INDIVIDUAL, AGENCIES, AND COMMUNITY MEMBERS	
DATE	**MEETING**
11.16.2004	Highway 49 Business Assn. Meeting – *Background, Issues, and Potential Corridor Alignment Alternatives* 21456 Grass Valley Highway, Auburn
11.17.2004	De LaSalle University Developers Meeting – Potential Corridor Alignment Alternatives URS, 2530 Venture Oaks Way, Sacramento
11.22.2004	Placer Co. Staff and Resources Law Group Meeting – *Mitigation Strategies* Placer Co. Public Works, DeWitt Center 11444 B Ave., Auburn
11.30.2004	Sutter Co. Board of Supervisors Study Session – *Potential Corridor Alignment Alternatives* *466 Second Street, Yuba City*
12.14.2004	Sierra Club – SAC Member (Alan Green) Meeting – *Bus Rapid Transit* PCTPA, 249 Nevada Street, Auburn
12.18.2004	FHWA, Caltrans, and Placer Ranch Specific Plan Meeting -- *Fiddyment Interchange* PCTPA, 249 Nevada Street, Auburn
12.28.2004	Sierra Club – SAC Member (Alan Green) Meeting – *Bus Rapid Transit and Specific Plan Coordination* PCTPA, 249 Nevada Street, Auburn
2005	
1.10.2005	Lincoln Rural Municipal Advisory Council – *Project Update* 3333 Mt. Pleasant Rd., Lincoln
1.11.2005	Placer County Building Industry Association (BIA) – *Project Update* 1536 Eureka Rd., Roseville
1.12.2005	Sheridan Municipal Advisory Council – *Project Update* 6005 Camp Far West Road, Sheridan
1.25.2005	Federal Resource Interagency Meeting #8 – *Background, Framework to Advance Project, Identify Agencies and Objectives, Summary of Agreements, and Action Items* FHWA, 650 Capitol Mall, Sacramento
3.10.2005	Federal Resource Interagency Meeting #9 – *Western Placer County – Land Use and Conservation Planning , Purpose and Need, Screening Criteria, Range of Alternatives, Alternatives Most Likely to Contain LEDPA, and Mitigation Framework* FHWA, 650 Capitol Mall, Sacramento
3.24.2005	Placer County Conservation Plan (PCCP) – *Interagency Working Group Meeting* Placer County Planning, 11414 B Ave., Auburn

MEETINGS WITH INDIVIDUAL, AGENCIES, AND COMMUNITY MEMBERS	
DATE	**MEETING**
3.24.2005	KT Communities – *Two Alignments Screening Work Plan, Schedule, and Cost Estimate Meeting* PCTPA, Auburn
4.6.2005	Placer County Conservation Plan (PCCP) – *Interagency Working Group Meeting* Placer County Planning, 11414 B Ave., Auburn
4.12.2005	Placer County Conservation Plan (PCCP) – *Interagency Working Group Meeting* Placer County Planning, 11414 B Ave., Auburn
4.13.2005	U.S. Fish and Wildlife Service Orientation Meeting – *Project Background, Modified NEPA/404 Process, Purpose and Need, and Phase 1 Screening and Alternatives Identification Process* U.S. Fish and Wildlife Service, 2800 Cottage Way, Sacramento
4.18.2005	Modified NEPA/404 Process (Federal Resource Interagency) Meeting #10 – Alternatives *Screening Criteria* FHWA, 650 Capitol Mall, Sacramento
4.26.2005	Placer County Conservation Plan (PCCP) – *SPRTA/Parkway Issues* Placer County Planning, 11414 B Ave., Auburn
5.18.2005	Modified NEPA/404 Process (Federal Resource Interagency) Meeting #11 – *Group Decision-making Process and Schedule, Action Items Review, Screening Criteria for Selecting the Range of Alternatives, and Range of Alternatives* FHWA, 650 Capitol Mall, Sacramento
6.8.2005	Placer County Conservation Plan (PCCP) – *SPRTA/Parkway Issues Meeting* U.S. Fish and Wildlife Service, 2800 Cottage Way, Sacramento
6.28.2005	Modified NEPA/404 Process (Federal Resource Interagency) Meeting #12 – *Consultation Process Status, Action Items Review, and Range of Feasible Alternatives* FHWA, 650 Capitol Mall, Sacramento
7.20.2005	New Alignments Screening Meeting – Placer County/City of Roseville Civic Center, 311 Vernon St., Roseville
8.2.2005	Construction Materials Association of California – *Background, Issues, and Corridor Alternatives Identification* Rusty Duck – 500 Bercut Drive, Sacramento
8.8.2005	Modified NEPA/404 Process (Federal Resource Interagency) Meeting #13 – *Consultation Process Status, Action Items Review, and Continue Discussion on the Range of Feasible Alternatives* FHWA, 650 Capitol Mall, Sacramento
8.22.2005	Sierra Club and Environmental Council of Sacramento -- *Project Update* 1414 K St. – Ste. 500, Sacramento

MEETINGS WITH INDIVIDUAL, AGENCIES, AND COMMUNITY MEMBERS	
DATE	**MEETING**
9.19.2005	Sutter County Coordination – *Local Roadway Access, SR 70/99 Interchanges and Measure "M" Land Uses/Circulation* Sutter County Board of Supervisors Office, 1160 Civic Center Blvd, Yuba City
9.27.2005	Expanded Corridor Alternative and Resource Opportunities Meeting Placer County Planning Dept., 11414 B Ave., Auburn
9.28.2005	Federal and State Resource Agencies Coordination Meeting – *Regional Conservation and Development Strategy* U.S. Army Corps of Engineers, 1325 J St., Sacramento
10.6.2005	Modified NEPA/404 Process (Federal Resource Interagency) Meeting #14 – *Consultation Process Status, Action Items Review, and Range of Feasible Alternatives Continuation* FHWA, 650 Capitol Mall, Sacramento
10.06.2005	Placer County Conservation Plan (PCCP) – *Landowner Meeting* U.S. Fish and Wildlife Service, 2800 Cottage Way, Sacramento
10.27.2005	Placer County Conservation Plan (PCCP) – *Policy Group Meeting -- PCCP Update, Participating Agencies, and Relationship of 404 LEDPA to PCCP Reserve Design* U.S. Fish and Wildlife Service, 2800 Cottage Way, Sacramento
10.31.2005	Placer County Conservation Plan (PCCP) – *SPRTA Participation and Costs* Placer County Planning Dept., 11414 B Ave., Auburn
11.3.2005	Placer County and Sutter County Fire Dept. – *Project Update and Emergency Access* Placer County Fire Station, 1300 Athens Ave., Lincoln
11.3.2005	Modified NEPA/404 Process (Federal Resource Interagency) Meeting #15 – *Consultation Process Status, Action Items Review, and Complete Range of Feasible Alternatives* FHWA, 650 Capitol Mall, Sacramento
11.4.2005	Placer Ranch Specific Plan and EIR Conference Call – *Placer County, Placer Ranch and PCTPA Coordination*
11.8.2005	SACOG Meeting – *MEPLAN Program Feasibility – Growth-Inducement* 1415 L St., Sacramento
11.19.2005	Placer County Conservation Plan (PCCP) – *Landowners Meeting* U.S. Fish and Wildlife Service, 2800 Cottage Way, Sacramento
11.21.2005	Lincoln Rural Municipal Advisory Council – *Update* 3333 Mt. Pleasant Rd., Lincoln
2006	
2.15.2006	Law Enforcement Agencies Coordination Meeting (Rocklin, Roseville, Placer and Sutter County Sheriffs Office) – *Project Overview and Emergency/Local Access Issues* Rocklin EOC – 4080 Rocklin Rd., Rocklin

MEETINGS WITH INDIVIDUAL, AGENCIES, AND COMMUNITY MEMBERS	
DATE	**MEETING**
2.15.2006	SACOG and MEPLAN Meeting – *Project Overview, MEPLAN and Scope of Work, Data Input Identification, and Schedule/Cost Estimates* SACOG – 1415 L Street, Sacramento
3.1.2006	Modified NEPA/404 Process (Federal Resource Interagency) Meeting #16 – *MEPLAN and growth Assessment Tool, Discussion/Feedback, and Range of Feasible Alternatives -- Concurrence* FHWA, 650 Capitol Mall, Sacramento
3.22.2006	PCCP Update Meeting – PCCP Status Placer County Planning Dept., 11414 B Ave., Auburn
3.28.2006	U.S. Fish and Wildlife Service Meeting – Project Status, PCCP Status, Biological Resource Evaluation, and Schedule USFWS Office, 2800 Cottage Way, Sacramento

1. Note: This list does not include Advisory Committee meetings, Project Team Development (PDT) meetings, or modified NEPA/404 meetings conducted with federal resource agencies.

PLACER PARKWAY
CORRIDOR PRESERVATION

DRAFT
TRAFFIC NOISE ANALYSIS TECHNICAL MEMORANDUM

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR

June 29, 2007

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

Caltrans

FHWA

Prepared by

URS Corporation

for
South Placer Regional Transportation Authority
California Department of Transportation
Federal Highway Administration

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Draft

TRAFFIC NOISE ANALYSIS TECHNICAL MEMORANDUM

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR
Placer and Sutter Counties, California

June 2007

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LIST OF ACRONYMS

ANSI	American National Standards Institute
Caltrans	California Department of Transportation
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
dB	decibel(s)
dBA	A-weighted decibel(s)
DD	doubling of the distance
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
FHWA	Federal Highway Administration
GIS	Geographic Information System
HDM	Highway Design Manual
Hz	Hertz
I-80	Interstate 80
kHz	kilo-Hertz
L_{dn}	Day-Night Noise Level
L_{eq}	Equivalent Noise Level
L_{min}/L_{max}	Maximum/Minimum A-weighted Sound Level
LOS	level of service
L_{xx}	Percentile Sound Level
µPa	micro-Pascals
MOU	Memorandum of Understanding
mph	miles per hour
msl	mean sea level
NAC	Noise Abatement Criteria
NEPA	National Environmental Policy Act
PCTPA	Placer County Transportation Planning Agency
PSR	Project Study Report
ROW	right-of-way
SACOG	Sacramento Area Council of Governments
SPL	Sound Pressure Level
SPRTA	South Placer Regional Transportation Authority
SR	State Route
ST	short term
TASA	Transportation Analysis Study Area
TAZ	traffic analysis zone
TeNS	(Caltrans) Technical Noise Supplement
TNM	Traffic Noise Model
USDOT	U.S. Department of Transportation
U.S. EPA	U.S. Environmental Protection Agency

TRAFFIC NOISE ANALYSIS TECHNICAL MEMORANDUM PLACER PARKWAY CORRIDOR PRESERVATION TIER 1 EIS/PROGRAM EIR

1.0 INTRODUCTION

1.1 TIER 1 EIS/PROGRAM EIR

The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the South Placer Regional Transportation Authority (SPRTA) propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking State Route (SR) 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1).

The planning for Placer Parkway involves two phases: (1) the present action, selection of a corridor (titled the Placer Parkway Corridor Preservation Project), and (2) the future selection of a precise alignment within the corridor and a decision whether or not to build the Parkway. If a build alternative is selected and pursued after the second phase, the ultimate Placer Parkway project would be constructed and operated. Throughout this document the term "Proposed Action" is used to describe the selection of a corridor to preserve. The document generally uses the term "Parkway" to mean the ultimate roadway, including construction and operation, except where context indicates otherwise.

As stated, the action to be considered based on this Tier 1 analysis involves only the selection of a corridor to preserve, which has limited environmental effects by itself. However, the ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. In order to describe the effects of the ultimate Placer Parkway project to the greatest extent feasible at this early stage, the Tier 1 EIS/EIR also addresses the potential effects of construction and operation of the future roadway. This discussion of the roadway is necessarily limited, however, because only the general concepts of the roadway design and location are known at this time. If a corridor is selected and preserved at Tier 1, a subsequent Tier 2 analysis will evaluate the Parkway itself in detail—the specific roadway "footprint" within the selected corridor, including construction and operation of the roadway.

1.2 CORRIDOR SELECTION AND PRESERVATION

The concept for the Placer Parkway is over a decade old. Placer County's 1994 General Plan depicts a "plan line" for it. Two planning studies helped to refine the concept:

- DKS Associates, 2000, Placer Parkway Interconnect Study/Conceptual Plan
- DKS Associates, 2001, Project Study Report (Project Development Support) for Placer Parkway

Placer Parkway is cited as a high priority regional transportation project by the Sacramento Area Council of Governments (SACOG) 2025 Metropolitan Transportation Plan and the 2027 Placer County Regional Transportation Plan. The project vicinity and surrounding area include some of the fastest growing communities in the Sacramento region. A number of large urban development proposals are being considered by Sutter and Placer Counties. New development is expected to add a significant amount of residential, commercial, industrial, and educational uses.

A 2½-year screening and public outreach program that involved local jurisdictions (the Technical Advisory Committee); regional, state, and federal agencies; stakeholder groups that included

representatives from planning and public works departments of all affected cities and counties, environmental, business, agricultural, development, and homeowner interests (the Study Advisory Committee); and elected officials (the Policy Advisory Committee), resulted in the identification of five potential corridors for the Parkway. The Tier 1 Environmental Impact Statement/Program Environmental Impact Report will analyze these five corridor alternatives along with a No-Build Alternative.

Other potential transportation modes such as bus rapid transit may be developed in the corridor in the future, although they are not proposed as part of the current project. The corridor for the Placer Parkway is to vary from approximately 500 feet wide in the Eastern and Western segments to approximately 1,000 feet wide in the Central Segment. Depending upon the alternative, the corridor's length ranges from a minimum of 14.2 miles to a maximum of 16.2 miles. The selected corridor would contain the roadway, including the median, travel lanes, shoulder, associated access ramps and a no-development buffer zone.

Corridor acquisition may not be completed until after Tier 2, as funding becomes available. Portions of the selected corridor will be preserved as a no-development buffer zone. The buffer would be maintained as a zone where development is either not permitted or is severely restricted. This is intended to restrict access to the proposed interchanges, protect the rural character of agriculturally designated areas in the vicinity of the Parkway as far as possible subject to future development, and to maximize opportunities to incorporate adjacent sensitive areas. It is intended that the buffer would be owned and managed in the future to achieve these objectives. For subsequent Tier 2 (project-level) environmental reviews, the size of this buffer zone could be considered flexible for agriculturally-designated land undergoing urban development. In the Tier 2 environmental review, the specific buffer size and location would be determined. This determination would be based on performance standards on a case-by-case basis, depending on the land use needs of future approved development, and taking into account the primary objective of restricting future access to the Parkway.

Project proponents are considering employment of several land management and control mechanisms in order to ensure that the buffer would be effectively maintained as an area where development would either not be permitted, and where construction of any additional access onto the Parkway would not be allowed. These mechanisms could include land use controls, land purchase/leases, general plan amendments, zoning/overlay zoning changes, covenants/deed restrictions, agricultural/conservation easements, urban growth boundaries, etc. "Layering" or using several of these methods would provide more assurance the buffers would be permanent, or at least more difficult to undo.

1.3 TECHNICAL STUDY OBJECTIVE

This Noise Technical Memorandum has been prepared to support the Tier 1 Environmental Impact Statement/Program Environmental Impact Report. It presents a Tier 1/Program level assessment of potential impacts related to noise for five corridor alternatives and the No-Build Alternative as described in Chapter 2.

The scope of work performed for this report is based on the Caltrans Local Assistance Procedures Manual (Caltrans, 2006), as modified for purposes of Tier 1/Program analysis by agreement of Caltrans; the Caltrans Highway Design Manual (HDM) (Caltrans, 2001) and the Caltrans Environmental Handbook guidance (Caltrans, 2005) on preparing a noise technical memorandum. In addition, the evaluation considered guidance from the FHWA, Environmental Checklists for Draft and Final Environmental Documents (FHWA, 1998a; FHWA, 1998b).

This report is organized as follows:

Chapter 2: The Proposed Action

Chapter 3: Regulatory and Technical Framework
Chapter 4: Affected Environment
Chapter 5: Potential Direct Impacts
Chapter 6: Secondary and Indirect Impacts
Chapter 7: Cumulative Impacts
Chapter 8: Watt Avenue Interchange
Chapter 9: Avoidance, Minimization and/or Mitigation Strategies
Chapter 10: Analyses to be Undertaken in Tier 2
Chapter 11: References

This report also includes figures and tables, which show the project location, each action alternative, and pertinent technical information prepared to evaluate the action alternatives.

Throughout this document, the Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report is referred to as the Tier 1 EIS/EIR.

2.0 THE PROPOSED ACTION

The Proposed Action for the Placer Parkway Corridor Preservation Project is to select and preserve a 500- to 1,000-foot-wide corridor in the project study area, within which the future four- or six-lane Placer Parkway may be constructed. The ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction, and operation of the Parkway. Although the action taken at Tier 1 on the Placer Parkway Corridor Preservation Project is limited, the underlying project whose effects are studied in this document is the Placer Parkway. To the extent feasible at this early stage, the Tier 1 EIS/EIR addresses the potential effects of construction and operation of the future roadway.

2.1 THE PROJECT STUDY AREA

The project study area is an area of approximately 33,460 acres located in Placer and Sutter Counties, with a small section located in Sacramento County (see Figures 1-1 and 2-1). The portion of the study area in Sacramento County is located in the extreme southwest corner of the study area and does not include any of the proposed corridor alignment alternatives. It extends from SR 70/SR 99 in the west to SR 65 in the east, with the northern boundary extending to Sunset Boulevard West and the southern boundary located adjacent to Baseline and Riego Roads.

For the purposes of the analysis the study area is divided into three segments

- Western Segment: the Western Segment extends from SR 70/99 to Pleasant Grove Road in Sutter County.
- Central Segment: the Central Segment extends from Pleasant Grove Road in Sutter County to approximately 2,300 feet north of Pleasant Grove Creek in Placer County.
- Eastern Segment: the Eastern Segment extends from approximately 2,300 feet north of Pleasant Grove Creek to SR 65 in Placer County.

2.2 CORRIDOR ALTERNATIVES

The following subsections describe the corridor alternatives, which are depicted on Figure 2-1, and are numbered according to location from south to north in the study area.

2.2.1 The No-Build Alternative

In this alternative, the project would not be implemented. A Placer Parkway corridor would not be selected/preserved, and the future Placer Parkway would not be constructed.

2.2.2 Alternative 1 – the Red Alternative

Alternative 1 would extend from SR 70/99 approximately ½ mile north of Riego Road, eastward approximately 1 mile north of Baseline Road to approximately Watt Avenue, proceeding north and transitioning in an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 16.2 miles long. This alternative would include six interchanges.

2.2.3 Alternative 2 – the Orange Alternative

Alternative 2 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed northeast, then in a northerly direction south of Pleasant Grove Creek, transitioning to an easterly direction before it reaches Sunset Boulevard

West, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.4 miles long. This alternative would include six interchanges.

2.2.4 Alternative 3 – the Blue Alternative

Alternative 3 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed north along the Sutter/Placer County Line, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.6 miles long. This alternative would include six interchanges.

2.2.5 Alternative 4 – the Yellow Alternative

Alternative 4 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.3 miles long. This alternative would include five interchanges.

2.2.6 Alternative 5 – the Green Alternative

Alternative 5 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 4,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.2 miles long. This alternative would include five interchanges.

2.3 PARKWAY DESIGN ASSUMPTIONS

Although the Parkway would be designed and construction-level impacts analyzed during Tier 2, for the purpose of this report and the Tier 1 EIS/Program EIR, several assumptions have been made about potential design and configuration concepts. These assumptions would be subject to further development and refinement, and specific decisions about design of the roadway would be made during the Tier 2 process. For example, the number, location, and design of over-crossings would be determined at the time of final Parkway design, in consultation with local jurisdictions. The following sections outline assumptions for the future roadway.

Preliminary costs estimates for the Parkway range from $600 to $650 million (2005 dollars). This includes costs for right-of-way, design, construction, and environmental mitigation for the four- to six-lane facility. The funding situation has spurred interest in exploring other more creative funding options. These include a county-wide sales tax, more developer contributions, and tolling facilities. The Technical Report and Tier 1 EIS/Program EIR do not make any assumptions about funding sources.

2.3.1 Conceptual Roadway Configuration

The Parkway would be a high-speed, limited access roadway. Depending upon the timing of adjacent urban development proposals and funding, the Parkway may be designed and constructed incrementally –

in segments. These could be built as a four-lane (interim) roadway until a six-lane segment is warranted, or as the full six-lane facility. A preliminary conceptual cross section (see Figure 2-2) was developed to facilitate the Tier 1/Program evaluation. It illustrates both four-lane (two lanes in both directions) and six-lane (three lanes in both directions) configurations within the 500- to 1,000-foot corridor widths. The roadway would include a central median approximately 100 to 134 feet wide, depending on local conditions and reflecting Caltrans safety guidance. The Parkway would be designed and constructed to Caltrans standards, unless specific design exceptions are granted. For the purposes of the Tier 1 EIS/ Program EIR, the Parkway's opening year is assumed to be 2020.

Access would be provided at the western and eastern ends of the Parkway, where existing areas of dense development are already located or planned. Access would be restricted for the 7-mile Parkway Central Segment. The analysis assumes no interchanges in this segment. (A possible future extension of Watt Avenue or another nearby roadway may be considered in the Central Segment as a separate project.)

2.3.2 Conceptual Roadway Elevation

As the study area is comprised of relatively flat terrain, the majority of the future Placer Parkway is assumed to be at-grade. As necessary, bridges would be used to span certain features and improvements such as the Union Pacific Railroad tracks along Industrial Boulevard, Pleasant Grove Creek, the Natomas East Main Drainage Canal, and floodplains. Generally, the approximate height of bridges is expected to range from 10 feet above streams to 30 feet above the railroad. Culverts would be used at smaller creek crossings as appropriate, depending on local conditions and permit requirements. The Pleasant Grove Creek floodplain would be crossed by bridges (one in each direction) supported by abutments located approximately 800 feet on either side of the creek to avoid the riparian habitat associated with the creek.

Within the 100-year floodplain, the roadway would be elevated such that the bottom of any new bridges would be above the 100-year water surface elevation. The roadway support structures and bridges would be designed to minimize environmental impact, not impede stream and flood flows, and allow for the unobstructed passage of potential future streamside uses such as maintenance equipment, bikeways or trails.

Throughout the project study area, the assumptions for creek and floodplain crossings include typical engineering specifications:

- a maximum bridge span of approximately 150 feet;
- for bridge spans exceeding 150 feet, assume one column, approximately 4 feet in diameter, every 150 feet; and
- all columns placed outside of the ordinary high water (OHW) level.

To maintain existing and future local roadway connectivity (for emergency access, farming operations, and community access), over-crossings would be constructed to convey traffic over the Parkway. These over-crossings would not connect to the Parkway. Parkway access would be via the interchanges described below.

2.3.3 Interchange Concepts

The analysis assumes that the location of interchanges (see Figure 2-1) is as follows.

- SR 70/99 (at ½ mile north of Riego Road or at Sankey Road)
- One or two locations to be determined in southern Sutter County
- Fiddyment Road
- Foothills Boulevard

- SR 65 at Whitney Ranch Parkway

The following discussion outlines concepts and assumptions for the six interchanges that could potentially serve the Placer Parkway.

2.3.3.1 Western Segment

Within the Western Segment of the Parkway, a high-speed, freeway-to-freeway type interchange would connect the Parkway with SR 70/99 at one of following potential locations depending on the project alternative (see Section 2.4). Placer Parkway would terminate at SR 70/99.

- **Placer Parkway/SR 70/99 Interchange at North of Riego Road.** This alternative concept uses "braided" ramps to eliminate weaving problems or conflicts with the future SR 70/99 at Riego Road interchange being developed by Sutter County and Caltrans.

- **Placer Parkway/SR 70/99 Interchange at Sankey Road.** Under this alternative concept, the existing two-lane Sankey Road would be realigned to the south of Placer Parkway and the proposed freeway-to-freeway interchange, extending from approximately ¼ mile west of SR 70/99 to approximately ¼ mile east of the Union Pacific railroad tracks. There would be no direct access to SR 70/99 or Placer Parkway from the realigned Sankey Road.

Depending on the final alignment selected, one or two additional arterial interchanges would also be located in south Sutter County. Conceptual locations are identified for purposes of this Tier 1/Program analysis (see Figure 2-1). The actual location of these interchanges would be developed in the Tier 2 phase, based on Sutter County requirements.

2.3.3.2 Central Segment

Within the Central Segment of the Parkway, there would not be any access proposed as part of the project in the 7-mile segment between Fiddyment Road and Pleasant Grove Road. Please see Section 2.8 regarding a potential interchange with a future extension of Watt Avenue (Figure 2-3) which could be proposed and constructed by others in the Central Segment; such an interchange is not part of the Placer Parkway.

2.3.3.3 Eastern Segment

Within the Eastern Segment of the Parkway, a signalized high-speed freeway-to-freeway and local access interchange would connect the Parkway to SR 65 at Whitney Ranch Parkway (Figure 2-1). From SR 65 eastward Placer Parkway would terminate and become Whitney Ranch Parkway east of the SR 65 exit ramp intersection. Traffic signals would be provided at the exit ramp terminals. This interchange would be approximately 1 mile north of a planned SR 65/Sunset Boulevard interchange and 1.2 miles south of the existing Twelve Bridges interchange.

As part of this interchange, auxiliary lanes would be required on SR 65 in both directions to enhance traffic operations on the north side of the future SR 65/Sunset Boulevard interchange. The southbound SR 65 exit-ramp at Sunset Boulevard is being designed to accommodate an additional auxiliary lane required for the future Placer Parkway/Whitney Ranch Parkway interchange to minimize the reconstruction of this ramp in the future. Within the Eastern Segment of the Parkway, from SR 65 westward, two interchanges with local roadways would be constructed, one at Foothills Boulevard and one at Fiddyment Road, as depicted on Figure 2-1.

The future interchange on Placer Parkway at Fiddyment Road would be located near the existing intersection of Fiddyment Road and Sunset Boulevard West. To provide acceptable traffic operations, additional distance needs to be provided between the Fiddyment Road/Sunset Boulevard West intersection and the Fiddyment Road/Placer Parkway westbound off-ramp intersection. Therefore, Sunset Boulevard West will need to be realigned to the north as it nears Fiddyment Road.

2.3.4 Landscaping Concept

For the purposes of this environmental analysis, preliminary landscaping concepts have been developed for Placer Parkway. These are entirely conceptual and would be subject to further refinement during the Tier 2 environmental process. It is anticipated that landscaping would be used to reflect local topography and vistas in the study area and complement the varying character of land adjacent to the Parkway corridor. Landscape design would vary within the Parkway's three segments depending on corridor width and type and density of surrounding land uses. Landscaping would be used within the median and the Parkway buffer zone to enhance the aesthetics of the Parkway, and would be used to provide screening and enhance local and long distance views. Where appropriate, more concentrated plantings would be considered to buffer the Parkway from future adjacent land uses that may be incompatible with the Parkway concept, and to prevent unwanted intrusion into shoulder or median areas. Landscape design would likely include a mix of compatible native and non-native plants that may require some irrigation. Wherever possible, native plant species would be used in line with Caltrans policy. Where possible and depending on availability, feasibility and cost, recycled water would be used for irrigation.

During a future design phase, lighting elements would be designed for safety and would consider the proposed landscaping plan in order to minimize potential aesthetic impacts (e.g., shielding lighting elements, using lower-voltage lighting, and proposing lighting fixtures that conform with the visual character of the area).

2.4 POTENTIAL WATT AVENUE INTERCHANGE

The Placer County General Plan includes a number of new roadways that may be needed in Placer County, according to travel demand forecasts. An extension of Watt Avenue to Placer Parkway (from Baseline Road to a new Blue Oaks Boulevard Extension) is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto the Placer Parkway via a new interchange (see Figure 2-3). A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. It would be subject to independent future environmental analysis and review and is not being fully evaluated within this Technical Report or Tier 1 EIS/Program EIR. However, the connection of Placer Parkway to a potential Watt Avenue extension could affect future travel patterns in the area, including use of the Parkway. Based on direction from previous planning studies, this Technical Study and the Tier 1 EIS/Program EIR will evaluate each corridor alternative with and without a Watt Avenue interchange. This evaluation does not predetermine the construction or alignment of a potential Watt Avenue or nearby roadway extension or the precise locations of any potential interchanges with Placer Parkway.

2.5 AGENCY PERMITS AND APPROVALS

The Proposed Action would preserve a preferred corridor for a future transportation facility. In the future, permits and approvals would be obtained from appropriate agencies prior to construction of the Parkway. These permits and approvals may include specific design or mitigation requirements that would be incorporated into the project.

2.6 SUBSEQUENT TIER 2 INFORMATION

As noted earlier, the design and construction of Placer Parkway—including its interchanges and over-crossings, and ancillary features such as stream crossings, safety devices, stormwater management structures, and similar improvements—would be evaluated in a subsequent Tier 2 environmental review process once a corridor has been identified. Chapter 10, Analyses to Be Undertaken in Tier 2, provides more detailed information regarding Tier 2 studies.

3.0 REGULATORY AND TECHNICAL SETTING

3.1 ACOUSTICS BACKGROUND

3.1.1 Sound and Noise Definitions

Sound is a perturbation in a medium: gas, liquid, or solid, sensed by hearing organs. Noise is a class of sound generally defined as loud, unpleasant, unexpected, or undesired sound typically associated with human activity that interferes with or disrupts normal activities. Although exposure to high noise levels has been demonstrated to cause hearing loss, the principal human response to environmental noise is annoyance. The response of individuals to similar noise events is diverse and influenced by the type of noise, perceived importance of the noise, its appropriateness in the setting, time of day, and type of activity during which the noise occurs, and sensitivity of the individual. Acoustics is defined as the generation, transmission, and reception of energy as vibrational waves in matter (Kinsler et al., 1982).

3.1.2 Frequency and Hertz

Sound waves are characterized by several parameters, including frequency (pitch) and amplitude (loudness). Like the notes on a piano or other musical instrument, a low frequency is low in pitch and a high frequency is high in pitch. Cycles per second or oscillations are used to quantify frequency and are referred to as Hertz (Hz). In the case of the piano, frequency relates to the oscillations of the vibrating wires struck by the hammers connected to the keys. Oscillations also characterize periodic systems with rotating components (e.g., multi-bladed fans) where a specified duration defines the return of a system to its original state and the associated creation of a fluid pressure perturbation or sound wave cycling from a state of high pressure, to a state of low pressure, and back to the state of high pressure (one cycle). For higher frequencies, a prefix is commonly attached to Hertz. Thus, 1 kilo-Hertz (kHz) is equivalent to 1,000 Hz, and 24 kHz equals 24,000 Hz. The human ear is sensitive to the frequency range from 20 Hz to 20 kHz, with variations based on age, genetics, and environment.

3.1.3 Amplitude and Decibels

Amplitude describes how loud a sound is. Sound is transmitted via a pressure wave. The peak-to-peak amplitude of a pressure wave corresponds to the difference between the crest (state of high pressure) and trough (state of low pressure) of the wave. Pressure is typically reported in micro-Pascals (µPa); however, the human ear's sensitivity to differences in µPa is minute. For example, the minimum perceptible *increase* in sound noticeable to the average human ear corresponds to a doubling of the pressure amplitude (e.g., from 400 to 800 µPa). The lowest sound perceptible to the human ear is approximately 20 µPa, while a very loud sound may be 200 million µPa.

Because the variance between sound amplitudes is so large, the use of µPa becomes impractical; therefore, sound pressure, measured in units of µPa, is rarely used. Instead, Sound Pressure Level (SPL), measured in units of decibels (dB), is the standard sound amplitude metric. A *level* is the logarithm of the ratio of a given quantity to a reference quantity of the same kind, so SPL is the logarithm of the given pressure referenced to 20×10^{-6} µPa (for air). SPL compresses the amplitude range into quantities that are manageable, as shown in Table 3-1.

Increasing any sound amplitude 3 dB on the logarithmic scale corresponds to an approximate doubling of pressure. So increasing from 70 dB to 73 dB is equivalent to increasing from 200 µPa to 400 µPa.

Table 3-1
Noise Levels from Common Sources

Noise Environment at a Given Distance	A-Weighted Noise Level (decibels)	Subjective Impression
Military Jet takeoff with after-burner (50 feet)	140	
Civil defense siren (100 feet)	130	
Jet takeoff (200 feet)	120	Threshold of pain
Loud rock music	110	
Pile driver (50 feet)	100	Very loud
Diesel truck (150 feet)	90	
Garbage disposal (3 feet)	80	
Vacuum cleaner (10 feet)	70	Moderately loud
Normal conversation (3 feet)	60	
Light traffic (100 feet); rainfall	50	
Bird calls (distant)	40	Quiet
Soft whisper (5 feet); rustling leaves	30	
Library	20	
Normal breathing	10	
	0-1	Threshold of hearing

3.1.4 Decibel Addition

Because the pressure amplitude range has been compressed by conversion from a linear scale to a logarithmic scale, normal arithmetic operations no longer apply. For example, suppose a speaker in a room produces 70 dB as measured from a distance of 5 feet. Adding another 70 dB speaker to the room also at 5 feet from the measurement point would result in an aggregate level of 73 dB from the following equation:

$10*Log_{10}(10^{(0.1*A)} + 10^{(0.1*B)})$, where A and B are each 70 dB.

But if speaker A is 70 dB and speaker B is 80 dB, the equation above indicates that the logarithmic sum is 80 dB. Hence, two commonly understood rules result:

A. Adding two sound sources with equivalent Sound Pressure Levels corresponds to an increase in sound level of 3 dB.

B. Adding two sound sources with Sound Pressure Levels differing by 10 dB means that the Sound Pressure Level equals the loudest sound source.

3.1.5 A-Weighted Scale

Loudness as perceived by the human ear is not only dependent upon noise amplitude, but also the frequency at which the noise occurs. The physical geometry of the human ear mimics a system capable of filtering out frequencies below 20 Hz and above 20 kHz. Also, this geometry provides frequency-

dependent sound attenuation within the range of human hearing. Unsurprisingly, the human ear best distinguishes sound in the range associated with speech: 1,000 to 5,000 Hz. The perception of sound outside of this range will be less than reality or as measured and quantified by an instrument. An amplitude weighting system called the "A-weighted scale" accounts for this sensitivity of the average normal human ear and thereby describes sound in a manner that relates well to human perception. The scale is a set of frequency-dependent constants that are algebraically applied to "flat" or "unweighted" sound levels, resulting in a closer approximation of perceived sound and the potential for annoyance. The A-weighted scale is expressed in A-weighted decibels (dBA). Because A-weighting only algebraically modifies sound levels, both dB and dBA values follow the same previously described rules of logarithmic decibel addition.

3.1.6 Human Response to Noise

Human response to SPL increases differs, but the widely accepted standard is that a 3 dBA increase in noise level is the lower threshold of sensitivity, representing the minimum perceptible increase in noise level to the average human. An increase of 5 dBA is a readily perceptible increase in noise level, and a 10 dBA increase is generally perceived as a doubling of the noise level.

3.1.7 Noise Descriptors

The following noise descriptors are typically used in quantifying noise for traffic analysis:

- Equivalent Sound Level (L_{eq}): The level of a sound, which, in a stated time period and at a stated location, has the same A-weighted sound energy as the time-varying sound.
- Maximum/Minimum A-weighted Sound Level (L_{min}/L_{max}): The maximum/minimum sound level measured using fast time-averaging and A-weighting.
- Percentile Sound Level (L_{xx}): For a stated duration of a total measurement period, the sound level that is exceeded for xx percent of the total measurement period using fast time-averaging and A-weighting. An L_{90} of 66 dBA implies that 90 percent of the time, the sound level exceeded 66 dBA.
- Day-Night Level (L_{dn}): L_{dn} is an L_{eq} averaged over 24 hours, with a 10 dBA penalty added between the hours of 10 p.m. and 7 a.m.
- Community Noise Equivalent Level (CNEL): CNEL is identical to L_{dn}, except 5 dBA is also added to the evening sound level, from 7 p.m. to 10 p.m. L_{dn} and CNEL introduce penalties to account for times when people are typically home and sleeping.

3.2 FEDERAL REGULATIONS

3.2.1 National Environmental Protection Act

The National Environmental Protection Act (NEPA) of 1969 instituted policies to "foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans." NEPA promotes environmentally conscious efforts aimed at improving the health and welfare of Americans by empowering federal, state, and local agencies authorized to develop and enforce environmental standards.

3.2.2 Title 23, Part 772 of the Code of Federal Regulations

The criteria for evaluating traffic noise effects in this report are contained in Title 23 of the Code of Federal Regulations Part 772 (23 CFR 772), "Procedures for Abatement of Highway Traffic Noise and Construction Noise," and Caltrans' "Traffic Noise Analysis Protocol," dated October 1998. The Category B criterion in these documents applies to residences, churches, schools, recreation areas, and other similar uses that are susceptible to noise, and is an hourly sound level that approaches or exceeds 67 dBA L_{eq}.

Other developed land with uses such as commercial or industrial uses is included in Category C, for which an hourly sound level criterion that approaches or exceeds 72 dBA L_{eq} has been established. There are no criteria for undeveloped land or construction noise. These criterion sound levels are determined at the exterior of structures during peak hour noise conditions.

Table 3-2 shows the FHWA noise criteria used for determining effects to specific land uses (for example, residential and commercial).

Table 3-2
Federal Highway Administration Noise Abatement Criteria

Activity Category	Design Noise Levels L_{eq} hourly (dBA)	Description of Land Use Activity Category
A	57 (exterior)	Serene or quiet lands that serve an important public need where the preservation of those qualities is essential if the lands are to continue to serve their intended purpose. Such areas could include amphitheaters, parks, open spaces, or historic districts that are dedicated or recognized by local officials for activities requiring serenity and quiet.
B	67 (exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, and parks not included in category A, and residences, motels, hotels, public meeting rooms, schools, churches, libraries, and hospitals.
C	72 (exterior)	Developed lands, properties, or activities not included in categories A and B.
D	--	Undeveloped lands.
E	52 (interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.
Source: 23 CFR 772, Federal Highway Administration, 1982.		

FHWA and Caltrans consider a traffic noise effect to occur if predicted loudest-hour traffic noise levels approach or exceed the noise levels contained within the FHWA noise abatement criteria. Caltrans defines "approach or exceed" as noise levels within 1 dBA of the noise criterion, meaning 66 dBA for activity category B (also referred to as an "absolute" noise impact). In addition to these criteria sound levels, the FHWA and Caltrans consider a traffic noise effect as occurring if predicted sound levels "substantially" exceed existing noise levels. Caltrans defines "substantial" as an increase of 12 dBA over existing peak-hour noise levels (also referred to as a "relative" noise impact). The FHWA and Caltrans policies dictate that noise abatement measures must be considered when noise effects are identified.

3.3 STATE OF CALIFORNIA

3.3.1 California Environmental Quality Act

The California Environmental Quality Act (CEQA) provides California law and procedure relative to analysis of projects that might result in significant impacts to the environment. CEQA discloses to decision-makers and the public the significant environmental effects of proposed activities and identifies ways to avoid or reduce those effects by requiring implementation of feasible alternatives or mitigation measures. Under CEQA, an agency may find that a substantial noise increase may result in a significant adverse environmental effect; if so, the noise increase must be mitigated or identified as a noise impact for which it is likely that only partial (or no) mitigation measures are available. Specific economic, social, environmental, legal, and technological conditions may make noise mitigation measures infeasible; if such conditions occur, a decision-making body must adopt a statement of those overriding considerations and an explanation of the benefits of the project that outweigh the impacts.

3.3.2 California Streets and Highways Code Section 216

Section 216 of the California Streets and Highways Code relates to the noise level produced by the traffic on, or by the construction of, a state freeway measured in the classrooms, libraries, multi-purpose rooms, and spaces used for pupil personnel services of a public or private elementary or secondary school. The code states that if the interior noise level produced by freeway traffic or the construction of a freeway exceeds 52 dBA-L_{eq}, the department shall undertake a noise abatement program in any such classroom, library, multi-purpose room, or space used for pupil personnel services to reduce the freeway traffic noise level therein to 52 dBA-L_{eq} or less by measures including, but not limited to, installing acoustical materials, eliminating windows, installing air conditioning, or constructing sound baffle structures.

3.3.3 Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects

The Protocol (Caltrans, 1998a) specifies the policies, procedures, and practices to be used by agencies that sponsor new construction or reconstruction projects. Noise abatement criteria specified in the Protocol are the same as those specified in 23 CFR 772 (Table 3-2 above). This report defines a noise increase as substantial when the predicted noise levels with project implementation exceed existing noise levels by 12 dBA-L_{eq}(h). The Protocol also states that a sound level is considered to approach a Noise Abatement Criteria (NAC) level when the sound level is within 1 dBA of the NAC identified in 23 CFR 772. For example, a sound level of 66 dBA is considered to approach the NAC of 67 dBA, but 65 dBA does not.

3.3.4 Technical Noise Supplement

The Caltrans Technical Noise Supplement (a.k.a. "TeNS") provides general technical background information on noise related to transportation, with specific attention to highway traffic noise (Caltrans, 1998b). Although not official policy, the procedures recommended in TeNS are in conformance with industry standards and serve to elaborate—for informational purposes—concepts and procedures referred to by the Caltrans Traffic Noise Analysis Protocol.

3.4 COUNTY

3.4.1 Sutter County General Plan

Policy 8.A-5 of the Sutter County Noise Element of the General Plan pertains to transportation noise, stating "noise created by new transportation noise sources, including roadway improvement projects, should be mitigated…." so as not to exceed the levels specified in Table 3-3.

Table 3-3
Placer County Maximum Allowable Noise Exposure
(Transportation Noise Sources)

Land Use	Outdoor Activity Areas[1]	Interior Spaces	
	L_{dn}/CNEL, dB	L_{dn}/CNEL, dB	L_{eq}, dB[2]
Residential	60[3]	45	--
Transient Lodging	60[3]	45	--
Hospitals, Nursing Homes	60[3]	45	--
Theaters, Auditoriums	--	--	35
Churches, Meeting Halls	60[3]	--	40
Office Buildings	--	--	45
Schools, Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

Source: Placer County General Plan (Placer County, 1994).

Notes:

[1] Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.

[2] As determined for a typical worst-case hour during periods of use.

[3] Where it is not possible to reduce noise in the outdoor activity areas to 60 dB L_{dn}/CNEL or less using a practical application of the best available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed provided that available exterior noise reduction measures have been implemented and interior noise levels are in compliance with this table.

3.4.2 Placer County General Plan

Placer County's General Plan contains policies governing noise related to development within Placer County (1994). The maximum allowable noise exposure limits for transportation noise sources are summarized in Table 3-4. The Placer County Noise Ordinance is in Article 9.36 of the County Code (updated February 12, 2005). Under the Noise Ordinance, any person generating noise must keep that noise below 55 dB during the day and 45 dB at night. If a complaint is reported, noise measurements may be taken to assess the sound levels. Exceptions to this rule include daytime construction activities and vehicle operation on public roads and driveways. In addition, the Placer County Board of Supervisors has issued a Minute Order that controls construction noise by limiting the hours of operation to the daytime hours of 6 a.m. to 8 p.m. Monday through Friday, and 8 a.m. to 6 p.m. Saturday. This order also requires proper maintenance of equipment mufflers and the indication of the staging area on the improvement plans.

Table 3-4
Sutter County Maximum Allowable Noise Exposure
(Transportation Noise Sources)

Land Use	Outdoor Activity Areas[1]	Interior Spaces	
	L_{dn}/CNEL, dB	L_{dn}/CNEL, dB	L_{eq}, dB[2]
Residential	60[3]	45	--
Transient Lodging	60[3]	45	--
Hospitals, Nursing Homes	60[3]	45	--
Theaters, Auditoriums	--	--	35
Churches, Meeting Halls	60[3]	--	40
Office Buildings	--	--	45
Schools, Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

Source: Sutter County General Plan (Sutter County, 1996).

Notes:

[1] Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.

[2] As determined for a typical worst-case hour during periods of use.

[3] Where it is not possible to reduce noise in the outdoor activity areas to 60 dB L_{dn}/CNEL or less using a practical application of the best available noise reduction measures, an exterior noise level of up to 62.5 dB L_{dn}/CNEL may be allowed provided that available exterior noise reduction measures have been implemented and interior noise levels are in compliance with this table.

4.0 AFFECTED ENVIRONMENT

This chapter describes the existing conditions in the study area. It characterizes existing ambient sound and identifies contributory sources such as traffic noise.

4.1 SITE SURVEY

A site reconnaissance and ambient noise measurement survey was conducted in January 2006 in the study area. Ten noise-sensitive receptors and proposed residential developments were selected as representative locations of existing noise conditions within the study area. One 15-minute, short-term attended measurement was conducted at each of the ten measurement locations.

4.1.1 Instrumentation and Setups

Short-term (ST) data were gathered using two Larson Davis Model 820 American National Standards Institute (ANSI) Type 1 integrating sound level meter (Serial Number 1324). A field calibration check was conducted for each meter before and after each measurement period with a Larson Davis Model CAL150B acoustic calibrator (Serial Number 2233). Each sound level meter was also within its manufacturer's recommended laboratory calibration period. For each measurement the meter was mounted on a tripod 5 feet above the ground to simulate the average height of the human ear. All sound level measurements were conducted in accordance with ISO (1996).

4.1.2 Meteorology

Information on wind speed, direction, atmospheric pressure, approximate cloud cover percentage, and ambient temperature appear in the raw data sheets contained in Appendix A. All the recorded meteorological data were within normally acceptable levels for environmental noise measurements.

4.1.3 Study Area Description

The existing topography of the study area is relatively flat with a gentle slope from east to west. Under these conditions, noise modeling for predicting future noise impacts will—unless otherwise noted—assume a flat, sound-reflective ground surface offering negligible attenuation.

Because Placer Parkway would have an impact on travel patterns in a fairly large area, a Transportation Analysis Study Area (TASA) was defined for the project's traffic study (DKS Associates, 2007). The TASA was the basis for this Traffic Noise Analysis Technical Memorandum. It extends from Nicolaus Road on the north to I-80 on the south, and from Sierra College Boulevard on the east to west of SR 70/99. The Transportation Analysis Study Area covers portions of eight jurisdictions: Placer County, Sutter County, Sacramento County, the Cities of Roseville, Rocklin, Lincoln and Sacramento, and the Town of Loomis.

4.1.4 Noise Measurements

Existing noise measurements were taken at a variety of locations throughout the study area (Figure 4-1). Actual noise measurement locations were selected according to a number of criteria, including, representation of the overall noise study area, proximity to identified project alternatives, proximity to actual noise sensitive land uses, and available access during the noise measurement period. Results of the short-term measurements appear in Table 4-1. The list below characterizes existing land use, the measurement period and perceived contributions to the aural environment.

Table 4-1
Short-Term Sound Level Measurement Summary

Location Tag	Location Description	Level, dBA-L_{eq}
ST1	5550 West Sunset Boulevard	48.6
ST2	Approximately 1.25 miles west of Industrial Boulevard on Sunset Boulevard West	58.7
ST3	6990 Country Acres Lane	38.3
ST4	4315 Brewer Road	45.7
ST5	The southwestern corner of Sankey and Pleasant Grove Road	63.1
ST6	Vacant land west of 3990 Sankey Road	52.0
ST7	7967 Pleasant Grove Road	54.9
ST8	Access road for agricultural land near Brewer Road	46.3
ST9	6382 Phillips Road	36.9
ST10	Approximately 2,500 feet south of the industrial park on the east side of Pacific Avenue	60.4

ST1. Land uses around this monitoring location are single-family residential to the north, west, and east, with vacant land to the south. Between 9:14 a.m. and 9:29 a.m. on January 25, the 15-minute L_{eq} captured lamb bleats, helicopter overflights, birdsongs, vehicle backup alert beeps, dog barks, jet aircraft overflights, and apparent industrial noise to the south.

ST2. Land uses around this monitoring location are agricultural to the north, with undeveloped land to the south and pastoral land to the west. Beyond this land use is residential, with agricultural land to the east and the Western Regional Sanitary Landfill farther away. The 15-minute L_{eq} for measurement between 9:44 a.m. and 9:59 a.m. on January 25 was 58.7 dBA and included birdsongs, apparent landfill operation processes, helicopter overflights, and vehicular traffic on Sunset Boulevard West and Industrial Boulevard.

ST3. Land uses around this monitoring location comprise single-family residential to the north and east, with areas of undeveloped land to the west. Between 11:11 a.m. and 11:26 a.m. on January 25, the 15-minute L_{eq} was 38.3 dBA and reflected birdsongs, vehicular traffic on Baseline Road, and jet aircraft overflights.

ST4. Land uses around this monitoring location comprise single-family residential to the south, east, and north, with areas of undeveloped land to the west. A 15-minute L_{eq} of 45.7 dBA was measured between 11:51 a.m. and 12:06 p.m. on January 25 and included vocalizing birds, vehicular traffic on Brewer Road, and propeller-equipped aircraft overflights.

ST5. Land uses around this monitoring location comprise single-family residential to the north, south, west, and northeast, with areas of agricultural land to the southeast. The measurements were conducted between 2:36 p.m. and 2:51 p.m. on January 25, recording a 15-minute L_{eq} of 63.1 dBA and including rooster calls, mooing cows, birdsongs, a pinging flagpole, vehicular traffic on Pleasant Grove and Sankey Road, and aircraft overflights.

ST6. Land uses around this monitoring location comprise single-family residential to the south, west, and east, with vacant land to the south and a single-family residential land use approximately 1 mile away. The 15-minute L_{eq} between 3:18 p.m. and 3:33 p.m. on January 25 was 52.0 dBA and captured dog barks, birdsongs, vehicular traffic on Sankey Road and Locust Road, and propeller-equipped aircraft overflights.

ST7. Land uses around this monitoring location comprise agricultural land to the south, with areas of undeveloped land to the east and west. A wood fabrication plant is located 2,000 feet to the east of the monitoring location, with commercial and single-family residential land uses to the north. Between 9:37 a.m. and 9:52 a.m. on January 26, jet aircraft overflights, birdsongs, frog croaks, childplay, helicopter overflights, dog barks and rooster calls contributed to a measured 15-minute L_{eq} of 54.9 dBA.

ST8. Land uses around this monitoring location comprise agricultural land to the east, west, and south, with single-family residential to the north. Noise measurements were conducted between 10:22 a.m. and 10:37 a.m. on January 26, with train whistles, dog barks, vehicular traffic on Brewer Road, frog croaks, and birdsongs influencing the 15-minute L_{eq} measurement of 46.3 dBA.

ST9. Land uses around this monitoring location comprise undeveloped or agricultural to the east, agricultural land to the south and west, and a retention basin to the north. Noise sources during the measurement included jet overflights, vocalizing birds, humming low-voltage overhead power lines, croaking frogs, and propeller-equipped aircraft overflights. The 15-minute L_{eq} between 10:55 a.m. and 11:10 a.m. on January 26 was 36.9 dBA.

ST10. Land uses around this monitoring location comprise industrial land to the north, agricultural land and Riego Road to the south, and agricultural land to the east and west, with SR 70/99 also located to the west. The measurements were conducted between 11:47 a.m. and 12:02 p.m. on January 26. Noise sources during the measurement included birdsongs and vehicular traffic on Pacific Avenue and Riego Road. The 15-minute L_{eq} was 60.4 dBA.

4.2 EXISTING TRAFFIC FLOWS

The Transportation Technical Report for this project includes a list of 107 existing roadway segments and/or locations within the Placer Parkway study area (DKS Associates, 2007). This noise analysis does not include detailed noise measurements or predictions for the majority of these locations in the TASA as they are removed from the locations of the corridor alignment alternatives and therefore are not relevant to the noise analysis as they are too far away from any of the locations of the Parkway alternatives to be substantially affected by Parkway noise. The noise analysis comprised noise measurements taken within the study area and close to the proposed corridor alignment alternatives. Estimated 2005 daily traffic volumes have been used to prepare a qualitative discussion of existing conditions with and without the Parkway, as required by both NEPA and CEQA, and will serve as the basis for comparison with years 2020 and 2040 to help determine potential relative direct and cumulative impacts, respectively.

5.0 POTENTIAL DIRECT IMPACTS

5.1 IMPACT CATEGORIES

In this chapter, two different types of potential noise impacts are discussed: "absolute" noise impacts, where a specific noise level (66 dBA-L_{eq}, for the loudest hour) is expected to be exceeded at noise-sensitive receptors for a particular alternative and design year, and "relative" noise impacts, where noise levels for a specific alternative and design year are expected to increase by a specific amount (12 dBA or more) relative to existing or projected noise conditions in each of the analysis years (i.e., 2004, 2020, and 2040).

In addition to the Caltrans and FHWA loudest-hour absolute impact threshold of 66 dBA, L_{eq}, both Placer and Sutter counties have land use compatibility noise guidelines within their respective general plans (typically 60 dBA, CNEL, for outdoor areas in residential land uses). It is assumed that these guidelines will be taken into consideration during the more detailed Tier 2 analysis as well as the detailed planning/design phase of any future residential developments in the study area.

In accordance with FHWA noise guidelines (FHWA, 1995) and the requirements of CEQA and NEPA, the analysis of potential noise impacts has been conducted within the following framework:

- 2004 existing conditions plus the project.
- 2020 conditions (projected Parkway opening year) compared to existing (2005) conditions for the No-Build Alternative and the build alternatives. This reflects 2020 development levels based on current general plans. Additional details of the development assumptions upon which the 2020 scenario is based are provided in the Transportation Technical Report (DKS Associates, 2007).
- 2040 conditions evaluating the contribution of the Parkway build alternatives to cumulative impacts. This scenario goes beyond SACOG's 2027 development levels to include foreseeable development based on input from local jurisdictions and SACOG's Preferred Blueprint Scenario.

5.1.1 Absolute Impacts

The study area contains existing noise-sensitive receptors that will potentially be directly affected by the completion and subsequent usage of Placer Parkway. Identification of these impacted receptors involves projecting future noise levels from projected traffic volumes on the Parkway using an appropriate model in the context of potential exceedance of regulatory noise thresholds.

5.1.1.1 Model Description

Section 3.1, Acoustics Background, provides a background of common acoustic terms and descriptions. The following subsections specifically discuss the phenomenon of outdoor noise propagation, its application to traffic noise, and the creation of a model suitable for a Tier 1 noise analysis for this project.

Propagation Factors

From the source to the receiver, noise changes both in level and frequency spectrum. The most obvious change is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on the following factors:

- Geometric spreading from point and line sources
- Ground absorption
- Atmospheric effects and refraction
- Shielding by natural and manmade features, noise barriers, diffraction, and reflection

Sound from a small localized source (approximating a "point" source) radiates uniformly outwards as it travels away from the source in a spherical pattern. The noise level decreases or drops off at a rate of 6 dBA for each doubling of the distance (DD) due to spherical spreading.

However, highway traffic noise is not a single, stationary point source of sound. Vehicle movement makes the source of the sound appear to emanate from a line (line source) rather than a point when viewed over a time interval. Generally, noise levels from a highway decrease at rates of 3 dBA to 4.5 dBA for each doubling of distance from the highway, depending on the type of terrain between the highway and receivers. Terrain located between a noise source and a receiver is assessed as one of two site types in traffic noise models, as follows:

- **Hard Sites**. These are sites with a reflective surface between the source and the receiver, such as parking lots or smooth bodies of water. No excess ground attenuation is assumed in the model for these sites and the changes in noise levels with distance (drop-off rate) are simply 6 dB or 3 dB per DD for point and line sources, respectively.

- **Soft Sites**. These sites have an absorptive ground surface, such as soft dirt, grass, or scattered brushes and trees. An excess ground attenuation value of 1.5 dBA is normally assumed and hence added to the aforementioned "hard" drop-off rates.

Research by the California Department of Transportation and others (Caltrans, 1998b) has shown that atmospheric conditions can have a profound effect on noise levels within 200 feet of a highway. Wind has been shown to be the single most important meteorological factor within approximately 500 feet, and vertical air temperature gradients are more important over longer distances. Other factors such as humidity and turbulence also have significant effects.

Traffic Data Assumptions and Site Geometry

To develop appropriate noise contour predictions for the Parkway alternatives, the analysis employed the following steps:

A. A set of traffic noise propagation cases was defined by dividing each corridor alignment alternative into distinguishable links between proposed interchanges, bridges, and ROW widths.

B. Each link was modeled as a straight section of highway, with features and dimensions corresponding to the conceptual project corridor alignment alternatives.

C. The level of service (LOS) and hourly traffic volumes, percentage of heavy trucks, percentage of buses/medium duty trucks, percentage of remaining vehicles (assumed to autos); posted speeds for each class, and number/configuration of lanes were determined for each analysis year.

D. The flow of traffic was assumed to be half of the total (i.e., half for each direction) and consolidated on the outermost lane of the travel direction.

E. The analysis used the FHWA Traffic Noise Model (TNM) 2.5 to estimate the distance from the centerline of the highway facility to the 66 dBA L_{eq} peak-noise-hour contour assuming the following analysis parameters:

- Flat topography
- No shielding from sound walls or structures
- No roadway gradient
- Highway either at-grade with surroundings with no elevated or depressed segments or at 10-foot or 30-foot elevations depending on water or railroad crossings, respectively.
- "Hard" ground characteristics between the highway and the receptor location.

F. Representative distances were applied to all roadway links with similar characteristics to obtain the distance to the 66 and 60 dBA contour for each link.

G. A Geographic Information System (GIS) was used to create 66 dBA contour maps for 2020 and 2040. These contours were extended on both sides of each corridor alignment alternative to define a "potential noise impact area."

H. The estimated total number of receptors within the noise contours (single-family dwellings, multi-family dwelling units, parks, and schools) was calculated. Receptors that would likely be acquired and removed as a result of the Parkway were excluded from the analysis.

It was assumed that the traffic volumes that would be associated with the interchange ramps for the Parkway alternatives (on-ramps and off-ramps) would not make a significant contribution to the noise contours in the vicinity of the interchanges. This assumption reflects the lower traffic volumes and speeds of ramp traffic generally, which generate much less noise than the mainline highway traffic. As a result, interchange ramps were not taken into account for this Tier 1 study. However, during the subsequent Tier 2 study, interchange ramps will be modeled separately.

5.1.1.2 Predicted Noise Contours

The tables in Appendix B present the input data that TNM used to model future Parkway traffic noise and calculate both the 60 dBA 1-hour L_{eq} and the 66 dBA peak-hour L_{eq} distances from the conceptual median centerline. The generation of graphical contour maps appearing on the figures in this report applied an additional buffer to these distances that allows for flexibility in the ultimate location of the roadway outer boundaries with respect to the ROW boundaries. In other words, the median centerline and ROW centerline may or may not be collinear. These 66 dBA contours, which were superimposed on the study area, provided the following:

1. Counts of existing single-family residences that could experience 66 dBA or greater highway traffic noise (a.k.a., an "absolute" impact, which does not consider the contribution of the existing ambient background sound environment).

2. Identification of "overlap" where planned and/or proposed residential developments will have some portion of their acreage experiencing 66 dBA or higher traffic noise from the Parkway. These impacts are considered in the 2020 impact analysis and the cumulative impacts chapter of this report (see Chapter 7). The degree and extent of this traffic noise impact on future residential developments will be addressed more fully in the Tier 2 study, which will include consideration of Placer Parkway traffic sound mitigation techniques (see Chapter 10, Analyses to be Undertaken in Tier 2).

In addition to the impacts of the Parkway traffic and its associated noise on existing and future residential receptors in the study area, potential noise impacts associated with increased traffic on roads that link to the Parkway are also discussed at a Tier 1 level in the subsequent section.

5.1.2 Relative Impacts

The Parkway traffic analysis estimates existing (2004) daily traffic volumes for 107 road segments in and around the study area (DKS Associates, 2007). As traffic volumes on Placer Parkway and other area roadways increase with the passing years, the associated sound levels will also increase.

Although the construction of the Parkway within one of the five corridor alternatives may reduce these future traffic volumes on many study area roadways when compared to the No-Build Alternative, the future traffic volumes on the majority of these 107 road segments are still going to be greater than 2005 levels. In many cases, the traffic volume at least doubles. By treating traffic flow as a collection of individual sources having, on average, the same sound contribution, acoustic theory tells us that a doubling of identical sources causes a logarithmic increase of 3 dB—considered, as industry-accepted research tells us, a perceptible change to the human ear (Bolt et al., 1973). The same studies indicate that a healthy human ear perceives a 10 dB change as a "doubling" of loudness. Furthermore, as already noted in Chapter 3, a difference of 12 dB or more is considered significant by Caltrans policy (Caltrans, 1998a).

Therefore, in addition to reporting the receptor-specific (i.e., existing residences) and non-specific (i.e., development land overlap) absolute impacts, the following noise impact presentations for the No-Build Alternative and the five build alternatives also discuss relative impacts based on a comparison of estimates for 2004 traffic flows and projected daily traffic volumes for 2020 as they appear in the project's transportation analysis report (DKS Associates, 2007).

5.2 2004 EXISTING PLUS PROJECT CONDITIONS

The Caltrans Traffic Noise Analysis Protocol (2006) requires the evaluation of noise impacts in the context of existing noise levels. As appropriate for a Tier 1 EIS/EIR, and the conditions in the study area, it was determined that "existing plus" project conditions would be evaluated at a qualitative level based on the findings of the Parkway transportation analysis.

- The study area is expected to experience substantial growth in the next 20 to 40 years. This growth will change much of the area from its present rural condition to a developed area. Along with that growth, additional roadways will be constructed to serve future traffic.

- The Parkway is not expected to be operational until 2020. Because of the 15 or so years between 2004 and project operation, current conditions do not reflect the 2020 conditions.

Sections 5.4, Comparison of Alternatives, and Chapter 7, Cumulative Impacts provide a quantitative noise analysis of the project alternatives under 2020 (Opening Year) and 2040 (cumulative) conditions, respectively. As shown in these sections, the future Placer Parkway would affect noise levels near existing roadways in a broad area covering south and west Placer County, south Sutter County, and north Sacramento County. Although some roadway segments near the proposed interchanges along the proposed project would experience increases in traffic volumes and noise levels due to Placer Parkway, a larger number of roadway segments would experience decreases in traffic volumes and noise levels with the Parkway in place.

The project's traffic report concluded that under existing plus project conditions, the project alternatives would result in similar changes in travel patterns in the TASA as those identified for 2020 conditions (described in the following section). While similar, the magnitude of change in travel patterns is less than the 2020 scenario, if the project were added to existing conditions. With respect to noise impacts, therefore, the project alternatives would:

- Increase noise levels for some roadway segments near proposed interchanges along the proposed project. These increases would likely be less than those under 2020 conditions.
- Result in decreases in noise levels near a larger number of local roadway segments in south Sutter County and southwestern Placer County. These decreases would likely be less than those under 2020 conditions.

5.3 2020 IMPACT ANALYSIS

The 66 dBA contour maps illustrate the potential absolute impacts, while Table 5-1 shows the existing and projected future roadway segments in the TASA that are anticipated to experience relative impacts of 3 dB or more. The relative impacts would be considered potentially significant if they exceed existing noise levels by 12 L_{eq} hourly (dBA) in the vicinity of sensitive receptors.

Table 5-1
Relative Impacts for Existing/Future Roadways (2020)

DKS Tag	Roadway	Segment	2005 Daily Traffic Vol.	Estimated 2020 Daily Traffic Volumes						Projected Relative Decibel (dBA) Increases in Traffic Noise from 2005 to 2020					
				No Build	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	No Build	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
3	99/70	North of Riego Rd.	29000	46200	43700	43500	43500	58300	58000	< 3	< 3	< 3	< 3	3	3
4	99/70	North of Elverta Rd.	32000	54600	62600	65500	66100	64800	64600	< 3	< 3	3	3	3	3
6	Hwy 65	North of Twelve Bridge	40000	94600	96400	96400	96400	96400	96400	4	4	4	4	4	4
7	Hwy 65	North of Sunset Blvd.	47500	111400	99700	99100	98900	99100	99100	4	3	3	3	3	3
8	Hwy 65	North of Blue Oaks Blvd.	43000	111400	108500	108000	107900	108000	108100	4	4	4	4	4	4
18	Athens Ave.	East of Fiddyment Rd.	3700	8900	3600	3700	3600	3300	3300	4	< 3	< 3	< 3	< 3	< 3
22	Baseline Rd.	West of Watt Ave.	10400	24200	22900	22600	22600	22500	22600	4	3	3	3	3	3
24	Baseline Rd.	West of Walerga Rd.	12600	34200	32300	31800	31800	31700	31800	4	4	4	4	4	4
25	Baseline Rd.	East of Walerga Rd.	15100	32200	31300	31100	31000	31000	31000	3	3	3	3	3	3
29	Blue Oaks Blvd.	East of Fiddyment Rd.	8200	27300	26400	26400	26400	26300	26400	5	5	5	5	5	5
31	Brewer Rd.	North of Sunset Blvd. West	200	500	200	200	200	200	200	4	< 3	< 3	< 3	< 3	< 3
32	Brewer Rd.	South of Sunset Blvd. West	200	400	500	500	500	500	500	3	4	4	4	4	4
34	Catlett Rd.	East of Hwy 99/70	200	2700	2200	2100	2300	1600	1700	11	10	10	11	9	9
35	Catlett Rd.	East of Pleasant Grove Rd.	100	500	600	600	600	200	200	7	8	8	8	3	3
37	E. Catlett Rd.	East of Brewer Rd.	200	200	700	700	700	300	300	< 3	5	5	5	< 3	< 3
38	E. Catlett Rd.	West of Fiddyment Rd.	200	200	800	800	800	400	400	< 3	6	6	6	3	3
45	Elverta Rd.	East of Hwy 99/70	7200	22200	21600	21500	21500	21600	21600	5	5	5	5	5	5
46	Elverta Rd.	East of Rio Linda Blvd.	8000	32900	32400	32200	32100	32100	32100	6	6	6	6	6	6
47	Elverta Rd.	West of Watt Ave.	20700	52500	52100	52100	52100	52000	52100	4	4	4	4	4	4
48	Fiddyment Rd.	North of Sunset Blvd. West	2800	12500	7800	8200	8300	8200	8200	6	4	5	5	5	5
49	Fiddyment Rd.	South of Sunset Blvd. West	4000	12500	8600	9000	9000	8900	8900	5	3	4	4	3	3
50	Fiddyment Rd.	North of Blue Oaks Blvd.	4000	21600	23400	23100	23100	23100	23100	7	8	8	8	8	8
51	Fiddyment Rd.	North of Pleasant Grove Blvd.	11800	26600	27400	27100	27100	27100	27100	4	4	4	4	4	4
52	Fiddyment Rd.	North of Baseline Rd.	19600	46400	45100	44600	44700	44700	44700	4	4	4	4	4	4
53	Foothills Blvd.	North of Blue Oaks Blvd.	3400	15900	18400	18500	18500	18600	18600	7	7	7	7	7	7
54	Foothills Blvd.	South of Roseville Pkwy.	12200	31000	30600	30500	30500	30500	30400	4	4	4	4	4	4
58	Industrial Ave.	North of Athens Ave.	4600	23100	19300	19300	19300	19300	19300	7	6	6	6	6	6
59	Industrial	North of Roseville Pkwy.	2800	22100	22500	22400	22500	22500	22500	9	9	9	9	9	9
63	Pacific St.	West of Sunset Blvd.	10600	30000	29800	29800	29700	29700	29700	5	4	4	4	4	4
65	Phillip Rd.	East of Brewer Rd.	100	400	400	400	400	400	400	6	6	6	6	6	6
67	Pleasant Grove Blvd.	East of Fiddyment Rd.	3700	19400	17700	17500	17800	17800	17800	7	7	7	7	7	7
68	Pleasant Grove Blvd.	East of Woodcreek Oaks Blvd.	16300	47300	45100	44900	44900	44800	44900	5	4	4	4	4	4
70	Pleasant Grove Blvd.	North of Sankey Rd.	1500	5300	4300	4200	4200	4200	4100	5	5	4	4	4	4
71	Pleasant Grove Blvd.	North of Riego Rd.	1700	3900	3700	3700	3700	4500	4400	4	3	3	3	4	4
75	Sankey Rd.	East of Hwy 99/70	400	1800	1000	900	900	0	0	7	4	4	4	n/a	n/a
76	Sankey Rd.	West of Pleasant Grove Rd.	200	1800	1000	900	900	1600	1600	10	7	7	7	9	9
77	Sierra College Blvd.	South of English Colony Way	11000	33100	33100	33100	33000	33000	33000	5	5	5	5	5	5
78	Sierra College Blvd.	North of King Rd.	11000	32400	32300	32300	32200	32300	32300	5	5	5	5	5	5
79	Sioux St.	North of Whitney Blvd.	3700	25900	26800	27000	26800	26900	26900	8	9	9	9	9	9
81	Sunset Blvd.	West of SR 65	8000	36400	32700	32800	32800	32900	32800	7	6	6	6	6	6
82	Sunset Blvd.	East of SR 65	7100	20700	21500	21600	21600	21600	21600	5	5	5	5	5	5
83	Sunset Blvd.	East of Blue Oaks Blvd.	9800	38100	37800	37600	37500	37500	37600	6	6	6	6	6	6
84	Sunset Blvd. West	West of Brewer Rd.	600	1400	700	600	600	500	600	4	< 3	< 3	< 3	< 3	< 3
86	Sunset Blvd. West	West of Fiddyment Rd.	600	1400	900	900	900	900	900	4	< 3	< 3	< 3	< 3	< 3
87	Twelve Bridges Dr.	West of SR 65	6000	21200	18400	18400	18300	18300	18400	5	5	5	5	5	5
88	Twelve Bridges Dr.	East of SR 65	5100	37700	37700	37600	37800	37700	37600	9	9	9	9	9	9
90	Walerga Rd.	South of Baseline Rd.	14900	31800	31600	31500	31500	31600	31500	3	3	3	3	3	3
92	Washington Blvd.	South of Blue Oaks Blvd.	4800	24700	23000	23000	23000	22900	23000	7	7	7	7	7	7
93	Washington Blvd.	North of Pleasant Grove Blvd.	6205	34000	31400	31300	31300	31300	31300	7	7	7	7	7	7
104	Woodcreek Oak Blvd.	South of Pleasant Grove Blvd.	11900	24200	23400	23300	23100	23100	23100	3	< 3	< 3	< 3	< 3	< 3
107	18th St.	North of Elverta Rd.	400	13600	13500	13500	13500	13500	13500	15	15	15	15	15	15

5.3.1 No-Build Alternative

Under the No-Build Alternative, land for the construction of Placer Parkway would not be acquired and the Parkway would not be constructed. There would not be any noise impacts under the No-Build Alternative.

5.3.1.1 No-Build Alternative – Western Segment

Number of Existing Roadways Experiencing Relative Noise Increases. The other area roadways identified in the project's traffic report within the Western Segment of the study area that, by 2020, would experience a 3 dB or greater increase in noise relative to existing levels attributable to higher traffic volume are as follows (identified by the DKS tag number on Table 5-1): 34, 45, 70, 71, 75, and 76. None of these is expected to experience a relative noise increase equal to or greater than 12 dB.

5.3.1.2 No-Build Alternative – Central Segment

Number of Existing Roadways Experiencing Relative Noise Increases. The other area roadways within the Central Segment of the study area that, by 2020, would experience a 3 dB or greater increase in noise relative to existing levels attributable to higher traffic volume are as follows: 22, 31, 35, 46 through 52, 65, 84, 86, 90, and 107 (as defined in Table 5-1). Of these, #107 (18th Street, north of Elverta Road) is expected to experience a relative noise increase greater than 12 dBA.

5.3.1.3 No-Build Alternative – Eastern Segment

Number of Existing Roadways Experiencing Relative Noise Increases. The list of other area roadways within the Eastern Segment of the study area that, by 2020, would experience a 3 dB or greater increase in noise relative to existing levels attributed to higher traffic volume are as follows: 6 through 8, 25, 29, 53, 54, 58, 59, 63, 67, 77 through 79, 81 through 83, 87, 88 and 104 (as defined in Table 5-1). None of these is expected to experience a relative noise increase equal to or greater than 12 dB.

5.3.2 Alternative 1 – the Red Alternative

Figure 5-1 presents the projected 66 dBA noise contour under Alternative 1.

5.3.2.1 Western Segment

The Western Segment of Alternative 1 is located entirely within Sutter County. The total length of this segment is approximately 15,300 feet along the centerline of the corridor. Two or three interchanges would be included along this segment, as shown on Figure 2-1.

Number of Absolute Noise Impacts at Existing Noise Sensitive Receptors. The estimated quantity of noise-impacted existing (2004) single-family residences associated with this segment is zero (from data in Table 5-2). If new sensitive receptors are constructed within the 66 dBA contour lines identified on Figure 5-1, they would be affected by the Parkway under Alternative 1.

Number of Existing Roadways Experiencing Relative Noise Increases. The other area roadways within the Western Segment of the study area that, by 2020, would experience a 3 dB or greater increase in noise relative to existing levels attributed to higher traffic volume are as follows: 4, 34, 45, 70, 71, 75, and 76 (as defined in Table 5-1). None of these is expected to experience a relative noise increase equal to or greater than 12 dB.

Table 5-2
Placer Parkway Absolute Noise Impact Summary (2020)

Alternative	Homes Within Proposed ROW[1]				Impacted Residential Units by Segment (2020)			
	Western	Central	Eastern	Total	Western	Central	Eastern	Total
1	0	5	1	6	0	0	0	0
2	0	5	1	6	0	2	0	2
3	0	3	1	4	0	2	0	2
4	2	3	1	6	0	0	0	0
5	2	5	1	8	0	1	0	1

Note:

1. Homes within proposed ROW are units that are currently within the identified right-of-way for the given proposed alternative/segment. Impacted units for given year 2020 are for existing units that are within the 66 dBA loudest hour contour for that alternative/segment but outside of the identified right-of-way for the given alternative/segment.

5.3.2.2 Alternative 1 – Central Segment

The Central Segment for Alternative 1 is located in Sutter and Placer counties. The total length of this segment is approximately 40,600 feet along the centerline of the corridor. No interchanges are proposed along this segment.

Number of Absolute Noise Impacts at Existing Noise Sensitive Receptors. The estimated quantity of noise-impacted existing (2004) single-family residences associated with this segment is zero (see Table 5-2). If new sensitive receptors are constructed within the 66 dBA contour lines identified on Figure 5-1, they would be affected by the Parkway under Alternative 1.

Number of Existing Roadways Experiencing Relative Noise Increases. The other area roadways within the Central Segment of the study area that, by 2020, would experience a 3 dB or greater increase in noise attributed to higher traffic volume are as follows: 22, 32, 35, 37, 38, 46 through 52, 65, 90, and 107 (as defined in Table 5-1). Of these, the last (18th Street, north of Elverta Road) is expected to experience a relative noise increase greater than 12 dB.

5.3.2.3 Alternative 1 – Eastern Segment

All of the Eastern Segment of Alternative 1 is within Placer County. The total length of this segment is approximately 29,600 feet measured along the centerline of the corridor. Three interchanges would be included along this segment as shown on Figure 2-1.

Number of Absolute Noise Impacts at Existing Noise Sensitive Receptors. The estimated quantity of noise-impacted existing single-family residences associated with this segment is zero (see Table 5-2). If new sensitive receptors are constructed within the 66 dBA contour lines identified on Figure 5-1, they would be affected by the Parkway under Alternative 1.

Number of Existing Roadways Experiencing Relative Noise Increases. The other area roadways within the Eastern Segment of the study area that, by 2020, would experience a 3 dB or greater increase in noise attributed to higher traffic volume are as follows: 6 through 8, 25, 29, 53, 54, 58, 59, 63, 67, 77 through 79, 81 through 83, 92, and 93 (as defined in Table 5-1). None of these is expected to experience a relative noise increase equal to or greater than 12 dB.

5.3.3 Alternative 2 – the Orange Alternative

Figure 5-2 presents the projected 66 dBA noise contour under Alternative 2.

5.3.3.1 Alternative 2 – Western Segment

The Western Segment of Alternative 2 is the same as that for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.3.3.2 Alternative 2 – Central Segment

The Central Segment for Alternative 2 is located in Sutter and Placer counties. The total length of this segment is approximately 36,400 feet along the centerline of the corridor. There are no interchanges along this segment.

Number of Absolute Noise Impacts at Existing Noise Sensitive Receptors. The estimated quantity of noise-impacted existing single-family residences associated with this segment is two (from data in Table 5-2). If new sensitive receptors are constructed within the 66 dBA contour lines identified on Figure 5-2, they would be impacted by the Parkway under Alternative 2.

Number of Existing Roadways Experiencing Relative Noise Increases. The other area roadways within the Central Segment of the study area that, by 2020, would experience a 3 dB or greater increase in noise attributed to higher traffic volume are as follows: 22, 32, 35, 37, 38, 46 through 52, 65, 90, and 107 (as defined in Table 5-1). Of these, the last (18th Street, north of Elverta Road) is expected to experience a relative noise increase greater than 12 dB.

5.3.3.3 Alternative 2 – Eastern Segment

The Eastern Segment of Alternative 2 is the same as that for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.3.4 Alternative 3 – the Blue Alternative

Figure 5-3 presents the projected 66 dBA noise contour under Alternative 3.

5.3.4.1 Alternative 3 – Western Segment

The Western Segment of Alternative 3 is the same as that for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.3.4.2 Alternative 3 – Central Segment

The Central Segment for Alternative 3 is located in Sutter and Placer counties. The total length of this segment is approximately 38,000 feet along the centerline of the corridor. No interchanges are planned along this segment.

Number of Absolute Noise Impacts at Existing Noise Sensitive Receptors. The estimated quantity of noise-impacted existing single-family residences associated with this segment is two (see Table 5-2). If new sensitive receptors are constructed within the 66 dBA contour lines identified on Figure 5-3, they would be affected by the Parkway under Alternative 3.

Number of Existing Roadways Experiencing Relative Noise Increases. The other area roadways within the Central Segment of the study area that, by 2020, would experience a 3 dB or greater increase in

noise attributed to higher traffic volume are as follows: 22, 32, 35, 37, 38, 46 through 52, 65, 90, and 107 (as defined in Table 5-1). Of these, the last (18th Street, north of Elverta Road) is expected to experience a relative noise increase greater than 12 dB.

5.3.4.3 Alternative 3 – Eastern Segment

The Eastern Segment of Alternative 3 is the same as that for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.3.5 Alternative 4 – the Yellow Alternative

Figure 5-4 presents the projected 66 dBA noise contour under Alternative 4.

5.3.5.1 Alternative 4 – Western Segment

The total length of this segment is approximately 15,300 feet along the centerline of the corridor. Two interchanges would be included along this segment, as shown on Figure 2-1. In addition, this segment includes the realignment of Sankey Road.

Number of Absolute Noise Impacts at Existing Noise Sensitive Receptors. The estimated quantity of noise-impacted existing single-family residences associated with this segment is zero (see Table 5-2). If new sensitive receptors are constructed within the 66 dBA contour lines identified on Figure 5-4, they would be affected by the Parkway under Alternative 4.

Number of Existing Roadways Experiencing Relative Noise Increases. The other area roadways within the Western Segment of the study area that, by 2020, would experience a 3 dB or greater increase in noise attributed to higher traffic volume are as follows: 4, 34, 45, 70, 71, and 76 (as defined in Table 5-1). None of these is expected to experience a relative noise increase equal to or greater than 12 dB.

5.3.5.2 Alternative 4 – Central Segment

The Central Segment for Alternative 4 is located in Sutter and Placer counties. The total length of this segment is approximately 30,600 feet along the centerline of the corridor. There are no interchanges along this segment.

Number of Absolute Noise Impacts at Existing Noise Sensitive Receptors. The estimated quantity of noise-impacted existing single-family residences associated with this segment is zero (see Table 5-2). If new sensitive receptors are constructed within the 66 dBA contour lines identified on Figure 5-4, they would be affected by the Parkway under Alternative 4.

Number of Existing Roadways Experiencing Relative Noise Increases. The other area roadways within the Central Segment of the study area that, by 2020, would experience a 3 dB or greater increase in noise attributed to higher traffic volume are as follows: 22, 32, 35, 38, 46 through 52, 65, 90, and 107 (as defined in Table 5-1). Of these, the last (18th Street, north of Elverta Road) is expected to experience a relative noise increase greater than 12 dB.

5.3.5.3 Alternative 4 – Eastern Segment

The Eastern Segment of Alternative 4 is the same as that for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.3.6 Alternative 5 – the Green Alternative

Figure 5-5 presents the projected 66 dBA noise contour under Alternative 5.

5.3.6.1 Alternative 5 – Western Segment

The Western Segment of Alternative 5 is the same as that for Alternative 4. Therefore, the potential impacts for this segment are the same as discussed for Alternative 4.

5.3.6.2 Alternative 5 – Central Segment

The Central Segment for Alternative 5 is located within Sutter and Placer counties. The total length of this segment is approximately 30,500 feet along the centerline of the corridor. There are no interchanges along this segment.

Number of Absolute Noise Impacts at Existing Noise Sensitive Receptors. The estimated quantity of noise-impacted existing single-family residences associated with this segment is one (see Table 5-2). If new sensitive receptors are constructed within the 66 dBA contour lines identified on Figure 5-5, they would be affected by the Parkway under Alternative 5.

Number of Existing Roadways Experiencing Relative Noise Increases. The list of other area roadways within the Central Segment of the study area that, by 2020, would experience a 3 dB or greater increase in noise attributed to higher traffic volume are as follows: 22, 32, 35, 38, 46 through 52, 65, 90, and 107 (as defined in Table 5-1). Of these, the last (18th Street, north of Elverta Road) is expected to experience a relative noise increase greater than 12 dB.

5.3.6.3 Alternative 5 – Eastern Segment

The Eastern Segment of Alternative 5 is the same as that for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.4 COMPARISON OF ALTERNATIVES

Absolute impacts for the five build alternatives are summarized in Table 5-2. The No-Build Alternative is not shown in Table 5-2 because no absolute impacts would be associated with this alternative.

Figures 5-1 through 5-5 illustrate the overlaps of 66 dBA contours for all build alternatives with respect to planned developments (see Section 5.1) within the TASA expected to be partially or fully built-out by 2020. In 2020, residential land uses within the approved West Roseville Specific Plan area are expected to be built-out. There is an open space buffer within the western edge of this Plan area, and absolute noise impacts are therefore not expected under any of the build alternatives. No sensitive receptors are planned within the City of Roseville Retention Basin, except for potential users of a trail that could pass under the Parkway overcrossing of Pleasant Grove Creek. Therefore, under the 2020 condition, no additional absolute noise impacts are anticipated.

Relative impacts related to the existing roadways in the study area are summarized in Table 5-1. In this case, the No-Build Alternative is shown for comparison purposes. For the same reason as for absolute impacts, under the 2020 condition, no additional relative impacts are anticipated.

Table 5-3 shows a comparison of all five alternatives for both absolute and relative noise impacts for design year 2020. Also shown is a combined ranking for each alternative with respect to combined noise impacts.

Table 5-3
Noise Impact Ranking by Alternative (2020)

Alternative	Absolute Impacts[a]	Relative Impacts[b]	Ranking[c]
No Build	0	1	1
1	0	1	1
2	2	1	5
3	2	1	5
4	0	1	1
5	1	1	4

Notes:

a. Number of residences.
b. Number of roadways with projected increases in traffic noise > 12 dBA.
c. A ranking of 1 indicates that an alternative has the fewest projected combined impacts; A ranking of 5 — the most.

6.0 SECONDARY AND INDIRECT IMPACTS

Recent FHWA, U.S. EPA, and Caltrans guidance on growth inducement (Mare Island Accord, 2006) advises that analysis of potential impacts associated with growth should include an evaluation of the effects of growth on resources of concern. The following discussion presents a qualitative evaluation of potential secondary and indirect impacts of Anticipated Growth (see below for definition) on human and environmental resources in the study area.

The Council on Environmental Quality (CEQ) provided clarification of the terminology "indirect impacts" when it issued its NEPA regulation in 1978. Secondary and indirect impacts are defined as impacts "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." Moreover, indirect effects ". . . may include growth-inducing effects and other effects related to induce changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems."

A key term used in this section is "Anticipated Growth." This is defined as the growth that is anticipated in the study area as described in the relevant General Plans and adopted regional forecasts, such as the SACOG Blueprint scenario (as detailed in the Community Impact Assessment [Mara Feeney & Associates and North Fork Associates, 2006]), including additional growth that may occur as a result of major new development proposals that have not yet been formally approved. It is possible that this additional growth may accelerate the rate of buildout in the study area, but it is not ultimately expected to result in any greater levels of development than are presented in adopted regional forecasts.

The following secondary and indirect discussion considers impacts that may occur as a result of anticipated growth, leading to additional increases in traffic volumes and associated noise. The study area for the analysis of secondary and indirect impacts for noise is shown on Figure 6-1.

6.1 GROWTH INDUCEMENT SCENARIO

NEPA and CEQA both require environmental analyses to consider the effects of a project on growth. Caltrans defines growth inducement as the relationship between a proposed project and growth. This section summarizes the relationship between the Placer Parkway Corridor Preservation project and regional growth, and discusses potential secondary and indirect effects of the project related to growth inducement.

While the study area is predominantly undeveloped at this time, parts of the study area are within local General Plan designations allowing urban growth. In addition, numerous proposals for major new development projects in and around the study area are depicted on Figure 6-2 that are currently in various stages of the approval and entitlement process. Portions of the surrounding area (especially northern Sacramento County and southwestern Placer County) have developed very rapidly over the past several decades. This has occurred as a result of many factors, including continuing net population growth statewide, strong employment growth in the Sacramento region, relative housing affordability, and location amenities.

Population and employment growth projections for California and the Sacramento Region in general, and for southwestern Placer County and south Sutter County in particular (described in detail in the Tier 1 EIS/EIR Community Impact Assessment), indicate that that development pressures in the project vicinity will remain relatively intense, irrespective of the Placer Parkway project. Between 1950 and 2000, the California population more than tripled. During the same period, population in the six-county SACOG region increased by more than 800 percent (DOF, 2006). Projections and established goals and policies from a wide range of sources, including SACOG, Placer, Sacramento and Sutter counties, and the Cities

of Roseville, Rocklin and Lincoln, confirm that relatively high rates of population and employment growth and housing and commercial development are anticipated in the six-county region by 2050. Between 2000 and 2050, California's population is expected to increase from approximately 34 million to 55 million. During the same time period, SACOG projects that the region's growth will double, from 1.9 million in 2000 to 3.95 million in 2050, with the Roseville-Rocklin-Lincoln area remaining one of the fastest growing areas in the region (Levy and Doche-Boulos, 2005; SACOG, 2006).

Placer Parkway would be growth inducing because it would help support changes in the amount of growth beyond current general plan levels, and could influence the pace and location of some development. It is likely that Placer Parkway could help to implement the various specific development proposals in the study area, since it would serve to relieve traffic congestion associated with these proposals. Furthermore, the Parkway could affect the timing of development in the vicinity of the proposed interchange locations, particularly those proposed near vacant land adjacent to rapidly developing areas or areas now proposed for urban development. It could result in different land uses, or more intensive land uses, in the vicinity of interchanges where land use plans are still being developed and have not yet been approved. Also, it could hasten the buildout of planned commercial and industrial uses, especially in the Sunset Industrial Area and proposed Placer Ranch Specific Plan area, as well as in the Sutter County Sutter Pointe Specific Plan.

In the longer term, improved access provided to lands in the Western and Eastern segments could be a factor in stimulating additional growth and development in areas west of SR 70/99 not protected by the Natomas Basin Habitat Conservation Plan, or north of the Sutter Pointe Specific Plan area or north of Sunset Boulevard West in Placer County. Although growth is anticipated in these areas over time (as reflected in SACOG's preferred Blueprint scenario, the Sutter County General Plan, and the City of Lincoln General Plan), such development is not reflected in general plans at present and has not been formally proposed by landowners. By providing improved access to adjacent areas, Placer Parkway could be one of many factors that would encourage growth in these areas sooner than this might otherwise occur.

The factors influencing growth in the region are complex. The Parkway is one of several major urban development proposals in the region. While Placer Parkway would contribute to regional growth, including growth beyond the level identified in current general plans, it is not feasible to quantify the amount of its contribution. A single new transportation facility such as the Parkway is only one of the many factors contributing to regional growth, and it is speculative to assign a particular quantity of growth to any one factor.

Furthermore, several factors serve to limit the likely effect of the Parkway on growth, including the following:

- No interchanges are proposed for any areas that are not already approved or proposed for development;
- All approved and proposed residential development that has not already been built is projected to be built out prior to 2020, when the Parkway is proposed to open; and
- Real estate market pressures in the area have been and continue to be intense without the Parkway, and local government jurisdictions have been supportive of processing development applications in spite of anticipated regional transportation challenges.

It is unlikely that the choice of one Placer Parkway alternative over another would substantially change expected patterns of growth and development in the project study area and the surrounding region. In the Western Segment, all corridor alignment alternatives would provide new access to an area that is currently undeveloped farmland, but that is proposed for mixed use urban development. The three more southerly alignments (Alternatives 1, 2, and 3) would provide two interchanges in the South Sutter Pointe Specific

Plan area, while the more northerly alignments (Alternatives 4 and 5) would provide only one interchange in this area, approximately one mile farther north of the more southerly alignments in the Western Segment. Since none of the alternative alignments would include any intersections in the Central Segment, there would be little difference in growth inducement effects among the alternatives in this segment. In the Eastern Segment, two interchanges are proposed within the existing Sunset Industrial Area Plan area, in an area proposed for the Placer Ranch Specific Plan. While these interchanges would provide new access to a currently undeveloped area, this area is planned for growth. In the Eastern Segment all alternatives would follow an identical alignment, so there would be no differences in growth inducement effects among the alternatives.

A future interchange at Watt Avenue could be growth inducing, because it would provide major new regional access to a portion of the project study area that is currently rural and undeveloped, although both conceptual interchange locations are now surrounded by formal development proposals or land controlled by development interests. A Watt Avenue interchange is not proposed as part of the project.

6.2 SECONDARY AND INDIRECT EFFECT EVALUATION

6.2.1 No-Build Alternative

Under the No-Build Alternative, land would not be acquired for the Parkway and the Parkway would not be constructed. There would not be any secondary or indirect impacts with respect to noise under the No-Build Alternative.

6.2.2 Build Alternatives

Upon completion, Placer Parkway would potentially serve as a major thoroughfare for the proposed developments in the area such as Placer Ranch Specific Plan, Brookfield Property, Creekview Specific Plan, City of Roseville Retention Basin, Curry Creek Community Plan, Regional University Specific Plan, West Roseville Specific Plan, Sierra Vista Specific Plan, Placer Vineyards Specific Plan, and Sutter Pointe Specific Plan. The operation of Placer Parkway may expedite the aforementioned proposed developments and potentially create a trend to develop other nearby vacant parcels of land to supplement the current proposed developments (e.g., storage facility, shipping and distribution facilities, automobile dealership) including changing existing businesses to better fit the needs of the area. The additional growth would have to be analyzed for air quality impacts and a determination made whether the growth is consistent with Placer and Sutter Counties' General Plan and is feasible with the proposed developments.

The anticipated growth that would be expected to occur as a result of Placer Parkway could result in secondary and indirect impacts associated with noise. Anticipated growth would be expected to generate additional traffic in the study area that would most likely not have occurred in the absence of such growth. Increased traffic volumes could adversely affect noise, particularly if this results in traffic traveling at higher speeds within the study area. Although precise impacts on future receptors cannot be predicted, it is reasonable to assume that new developments that would be present in the study area in the future could be affected by noise. Secondary and indirect impacts could include the following:

- Increase in overall ambient noise such that any increase in noise might be significant (resulting in a reduction in available increment for future projects in the area);
- Increased risk of reduced quality of life, and associated adverse health effects on residences, business and facilities located in areas affected by increased noise levels; and

- Impacts on noise-sensitive wildlife, such as birds, mammals, and reptiles. Impacts are also possible on species that are sensitive to noise, and noise-related disturbance, at particular stages of their life cycle, such as during nesting and other breeding activities.

Further analysis of potential secondary and indirect impacts on noise will be performed during the Tier 2 EIS/EIR for Placer Parkway.

7.0 CUMULATIVE IMPACTS

7.1 CUMULATIVE IMPACT SCENARIO

Analysis of cumulative impacts is required under NEPA and CEQA. Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that should be the focus of cumulative impact analysis. The CEQ's regulations (CEQ, 1987) explicitly state that cumulative impacts must be evaluated along with the direct and indirect effects of each alternative.

FHWA has requested that cumulative conditions for the analysis of project alternatives in the EIS/EIR for Placer Parkway be based on development levels that are 20 years beyond the projected opening of the Parkway. For planning purposes, Placer County Transportation Planning Agency has identified 2020 as the opening year of the Parkway. Cumulative impacts are therefore being evaluated for the year 2040. This 2040 scenario includes the following projects (see Figure 6-2).

- Full build-out of all residential land in Placer County west of Sierra College Boulevard, including current general plan areas and the following major development proposals in West Placer County:
  - The Creekview and Sierra Vista Specific Plan areas in Roseville's Memorandum of Understanding (MOU) Remainder area
  - The Sphere of Influence expansion areas of Lincoln
  - The Placer Vineyards, the Regional University, Placer Ranch Specific Plan areas in unincorporated Placer County
  - The Curry Creek Community Plan area
- Growth in retail employment in Placer County that balances the growth in residential development by matching SACOG's countywide estimate of about 0.32 employee per dwelling unit from their 2025 forecasts.
- Growth in total employment levels in Placer County that balances the growth in residential development by matching SACOG's 1.3 employees per dwelling unit from their 2025 forecasts.
- Full build-out of the residential development in the proposed South Sutter Pointe Specific Plan along with a non-residential development level that balances the residential development in that area.
- Estimated 2040 developments in all other portions of SACOG's six-county region based on assuming a constant rate for the development growth between 2005 levels and the 2050 Preferred Blueprint scenario for each of SACOG's traffic analysis zones (TAZs).

Cumulative impacts are described below.

7.2 CUMULATIVE IMPACT EVALUATION

7.2.1 2040 Noise-Sensitive Receptors

The predicted 66 dBA noise contours in 2040 for Alternatives 1 through 5 are shown on Figures 7-1 through 7-5, respectively. There would not be absolute noise impacts for the No-Build Alternative because the Parkway would not be constructed under the No-Build Alternative.

Table 7-1 summarizes absolute impacts on residential units existing as of 2005 for the build alternatives with respect to 2040. Homes within the proposed ROW are similar to 2020, because the land use changes associated with most of the proposed development are not known. The number of impacted residential units in 2040 will be greater than in 2020 because, as traffic volumes increase, the 66 dBA contour expands relative to the 2020 contour. Residential units built after 2005 may also be affected. This issue is addressed in Section 7.2.2.

Table 7-1
Cumulative Absolute Noise Impact Summary (2040)

	Homes Within Proposed ROW[a]				Impacted Residential Units by Segment (2040)			
Alternative	Western	Central	Eastern	Total	Western	Central	Eastern	Total
1	0	5	1	6	0	4	0	4
2	0	5	1	6	0	4	0	4
3	0	3	1	4	0	5	0	5
4	2	3	1	6	5	3	0	8
5	2	5	1	8	5	2	0	7

Note:

a. Homes within proposed ROW are units that are currently within the identified right-of-way for the given proposed alternative/segment. Impacted units for given year 2040 are for existing units that are within the 66 dBA loudest hour contour for that alternative/segment but outside of the identified right-of-way for the given alternative/segment.

7.2.2 Future Residential Developments

Figures 7-1 through 7-5 illustrate the overlaps of 66 dBA contours for all build alternatives with respect to planned developments within the TASA expected to be partially or fully built-out by 2040. As discussed in Section 5.1.1.2, these 66 dBA noise contours based on a TNM model of future traffic volumes create geographical zones for each alternative that overlap acreage planned for development. Although a review of Figures 7-1 through 7-5 might suggest that one corridor alignment alternative may demonstrate less absolute noise impact than the others, it is not possible to make such comparisons until specific detailed plans in these future developments are known. The specific detailed plans would identify the locations of residences and other noise-sensitive receptors and would count them, as was done for Table 7-1. Design details for land use plans for proposed development are not yet finalized and will have a significant influence over the type and amount of future noise impacts in these areas. Therefore, this analysis is general in nature.

Coordination with jurisdictions which are processing the applications for proposed development has provided some idea of the location where such potential impacts may occur for some developments. Sutter Pointe Specific Plan applicants and Sutter County are planning residential land uses in the south and predominantly industrial/commercial land uses in the north. There are no land use plans for the Curry Creek Community Plan as yet. The Sierra Vista and Creekview Specific Plans have not finalized their roadway network or their land use plans. The Regional University Specific Plan is underway; residential development is planned in the eastern portion of the Plan area. There is an open space buffer within the western edge of the West Roseville Specific Plan area, and absolute noise impacts are therefore not expected under any of the build alternatives. No sensitive receptors are planned within the City of Roseville Retention Basin. No land use plan has been identified for the Brookfield property. Placer County and the Placer Ranch Specific Plan applicant have been working cooperatively to reserve ROW for a future Parkway within the proposed Placer Ranch Specific Plan area, since all Parkway alternatives cross through the Placer Ranch Specific Plan area in the same location. Although it is not certain that currently proposed land uses will be approved, this is the best current information upon which to base a projected evaluation of potential absolute noise impacts of the Parkway's build alternatives in 2040.

The following narrative addresses each alternative, identifying which planned and/or proposed developments experience some degree of overlap with the projected 2040 66 dBA contour.

7.2.2.1 Alternative 1

The Alternative 1 66 dBA contour in 2040 would overlap with areas of the Sutter Pointe Specific Plan, the Curry Creek Community Plan (both northern and southern regions), the Sierra Vista Specific Plan area, the Regional University Specific Plan, the West Roseville Specific Plan, the Creekview Specific Plan, the Brookfield property and the Placer Ranch Specific Plan. Based on current information, Alternative 1 would potentially result in absolute noise impacts on the Sutter Pointe Specific Plan area and the Regional University Specific Plan area. Impacts to other development areas are unknown.

7.2.2.2 Alternative 2

The Alternative 2 66 dBA contour in 2040 would overlap with areas of the Sutter Pointe Specific Plan, the Curry Creek Community Plan (both northern and southern regions), the Regional University Specific Plan, the West Roseville Specific Plan, the Creekview Specific Plan, the Brookfield property and the Placer Ranch Specific Plan. Based on current information, Alternative 2 would potentially result in absolute noise impacts on the Sutter Pointe Specific Plan area and the Regional University Specific Plan area. Potential impacts on the Regional University Specific Plan area would be more severe than that under Alternative 1 or any other alternative. There would be no potential impacts on the Sierra Vista Specific Plan area. Impacts to other development areas are unknown.

7.2.2.3 Alternative 3

The Alternative 3 66 dBA contour in 2040 would overlap with areas of the Sutter Pointe Specific Plan, the Curry Creek Community Plan (only northern region), the Regional University Specific Plan, the Creekview Specific Plan, the Brookfield property and the Placer Ranch Specific Plan. Based on current information, Alternative 3 would potentially result in absolute noise impacts on the Sutter Pointe Specific Plan area and the Regional University Specific Plan area. Potential impacts on the Regional University Specific Plan area would be limited to a small area on the northern Plan Area boundary. There would be no potential impacts on the West Roseville Specific Plan area or the Sierra Vista Specific Plan area. Impacts to other development areas are unknown.

7.2.2.4 Alternative 4

The Alternative 4 66 dBA contour in 2040 would overlap with areas of the Sutter Pointe Specific Plan, the Curry Creek Community Plan (only northern region), the Regional University Specific Plan, the Creekview Specific Plan, the Brookfield property, and the Placer Ranch Specific Plan. Based on current information, Alternative 4 would not likely result in impacts to the Sutter Pointe Specific Plan area since industrial and commercial uses are planned in the area of overlap with this alternative. Alternative 4 would result in the same potentially limited impacts to the Regional University Specific Plan area as under Alternative 3. There would be no potential impacts on the West Roseville Specific Plan area or the Sierra Vista Specific Plan area. Impacts to other development areas are unknown.

7.2.2.5 Alternative 5

The Alternative 4 66 dBA contour in 2040 would overlap with areas of the Sutter Pointe Specific Plan, the Creekview Specific Plan, the Brookfield property, and the Placer Ranch Specific Plan. Based on current information, Alternative 5 would not likely result in impacts to the Sutter Pointe Specific Plan since industrial and commercial uses are planned in the area of overlap with this alternative. There would be no potential impacts on the Curry Creek Community Plan area, the Regional University Specific Plan area, the West Roseville Specific Plan area or the Sierra Vista Specific Plan area. Impacts to other development areas are unknown.

Sutter Pointe Specific Plan

Good planning within future development could involve location of noise-sensitive receptors (e.g., residences) far enough away from the overlap zones depicted on Figures 7-1 through 7-5 and listed in Table 7-1. This potential strategy is discussed in Chapter 9.

7.2.3 Relative Impacts on Future Roadways

Relative impacts related to the existing and projected future roadways in the study area are summarized in Table 7-2. In this case, the No-Build Alternative is shown for comparison purposes.

It appears from Table 7-2 that, similar to 2020, Alternatives 4 and 5 would generate the same number of roadway segments experiencing relative impacts. Although each has a slightly larger quantity of noticeable impacts than the totals for Alternatives 1, 2, and 3, Alternatives 4 and 5 each have one less impact of 12 dBA or greater. Since these significant relative impacts invite closer scrutiny, one might conclude that—on the basis of counts—Alternatives 4 and 5 are quieter or will need less mitigation.

As for absolute impacts, actual relative impacts would also depend on the nature of the land uses ultimately approved for the various planned and proposed developments.

Table 7-2
Cumulative Relative Impact for Existing Roadways (2040)

DKS Tag	Roadway	Segment	2005 Daily Traffic Vol.	Estimated 2040 Daily Traffic Volumes						Projected Relative Decibel (dBA) Increases in Traffic Noise from 2005 to 2040					
				No Build	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	No Build	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
3	99/70	North of Riego Rd.	29000	68900	56200	55800	55600	91900	91500	4	< 3	< 3	< 3	5	5
4	99/70	North of Elverta Rd.	32000	129700	144200	146900	147300	145400	145000	6	7	7	7	7	7
5	99/70	North of I-5	47500	155100	160800	162200	162300	161400	161000	5	5	5	5	5	5
6	Hwy 65	North of Twelve Bridge	40000	140100	148300	148000	148000	147700	147800	5	6	6	6	6	6
7	Hwy 65	North of Sunset Blvd.	47500	144500	132800	132800	133000	132900	132900	5	4	4	4	4	4
8	Hwy 65	North of Blue Oaks Blvd.	43000	154000	153100	152900	153000	153100	153100	6	6	6	6	6	6
9	Hwy 65	North of Pleasant Grove Blvd.	76000	163600	162000	161900	161800	161900	161800	3	3	3	3	3	3
10	Hwy 65	North of Stanford Ranch Rd.	82000	175700	174600	174300	174300	174300	174400	3	3	3	3	3	3
11	Hwy 65	North of I-80	84000	170500	167800	167900	167500	167700	167700	3	3	3	< 3	3	3
18	Athens Ave.	East of Fiddyment Rd.	3700	34400	26500	26500	26500	26200	26300	10	9	9	9	9	9
19	Baseline Rd.	East of Pleasant Grove Rd.	9950	79600	78700	78200	78200	76800	76800	9	9	9	9	9	9
20	Baseline Rd.	East of Brewer Rd.	10400	59800	56300	55100	55000	55300	55500	8	7	7	7	7	7
21	Baseline Rd.	West of 16th St.	10400	63900	60500	59600	59300	59600	59700	8	8	8	8	8	8
22	Baseline Rd.	West of Watt Ave.	10400	60100	54400	57600	57300	57800	58000	8	7	7	7	7	7
23	Baseline Rd.	East of Watt Ave.	12600	56500	53100	52500	52400	52700	52900	7	6	6	6	6	6
24	Baseline Rd.	West of Walerga Rd.	12600	47900	45700	44700	44700	45000	45300	6	6	5	5	6	6
25	Baseline Rd.	East of Walerga Rd.	15100	64200	60600	60200	60000	60300	60300	6	6	6	6	6	6
26	Baseline Rd.	West of Woodcreek Oaks Blvd.	15100	47100	46000	45300	45800	45800	46100	5	5	5	5	5	5
29	Blue Oaks Blvd.	East of Fiddyment Rd.	8200	43500	41100	40900	40900	41100	41100	7	7	7	7	7	7
31	Brewer Rd.	North of Sunset Blvd. West	200	2900	1600	1200	1100	1400	1400	12	9	8	7	8	8
32	Brewer Rd.	South of Sunset Blvd. West	200	3500	2500	2500	2400	2400	2400	12	11	11	11	11	11
34	Catlett Rd.	East of Hwy 99/70	200	7000	3600	3300	3200	3100	3100	15	13	12	12	12	12
35	Catlett Rd.	East of Pleasant Grove Rd.	100	4400	2200	1700	1600	1500	1500	16	13	12	12	12	12
37	E. Catlett Rd.	East of Brewer Rd.	200	4100	2900	2400	2300	2000	2100	13	12	11	11	10	10
38	E. Catlett Rd.	West of Fiddyment Rd.	200	11300	11500	11600	11500	11500	11500	18	18	18	18	18	18
41	Elkhorn Blvd.	East of Hwy 70/99	16300	60500	60400	60600	60500	60500	60200	6	6	6	6	6	6
45	Elverta Rd.	East of Hwy 99/70	7200	53200	53200	53300	53400	53800	53700	9	9	9	9	9	9
46	Elverta Rd.	East of Rio Linda Blvd.	8000	49500	48300	47900	48000	48400	48200	8	8	8	8	8	8
47	Elverta Rd.	West of Watt Ave.	20700	62200	61700	61600	61600	61600	61700	5	5	5	5	5	5
48	Fiddyment Rd.	North of Sunset Blvd. West	2800	37900	39400	41800	42200	41600	41400	11	11	12	12	12	12
49	Fiddyment Rd.	South of Sunset Blvd. West	4000	44800	47200	49200	49600	48600	48400	10	11	11	11	11	11
50	Fiddyment Rd.	North of Blue Oaks Blvd.	4000	36400	38500	38200	38200	38200	38400	10	10	10	10	10	10
51	Fiddyment Rd.	North of Pleasant Grove Blvd.	11800	36400	36800	36400	36400	36400	36600	5	5	5	5	5	5
52	Fiddyment Rd.	North of Baseline Rd.	19600	40800	40100	39100	39300	39600	39500	3	3	< 3	3	3	3
53	Foothills Blvd.	North of Blue Oaks Blvd.	3400	37300	34700	34800	34900	34900	34800	10	10	10	10	10	10
54	Foothills Blvd.	South of Roseville Pkwy.	12200	39400	38600	38700	38400	38600	38600	5	5	5	5	5	5
56	Foothills Blvd.	South of Baseline Rd.	30900	69300	68800	68600	68800	68600	68900	4	3	3	3	3	3
57	Howsley Rd.	East of Hwy 99/70	800	7500	4700	4500	4400	4300	4300	10	8	8	7	7	7
58	Industrial Ave.	North of Athens Ave.	4600	33900	25100	25100	25100	25100	25100	9	7	7	7	7	7
59	Industrial	North of Roseville Pkwy.	2800	30900	31400	31600	31600	31500	31600	10	10	11	11	11	11
61	Moore Rd.	West of Brewer Rd.	400	2400	400	300	300	300	300	8	< 3	< 3	< 3	< 3	< 3
62	Nicolaus Rd.	East of Brewer Rd.	900	8800	5900	5400	5400	5200	5200	10	8	8	8	8	8
63	Pacific St.	West of Sunset Blvd.	10600	31200	31100	31100	31100	31100	31100	5	5	5	5	5	5
64	PFE Rd.	East of Watt Ave.	4700	16200	15800	16100	15800	16000	16000	5	5	5	5	5	5
65	Phillip Rd.	East of Brewer Rd.	100	3300	2500	2400	2400	2400	2400	15	14	14	14	14	14
67	Pleasant Grove Blvd.	East of Fiddyment Rd.	3700	42800	40700	40500	40500	40700	40700	11	10	10	10	10	10
68	Pleasant Grove Blvd.	East of Woodcreek Oaks Blvd.	16300	67700	63200	62900	62700	63000	63100	6	6	6	6	6	6
70	Pleasant Grove Blvd.	North of Sankey Rd.	1500	23900	16300	15100	15000	15400	15500	12	10	10	10	10	10
71	Pleasant Grove Blvd.	North of Riego Rd.	1700	27300	26500	26300	26200	27400	27500	12	12	12	12	12	12
72	Pleasant Grove Blvd.	South of Baseline Rd.	1500	22900	22800	22900	22800	22600	22600	12	12	12	12	12	12
73	Riego Rd.	East of Hwy 99/70	9900	71200	63900	63600	63500	67500	67500	9	8	8	8	8	8
74	Riego Rd.	West of Pleasant Grove Rd.	9900	69100	69900	70000	69800	64700	64700	8	8	8	8	8	8
75	Sankey Rd.	East of Hwy 99/70	400	26100	19100	19300	19300	6700	6600	18	17	17	17	12	12
76	Sankey Rd.	West of Pleasant Grove Rd.	200	28700	22300	22500	22500	26900	26700	22	20	21	21	21	21
77	Sierra College Blvd.	South of English Colony Way	11000	31700	33200	33300	33300	33300	33300	5	5	5	5	5	5
78	Sierra College Blvd.	North of King Rd.	11000	30900	31800	31900	31900	31900	31900	4	5	5	5	5	5
79	Sioux St.	North of Whitney Blvd.	3700	32600	27500	27500	27700	27600	27600	9	9	9	9	9	9
81	Sunset Blvd.	West of SR 65	8000	83600	67700	67800	67800	67800	67900	10	9	9	9	9	9
82	Sunset Blvd.	East of SR 65	7100	38800	38200	38400	38500	38400	38400	7	7	7	7	7	7
83	Sunset Blvd.	East of Blue Oaks Blvd.	9800	43400	44000	44100	44100	44100	44100	6	7	7	7	7	7
84	Sunset Blvd. West	West of Brewer Rd.	600	13200	8300	7600	7500	6700	6800	13	11	11	11	10	11
85	Sunset Blvd. West	East of Brewer Rd.	600	10900	5500	4800	4700	4000	4100	13	10	9	9	8	8
86	Sunset Blvd. West	West of Fiddyment Rd.	600	8200	8800	8600	8600	8100	8100	11	12	12	12	11	11
87	Twelve Bridges Dr.	West of SR 65	6000	26900	22400	22400	22400	22400	22400	7	6	6	6	6	6
88	Twelve Bridges Dr.	East of SR 65	5100	41600	39900	39900	39900	39900	39900	9	9	9	9	9	9
90	Walerga Rd.	South of Baseline Rd.	14900	34000	32600	32400	32600	32600	32400	4	3	3	3	3	3
91	Walerga Rd.	North of Elverta Rd.	22700	56400	55200	55600	55600	55700	55600	4	4	4	4	4	4
92	Washington Blvd.	South of Blue Oaks Blvd.	4800	30400	27600	27200	27500	27300	27500	8	8	8	8	8	8
93	Washington Blvd.	North of Pleasant Grove Blvd.	6205	41500	38000	37800	37900	37900	37900	8	8	8	8	8	8
96	Watt Ave.	South of Baseline Rd.	7100	41200	41500	41800	41500	41800	41700	8	8	8	8	8	8
97	Watt Ave.	North of Elverta Rd.	19400	58900	58700	58200	58300	58700	58700	5	5	5	5	5	5
104	Woodcreek Oak Blvd.	South of Pleasant Grove Blvd.	11900	31600	29200	28900	28800	29000	29100	4	4	4	4	4	4
107	18th St.	North of Elverta Rd.	400	25100	24300	24800	24600	24700	24600	18	18	18	18	18	18

8.0 WATT AVENUE INTERCHANGE

An extension of Watt Avenue to Placer Parkway is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto Placer Parkway via a new interchange. A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. It would be subject to independent future environmental analysis and review and is not being fully evaluated within this technical report. However, the connection of Placer Parkway to a potential Watt Avenue interchange could affect future travel patterns in the area, including use of the Parkway.

As shown on Figure 2-3, two general locations for a future Watt Avenue interchange were identified through a planning process involving local jurisdictions. Each of these locations was identified for purposes of evaluating potential impacts of such an interchange on a general basis; the actual location of a Watt Avenue interchange could be different, when proposed. Each of the two interchange options influences projected traffic volumes for both the Placer Parkway alternatives and the existing roads in the study area. In both the TNM 2.5 model used to predict absolute impacts and in the logarithmic expression used to derive a relative noise increase for the study area's existing roadways, the physical location of these interchanges and their design or layout is—for this Tier 1 level study—not nearly as acoustically important as the traffic volumes. Hence, although the following discussion will largely resemble that of the "without Watt" study, the reader should note differences in both absolute and relative impacts resulting from the inclusion of the Watt Avenue interchange.

8.1 2020 IMPACT ANALYSIS WITH WATT AVENUE INTERCHANGE

The predicted 66 dBA noise contours in 2020 for Alternatives 1 (Options One and Two) through Alternative 5 with the Watt Avenue interchange are shown on Figures 8-1 through 8-6, respectively.

Absolute impacts with respect to residential units existing as of 2005 for the five build alternatives are summarized in Table 8-1. Residential units built after 2005 may also be affected in a manner similar to that described in Chapter 7. The No-Build Alternative is not shown in Table 8-1 because no impacts would be associated with this alternative.

Table 8-1
Placer Parkway Absolute Noise Impact Summary,
with Watt Avenue Interchange (2020)

	Homes Within Proposed ROW[a]				Impacted Residential Units by Segment (2020)			
Alternative	**Western**	**Central**	**Eastern**	**Total**	**Western**	**Central**	**Eastern**	**Total**
1, Option One	0	5	1	6	0	2	0	2
1, Option Two	0	5	1	6	0	3	0	3
2	0	5	1	6	0	3	0	3
3	0	3	1	4	0	3	0	3
4	2	3	1	6	2	1	0	3
5	2	5	1	8	0	2	0	7

Note:

a. Homes within proposed ROW are units that are currently within the identified right-of-way for the given proposed alternative/segment. Impacted units for given year 2020 are for existing units that are within the 66 dBA loudest hour contour for that alternative/segment but outside of the identified right-of-way for the given alternative/segment.

Unless appropriate mitigation is in place, new residential units in the overlap zones could therefore experience absolute impacts and be quantified in a manner similar to that shown in Table 8-1.

Relative impacts related to the existing roadways in the study area are summarized in Table 8-2. In this case, the No-Build Alternative is shown for comparison purposes.

Table 8-2
Relative Impacts for Existing Roadways, with Watt Avenue Interchange (2020)

DKS Tag	Roadway	Segment	2005 Daily Traffic Vol.	Estimated 2020 Daily Traffic Volumes (with potential Watt Interchange)							Projected Relative Decibel (dBA) Increases in Traffic Noise from 2005 to 2020						
				No Build	Alt. 1, Opt. 2	Alt. 1, Opt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	No Build	Alt. 1, Opt. 2	Alt. 1, Opt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
3	99/70	North of Riego Rd.	29000	46200	42200	43500	43100	43300	61700	60700	< 3	< 3	< 3	< 3	< 3	3	3
4	99/70	North of Elverta Rd.	32000	54600	64200	65800	69600	69200	67400	66500	< 3	3	3	3	3	3	3
6	Hwy 65	North of Twelve Bridge	40000	94600	96300	96500	96500	96400	96300	96400	4	4	4	4	4	4	4
7	Hwy 65	North of Sunset Blvd.	47500	111400	99000	99300	98600	98700	98700	98900	4	3	3	3	3	3	3
8	Hwy 65	North of Blue Oaks Blvd.	43000	111400	107000	108000	107400	107300	107500	107700	4	4	4	4	4	4	4
18	Athens Ave.	East of Fiddyment Rd.	3700	8900	3200	3300	3200	3300	3000	3100	4	< 3	< 3	< 3	< 3	< 3	< 3
22	Baseline Rd.	West of Watt Ave.	10400	24200	22300	22500	22100	22000	22000	21800	4	3	3	3	3	3	3
24	Baseline Rd.	West of Walerga Rd.	12600	34200	27600	26500	26000	26500	26600	27500	4	3	3	3	3	3	3
25	Baseline Rd.	East of Walerga Rd.	15100	32200	30200	29800	29500	29600	30000	30200	3	3	< 3	< 3	< 3	< 3	3
29	Blue Oaks Blvd.	East of Fiddyment Rd.	8200	27300	27500	28800	29700	28900	29000	28100	5	5	5	6	5	5	5
31	Brewer Rd.	North of Sunset Blvd. West	200	500	100	100	100	200	200	200	4	< 3	< 3	< 3	< 3	< 3	< 3
32	Brewer Rd.	South of Sunset Blvd. West	200	400	300	200	200	300	300	200	3	< 3	< 3	< 3	< 3	< 3	< 3
34	Catlett Rd.	East of Hwy 99/70	200	2700	1900	1900	1800	1900	1500	1600	11	10	10	10	10	9	9
35	Catlett Rd.	East of Pleasant Grove Rd.	100	500	500	500	400	500	200	200	7	7	7	6	7	3	3
37	E. Catlett Rd.	East of Brewer Rd.	200	200	500	600	500	600	200	300	< 3	4	5	4	5	< 3	< 3
38	E. Catlett Rd.	West of Fiddyment Rd.	200	200	700	700	700	700	400	500	< 3	5	5	5	5	3	4
45	Elverta Rd.	East of Hwy 99/70	7200	22200	19800	21100	21000	21000	21000	21100	5	4	5	5	5	5	5
46	Elverta Rd.	East of Rio Linda Blvd.	8000	32900	31100	31900	31600	31700	31700	31800	6	6	6	6	6	6	6
47	Elverta Rd.	West of Watt Ave.	20700	52500	51400	51900	51600	51800	51800	51800	4	4	4	4	4	4	4
48	Fiddyment Rd.	North of Sunset Blvd. West	2800	12500	8300	8100	8400	8400	8300	8200	6	5	5	5	5	5	5
49	Fiddyment Rd.	South of Sunset Blvd. West	4000	12500	9000	8800	9200	9200	9000	8900	5	4	3	4	4	4	3
50	Fiddyment Rd.	North of Blue Oaks Blvd.	4000	21600	18600	18600	18600	19700	19700	20700	7	7	7	7	7	7	7
51	Fiddyment Rd.	North of Pleasant Grove Blvd.	11800	26600	22600	23200	23000	23400	23400	24200	4	< 3	< 3	< 3	< 3	< 3	3
52	Fiddyment Rd.	North of Baseline Rd.	19600	46400	40200	40300	39900	40400	40500	41400	4	3	3	3	3	3	3
53	Foothills Blvd.	North of Blue Oaks Blvd.	3400	15900	17100	17300	17200	17100	17000	17200	7	7	7	7	7	7	7
54	Foothills Blvd.	South of Roseville Pkwy.	12200	31000	29900	30000	29800	30000	30000	30200	4	4	4	4	4	4	4
58	Industrial Ave.	North of Athens Ave.	4600	23100	19300	19300	19300	19300	19300	19300	7	6	6	6	6	6	6
59	Industrial	North of Roseville Pkwy.	2800	22100	22400	22400	22400	22400	22400	22400	9	9	9	9	9	9	9
63	Pacific St.	West of Sunset Blvd.	10600	30000	29700	29700	29700	29700	29800	29800	5	4	4	4	4	4	4
65	Phillip Rd.	East of Brewer Rd.	100	400	300	200	200	300	200	200	6	5	3	3	5	3	3
67	Pleasant Grove Blvd.	East of Fiddyment Rd.	3700	19400	18800	18600	18800	18800	18400	18400	7	7	7	7	7	7	7
68	Pleasant Grove Blvd.	East of Woodcreek Oaks Blvd.	16300	47300	43800	43900	43900	44000	44000	44300	5	4	4	4	4	4	4
70	Pleasant Grove Blvd.	North of Sankey Rd.	1500	5300	4200	4300	4200	4200	4100	4200	5	4	5	4	4	4	4
71	Pleasant Grove Blvd.	North of Riego Rd.	1700	3900	3500	3600	3700	3700	4100	4300	4	3	3	3	3	4	4
75	Sankey Rd.	East of Hwy 99/70	400	1800	1000	900	900	900	0	0	7	4	4	4	4	n/a	n/a
76	Sankey Rd.	West of Pleasant Grove Rd.	200	1800	1000	900	900	900	1300	1400	10	7	7	7	7	8	8
77	Sierra College Blvd.	South of English Colony Way	11000	33100	32900	33000	32900	32900	32900	33000	5	5	5	5	5	5	5
78	Sierra College Blvd.	North of King Rd.	11000	32400	32100	32200	32100	32100	32200	32200	5	5	5	5	5	5	5
79	Sioux St.	North of Whitney Blvd.	3700	25900	26900	26800	26900	27100	26900	26900	8	9	9	9	9	9	9
81	Sunset Blvd.	West of SR 65	8000	36400	32800	32800	32600	32700	32700	32800	7	6	6	6	6	6	6
82	Sunset Blvd.	East of SR 65	7100	20700	21600	21500	21600	21700	21700	21700	5	5	5	5	5	5	5
83	Sunset Blvd.	East of Blue Oaks Blvd.	9800	38100	37500	37600	37400	37500	37500	37600	6	6	6	6	6	6	6
84	Sunset Blvd. West	West of Brewer Rd.	600	1400	500	400	300	400	300	300	4	< 3	< 3	< 3	< 3	< 3	< 3
86	Sunset Blvd. West	West of Fiddyment Rd.	600	1400	900	900	900	900	900	900	4	< 3	< 3	< 3	< 3	< 3	< 3
87	Twelve Bridges Dr.	West of SR 65	6000	21200	18300	18300	18300	18300	18300	18300	5	5	5	5	5	5	5
88	Twelve Bridges Dr.	East of SR 65	5100	37700	37800	37700	37700	37700	37700	37700	9	9	9	9	9	9	9
90	Walerga Rd.	South of Baseline Rd.	14900	31800	30200	30800	30600	30800	30900	31200	3	3	3	3	3	3	3
92	Washington Blvd.	South of Blue Oaks Blvd.	4800	24700	22200	22500	22600	22500	22600	22700	7	7	7	7	7	7	7
93	Washington Blvd.	North of Pleasant Grove Blvd.	6205	34000	30500	30800	30800	30800	30900	31000	7	7	7	7	7	7	7
104	Woodcreek Oak Blvd.	South of Pleasant Grove Blvd.	11900	24200	21000	21200	20900	21000	21500	21800	3	< 3	< 3	< 3	< 3	< 3	< 3
107	18th St.	North of Elverta Rd.	400	13600	13700	13600	13500	13600	13600	13500	15	15	15	15	15	15	15

Based on counts of roadway segments expected to experience relative impacts, Alternative 4 narrowly bests Alternative 5 by just one noticeable difference. Aside from that, Alternatives 4 and 5 would appear to create less relative acoustical impact on the study area's existing roadways than the remaining three build alternatives or the No-Build Alternative.

8.2 2040 IMPACT ANALYSIS WITH WATT AVENUE INTERCHANGE

8.2.1 Existing Noise-Sensitive Receptors

An evaluation of cumulative impacts for noise considers again both absolute and relative impacts that correspond to the Placer Parkway 66 dBA contours and arterial roadway traffic volume increases, respectively.

The predicted 66 dBA noise contours for Alternatives 1 (Options One and Two) through Alternative 5 with the Watt Avenue connection, 2040 are shown on Figures 8-7 through 8-12.

Table 8-3 summarizes absolute impacts on existing (2005) residential units for the five build alternatives with respect to 2040. Homes within the proposed ROW are similar to 2020, because the land use changes associated with most of the proposed development are not known. The number of affected residential units with a Watt Avenue interchange in 2040 will be greater than in 2020 because, as traffic volumes increase, the 66 dBA contour expands relative to the 2020 contour. Residential units built after 2005 may also be affected in a manner similar to that described in Chapter 7. The No-Build Alternative is not shown in Table 8-3 because no impacts would be associated with this alternative.

Table 8-3
Placer Parkway Absolute Noise Impact Summary,
with Watt Avenue Interchange (2040)

Alternative	Homes Within Proposed ROW[a]				Impacted Residential Units by Segment (2020)			
	Western	Central	Eastern	Total	Western	Central	Eastern	Total
1, Option One	0	5	1	6	0	5	0	5
1, Option Two	0	5	1	6	0	6	0	6
2	0	5	1	6	0	5	0	5
3	0	3	1	4	0	5	0	5
4	2	3	1	6	6	3	0	9
5	2	5	1	8	6	2	0	8

Note:

a. Homes within proposed ROW are units that are currently within the identified right-of-way for the given proposed alternative/segment. Impacted units for given year 2040 are for existing units that are within the 66 dBA loudest hour contour for that alternative/segment but outside of the identified right-of-way for the given alternative/segment.

Unless appropriate mitigation is in place (such as discussed in Section 9), new residential units in the overlap zones could therefore experience absolute impacts and be quantified in a manner similar to that shown in Table 8-3.

8.2.2 Relative Impacts on Future Roadways

Relative impacts related to the existing roadways in the study area are summarized in Table 8-4. In this case, the No-Build Alternative is shown for comparison purposes.

Table 8-4 shows that the inclusion of a Watt Avenue interchange creates relative affected roadway segment count totals that indicate that Alternative 5 would have the least overall impact. This conclusion is largely based on Alternative 5 having both the least "significant" (i.e., greater than or equal to 12 dB) and least "substantial" impacts.

Table 8-4
Relative Impact for Existing Roadways, with Watt Avenue Interchange (2040)

DKS Tag	Roadway	Segment	2005 Daily Traffic Vol.	Estimated 2040 Daily Traffic Volumes (with potential Watt Interchange)							Projected Relative Decibel (dBA) Increases in Traffic Noise from 2005 to 2040						
				No Build	Alt. 1, Opt. 2	Alt. 1, Opt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	No Build	Alt. 1, Opt. 2	Alt. 1, Opt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
3	99/70	North of Riego Rd.	29000	68900	53700	55200	54700	55100	96100	94600	4	< 3	< 3	< 3	< 3	5	5
4	99/70	North of Elverta Rd.	32000	129700	148000	147200	150000	149700	147700	146700	6	7	7	7	7	7	7
5	99/70	North of I-5	47500	155100	162300	162300	163400	163400	162600	162200	5	5	5	5	5	5	5
6	Hwy 65	North of Twelve Bridge	40000	140100	148800	148700	148400	148400	148200	148100	5	6	6	6	6	6	6
7	Hwy 65	North of Sunset Blvd.	47500	144500	131000	130400	130000	130900	130800	131400	5	4	4	4	4	4	4
8	Hwy 65	North of Blue Oaks Blvd.	43000	154000	149800	149900	148700	149900	149800	150600	6	5	5	5	5	5	5
9	Hwy 65	North of Pleasant Grove Blvd.	76000	163600	159900	161200	160700	160700	160700	160900	3	3	3	3	3	3	3
10	Hwy 65	North of Stanford Ranch Rd.	82000	175700	173800	174700	174200	174100	174100	174100	3	3	3	3	3	3	3
11	Hwy 65	North of I-80	84000	170500	167800	168300	167800	167500	167700	167500	3	3	3	3	< 3	3	< 3
18	Athens Ave.	East of Fiddyment Rd.	3700	34400	25000	24900	24900	25100	25100	25100	10	8	8	8	8	8	8
19	Baseline Rd.	East of Pleasant Grove Rd.	9950	79600	66100	75500	75300	75400	73000	74100	9	8	9	9	9	9	9
20	Baseline Rd.	East of Brewer Rd.	10400	59800	46900	53900	50900	51300	52400	52900	8	7	7	7	7	7	7
21	Baseline Rd.	West of 16th St.	10400	63900	52200	58600	55900	56200	57300	57700	8	7	8	7	7	7	7
22	Baseline Rd.	West of Watt Ave.	10400	60100	49400	52900	55700	56100	56500	57000	8	7	7	7	7	7	7
23	Baseline Rd.	East of Watt Ave.	12600	56500	48200	49700	49100	49900	50500	51200	7	6	6	6	6	6	6
24	Baseline Rd.	West of Walerga Rd.	12600	47900	44700	42900	42200	43000	43400	44200	6	5	5	5	5	5	5
25	Baseline Rd.	East of Walerga Rd.	15100	64200	61600	59900	59400	59800	60000	60200	6	6	6	6	6	6	6
26	Baseline Rd.	West of Woodcreek Oaks Blvd.	15100	47100	46500	45800	45500	45600	46000	46200	5	5	5	5	5	5	5
29	Blue Oaks Blvd.	East of Fiddyment Rd.	8200	43500	39500	44800	46200	44400	44600	43100	7	7	7	8	7	7	7
31	Brewer Rd.	North of Sunset Blvd. West	200	2900	1100	1000	800	1100	900	1000	12	7	7	6	7	7	7
32	Brewer Rd.	South of Sunset Blvd. West	200	3500	600	1400	1200	2300	1200	1400	12	5	8	8	11	8	8
34	Catlett Rd.	East of Hwy 99/70	200	7000	2200	2300	2000	2500	2000	2100	15	10	11	10	11	10	10
35	Catlett Rd.	East of Pleasant Grove Rd.	100	4400	1500	1600	1300	1400	1100	1200	16	12	12	11	11	10	11
37	E. Catlett Rd.	East of Brewer Rd.	200	4100	2500	2200	1800	2100	1800	2000	13	11	10	10	10	10	10
38	E. Catlett Rd.	West of Fiddyment Rd.	200	11300	10900	10300	10200	11100	11000	11000	18	17	17	17	17	17	17
41	Elkhorn Blvd.	East of Hwy 70/99	16300	60500	60200	60500	60200	60600	60400	60400	6	6	6	6	6	6	6
45	Elverta Rd.	East of Hwy 99/70	7200	53200	51600	52900	53000	52900	53300	53400	9	9	9	9	9	9	9
46	Elverta Rd.	East of Rio Linda Blvd.	8000	49500	46400	47600	47100	47400	47800	47800	8	8	8	8	8	8	8
47	Elverta Rd.	West of Watt Ave.	20700	62200	60700	61800	61400	61400	61300	61400	5	5	5	5	5	5	5
48	Fiddyment Rd.	North of Sunset Blvd. West	2800	37900	41900	40500	41400	42400	41900	41500	11	12	12	12	12	12	12
49	Fiddyment Rd.	South of Sunset Blvd. West	4000	44800	48100	46100	46200	47700	46900	46500	10	11	11	11	11	11	11
50	Fiddyment Rd.	North of Blue Oaks Blvd.	4000	36400	32500	33600	33600	34200	34200	35200	10	9	9	9	9	9	9
51	Fiddyment Rd.	North of Pleasant Grove Blvd.	11800	36400	32200	34100	33800	34400	34600	35300	5	4	5	5	5	5	5
52	Fiddyment Rd.	North of Baseline Rd.	19600	40800	36500	37600	37200	37900	38000	38600	3	< 3	< 3	< 3	< 3	< 3	< 3
53	Foothills Blvd.	North of Blue Oaks Blvd.	3400	37300	32500	32600	32600	32800	32900	33000	10	10	10	10	10	10	10
54	Foothills Blvd.	South of Roseville Pkwy.	12200	39400	37600	38000	38000	38000	38100	38200	5	5	5	5	5	5	5
56	Foothills Blvd.	South of Baseline Rd.	30900	69300	69000	68900	68700	68600	68600	68800	4	3	3	3	3	3	3
57	Howsley Rd.	East of Hwy 99/70	800	7500	4500	4500	4500	4400	4100	4300	10	8	8	8	7	7	7
58	Industrial Ave.	North of Athens Ave.	4600	33900	25000	24900	24900	24900	24900	24900	9	7	7	7	7	7	7
59	Industrial	North of Roseville Pkwy.	2800	30900	31000	31100	31100	31200	31100	31300	10	10	10	10	10	10	10
61	Moore Rd.	West of Brewer Rd.	400	2400	300	400	300	300	300	300	8	< 3	< 3	< 3	< 3	< 3	< 3
62	Nicolaus Rd.	East of Brewer Rd.	900	8800	5500	5500	5200	5200	5000	5100	10	8	8	8	8	7	8
63	Pacific St.	West of Sunset Blvd.	10600	31200	31000	31200	31100	31100	31100	31000	5	5	5	5	5	5	5
64	PFE Rd.	East of Watt Ave.	4700	16200	16300	15500	15600	15500	16100	16000	5	5	5	5	5	5	5
65	Phillip Rd.	East of Brewer Rd.	100	3300	600	1400	1100	2300	1200	1400	15	8	11	10	14	11	11
67	Pleasant Grove Blvd.	East of Fiddyment Rd.	3700	42800	42100	40400	40600	40400	40600	40700	11	11	10	10	10	10	10
68	Pleasant Grove Blvd.	East of Woodcreek Oaks Blvd.	16300	67700	64300	62400	62300	62200	62500	62700	6	6	6	6	6	6	6
70	Pleasant Grove Blvd.	North of Sankey Rd.	1500	23900	16900	15800	19000	14500	15300	15400	12	11	10	11	10	10	10
71	Pleasant Grove Blvd.	North of Riego Rd.	1700	27300	26700	26400	20600	26200	25900	26700	12	12	12	11	12	12	12
72	Pleasant Grove Blvd.	South of Baseline Rd.	1500	22900	21000	22300	33000	22500	22100	22300	12	11	12	13	12	12	12
73	Riego Rd.	East of Hwy 99/70	9900	71200	61300	63100	31600	62200	65600	66100	9	8	8	5	8	8	8
74	Riego Rd.	West of Pleasant Grove Rd.	9900	69100	57300	67100	67100	67400	62000	62700	8	8	8	8	8	8	8
75	Sankey Rd.	East of Hwy 99/70	400	26100	18700	18900	19000	19000	7200	7000	18	17	17	17	17	13	12
76	Sankey Rd.	West of Pleasant Grove Rd.	200	28700	18000	20100	20600	20800	23800	24600	22	20	20	20	20	21	21
77	Sierra College Blvd.	South of English Colony Way	11000	31700	33000	33000	33000	33200	33200	33200	5	5	5	5	5	5	5
78	Sierra College Blvd.	North of King Rd.	11000	30900	31700	31600	31600	31700	31700	31800	4	5	5	5	5	5	5
79	Sioux St.	North of Whitney Blvd.	3700	32600	27800	27900	27900	28000	28000	27900	9	9	9	9	9	9	9
81	Sunset Blvd.	West of SR 65	8000	83600	66400	66600	66300	66500	66600	66700	10	9	9	9	9	9	9
82	Sunset Blvd.	East of SR 65	7100	38800	38200	38000	38300	38500	38500	38400	7	7	7	7	7	7	7
83	Sunset Blvd.	East of Blue Oaks Blvd.	9800	43400	43700	43600	43500	43700	43800	44000	6	6	6	6	6	7	7
84	Sunset Blvd. West	West of Brewer Rd.	600	13200	7000	7300	6000	6800	5400	5700	13	11	11	10	11	10	10
85	Sunset Blvd. West	East of Brewer Rd.	600	10900	5400	5400	4400	4200	3700	3800	13	10	10	9	8	8	8
86	Sunset Blvd. West	West of Fiddyment Rd.	600	8200	6900	6400	5500	6000	5700	5700	11	11	10	10	10	10	10
87	Twelve Bridges Dr.	West of SR 65	6000	26900	22500	22600	22600	22500	22500	22500	7	6	6	6	6	6	6
88	Twelve Bridges Dr.	East of SR 65	5100	41600	40000	40000	40100	40000	40000	40000	9	9	9	9	9	9	9
90	Walerga Rd.	South of Baseline Rd.	14900	34000	30900	32100	31800	32200	32300	32300	4	3	3	3	3	3	3
91	Walerga Rd.	North of Elverta Rd.	22700	56400	55300	55100	55100	55100	55600	55400	4	4	4	4	4	4	4
92	Washington Blvd.	South of Blue Oaks Blvd.	4800	30400	25400	27200	27300	27200	27400	27200	8	7	8	8	8	8	8
93	Washington Blvd.	North of Pleasant Grove Blvd.	6205	41500	36500	37500	37400	37600	37600	37600	8	8	8	8	8	8	8
96	Watt Ave.	South of Baseline Rd.	7100	41200	47000	42400	42600	42300	42600	42200	8	8	8	8	8	8	8
97	Watt Ave.	North of Elverta Rd.	19400	58900	58700	58400	58200	58300	58200	58500	5	5	5	5	5	5	5
104	Woodcreek Oak Blvd.	South of Pleasant Grove Blvd.	11900	31600	29000	28400	28000	28300	28500	28600	4	4	4	4	4	4	4
107	18th St.	North of Elverta Rd.	400	25100	24300	24300	24300	24200	24400	24900	18	18	18	18	18	18	18

Table 8-5 shows a comparison of all five alternatives for both absolute and relative noise impacts for design year 2040 with a Watt Avenue interchange. Also shown is a combined ranking for each alternative with respect to combined noise impacts.

Table 8-5
Noise Impact Rating by Alternative, with Watt Avenue Interchange (2040)

Alternative	Absolute Impacts[a]	Relative Impacts[b]	Ranking[c]
No Build	0	15	7
1, Option One	5	8	2
1, Option Two	6	7	4
2	5	6	1
3	5	8	2
4	9	7	6
5	8	7	5

Notes:

a. Number of residences.
b. Number of roadways with projected increases in traffic noise > 12 dBA.
c. A ranking of 1 indicates that an alternative has the fewest projected combined impacts; A ranking of 7 — the most

9.0 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION STRATEGIES

9.1 OPERATIONAL NOISE ABATEMENT STRATEGIES

Per Caltrans policy, noise abatement is only considered where noise impacts are predicted, where frequent human use occurs, and where a lowered noise level would be of benefit. As a matter of practice, abatement is only considered for places where people are exposed to highway noise for at least 1 hour on a regular basis. Potential noise abatement measures identified in the Caltrans policy (Caltrans, 1998a) include the following:

- avoiding the project impact by using design alternatives, such as altering the horizontal and vertical alignment of the project;
- constructing noise barriers;
- acquiring property to serve as a buffer zone;
- using traffic management measures to regulate types of vehicles and speeds; and
- acoustically insulating public use or nonprofit institutional structures.

Given the amount of proposed and planned development that could potentially be affected by the proposed project, avoidance practiced by jurisdictions with land use control over the development proposals would be the most effective and least costly noise abatement measure. To the extent practicable, this mitigation strategy should be considered as the primary mitigation for noise impacts resulting from Placer Parkway. Until a corridor is identified at the end of the Tier 1 EIS/Program EIR process, this can only be implemented with certainty in the common alignment, which occurs primarily in the Western Segment. Once a corridor has been selected, this mitigation measure can be more fully implemented.

Jurisdictions should require that applicants for development proposals perform a noise impact study as part of their environmental review process, using the projected traffic volumes in the project's traffic report (DKS Associates, 2007), to assess the potential for exceedances of the land use compatibility noise thresholds identified in their General Plans. Jurisdictions should work to avoid such exceedances in their planning processes so as to avoid costly mitigation in the future.

Application of these mitigation strategies will follow a phased approach. Once the corridor is selected at the end of Tier 1, the jurisdictions will be able to account for this corridor in CEQA review and land use decisions. Once Tier 2 is completed, the specific location of the Parkway within the corridor will be determined, and can be accounted for accordingly in CEQA and land use review.

Based on this study and the configuration and location of the project, noise abatement in the form of noise barriers would be considered at the impacted residential locations. The reasonableness of this noise mitigation strategy and the criteria for determining it would be guided by Caltrans policy and would also be discussed in the Tier 2 noise study.

9.2 CONVENTIONAL CONSTRUCTION NOISE MITIGATION STRATEGIES

Noise produced by construction equipment required to build this project would occur with varying intensity and duration during the various phases of construction. Typically, construction activities would occur on weekdays between the hours of 7:00 a.m. and 7:00 p.m.

To avoid unnecessary annoyance from construction noise, the following construction noise control strategies should be implemented:

- Minimize nighttime and weekend work;

- Use portable noise screens to provide shielding for jack hammering or other similar activities when work is close to the hotels; and

- Comply with Caltrans' Standard Specifications 7-1.011 (July 1999) "*Sound Control Requirements"*: The contractor should comply with all local sound control and noise level rules, regulations and ordinances which apply to any work performed pursuant to the contract. Each internal combustion engine, used for any purpose on the job or related to the job, should be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine should be operated on the project without said muffler.

10.0 ANALYSES TO BE UNDERTAKEN IN TIER 2

Once a preferred alternative is selected, the purposes of a Tier 2 noise study would be to determine the following:

- A depiction of the noise contours associated with Placer Parkway that would have finer resolution with respect to specific identified noise-sensitive receiver locations and that would include modeled features resulting from a more complex TNM model which accounts for such factors as intervening topography, actual roadway alignment, ramp designs, locations, expected traffic volumes, level of service, vehicle speeds, and category composition.

- Guidance regarding the location and design of noise mitigation means along the chosen alternative route where absolute impacts are expected.

This information would allow estimation of costs for one or more mitigation options with respect to existing and future noise-sensitive receptors.

To undertake this Tier 2 level model creation and the development of mitigation guidance, input parameters would be required as follows:

- Detailed road segment designs and locations for the selected Placer Parkway alternative. This would include landscaping features that could offer some level of noise abatement.

- To the extent that such plans and details are available, locations of single- or multiple-story residential dwellings in currently understood future developments.

- Additional site measurements, similar to those covered in Chapter 4, Affected Environment, chosen to generate a database of existing ambient sound levels that would help calibrate and thereby enhance the accuracy of noise impact predictions made possible with a Tier 2 TNM model.

As a result of a more detailed noise receiver identification effort and more detailed noise modeling, specific noise mitigation elements would be considered for locations where noise impacts are determined to exist.

11.0 REFERENCES

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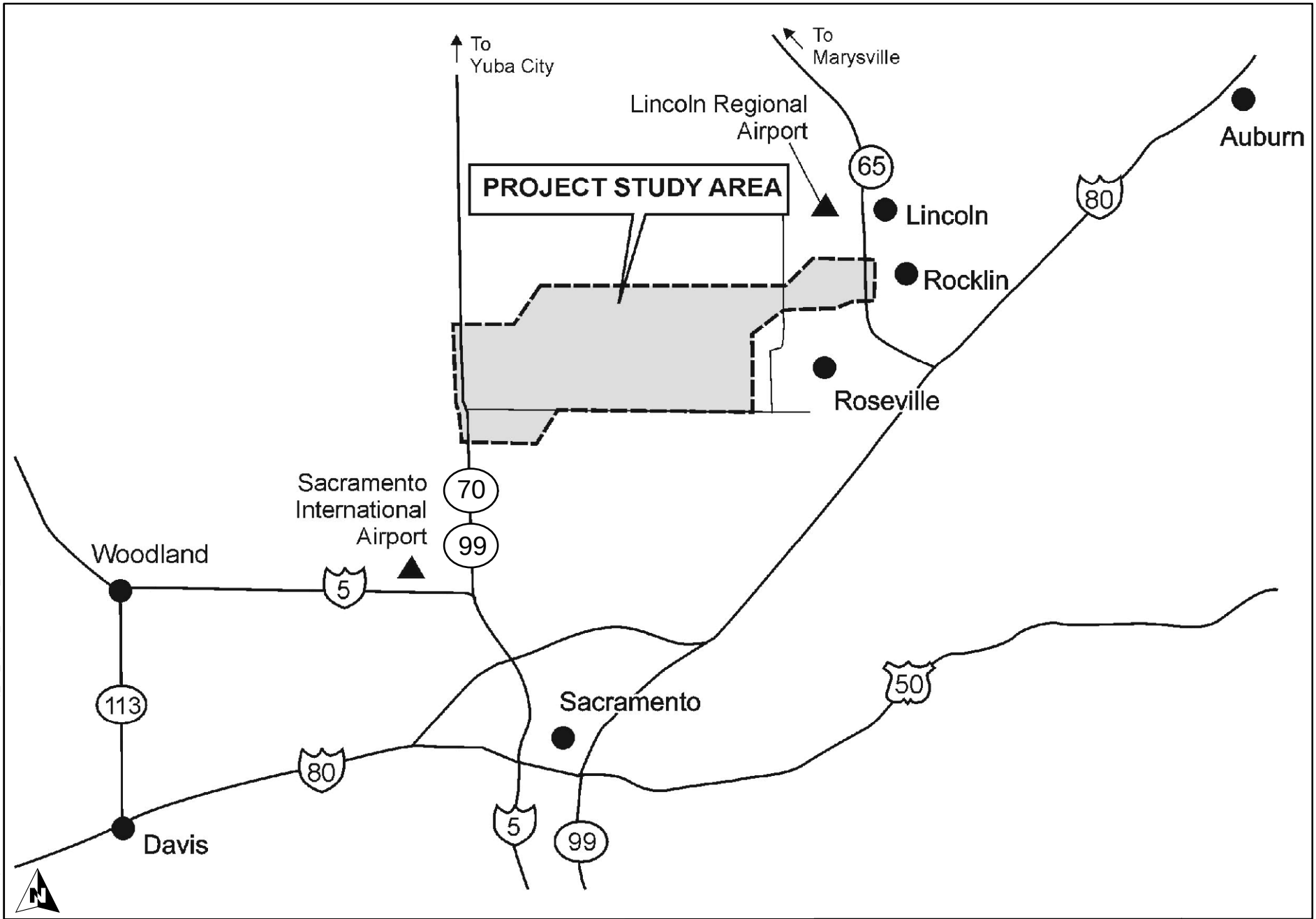

Tier 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Project Location

Figure 1-1

June 2007

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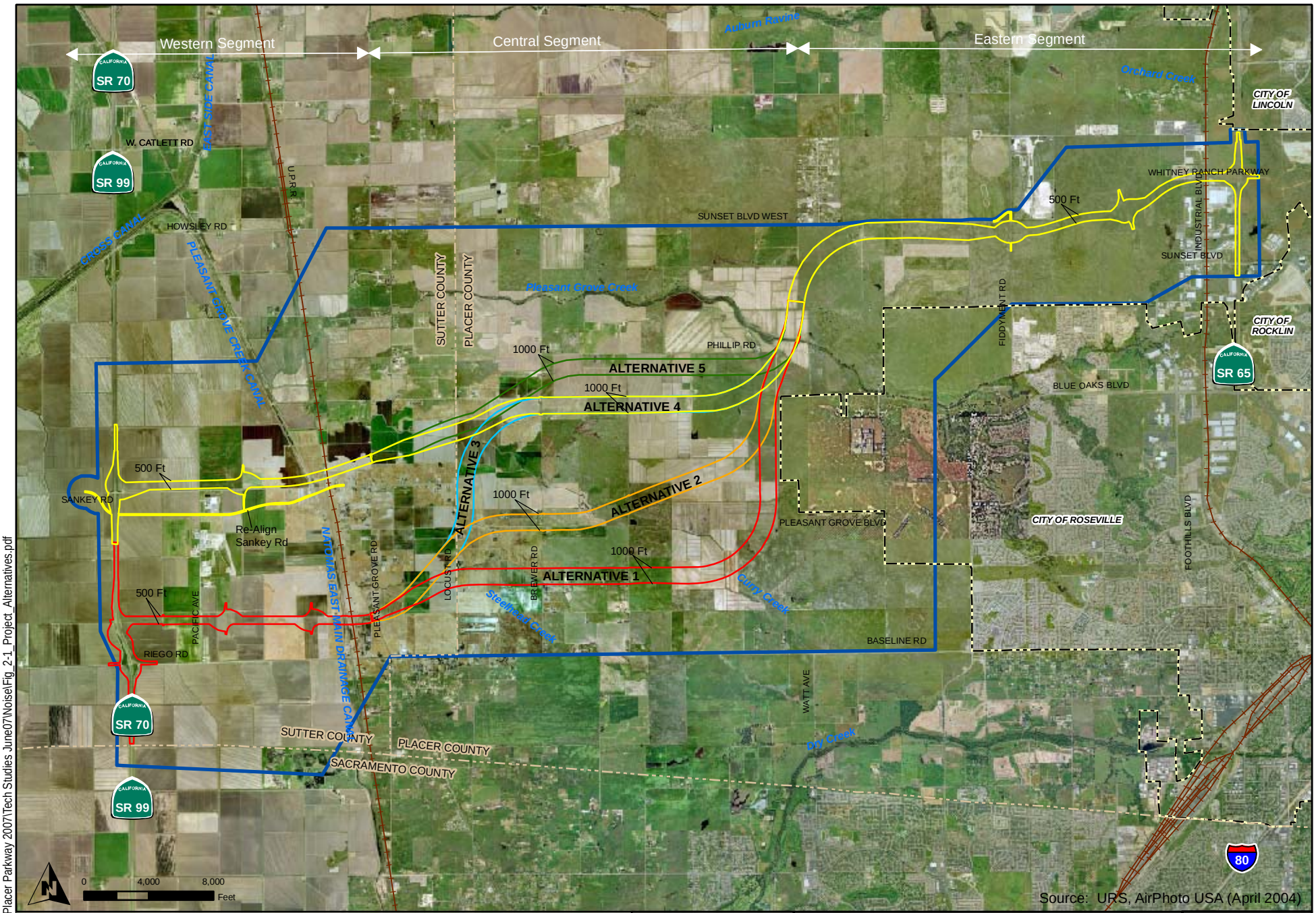

Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Project Alternatives

Figure 2-1

June 2007

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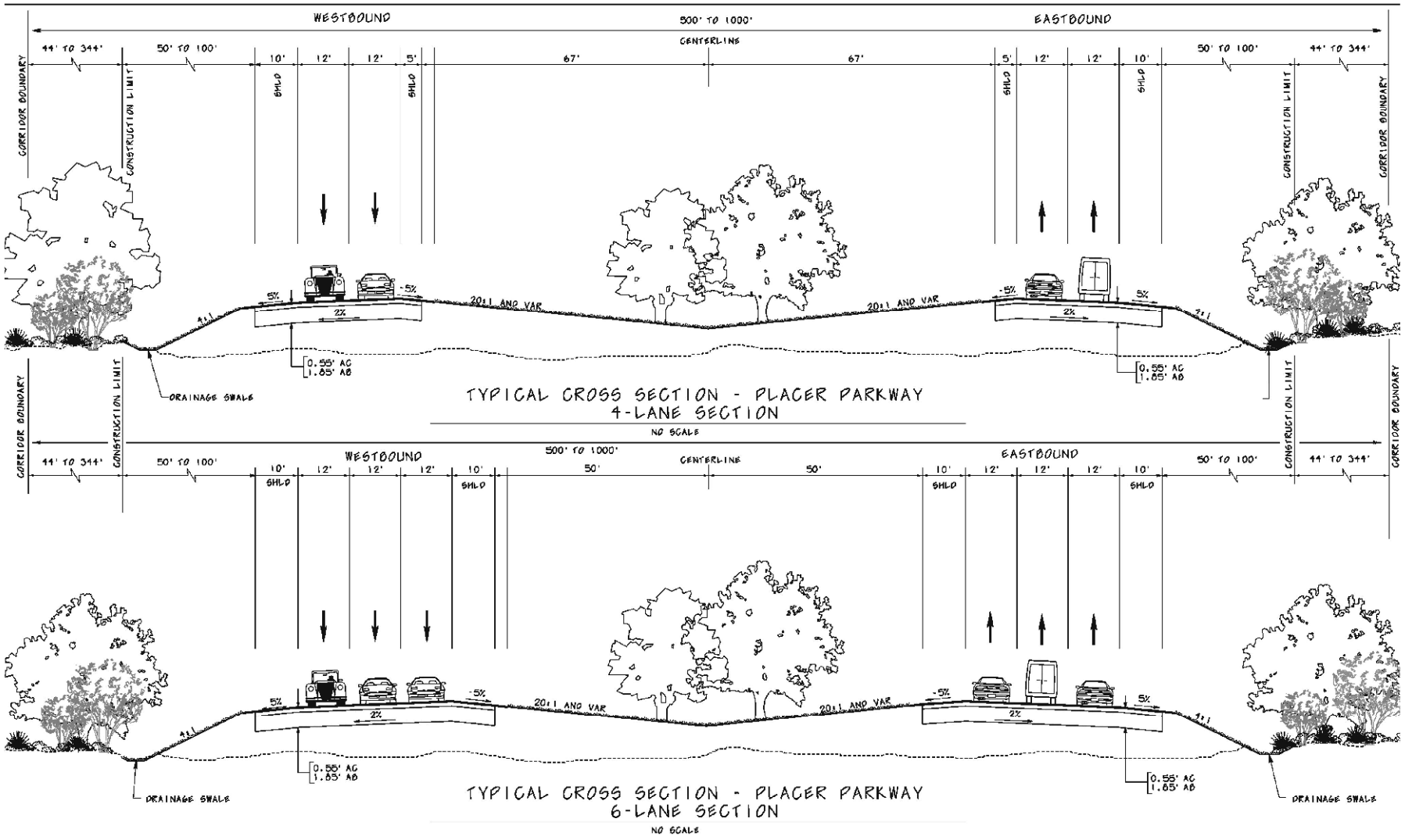


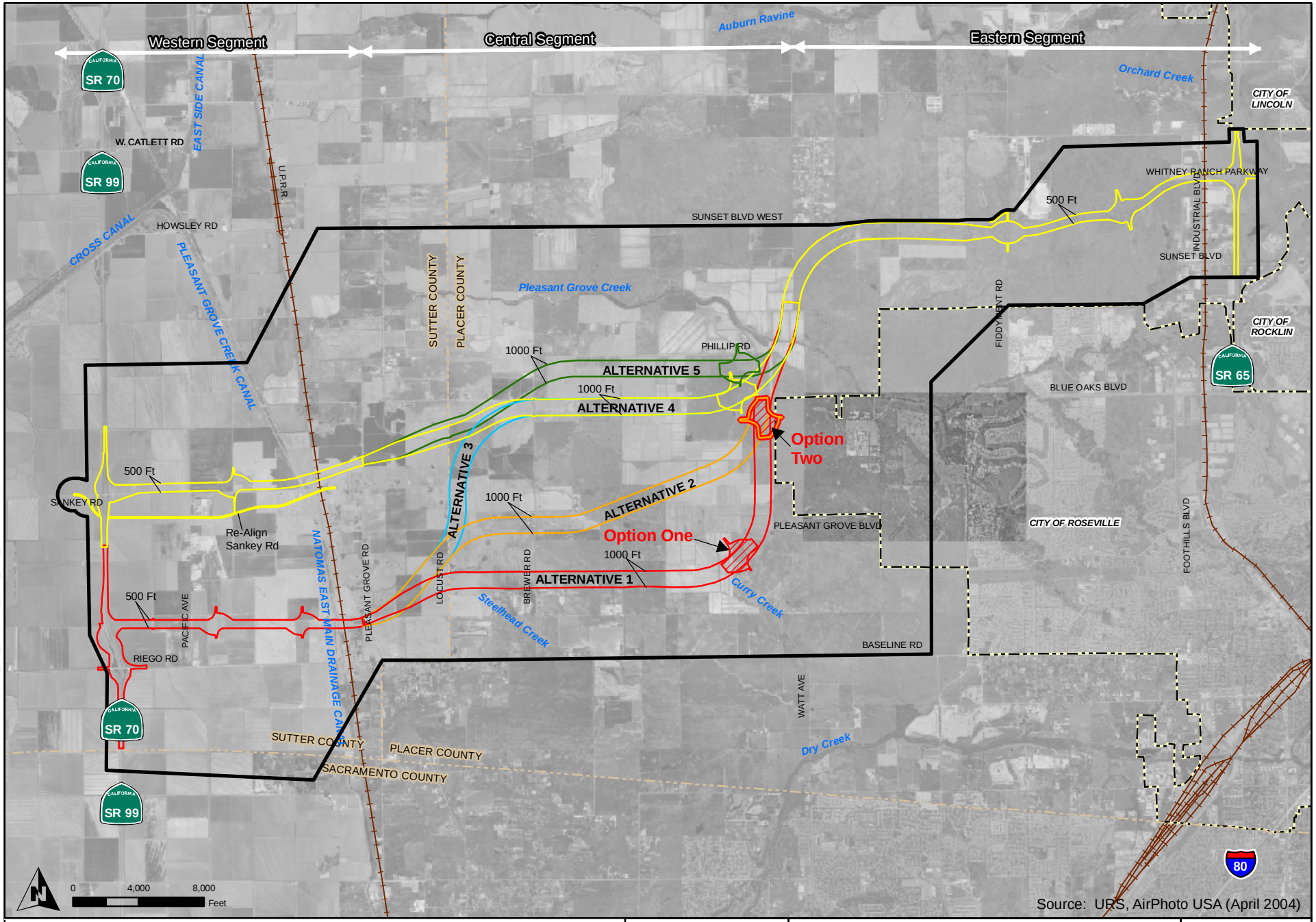
PLACER PARKWAY
CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Typical Cross Section
(Conceptual)

Figure 2-2

June 2007



Tier 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Potential Watt Avenue Interchange

Figure 2-3

June 2007

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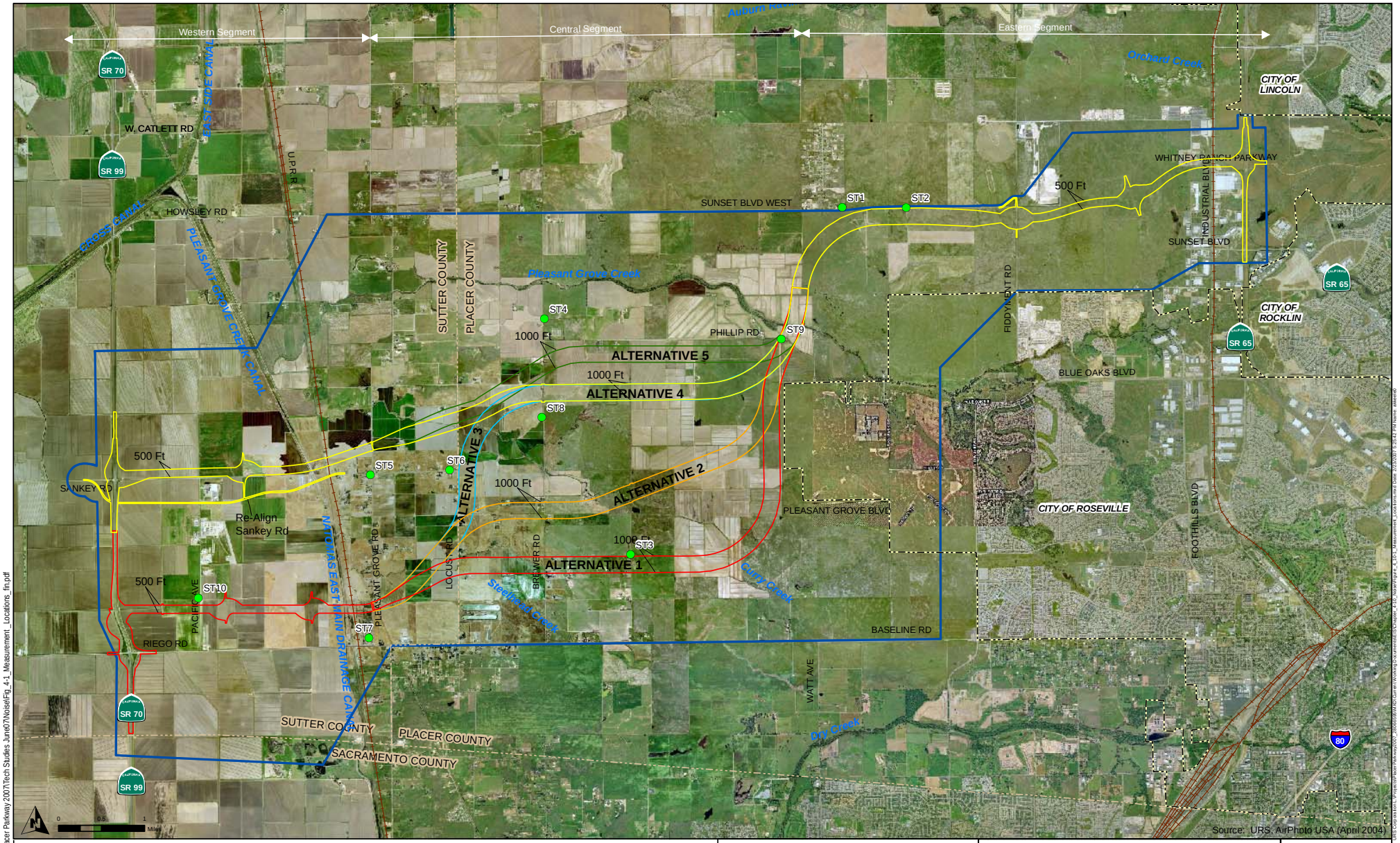

Tier 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Measurement Locations

Figure 4-1

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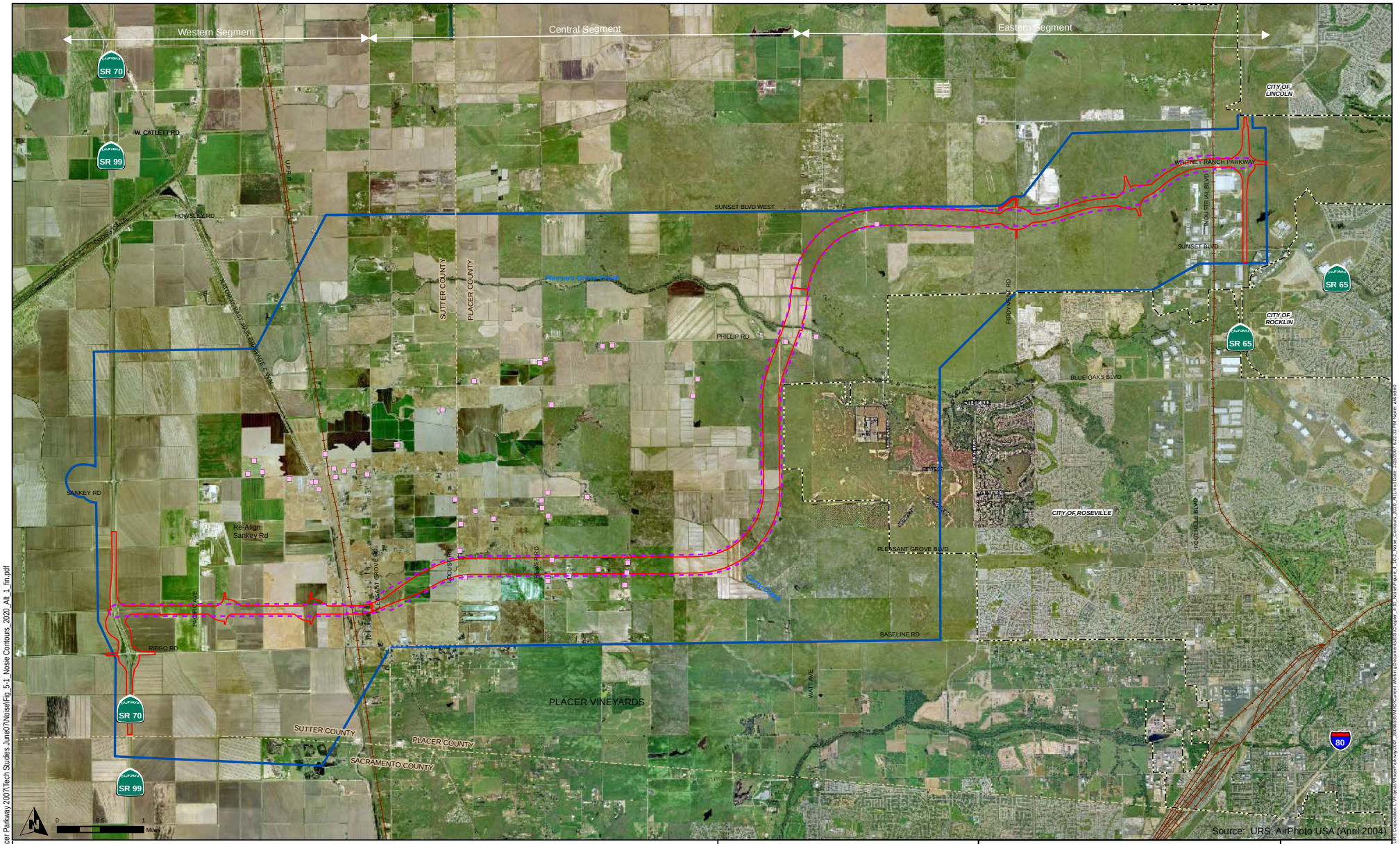

Tier 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Noise Contours - 2020 - Alternative 1

Figure 5-1

June 2007

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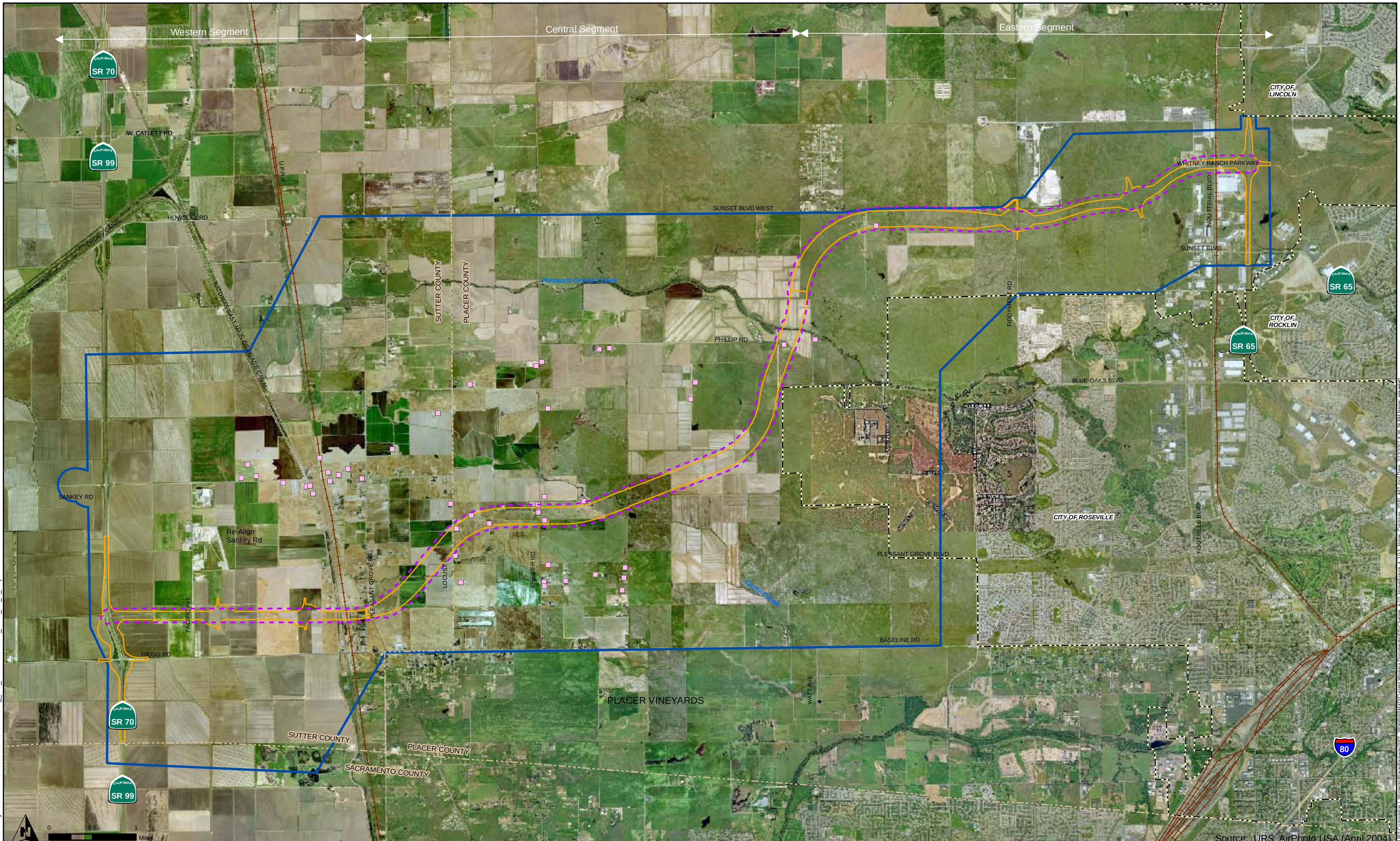

Alternative 2 | County Boundary | Noise Contour (66 dBA)
Study Area Boundary | City Boundary | Noise Receptors

Placer Parkway

Tier 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Noise Contours - 2020 - Alternative 2

Figure 5-2

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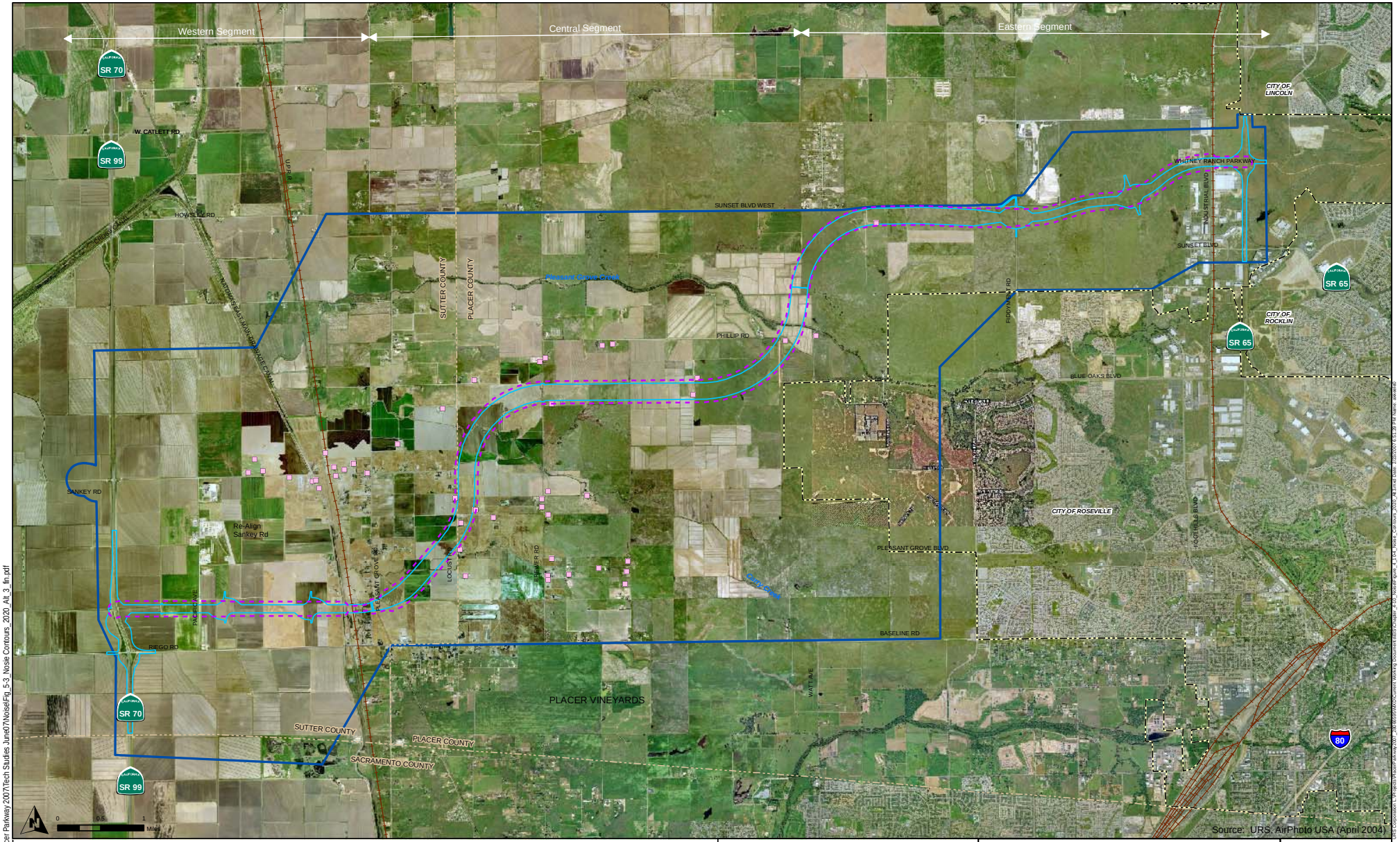
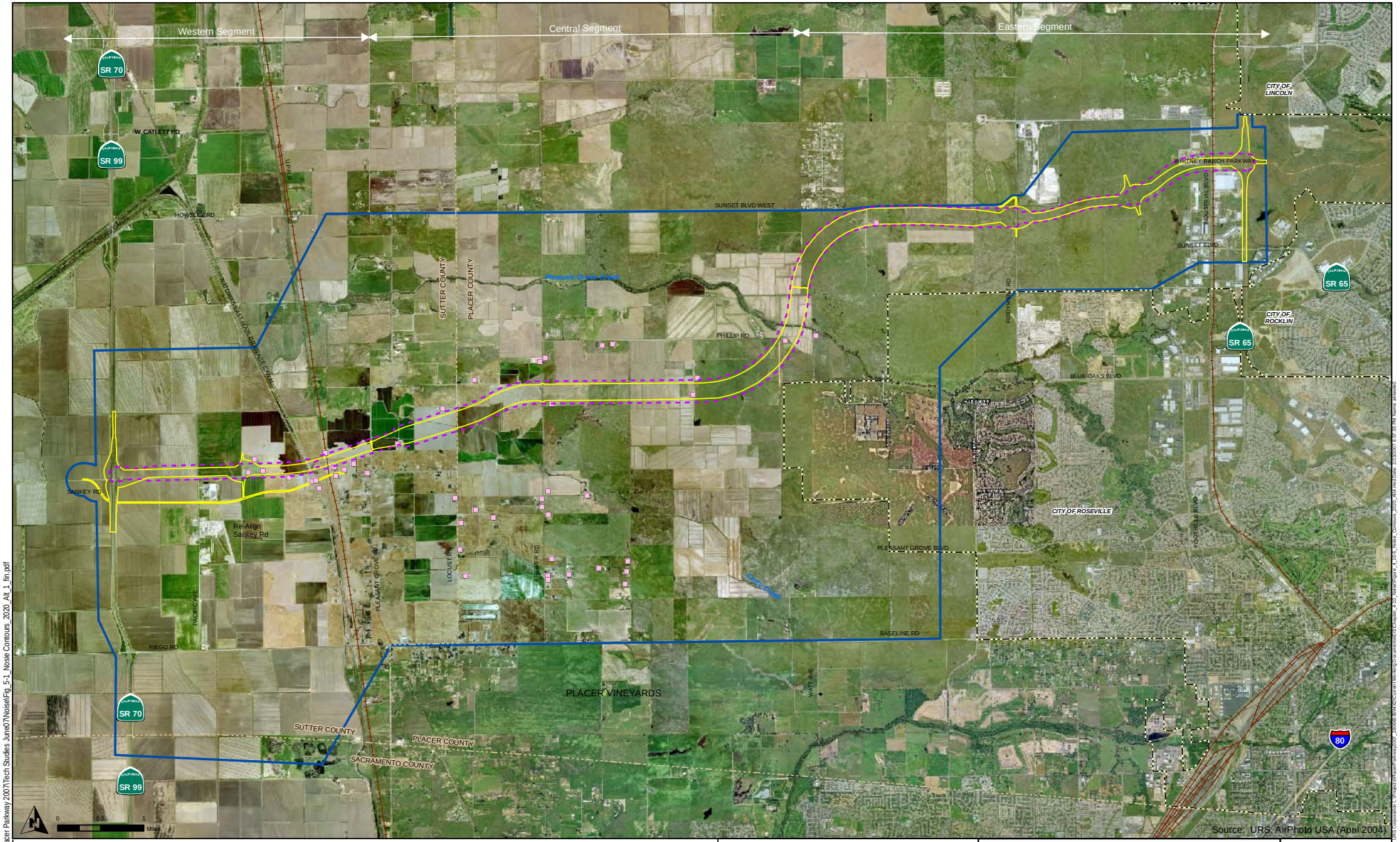

Western Segment
Central Segment
Eastern Segment
SR 70
SR 99
SR 65
80
W. CATLETT RD
HOWSLEY RD
SUNSET BLVD WEST
WHITNEY RANCH PARKWAY
SUNSET BLVD
INDUSTRIAL BLVD
CITY OF LINCOLN
CITY OF ROCKLIN
CITY OF ROSEVILLE
SUTTER COUNTY
PLACER COUNTY
SACRAMENTO COUNTY
Pleasant Grove Creek
PHILLIP RD
FOOTHILLS BLVD
BLUE OAKS BLVD
PLEASANT GROVE BLVD
BASELINE RD
SANKEY RD
Re-Align Sankey Rd
RIEGO RD
PACIFIC AVE
LOCUST RD
BREWER RD
WATT AVE
PLACER VINEYARDS
Source: URS, AirPhoto USA (April 2004)
Alternative 3
Study Area Boundary
County Boundary
City Boundary
Noise Contour (66 dBA)
Noise Receptors
Tier 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum
Noise Contours - 2020 - Alternative 3
Figure 5-3
June 2007



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Traffic Noise Analysis
Technical Memorandum

Noise Contours - 2020 - Alternative 4

Figure 5-4

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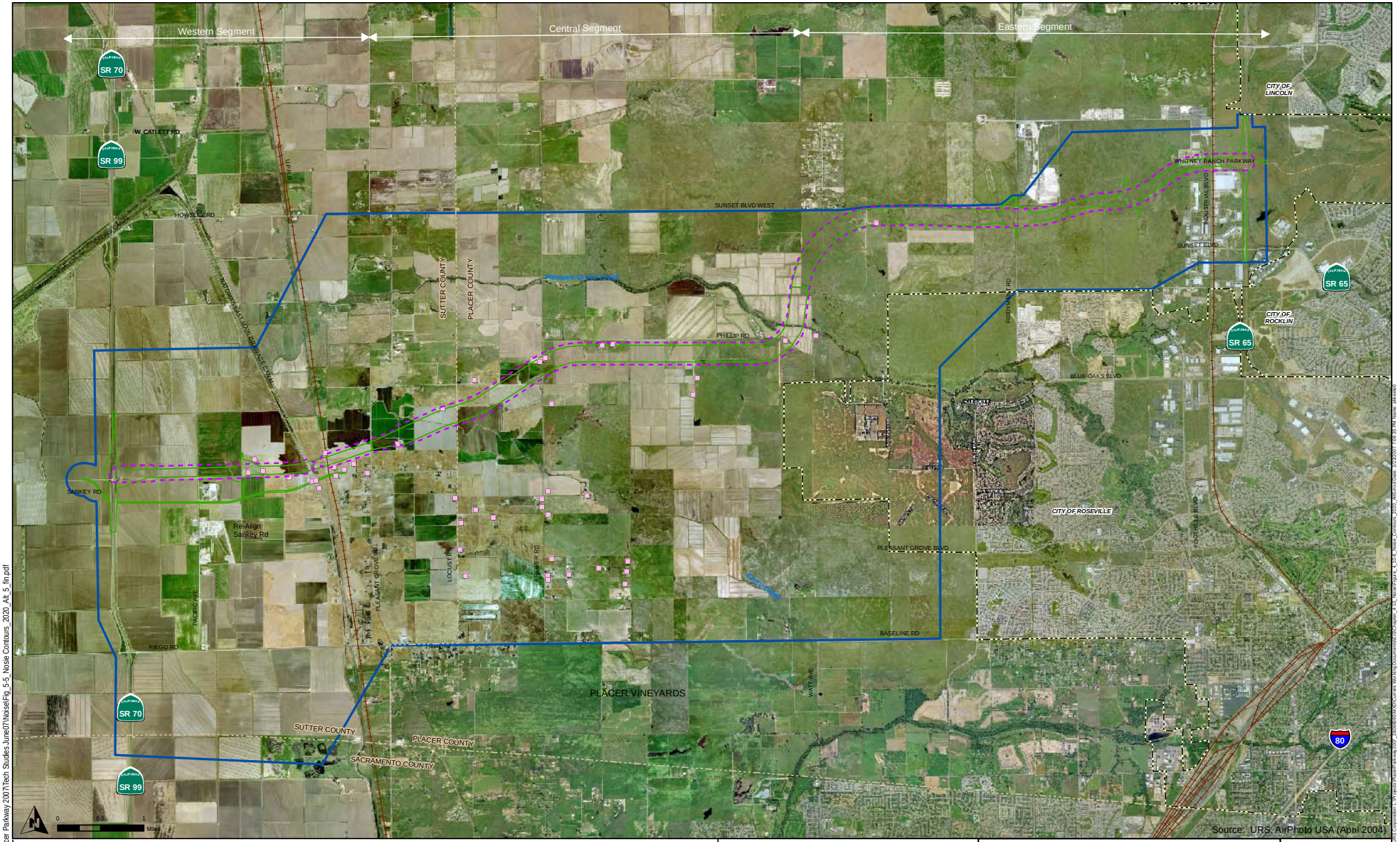

Tier 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Noise Contours - 2020 - Alternative 5

Figure 5-5

June 2007

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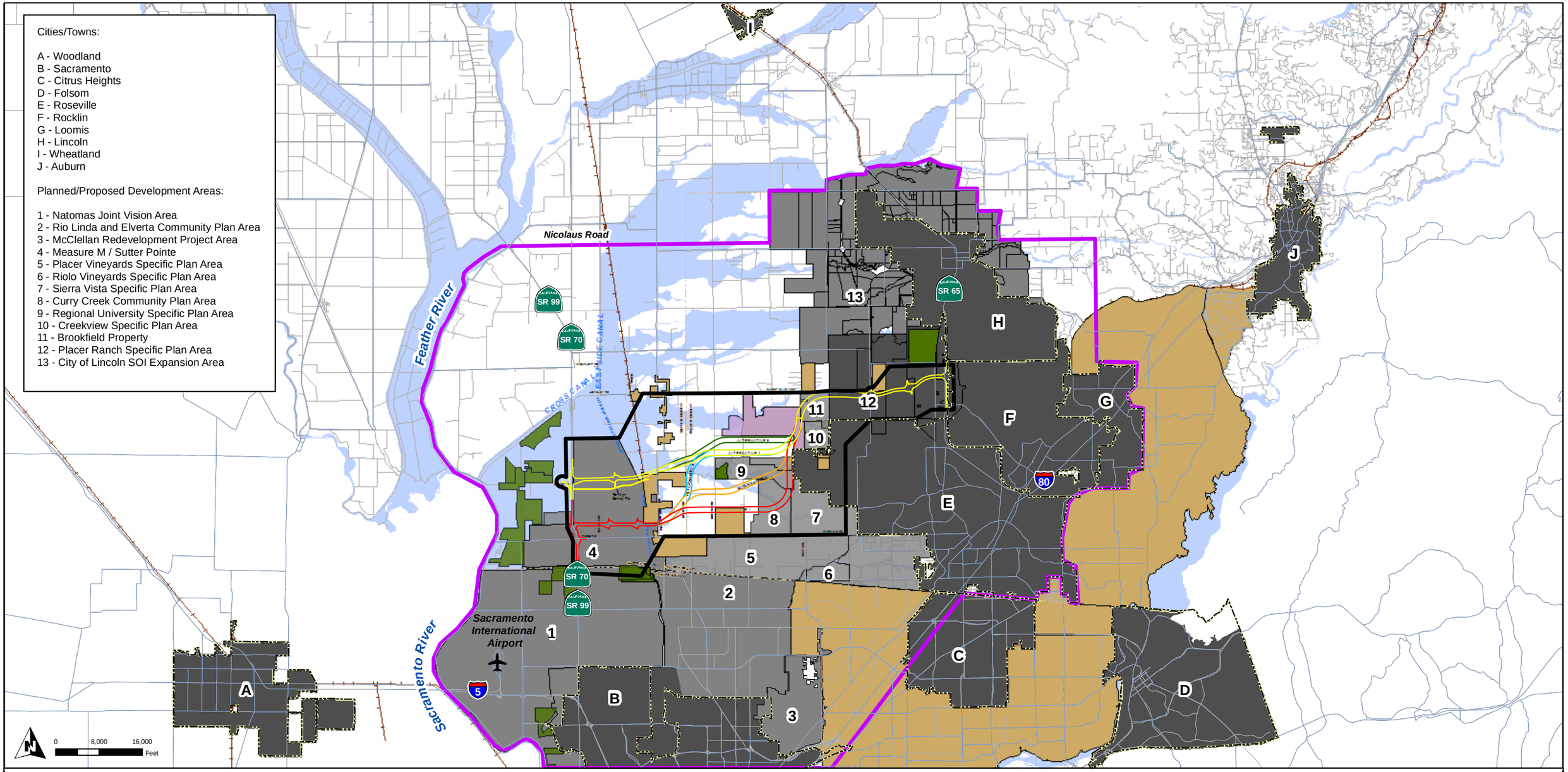
Cities/Towns:

A - Woodland
B - Sacramento
C - Citrus Heights
D - Folsom
E - Roseville
F - Rocklin
G - Loomis
H - Lincoln
I - Wheatland
J - Auburn

Planned/Proposed Development Areas:

1 - Natomas Joint Vision Area
2 - Rio Linda and Elverta Community Plan Area
3 - McClellan Redevelopment Project Area
4 - Measure M / Sutter Pointe
5 - Placer Vineyards Specific Plan Area
6 - Riolo Vineyards Specific Plan Area
7 - Sierra Vista Specific Plan Area
8 - Curry Creek Community Plan Area
9 - Regional University Specific Plan Area
10 - Creekview Specific Plan Area
11 - Brookfield Property
12 - Placer Ranch Specific Plan Area
13 - City of Lincoln SOI Expansion Area



County Boundary
Railroads
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Existing and Approved Development
Planned / Proposed Development (including future conservation areas)
Existing Conservation Areas
Developed Unincorporated Areas
Municipal Facilities
Study Area for Secondary and Indirect Impacts
Project Study Area Boundary
100 Year Floodplain Areas

Source: North Fork Associates;Mara Feeney Associates; Sutter County Planning Division; County of Sacramento Planning and Community Development Department; City of Sacramento Development Services Department; Sunset Industrial Area Plan; City of Lincoln Community Development Department; Natomas Basin HCP;Placer County Planning Deptartment; City of Sacramento; City of Roseville

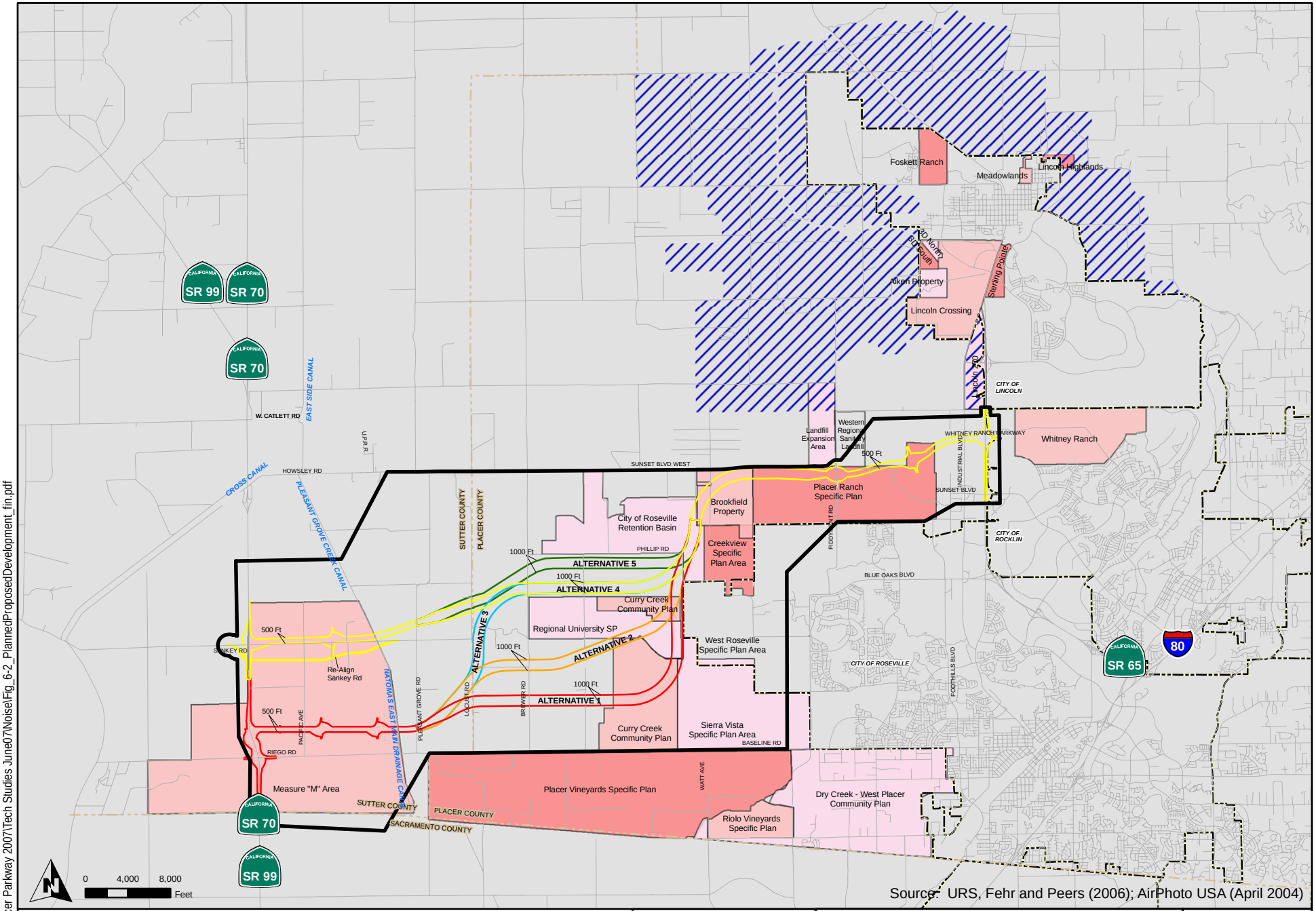
PLACER PARKWAY
CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Secondary and Indirect Impact Analysis Study Area

Figure 6-1

June 2007



Study Area Boundary
City Boundary
County Boundary
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
City of Lincoln Sphere of Influence
Planned/Proposed Development

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Planned / Proposed Development

Figure 6-2

June 2007

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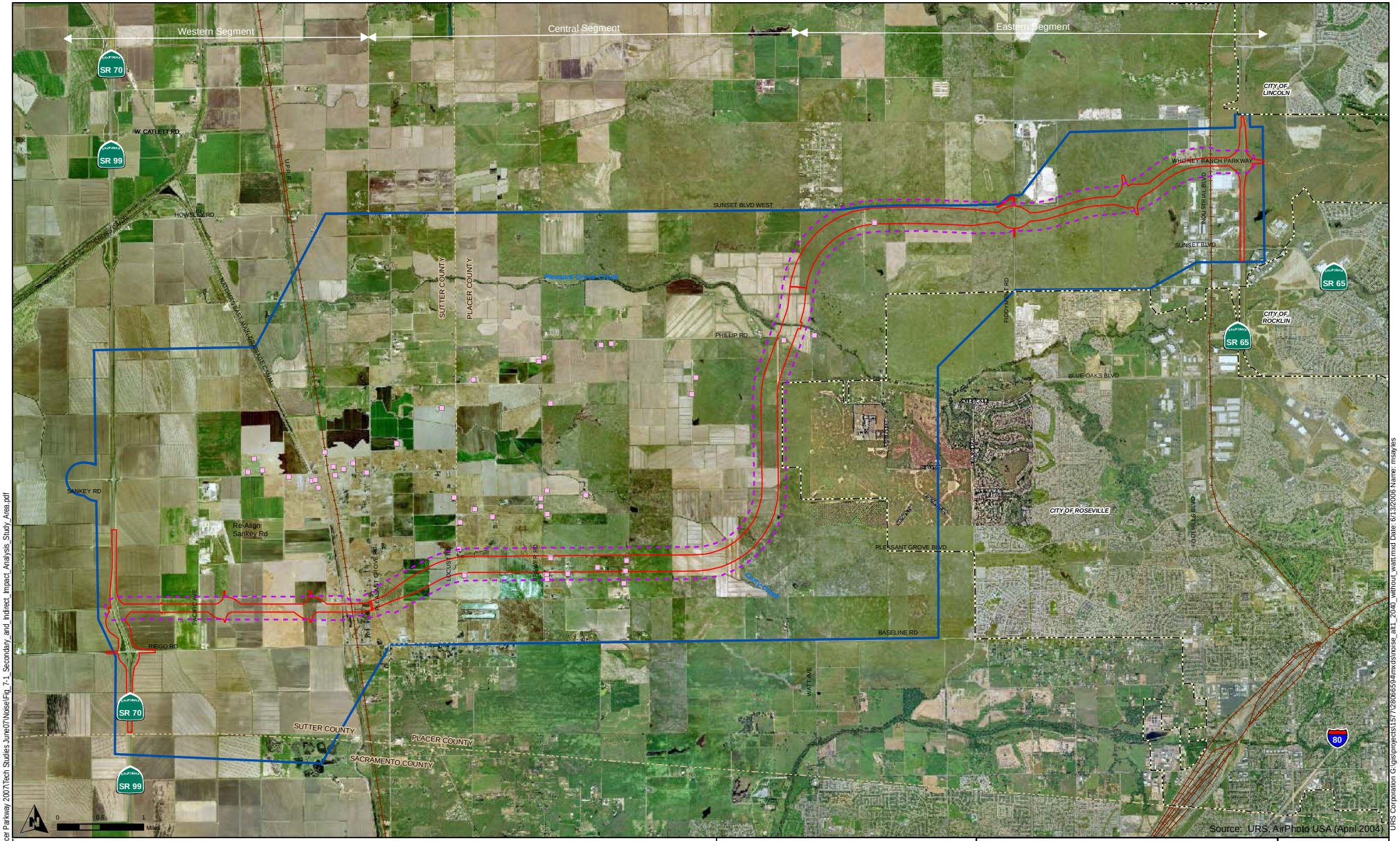

Alternative 1
Study Area Boundary
County Boundary
City Boundary
Noise Contour (66 dBA)
Noise Receptors

PLACER PARKWAY

Tier 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Noise Contours - 2040 - Alternative 1

Figure 7-1

June 2007

6/18/07 ...lhkt:\Placer Parkway 2007\Tech Studies June07\Noise\Fig_7-1_Secondary_and_Indirect_Impact_Analysis_Study_Area.pdf

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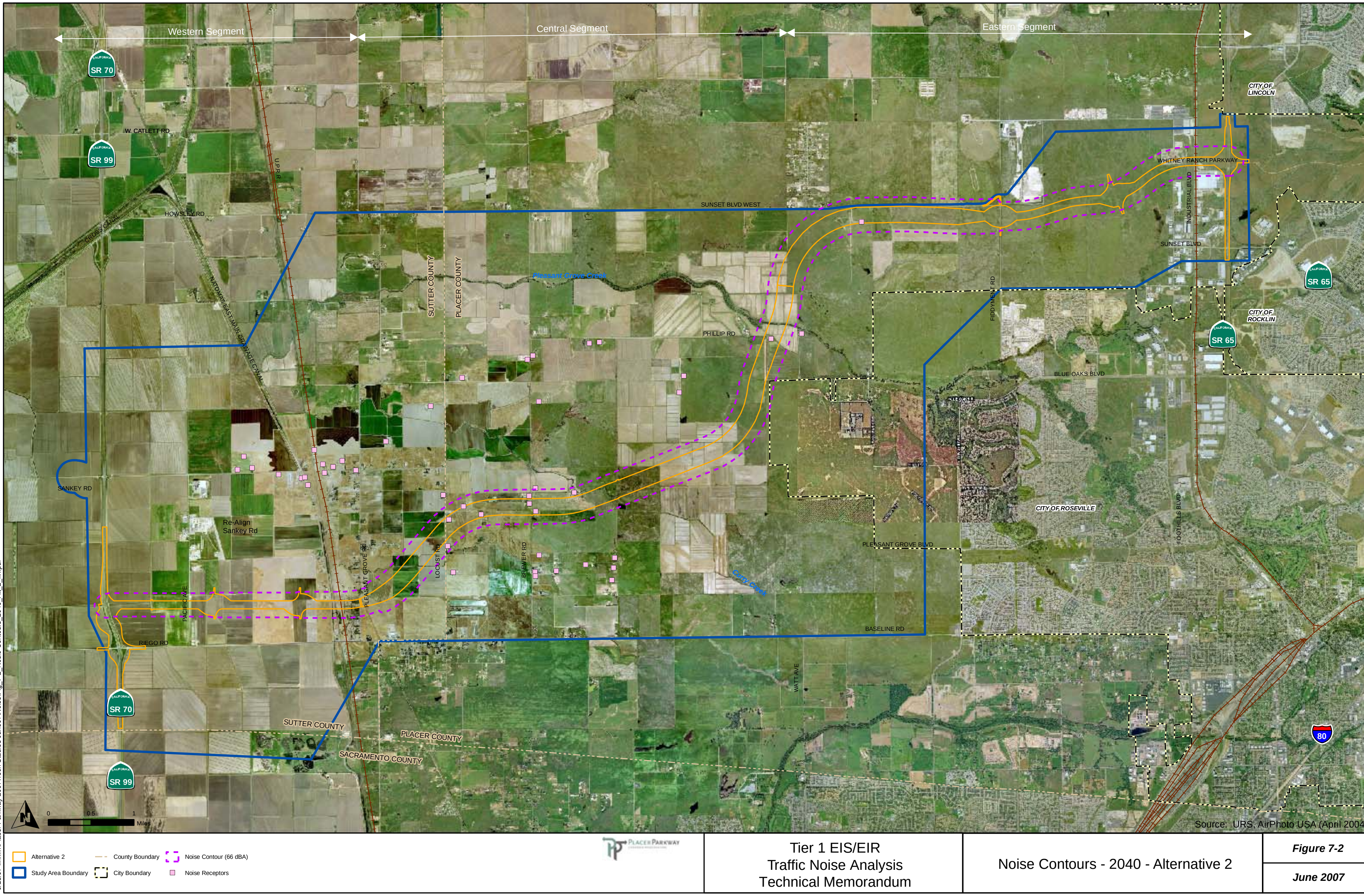


Placer Parkway

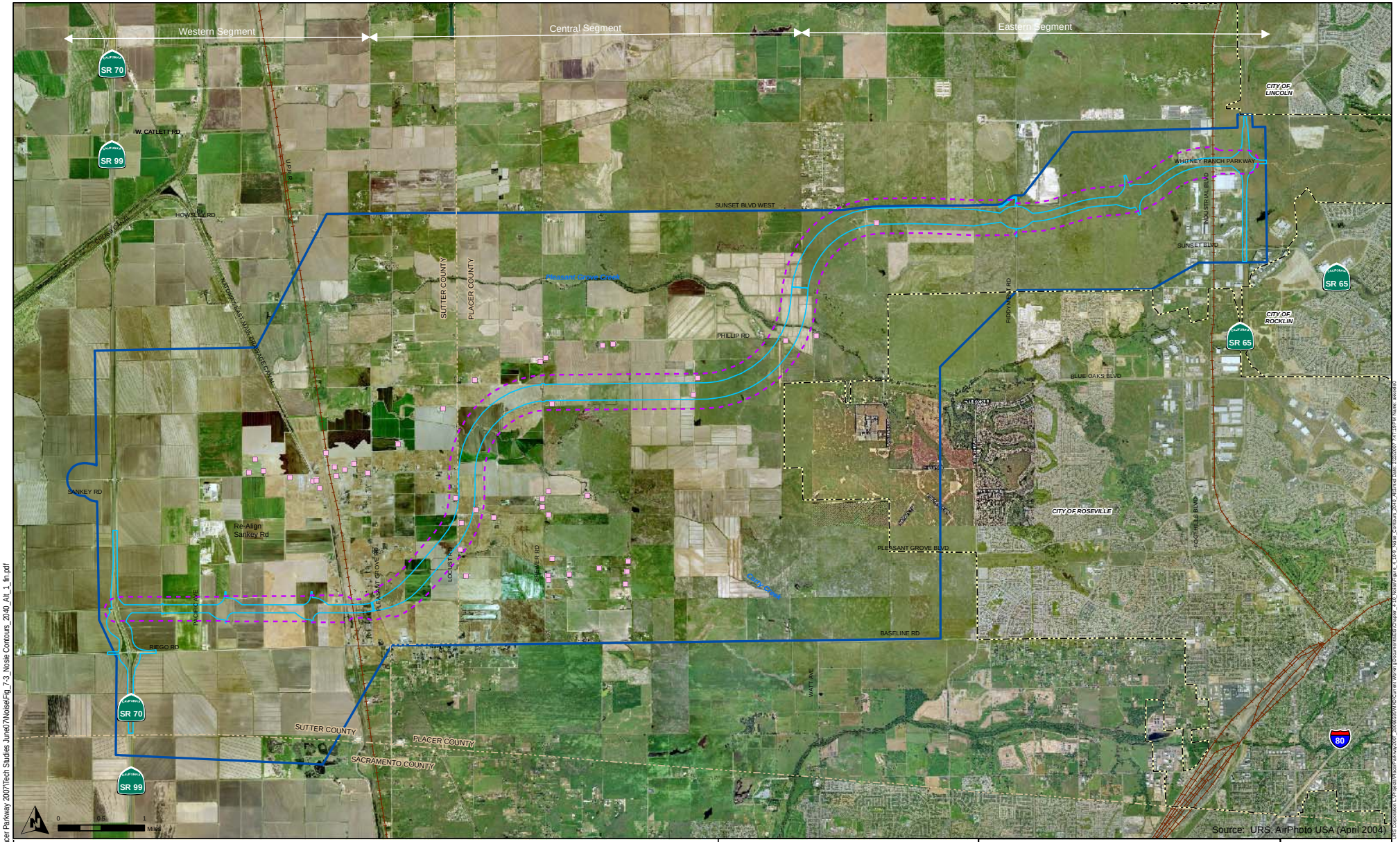
Tier 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Noise Contours - 2040 - Alternative 2

Figure 7-2

June 2007

6/18/07 ..\kT:\Placer Parkway 2007\Tech Studies June07\Noise\Fig_7-2_Nosie Contours_2040_Alt_2_fin.pdf



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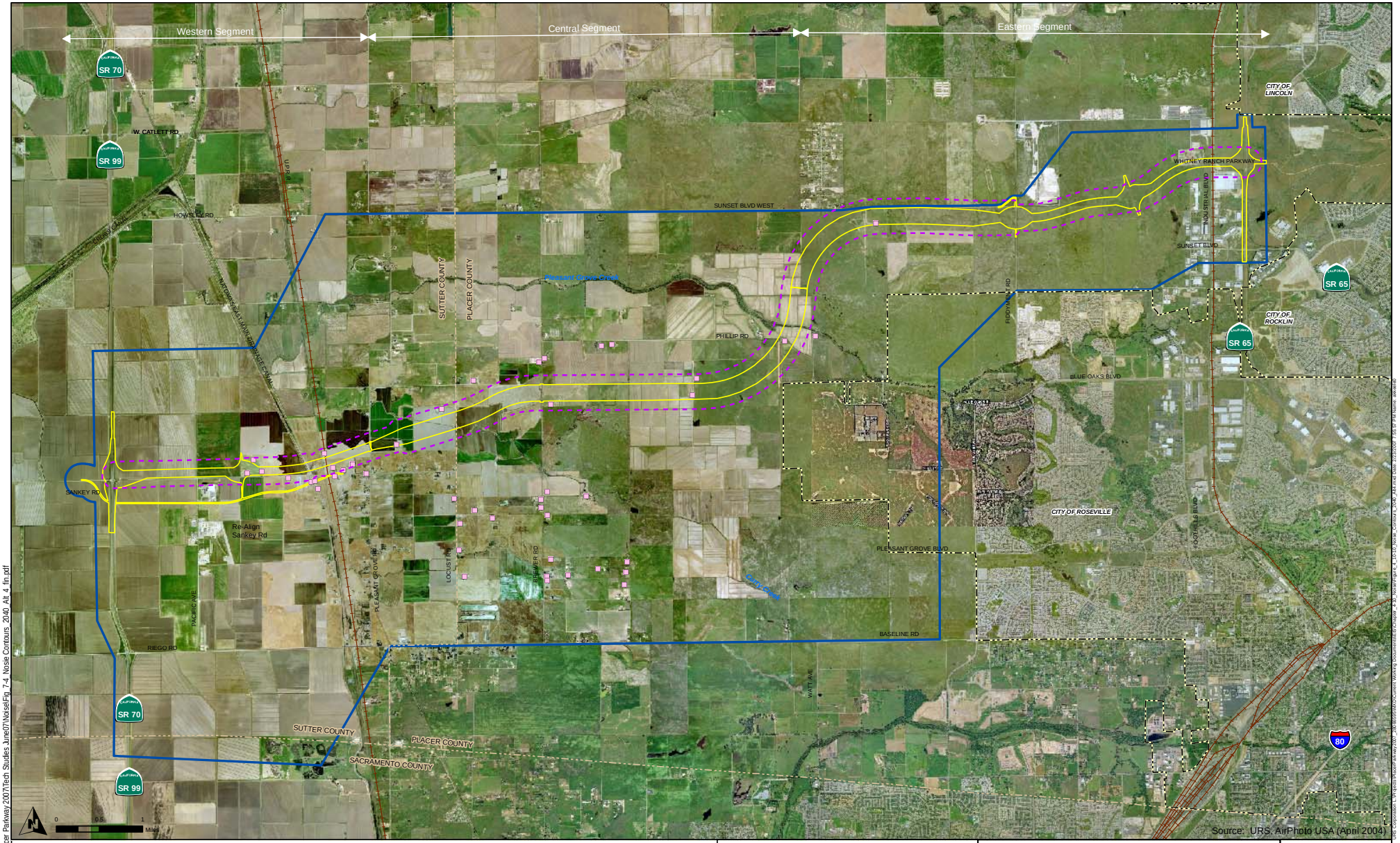
Tier 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Noise Contours - 2040 - Alternative 3

Figure 7-3

June 2007



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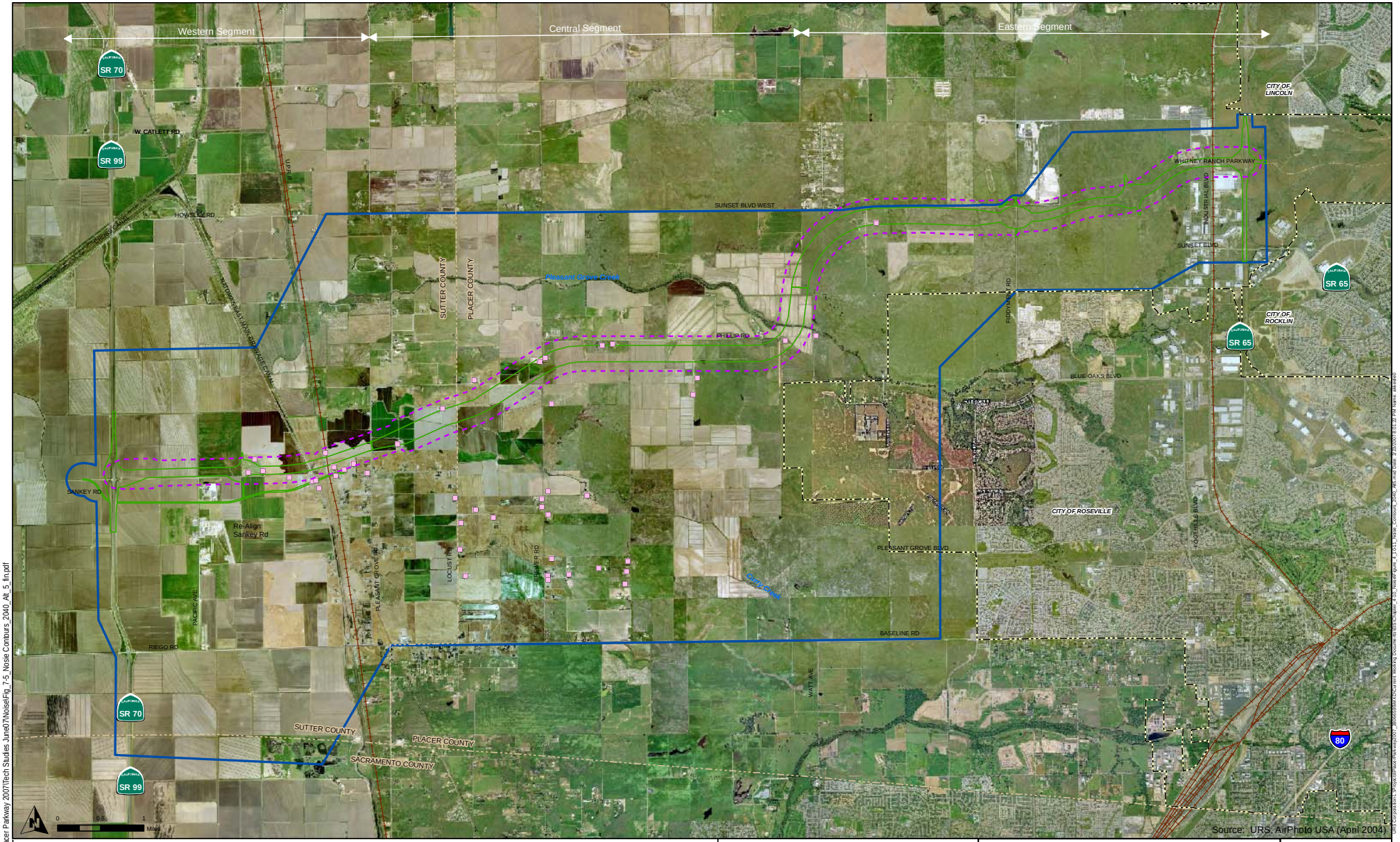
PLACER PARKWAY

Tier 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Noise Contours - 2040 - Alternative 4

Figure 7-4

June 2007



Alternative 5
Study Area Boundary
County Boundary
City Boundary
Noise Contour (66 dBA)
Noise Receptors

PLACER PARKWAY

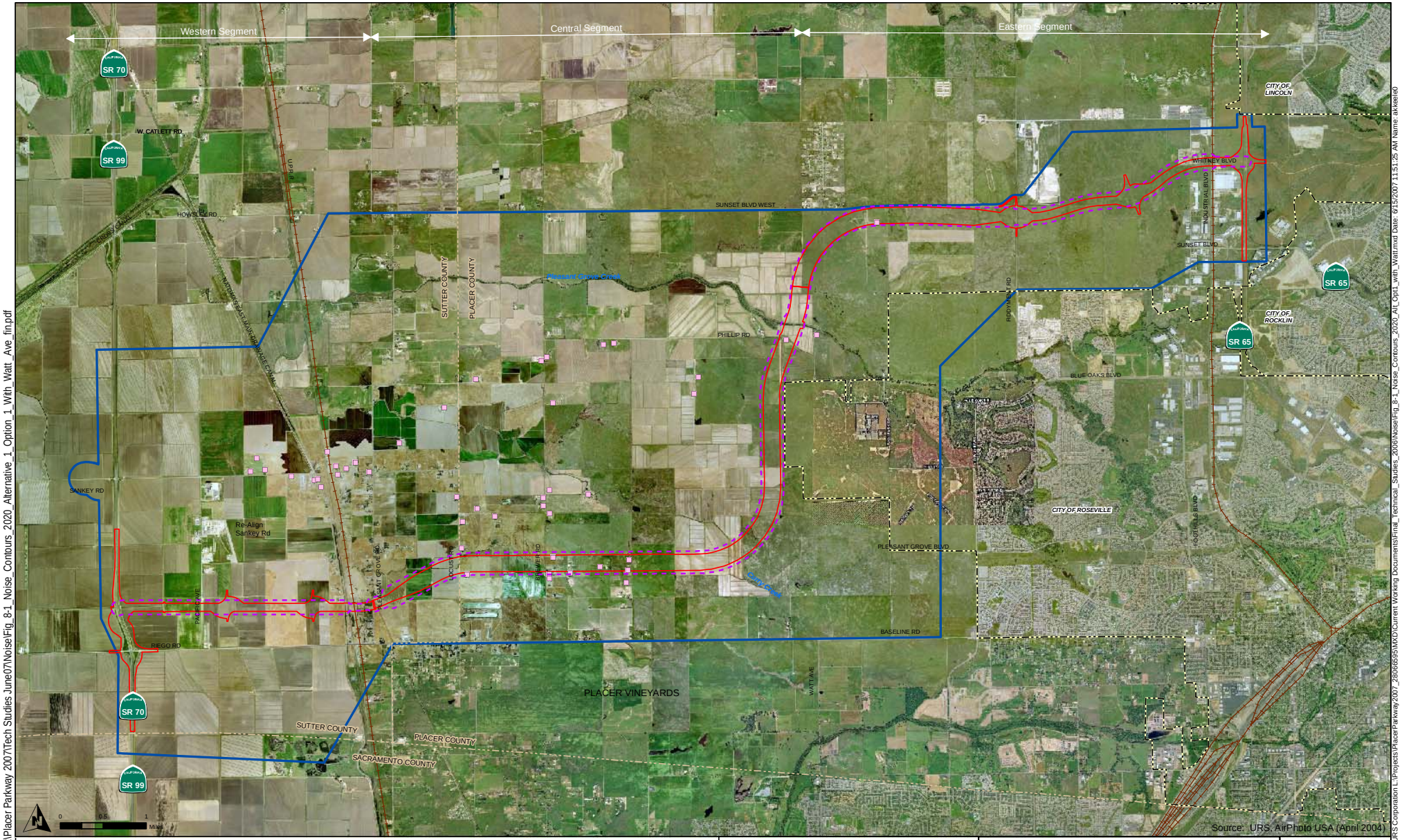
Tier 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Noise Contours - 2040 - Alternative 5

Figure 7-5

June 2007

6/19/07 J:\k\TI\Placer Parkway 2007\Tech Studies June07\Noise\Fig_7-5_Noise Contours_2040_Alt_5_fin.pdf



TIER 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Noise Contours - 2020 - Alternative 1, Option 1
With Watt Avenue Connection

Figure 8-1

June 2007

6/19/07 ...hkT:\Placer Parkway 2007\Tech Studies June07\Noise\Fig_8-1_Noise_Contours_2020_Alternative_1_Option_1_With_Watt_Ave_fin.pdf

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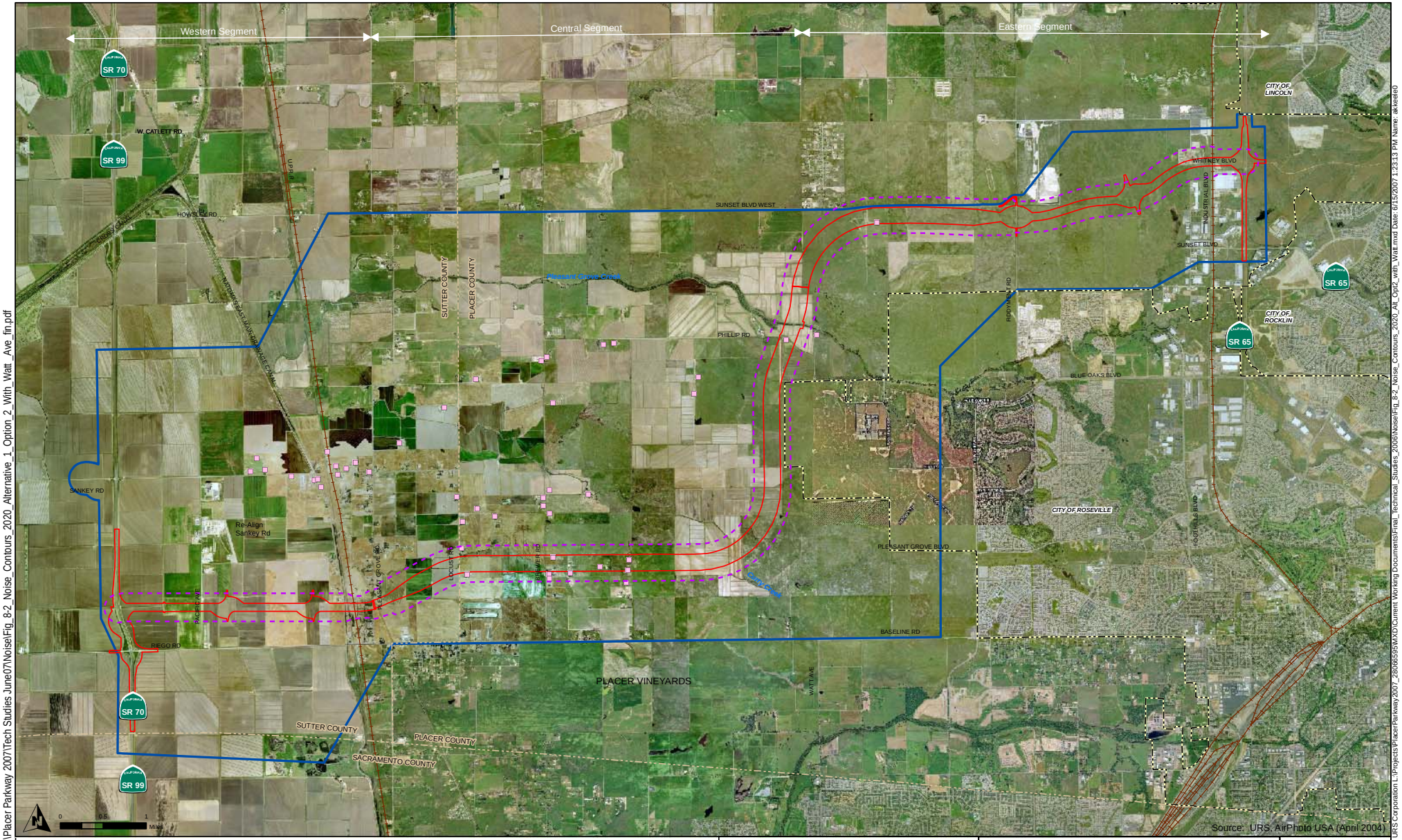
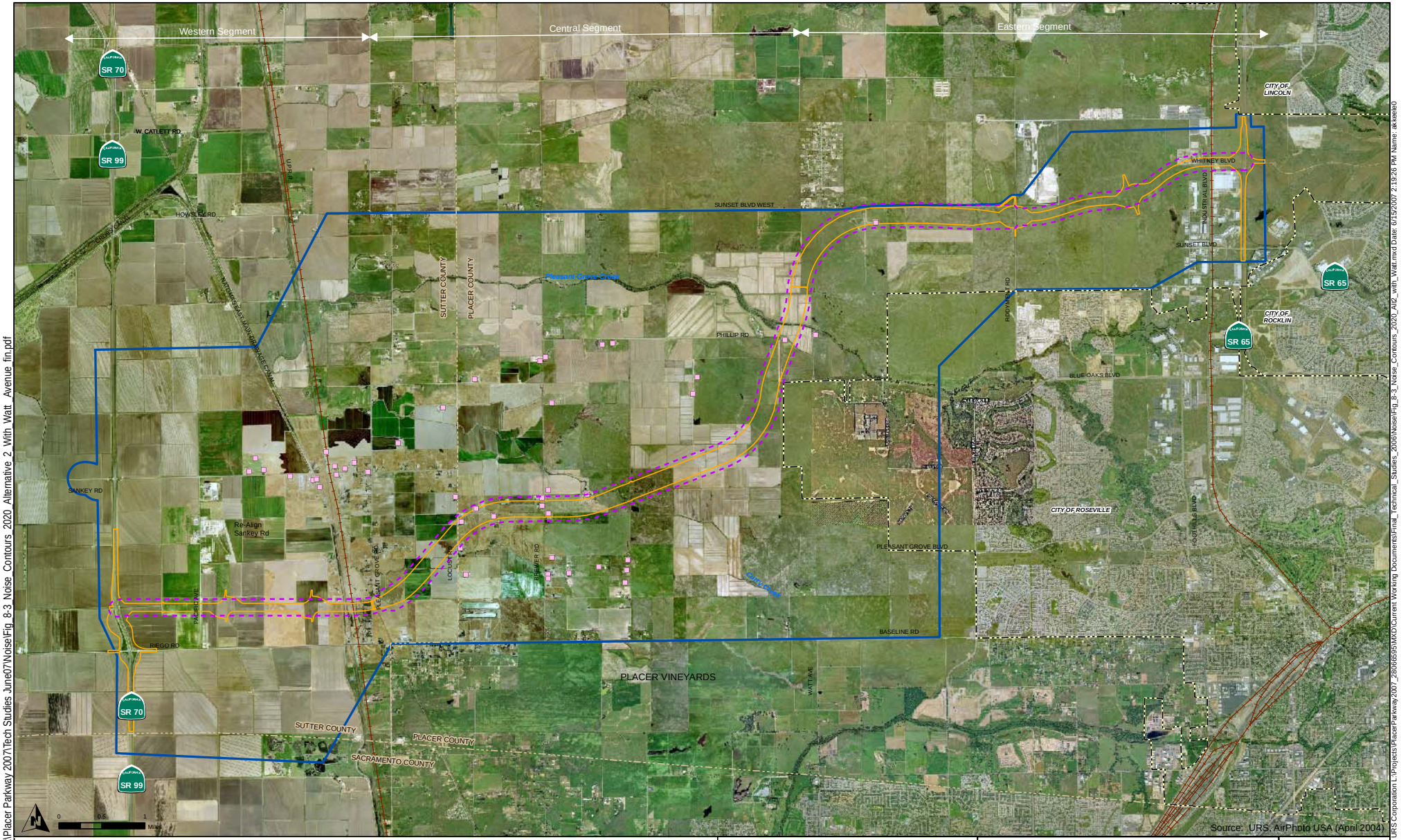

Western Segment
Central Segment
Eastern Segment
SR 70
SR 99
SR 65
W. CATLETT RD
HOWSLEY RD
SUNSET BLVD WEST
WHITNEY BLVD
SUNSET BLVD
INDUSTRIAL BLVD
CITY OF LINCOLN
CITY OF ROCKLIN
CITY OF ROSEVILLE
PHILLIP RD
ROSEVILLE RD
BLUE OAKS BLVD
SANKEY RD
Re-Align Sankey Rd
PLEASANT GROVE BLVD
PACIFIC AVE
LOCUST RD
BREWER RD
RIEGO RD
BASELINE RD
WATT AVE
PLACER VINEYARDS
SUTTER COUNTY
PLACER COUNTY
SACRAMENTO COUNTY
Pleasant Grove Creek
Orchard Creek
UPRR
0
0.5
1
Miles
Source: URS, AirPhoto USA (April 2004)
Alternative 1
Study Area Boundary
County Boundary
City Boundary
Noise Contour (66 dBA)
Noise Receptors
PLACER PARKWAY
TIER 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum
Noise Contours - 2020 - Alternative 1, Option 2
With Watt Avenue Connection
Figure 8-2
June 2007
6/19/07 ...hk\T\Placer Parkway 2007\Tech Studies June07\Noise\Fig_8-2_Noise_Contours_2020_Alternative_1_Option_2_With_Watt_Ave_fin.pdf
URS Corporation L:\Projects\PlacerParkway\2007_2806855\5MXD\Current Working Documents\Final_Technical_Studies_2006\Noise\Fig_8-2_Noise_Contours_2020_Alt_Op2_with_Watt.mxd Date: 6/15/2007 1:23:13 PM Name: akeseleG



TIER 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Noise Contours - 2020 - Alternative 2
With Watt Avenue Connection

Figure 8-3

June 2007

6/19/07 ...hk\T:\Placer Parkway 2007\Tech Studies June07\Noise\Fig_8-3_Noise_Contours_2020_Alternative_2_With_Watt_Avenue_fin.pdf

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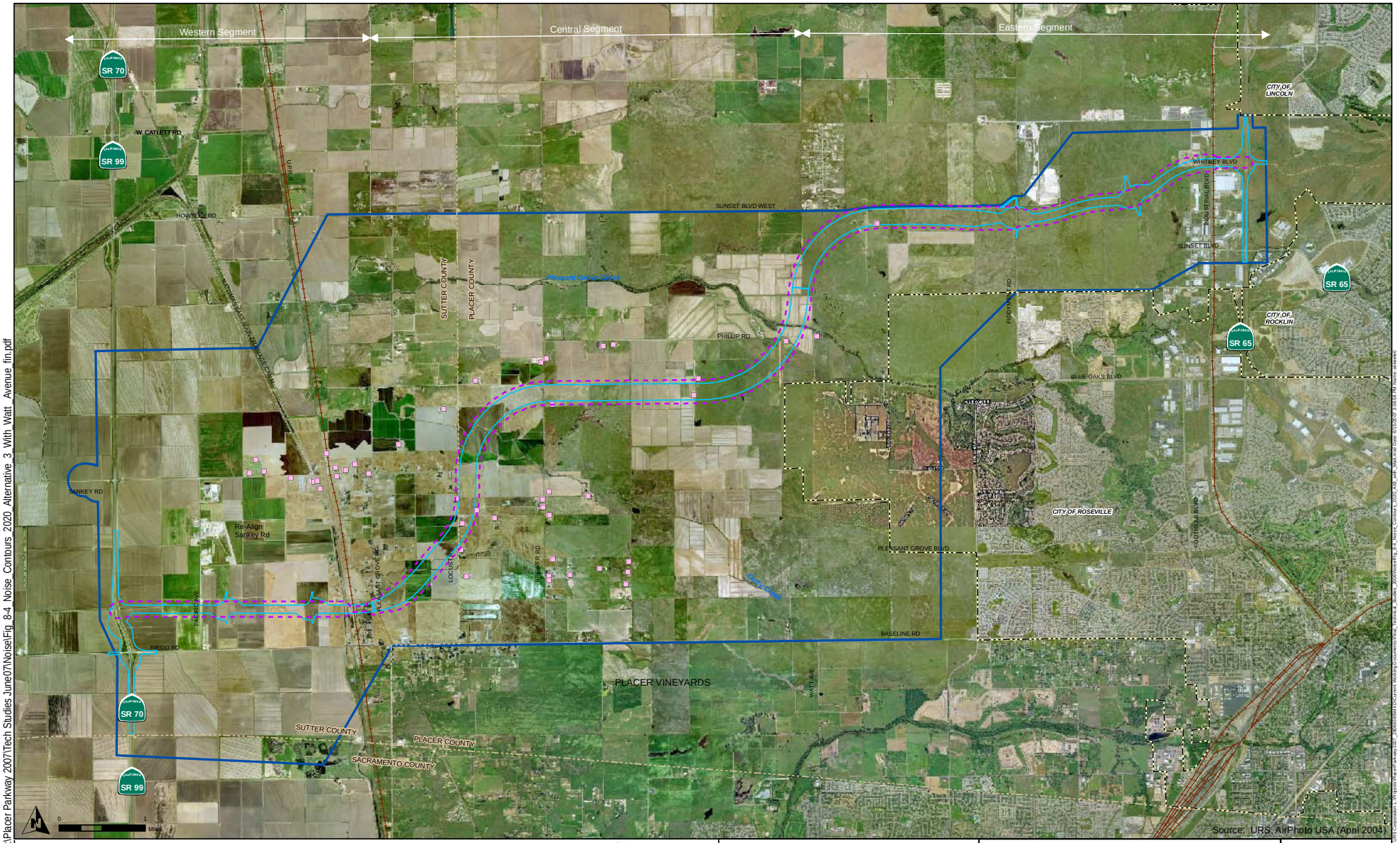


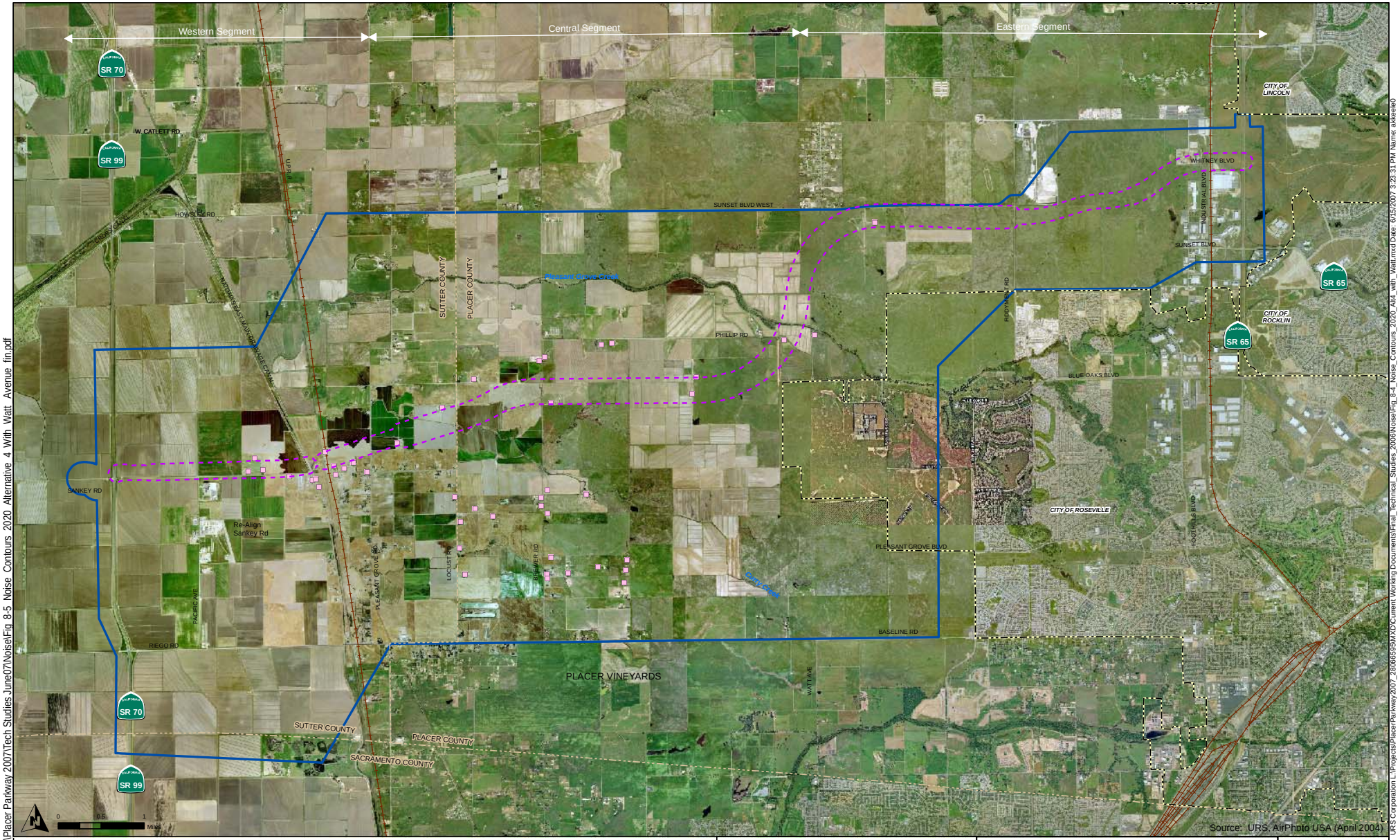
TIER 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Noise Contours - 2020 - Alternative 3
With Watt Avenue Connection

Figure 8-4

June 2007

6/19/07 ..\kT\Placer Parkway 2007\Tech Studies June07\Noise\Fig 8-4 Noise Contours 2020 Alternative 3 With Watt Avenue fin.pdf



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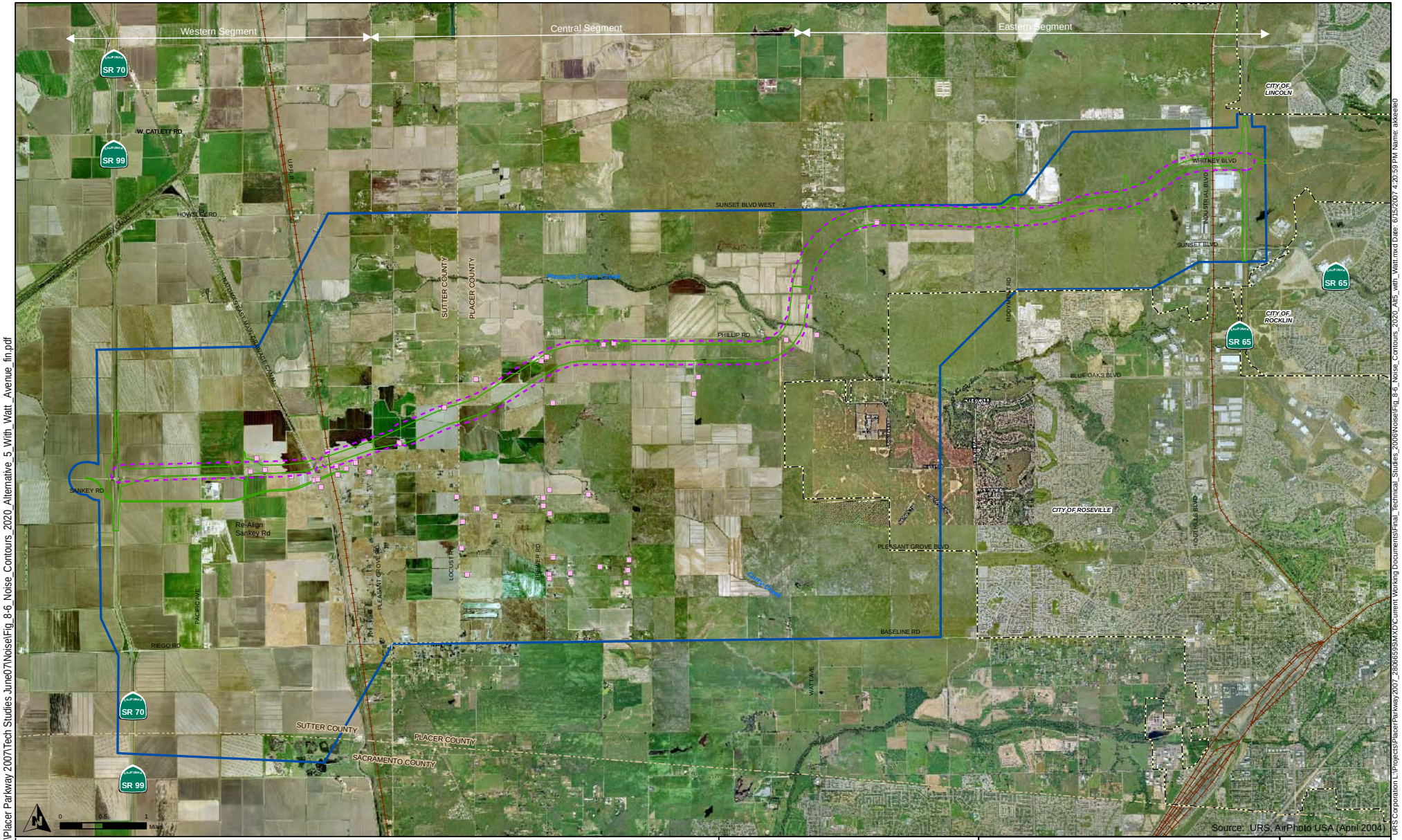

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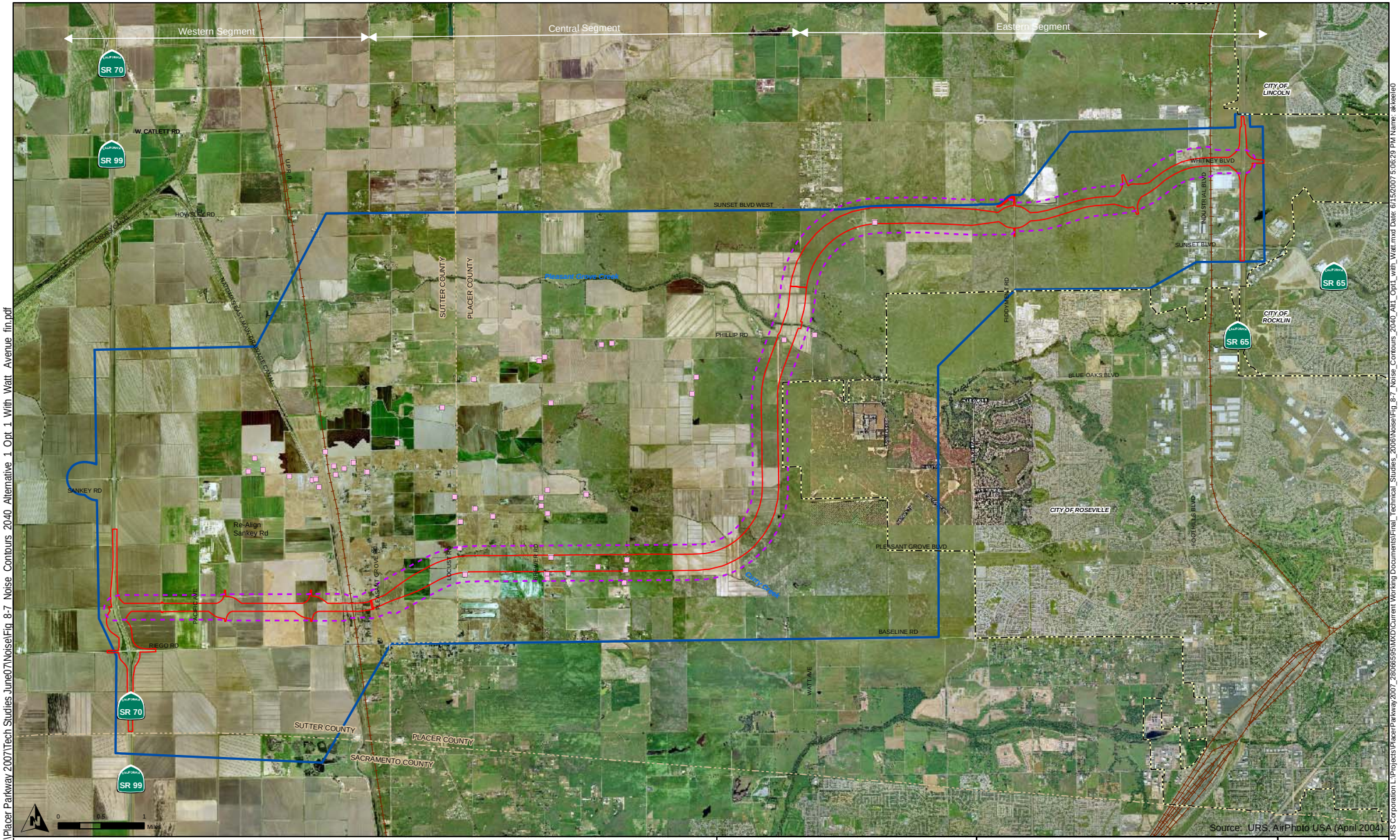
PLACER PARKWAY

TIER 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Noise Contours - 2020 - Alternative 5
With Watt Avenue Connection

Figure 8-6

June 2007



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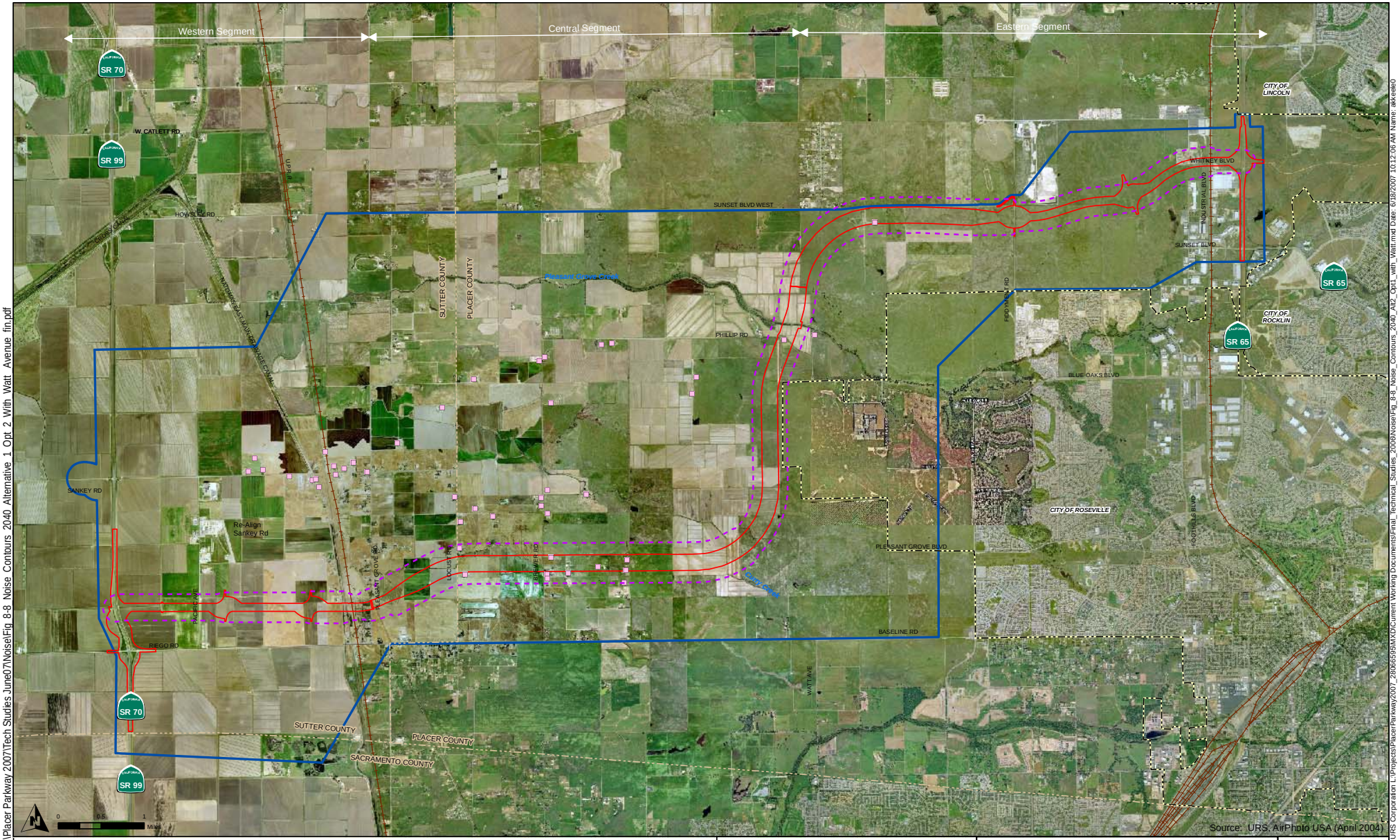


Alternative 1
Study Area Boundary
County Boundary
City Boundary
Noise Contour (66 dBA)
Noise Receptors

PLACER PARKWAY

TIER 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

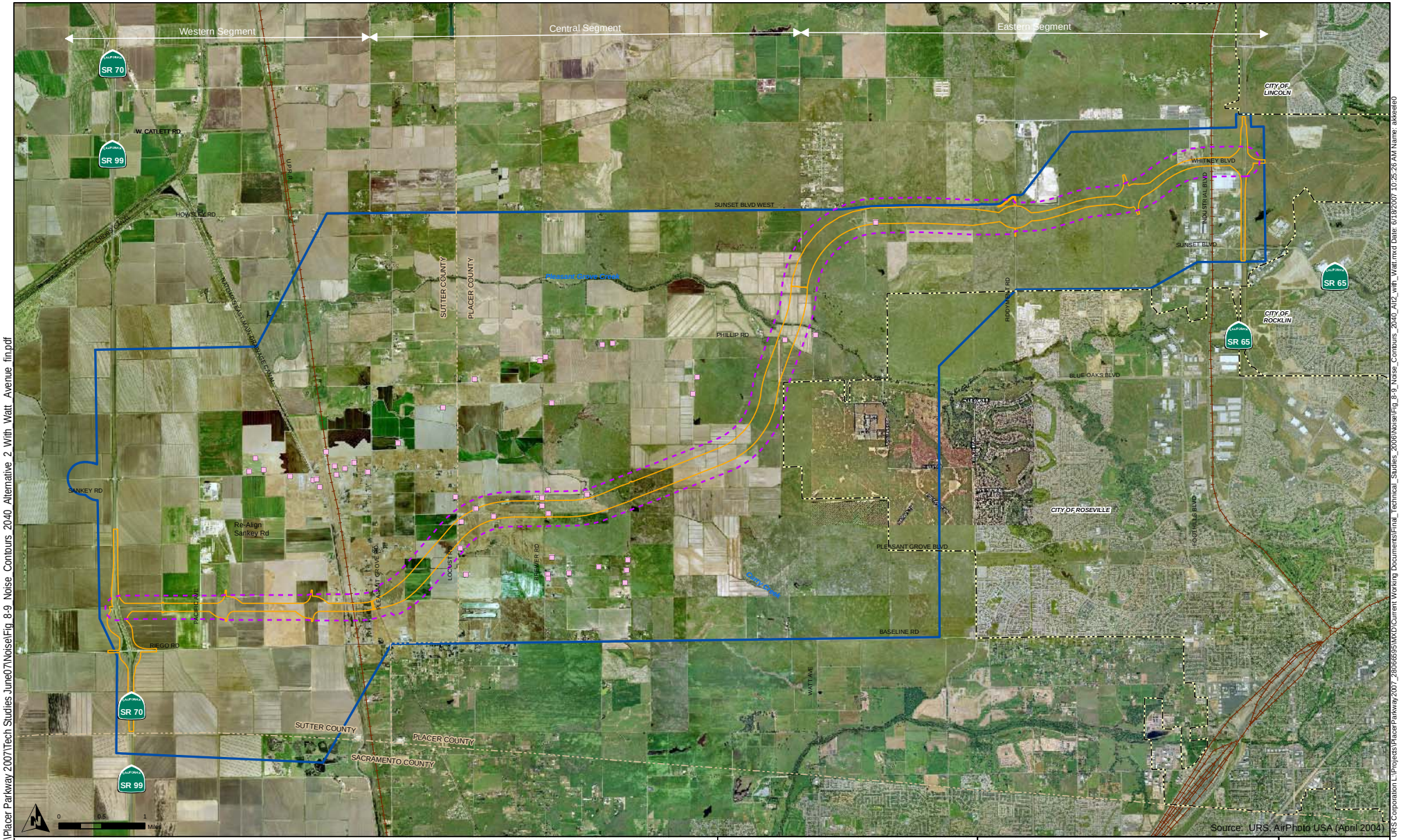
Noise Contours - 2040 - Alternative 1, Option 2
With Watt Avenue Connection

Figure 8-8

June 2007

6/19/07 ...hk\T:\Placer Parkway 2007\Tech Studies June07\Noise\Fig 8-8 Noise Contours 2040 Alternative 1 Opt 2 With Watt Avenue fin.pdf

URS Corporation L:\Projects\PlacerParkway2007_2806565\MXD\Current Working Documents\Final_Technical_Studies_2006\Noise\Fig_8-8_Noise_Contours_2040_Alt2_Opt1_with_Watt.mxd Date: 6/18/2007 10:12:06 AM Name: akkeledi



Alternative 2
Study Area Boundary
County Boundary
City Boundary
Noise Contour (66 dBA)
Noise Receptors

PLACER PARKWAY

TIER 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

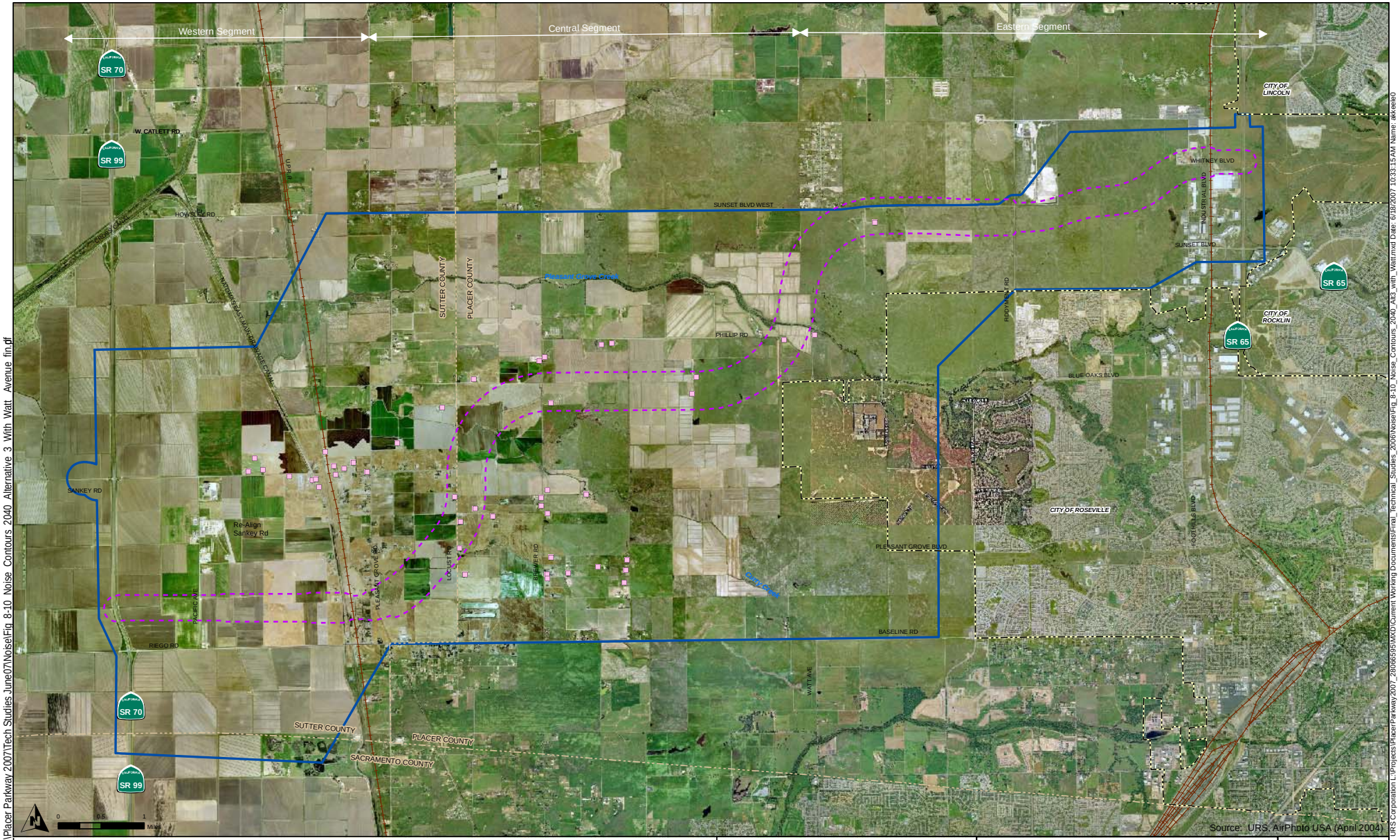
Noise Contours - 2040 - Alternative 2
With Watt Avenue Connection

Figure 8-9

June 2007

6/19/07 ...hkT:\Placer Parkway 2007\Tech Studies June07\Noise\Fig 8-9 Noise Contours 2040 Alternative 2 With Watt Avenue fin.pdf

URS Corporation L:\Projects\PlacerParkway\2007_28066565\MXD\Current Working Documents\Final_Technical_Studies_2006\Noise\Fig_8-9_Noise_Contours_2040_Alt2_with_Watt.mxd Date: 6/19/2007 10:25:26 AM Name: akkesler0



TIER 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Noise Contours - 2040 - Alternative 3
With Watt Avenue Connection

Figure 8-10

June 2007

6/19/07 ...hkT:\Placer Parkway 2007\Tech Studies June07\Noise\Fig 8-10 Noise Contours 2040 Alternative 3 With Watt Avenue fin.pdf

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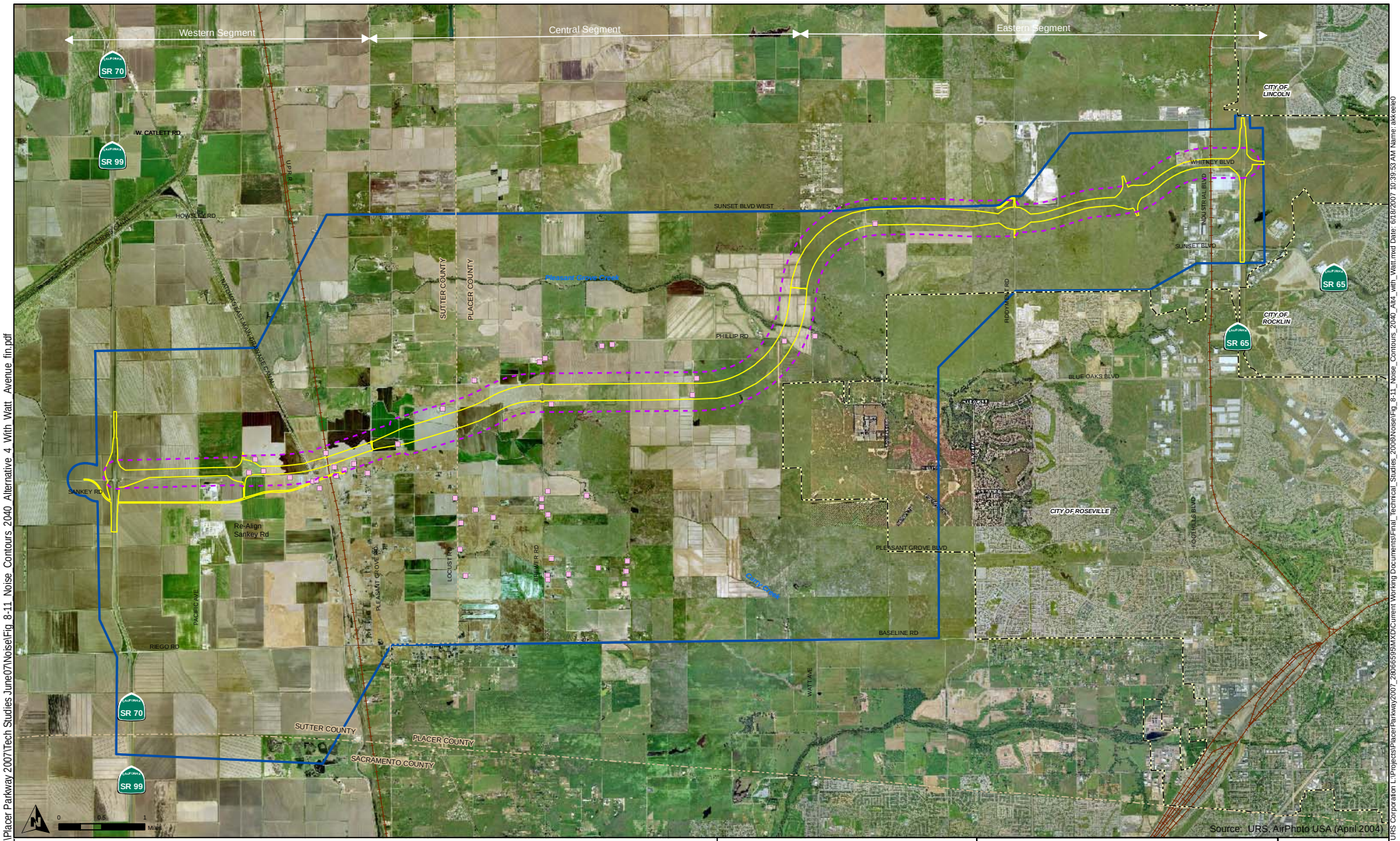

PLACER PARKWAY

TIER 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Noise Contours - 2040 - Alternative 4
With Watt Avenue Connection

Figure 8-11

June 2007

6/19/07 ...hkT:\Placer Parkway 2007\Tech Studies June07\Noise\Fig 8-11_Noise_Contours_2040_Alternative 4_With_Watt_Avenue_fin.pdf

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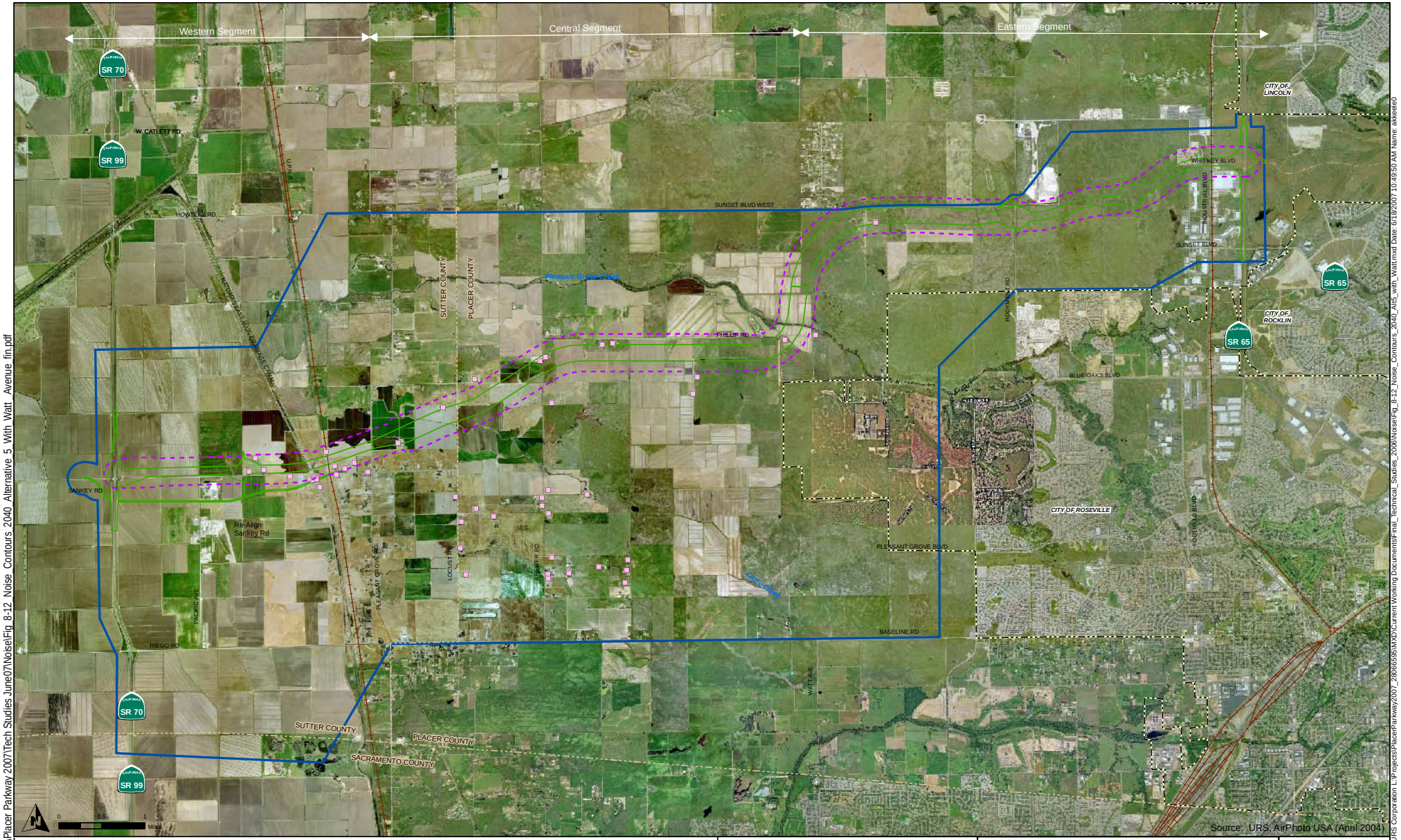


PLACER PARKWAY

TIER 1 EIS/EIR
Traffic Noise Analysis
Technical Memorandum

Noise Contours - 2040 - Alternative 5
With Watt Avenue Connection

Figure 8-12

June 2007

6/19/07 ...rkT:\Placer Parkway 2007\Tech Studies June07\Noise\Fig 8-12 Noise Contours 2040 Alternative 5 With Watt Avenue fin.pdf

URS Corporation L:\Projects\PlacerParkway\2007_28066595\MXD\Current Working Documents\Final_Technical_Studies_2006\Noise\Fig_8-12_Noise_Contours_2040_Alt5_with_Watt.mxd Date: 6/19/2007 10:49:50 AM Name: akkeleid

Appendix A
Meteorological Data Sheets

2.25 2925
x 13
6825
2250
5550

ST1

FIELD NOISE MEASUREMENT DATA

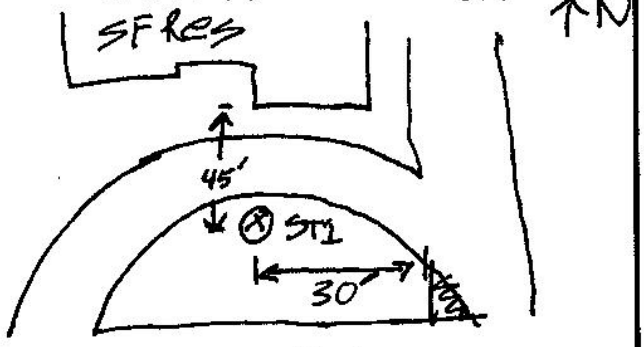
Project Name: Placer Pkwy
Project #:
Day / Date: 11-25
Page 1 of
My Name: WC

Sound Level Meter	Calibrator	Weather Meter
Model # LD820	Model # 150B	Model # Serial #
Serial # 1324	Serial # 2233	
Weighting: A / C / Flat	Pre-Test: 114.2 dBA SPL	Terrain: Hard / Soft / Mixed
Response: Slow / Fast / Impl	Post-Test: 114.1 dBA SPL	Topo: Flat / Hilly (describe)
Windscreen: Yes / No		Wind: Steady / Gusty

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
ST1	9:14	9:29	48.6	34.8	65.9	45.7	38.2	36.1	1-2/W	61.5		29.89	40

Roadway Name	Sunset Blvd WB/SB	West	
Speed (post/obs)	55		
Number of Lanes	2		
Width (pave/row)	24		
1- or 2- way	2-way		
Grade	flat		
Bus Stops			
Stoplights			
Street Parking			
Automobiles	4/2		
Medium Trucks	0/0		
Heavy Trucks	0/0		

Location(s) / GPS Reading(s):



N: 38.82460
W: 121.38678

Noise Sources: Lambs "baa-ing", helicopter overflight, birds vocalizing, back up beepers from West, industrial noise to South, dog barking in distance, Aircraft overflight

Other Noise Sources: distant: aircraft / roadway traffic / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

ST2

FIELD NOISE MEASUREMENT DATA

Project Name: Placer Pkwy — Page 2 of
Project #: — Day / Date: 9/4-25 — My Name: WC

Sound Level Meter
Model # LD 820
Serial # 1324
Weighting: (A) / C / Flat
Response: (Slow) / Fast / Impl
Windscreen: (Yes) / No

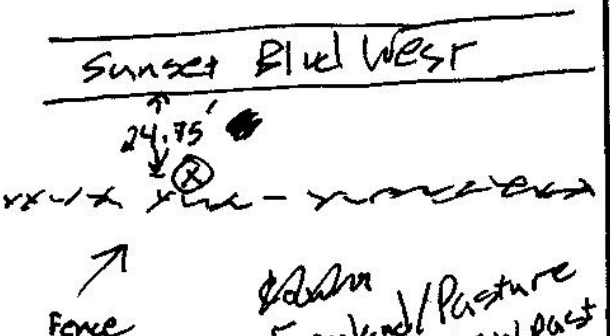
Calibrator
Model # 150B
Serial # 2233
Pre-Test: 114.1 dBA SPL
Post-Test: 114.1 dBA SPL

Weather Meter
Model # — Serial # —
Terrain: Hard / (Soft) / Mixed
Topo: (Flat) / Hilly (describe)
Wind: Steady / (Gusty)

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
ST2	9:44	9:59	58.7	39.5	75.9	59.2	44.6	41.9	2-4/W	61		30.09	40

Roadway Name	Sunset Blvd	West	
Speed (post/obs)	55		
Number of Lanes	2		
Width (pave/row)	24		
1- or 2- way	2-way		
Grade	flat		
Bus Stops	no		
Stoplights	no		
Street Parking	no		
Automobiles	4 / 2		
Medium Trucks	0 / 0		
Heavy Trucks	0 / 0		

Location(s) / GPS Reading(s):
N 38.82449 W 121.37298
N ↓



Noise Sources: Birds vocalizing, landfill operational noise to west, helicopter, vehicular traffic on Sunset Blvd W & Industrial
Adj Land Uses: Landfill (W), Pasture (N), SF Res (E), Vacant/Under (S)

Other Noise Sources: distant: aircraft / roadway traffic / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

ST3

FIELD NOISE MEASUREMENT DATA

6990 Country Acres Lane

Project Name: Placer Parkway | Page 3 of

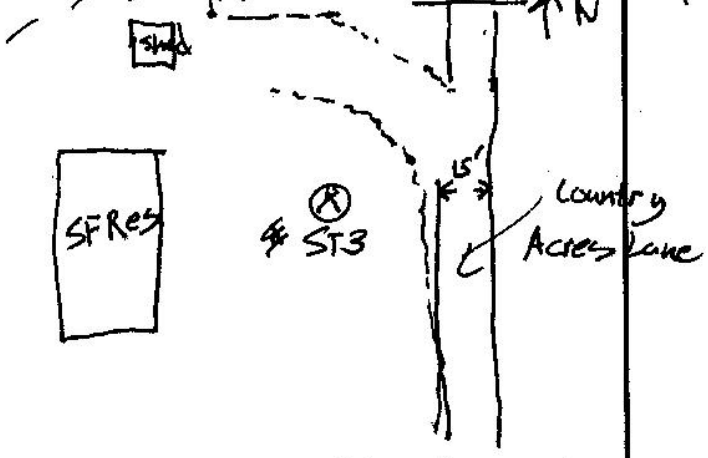
Project #: | Day / Date: 1-25 | My Name: WC

Sound Level Meter	Calibrator	Weather Meter
Model # LD820	Model # 150B	Model # ____ Serial # ____
Serial # 1324	Serial # 2233	
Weighting: (A) / C / Flat	Pre-Test: 114.1 dBA SPL	Terrain: Hard / (Soft) / Mixed (Ground is damp, indicating less attn than dry)
Response: (Slow) / Fast / Impl	Post-Test: 114.0 dBA SPL	Topo: (Flat) / Hilly (describe)
Windscreen: (Yes) / No		Wind: Steady / (Gusty)

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
ST3	11:11	11:26	38.3	34.3	46.9	40.1	37.7	35.7	2-4.5/N	63.5		30.57	60

Roadway Name	Country Acres Lane		
Speed (post/obs)			
Number of Lanes			
Width (pave/row)	15'		
1- or 2- way	2-way		
Grade	flat		
Bus Stops			
Stoplights	Dead End		
Street Parking	no		
Automobiles			
Medium Trucks			
Heavy Trucks			

Location(s) / GPS Reading(s): ← Dead End, ↑ N



N: 36.76639 W: 121.43278

Noise Sources: Birds vocalizing, vehicular traffic on Baseline, aircraft overflights

Adj Land Uses: SF Res (S), Undeveloped/Ag (N & W), Horse stables & SF Res (1-2) to (E)

Other Noise Sources: distant: aircraft / roadway traffic / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

ST4

FIELD NOISE MEASUREMENT DATA

4315 Brewer

Project Name: Placer Pkwy Page 4 of

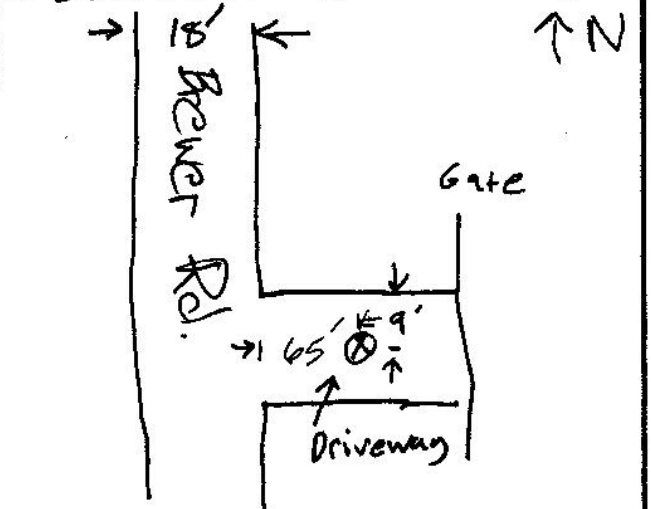
Project #: Day / Date: 1-25 My Name: WC

Sound Level Meter	Calibrator	Weather Meter
Model # LD820	Model # 150B	Model # Serial #
Serial # 1324	Serial # 2233	
Weighting: (A) / C / Flat	Pre-Test: 114.0 dBA SPL	Terrain: Hard / (Soft) / Mixed
Response: (Slow) / Fast / Impl	Post-Test: 114.2 dBA SPL	Topo: (Flat) / Hilly (describe)
Windscreen: (Yes) / No		Wind: Steady / (Gusty)

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
	11:51	12:06	45.7	29.0	62.4	46.6	35.9	31.7	2-5 / W	63.2		30.53	95

Roadway Name	Brewer SB/NB		
Speed (post/obs)	45		
Number of Lanes	2		
Width (pave/row)			
1- or 2- way	2-way		
Grade	flat		
Bus Stops	no		
Stoplights	no		
Street Parking	no		
Automobiles	3 / 4		
Medium Trucks	0 / 0		
Heavy Trucks	0 / 0		

Location(s) / GPS Reading(s):
N 38.80617 W 121.45098



Noise Sources: Birds vocalizing, vehicular traffic on
prop-plane overflight
Adj Land Uses: SF Res (S, SE, N), under land (W)
Donnalee 916 991 2398

Other Noise Sources: distant: aircraft / roadway traffic / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Gray

Notes and Sketches on Reverse

FIELD NOISE MEASUREMENT DATA

ST5

SW Corner of Sankey & Pleasant Grove

Project Name: Placer Pkwy | Page 5 of

Project #: | Day / Date: 1-25 | My Name: WC

Sound Level Meter	Calibrator	Weather Meter
Model # LD 820	Model # 150B	Model # Serial #
Serial # 1324	Serial # 2233	
Weighting: A / C / Flat	Pre-Test: 114.2 dBA SPL	Terrain: Hard / Soft / Mixed
Response: Slow / Fast / Impl	Post-Test: 114.1 dBA SPL	Topo: Flat / Hilly (describe)
Windscreen: Yes / No		Wind: Steady / Gusty

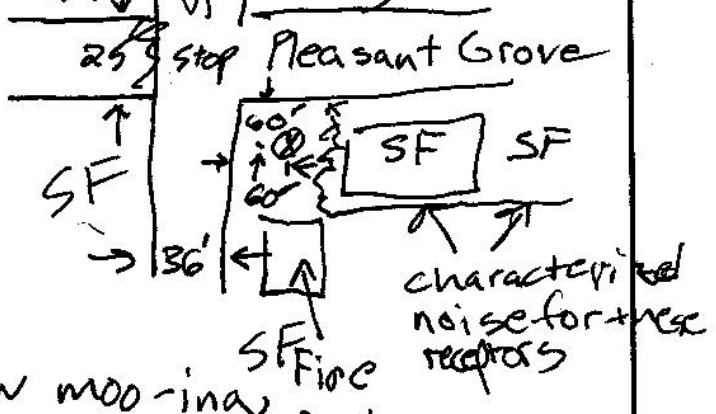
ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
	14:36	14:51	63.1	34.0	84.1	65.7	49.7	40.0	1-4/N	74.0		30.51	20

Roadway Name	Sankey WB/EB	Pleasant Grove SB/NB	
Speed (post/obs)	55	55	
Number of Lanes			
Width (pave/row)			
1- or 2- way			
Grade			
Bus Stops			
Stop Sign/Signal	yes	yes	
Street Parking			
Automobiles	5/6	9/10	
Medium Trucks	0/0	0/0	
Heavy Trucks	2/3	3/4	

Location(s) / GPS Reading(s):

N: 38.78007

W: 121.48885



Noise Sources: Rooster crowing, cow mooing, birds vocalizing, flagpole pinging, vehicular traffic on Pleasant Grove & Sankey, aircraft over flights. Dept. No. 2

Adj. Land Uses: SF Res (N, S, W, NE), Ag (SE)

Other Noise Sources: distant: aircraft / roadway traffic / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

FIELD NOISE MEASUREMENT DATA

ST6

3990 Sankey (West of due to dogs)

Project Name: Placer Pkwy | Page 6 of

Project #: | Day / Date: 1-25-06 | My Name: WC

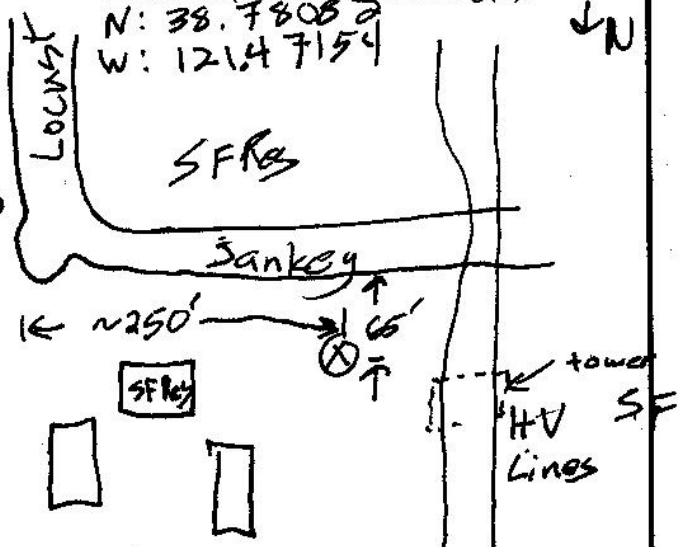
Sound Level Meter	Calibrator	Weather Meter
Model # LD 820	Model # 150B	Model # ____ Serial # ____
Serial # 1324	Serial # 2233	
Weighting: (A) / C / Flat	Pre-Test: 114.1 dBA SPL	Terrain: Hard / (Soft) / Mixed
Response: (Slow) / Fast / Impl	Post-Test: 114.1 dBA SPL	Topo: (Flat) / Hilly (describe)
Windscreen: (Yes) / No		Wind: Steady / (Gusty)

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
	15:18	15:33	52.0	33.1	66.8	56.0	44.6	39.4	2-7/N	59.9		30.50	30

Roadway Name	Sankey WB/EB		
Speed (post/obs)	55		
Number of Lanes	2		
Width (pave/row)	20'		
1- or 2- way	2-way		
Grade	flat		
Bus Stops	no		
Stoplights	no		
Street Parking	no		
Automobiles	2/4		
Medium Trucks	0/0		
Heavy Trucks	0/0		

Location(s) / GPS Reading(s):

N: 38.78082
W: 121.47154



Noise Sources: Dogs barking to E & S, birds vocalizing, vehicular traffic on Sankey & Locust, Aircraft overflight (prop)

Adj Land Uses: SF Res (E, W, S, N(this one is distant)), Undev/Ag (N also)

Other Noise Sources: distant: aircraft / roadway traffic / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

FIELD NOISE MEASUREMENT DATA

ST7

7967 Pleasant Grove

Project Name: Placer Pkwy — Page 7 of

Project #: — Day / Date: 1-24-06 — My Name: WC

Sound Level Meter	Calibrator	Weather Meter
Model # LD820	Model # 150B	Model # ____ Serial # ____
Serial # 1324	Serial # 2233	
Weighting: A / C / Flat	Pre-Test: 114.0 dBA SPL	Terrain: Hard / (Soft) / Mixed
Response: (Slow) / Fast / Impl	Post-Test: 113.8 dBA SPL	Topo: (Flat) / Hilly (describe)
Windscreen: (Yes) / No		Wind: Steady / (Gusty)

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
	9:37	9:52	59.9	39.6	71.3	55.6	48.6	44.3	2-5/N	55.5	38%	30.74	15

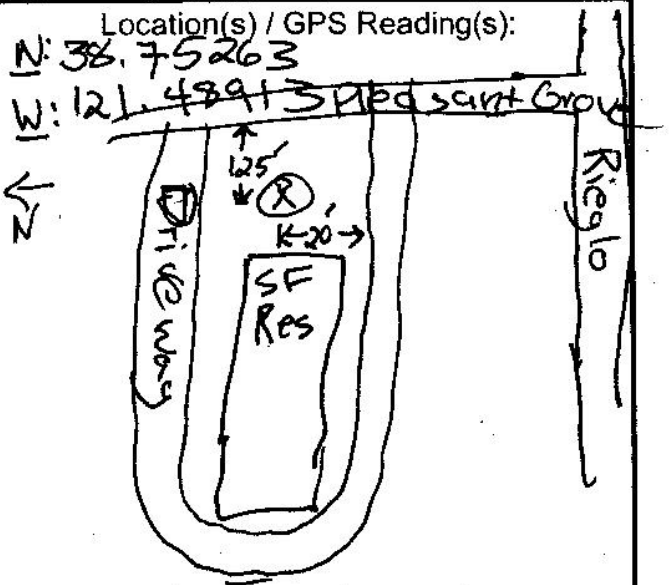
Roadway Name	Pleasant Grove SB/NB	Riego WB/EB	
Speed (post/obs)	55	55	
Number of Lanes	2,	2	
Width (pave/row)	20	24	
1- or 2- way	2-way	2-w	
Grade	flat	flat	
Bus Stops	no	no	
Stop signs/Signals	yes	yes	
Street Parking	no	no	
Automobiles	4 / 8	49/36	
Medium Trucks	0 / 0	3 / 1	
Heavy Trucks	1 / 0	6 / 6	

1MC/0MC

Location(s) / GPS Reading(s):

N: 38.75263

W: 121.48913 Pleasant Grove



★ Notes on back

Other Noise Sources: distant: aircraft / roadway traffic / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

FIELD NOISE MEASUREMENT DATA

ST 8

Project Name: Placer Pkwy Page 8 of

Project #: Day / Date: 1-26-06 My Name: WC

Sound Level Meter
Model # LD820
Serial # 1324
Weighting: (A) / C / Flat
Response: (Slow) / Fast / Impl
Windscreen: (Yes) / No

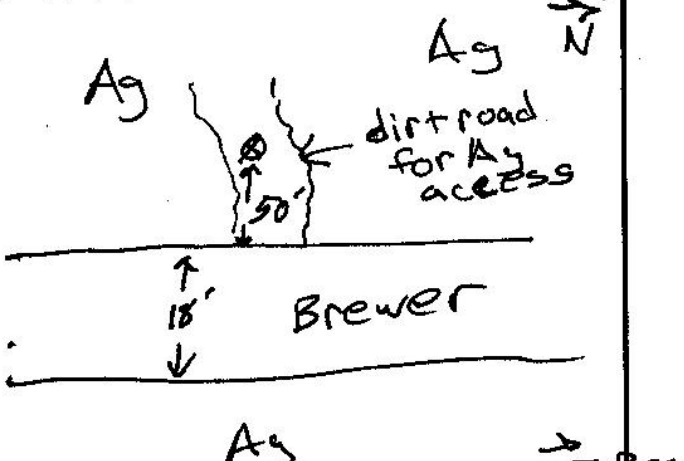
Calibrator
Model # 1503
Serial # 2233
Pre-Test: 113.8 dBA SPL
Post-Test: 113.8 dBA SPL

Weather Meter
Model # Serial #
Terrain: Hard / (Soft) / Mixed
Topo: (Flat) / Hilly (describe)
Wind: Steady / (Gusty)

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
	10:22	10:37	46.3	25.8	68.8	43.3	33.3	30.7	2-4.5/N	59.9		30.72	5

Roadway Name	Brewer SB/N		
Speed (post/obs)	55		
Number of Lanes	2		
Width (pave/row)	18'		
1- or 2- way	2-way		
Grade	flat		
Bus Stops	no		
Stoplights	no		
Street Parking	no		
Automobiles	0 13		
Medium Trucks	0 1 0		
Heavy Trucks	0 1 0		

Location(s) / GPS Reading(s):
N:38.78959 W:121.45169



Noise Sources: Train whistle, dogs barking, vehicular traffic on Brewer, birds vocalizing, frogs croaking
Adj. Land Uses: Ag (E, W, S), SF Res (N)

Other Noise Sources: distant: aircraft / roadway traffic / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

FIELD NOISE MEASUREMENT DATA

6382 #1 Phillips (?)

Project Name: Placer Pkwy Page 9 of

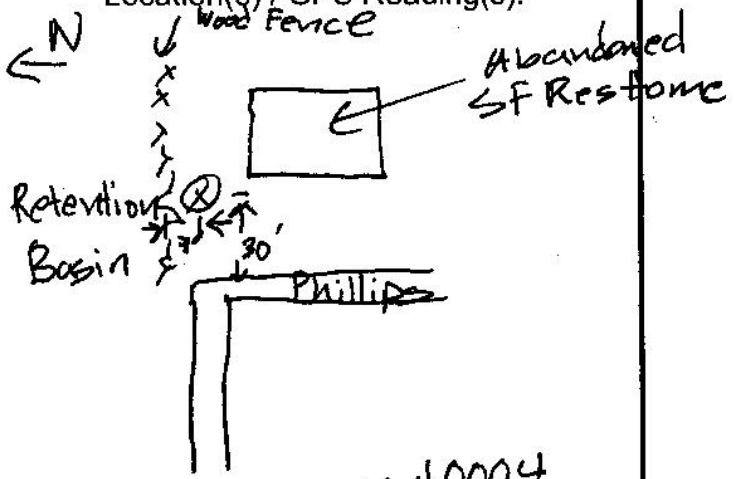
Project #: Day / Date: 1-20-06 My Name: WC

Sound Level Meter	Calibrator	Weather Meter
Model # LD820	Model # 150B	Model # Serial #
Serial # 1324	Serial # 2233	
Weighting: (A) / C / Flat	Pre-Test: 113.8 dBA SPL	Terrain: Hard (Soft) / Mixed
Response: (Slow) / Fast / Impl	Post-Test: 113.9 dBA SPL	Topo: (Flat) / Hilly (describe)
Windscreen: (Yes) / No		Wind: Steady (Gusty)

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
	10:55	11:10	36.9	25.1	59.8	38.8	32.0	27.0	2-4.5/N	59.5		30.69	0

Roadway Name	Phillips Rd
Speed (post/obs)	
Number of Lanes	
Width (pave/row)	
1- or 2- way	
Grade	
Bus Stops	
Stoplights	
Street Parking	
Automobiles	0
Medium Trucks	0
Heavy Trucks	0

Location(s) / GPS Reading(s):



N: 38.80250 W: 121.40004

Noise sources: Jet overflights, birds, electrical hums from LV power lines, frog croaking, prop-plane

adj Land Uses: Ret Basin (N), Undev/Ag (E), Ag (W), Ag (S)

Other Noise Sources: distant: aircraft / roadway traffic / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

MT | HT
1 | 1

FIELD NOISE MEASUREMENT DATA

MT | HT
1 | 1

ST10

Project Name: Placer Pkwy Page 10 of 10
Project #: Day / Date: 1-26-05 My Name: WC

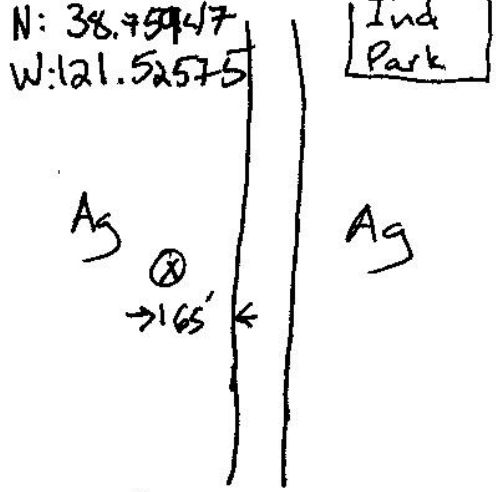
Sound Level Meter	Calibrator	Weather Meter
Model # LD 820	Model # 150B	Model # Serial #
Serial # 3294	Serial # 2233	
Weighting: A / C / Flat	Pre-Test: 113.9 dBA SPL	Terrain: Hard / Soft / Mixed
Response: Slow / Fast / Impl	Post-Test: 113.8 dBA SPL	Topo: Flat / Hilly (describe)
Windscreen: Yes / No		Wind: Steady / Gusty

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
	11:47	12:02	60.4	36.1	74.7	65.3	45.5	39.2	3-5-5/N	61.4		30.73	5

Roadway Name	SB/NB		
Speed (post/obs)	55		
Number of Lanes	2		
Width (pave/row)	48'		
1- or 2- way	2-way		
Grade	flat		
Bus Stops	no		
Stoplights	no		
Street Parking	no		
Automobiles	/		
Medium Trucks	/		
Heavy Trucks	/		

Location(s) / GPS Reading(s): ↑N

N: 38.75947
W: 121.52575



Noise sources: Vehicular traffic on & Riego, birds vocalizing,

Adj Land Uses: Industrial (N), Ag (S, E, W), Riego (S) & I-70 (W)

Other Noise Sources: distant: aircraft / roadway traffic / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

Appendix B
Input Data for Noise Modeling

2020
TNM Path Construction -- Alternative 1

Tag	Segment	Length (ft)	ROW Width (ft)	Elev. (ft)	Total Lanes	Average Daily Volume: Total (both directions, all lanes)			Peak Hourly Volume: 5% of Total ADV			Peak Hourly Volume: Level of Service			Traffic Composition -- Fraction of PHV by Vehicle Type: 2-axle, 4-tire vehicles			Medium Trucks			Heavy Trucks			Contour Distances from ROW Centerline: 66 dBA			60 dBA Leq		
						w/out Watt int'change	with N. Watt int'change	with S. Watt int'change	w/out Watt int'change	with N. Watt int'change	with S. Watt int'change	w/out Watt int'change	with N. Watt int'change	with S. Watt int'change	w/out Watt int'change	with N. Watt int'change	with S. Watt int'change	w/out Watt int'change	with N. Watt int'change	with S. Watt int'change	w/out Watt int'change	with N. Watt int'change	with S. Watt int'change	w/out Watt int'change	with N. Watt int'change	with S. Watt int'change	w/out Watt int'change	with N. Watt int'change	with S. Watt int'change
1A	SR 70/99 Interchange	1000	500		6				0	0	0				0	0	0	0	0	0	0	0	0						
1B	East of SR 70/99	7000	500	0	6	12,200	17,300	19,300	610	865	965	A	A	A	537	761	849	18	26	29	55	78	87	297	360	380	627	744	784
1C	Pacific Ave. Interchange	1000	500		6				0	0	0				0	0	0	0	0	0	0	0	0						
1D	East of PAI	5500	500	0	6	11,900	17,100	19,500	595	855	975	A	A	A	524	752	858	18	26	29	54	77	88	296	358	385	621	742	792
1E	Sutter Road Interchange	1000	500		6				0	0	0				0	0	0	0	0	0	0	0	0						
1F	East of SRI	2000	500	0	6	11,900	17,100	19,500	595	855	975	A	A	A	524	752	858	18	26	29	54	77	88	296	358	385	621	742	792
1G	Natomas Main Drainage Canal & L	500	500	30	6	11,900	17,100	19,500	595	855	975	A	A	A	524	752	858	18	26	29	54	77	88	94	139	188	400	567	608
1H	East of NMDC xing	2000	500	0	6	11,900	17,100	19,500	595	855	975	A	A	A	524	752	858	18	26	29	54	77	88	296	358	385	621	742	792
1I	Pleasant Grove Road crossing	250	500	0	6	11,900	17,100	19,500	595	855	975	A	A	A	524	752	858	18	26	29	54	77	88	296	358	385	621	742	792
1J	East of PGR xing	5500	trans	0	6	11,900	17,100	19,500	595	855	975	A	A	A	524	752	858	18	26	29	54	77	88	296	358	385	621	742	792
1K	Locust Road crossing	250	1000	0	6	11,900	17,100	19,500	595	855	975	A	A	A	524	752	858	18	26	29	54	77	88	296	358	385	621	742	792
1L	East of LR xing	6000	1000	0	6	11,900	17,100	19,500	595	855	975	A	A	A	524	752	858	18	26	29	54	77	88	296	358	385	621	742	792
1M	Brewer Road crossing	250	1000	0	6	11,900	17,100	19,500	595	855	975	A	A	A	524	752	858	18	26	29	54	77	88	296	358	385	621	742	792
1N	East of BR xing	6000	1000	0	6	11,900	17,100	19,500	595	855	975	A	A	A	524	752	858	18	26	29	54	77	88	296	358	385	621	742	792
1O	Country Acres Lane crossing	250	1000	0	6	11,900	17,100	19,500	595	855	975	A	A	A	524	752	858	18	26	29	54	77	88	296	358	385	621	742	792
1P	East of CAL xing	10000	1000	0	6	11,900	17,100	19,500	595	855	975	A	A	A	524	752	858	18	26	29	54	77	88	296	358	385	621	742	792
1Q	Watt Ave Interchange	1000	1000		6				0	0	0				0	0	0	0	0	0	0	0	0						
1R	East of WAI	10000	1000	0	6	11,900	17,700	19,800	595	885	990	A	A	A	524	779	871	18	27	30	54	80	89	296	365	390	621	758	800
1S	Pleasant Grove Creek crossing	1600	1000	10	6	11,900	17,700	19,800	595	885	990	A	A	A	524	779	871	18	27	30	54	80	89	206	267	290	607	750	790
1T	East of PGC xing	2000	1000	0	6	11,900	17,700	19,800	595	885	990	A	A	A	524	779	871	18	27	30	54	80	89	296	365	390	621	758	800
1U	Pleasant Grove Floodplain crossin	500	1000	10	6	11,900	17,700	19,800	595	885	990	A	A	A	524	779	871	18	27	30	54	80	89						
1V	East of PGF xing	8000	1000	0	6	11,900	17,700	19,800	595	885	990	A	A	A	524	779	871	18	27	30	54	80	89	296	365	390	621	758	800
1W	Un-named crossing	250	1000	0	6	11,900	17,700	19,800	595	885	990	A	A	A	524	779	871	18	27	30	54	80	89	296	365	390	621	758	800
1X	East of UN xing	8000	1000	0	6	11,900	17,700	19,800	595	885	990	A	A	A	524	779	871	18	27	30	54	80	89	296	365	390	621	758	800
1Y	Fiddyment Interchange	1000	1000		6				0	0	0				0	0	0	0	0	0	0	0	0						
1Z	East of Fiddyment	7000	500	0	6	20,700	22,600	24,500	1035	1130	1225	B	B	B	911	994	1078	31	34	37	93	102	110	396	415	435	817	850	883
1AA	Foothills Interchange	1000	500		6				0	0	0				0	0	0	0	0	0	0	0	0						
1AB	East of Foothills	5000	500	0	6	21,500	23,000	23,900	1075	1150	1195	B	B	B	946	1012	1052	32	35	36	97	104	108	405	420	430	830	860	875
1AC	Industrial Blvd. (RR) crossing	250	500	30	6	21,500	23,000	23,900	1075	1150	1195	B	B	B	946	1012	1052	32	35	36	97	104	108	232	243	247	650	675	690
1AD	East of IB(RR) xing	2000	500	0	6	21,500	23,000	23,900	1075	1150	1195	B	B	B	946	1012	1052	32	35	36	97	104	108	405	420	430	830	860	875
1AE	SR65 Interchange	1000	1000		6				0	0	0				0	0	0	0	0	0	0	0	0						

2040
TNM Path Construction -- Alternative 1

Tag	Segment	Length (ft)	ROW Width (ft)	Elev. (ft)	Total Lanes	Average Daily Volume: Total (both directions, all lanes)			Peak Hourly Volume: 5% of Total ADV			Peak Hourly Volume: Level of Service			Traffic Composition -- Fraction of PHV by Vehicle Type: 2-axle, 4-tire vehicles			Medium Trucks			Heavy Trucks			Contour Distances from ROW Centerline: 66 dBA			60 dBA Leq		
						w/out Watt int'change	with N. Watt int'change	with S. Watt int'change	w/out Watt int'change	with N. Watt int'change	with S. Watt int'change	w/out Watt int'change	with N. Watt int'change	with S. Watt int'change	w/out Watt int'change	with N. Watt int'change	with S. Watt int'change	w/out Watt int'change	with N. Watt int'change	with S. Watt int'change	w/out Watt int'change	with N. Watt int'change	with S. Watt int'change	w/out Watt int'change	with N. Watt int'change	with S. Watt int'change	w/out Watt int'change	with N. Watt int'change	with S. Watt int'change
1A	SR 70/99 Interchange	1000	500		6				0	0	0				0	0	0	0	0	0	0	0	0						
1B	East of SR 70/99	7000	500	0	6	40,300	47,400	55,200	2015	2370	2760	B	B	B	1773	2086	2429	60	71	83	181	213	248	617	675	733	1286	1400	1486
1C	Pacific Ave. Interchange	1000	500		6				0	0	0				0	0	0	0	0	0	0	0	0						
1D	East of PAI	5500	500	0	6	42,800	54,600	71,000	2140	2730	3550	B	B	C	1883	2402	3124	64	82	107	193	246	320	633	730	840	1329	1486	1643
1E	Sutter Road Interchange	1000	500		6				0	0	0				0	0	0	0	0	0	0	0	0						
1F	East of SRI	2000	500	0	6	45,100	59,300	82,800	2255	2965	4140	B	B	C	1984	2609	3643	68	89	124	203	267	373	658	760	913	1357	1529	1743
1G	Natomas Main Drainage Canal & L	500	500	30	6	45,100	59,300	82,800	2255	2965	4140	B	B	C	1984	2609	3643	68	89	124	203	267	373	413	570	710	1200	1400	1633
1H	East of NMDC xing	2000	500	0	6	45,100	59,300	82,800	2255	2965	4140	B	B	C	1984	2609	3643	68	89	124	203	267	373	658	760	913	1357	1529	1743
1I	Pleasant Grove Road crossing	250	500	0	6	45,100	59,300	82,800	2255	2965	4140	B	B	C	1984	2609	3643	68	89	124	203	267	373	658	760	913	1357	1529	1743
1J	East of PGR xing	5500	trans	0	6	45,100	59,300	82,800	2255	2965	4140	B	B	C	1984	2609	3643	68	89	124	203	267	373	658	760	913	1357	1529	1743
1K	Locust Road crossing	250	1000	0	6	45,100	59,300	82,800	2255	2965	4140	B	B	C	1984	2609	3643	68	89	124	203	267	373	658	760	913	1357	1529	1743
1L	East of LR xing	6000	1000	0	6	45,100	59,300	82,800	2255	2965	4140	B	B	C	1984	2609	3643	68	89	124	203	267	373	658	760	913	1357	1529	1743
1M	Brewer Road crossing	250	1000	0	6	45,100	59,300	82,800	2255	2965	4140	B	B	C	1984	2609	3643	68	89	124	203	267	373	658	760	913	1357	1529	1743
1N	East of BR xing	6000	1000	0	6	45,100	59,300	82,800	2255	2965	4140	B	B	C	1984	2609	3643	68	89	124	203	267	373	658	760	913	1357	1529	1743
1O	Country Acres Lane crossing	250	1000	0	6	45,100	59,300	82,800	2255	2965	4140	B	B	C	1984	2609	3643	68	89	124	203	267	373	658	760	913	1357	1529	1743
1P	East of CAL xing	10000	1000	0	6	45,100	59,300	82,800	2255	2965	4140	B	B	C	1984	2609	3643	68	89	124	203	267	373	658	760	913	1357	1529	1743
1Q	Watt Ave Interchange	1000	1000		6				0	0	0				0	0	0	0	0	0	0	0	0						
1R	East of WAI	10000	1000	0	6	45,100	57,800	62,300	2255	2890	3115	B	B	B	1984	2543	2741	68	87	93	203	260	280	658	750	730	1357	1514	1557
1S	Pleasant Grove Creek crossing	1600	1000	10	6	45,100	57,800	62,300	2255	2890	3115	B	B	B	1984	2543	2741	68	87	93	203	260	280	642	750	780	1417	1600	1650
1T	East of PGC xing	2000	1000	0	6	45,100	57,800	62,300	2255	2890	3115	B	B	B	1984	2543	2741	68	87	93	203	260	280	658	750	730	1357	1514	1557
1U	Pleasant Grove Floodplain crossin	500	1000	10	6	45,100	57,800	62,300	2255	2890	3115	B	B	B	1984	2543	2741	68	87	93	203	260	280	642	750	780	1417	1600	1650
1V	East of PGF xing	8000	1000	0	6	45,100	57,800	62,300	2255	2890	3115	B	B	B	1984	2543	2741	68	87	93	203	260	280	658	750	730	1357	1514	1557
1W	Un-named crossing	250	1000	0	6	45,100	57,800	62,300	2255	2890	3115	B	B	B	1984	2543	2741	68	87	93	203	260	280	658	750	730	1357	1514	1557
1X	East of UN xing	8000	1000	0	6	45,100	57,800	62,300	2255	2890	3115	B	B	B	1984	2543	2741	68	87	93	203	260	280	658	750	730	1357	1514	1557
1Y	Fiddyment Interchange	1000	1000		6				0	0	0				0	0	0	0	0	0	0	0	0						
1Z	East of Fiddyment	7000	500	0	6	60,200	64,600	66,000	3010	3230	3300	B	C	C	2649	2842	2904	90	97	99	271	291	297	770	800	810	1543	1586	1600
1AA	Foothills Interchange	1000	500		6				0	0	0				0	0	0	0	0	0	0	0	0						
1AB	East of Foothills	5000	500	0	6	68,500	70,400	70,800	3425	3520	3540	B	C	C	3014	3098	3115	103	106	106	308	317	319	830	840	840	1629	1643	1643
1AC	Industrial Blvd. (RR) crossing	250	500	30	6	68,500	70,400	70,800	3425	3520	3540	B	C	C	3014	3098	3115	103	106	106	308	317	319	620	640	640	1500	1600	1600
1AD	East of IB(RR) xing	2000	500	0	6	68,500	70,400	70,800	3425	3520	3540	B	C	C	3014	3098	3115	103	106	106	308	317	319	830	840	840	1629	1643	1643
1AE	SR65 Interchange	1000	1000		6				0	0	0				0	0	0	0	0	0	0	0	0						

Notes:
1. "Trans" = transition from 500 to 1000 feet of ROW corridor width.
2. Level of Service input from DKS Table 12 or 21 as follows: 2020, four lanes of travel; 2040, six lanes of travel. All Average Daily Volumes from DKS tables and assume six travel lanes for 2020 and 2040.
3. Zero elevation crossings are considered traverses over Placer Parkway.
4. Non-zero elevation crossings are described in Feb. 2006 draft project description and on April 5th 2006 URS Figure 1 (Tier 1 EIS/EIR).
5. Truck compositions based on "median" percentages shown on DKS Associates "truckdata.xls" found on their FTP site.
6. Peak hourly volume assumed to be 10% of half of the total Average Daily Volume.
7. Unless specifically indicated in DKS tables, "East of Foothills" shall mean "West of SR 65" for volumes and LoS.

2020
TNM Path Construction -- Alternative 2

Tag	Segment	Length (ft)	ROW Width (ft)	Elev. (ft)	Total Lanes	Average Daily Volume (both dir., all lanes)		Peak Hourly Volume 5% of Total ADV		Level of Service		Traffic Composition -- Fraction of PHV by Vehicle Type 2-axle, 4-tire		Medium Trucks		Heavy Trucks		Contour Distances from ROW Centerline 66 dBA		60 dBA Leq	
						w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change
1A	SR 70/99 Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1B	East of SR 70/99	7000	500	0	6	15,800	21,900	790	1095	A	B	695	964	24	33	71	99	355	431	790	940
1C	Pacific Ave. Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1D	East of PAI	5500	500	0	6	15,800	22,100	790	1105	A	B	695	972	24	33	71	99	355	431	790	940
1E	Sutter Road Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1F	East of SRI	2000	500	0	6	15,800	22,100	790	1105	A	B	695	972	24	33	71	99	355	431	790	940
1G	Natomas Main Drainage Canal Crossing	500	500	30	6	15,800	22,100	790	1105	A	B	695	972	24	33	71	99	100	100	590	730
1H	East of NMDC xing	2000	500	0	6	15,800	22,100	790	1105	A	B	695	972	24	33	71	99	355	431	790	940
1I	Pleasant Grove Road Crossing	250	500	0	6	15,800	22,100	790	1105	A	B	695	972	24	33	71	99	355	431	790	940
1J	East of PGR xing	6500	trans	0	6	15,800	22,100	790	1105	A	B	695	972	24	33	71	99	355	431	790	940
2K	Locust Road crossing	250	1000	0	6	15,800	22,100	790	1105	A	B	695	972	24	33	71	99	355	431	790	940
2L	East of LR xing	6500	1000	0	6	15,800	22,100	790	1105	A	B	695	972	24	33	71	99	355	431	790	940
2M	Brewer Road crossing	250	1000	0	6	15,800	22,100	790	1105	A	B	695	972	24	33	71	99	355	431	790	940
2N	East of BR xing	6500	1000	0	6	15,800	22,100	790	1105	A	B	695	972	24	33	71	99	355	431	790	940
2O	Country Acres Lane crossing	250	1000	0	6	15,800	22,100	790	1105	A	B	695	972	24	33	71	99	355	431	790	940
2P	East of CAL xing	10000	1000	0	6	15,800	22,100	790	1105	A	B	695	972	24	33	71	99	355	431	790	940
2Q	Watt Ave Interchange	1000	1000		6			0	0			0	0	0	0	0	0				
2R	East of WAI	4000	1000	0	6	15,800	20,000	790	1000	A	B	695	880	24	30	71	90	355	406	790	900
1S	Pleasant Grove Creek crossing	1600	1000	10	6	15,800	20,000	790	1000	A	B	695	880	24	30	71	90	258	390	788	900
1T	East of PGC xing	2000	1000	0	6	15,800	20,000	790	1000	A	B	695	880	24	30	71	90	355	406	790	900
1U	Pleasant Grove Floodplain crossing	500	1000	10	6	15,800	20,000	790	1000	A	B	695	880	24	30	71	90	258	390	788	900
1V	East of PGF xing	8000	1000	0	6	15,800	20,000	790	1000	A	B	695	880	24	30	71	90	355	406	790	900
1W	Un-named crossing	250	1000	0	6	15,800	20,000	790	1000	A	B	695	880	24	30	71	90	355	406	790	900
1X	East of UN xing	8000	1000	0	6	15,800	20,000	790	1000	A	B	695	880	24	30	71	90	355	406	790	900
1Y	Fiddyment Interchange	1000	1000		6			0	0			0	0	0	0	0	0				
1Z	East of Fiddyment	7000	500	0	6	23,400	24,400	1170	1220	B	B	1030	1074	35	37	105	110	445	456	975	1000
1AA	Foothills Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1AB	East of Foothills	5000	500	0	6	23,100	24,300	1155	1215	B	B	1016	1069	35	36	104	109	444	456	970	990
1AC	Industrial Blvd. (RR) crossing	250	500	30	6	23,100	24,300	1155	1215	B	B	1016	1069	35	36	104	109	260	260	753	780
1AD	East of IB(RR) xing	2000	500	0	6	23,100	24,300	1155	1215	B	B	1016	1069	35	36	104	109	444	456	970	990
1AE	SR65 Interchange	1000	1000		6			0	0			0	0	0	0	0	0				

2040
TNM Path Construction -- Alternative 2

Tag	Segment	Length (ft)	ROW Width (ft)	Elev. (ft)	Total Lanes	Average Daily Volume (both dir., all lanes)		Peak Hourly Volume 5% of Total ADV		Level of Service		Traffic Composition -- Fraction of PHV by Vehicle Type 2-axle, 4-tire		Medium Trucks		Heavy Trucks		Contour Distances from ROW Centerline 66 dBA		60 dBA Leq	
						w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change
1A	SR 70/99 Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1B	East of SR 70/99	7000	500	0	6	44,500	52,800	2225	2640	B	B	1958	2323	67	79	200	238	650	717	1357	1457
1C	Pacific Ave. Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1D	East of PAI	5500	500	0	6	49,200	63,300	2460	3165	B	B	2165	2785	74	95	221	285	690	790	1414	1571
1E	Sutter Road Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1F	East of SRI	2000	500	0	6	55,800	75,400	2790	3770	B	C	2455	3318	84	113	251	339	740	870	1500	1686
1G	Natomas Main Drainage Canal Crossing	500	500	30	6	55,800	75,400	2790	3770	B	C	2455	3318	84	113	251	339	553	660	1433	1550
1H	East of NMDC xing	2000	500	0	6	55,800	75,400	2790	3770	B	C	2455	3318	84	113	251	339	740	870	1500	1686
1I	Pleasant Grove Road Crossing	250	500	0	6	55,800	75,400	2790	3770	B	C	2455	3318	84	113	251	339	740	870	1500	1686
1J	East of PGR xing	6500	trans	0	6	55,800	75,400	2790	3770	B	C	2455	3318	84	113	251	339	740	870	1500	1686
2K	Locust Road crossing	250	1000	0	6	55,800	75,400	2790	3770	B	C	2455	3318	84	113	251	339	740	870	1500	1686
2L	East of LR xing	6500	1000	0	6	55,800	75,400	2790	3770	B	C	2455	3318	84	113	251	339	740	870	1500	1686
2M	Brewer Road crossing	250	1000	0	6	55,800	75,400	2790	3770	B	C	2455	3318	84	113	251	339	740	870	1500	1686
2N	East of BR xing	6500	1000	0	6	55,800	75,400	2790	3770	B	C	2455	3318	84	113	251	339	740	870	1500	1686
2O	Country Acres Lane crossing	250	1000	0	6	55,800	75,400	2790	3770	B	C	2455	3318	84	113	251	339	740	870	1500	1686
2P	East of CAL xing	10000	1000	0	6	55,800	75,400	2790	3770	B	C	2455	3318	84	113	251	339	740	870	1500	1686
2Q	Watt Ave Interchange	1000	1000		6			0	0			0	0	0	0	0	0				
2R	East of WAI	4000	1000	0	6	55,800	63,400	2790	3170	B	B	2455	2790	84	95	251	285	740	790	1500	1571
1S	Pleasant Grove Creek crossing	1600	1000	10	6	55,800	63,400	2790	3170	B	B	2455	2790	84	95	251	285	730	790	1567	1667
1T	East of PGC xing	2000	1000	0	6	55,800	63,400	2790	3170	B	B	2455	2790	84	95	251	285	740	790	1500	1571
1U	Pleasant Grove Floodplain crossing	500	1000	10	6	55,800	63,400	2790	3170	B	B	2455	2790	84	95	251	285	730	790	1567	1667
1V	East of PGF xing	8000	1000	0	6	55,800	63,400	2790	3170	B	B	2455	2790	84	95	251	285	740	790	1500	1571
1W	Un-named crossing	250	1000	0	6	55,800	63,400	2790	3170	B	B	2455	2790	84	95	251	285	740	790	1500	1571
1X	East of UN xing	8000	1000	0	6	55,800	63,400	2790	3170	B	B	2455	2790	84	95	251	285	740	790	1500	1571
1Y	Fiddyment Interchange	1000	1000		6			0	0			0	0	0	0	0	0				
1Z	East of Fiddyment	7000	500	0	6	64,200	66,700	3210	3335	C	C	2825	2935	96	100	289	300	800	813	1586	1600
1AA	Foothills Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1AB	East of Foothills	5000	500	0	6	71,000	71,700	3550	3585	C	C	3124	3155	107	108	320	323	840	850	1643	1683
1AC	Industrial Blvd. (RR) crossing	250	500	30	6	71,000	71,700	3550	3585	C	C	3124	3155	107	108	320	323	640	640	1620	1617
1AD	East of IB(RR) xing	2000	500	0	6	71,000	71,700	3550	3585	C	C	3124	3155	107	108	320	323	840	850	1643	1683
1AE	SR65 Interchange	1000	1000		6			0	0			0	0	0	0	0	0				

Notes:
1. "Trans" = transition from 500 to 1000 feet of ROW corridor width.
2. Level of Service input from DKS Table 12 or 21 as follows: 2020, four lanes of travel; 2040, six lanes of travel. All Average Daily Volumes from DKS tables and assume six travel lanes for 2020 and 2040.
3. Zero elevation crossings are considered traverses over Placer Parkway.
4. Non-zero elevation crossings are described in Feb. 2006 draft project description and on April 5th 2006 URS Figure 1 (Tier 1 EIS/EIR).
5. Truck compositions based on "median" percentages shown on DKS Associates "truckdata.xls" found on their FTP site.
6. Peak hourly volume assumed to be 10% of half of the total Average Daily Volume.
7. Unless specifically indicated in DKS tables, "East of Foothills" shall mean "West of SR 65" for volumes and LoS.

2020
TNM Path Construction -- Alternative 3

Tag	Segment	Length (ft)	ROW Width (ft)	Elev. (ft)	Total Lanes	Average Daily Volume (both dir., all lanes)		Peak Hourly Volume 5% of Total ADV		Peak Hourly Volume Level of Service		Traffic Composition -- Fraction of PHV by Vehicle Type 2-axle, 4-tire		Traffic Composition -- Fraction of PHV by Vehicle Type Medium Trucks		Traffic Composition -- Fraction of PHV by Vehicle Type Heavy Trucks		Contour Distances from ROW Centerline 66 dBA		Contour Distances from ROW Centerline 60 dBA Leq	
						w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change
1A	SR 70/99 Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1B	East of SR 70/99	7000	500	0	6	16,400	21,300	820	1065	A	B	722	937	25	32	74	96	405	406	880	938
1C	Pacific Ave. Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1D	East of PAI	5500	500	0	6	16,500	21,400	825	1070	A	B	726	942	25	32	74	96	365	395	810	863
1E	Sutter Road Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1F	East of SRI	2000	500	0	6	16,500	21,400	825	1070	A	B	726	942	25	32	74	96	365	395	810	863
1G	Natomas Main Drainage Canal Crossing	500	500	30	6	16,500	21,400	825	1070	A	B	726	942	25	32	74	96	100	100	610	670
1H	East of NMDC xing	2000	500	0	6	16,500	21,400	825	1070	A	B	726	942	25	32	74	96	365	395	810	863
1I	Pleasant Grove Road Crossing	250	500	0	6	16,500	21,400	825	1070	A	B	726	942	25	32	74	96	365	395	810	863
1J	East of PGR xing	6500	trans	0	6	16,500	21,400	825	1070	A	B	726	942	25	32	74	96	365	395	810	863
2K	Locust Road crossing	250	1000	0	6	16,500	21,400	825	1070	A	B	726	942	25	32	74	96	365	395	810	863
3L	East of LR xing	10000	1000	0	6	16,500	21,400	825	1070	A	B	726	942	25	32	74	96	365	395	810	863
3M	Brewer Road crossing	250	1000	0	6	16,500	21,400	825	1070	A	B	726	942	25	32	74	96	365	395	810	863
3N	East of BR xing	6000	1000	0	6	16,500	21,400	825	1070	A	B	726	942	25	32	74	96	365	395	810	863
3O	Country Acres Lane crossing	250	1000	0	6	16,500	21,400	825	1070	A	B	726	942	25	32	74	96	365	395	810	863
3P	East of CAL xing	6000	1000	0	6	16,500	21,400	825	1070	A	B	726	942	25	32	74	96	365	395	810	863
3Q	Watt Ave crossing	250	1000		6			0	0			0	0	0	0	0	0				
3R	East of WA xing	5500	1000	0	6	16,500	19,100	825	955	A	A	726	840	25	29	74	86	365	380	810	875
1S	Pleasant Grove Creek crossing	1600	1000	10	6	16,500	19,100	825	955	A	A	726	840	25	29	74	86	256	380	800	875
1T	East of PGC xing	2000	1000	0	6	16,500	19,100	825	955	A	A	726	840	25	29	74	86	365	380	810	875
1U	Pleasant Grove Floodplain crossing	500	1000	10	6	16,500	19,100	825	955	A	A	726	840	25	29	74	86	256	380	800	875
1V	East of PGF xing	8000	1000	0	6	16,500	19,100	825	955	A	A	726	840	25	29	74	86	365	380	810	875
1W	Un-named crossing	250	1000	0	6	16,500	19,100	825	955	A	A	726	840	25	29	74	86	365	380	810	875
1X	East of UN xing	8000	1000	0	6	16,500	19,100	825	955	A	A	726	840	25	29	74	86	365	380	810	875
1Y	Fiddyment Interchange	1000	1000		6			0	0			0	0	0	0	0	0				
1Z	East of Fiddyment	7000	500	0	6	23,900	24,300	1195	1215	B	B	1052	1069	36	36	108	109	438	438	1000	1000
1AA	Foothills Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1AB	East of Foothills	5000	500	0	6	23,400	24,300	1170	1215	B	B	1030	1069	35	36	105	109	431	456	962	990
1AC	Industrial Blvd. (RR) crossing	250	500	30	6	23,400	24,300	1170	1215	B	B	1030	1069	35	36	105	109	260	260	760	780
1AD	East of IB(RR) xing	2000	500	0	6	23,400	24,300	1170	1215	B	B	1030	1069	35	36	105	109	431	456	962	990
1AE	SR65 Interchange	1000	1000		6			0	0			0	0	0	0	0	0				

2040
TNM Path Construction -- Alternative 3

Tag	Segment	Length (ft)	ROW Width (ft)	Elev. (ft)	Total Lanes	Average Daily Volume (both dir., all lanes)		Peak Hourly Volume 5% of Total ADV		Peak Hourly Volume Level of Service		Traffic Composition -- Fraction of PHV by Vehicle Type 2-axle, 4-tire		Traffic Composition -- Fraction of PHV by Vehicle Type Medium Trucks		Traffic Composition -- Fraction of PHV by Vehicle Type Heavy Trucks		Contour Distances from ROW Centerline 66 dBA		Contour Distances from ROW Centerline 60 dBA Leq	
						w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change
1A	SR 70/99 Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1B	East of SR 70/99	7000	500	0	6	45,300	51,500	2265	2575	B	B	1993	2266	68	77	204	232	658	708	1367	1450
1C	Pacific Ave. Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1D	East of PAI	5500	500	0	6	50,600	61,300	2530	3065	B	B	2226	2697	76	92	228	276	700	780	1450	1583
1E	Sutter Road Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1F	East of SRI	2000	500	0	6	57,800	72,100	2890	3605	B	C	2543	3172	87	108	260	324	750	850	1533	1700
1G	Natomas Main Drainage Canal Crossing	500	500	30	6	57,800	72,100	2890	3605	B	C	2543	3172	87	108	260	324	500	650	1470	1517
1H	East of NMDC xing	2000	500	0	6	57,800	72,100	2890	3605	B	C	2543	3172	87	108	260	324	750	850	1533	1700
1I	Pleasant Grove Road Crossing	250	500	0	6	57,800	72,100	2890	3605	B	C	2543	3172	87	108	260	324	750	850	1533	1700
1J	East of PGR xing	6500	trans	0	6	57,800	72,100	2890	3605	B	C	2543	3172	87	108	260	324	750	850	1533	1700
2K	Locust Road crossing	250	1000	0	6	57,800	72,100	2890	3605	B	C	2543	3172	87	108	260	324	750	850	1533	1700
3L	East of LR xing	10000	1000	0	6	57,800	72,100	2890	3605	B	C	2543	3172	87	108	260	324	750	850	1533	1700
3M	Brewer Road crossing	250	1000	0	6	57,800	72,100	2890	3605	B	C	2543	3172	87	108	260	324	750	850	1533	1700
3N	East of BR xing	6000	1000	0	6	57,800	72,100	2890	3605	B	C	2543	3172	87	108	260	324	750	850	1533	1700
3O	Country Acres Lane crossing	250	1000	0	6	57,800	72,100	2890	3605	B	C	2543	3172	87	108	260	324	750	850	1533	1700
3P	East of CAL xing	6000	1000	0	6	57,800	72,100	2890	3605	B	C	2543	3172	87	108	260	324	750	850	1533	1700
3Q	Watt Ave crossing	250	1000		6			0	0			0	0	0	0	0	0				
3R	East of WA xing	5500	1000	0	6	57,800	63,200	2890	3160	B	B	2543	2781	87	95	260	284	750	790	1533	1600
1S	Pleasant Grove Creek crossing	1600	1000	10	6	57,800	63,200	2890	3160	B	B	2543	2781	87	95	260	284	750	788	1600	1563
1T	East of PGC xing	2000	1000	0	6	57,800	63,200	2890	3160	B	B	2543	2781	87	95	260	284	750	790	1533	1600
1U	Pleasant Grove Floodplain crossing	500	1000	10	6	57,800	63,200	2890	3160	B	B	2543	2781	87	95	260	284	750	788	1600	1563
1V	East of PGF xing	8000	1000	0	6	57,800	63,200	2890	3160	B	B	2543	2781	87	95	260	284	750	790	1533	1600
1W	Un-named crossing	250	1000	0	6	57,800	63,200	2890	3160	B	B	2543	2781	87	95	260	284	750	790	1533	1600
1X	East of UN xing	8000	1000	0	6	57,800	63,200	2890	3160	B	B	2543	2781	87	95	260	284	750	790	1533	1600
1Y	Fiddyment Interchange	1000	1000		6			0	0			0	0	0	0	0	0				
1Z	East of Fiddyment	7000	500	0	6	65,200	67,400	3260	3370	C	C	2869	2966	98	101	293	303	800	820	1567	1650
1AA	Foothills Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1AB	East of Foothills	5000	500	0	6	71,700	72,500	3585	3625	C	C	3155	3190	108	109	323	326	850	850	1683	1700
1AC	Industrial Blvd. (RR) crossing	250	500	30	6	71,700	72,500	3585	3625	C	C	3155	3190	108	109	323	326	640	650	1609	1608
1AD	East of IB(RR) xing	2000	500	0	6	71,700	72,500	3585	3625	C	C	3155	3190	108	109	323	326	850	850	1683	1700
1AE	SR65 Interchange	1000	1000		6			0	0			0	0	0	0	0	0				

Notes:
1. "Trans" = transition from 500 to 1000 feet of ROW corridor width.
2. Level of Service input from DKS Table 12 or 21 as follows: 2020, four lanes of travel; 2040, six lanes of travel. All Average Daily Volumes from DKS tables and assume six travel lanes for 2020 and 2040.
3. Zero elevation crossings are considered traverses over Placer Parkway.
4. Non-zero elevation crossings are described in Feb. 2006 draft project description and on April 5th 2006 URS Figure 1 (Tier 1 EIS/EIR).
5. Truck compositions based on "median" percentages shown on DKS Associates "truckdata.xls" found on their FTP site.
6. Peak hourly volume assumed to be 10% of half of the total Average Daily Volume.
7. Unless specifically indicated in DKS tables, "East of Foothills" shall mean "West of SR 65" for volumes and LoS.

2020
TNM Path Construction -- Alternative 4

Tag	Segment	Length (ft)	ROW Width (ft)	Elev. (ft)	Total Lanes	Average Daily Volume (both dir., all lanes)		Peak Hourly Volume 5% of Total ADV		Peak Hourly Volume Level of Service		Traffic Composition -- Fraction of PHV by Vehicle Type 2-axle, 4-tire		Traffic Composition -- Fraction of PHV by Vehicle Type Medium Trucks		Traffic Composition -- Fraction of PHV by Vehicle Type Heavy Trucks		Contour Distances from ROW Centerline 66 dBA		Contour Distances from ROW Centerline 60 dBA Leq	
						w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change
4A	SR 70/99 Interchange	1000	500		6			0	0			0	0	0	0	0	0				
4B	East of SR 70/99	8000	500	0	6	16,700	21,900	835	1095	A	B	735	964	25	33	75	99	367	431	810	840
4C	Pacific Ave. Interchange	1000	500		6			0	0			0	0	0	0	0	0				
4D	East of PAI	4000	500	0	6	16,100	21,500	805	1075	A	B	708	946	24	32	72	97	360	450	792	988
4E																					
4F																					
4G	Natomas Main Drainage Canal Crossing	1000	500	30	6	16,100	21,500	805	1075	A	B	708	946	24	32	72	97	100	100	596	720
4H	East of NMDC xing	3000	500	0	6	16,100	21,500	805	1075	A	B	708	946	24	32	72	97	360	450	792	988
4I	Pleasant Grove Road Crossing	250	500	0	6	16,100	21,500	805	1075	A	B	708	946	24	32	72	97	360	450	792	988
4J	East of PGR xing	5500	trans	0	6	16,100	21,500	805	1075	A	B	708	946	24	32	72	97	360	450	792	988
4K	Locust Road crossing	250	1000	0	6	16,100	21,500	805	1075	A	B	708	946	24	32	72	97	360	450	792	988
4L	East of LR xing	5500	1000	0	6	16,100	21,500	805	1075	A	B	708	946	24	32	72	97	360	450	792	988
3M	Brewer Road crossing	250	1000	0	6	16,100	21,500	805	1075	A	B	708	946	24	32	72	97	360	450	792	988
3N	East of BR xing	6000	1000	0	6	16,100	21,500	805	1075	A	B	708	946	24	32	72	97	360	450	792	988
3O	Country Acres Lane crossing	250	1000	0	6	16,100	21,500	805	1075	A	B	708	946	24	32	72	97	360	450	792	988
3P	East of CAL xing	6000	1000	0	6	16,100	21,500	805	1075	A	B	708	946	24	32	72	97	360	450	792	988
3Q	Watt Ave crossing	250	1000		6			0	0			0	0	0	0	0	0				
3R	East of WA xing	5500	1000	0	6	16,100	18,600	805	930	A	A	708	818	24	28	72	84	360	390	792	863
1S	Pleasant Grove Creek crossing	1600	1000	10	6	16,100	18,600	805	930	A	A	708	818	24	28	72	84	260	375	790	863
1T	East of PGC xing	2000	1000	0	6	16,100	18,600	805	930	A	A	708	818	24	28	72	84	360	390	792	863
1U	Pleasant Grove Floodplain crossing	500	1000	10	6	16,100	18,600	805	930	A	A	708	818	24	28	72	84	260	375	790	863
1V	East of PGF xing	8000	1000	0	6	16,100	18,600	805	930	A	A	708	818	24	28	72	84	360	390	792	863
1W	Un-named crossing	250	1000	0	6	16,100	18,600	805	930	A	A	708	818	24	28	72	84	360	390	792	863
1X	East of UN xing	8000	1000	0	6	16,100	18,600	805	930	A	A	708	818	24	28	72	84	360	390	792	863
1Y	Fiddyment Interchange	1000	1000		6			0	0			0	0	0	0	0	0				
1Z	East of Fiddyment	7000	500	0	6	23,700	23,900	1185	1195	B	B	1043	1052	36	36	107	108	450	456	988	988
1AA	Foothills Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1AB	East of Foothills	5000	500	0	6	23,000	23,800	1150	1190	B	B	1012	1047	35	36	104	107	444	450	963	988
1AC	Industrial Blvd. (RR) crossing	250	500	30	6	23,000	23,800	1150	1190	B	B	1012	1047	35	36	104	107	100	100	713	770
1AD	East of IB(RR) xing	2000	500	0	6	23,000	23,800	1150	1190	B	B	1012	1047	35	36	104	107	444	450	963	988
1AE	SR65 Interchange	1000	1000		6			0	0			0	0	0	0	0	0				

2040
TNM Path Construction -- Alternative 4

Tag	Segment	Length (ft)	ROW Width (ft)	Elev. (ft)	Total Lanes	Average Daily Volume (both dir., all lanes)		Peak Hourly Volume 5% of Total ADV		Peak Hourly Volume Level of Service		Traffic Composition -- Fraction of PHV by Vehicle Type 2-axle, 4-tire		Traffic Composition -- Fraction of PHV by Vehicle Type Medium Trucks		Traffic Composition -- Fraction of PHV by Vehicle Type Heavy Trucks		Contour Distances from ROW Centerline 66 dBA		Contour Distances from ROW Centerline 60 dBA Leq	
						w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change
4A	SR 70/99 Interchange	1000	500		6			0	0			0	0	0	0	0	0				
4B	East of SR 70/99	8000	500	0	6	52,200	62,300	2610	3115	B	B	2297	2741	78	93	235	280	710	780	1467	1583
4C	Pacific Ave. Interchange	1000	500		6			0	0			0	0	0	0	0	0				
4D	East of PAI	4000	500	0	6	57,600	73,100	2880	3655	B	C	2534	3216	86	110	259	329	750	860	1533	1700
4E																					
4F																					
4G	Natomas Main Drainage Canal Crossing	1000	500	30	6	57,600	73,100	2880	3655	B	C	2534	3216	86	110	259	329	556	650	1467	1633
4H	East of NMDC xing	3000	500	0	6	57,600	73,100	2880	3655	B	C	2534	3216	86	110	259	329	750	860	1533	1700
4I	Pleasant Grove Road Crossing	250	500	0	6	57,600	73,100	2880	3655	B	C	2534	3216	86	110	259	329	750	860	1533	1700
4J	East of PGR xing	5500	trans	0	6	57,600	73,100	2880	3655	B	C	2534	3216	86	110	259	329	750	860	1533	1700
4K	Locust Road crossing	250	1000	0	6	57,600	73,100	2880	3655	B	C	2534	3216	86	110	259	329	750	860	1533	1700
4L	East of LR xing	5500	1000	0	6	57,600	73,100	2880	3655	B	C	2534	3216	86	110	259	329	750	860	1533	1700
3M	Brewer Road crossing	250	1000	0	6	57,600	73,100	2880	3655	B	C	2534	3216	86	110	259	329	750	860	1533	1700
3N	East of BR xing	6000	1000	0	6	57,600	73,100	2880	3655	B	C	2534	3216	86	110	259	329	750	860	1533	1700
3O	Country Acres Lane crossing	250	1000	0	6	57,600	73,100	2880	3655	B	C	2534	3216	86	110	259	329	750	860	1533	1700
3P	East of CAL xing	6000	1000	0	6	57,600	73,100	2880	3655	B	C	2534	3216	86	110	259	329	750	860	1533	1700
3Q	Watt Ave crossing	250	1000		6			0	0			0	0	0	0	0	0				
3R	East of WA xing	5500	1000	0	6	57,600	62,400	2880	3120	B	B	2534	2746	86	94	259	281	750	790	1533	1583
1S	Pleasant Grove Creek crossing	1600	1000	10	6	57,600	62,400	2880	3120	B	B	2534	2746	86	94	259	281	740	780	1600	1667
1T	East of PGC xing	2000	1000	0	6	57,600	62,400	2880	3120	B	B	2534	2746	86	94	259	281	750	790	1533	1583
1U	Pleasant Grove Floodplain crossing	500	1000	10	6	57,600	62,400	2880	3120	B	B	2534	2746	86	94	259	281	740	780	1600	1667
1V	East of PGF xing	8000	1000	0	6	57,600	62,400	2880	3120	B	B	2534	2746	86	94	259	281	750	790	1533	1583
1W	Un-named crossing	250	1000	0	6	57,600	62,400	2880	3120	B	B	2534	2746	86	94	259	281	750	790	1533	1583
1X	East of UN xing	8000	1000	0	6	57,600	62,400	2880	3120	B	B	2534	2746	86	94	259	281	750	790	1533	1583
1Y	Fiddyment Interchange	1000	1000		6			0	0			0	0	0	0	0	0				
1Z	East of Fiddyment	7000	500	0	6	65,200	67,000	3260	3350	C	C	2869	2948	98	101	293	302	800	820	1617	1633
1AA	Foothills Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1AB	East of Foothills	5000	500	0	6	71,500	72,300	3575	3615	C	C	3146	3181	107	108	322	325	850	850	1683	1700
1AC	Industrial Blvd. (RR) crossing	250	500	30	6	71,500	72,300	3575	3615	C	C	3146	3181	107	108	322	325	640	650	1617	1617
1AD	East of IB(RR) xing	2000	500	0	6	71,500	72,300	3575	3615	C	C	3146	3181	107	108	322	325	850	850	1683	1700
1AE	SR65 Interchange	1000	1000		6			0	0			0	0	0	0	0	0				

Notes:
1. "Trans" = transition from 500 to 1000 feet of ROW corridor width.
2. Level of Service input from DKS Table 12 or 21 as follows: 2020, four lanes of travel; 2040, six lanes of travel. All Average Daily Volumes from DKS tables and assume six travel lanes for 2020 and 2040.
3. Zero elevation crossings are considered traverses over Placer Parkway.
4. Non-zero elevation crossings are described in Feb. 2006 draft project description and on April 5th 2006 URS Figure 1 (Tier 1 EIS/EIR).
5. Truck compositions based on "median" percentages shown on DKS Associates "truckdata.xls" found on their FTP site.
6. Peak hourly volume assumed to be 10% of half of the total Average Daily Volume.
7. Unless specifically indicated in DKS tables, "East of Foothills" shall mean "West of SR 65" for volumes and LoS.

2020
TNM Path Construction -- Alternative 5

Tag	Segment	Length (ft)	ROW Width (ft)	Elev. (ft)	Total Lanes	Average Daily Volume (both dir., all lanes)		Peak Hourly Volume 5% of Total ADV		Peak Hourly Volume Level of Service		Traffic Composition -- Fraction of PHV by Vehicle Type 2-axle, 4-tire		Traffic Composition -- Fraction of PHV by Vehicle Type Medium Trucks		Traffic Composition -- Fraction of PHV by Vehicle Type Heavy Trucks		Contour Distances from ROW Centerline 66 dBA		Contour Distances from ROW Centerline 60 dBA Leq	
						w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change
4A	SR 70/99 Interchange	1000	500		6			0	0			0	0	0	0	0	0				
4B	East of SR 70/99	8000	500	0	6	16,200	20,300	810	1015	A	A	713	893	24	30	73	91	360	410	800	900
4C	Pacific Ave. Interchange	1000	500		6			0	0			0	0	0	0	0	0				
4D	East of PAI	4000	500	0	6	15,600	19,900	780	995	A	A	686	876	23	30	70	90	350	406	780	900
4E																					
4F																					
4G	Natomas Main Drainage Canal Crossing	1000	500	30	6	15,600	19,900	780	995	A	A	686	876	23	30	70	90	100	100	580	690
4H	East of NMDC xing	3000	500	0	6	15,600	19,900	780	995	A	A	686	876	23	30	70	90	350	406	780	900
4I	Pleasant Grove Road Crossing	250	500	0	6	15,600	19,900	780	995	A	A	686	876	23	30	70	90	350	406	780	900
5J	East of PGR xing	5500	trans	0	6	15,600	19,900	780	995	A	A	686	876	23	30	70	90	350	406	780	900
5K	Locust Road crossing	250	1000	0	6	15,600	19,900	780	995	A	A	686	876	23	30	70	90	350	406	780	900
5L	East of LR xing	6000	1000	0	6	15,600	19,900	780	995	A	A	686	876	23	30	70	90	350	406	780	900
5M	Brewer Road crossing	250	1000	0	6	15,600	19,900	780	995	A	A	686	876	23	30	70	90	350	406	780	900
5N	East of BR xing	6000	1000	0	6	15,600	19,900	780	995	A	A	686	876	23	30	70	90	350	406	780	900
5O	Country Acres Lane crossing	250	1000	0	6	15,600	19,900	780	995	A	A	686	876	23	30	70	90	350	406	780	900
5P	East of CAL xing	6000	1000	0	6	15,600	19,900	780	995	A	A	686	876	23	30	70	90	350	406	780	900
5Q	Watt Ave crossing	250	1000		6			0	0			0	0	0	0	0	0				
5R	East of WA xing	4000	1000	0	6	15,600	17,100	780	855	A	A	686	752	23	26	70	77	350	371	780	825
1S	Pleasant Grove Creek crossing	1600	1000	10	6	15,600	17,100	780	855	A	A	686	752	23	26	70	77	255	275	780	825
1T	East of PGC xing	2000	1000	0	6	15,600	17,100	780	855	A	A	686	752	23	26	70	77	350	371	780	825
1U	Pleasant Grove Floodplain crossing	500	1000	10	6	15,600	17,100	780	855	A	A	686	752	23	26	70	77	255	275	780	825
1V	East of PGF xing	8000	1000	0	6	15,600	17,100	780	855	A	A	686	752	23	26	70	77	350	371	780	825
1W	Un-named crossing	250	1000	0	6	15,600	17,100	780	855	A	A	686	752	23	26	70	77	350	371	780	825
1X	East of UN xing	8000	1000	0	6	15,600	17,100	780	855	A	A	686	752	23	26	70	77	350	371	780	825
1Y	Fiddyment Interchange	1000	1000		6			0	0			0	0	0	0	0	0				
1Z	East of Fiddyment	7000	500	0	6	23,400	23,400	1170	1170	B	B	1030	1030	35	35	105	105	445	445	975	975
1AA	Foothills Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1AB	East of Foothills	5000	500	0	6	22,800	23,400	1140	1170	B	B	1003	1030	34	35	103	105	440	445	963	975
1AC	Industrial Blvd. (RR) crossing	250	500	30	6	22,800	23,400	1140	1170	B	B	1003	1030	34	35	103	105	100	100	750	760
1AD	East of IB(RR) xing	2000	500	0	6	22,800	23,400	1140	1170	B	B	1003	1030	34	35	103	105	440	445	963	975
1AE	SR65 Interchange	1000	1000		6			0	0			0	0	0	0	0	0				

2040
TNM Path Construction -- Alternative 5

Tag	Segment	Length (ft)	ROW Width (ft)	Elev. (ft)	Total Lanes	Average Daily Volume (both dir., all lanes)		Peak Hourly Volume 5% of Total ADV		Peak Hourly Volume Level of Service		Traffic Composition -- Fraction of PHV by Vehicle Type 2-axle, 4-tire		Traffic Composition -- Fraction of PHV by Vehicle Type Medium Trucks		Traffic Composition -- Fraction of PHV by Vehicle Type Heavy Trucks		Contour Distances from ROW Centerline 66 dBA		Contour Distances from ROW Centerline 60 dBA Leq	
						w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change	w/out Watt int'change	with Watt int'change
4A	SR 70/99 Interchange	1000	500		6			0	0			0	0	0	0	0	0				
4B	East of SR 70/99	8000	500	0	6	51,700	59,700	2585	2985	B	B	2275	2627	78	90	233	269	708	770	1450	1550
4C	Pacific Ave. Interchange	1000	500		6			0	0			0	0	0	0	0	0				
4D	East of PAI	4000	500	0	6	56,300	68,700	2815	3435	B	C	2477	3023	84	103	253	309	740	830	1517	1667
4E																					
4F																					
4G	Natomas Main Drainage Canal Crossing	1000	500	30	6	56,300	68,700	2815	3435	B	C	2477	3023	84	103	253	309	548	628	1433	1583
4H	East of NMDC xing	3000	500	0	6	56,300	68,700	2815	3435	B	C	2477	3023	84	103	253	309	740	830	1517	1667
4I	Pleasant Grove Road Crossing	250	500	0	6	56,300	68,700	2815	3435	B	C	2477	3023	84	103	253	309	740	830	1517	1667
5J	East of PGR xing	5500	trans	0	6	56,300	68,700	2815	3435	B	C	2477	3023	84	103	253	309	740	830	1517	1667
5K	Locust Road crossing	250	1000	0	6	56,300	68,700	2815	3435	B	C	2477	3023	84	103	253	309	740	830	1517	1667
5L	East of LR xing	6000	1000	0	6	56,300	68,700	2815	3435	B	C	2477	3023	84	103	253	309	740	830	1517	1667
5M	Brewer Road crossing	250	1000	0	6	56,300	68,700	2815	3435	B	C	2477	3023	84	103	253	309	740	830	1517	1667
5N	East of BR xing	6000	1000	0	6	56,300	68,700	2815	3435	B	C	2477	3023	84	103	253	309	740	830	1517	1667
5O	Country Acres Lane crossing	250	1000	0	6	56,300	68,700	2815	3435	B	C	2477	3023	84	103	253	309	740	830	1517	1667
5P	East of CAL xing	6000	1000	0	6	56,300	68,700	2815	3435	B	C	2477	3023	84	103	253	309	740	830	1517	1667
5Q	Watt Ave crossing	250	1000		6			0	0			0	0	0	0	0	0				
5R	East of WA xing	4000	1000	0	6	56,300	59,300	2815	2965	B	B	2477	2609	84	89	253	267	740	760	1517	1550
1S	Pleasant Grove Creek crossing	1600	1000	10	6	56,300	59,300	2815	2965	B	B	2477	2609	84	89	253	267	730	760	1580	1620
1T	East of PGC xing	2000	1000	0	6	56,300	59,300	2815	2965	B	B	2477	2609	84	89	253	267	740	760	1517	1550
1U	Pleasant Grove Floodplain crossing	500	1000	10	6	56,300	59,300	2815	2965	B	B	2477	2609	84	89	253	267	730	760	1580	1620
1V	East of PGF xing	8000	1000	0	6	56,300	59,300	2815	2965	B	B	2477	2609	84	89	253	267	740	760	1517	1550
1W	Un-named crossing	250	1000	0	6	56,300	59,300	2815	2965	B	B	2477	2609	84	89	253	267	740	760	1517	1550
1X	East of UN xing	8000	1000	0	6	56,300	59,300	2815	2965	B	B	2477	2609	84	89	253	267	740	760	1517	1550
1Y	Fiddyment Interchange	1000	1000		6			0	0			0	0	0	0	0	0				
1Z	East of Fiddyment	7000	500	0	6	64,600	66,700	3230	3335	C	C	2842	2935	97	100	291	300	800	813	1617	1613
1AA	Foothills Interchange	1000	500		6			0	0			0	0	0	0	0	0				
1AB	East of Foothills	5000	500	0	6	71,200	71,800	3560	3590	C	C	3133	3159	107	108	320	323	840	850	1683	1683
1AC	Industrial Blvd. (RR) crossing	250	500	30	6	71,200	71,800	3560	3590	C	C	3133	3159	107	108	320	323	640	640	1617	1617
1AD	East of IB(RR) xing	2000	500	0	6	71,200	71,800	3560	3590	C	C	3133	3159	107	108	320	323	840	850	1683	1683
1AE	SR65 Interchange	1000	1000		6			0	0			0	0	0	0	0	0				

Notes:
1. "Trans" = transition from 500 to 1000 feet of ROW corridor width.
2. Level of Service input from DKS Table 12 or 21 as follows: 2020, four lanes of travel; 2040, six lanes of travel. All Average Daily Volumes from DKS tables and assume six travel lanes for 2020 and 2040.
3. Zero elevation crossings are considered traverses over Placer Parkway.
4. Non-zero elevation crossings are described in Feb. 2006 draft project description and on April 5th 2006 URS Figure 1 (Tier 1 EIS/EIR).
5. Truck compositions based on "median" percentages shown on DKS Associates "truckdata.xls" found on their FTP site.
6. Peak hourly volume assumed to be 10% of half of the total Average Daily Volume.
7. Unless specifically indicated in DKS tables, "East of Foothills" shall mean "West of SR 65" for volumes and LoS.

PLACER PARKWAY
CORRIDOR PRESERVATION

DRAFT
TRANSPORTATION TECHNICAL REPORT
Placer Parkway Corridor Preservation Tier 1 EIS/EIR

June 29, 2007

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

Caltrans

FHWA

Prepared by
DKS Associates

for
URS Corporation

South Placer Regional Transportation Authority
California Department of Transportation
Federal Highway Administration

The preparation of this report was financed in part through a planning grant from the Federal Highway Administration

DRAFT TRANSPORTATION TECHNICAL REPORT
PLACER PARKWAY CORRIDOR PRESERVATION TIER 1 EIS/PROGRAM EIR

June 2007

Prepared by DKS Associates
in association with
URS Corporation
For Placer County
Transportation Planning Agency

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ACRONYMS

AFA	Analysis Focus Area
Caltrans	California Department of Transportation
CIP	Capital Improvement Project
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
FHWA	Federal Highway Administration
HCM	Highway Capacity Manual
HDM	Highway Design Manual
I-5	Interstate 5
I-80	Interstate 80
LOS	Level of Service
mph	miles per hour
MTP	Metropolitan Transportation Plan
OHW	ordinary high water
PCTPA	Placer County Transportation Planning Agency
PSR	Project Study Report
ROW	right-of-way
SACOG	Sacramento Area Council of Governments
SOI	Sphere of Influence
SPRTA	South Placer Regional Transportation Authority
SR	State Route
TAC	Technical Advisory Committee
TASA	Transportation Analysis Study Area
TAZ	traffic analysis zone
TCR	Transportation Concept Report
UPRR	Union Pacific Rail Road
VMT	vehicle miles of travel

1.0 INTRODUCTION

1.1 TIER 1 EIS/PROGRAM EIR

The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the South Placer Regional Transportation Authority (SPRTA) propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking State Route (SR) 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1).

The planning for Placer Parkway involves two phases: (1) the present action, selection of a corridor (titled the Placer Parkway Corridor Preservation Project), and (2) the future selection of a precise alignment within the corridor and a decision whether or not to build the Parkway. If a build alternative is selected and pursued after the second phase, the ultimate Placer Parkway project would be constructed and operated. Throughout this document the term "Proposed Action" is used to describe the selection of a corridor to preserve. The document generally uses the term "Parkway" to mean the ultimate roadway, including construction and operation, except where context indicates otherwise.

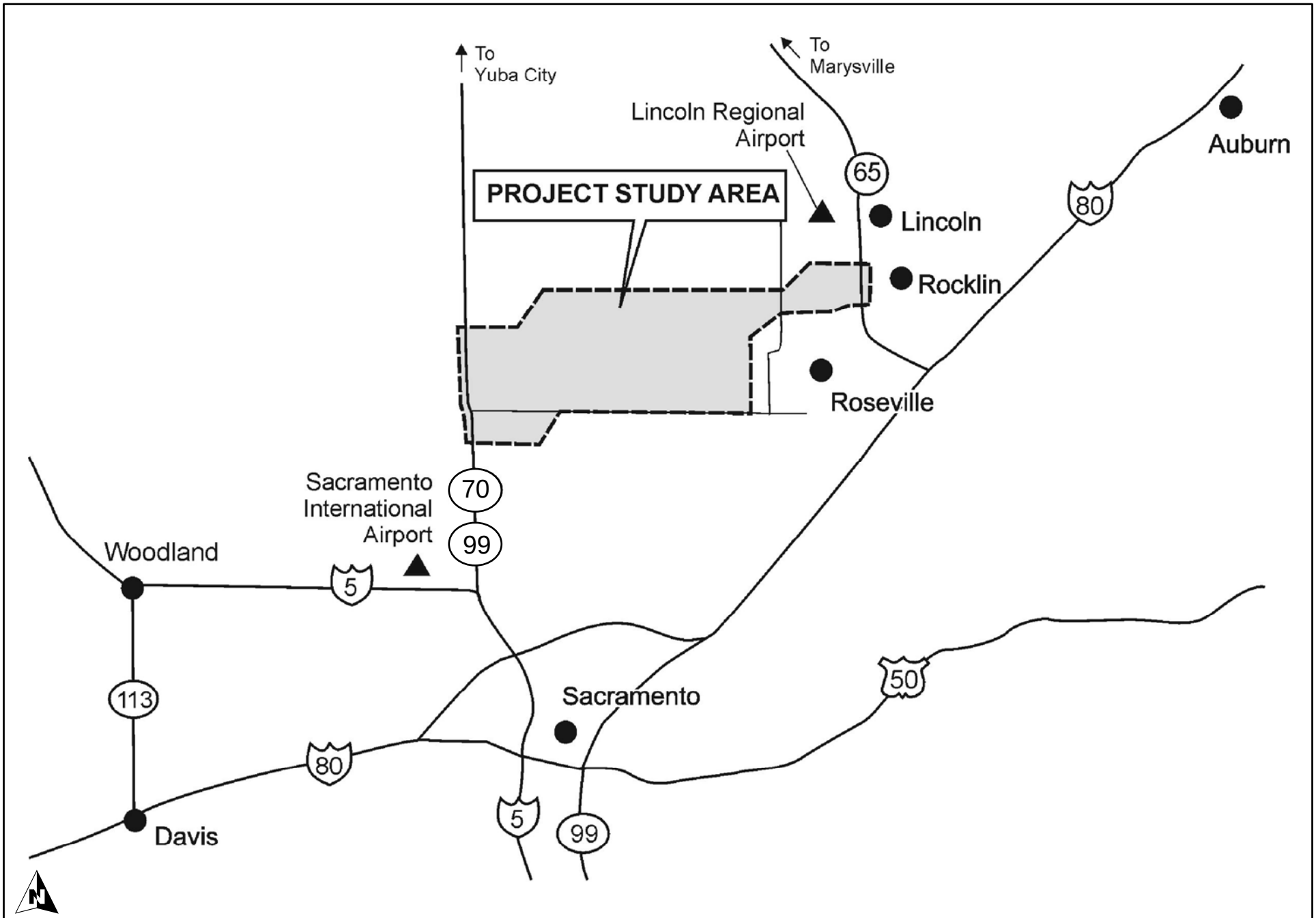
As stated, the action to be considered based on this Tier 1 analysis involves only the selection of a corridor to preserve, which has limited environmental effects by itself. However, the ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. In order to describe the effects of the ultimate Placer Parkway project to the greatest extent feasible at this early stage, the Tier 1 EIS/EIR also addresses the potential effects of construction and operation of the future roadway. This discussion of the roadway is necessarily limited, however, because only the general concepts of the roadway design and location are known at this time. If a corridor is selected and preserved at Tier 1, a subsequent Tier 2 analysis will evaluate the Parkway itself in detail—the specific roadway "footprint" within the selected corridor, including construction and operation of the roadway.

1.2 CORRIDOR SELECTION AND PRESERVATION

The concept for the Placer Parkway is over a decade old. Placer County's 1994 General Plan depicts a "plan line" for it. Two planning studies (DKS Associates, 2000 and 2001) helped to refine the concept:

- DKS Associates, 2000, Placer Parkway Interconnect Study/Conceptual Plan
- DKS Associates, 2001, Project Study Report (Project Development Support) for Placer Parkway

Placer Parkway is cited as a high-priority regional transportation project by the Sacramento Area Council of Governments (SACOG) 2025 Metropolitan Transportation Plan and the 2027 Placer County Regional Transportation Plan. The project vicinity and surrounding area include some of the fastest growing communities in the Sacramento region. A number of large urban development proposals are being considered by Placer and Sutter counties. New development is expected to add a significant amount of residential, commercial, industrial, and educational uses.



PLACER PARKWAY
CORRIDOR PRESERVATION

Tier 1 EIS/EIR Transportation Technical Report	Project Location Map	***Figure 1***
		June 2007

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URS Corporation L:\Projects\PlacerParkway2006_28066593\MXD\Current Working Documents\Archaeological_Survey_Report\Fig_1_Project_Location.mxd Date: 6/29/2006 4:11:03 PM Name: akkeele0

A 2½-year screening and public outreach program that involved local jurisdictions (the Technical Advisory Committee); regional, state, and federal agencies; stakeholder groups that included representatives from planning and public works departments of all affected cities and counties, environmental, business, agricultural, development, and homeowner interests (the Study Advisory Committee); and elected officials (the Policy Advisory Committee), resulted in the identification of five potential corridors for the Parkway. The Tier 1 Environmental Impact Statement/Program Environmental Impact Report will analyze these five corridor alternatives along with a No-Build Alternative (Figure 2).

Other potential transportation modes such as bus rapid transit may be developed in the corridor in the future, although they are not proposed as part of the current project. The width of the corridor for the Placer Parkway is to vary from approximately 500 feet in the Eastern and Western segments to approximately 1,000 feet in the Central Segment. Depending upon the alternative, the corridor's length ranges from a minimum of 14.2 miles to a maximum of 16.2 miles. The selected corridor would contain the roadway, including the median, travel lanes, shoulder, associated access ramps and a no-development buffer zone.

Corridor acquisition may not be completed until after Tier 2, as funding becomes available. Portions of the selected corridor would be preserved as a no-development buffer zone. The buffer would be maintained as a zone where development is either not permitted or is severely restricted. This is intended to restrict access to the proposed interchanges, protect the rural character of agriculturally designated areas in the vicinity of the Parkway as far as possible subject to future development, and to maximize opportunities to incorporate adjacent sensitive areas. It is intended that the buffer would be owned and managed in the future to achieve these objectives. For subsequent Tier 2 (project-level) environmental reviews, the size of this buffer zone could be considered flexible for agriculturally designated land undergoing urban development. In the Tier 2 environmental review, the specific buffer size and location would be determined. This determination would be based on performance standards on a case-by-case basis, depending on the land use needs of future approved development, and taking into account the primary objective of restricting future access to the Parkway.

Project proponents are considering employment of several land management and control mechanisms in order to ensure that the buffer would be effectively maintained as an area where development would either not be permitted, and where construction of any additional access onto the Parkway would not be allowed. These mechanisms could include land use controls, land purchase/leases, general plan amendments, zoning/overlay zoning changes, covenants/deed restrictions, agricultural/conservation easements, urban growth boundaries, etc. "Layering" or using several of these methods would provide more assurance that the buffers would be permanent, or at least more difficult to undo.

1.3 TECHNICAL STUDY OBJECTIVE

This Transportation Technical Report has been prepared to support the Tier 1 EIS/Program EIR. It presents a Tier 1/Program level assessment of potential impacts related to transportation for five corridor alternatives and the No-Build Alternative as described in Chapter 2.

The scope of work performed for this report is based on the Caltrans Local Assistance Procedures Manual (Caltrans, 2006), as modified for purposes of Tier 1/Program analysis by agreement of Caltrans, the Caltrans Highway Design Manual (HDM) (Caltrans, 2001b) and the Caltrans Environmental Handbook guidance (Caltrans, 2005) on preparing a Transportation Technical Report. In addition, the evaluation considered guidance from the Federal Highway Administration (FHWA), Environmental Checklists for Draft and Final Environmental Documents (FHWA, 1998a; FHWA, 1998b).

The Transportation Technical Report provides an analysis of the transportation and circulation impacts associated with development of the Placer Parkway Corridor Preservation alternatives including impacts on roadways, transit services and bicycle facilities and pedestrians. The traffic analysis of the build alternatives is conducted under the projected opening year (2020) and cumulative (2040) conditions, and also includes an evaluation of circulation scenarios with and without a Placer Parkway interchange at a potential future extension of Watt Avenue.

The potential extension of Watt Avenue and an interchange with Placer Parkway are not part of the project. This potential work would be a distinct project(s) with a separate environmental review. The direction to analyze each build alternative with and without a Watt Avenue connection is based on input from the Policy Advisory Committee during the preparation of the Concept Plan and Project Study Report (PSR) (DKS Associates, 2001) for Placer Parkway.

This report is organized as follows:

Chapter 2 The Proposed Action
Chapter 3 Environmental Setting
Chapter 4 Analysis Methodology
Chapter 5 Impacts and Mitigation Strategies
Chapter 6 Analyses to be Undertaken in Tier 2
Chapter 7 References

This report also includes figures and tables, which show the project location, each action alternative, and pertinent technical information prepared to evaluate the action alternatives.

Throughout this document, the Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report is referred to as the Tier 1 EIS/EIR.

2.0 THE PROPOSED ACTION

The Proposed Action for the Placer Parkway Corridor Preservation Project is to select and preserve a 500- to 1,000-foot-wide corridor in the project study area, within which the future four or six-lane Placer Parkway may be constructed. The ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. Although the action taken at Tier 1 on the Placer Parkway Corridor Preservation Project is limited, the underlying project whose effects are studied in this document is the Placer Parkway. To the extent feasible at this early stage, the Tier 1 EIS/EIR addresses the potential effects of construction and operation of the future roadway.

2.1 THE PROJECT STUDY AREA

The project study area is an area of approximately 33,460 acres located in Placer and Sutter counties, with a small section located in Sacramento County (Figures 1 and 2). The portion of the study area that is located in Sacramento County is in the extreme southwest corner of the study area and does not include any of the proposed corridor alignment alternatives. It extends from SR 70/SR 99 in the west to SR 65 in the east, with the northern boundary extending to Sunset Boulevard West and the southern boundary located adjacent to Baseline and Riego Roads. The study area as defined for transportation analysis includes the project study area and is described in Section 3.1.

The study area is divided into three segments:

- Western Segment: the Western Segment extends from SR 70/99 to Pleasant Grove Road in Sutter County.
- Central Segment: the Central Segment extends from Pleasant Grove Road in Sutter County to approximately 2,300 feet north of Pleasant Grove Creek in Placer County.
- Eastern Segment: the Eastern Segment extends from approximately 2,300 feet north of Pleasant Grove Creek to SR 65 in Placer County.

2.2 CORRIDOR ALTERNATIVES

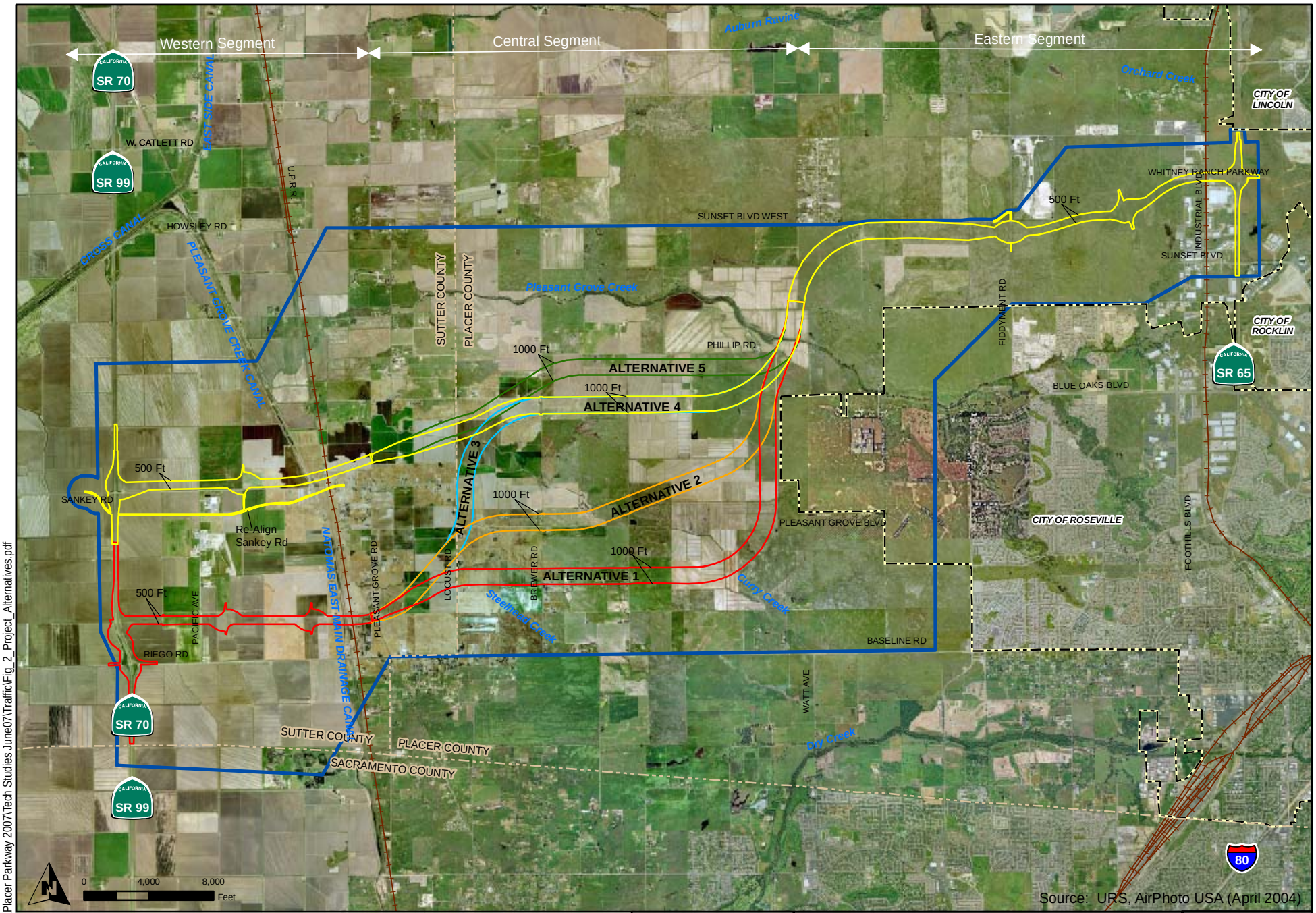
The following subsections describe the corridor alternatives, which are depicted on Figure 2, and are numbered according to location from south to north in the study area.

2.2.1 The No-Build Alternative

Under the No-Build Alternative, the project would not be implemented. A Placer Parkway corridor would not be selected/preserved, and the future Placer Parkway would not be constructed.

2.2.2 Alternative 1 – the Red Alternative

Alternative 1 would extend from SR 70/99 approximately ½ mile north of Riego Road, eastward approximately 1 mile north of Baseline Road to approximately Watt Avenue, proceeding north and transitioning in an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 16.2 miles long. This alternative includes six interchanges, as described in Section 2.3.3.



Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Transportation
Technical Report

Project Alternatives

Figure 2

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2.2.3 Alternative 2 – the Orange Alternative

Alternative 2 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed northeast, then in a northerly direction south of Pleasant Grove Creek, transitioning to an easterly direction before it reaches Sunset Boulevard West, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.4 miles long. This alternative would include six interchanges, as described in Section 2.3.3 below.

2.2.4 Alternative 3 – the Blue Alternative

Alternative 3 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed north along the Sutter/Placer County Line, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.6 miles long. This alternative would include six interchanges, as described in Section 2.3.3 below.

2.2.5 Alternative 4 – the Yellow Alternative

Alternative 4 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.3 miles long. This alternative would include five interchanges, as described in Section 2.3.3 below.

2.2.6 Alternative 5 – the Green Alternative

Alternative 5 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 4,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.2 miles long. This alternative would include five interchanges, as described in Section 2.3.3 below.

2.3 PARKWAY DESIGN ASSUMPTIONS

Although the Parkway would be designed and construction-level impacts analyzed during Tier 2, for the purpose of this report and the Tier 1 EIS/Program EIR, several assumptions have been made about potential design and configuration concepts. These assumptions would be subject to further development and refinement, and specific decisions about design of the roadway would be made during the Tier 2 process. For example, the number, location, and design of over-crossings would be determined at the time of final Parkway design, in consultation with local jurisdictions. The following sections outline assumptions for the future roadway.

Preliminary costs estimates for the Parkway range from $600 to $650 million (2005 dollars). This includes costs for right-of-way, design, construction and environmental mitigation for the four- to six-lane facility. The funding situation has spurred interest in exploring other more creative funding options.

These include a county-wide sales tax, more developer contributions, and tolling facilities. The Technical Report and Tier 1 EIS/Program EIR do not make any assumptions about funding sources.

2.3.1 Conceptual Roadway Configuration

The Parkway would be a high-speed, limited access roadway. Depending upon the timing of adjacent urban development proposals and funding, the Parkway may be designed and constructed incrementally in segments. These could be built as a four-lane (interim) roadway until a six-lane segment is warranted, or as the full six-lane facility. A preliminary conceptual cross section (see Figure 3) was developed to facilitate the Tier 1/Program evaluation. It illustrates both four-lane (two lanes in both directions) and six-lane (three lanes in both directions) configurations within the 500- to 1,000-foot corridor widths. The roadway would include a central median approximately 100 to 134 feet wide, depending on local conditions and reflecting Caltrans safety guidance. The Parkway would be designed and constructed to Caltrans standards, unless specific design exceptions are granted. For the purposes of the Tier 1 EIS/Program EIR, the Parkway's opening year is assumed to be 2020.

Access would be provided at the western and eastern ends of the Parkway, where existing areas of dense development are already located or planned. Access would be restricted for the 7-mile Parkway Central Segment. The analysis assumes no interchanges in this segment. (A possible future extension of Watt Avenue or another nearby roadway may be considered in the Central Segment as a separate project.)

2.3.2 Conceptual Roadway Elevation

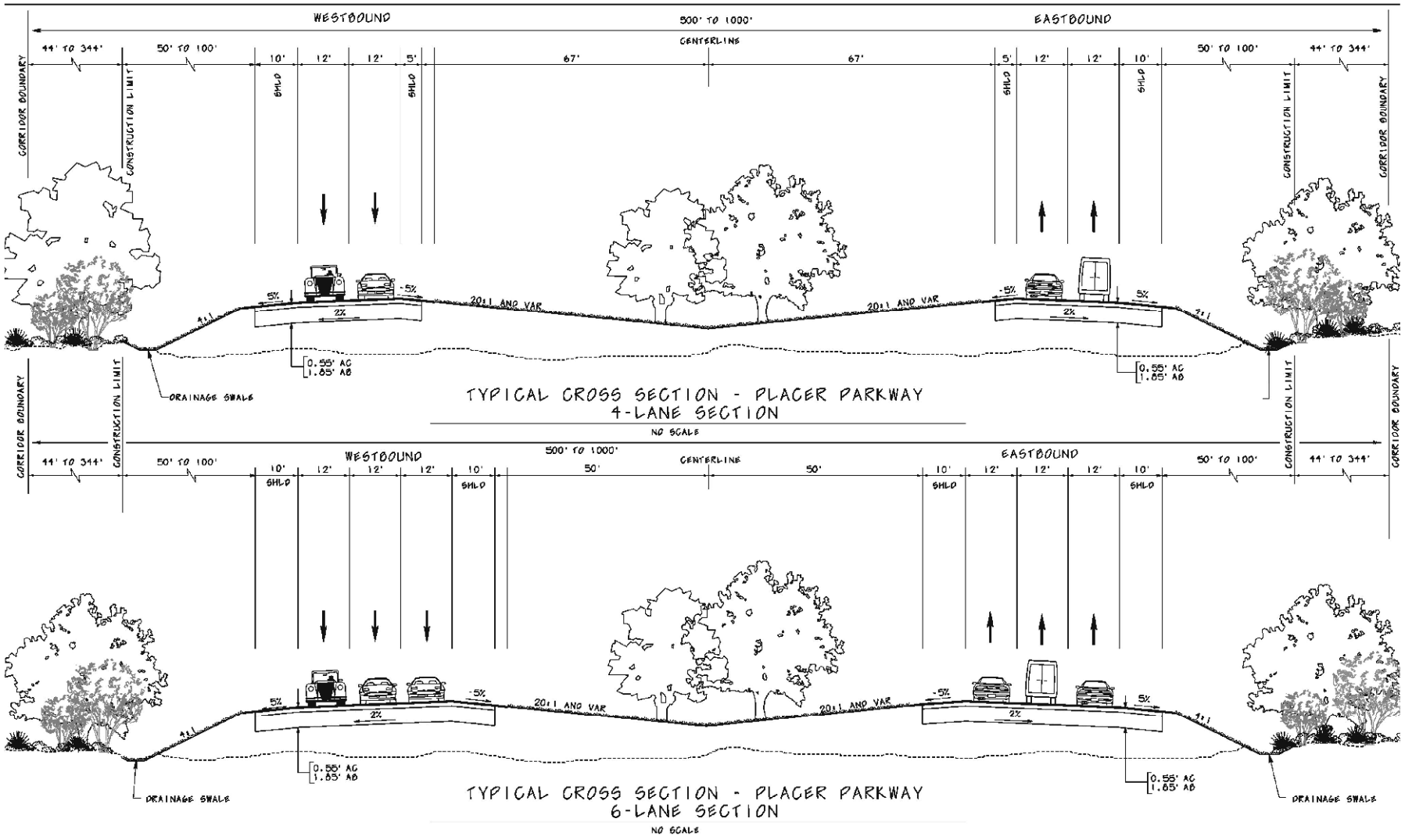
As the study area is comprised of relatively flat terrain, the majority of the future Placer Parkway is assumed to be at-grade. As necessary, bridges would be used to span certain features and improvements such as the Union Pacific Railroad tracks along Industrial Boulevard, Pleasant Grove Creek, the Natomas East Main Drainage Canal, and floodplains. Generally, the approximate height of bridges is expected to range from 10 feet above streams to 30 feet above the railroad. Culverts would be used at smaller creek crossings as appropriate, depending on local conditions and permit requirements. The Pleasant Grove Creek floodplain would be crossed by bridges (one in each direction) supported by abutments located approximately 800 feet on either side of the creek to avoid the riparian habitat associated with the creek.

Within the 100-year floodplain, the roadway would be elevated such that the bottom of any new bridges would be above the 100-year water surface elevation. The roadway support structures and bridges would be designed to minimize environmental impact, not impede stream and flood flows, and allow for the unobstructed passage of potential future streamside uses such as maintenance equipment, bikeways or trails.

Throughout the project study area, the assumptions for creek and floodplain crossings include typical engineering specifications:

- a maximum bridge span of approximately 150 feet;
- for bridge spans exceeding 150 feet, assume one column, approximately 4 feet in diameter, every 150 feet; and
- all columns placed outside of the ordinary high water (OHW) level.

To maintain existing and future local roadway connectivity (for emergency access, farming operations, and community access), over-crossings would be constructed to convey traffic over the Parkway. These over-crossings would not connect to the Parkway. Parkway access would be via the interchanges described below.



PLACER PARKWAY CORRIDOR PRESERVATION	Tier 1 EIS/EIR Transportation Technical Report	Typical Cross Section (Conceptual)	***Figure 3*** ***June 2007***

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2.3.3 Interchange Concepts

The analysis assumes that the location of interchanges (see Figure 2) is as follows.

- SR 70/99 (at ½ mile north of Riego Road or at Sankey Road)
- One or two locations to be determined in southern Sutter County
- Fiddyment Road
- Foothills Boulevard
- SR 65 at Whitney Ranch Parkway

The following discussion outlines concepts and assumptions for the six interchanges that could potentially serve Placer Parkway.

2.3.3.1. Western Segment

Within the Western Segment of the Parkway, a high-speed, freeway-to-freeway type interchange would connect the Parkway with SR 70/99 at one of following potential locations depending on the project alternative (see Section 2.2). Placer Parkway would terminate at SR 70/99.

- **Placer Parkway/SR 70/99 Interchange at North of Riego Road.** This alternative concept uses "braided" ramps to eliminate weaving problems or conflicts with the future SR 70/99 at Riego Road interchange being developed by Sutter County and Caltrans.

- **Placer Parkway/SR 70/99 Interchange at Sankey Road.** Under this alternative concept, the existing two-lane Sankey Road would be realigned to the south of Placer Parkway and the proposed freeway-to-freeway interchange, extending from approximately ¼ mile west of SR 70/99 to approximately ¼ mile east of the Union Pacific railroad tracks. There would be no direct access to SR 70/99 or Placer Parkway from the realigned Sankey Road.

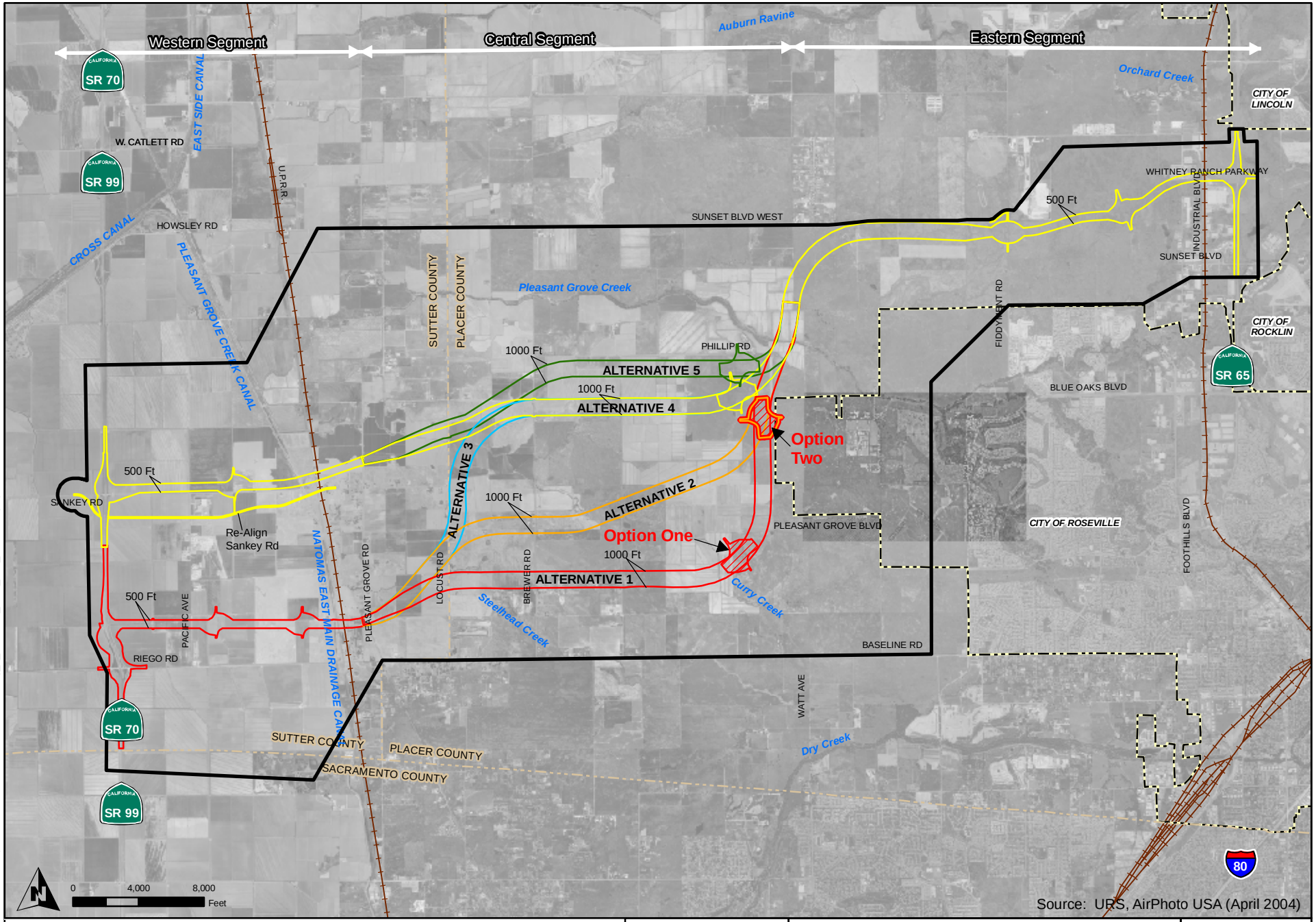
Depending on the final alignment selected, one or two additional arterial interchanges would also be located in south Sutter County. Conceptual locations are identified for purposes of this Tier 1/Program analysis (see Figure 2). The actual location of these interchanges would be developed in the Tier 2 phase, based on Sutter County requirements.

2.3.3.2. Central Segment

Within the Central Segment of the Parkway, there would not be any access proposed as part of the project in the 7-mile segment between Fiddyment Road and Pleasant Grove Road. Please see Section 2.4 regarding a potential connection to a future extension of Watt Avenue (Figure 4) which could be proposed and constructed by others in the Central Segment; such an interchange is not part of the Placer Parkway.

2.3.3.3. Eastern Segment

Within the Eastern Segment of the Parkway, a signalized high-speed freeway-to-freeway and local access interchange would connect the Parkway to SR 65 at Whitney Ranch Parkway (Figure 2). From SR 65 eastward Placer Parkway would terminate and become Whitney Ranch Parkway east of the SR 65 exit ramp intersection. Traffic signals would be provided at the exit ramp terminals. This interchange would be approximately 1 mile north of a planned SR 65/Sunset Boulevard interchange and 1.2 miles south of the existing Twelve Bridges interchange.



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Potential Watt Avenue Interchange

Figure 4

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As part of this interchange, auxiliary lanes would be required on SR 65 in both directions to enhance traffic operations on the north side of the future SR 65/Sunset Boulevard interchange. The southbound SR 65 exit-ramp at Sunset Boulevard is being designed to accommodate an additional auxiliary lane required for the future Placer Parkway/Whitney Ranch Parkway interchange to minimize the reconstruction of this ramp in the future. Within the Eastern Segment of the Parkway, from SR 65 westward, two interchanges with local roadways would be constructed, one at Foothills Boulevard and one at Fiddyment Road, as depicted on Figure 2.

The future interchange on Placer Parkway at Fiddyment Road would be located near the existing intersection of Fiddyment Road and Sunset Boulevard West. To provide acceptable traffic operations additional distance needs to be provided between the Fiddyment Road/Sunset Boulevard West intersection and the Fiddyment Road/Placer Parkway westbound off-ramp intersection. Therefore, Sunset Boulevard West will need to be realigned to the north as it nears Fiddyment Road.

2.3.4 Landscaping Concept

For the purposes of this environmental analysis, preliminary landscaping concepts have been developed for Placer Parkway. These are entirely conceptual and would be subject to further refinement during the Tier 2 environmental process. It is anticipated that landscaping would be used to reflect local topography and vistas in the study area and complement the varying character of land adjacent to the Parkway corridor. Landscape design would vary within the Parkway's three segments depending on corridor width and type and density of surrounding land uses. Landscaping would be used within the median and the Parkway buffer zone to enhance the aesthetics of the Parkway, and would be used to provide screening and enhance local and long-distance views. Where appropriate, more concentrated plantings would be considered to buffer the Parkway from future adjacent land uses that may be incompatible with the Parkway concept, and to prevent unwanted intrusion into shoulder or median areas. Landscape design would likely include a mix of compatible native and non-native plants that may require some irrigation. Wherever possible, native plant species would be used in line with Caltrans policy. Where possible and depending on availability, feasibility and cost, recycled water would be used for irrigation.

During a future design phase, lighting elements would be designed for safety and would consider the proposed landscaping plan in order to minimize potential aesthetic impacts (e.g., shielding lighting elements, using lower-voltage lighting, and proposing lighting fixtures that conform with the visual character of the area).

2.4 POTENTIAL WATT AVENUE INTERCHANGE

The Placer County General Plan includes a number of new roadways that may be needed in Placer County, according to travel demand forecasts. An extension of Watt Avenue to Placer Parkway (from Baseline Road to a new Blue Oaks Boulevard Extension) is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto the Placer Parkway via a new interchange (see Figure 4). A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. It would be subject to independent future environmental analysis and review and is not being fully evaluated within this Technical Report or Tier 1 EIS/Program EIR. However, the connection of Placer Parkway to a potential Watt Avenue extension could affect future travel patterns in the area, including use of the Parkway. Based on direction from previous planning studies, this Technical Study and the Tier 1 EIS/Program EIR will evaluate each corridor alternative with and without a Watt Avenue interchange. This evaluation does not predetermine the construction or alignment of a potential Watt Avenue or nearby roadway extension or the precise locations of any potential interchanges with Placer Parkway.

2.5 AGENCY PERMITS AND APPROVALS

The Proposed Action would preserve a preferred corridor for a future transportation facility. In the future, permits and approvals would be obtained from appropriate agencies prior to construction of the Parkway. These permits and approvals may include specific design or mitigation requirements that would be incorporated into the project.

2.6 SUBSEQUENT TIER 2 INFORMATION

As noted earlier, the design and construction of Placer Parkway—including its interchanges and over-crossings, and ancillary features such as stream crossings, safety devices, stormwater management structures, and similar improvements—would be evaluated in a subsequent Tier 2 environmental review process once a corridor has been identified. Chapter 6, Analyses to Be Undertaken in Tier 2, provides more detailed information regarding Tier 2 studies.

3.0 ENVIRONMENTAL SETTING

The initial task of defining transportation impacts for the project's alternatives was to evaluate the operating characteristics of the circulation system in the vicinity of the project. The following sections discuss existing roadway functions, traffic volumes, and traffic levels of service, as well as transit services and bicycle facilities.

3.1 EXISTING ROADWAY SYSTEM

Placer Parkway would have an impact on travel patterns in a fairly wide (large) area. Based on an evaluation of the changes in traffic volumes, a Transportation Analysis Study Area (TASA) was defined. It covers the area where the travel model shows "significant" changes in traffic volumes, although the percentage of roadways that would be affected by Placer Parkway decreases on the fringes of that area. The TASA extends from Nicolaus Road on the north to I-80 on the south, and from Sierra College Boulevard on the east to west of SR 70/99. The TASA (shown in Figure 5) covers portions of eight jurisdictions: Placer County, Sutter County, Sacramento County, the cities of Roseville, Rocklin, Lincoln and Sacramento, and the Town of Loomis.

For some system-wide analysis measures, two analysis areas were used: (1) the TASA, as described above; and (2) an Analysis Focus Area (AFA), also shown in Figure 5. The AFA is the portion of the TASA that is close to the build alternatives. Its boundaries were selected to define the area where most of the transportation benefits of constructing Placer Parkway would occur.

The existing roadway network in the TASA consists of state highways, arterials, collectors, and local roadways. The key existing highways, arterials, and collector roadways shown in Figure 5 that are in the vicinity of the project, or may have a measurable change in traffic volume due to Placer Parkway are described below.

- **State Route 65 (SR 65)** is a north–south state highway that begins at I-80 in Roseville and extends north through Rocklin and Lincoln to SR 70 near Marysville. SR 65 is a four-lane freeway between I-80 and Industrial Avenue and a two-lane to four-lane conventional highway from Industrial Avenue to SR 70.

- **State Route 70/99 (SR 70/99)** is a north–south state highway that extends from I-5 in Sacramento County northward into Sutter County. North of Catlett Road the route splits into SR 70 (which extends northward through Yuba and Butte counties to Marysville and Oroville), and SR 99 (which extends northward through Sutter and Butte counties to Yuba City and Chico).

- **Interstate 80 (I-80)** is the primary east–west state highway that provides a regional link between Placer County and Sacramento County, as well as an interregional link to the Bay Area. Interstate 80 is the only trans-Sierra Interstate route in northern California. This highway serves both local travel, such as commuter traffic, as well as interstate travel, including goods movement.

- **Interstate 5 (I-5)** is the primary north–south highway that provides a regional link between Yolo County and Sacramento County, as well as an interregional link within the Central Valley of California. I-5 provides access to Downtown Sacramento and the Sacramento International Airport. I-5 is also a key route for interstate travel, especially goods movement along the west coast of the U.S.

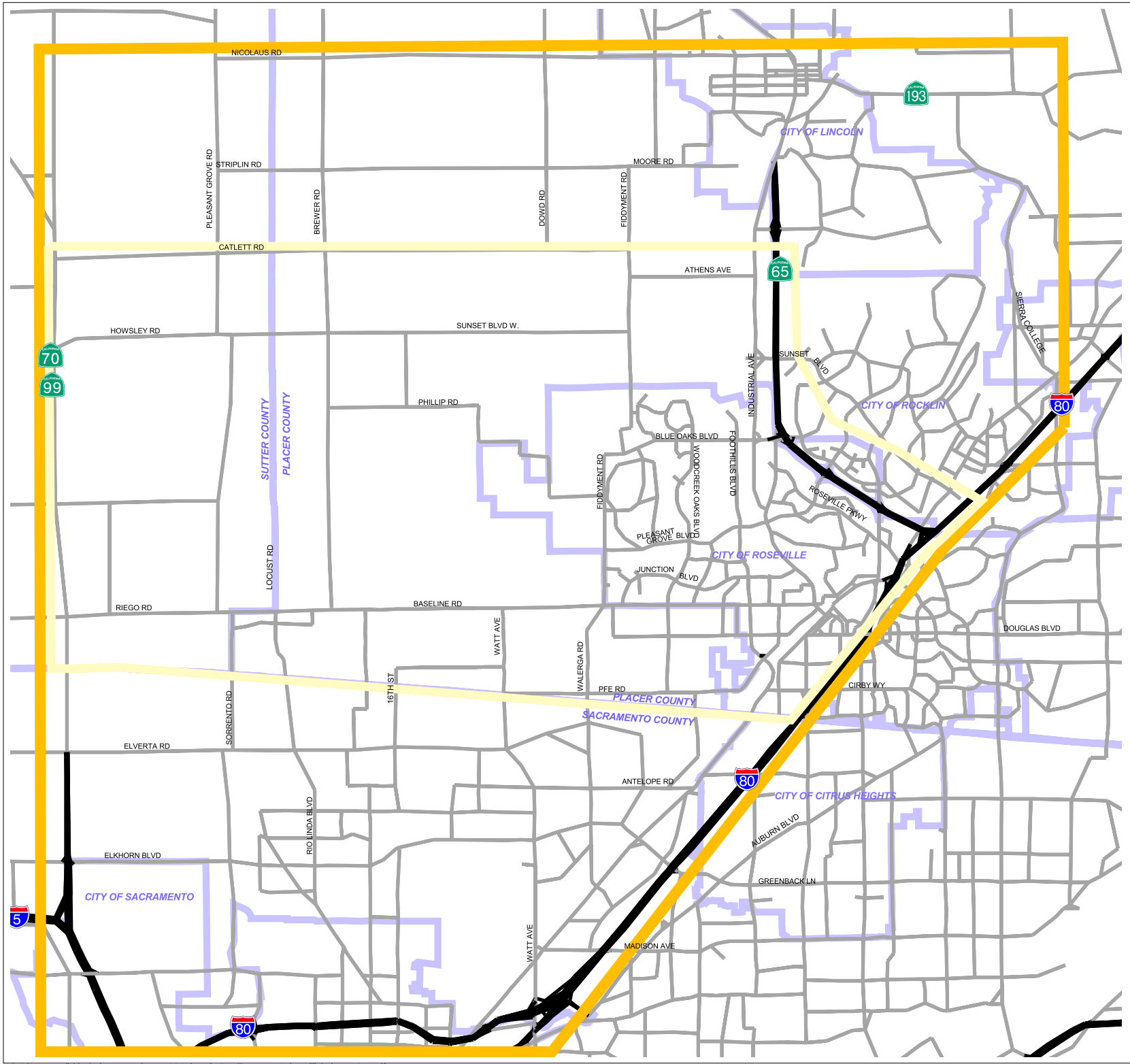

FIGURE 5
Existing Roadway Network and Transportation Analysis Study Area

Transportation Analysis Study Area

Analysis Focus Area

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- **State Route 193 (SR 193)** is an east–west two-lane conventional state highway that extends from SR 65 in Downtown Lincoln east to Interstate 80 at Newcastle.

- **Baseline Road/Riego Road** is an east–west rural arterial that extends through the study area. Baseline Road extends from Foothills Boulevard in the City of Roseville to the Sutter County line. East of Foothills Boulevard this roadway becomes Main Street. Within Sutter County, this roadway becomes Riego Road, which extends across SR 70/99 to the Garden Highway. Baseline Road and Riego Road connect Roseville, west Placer County, and south Sutter County with each other and with SR 70/99.

- **Watt Avenue** is a north–south arterial that runs from Baseline Road south to Florin Road in Sacramento County. Watt Avenue connects west Placer County with Interstate 80, and extends across the American River to provide access to U.S. 50. The roadway becomes South Watt Avenue at Jackson Road (SR 16), and becomes Elk Grove-Florin Road at Florin Road. Elk Grove-Florin Road continues south to Stockton Boulevard at State Route 99 in the community of Elk Grove.

- **Fiddyment Road** is a two- to four-lane north–south rural arterial that extends north from Baseline Road to Moore Road, southwest of the City of Lincoln.

- **Brewer Road** is a two-lane north–south rural collector that extends from Baseline Road north across west Placer County. It terminates just south of the Bear River, which is the Yuba County line.

- **Locust Road** is a two-lane north–south rural collector that extends from the Sacramento County line north to Sunset Boulevard West. In Sacramento County this roadway becomes Elwyn Avenue.

- **Pleasant Grove Road** is a two-lane north–south rural arterial that runs along the Placer County/Sutter County line from Baseline Road south to the Sacramento County line, where it becomes Sorrento Road. Pleasant Grove Road also extends north of Riego Road, beginning about one-quarter mile west of its southern section, and runs north to the Yuba County line where it becomes Forty Mile Road.

- **Sankey Road** is a two-lane east–west rural roadway in Sutter County that runs from the Garden Highway across SR 70/99 to Locust Road.

- **Howsley Road/Sunset Boulevard West** is a two-lane east–west roadway that extends from the Garden Highway across SR 70/99 to Placer County line. In Placer County, this roadway becomes Sunset Boulevard West, which extends east to Fiddyment Road.

- **Pacific Avenue** is a two-lane north–south roadway parallel to SR 70/99 in Sutter County that extends from Riego Road to Sankey Road, as well as from Howsley Road north to Bear River Drive.

- **Nicolaus Road** is an east–west two-lane arterial roadway that extends from H Street (just west of SR 65 and the Union Pacific Rail Road (UPRR) tracks) in the City of Lincoln west to Joiner Parkway. Between Joiner Parkway and Aviation Road it is a four-lane arterial roadway. West of Aviation Road, it returns to a two-lane arterial roadway west to the Sutter County Line, where it becomes Marcum Road.

- **Athens Road** is an east–west two-lane rural arterial roadway that extends from Fiddyment Road to Industrial Avenue.

- **Dowd Road** is a north–south two-lane rural collector roadway that runs from Moore Road north to SR 65.

- **Catlett Road** is an east–west two-lane roadway that extends from SR 70/99 in Sutter County east to Fiddyment Road in Placer County.

- **Walerga Road** is a two-lane rural arterial that extends from Baseline Road south to Roseville Road in Sacramento County. It provides access between western Placer County and the Antelope area of Sacramento County.

- **Blue Oaks Boulevard** is an east–west arterial that links the cities of Roseville and Rocklin to each other and to SR 65. Between SR 65 and Woodcreek Oaks Boulevard it has four lanes.

- **Foothills Boulevard** is a north–south arterial in Roseville west of I-80. It extends as far south as Cirby Way, where it becomes Roseville Road and continues south into Sacramento. North of Cirby Way it traverses portions of the City's Infill Area, Northwest Specific Plan, and North Industrial Area, and currently ends at Duluth Avenue at the northern city limits.

- **Junction Boulevard** is an east–west arterial in west Roseville that has four lanes from Washington Boulevard to Baseline Road.

- **Pleasant Grove Boulevard** is an east–west arterial that extends from Fiddyment Road to the City of Rocklin where it becomes Park Drive and connects the Del Webb Specific, Plan, the Northwest Roseville Specific Plan, the North Central Roseville Specific Plan, and the Highland Reserve Specific Plan to each other and to SR 65. It is a two-lane facility between Fiddyment Road and Woodcreek Oaks Boulevard, a four-lane roadway from Woodcreek Oaks Boulevard to Foothills Boulevard, and a six-lane facility between Foothills Boulevard and SR 65.

- **Roseville Parkway** is a four- to six-lane arterial that links the North Central, Stoneridge, Northeast and Southeast Specific Plan areas of the City of Roseville to Placer County east of Sierra College Boulevard.

- **Washington Boulevard** is a major north–south arterial that connects SR 65 and Blue Oaks Boulevard on the north to Oak Street in downtown Roseville. Most of Washington Boulevard has four lanes, except a two-lane segment north and south of where it crosses under the UPRR north–south tracks. Along with Foothills Boulevard and SR 65, it provides one of three grade-separated crossings of the UPRR east–west mainline tracks.

- **Woodcreek Oaks Boulevard** is a north–south arterial that extends from Baseline Road to Blue Oaks Boulevard. Most of this arterial currently has only two lanes, but its wide median is designed for widening to four lanes.

- **Industrial Avenue** is a two-lane north–south arterial that extends from Washington Boulevard in Roseville north through the Sunset Industrial Area to connect with SR 65.

- **Sunset Boulevard** is an arterial that extends in a northwest direction from Pacific Street in the City of Rocklin to west of SR 65 in the Sunset Industrial Plan Area in unincorporated Placer County. Sunset Boulevard has two lanes west of SR 65 and four to six lanes east of SR 65.

- **Sierra College Boulevard** is a major north–south two- to six-lane arterial connecting Placer County with Sacramento County. The roadway starts at SR 193 east of Central Lincoln and extends south through unincorporated Placer County, Rocklin, Loomis, and Roseville to the Sacramento County line. In Sacramento County it becomes Hazel Avenue and continues south to U.S. 50.

- **Elverta Road** is an east–west arterial in northern Sacramento County that extends from the Garden Highway to east of Walerga Road. From the Garden Highway to just west of Watt Avenue this roadway has two travel lanes, while there are four to six lanes on its Eastern Segments.

- **Elkhorn Boulevard** is an east–west arterial in Sacramento County that extends from the Sacramento International Airport east to I-80 where it becomes Greenback Lane. From the Sacramento International Airport to just west of Rio Linda Boulevard, this roadway has two travel lanes, while there are four on its Eastern Segments.

3.2 EXISTING TRAFFIC LEVELS OF SERVICE

Determination of traffic impacts of the project is based upon projected roadway volumes and comparisons to roadway capacities. Roadway operating conditions are described using the concept of "level of service."

Level of Service (LOS) is a qualitative measure of the effect of a number of factors that include speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort/convenience, and operation costs. LOSs are designated "A" through "F," from the best to worst, which covers the entire range of traffic operations that might occur. Level of Service "E" describes conditions approaching or at maximum capacity.

As shown in Table 1, the LOS standards and the analysis methodologies for calculating LOS differ for the jurisdictions and agencies in the study area. Most jurisdictions use both a roadway segment analysis (based on daily capacities by roadway type) and an intersection analysis (based on critical movements during peak hours), while the cities of Roseville and Lincoln do not use a roadway segment analysis. The LOS standards on state highways are based on Caltrans' Transportation Concept Reports for each route. Typical Concept LOS standards in District 3 are LOS D in rural areas and LOS E in urban areas. However, some heavily congested route segments now have a concept LOS F because improvements required to bring the LOS to E are not considered feasible.

For the Tier 1 EIS/EIR, the LOS analysis is based on comparing average weekday traffic volumes on a roadway segment to a planning level daily capacity for that roadway segment. Table 2 summarizes the LOS criteria used for this analysis.

The daily segment-based analysis criteria in Table 2 are consistent with the methodologies used in the *Placer County General Plan EIR* and the *Sacramento County General Plan EIR*, as well as by other jurisdictions in the area. Arterial roadways were evaluated using the criteria for "moderate access control arterials," while the criteria for "low access control" arterials were used for collector roadways.

Table 1:
Summary of Level of Service Standards and Methodologies for Local Jurisdictions

Jurisdiction/ Agency	Level of Service Standard	Methodology for LOS Calculations	
		Roadway Segment Analysis	Peak hour Intersection Analysis
Placer County	C (D within ½ mile of state highway)	Based on daily volumes	Circular 212
Sutter County	D	Based on daily volumes	Circular 212
Sacramento County	E	Based on daily volumes	Circular 212 with modified capacities
City of Roseville	C (up to 30 percent of signalized intersections can exceed LOS C at buildout of City's entitled land)	NA	Circular 212 with modified capacities
City of Lincoln	C (LOS D along state highways)	NA	Circular 212 with modified capacities
City of Rocklin	C (LOS D within ½ mile of freeway interchange)	Based on daily volumes	Circular 212
Town of Loomis	C	Based on daily volumes	Circular 212
Caltrans	Based on Transportation Concept Report (TCR) for each facility	Highway Capacity Manual (HCM) based on peak hour volumes	HCM

Sources: General Plans and traffic impact guidelines for local jurisdictions and agencies

Table 2:
Level of Service Definitions – Daily Segment Based Analysis

Roadway Capacity Class	Maximum Daily Traffic Volume Per Lane for Each Level of Service Designation				
	A	B	C	D	E
1) Arterial – High Access Control	6,000	7,000	8,000	9,000	10,000
2) Arterial – Moderate Access Control	5,400	6,300	7,200	8,100	9,000
3) Arterial and Collector – Low Access Control	4,500	5,250	6,000	6,870	7,500
4) Expressway – Level Terrain	4,050	6,620	9,450	12,150	13,500
5) Freeway – Level Terrain	6,300	10,620	13,680	16,740	18,000
6) Rural Roadway	1,500	2,950	4,800	7,750	12,500

Sources: Placer County General Plan EIR and Sacramento County General Plan EIR

Table 3 shows the existing daily traffic volumes and the daily segment-based LOS on a number of key roadways in the study area. Most of the traffic counts on local roadways were taken in 2005, while the counts on state highways are from 2004. The counts on local roadways were collected by local jurisdictions as part of regular count programs, by consultants as part of recent traffic impact studies or by DKS for this technical report.

Table 3:
Existing Daily Traffic Volumes and Roadway Segment Levels of Service in TASA

	Roadway	Segment	2005 Conditions		
			Travel Lanes	Daily Traffic Volume	Segment Level of Service
State Highways					
1	SR 70/99	North of Howsley Road	4	29,000	A
2	SR 70/99	North of Sankey Road	4	29,000	A
3	SR 70/99	North of Riego Road	4	29,000	A
4	SR 70/99	North of Elverta Road	4	32,000	A
5	SR 70/99	North of I-5	4	47,500	B
6	SR 65	North of Twelve Bridges	4	40,000	A
7	SR 65	North of Sunset Boulevard	4	47,500	B
8	SR 65	North of Blue Oaks Boulevard	4	43,000	A
9	SR 65	North of Pleasant Grove Boulevard	4	76,000	F
10	SR 65	North of Stanford Ranch Road	4	82,000	F
11	SR 65	North of I-80	4	84,000	F
12	I-80	East of Rocklin Road	6	96,000	D
13	I-80	East of SR 65	6	116,000	F
14	I-80	East of Douglas Boulevard	6	156,000	F
15	I-80	East of Riverside Avenue	6	163,000	F
16	I-80	West of Riverside Avenue	8+2	179,000	F
17	I-80	East of Northgate Boulevard	6	143,000	F
Local Roadways					
18	Athens Avenue	East of Fiddyment Road	2	3,700	B
19	Baseline Road	East of Pleasant Grove Road	2	9,950	D
20	Baseline Road	East of Brewer Road	2	10,400	D
21	Baseline Road	West of 16th Street	2	10,400	D
22	Baseline Road	West of Watt Avenue	2	10,400	D
23	Baseline Road	East of Watt Avenue	2	12,600	C
24	Baseline Road	West of Walerga Road	2	12,600	C
25	Baseline Road	East of Walerga Road	3	15,100	D
26	Baseline Road	West of Woodcreek Oaks Boulevard	3	15,100	D
27	Blue Oaks Boulevard	East of Watt Avenue	NA	NA	NA
28	Blue Oaks Boulevard	West of Fiddyment Road	NA	NA	NA
29	Blue Oaks Boulevard	East of Fiddyment Road	2	8,200	A

Table 3:
Existing Daily Traffic Volumes and Roadway Segment Levels of Service in TASA

	Roadway	Segment	2005 Conditions		
			Travel Lanes	Daily Traffic Volume	Segment Level of Service
30	Blue Oaks Boulevard	West of SR 65	4	38,700	**E**
31	Brewer Road	North of Sunset Boulevard West	2	200	A
32	Brewer Road	South of Sunset Boulevard West	2	200	A
33	Brewer Road	North of Baseline Road	2	700	A
34	Catlett Road	East of SR 70/99	2	200	A
35	Catlett Road	East of Pleasant Grove Road	2	100	A
36	Cirby Way	East of Foothills Boulevard	4	38,900	F
37	East Catlett Road	East of Brewer Road	2	200	A
38	East Catlett Road	West of Fiddyment Road	2	200	A
39	Dowd Road	North of Sunset Boulevard West	NA	NA	NA
40	Dryer Road West	South of Baseline Road	NA	NA	NA
41	Elkhorn Boulevard	East of SR 70/99	2	16,300	E
42	Elkhorn Boulevard	West of Watt Avenue	4	26,800	C
43	Elkhorn Boulevard	East of Watt Avenue	4	23,020	B
44	Elkhorn Boulevard	West of Walerga Road	4	25,700	C
45	Elverta Road	East of SR 70/99	2	7,200	A
46	Elverta Road	East of Rio Linda Boulevard	2	8,000	A
47	Elverta Road	West of Watt Avenue	2	20,700	F
48	Fiddyment Road	North of Sunset Boulevard West	2	2,800	A
49	Fiddyment Road	South of Sunset Boulevard	2	4,000	B
50	Fiddyment Road	North of Blue Oaks Boulevard	2	4,000	A
51	Fiddyment Road	North of Pleasant Grove Boulevard	2	11,800	B
52	Fiddyment Road	North of Baseline Road	2	19,600	F
53	Foothills Boulevard	North of Blue Oaks Boulevard	4	3,400	A
54	Foothills Boulevard	South of Roseville Parkway	4	12,200	A
55	Foothills Boulevard	North of Baseline Road	4	28,400	C
56	Foothills Boulevard	South of Baseline Road	4	30,900	D
57	Howsley Road	East of SR 70/99	2	800	A
58	Industrial Avenue	North of Athens Avenue	2	4,600	A
59	Industrial	North of Roseville Parkway	2	2,800	A
60	Junction Boulevard	East of Woodcreek Oaks Boulevard	4	6,100	A
61	Moore Road	West of Brewer Road	2	400	A
62	Nicolaus Road	East of Brewer Road	2	900	A
63	Pacific Street	West of Sunset Boulevard	2	10,600	A
64	PFE Road	East of Watt Avenue	2	4,700	A
65	Phillip Road	East of Brewer Road	2	100	A

Table 3:
Existing Daily Traffic Volumes and Roadway Segment Levels of Service in TASA

	Roadway	Segment	2005 Conditions		
			Travel Lanes	Daily Traffic Volume	Segment Level of Service
66	Pleasant Grove Boulevard	West of Fiddyment Road	NA	NA	NA
67	Pleasant Grove Boulevard	East of Fiddyment Road	2	3,700	A
68	Pleasant Grove Boulevard	East of Woodcreek Oaks Boulevard.	4	16,300	A
69	Pleasant Grove Boulevard	West of SR 65	6	41,300	C
70	Pleasant Grove Road	North of Sankey Road	2	1,500	A
71	Pleasant Grove Road	North of Riego Road	2	1,700	A
72	Pleasant Grove Road	South of Baseline Road	2	1,500	A
73	Riego Road	East of SR 70/99	2	9,900	D
74	Riego Road	West of Pleasant Grove Road	2	9,900	D
75	Sankey Road	East of SR 70/99	2	400	A
76	Sankey Road	West of Pleasant Grove Road	2	200	A
77	Sierra College Boulevard	South of English Colony	2	11,000	B
78	Sierra College Boulevard	North of King Road	2	11,000	B
79	Wildcat Boulevard	North of Whitney Ranch Parkway	4	3,700	A
80	Sunset Boulevard	East of Fiddyment Boulevard	NA	NA	NA
81	Sunset Boulevard	West of SR 65	4	8,000	A
82	Sunset Boulevard	East of SR 65	4	7,100	A
83	Sunset Boulevard	East of Blue Oaks Boulevard	6	9,800	A
84	Sunset Boulevard West	West of Brewer Road	2	600	A
85	Sunset Boulevard .West	East of Brewer Road	2	600	A
86	Sunset Boulevard West	West of Fiddyment Road	2	600	A
87	Twelve Bridges Drive	West of SR 65	2	6,000	A
88	Twelve Bridges Drive	East of SR 65	4	5,100	A
89	Valley View Drive	West of Park Drive	NA	NA	NA
90	Walerga Road	South of Baseline Road	2	14,900	D
91	Walerga Road	North of Elverta Road	4	22,700	F
92	Washington Boulevard	South of Blue Oaks Boulevard	2	4,800	A
93	Washington Boulevard	North of Pleasant Grove Boulevard	2	6,205	A
94	Watt Avenue	North of Pleasant Grove Boulevard	NA	NA	NA
95	Watt Avenue	North of Baseline Road	NA	NA	NA
96	Watt Avenue	South of Baseline Road	2	7,100	A
97	Watt Avenue	North of Elverta Road	4	19,400	A
98	Watt Avenue	North of Elkhorn Boulevard	4	38,700	F
99	Watt Avenue	North of Airbase Drive	6	47,100	D
100	Watt Avenue	North of I-80	6	62,600	F

Table 3:
Existing Daily Traffic Volumes and Roadway Segment Levels of Service in TASA

Roadway		Segment	2005 Conditions		
			Travel Lanes	Daily Traffic Volume	Segment Level of Service
101	West Side Drive	North of Blue Oaks Boulevard	NA	NA	NA
102	West Side Drive	North of Baseline Road	NA	NA	NA
103	Whitney Ranch Parkway	East of SR 65	NA	NA	NA
104	Woodcreek Oak Boulevard	South of Pleasant Grove Boulevard	2	11,900	A
105	16th Street	North of Baseline Road	NA	NA	NA
106	16th Street	South of Baseline Road	NA	NA	NA
107	16th Street	North of Elverta Road	2	400	A
108	Blue Oaks Boulevard	East of Lonetree Boulevard	4	9,500	A

Notes:
Shaded cells reflect roadway segments that do not meet LOS policies of jurisdiction or agency.
[1] +2 = Plus two HOV lanes
[2] Traffic volumes on state highways are 2004. Counts on some local roadways were taken prior to 2005
Source: DKS Associates, 2006

Table 3 shows that some roadway segments in the TASA currently do not meet the LOS standards of the jurisdictions and agencies that control them, including the following:

- I-80 from SR 65 to Antelope Road and between Northgate Boulevard and Norwood Avenue
- SR 65 from I-80 to Pleasant Grove Boulevard
- Baseline Road from the Sutter County Line to Watt Avenue, and from Walerga Road to Woodcreek Oaks Boulevard
- Blue Oaks Boulevard from SR 65 to Foothill Boulevard
- Cirby Way from Foothill Boulevard to Riverside Avenue
- Elverta Road from 28th Street to Watt Avenue
- Fiddyment Road from Baseline Road to Pleasant Grove Boulevard
- Foothill Boulevard from Baseline Road to Cirby Way
- Walerga Road from Baseline Road to Elverta Road
- Watt Avenue from Antelope Road to Elkhorn Boulevard, and from Airbase Drive to I-80

Table 3 indicates that Riego Road and Baseline Road operate at LOS D, conditions, while observations indicate that portions of these roadways currently operate at LOS F conditions. The LOS for Riego Road and Baseline Road in Table 3 are based on capacities for an urban arterial, which would typically have

signalized intersections at major cross streets instead of the four-way or three-way stop-sign control that exists along Riego Road and Baseline Road. If these intersections were signalized, these roadways would operate at LOS D conditions.

The analysis of I-80 in this Technical Report covers segments between Rocklin Road and Antelope Road, and well as between Northgate Boulevard and Norwood Road. This latter section of I-80 was selected because it is a current bottleneck, especially during the p.m. peak period due to a decrease in travel lanes between Truxel Avenue and Norwood Road.

3.3 EXISTING TRANSIT SERVICE

Local transit service in the TASA is currently provided by local governments and social service agencies. Fixed-route bus service providers in south/west Placer County include Placer County Transit, Lincoln Transit, Roseville Fixed Route, and Roseville Commuter Service. In south Sutter County, Yuba-Sutter Transit provides fixed-route bus services. In Sacramento County, Sacramento RT operates fixed-route bus and light-rail services.

The existing transit services in the TASA are summarized in Table 4. While there are a number of transit routes and services within the urbanized portion of this area, only a few transit routes travel near the proposed build alternatives, and those are located along SR 65, SR 70/99, or in the western portion of the City of Roseville. As discussed in Section 4.5, local transit operators intend to extend transit services into western Placer County as it urbanizes.

Table 4:
Existing Transit Routes in the TASA

		Existing Service		
			Approximate Frequency	
Operator	**Line**	**Route Description**	**Peak Period**	**Off-peak**
Auburn Transit	Blue	Local Blue	2 runs	hourly
	Red	Local Red	2 runs	hourly
Lincoln Transit	102	Local	1 a.m. Run	
	202	Eastside local	hourly	hourly
	203	Westside local	hourly	hourly
Placer County Transit	1	Auburn-LRT	hourly	hourly
	2	Lincoln to Sierra College	hourly	hourly
	3	SR 49 – N Auburn	hourly	hourly
	4	Colfax-Alta	1 a.m./p.m.	
	5	Taylor Road Shuttle	2 hour	2 hour
	PCX	Commuter Express Colfax to Sac	2 a.m./p.m.	
Roseville Transit	1	Commuter 1	1 a.m. & 1 p.m.	
	2	Commuter 2		
	3	Commuter 3		
	4	Commuter 4		
	5	Commuter 5		
	6	Commuter 6		

Table 4:
Existing Transit Routes in the TASA

Operator	Line	Existing Service		
			Approximate Frequency	
		Route Description	Peak Period	Off-peak
	7	Commuter 7		
	A	Local A	hourly	hourly
	B	Local B		
	C	Local C		
	D	Local D		
	E	Local E		
	F	Local F		
Roseville Transit	G	Local G		
	H	Local H		
	I	Local I		
	J	Local J		
	K	Local K		
	M	Local M		
	R	Local R	1 a.m./p.m.	
Yuba-Sutter Transit	SR 99	Sacramento Commuter Express	6 a.m./p.m.	
	SR 99	Sacramento Midday Express		3 runs
Regional Transit	11	Truxel Road (Natomas – Downtown)	30 min	hourly
	13	Northgate (Northgate – Arden/Del Paso)	30 min	hourly
	14	Norwood (North Natomas – Arden/Del Paso)	30 min	hourly
	15	Rio Linda – O Street (Watt/I-80 – Downtown)	30 min	30 min
	16	Del Paso Heights – Norwood (Norwood Center – Arden/Del Paso)	hourly	hourly
	17	Del Paso Heights – McClellan (Norwood Center – McClellan)	hourly	hourly
	18	Del Paso Heights – Bell Road (Norwood Center – Marconi/Arcade)	hourly	hourly
	19	Rio Linda (Watt/I-80 – Arden/Del Paso)	hourly	hourly
	80	Watt Avenue – Elkhorn (Watt/Manlove – Greenback/Auburn)	hourly	hourly
	84	Watt Avenue – North Highlands (Watt/Manlove –Watt/Elverta)	hourly	hourly
	100	Antelope Express (Antelope – Watt/I-80)	30 min	
	101	Don Julio (North Highlands – Watt/I-80)	2 a.m./p.m.	
	102	Hillsdale Express (Hillsdale – Watt/I-80)	30 min	

Sources: Schedules from local transit providers

The urbanized portions of the TASA are also served by "dial-a-ride" transit services, but not the rural area around the build alternatives. Consolidated Transportation Services Agency, an independent provider of demand responsive transportation services to the elderly and disabled, provides services in portions of Placer County, but they do not serve the area near the Parkway alternatives. Dial-a-ride services would be extended into western Placer County as it urbanizes.

3.4 EXISTING BICYCLE FACILITIES

Bicycle facilities in Placer County and Sutter County are classified as follows:

- **Class I:** Off-street bike trails or paths that are physically separated from streets or roads used by motorized vehicles.
- **Class II:** On-street bike lanes with signs, striped lane markings, and pavement legends.
- **Class III:** On-street bike routes marked by signs and shared with motor vehicles and pedestrians. Optional 4-inch edge lines painted on the pavement.

There is a very limited bikeway system in the vicinity of the Parkway Alternatives.

Placer County adopted a *Regional Bikeway Plan* in 2002. That plan covered much of Placer County, but not areas west of Watt Avenue. Sacramento County and the cities of Roseville and Lincoln have also developed Bikeway Master Plans. Sutter County has worked to establish bikeways in urban areas. There are no existing bikeways in the rural portion of Sutter County near the corridor alignment alternatives.

4.0 TRAVEL FORECASTING AND ANALYSIS METHODOLOGY

4.1 ANALYSIS SCENARIOS

Table 5 outlines the 24 scenarios (corridor alternatives, Watt Avenue options, and development conditions) that were defined and evaluated in this Technical Report. Comparing traffic conditions based on the above conditions and scenarios provides a comprehensive basis for determining the traffic impacts of the proposed Parkway alternatives. To determine the traffic impacts, the traffic associated with each alternative was compared to a No-Build scenario for the same time frame, as follows:

Table 5:
Analysis Scenarios for Transportation Technical Report

#	Development Level	Placer Parkway Alternative	Watt Avenue Interchange
1	Opening Year (2020)	No-Build	
2		1	Without interchange
3			With north interchange
4			With south interchange
5		2	Without interchange
6			With interchange
7		3	Without interchange
8			With interchange
9		4	Without interchange
10			With interchange
11		5	Without interchange
12			With interchange
13	Cumulative (2040)	No-Build	
14		1	Without interchange
15			With north interchange
16			With south interchange
17		2	Without interchange
18			With interchange
19		3	Without interchange
20			With interchange
21		4	Without interchange
22			With interchange
23		5	Without interchange
24			With interchange

- The traffic impacts under the Opening Year (2020) Plus Project scenario were determined by comparing its traffic operations to the Opening Year (2020) No-Build scenario.

- The traffic impacts under the Cumulative (2040) Plus Project scenario were determined by comparing its traffic operations to the Cumulative (2040) No-Build scenario.

4.2 SACMET MODEL

The primary travel forecasting tool to be used for the Parkway Tier 1 EIS/EIR is the Sacramento Metropolitan Travel Demand Model, or "SACMET" model. This model was used for development of SACOG's 2006 Metropolitan Transportation Plan (MTP), and for regional air quality conformity analyses. It has provided the basis for other recent regional studies, corridor analyses, and environmental documents. SACOG maintains SACMET over time, updating base year and forecast year demographic data and networks, and working with a technical advisory committee to periodically update and enhance the model. Finally, many local jurisdictions use the model as the basis for general plans and environmental studies. For all of these reasons, this model provides the best starting point for travel forecasts for this project.

Documentation on this model is provided in *"Sacramento Regional Travel Demand Model Version 2001 – SACMET 01 (SACOG and DKS Associates, March 2002).*

The Parkway would affect traffic patterns and volumes on arterial and collector roadways in a broad area covering south/west Placer County, south Sutter County, and north Sacramento County. SACMET does not include some of the arterial roadways or most of the major collector roadways in that sub-regional area. To adequately evaluate the impact of the Parkway on that roadway system, modifications to SACMET were needed. Modifying a regional model to provide additional detail in the model's transportation system for a corridor or sub-regional transportation analysis is a common practice.

Through discussions with the Placer Parkway Technical Advisory Committee (TAC) and SACOG, the following enhancements were made to the SACMET model for the purposes of preparing travel forecasts for the project's Tier 1 EIS/EIR alternatives:

- The traffic analysis zones (TAZs) and roadway network in the Placer County Travel Demand Model were substituted for the SACMET zone system and roadway network in Placer County.

- Additional TAZs were also added to SACMET in south Sutter County to allow a more detailed analysis in that area.

It is important to test the model's accuracy and make appropriate adjustments to its equations, parameters, and assumptions through a validation process. Validation refers to the systematic comparison of the model outputs for a base year (i.e., 2005) to observed travel behavior. The validation of the enhanced SACMET model for the project's Tier 1 EIS/EIR focused on vehicle volume counts on roadway segments (or links in the model networks). The performance of the model in predicting traffic volumes by functional class, volume class, and "screenlines" was evaluated.

The results of the validation process, shown in Appendix A of this report, were presented to the TAC. The validation produced results that were within acceptable tolerances for sub-regional travel models following best practices in travel demand forecasting. The TAC concurred that the travel model was acceptable for use in this Tier 1 EIS/EIR.

4.3 INDUCED TRAVEL DEMAND

When a major new transportation facility such as Placer Parkway is introduced into a heavily congested travel corridor, it would not only impact people's route choice, but potentially the mode and origin/destination of trips in that corridor. A new or widened regional transportation facility could "induce" travel and increase vehicle-miles of travel (VMT) in the corridor by allowing people to travel further in the same amount of time.

In general terms, induced travel can come from the following sources:

- A change in trip generation – either an increase in the number of total person trips related to development or an increase in motorized person trips *per development unit*
- A change in trip distribution – an increase in average motorized person trip distance
- A change in mode choice – an increase in the share of person travel by private motorized vehicles
- A change in route choice – a shift in vehicle travel to new or improved facilities from unimproved facilities within a corridor, or to an improved corridor due to diversion of traffic from other corridors.

It is important that the model used for the Tier 1 EIS/EIR follows nationally accepted "best practices" in the engineering profession. Under "best practices," the model should be capable of forecasting differences in trip distribution, mode choice, and route choice (traffic assignment) between all alternatives.

The "feedback loop" in the SACMET model to both the trip distribution and mode choice models is being used in the forecasting for the Tier 1 EIS/EIR. This model feature ensures that the model adequately predicts how the project would change trip distribution and mode choice (and resulting traffic volumes and vehicle-miles of travel) compared to the No-Build Alternative.

4.4 DEVELOPMENT PROJECTIONS (2005 TO 2040)

Travel demand in the vicinity of the project area will be influenced by growth in population and employment in the six-county Sacramento region, and especially growth in south/west Placer County, south Sutter County, and north Sacramento County.

FHWA and Caltrans have requested that cumulative conditions for the transportation analysis of build alternatives be based on development levels that are 20 years beyond the projected opening of the Parkway. For planning purposes, Placer County Transportation Planning Agency (PCTPA) has identified 2020 as the opening year of this facility.

SACOG's current MTP has a 2027 horizon year. In 2004, the SACOG Board adopted the Preferred Blueprint Scenario, which outlines land use and development levels for a 2050 horizon year. Based on discussions with the TAC, the transportation analysis of build alternatives was conducted for the following two future development scenarios:

- A 2020 "Opening Year" scenario reflecting 2020 development levels based on current general plans.
- A Cumulative (2040) Development Scenario that reflects a 2040 horizon. This scenario goes beyond SACOG's 2027 development levels to include foreseeable development based on input from local jurisdictions and SACOG's Preferred Blueprint Scenario.

The PDT concluded that these two scenarios would "bracket" regional development levels from a low (2020) level to a high (2040) level.

The development assumptions for a 2020 "Opening Year" scenario were based on discussions with the TAC and reflect the following assumptions:

- Residential buildout of current general plans within Placer County (see Figure 6).
- No development in the following major projects that would require General Plan amendments:
  - The Creekview and Sierra Vista Specific Plans in Roseville's Annexation Area
  - The SOI expansion areas of Lincoln
  - The Regional University, Placer Ranch Specific Plan areas, and Curry Creek Community Plan area in unincorporated Placer County
  - Sutter Pointe area in Sutter County.
- Development of the initial phase of Placer Vineyards (7,261 dwelling units out of 14,132 total). Placer Vineyards was included in the 2020 "Opening Year" scenario since urban development in that area was envisioned in Placer County General Plan.
- Growth in retail employment in the current General Plan areas of Placer County that "balances" the growth in residential development by matching SACOG's countywide estimate of about 0.32 employee per dwelling unit from their 2025 forecasts.
- Growth in total employment levels in the current General Plan areas of Placer County that "balances" the growth in residential development by matching SACOG's 1.3 employees per dwelling unit from their 2025 forecasts
- A straight-line growth rate between SACOG's estimates of 2005 development levels and their draft 2032 forecasts in each travel model zone outside Placer County and south Sutter County.

The Cumulative (2040) Development Scenario is based on the "Super-Cumulative" development scenario that was developed for the evaluation of traffic impacts in several pending EIRs for major developments in Placer County. It was prepared through discussions with the staffs of Placer County and the cities of Roseville, Rocklin, and Lincoln. The Cumulative (2040) Development Scenario for this Tier 1 EIS/EIR is based on the following:

- Full build out of all residential land in Placer County west of Sierra College Boulevard, including: current general plan areas and the following major development proposals in west Placer County (see Figures 7 and 7a):
  - The Creekview and Sierra Vista Specific Plans in Roseville's Sphere of Influence Annexation area
  - The Sphere of Influence expansion areas of Lincoln
  - The Placer Vineyards, the Regional University, Placer Ranch Specific Plans in unincorporated Placer County
  - The Curry Creek Community Plan area.

- Growth in retail employment in Placer County that "balances" the growth in residential development by matching SACOG's countywide estimate of about 0.32 employee per dwelling unit from their 2025 forecasts.

- Growth in total employment levels in Placer County that "balances" the growth in residential development by matching SACOG's 1.3 employees per dwelling unit from their 2025 forecasts.

- Full build-out of the residential development in the proposed Sutter Pointe Specific Plan area along with a non-residential development level that "balances" the residential development in that area.

- Estimated 2040 developments in all other portions of SACOG's six-county region based on a straight-line for the development growth between 2005 levels, and the 2050 Preferred Blueprint scenario for each of SACOG's TAZs.

As shown on Table 6, the 2020 "Opening Year" scenario has the same average yearly growth rate in each land use category as the Cumulative (2040) Development scenario, and the same yearly growth rate in residential units as SACOG's draft 2032 MTP forecasts for Placer County. This shows that the development rates used in this Tier 1 EIS/EIR are generally consistent with growth rates used in SACOG's regional forecasts for the MTP.

Table 6:
Summary of Placer County Growth

Land Use	Forecast Year	Estimate of Growth Rate		
		Period	Development (dwelling units [DU] or square feet [sq. ft.])	Growth per Year
Residential (Dwelling Units)	2004		109,810 DU	
	2020	2004 to 2020	181,437 DU	4,477 DU
	2032 (SACOG)[1]	2004 to 2032	216,962 DU	4,121 DU
	2040	2004 to 2040	261,980 DU	4,227 DU
Retail (KSF)	2004		17,008,000 sq. ft.	
	2020	2004 to 2020	28,575,000 sq. ft.	723,000 sq. ft.
	2040	2004 to 2040	43,015,000 sq. ft.	722,000 sq. ft.
Office (KSF)	2004		9,904,000 sq. ft.	
	2020	2004 to 2020	24,681,000 sq. ft.	924,000 sq. ft.
	2040	2004 to 2040	43,268,000 sq. ft.	927,000 sq. ft.
Industrial (KSF)	2004		21,906,000 sq. ft.	
	2020	2004 to 2020	34,640,000 sq. ft.	796,000 sq. ft.
	2040	2004 to 2040	50,565,000 sq. ft.	796,000 sq. ft.

[1] Based on March 2006 draft development forecasts from SACOG
All growth estimates do not include Placer County's High Country east of Colfax

Table 7 summarizes the development assumptions that were used for the 2020 and Cumulative (2040) travel demand forecasts. The location of the assumed development areas in 2020 and 2040 are shown in Figures 6 and 7, respectively.

Table 7:
Summary of Development Assumptions – 2020 and 2040 Scenarios for Placer Parkway Tier 1 EIS/EIR

Jurisdiction	Residential (DU)			(KSF) Retail			Office			Industrial		
	2004	2020	2040	2004	2020	2040	2004	2020	2040	2004	2020	2040
Cities (Current General Plans)												
Roseville	40,889	60,039	60,039	9,857	13,200	14,334	5,712	12,441	12,441	8,630	14,000	17,403
Rocklin	19,641	28,606	28,606	2,126	3,900	4,590	797	3,000	5,788	2,791	5,000	6,494
Lincoln	10,478	22,218	22,218	431	2,000	3,000	584	2,491	2,491	3,779	4,700	5,899
Loomis	2,274	4,087	4,087	323	932	932	94	492	492	1,038	1,100	1,124
Auburn	5,135	7,022	7,022	1,375	1,667	1,758	613	943	943	266	400	555
Colfax	622	921	921	250	448	448	35	68	68	175	200	204
Unincorporated Areas (Current General Plans)												
Auburn/Bowman	9,056	17,144	17,144	1,545	2,600	2,932	1,480	2,946	2,946	953	2,000	2,767
Granite Bay	7,140	7,892	7,892	602	919	919	286	819	819	12	40	62
Sunset	-	-	-	0	357	357	166	762	762	3,527	6,000	7,528
Bickford	9	1,890	1,890	3	105	105	-	-	-	-	-	-
Riolo Vineyard	6	958	958	-	88	88	-	-	-	-	-	-
Other Dry Creek	956	3,461	3,461	47	224	224	-	157	157	172	600	897
Other Unincorporated	13,457	19,938	19,938	450	1,040	1,225	137	400	400	533	600	747
Major Projects in west Placer County												
Curry Creek (Placer County)	-	-	16,206	-	-	2,025	-	-	2,122	-	-	-
Regional University (Placer County)	-	-	4,387	-	-	215	-	-	75	-	-	-
Lincoln SOI Expansion	-	-	33,720	-	-	5,659	-	-	5,748	-	-	2,700
Placer Ranch (Placer County)	-	-	6,759	-	-	1,047	-	-	5,243	-	-	4,185
Placer Vineyards (Placer County)	147	7,261	14,132	-	1,095	1,857	-	162	2,073	31	-	-
Creekview (Roseville)	-	-	2,600	-	-	300	-	-	-	-	-	-
Sierra Vista (Roseville)	-	-	10,000	-	-	1,000	-	-	700	-	-	-
Total Placer County	109,810	181,437	261,980	17,008	28,575	43,015	9,904	24,681	43,268	21,906	34,640	50,565
South Sutter (South of Howsley)	360	400	17,500	12	20	2,188	78	100	1,500	292	600	3,000

Source: DKS Associates, 2006

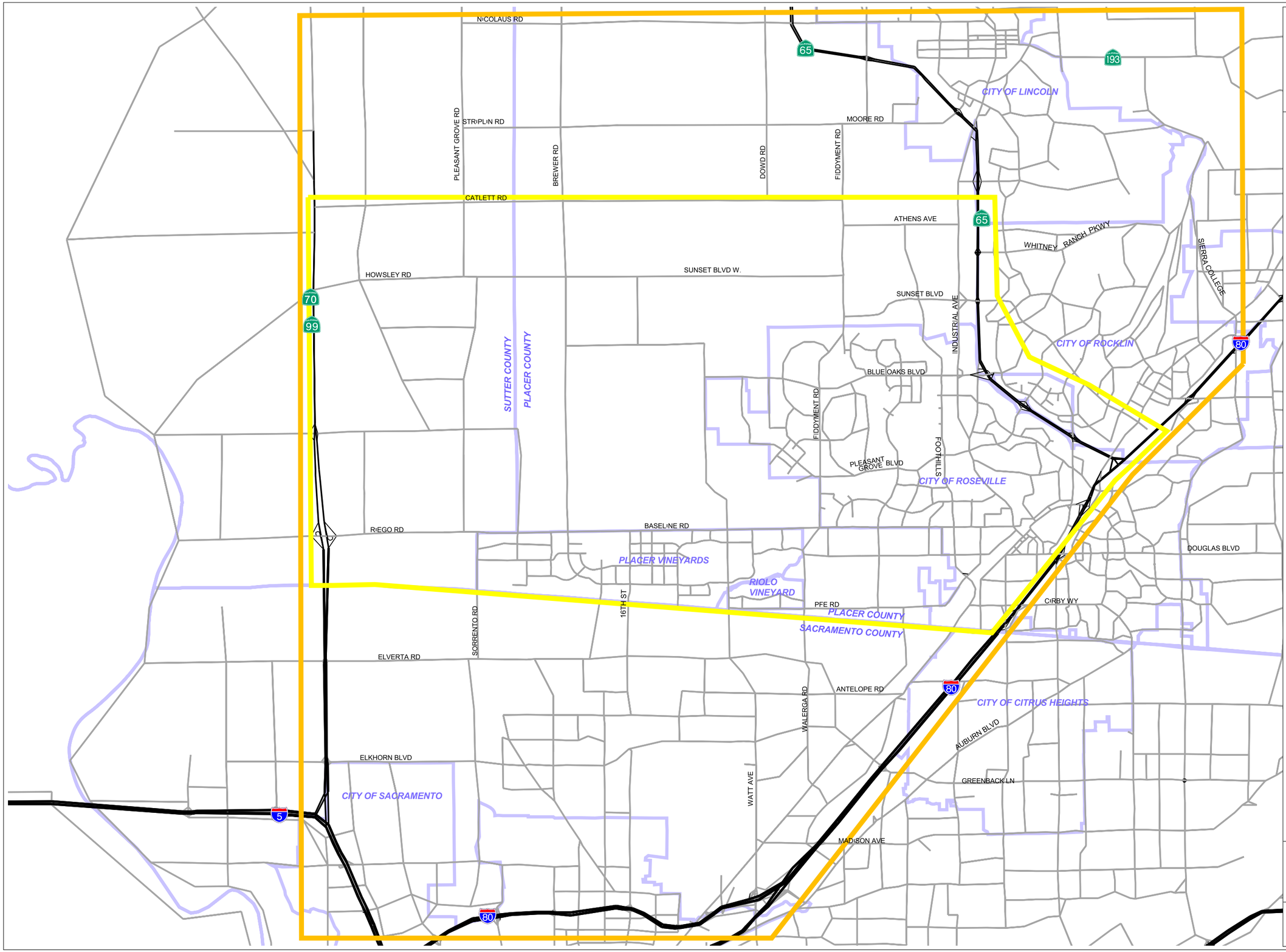

FIGURE 6
Assumed Development Areas and Roadway Network in 2020

- Transportation Analysis Study Area
- Analysis Focus Area
- Cities and Specific Plan Areas

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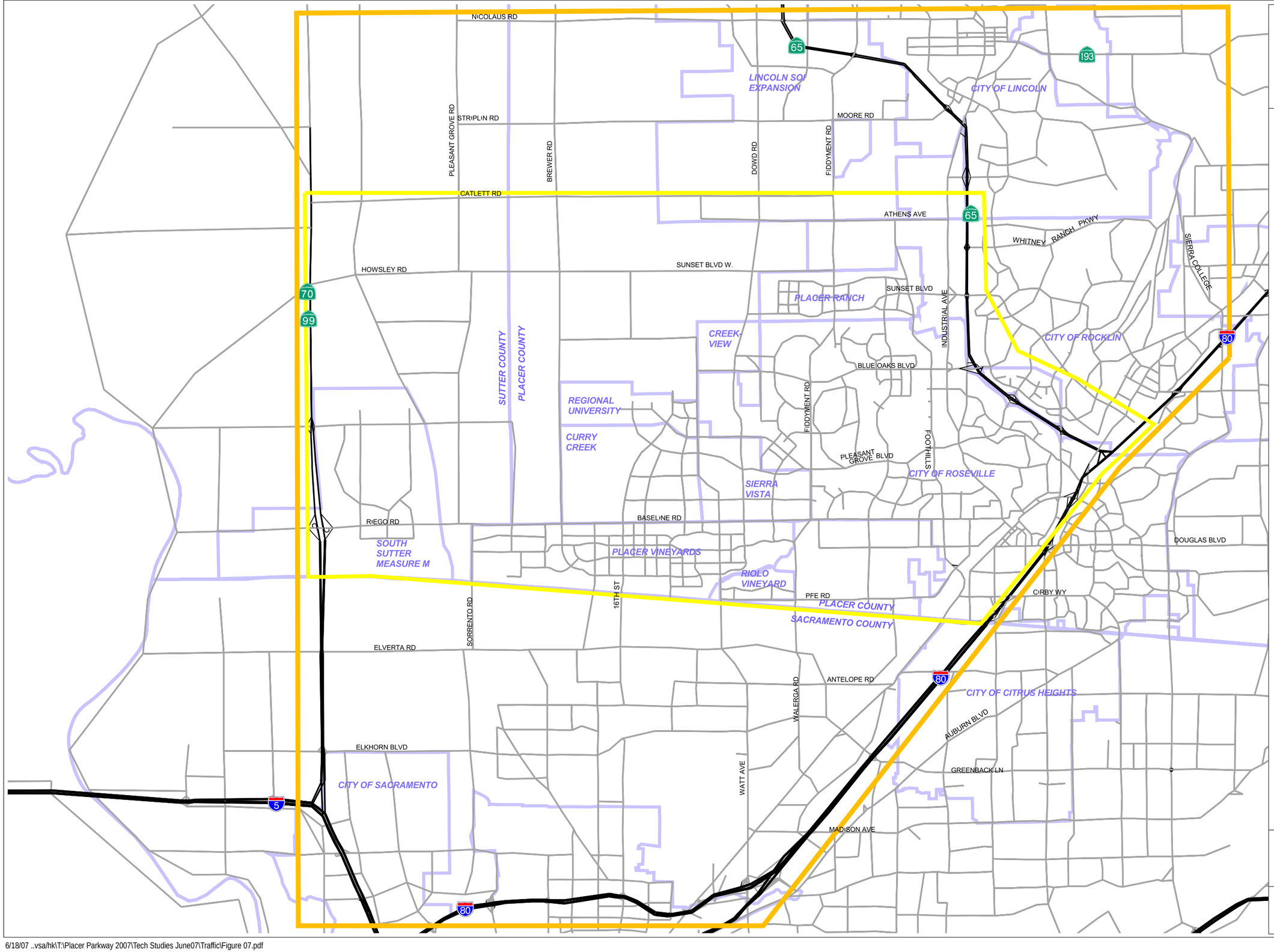
FIGURE 7
Assumed Development Areas and Roadway Network in 2040



Transportation Analysis Study Area

Analysis Focus Area

Cities and Specific Plan Areas

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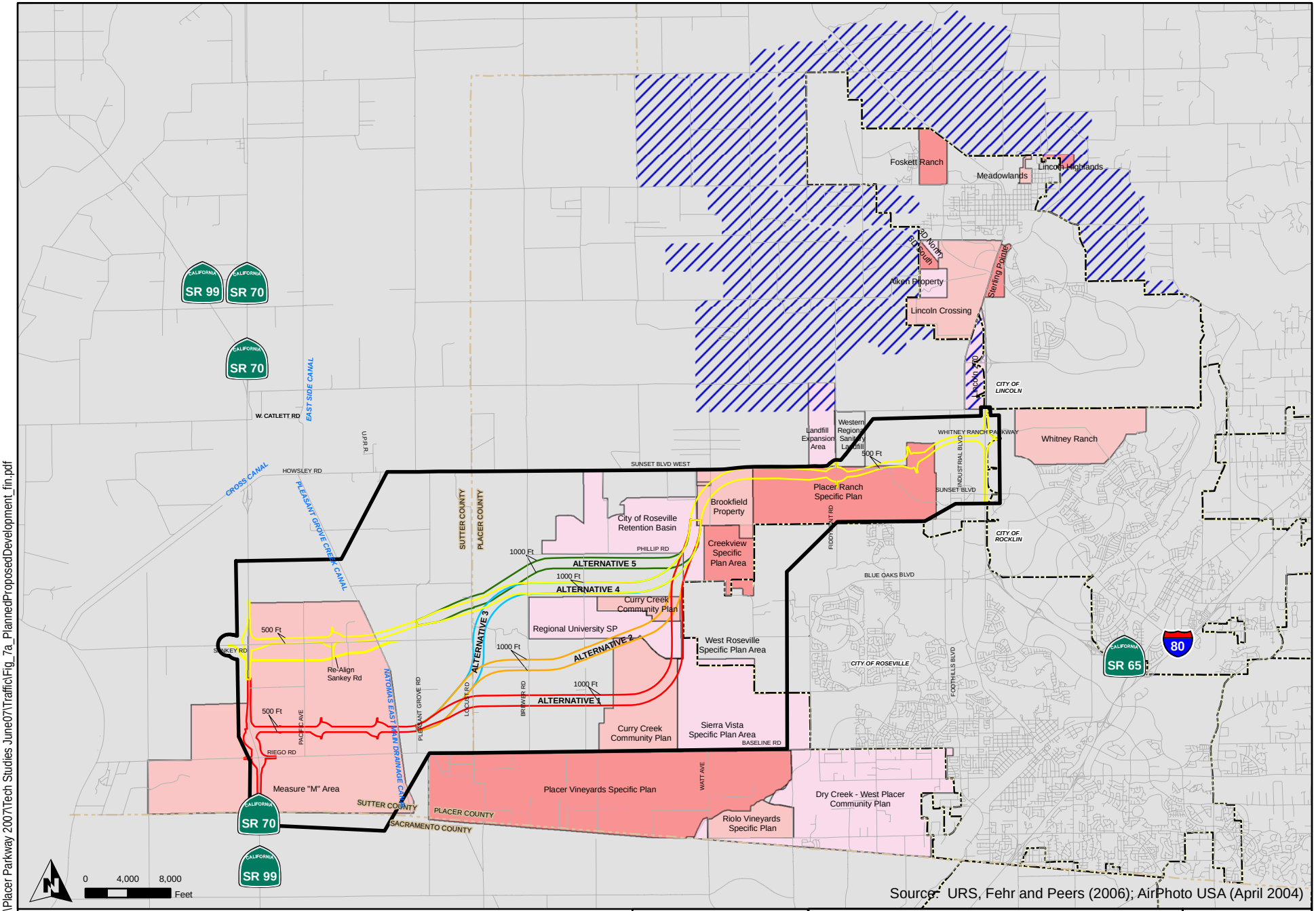

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR Transportation Technical Report

Planned / Proposed Development

Figure 7a

June 2007

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4.5 FUTURE TRANSPORTATION SYSTEM

The 2020 No-Build roadway system (shown in Figure 6) includes the following elements:

- The roadway improvements in the MTP that would be implemented by 2020, which includes the funded Capital Improvement Programs (CIPs) of local jurisdictions.
- The proposed new roadways and roadway widening projects that would be part of Phase 1 of the proposed Placer Vineyards development that was assumed in the 2020 development scenario

The assumed 2040 No-Build roadway system (shown in Figure 7) was based on the "Super-Cumulative" scenario that was developed for the evaluation of traffic impacts in several recent EIR's for major developments in Placer County and was prepared through discussions with the staffs of Placer County and the cities of Roseville, Rocklin and Lincoln. The 2040 No-Build roadway system includes the following elements:

- The roadway improvements in SACOG's 2027 MTP that includes the funded Capital Improvement Programs (CIPs) of local jurisdictions. The MTP also includes the addition of HOV lanes and auxiliary lanes on I-80 between Riverside Avenue and SR 65.
- The proposed new roadway and roadway widening projects that would be part of the new developments assumed in the Cumulative (2040) Development Scenario, including the following:
  - New roadways in the Placer Vineyards, Regional University, Placer Ranch, Curry Creek, Creekview, and Sierra Vista developments
  - Widening Baseline Road to six lanes west of Watt Avenue and widening of Watt Avenue to six lanes between Baseline Road and the Sacramento County line that will be required as part of the proposed Placer Vineyards development.
  - The new and widened roadways identified as part of the proposed Lincoln SOI expansion area.
- Widening of SR 65 to six lanes from I-80 to Nelson Road.
- Widening of SR 70/99 to six lanes from I-5 to Riego Road.

The transit system assumptions for the No-Build Alternative were based on the "Funded Constrained Alternative" that was recently developed by PCTPA with the assistance of local transit providers as part of the Placer County Long-range Transit Plan update. This represents the most likely future transit system unless new sources for transit operating subsidies are established.

The Funded Constrained Alternative assumed that operating funds (in particular TDA funds) would increase at the same rate as population in Placer County. The 2040 development scenario represented about a 140 percent increase in population between 2005 and 2040. Based on this, a transit system was defined that represented about a 140 percent increase in bus-miles from the 2005 system. The assumed increase in bus service between 2005 and 2040 is summarized in Table 8, and was defined by the following:

Table 8:
Assumed Transit Service Changes for 2040 Funded Constrained Scenario

Line Name	Existing Service			Funded Constrained Scenario – Assumed Modified or New Service			
		Frequency		Route Description		Assumed Frequency	
	Route Description	Peak Period	Off-peak	Short Range Transit Plan Changes	Other Additional Services	Peak Period	Off-peak
0084 X	RT Watt Avenue	hourly	hourly		Extend to Placer Vineyards	hourly	hourly
BRT1	Placer Ranch/Galleria/I-80						
BRT2	Placer Ranch to Watt Avenue (BRT "light")				Extend BRT on Watt to Placer Ranch via Placer Vineyard and West Roseville	hourly	hourly
AUBBL	Auburn Local, Blue	2 runs	hourly		Increase peak period frequencies & extend south	hourly	hourly
AUBR	Auburn Local, Red	2 runs	hourly		Increase peak period frequencies	hourly	hourly
LIN102	Lincoln local (One a.m. run)	1 a.m. Run			Extend to west side	1 a.m. Run	
LIN202	Eastside local	hourly	hourly			hourly	hourly
LIN203	Westside local	hourly	hourly		Extend to west side	hourly	hourly
LIN301					Long local loop route connecting all new villages in expansion area via new East Loop Road, Wise Road, Dowd Road, Fiddyment Road and Ferrari Ranch Road	hourly	hourly
LIN302					Local west side route connecting Villages 4, 5 & 6 and retail/employment in SUD A, B & C	hourly	hourly
PCT1	Placer: Auburn-LRT	hourly	hourly	Double frequency		30 min	30 min
PCT2	Placer: Lincoln to Sierra College	hourly	hourly	Reroute to Thunder Valley Casino (implemented 2005)	Double frequency	30 min	30 min
PCT3	Placer: SR 49 – North Auburn	hourly	hourly		Double frequency	30 min	30 min
PCT4	Placer: Colfax-Alta	1 a.m./p.m.		Add mid-day runs			
PCT5	Placer: Taylor Road Shuttle	2 hour headway	2 hour headway		See PCT110		
PCT6				Add mid-day Foresthill runs 2x/wk			
PCT101				(see RSVC9)			
PCT102					Internal route through west side of Placer Vineyard Roads	hourly	hourly
PCT 105					Curry Creek to Galleria	hourly	hourly
PCT106					Regional University to Galleria	hourly	hourly
PCT108					Casino, Placer Ranch, South Placer Justice Center & Galleria	hourly	hourly
PCT110					Auburn to Loomis (via Taylor Road) to Sierra College & Sierra Gardens transit center in Roseville (via Sierra College Boulevard and Douglas Boulevard)	hourly	hourly
PCT111					Luther Road route (SR 49 to I-80)	hourly	hourly
PCTBO	Blue Oaks, Placer Ranch, Rocklin				Serve west Placer growth areas and Justice Center		
PCTBR	Auburn to Lincoln				Service to Bickford Ranch		
PCTWR	West Vineyards, West Roseville				Add service West, Southwest of Roseville		
PCX	Placer Commuter Express Colfax to Sacramento	2 a.m./p.m.				hourly	

Table 8:
Assumed Transit Service Changes for 2040 Funded Constrained Scenario

Line Name	Existing Service			Funded Constrained Scenario – Assumed Modified or New Service			
		Frequency		Route Description		Assumed Frequency	
	Route Description	Peak Period	Off-peak	Short Range Transit Plan Changes	Other Additional Services	Peak Period	Off-peak
RSVC1	Roseville Commuter 1	1 a.m. & 1 p.m.				1 a.m. & 1 p.m.	
RSVC2	Roseville Commuter 2						
RSVC3	Roseville Commuter 3						
RSVC4	Roseville Commuter 4				Extend to Placer Ranch		
RSVC5	Roseville Commuter 5						
RSVC6	Roseville Commuter 6						
RSVC7	Roseville Commuter 7						
RSVC8	New Roseville Commuter 8			Cirby/Foothill to Downtown Sacramento		hourly	
RSVC9	New Roseville Commuter 9			West Roseville/Placer Vineyards to Downtown Sacramento via Baseline/SR 70/99		hourly	
RSVC10	New Roseville Commuter 10			Roseville Parkway/Sierra College to I-80 and Downtown Sacramento		hourly	
RSVC11	New Roseville Commuter 11			Olympus/Stoneridge to I-80 and Downtown Sacramento		hourly	
RSVCFO	New Roseville Commuter 12				Commuter to Folsom via Douglas and Auburn-Folsom Road	hourly	
RSVCRC	New Roseville Commuter 13				Commuter to Rancho Cordova	hourly	
RSVLA	Roseville Local A	hourly	hourly	Double frequency		30 min	30 min
RSVLB	Roseville Local B			Double frequency		30 min	30 min
RSVLC	Roseville Local C					hourly	hourly
RSVLD	Roseville Local D			Extend west			
RSVLE	Roseville Local E						
RSVLF	Roseville Local F						
RSVLG	Roseville Local G						
RSVLH	Roseville Local H				Extend to Placer Ranch		
RSVLI	Roseville Local I			Extend west			
RSVLJ	Roseville Local J			Shorten			
RSVLK	Roseville Local K						
RSVLM	Roseville Local M			Extend for WRSP service			
RSVLN	Roseville Local			Stoneridge			
RSVLO	Roseville Local			Highland Reserve			
RSVLR	Roseville Local R	1 a.m./p.m.				1 a.m./p.m.	

Source: DKS Associates, 2006

- First, the 2005 to 2012 bus service improvements in the Short Range Transit Plans for each of the transit providers in Placer County were assumed.

- Second, other "potential future services" that were discussed in each of Short Range Transit Plans were assumed.

- Third, additional bus service was added to new growth areas that would develop after the 2012 horizon year of the Short-Range Transit Plans.

The 2020 "Opening Year" scenario represents about a 65 percent increase in population in Placer County between 2005 and 2020, and a transit system was defined that represented about a 65 percent increase in bus-miles from the 2005 system. The 2020 No-Build transit system is similar to the "Funded Constrained" transit system that was used for the 2040 transportation analysis. It excludes a number of transit lines that would serve new development areas that were not included in the 2020 development scenario. That is, it excludes transit service to proposed Creekview, Sierra Vista, Placer Ranch, and Regional University Specific Plan areas, the proposed SOI expansion areas of Lincoln, and the Curry Creek Community Plan area in unincorporated Placer County.

4.6 STANDARDS OF SIGNIFICANCE

Transportation impacts were evaluated in the TASA (shown in Figure 1) that covers portions of Sutter County, Placer County, Sacramento County, the cities of Roseville and Rocklin, and the town of Loomis. Potential significant transportation impacts have been evaluated using the following specific criteria:

- In the City of Lincoln, the project would cause the operations on a roadway segment operating at LOS C or better conditions to deteriorate to LOS D or worse conditions. If a roadway segment already operates below the LOS standard, the project would cause roadway operations to deteriorate by one grade, or its volume-to-capacity ratio[1] increases by at least 0.05.

- In unincorporated Placer County, the project would cause a roadway segment operating at LOS C or better conditions to deteriorate to LOS D or worse conditions; or, for a roadway segment within one-half mile of state highways, the project would cause a roadway segment operating at LOS D or better conditions to deteriorate to LOS E or worse conditions. If a roadway segment already operates below the LOS standard, the project would cause roadway operations to deteriorate by one grade, or it causes the volume-to-capacity ratio to increase by at least 0.05.

- In unincorporated Sutter County, the project would cause a roadway segment operating at LOS D or better conditions to deteriorate to LOS E or worse conditions. If a roadway segment already operates below the LOS standard, the project would cause roadway operations to deteriorate by one grade, or it causes the volume-to-capacity ratio to increase by at least 0.05.

- In the City of Roseville, the project would cause a roadway segment operating at LOS C or better conditions to deteriorate to LOS D or worse conditions. If a roadway segment

[1] Volume-to-capacity (V/C) ratio equals the roadway volume divided by its capacity. A volume-to-capacity (v/c) ratio of 0.50 means that vehicles use only ½ of the road or intersection capacity and traffic moves freely. A v/c ratio of 1.0 indicates the volume of vehicles has completely used all the road's capacity and the roadway is congested.

already operates below the LOS standard, the project would cause roadway operations to deteriorate by one grade.

- In the City of Rocklin, the project would cause a roadway segment operating at LOS C or better conditions to deteriorate to LOS D or worse conditions; or, for a roadway segment within one-half mile of access to an interstate freeway, the project would cause a roadway segment operating at LOS D or better conditions to deteriorate to LOS E or worse conditions. If a roadway segment already operates below the LOS standard, the project would cause roadway operations to deteriorate by one grade, or it causes the volume-to-capacity ratio to increase by at least 0.05.

- The project would cause operations on a state highway to deteriorate to levels below the "concept LOS" identified in Caltrans' Transportation Concept Report (TCR). The TCRs for I-80, SR 65, and SR 70/99 indicate that these state highways have a concept LOS "E."

- The project would 1) directly remove or obstruct existing and planned transit facilities, routes, or services; or 2) substantially impact travel times on existing or planned transit routes.

- The project would directly remove or obstruct existing and planned bicycle facilities.

The above criteria focus on impacts to individual transportation facilities and reflect adopted policies of local jurisdictions and agencies. PCTPA and SACOG also have policies related to improving regional access and mobility. To assess the impact of the project on these policies, the following system-wide criteria were defined:

- The project would increase the percentage of vehicle-miles of travel on congested roadways in the TASA.

- The project would increase total vehicle delay in the TASA.

5.0 TRANSPORTATION IMPACT ANALYSIS

5.1 EXISTING PLUS PROJECT CONDITIONS

A qualitative evaluation of Existing Plus Project conditions was conducted for the Tier 1 EIS/EIR for the following reasons:

- The project is not needed to accommodate existing traffic demand. It is intended to reduce expected future traffic congestion levels on the local roadway system in south Sutter County and southwestern Placer County stemming from future development in those areas.
- Construction of the Parkway is not expected to commence until 2020.
- A full evaluation of Existing Plus Project Conditions will be conducted in a Tier 2 EIS/EIR, which will cover the design and construction of this transportation facility.

Sections 5.2 and 5.3 below provide a quantitative analysis of the build alternatives under 2020 (Opening Year) and 2040 (cumulative) conditions. As shown in these sections, the Parkway would affect traffic patterns and volumes on arterial and collector roadways in a broad area covering south/west Placer County, south Sutter County, and north Sacramento County. While some roadway segments near proposed interchanges along the project would have increases in traffic volumes due to Placer Parkway, a larger number of roadway segments would have decreases in traffic volumes.

The 2020 travel demand forecasts assume continued development in areas covered by current general plans within Placer County. None of the following major projects that would require general plan amendments were assumed to be developed by 2020:

- The Creekview and Sierra Vista specific plans in Roseville's Annexation Area.
- The SOI expansion areas of Lincoln.
- The Regional University and Placer Ranch Specific Plans and Curry Creek Community Plan area in unincorporated Placer County.
- Sutter Pointe Specific Plan area. in Sutter County

It was concluded that under Existing Plus Project conditions, the build alternatives would result in similar but smaller changes in travel patterns in the TASA under Existing Plus Project conditions than the under 2020 conditions (described in the following section). That is, the build alternatives would:

- Increase traffic volumes on some roadway segments near proposed interchanges along the Parkway. These increases would likely be less than those under 2020 conditions.
- Result in decreases in traffic volumes on a larger number of local roadway segments in south Sutter County and southwestern Placer County. These decreases would likely be less than those under 2020 conditions.
- Have a lower traffic volume on Placer Parkway than 2020 conditions.

5.2 ANALYSIS OF 2020 CONDITIONS

5.2.1 Changes in Traffic Volumes

Table 9 summarizes the projected 2020 daily traffic volumes on segments of the Parkway under each build alternative. For Alternatives 1 through 5, traffic forecasts were made both with and without a potential interchange at the future extension of Watt Avenue. For Alternative 1, two general locations for this potential interchange—a north and a south location—were sited through discussions with the TAC. See Figure 4 for assumed interchange locations along the Placer Parkway corridor alternatives. Table 10 shows the 2020 projected daily volumes on each of the assumed on- and off-ramps to Placer Parkway under each alternative.

Table 11 compares estimated 2020 daily traffic volumes on study area roadways under each build alternative to each other and to 2005 traffic volumes. The change in traffic volumes on study area roadways for Alternatives 1 through 5 compared to the No-Build Alternative are shown in Table 12. The locations of the volumes provided in Tables 11 and 12 are shown on Figure 8.

To help illustrate how the Parkway would affect traffic patterns and volumes, a set of "difference plots" were prepared that show which roadways would have increases and which would have decreases in volumes due to a corridor alternative when compared to the No-Build Alternative. On Figure 9 through Figure 19, these differences are shown for each alternative with red colors on roadways that would receive increases in volumes (compared to the No-Build Alternative) and green colors on roadways with decreases in volume. The width of the red or green bands on each roadway provides an indication of the magnitude of the change in traffic volumes (compared to the No-Build Alternative with larger changes having the widest band widths).

These figures show that compared to the No-Build Alternative, Alternatives 1 through 5 would decrease traffic on many arterial/collector roadway segments in western Roseville, unincorporated portions of west Placer County, and unincorporated portions of south Sutter County. While all of these alternatives would decrease traffic volumes on many roadway segments, they would all cause increases in traffic volumes on the following segments:

- SR 70/99 south of where the Parkway would connect to this state highway
- SR 65 north of where the Parkway would connect to this state highway
- Rocklin's Whitney Ranch Parkway and the future Valley View Parkway
- Some roadways near future Placer Parkway interchanges.

5.2.2 Changes in Traffic Levels of Service

The Purpose and Need Statement for the Parkway indicates that it would be designed to "improve travel times between the SR 65 corridor and SR 70/99 by maintaining a travel speed at or near the free flow speed of the Parkway, which on a freeway reflects LOS C to D conditions." Table 13 shows the estimated 2020 LOS on segments of the Parkway based on four travel lanes with and without a Watt Avenue interchange. This table shows that under all alternatives, all segments would operate at LOS A or B conditions in 2020 if four lanes are provided.

Table 14 shows the estimated volume/capacity ratio in 2020 on key roadway segments under each project alternative. Table 15 provides the resulting LOS on these roadway segments.

Table 9:
Projected 2020 Daily Traffic Volumes on Placer Parkway Mainline

Number	Segment	Lanes	Average Daily Volume									
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			With Watt South[1]	With Watt North[1]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
1	East of SR 70/99	6	19,300	17,300	12,200	21,900	15,800	21,300	16,400	21,900	16,700	20,300	16,200
2	East of Pacific Street	6	19,500	17,100	11,900	22,100	15,800	21,400	16,500	21,500	16,100	19,900	15,600
3	East of South Sutter Road 2	6	19,500	17,100	11,900	22,100	15,800	21,400	16,500	21,500	16,100	19,900	15,600
4	East of Watt Avenue	6	19,800	17,700	11,900	20,000	15,800	19,100	16,500	18,600	16,100	17,100	15,600
5	East of Fiddyment Road	6	24,500	22,600	20,700	24,400	23,400	24,300	23,900	23,900	23,700	23,400	23,400
6	West of SR 65	6	23,900	23,000	21,500	24,300	23,100	24,300	23,400	23,800	23,000	23,400	22,800

[1] Two general locations for a potential interchange on Placer Parkway at the future extension of Watt Avenue were identified with Alternative 1 – a north and a south location (see Figure 4 for assumed interchange locations)

Source: DKS Associates, 2006

Table 10:
Projected 2020 Daily Traffic Volumes on Placer Parkway Ramps

Number	Ramp	Lanes	Average Daily Volume									
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			With Watt South[1]	With Watt North[1]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
1	Northbound SR 70/99 On Ramp to Eastbound Placer Parkway	2	8,600	8,400	5,900	10,600	7,700	10,400	8,100	10,300	8,200	9,600	8,000
2	Southbound SR 70/99 On Ramp to Eastbound Placer Parkway	1	1,400	600	400	700	400	600	400	1,000	600	800	500
3	Westbound Placer Parkway Off Ramp to Northbound SR 70/99	2	1,400	500	300	700	300	600	300	1,200	500	1,000	500
4	Westbound Placer Parkway Off Ramp to Southbound SR 70/99	1	7,900	7,800	5,500	10,000	7,300	9,700	7,500	8,800	7,400	8,500	7,200
5	Eastbound On Ramp from Northbound Pacific Road	1	400	300	300	500	400	400	400	400	400	500	400
6	Westbound On Ramp from Northbound Pacific Road	1	100	200	300	200	200	200	200	100	200	100	200
7	Eastbound On Ramp from Southbound Pacific Road	1	0	0	0	0	0	0	0	0	0	0	0
8	Westbound On Ramp from Southbound Pacific Road	1	100	100	100	100	100	100	100	0	0	0	0
9	Eastbound Off Ramp to Pacific Road	1	200	400	400	400	400	400	400	800	1,000	900	1,000
10	Westbound Off Ramp to Pacific Road	1	200	300	300	400	400	400	400	200	200	200	200
11	Eastbound On Ramp from Northbound South Sutter Road 2	1	0	0	0	0	0	0	0	0	0	0	0
12	Westbound On Ramp from Northbound South Sutter Road 2	1	0	0	0	0	0	0	0	0	0	0	0
13	Eastbound On Ramp from Southbound South Sutter Road 2	1	0	0	0	0	0	0	0	0	0	0	0
14	Westbound On Ramp from Southbound South Sutter Road 2	1	0	0	0	0	0	0	0	0	0	0	0

Table 10:
Projected 2020 Daily Traffic Volumes on Placer Parkway Ramps

Number	Ramp	Lanes	Average Daily Volume										
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			With Watt South[1]	With Watt North[1]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
15	Eastbound Off Ramp to South Sutter Road 2	1	0	0	0	0	0	0	0	0	0	0	0
16	Westbound Off Ramp to South Sutter Road 2	1	0	0	0	0	0	0	0	0	0	0	0
17	Eastbound On Ramp from Northbound Watt Avenue	1	5,200	800	0	800	0	3,200	0	3,100	0	2,100	0
18	Westbound On Ramp from Northbound Watt Avenue	1	2,200	3,600	0	4,800	0	3,900	0	4,400	0	0	0
19	Eastbound On Ramp from Southbound Watt Avenue	1	0	3,300	0	3,100	0	0	0	0	0	0	0
20	Westbound On Ramp from Southbound Watt Avenue	1	2,300	0	0	0	0	0	0	0	0	3,300	0
21	Eastbound Off Ramp to Watt Avenue	1	5,300	4,200	0	5,400	0	4,400	0	4,700	0	3,700	0
22	Westbound Off Ramp to Watt Avenue	1	5,100	4,300	0	4,200	0	3,000	0	3,000	0	2,000	0
23	Eastbound On Ramp from Northbound Fiddyment	1	3,700	3,600	5,100	3,700	5,000	3,900	5,000	3,900	5,000	4,200	5,000
24	Westbound On Ramp from Northbound Fiddyment	1	0	0	400	0	600	0	600	0	600	100	600
25	Eastbound On Ramp from Southbound Fiddyment	1	400	400	400	400	400	400	400	400	400	400	400
26	Westbound On Ramp from Southbound Fiddyment	1	1,800	1,600	800	1,800	1,100	1,600	1,100	1,600	1,100	1,300	1,100
27	Eastbound Off Ramp to Fiddyment	1	1,900	1,600	1,400	1,900	1,800	1,800	1,900	1,700	1,800	1,500	1,800
28	Westbound Off Ramp to Fiddyment	1	4,300	4,100	5,800	4,100	5,700	4,400	5,700	4,400	5,700	4,700	5,700
29	Eastbound On Ramp from Northbound Foothills	1	2,300	2,200	2,300	2,300	2,300	2,300	2,300	2,200	2,300	2,300	2,300
30	Westbound On Ramp from Northbound Foothills	1	1,300	1,000	1,200	1,100	1,600	1,200	1,700	1,200	1,900	1,400	1,800
31	Eastbound On Ramp from Southbound Foothills	1	500	500	500	500	500	500	500	500	500	500	500
32	Westbound On Ramp from Southbound Foothills	1	1,200	1,100	800	1,200	900	1,100	900	1,100	800	1,000	800
33	Eastbound Off Ramp to Foothills	1	3,200	2,700	2,500	3,000	3,100	3,000	3,300	2,900	3,200	2,800	3,100
34	Westbound Off Ramp to Foothills	1	2,400	2,400	2,600	2,400	2,500	2,400	2,500	2,400	2,500	2,400	2,500
35	Northbound SR 65 Off Ramp to Sunset Boulevard	1	4,200	4,200	4,200	4,200	4,100	4,100	4,100	4,200	4,100	4,200	4,100
36	Southbound SR 65 Off Ramp to Sunset Boulevard	1	4,800	4,800	4,900	4,800	4,900	4,800	4,900	4,800	4,900	4,900	4,900
37	Southbound SR 65 On Ramp to Westbound Placer Parkway	1	5,400	5,200	4,800	5,600	5,200	5,400	5,200	5,300	5,200	5,200	5,100
38	Eastbound Placer Parkway Off Ramp to Northbound SR 65	1	4,000	3,900	3,600	4,100	3,900	4,200	4,000	4,000	3,800	3,900	3,800
39	Eastbound Placer Parkway Off Ramp to Southbound SR 65	1	2,900	3,000	2,800	2,700	2,900	2,800	2,800	2,700	2,800	2,800	2,900
40	Sunset On Ramp to Northbound SR 65	1	5,100	5,100	5,200	5,100	5,100	5,100	5,100	5,100	5,200	5,100	5,100
41	Sunset On Ramp to Southbound SR 65	1	1,100	1,000	1,100	1,200	1,100	1,100	1,000	1,200	1,100	1,100	1,000

[1] Two general locations for a potential interchange on Placer Parkway at the future extension of Watt Avenue were identified with Alternative 1 – a north and a south location (see Figure 4 for assumed interchange locations)

Source: DKS Associates, 2006

Table 11:
Estimated Daily Traffic Volumes for Build Alternatives under 2020 Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	Estimated 2020 Daily Traffic Volumes (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2020		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
1	SR 70/99	North of Howsley Road	4	4	29,000	43,000	42,700	42,500	42,500	42,600	42,200	42,500	42,500	43,100	42,600	42,900	42,600
2	SR 70/99	North of Sankey Road	4	4	29,000	44,200	43,800	43,400	43,300	43,400	43,100	43,400	43,200	44,000	43,600	43,900	43,600
3	SR 70/99	North of Riego Road	4	4	29,000	46,200	42,200	43,500	43,700	43,100	43,500	43,300	43,500	61,700	58,300	60,700	58,000
4	SR 70/99	North of Elverta Road	4	4	32,000	54,600	64,200	65,800	62,600	69,600	65,500	69,200	66,100	67,400	64,800	66,500	64,600
5	SR 70/99	North of I-5	4	4	47,500	75,000	79,500	80,000	78,600	82,500	80,300	82,200	80,800	81,400	80,100	80,800	79,800
6	SR 65	North of Twelve Bridge	4	4	40,000	94,600	96,300	96,500	96,400	96,500	96,400	96,400	96,400	96,300	96,400	96,400	96,400
7	SR 65	North of Sunset Boulevard	4	4	47,500	111,400	99,000	99,300	99,700	98,600	99,100	98,700	98,900	98,700	99,100	98,900	99,100
8	SR 65	North of Blue Oaks Boulevard	4	4	43,000	114,400	107,700	108,000	108,500	107,400	108,000	107,300	107,900	107,500	108,000	107,700	108,100
9	SR 65	North of Pleasant Grove Boulevard	4	4	76,000	115,100	112,300	112,700	112,700	112,300	112,400	112,100	112,400	112,200	112,600	112,300	112,600
10	SR 65	North of Stanford Ranch Road	4	4	82,000	124,700	123,000	123,300	123,400	123,000	123,000	122,900	123,000	123,000	123,100	123,100	123,000
11	SR 65	North of I-80	4	4	84,000	127,800	126,300	126,500	126,600	126,000	126,000	126,000	126,000	126,200	126,100	126,200	126,200
12	I-80	East of Rocklin Road	6	6	96,000	109,600	109,300	109,400	109,400	109,400	109,400	109,400	109,400	109,400	109,400	109,400	109,400
13	I-80	East of SR 65	6	6	116,000	142,200	142,200	142,200	142,200	142,300	142,300	142,400	142,300	142,300	142,200	142,200	142,300
14	I-80	East of Douglas Boulevard	6	6	156,000	163,700	165,200	162,000	162,400	162,100	162,200	161,400	162,500	162,700	161,800	162,900	161,300
15	I-80	East of Riverside Avenue	6	6	163,000	219,100	216,400	216,500	216,600	215,500	215,700	215,500	215,500	215,800	215,800	215,900	216,200
16	I-80	West of Riverside Avenue	8+2	8+2	179,000	232,700	229,800	229,900	230,200	228,900	229,400	228,900	229,300	229,100	229,400	229,500	229,800
17	I-80	East of Northgate Boulevard	6	6	143,000	154,800	152,100	152,000	153,100	151,200	151,800	151,400	152,100	151,500	151,900	151,700	152,200
18	Athens Avenue	East of Fiddyment Road	2	2	3,700	8,900	3,200	3,300	3,600	3,200	3,700	3,300	3,600	3,000	3,300	3,100	3,300
19	Baseline Road	East of Pleasant Grove Road	2	4	9,950	11,900	6,700	8,000	9,700	7,400	9,200	7,500	9,100	7,300	9,100	7,600	9,200
20	Baseline Road	East of Brewer Road	2	4	10,400	12,400	7,600	8,900	10,400	8,300	9,900	8,400	9,800	8,200	9,800	8,400	9,900
21	Baseline Road	West of 16th Street	2	4	10,400	12,400	7,600	8,900	10,400	8,300	9,900	8,400	9,800	8,200	9,800	8,400	9,900
22	Baseline Road	West of Watt Avenue	2	6	10,400	24,200	22,300	22,500	22,900	22,100	22,600	22,000	22,600	22,000	22,500	21,800	22,600
23	Baseline Road	East of Watt Avenue	2	6	12,600	20,400	17,900	15,700	18,800	15,400	18,400	15,600	18,400	15,700	18,300	16,000	18,400
24	Baseline Road	West of Walerga Road	2	6	12,600	34,200	27,600	26,500	32,300	26,000	31,800	26,500	31,800	26,600	31,700	27,500	31,800
25	Baseline Road	East of Walerga Road	3	6	15,100	32,200	30,200	29,800	31,300	29,500	31,100	29,600	31,000	30,000	31,000	30,200	31,000
26	Baseline Road	West of Woodcreek Oaks Boulevard	3	4	15,100	29,600	28,100	28,000	29,000	27,600	28,800	27,800	28,700	28,100	28,600	28,100	28,800
27	Blue Oaks Boulevard	East of Watt Avenue	NA	6	NA	3,500	6,700	9,500	3,300	10,500	3,200	10,800	3,200	11,000	3,400	8,700	3,400
28	Blue Oaks Boulevard	West of Fiddyment Road	NA	6	NA	14,000	16,100	16,800	14,200	18,100	14,200	17,800	14,200	17,900	14,100	17,000	14,100
29	Blue Oaks Boulevard	East of Fiddyment Road	2	6	8,200	27,300	27,500	28,800	26,400	29,700	26,400	28,900	26,400	29,000	26,300	28,100	26,400
30	Blue Oaks Boulevard	West of SR 65	4	6	38,700	49,800	47,900	48,200	48,200	48,500	48,500	48,400	48,500	48,300	48,400	48,400	48,500
31	Brewer Road	North of Sunset Boulevard West	2	2	200	500	100	100	200	100	200	200	200	200	200	200	200
32	Brewer Road	South of Sunset Boulevard West	2	2	200	400	300	200	500	200	500	300	500	300	500	200	500
33	Brewer Road	North of Baseline Road	2	2	700	300	300	300	300	300	300	300	300	300	300	300	300
34	Catlett Road	East of SR 70/99	2	2	200	2,700	1,900	1,900	2,200	1,800	2,100	1,900	2,300	1,500	1,600	1,600	1,700
35	Catlett Road	East of Pleasant Grove Road	2	2	100	500	500	500	600	400	600	500	600	200	200	200	200
36	Cirby Way	East of Foothills Boulevard	4	6	38,900	61,000	60,700	60,600	60,800	60,400	60,600	60,400	60,700	60,600	60,700	60,700	60,600
37	East Catlett Road	East of Brewer Road	2	2	200	900	500	600	700	500	700	600	700	200	300	300	300
38	East Catlett Road	West of Fiddyment Road	2	2	200	700	700	700	800	700	800	700	800	400	400	500	400

Table 11:
Estimated Daily Traffic Volumes for Build Alternatives under 2020 Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	Estimated 2020 Daily Traffic Volumes (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2020		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
39	Dowd Road	North of Sunset Boulevard West	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
40	Dryer Road West	South of Baseline Road	NA	4	NA	2,800	3,000	2,900	2,800	2,900	2,800	2,900	2,800	2,900	2,800	2,900	2,800
41	Elkhorn Boulevard	East of SR 70/99	2	6	16,300	30,900	30,800	30,800	30,700	30,800	30,600	30,700	30,800	30,800	30,800	30,700	30,800
42	Elkhorn Boulevard	West of Watt Avenue	4	4	26,800	28,700	28,000	28,100	28,100	28,100	28,000	28,100	28,100	27,900	28,000	27,900	28,300
43	Elkhorn Boulevard	East of Watt Avenue	4	6	23,020	35,500	35,000	34,900	35,000	34,800	35,100	34,700	35,100	34,700	35,000	34,900	35,000
44	Elkhorn Boulevard	West of Walerga Road	4	6	25,700	35,600	35,000	34,900	35,100	35,000	35,200	34,900	35,200	34,900	35,100	35,000	35,200
45	Elverta Road	East of SR 70/99	2	4	7,200	22,200	19,800	21,100	21,600	21,000	21,500	21,000	21,500	21,000	21,600	21,100	21,600
46	Elverta Road	East of Rio Linda Boulevard	2	4	8,000	32,900	31,100	31,900	32,400	31,600	32,200	31,700	32,100	31,700	32,100	31,800	32,100
47	Elverta Road	West of Watt Avenue	2	4	20,700	52,500	51,400	51,900	52,100	51,600	52,100	51,800	52,100	51,800	52,000	51,800	52,100
48	Fiddyment Road	North of Sunset Boulevard West	2	2	2,800	12,500	8,300	8,100	7,800	8,400	8,200	8,400	8,300	8,300	8,200	8,200	8,200
49	Fiddyment Road	South of Sunset Boulevard	2	2	4,000	12,500	9,000	8,800	8,600	9,200	9,000	9,200	9,000	9,000	8,900	8,900	8,900
50	Fiddyment Road	North of Blue Oaks Boulevard	2	4	4,000	21,600	18,600	18,600	23,400	18,600	23,100	19,700	23,100	19,700	23,100	20,700	23,100
51	Fiddyment Road	North of Pleasant Grove Boulevard	2	4	11,800	26,600	22,600	23,200	27,400	23,000	27,100	23,400	27,100	23,400	27,100	24,200	27,100
52	Fiddyment Road	North of Baseline Road	2	6	19,600	46,400	40,200	40,300	45,100	39,900	44,600	40,400	44,700	40,500	44,700	41,400	44,700
53	Foothills Boulevard	North of Blue Oaks Boulevard	4	4	3,400	15,900	17,100	17,300	18,400	17,200	18,500	17,100	18,500	17,000	18,600	17,200	18,600
54	Foothills Boulevard	South of Roseville Parkway	4	6	12,200	31,000	29,900	30,000	30,600	29,800	30,500	30,000	30,500	30,000	30,500	30,200	30,400
55	Foothills Boulevard	North of Baseline Road	4	6	28,400	48,600	47,600	47,600	48,100	47,400	48,000	47,500	48,000	47,600	48,000	47,700	48,000
56	Foothills Boulevard	South of Baseline Road	4	6	30,900	57,800	57,200	57,100	57,500	56,900	57,400	57,000	57,400	57,100	57,300	57,200	57,400
57	Howsley Road	East of SR 70/99	2	2	800	1,400	1,200	1,000	1,000	900	1,100	900	1,000	1,000	1,200	1,000	1,100
58	Industrial Avenue	North of Athens Avenue	2	4	4,600	23,100	19,300	19,300	19,300	19,300	19,300	19,300	19,300	19,300	19,300	19,300	19,300
59	Industrial	North of Roseville Parkway	2	2	2,800	22,100	22,400	22,400	22,500	22,400	22,400	22,400	22,500	22,400	22,500	22,400	22,500
60	Junction Boulevard	East of Woodcreek Oaks Boulevard	4	4	6,100	4,400	4,300	4,300	4,400	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300
61	Moore Road	West of Brewer Road	2	2	400	200	200	200	200	200	200	200	200	200	200	200	200
62	Nicolaus Road	East of Brewer Road	2	2	900	1,700	700	700	700	700	700	700	700	600	600	700	700
63	Pacific Street	West of Sunset Boulevard	4	6	10,600	30,000	29,700	29,700	29,800	29,700	29,800	29,700	29,700	29,800	29,700	29,800	29,700
64	PFE Road	East of Watt Avenue	2	4	4,700	3,500	3,200	3,400	3,500	3,300	3,500	3,300	3,500	3,400	3,500	3,400	3,500
65	Phillip Road	East of Brewer Road	2	2	100	400	300	200	400	200	400	300	400	200	400	200	400
66	Pleasant Grove Boulevard	West of Fiddyment Road	NA	4	NA	23,200	22,300	21,900	23,200	22,000	23,200	22,000	23,200	22,200	23,100	22,300	23,100
67	Pleasant Grove Boulevard	East of Fiddyment Road	4	4	3,700	19,400	18,800	18,600	17,700	18,800	17,500	18,800	17,800	18,400	17,800	18,400	17,800
68	Pleasant Grove Boulevard	East of Woodcreek Oaks Boulevard	4	6	16,300	47,300	43,800	43,900	45,100	43,900	44,900	44,000	44,900	44,000	44,800	44,300	44,900
69	Pleasant Grove Boulevard	West of SR 65	6	6	41,300	49,600	48,600	48,700	48,700	48,700	48,800	48,700	48,700	48,700	48,700	48,800	48,800
70	Pleasant Grove Road	North of Sankey Road	2	4	1,500	5,300	4,200	4,300	4,300	4,200	4,200	4,200	4,200	4,100	4,200	4,200	4,100
71	Pleasant Grove Road	North of Riego Road	2	4	1,700	3,900	3,500	3,600	3,700	3,700	3,700	3,700	3,700	4,100	4,500	4,300	4,400
72	Pleasant Grove Road	South of Baseline Road	2	2	1,500	2,400	1,400	1,500	1,900	1,300	1,900	1,400	1,900	1,600	2,100	1,700	2,000

Table 11:
Estimated Daily Traffic Volumes for Build Alternatives under 2020 Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	Estimated 2020 Daily Traffic Volumes (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2020		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
73	Riego Road	East of SR 70/99	2	4	9,900	11,100	7,100	7,900	9,100	7,700	8,700	7,700	8,700	7,600	8,700	7,800	8,800
74	Riego Road	West of Pleasant Grove Road	2	4	9,900	11,000	6,900	8,000	9,500	7,800	9,300	8,000	9,300	7,300	8,400	7,500	8,500
75	Sankey Road	East of SR 70/99	2	4	400	1,800	1,000	900	1,000	900	900	900	900	0	0	0	0
76	Sankey Road	West of Pleasant Grove Road	2	4	200	1,800	1,000	900	1,000	900	900	900	900	1,300	1,600	1,400	1,600
77	Sierra College Boulevard	South of English Colony Way	2	4	11,000	33,100	32,900	33,000	33,100	32,900	33,100	32,900	33,000	32,900	33,000	33,000	33,000
78	Sierra College Boulevard	North of King Road	2	4	11,000	32,400	32,100	32,200	32,300	32,100	32,300	32,100	32,200	32,200	32,300	32,200	32,300
79	Wildcat Boulevard	North of Whitney Ranch Parkway	4	4	3,700	25,900	26,900	26,800	26,800	26,900	27,000	27,100	26,800	26,900	26,900	26,900	26,900
80	Sunset Boulevard	East of Fiddyment Boulevard	NA	6	NA	4,000	1,900	2,000	2,100	2,000	2,100	2,200	2,100	2,200	2,100	2,200	2,100
81	Sunset Boulevard	West of SR 65	2	4	8,000	36,400	32,800	32,800	32,700	32,600	32,800	32,700	32,800	32,700	32,900	32,800	32,800
82	Sunset Boulevard	East of SR 65	4	6	7,100	20,700	21,600	21,500	21,500	21,600	21,600	21,700	21,600	21,700	21,600	21,700	21,600
83	Sunset Boulevard	East of Blue Oaks Boulevard	6	2	9,800	38,100	37,500	37,600	37,800	37,400	37,600	37,500	37,500	37,500	37,500	37,600	37,600
84	Sunset Boulevard West	West of Brewer Road	2	2	600	1,400	500	400	700	300	600	400	600	300	500	300	600
85	Sunset Boulevard West	East of Brewer Road	2	2	600	700	200	200	200	200	200	100	200	100	100	100	100
86	Sunset Boulevard West	West of Fiddyment Road	2	2	600	1,400	900	900	900	900	900	900	900	900	900	900	900
87	Twelve Bridges Drive	West of SR 65	2	4	6,000	21,200	18,300	18,300	18,400	18,300	18,400	18,300	18,300	18,300	18,300	18,300	18,400
88	Twelve Bridges Drive	East of SR 65	4	6	5,100	37,700	37,800	37,700	37,700	37,700	37,600	37,700	37,800	37,700	37,700	37,700	37,600
89	Valley View Parkway	West of Park Drive	NA	4	NA	10,300	10,900	10,900	10,800	10,900	10,900	10,900	10,900	10,900	10,900	10,900	10,800
90	Walerga Road	South of Baseline Road	2	4	14,900	31,800	30,200	30,800	31,600	30,600	31,500	30,800	31,500	30,900	31,600	31,200	31,500
91	Walerga Road	North of Elverta Road	4	4	22,700	41,400	40,100	40,400	41,200	40,300	41,100	40,500	41,100	40,500	41,200	40,800	41,100
92	Washington Boulevard	South of Blue Oaks Boulevard	2	4	4,800	24,700	22,200	22,500	23,000	22,600	23,000	22,500	23,000	22,600	22,900	22,700	23,000
93	Washington Boulevard	North of Pleasant Grove Boulevard	2	4	6,205	34,000	30,500	30,800	31,400	30,800	31,300	30,800	31,300	30,900	31,300	31,000	31,300
94	Watt Avenue	North of Pleasant Grove Boulevard	NA	6	NA	3,200	6,500	8,700	3,000	8,400	2,900	7,500	2,800	7,900	3,100	6,400	3,100
95	Watt Avenue	North of Baseline Road	NA	6	NA	3,200	17,200	8,700	3,000	8,400	2,900	7,500	2,800	7,900	3,100	6,400	3,100
96	Watt Avenue	South of Baseline Road	2	6	7,100	4,900	10,900	7,500	4,700	7,300	4,600	6,800	4,500	7,000	4,600	6,100	4,600
97	Watt Avenue	North of Elverta Road	4	4	19,400	34,600	36,500	34,600	34,400	34,400	34,300	34,200	34,200	34,400	34,300	34,200	34,200
98	Watt Avenue	North of Elkhorn Boulevard	4	6	38,700	38,000	38,500	38,200	38,300	38,000	38,100	38,000	38,000	38,200	38,100	38,200	37,800
99	Watt Avenue	North of Airbase Drive	6	6	47,100	62,600	62,300	62,500	62,600	62,300	62,500	62,400	62,600	62,400	62,500	62,500	62,600
100	Watt Avenue	North of I-80	6	6	62,600	72,400	72,200	71,900	71,900	71,900	72,600	72,100	72,500	72,000	72,300	72,300	72,300
101	West Side Drive	North of Blue Oaks Boulevard	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
102	West Side Drive	North of Baseline Road	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
103	Whitney Ranch Parkway	East of SR 65	NA	6	NA	29,800	32,700	32,100	31,300	32,700	32,100	32,700	32,100	32,400	32,000	32,200	32,000
104	Whitney Ranch Parkway	East of University Avenue	NA	6	NA	18,200	21,400	20,800	20,400	21,300	21,100	21,500	21,000	21,200	21,000	21,000	20,800

Table 11:
Estimated Daily Traffic Volumes for Build Alternatives under 2020 Conditions

Roadway		Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	Estimated 2020 Daily Traffic Volumes (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2020		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
105	Whitney Ranch Parkway	East of Wildcat Boulevard	NA	4	NA	9,800	11,200	11,100	10,900	11,200	11,100	11,300	11,100	11,200	11,100	11,200	11,100
106	Woodcreek Oak Boulevard	South of Pleasant Grove Boulevard	2	4	11,900	24,200	21,000	21,200	23,400	20,900	23,300	21,000	23,100	21,500	23,100	21,800	23,100
107	16th Street	North of Baseline Road	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
108	16th Street	South of Baseline Road	NA	4	NA	3,300	4,200	3,900	3,400	3,900	3,400	3,800	3,400	3,800	3,400	3,700	3,400
109	16th Street	North of Elverta Road	2	2	400	13,600	13,700	13,600	13,500	13,500	13,500	13,600	13,500	13,600	13,500	13,500	13,500
110	Blue Oaks Boulevard	East of Lonetree Boulevard	4	4	9,500	19,500	18,500	18,600	18,900	18,600	18,900	18,600	18,900	18,600	18,900	18,700	18,900

Notes
[1] +2 = Plus two HOV lanes
[2] Traffic volumes on state highways are from 2004. Counts on some local roadways were taken prior to 2005
[3] Two general locations for a potential interchange on Placer Parkway at the future extension of Watt Avenue were identified with Alternative 1 – a north and a south location (see Figure 4 for assumed interchange locations)

Source: DKS Associates, 2006

Table 12:
Estimated Change in Daily Traffic Volumes for Build Alternatives Compared to No-Build Alternative under 2020 Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	No-Build 2020 Daily Volume	Estimated Change in 2020 Daily Traffic Volumes Compared to No-Build Alternative										
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2020			With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
1	SR 70/99	North of Howsley Road	4	4	29,000	43,000	-300	-500	-500	-400	-800	-500	-500	100	-400	-100	-400
2	SR 70/99	North of Sankey Road	4	4	29,000	44,200	-400	-800	-900	-800	-1,100	-800	-1,000	-200	-600	-300	-600
3	SR 70/99	North of Riego Road	4	4	29,000	46,200	-4,000	-2,700	-2,500	-3,100	-2,700	-2,900	-2,700	15,500	12,100	14,500	11,800
4	SR 70/99	North of Elverta Road	4	4	32,000	54,600	9,600	11,200	8,000	15,000	10,900	14,600	11,500	12,800	10,200	11,900	10,000
5	SR 70/99	North of I-5	4	4	47,500	75,000	4,500	5,000	3,600	7,500	5,300	7,200	5,800	6,400	5,100	5,800	4,800
6	SR 65	North of Twelve Bridge	4	4	40,000	94,600	1,700	1,900	1,800	1,900	1,800	1,800	1,800	1,700	1,800	1,800	1,800
7	SR 65	North of Sunset Boulevard	4	4	47,500	111,400	-12,400	-12,100	-11,700	-12,800	-12,300	-12,700	-12,500	-12,700	-12,300	-12,500	-12,300
8	SR 65	North of Blue Oaks Boulevard	4	4	43,000	114,400	-6,700	-6,400	-5,900	-7,000	-6,400	-7,100	-6,500	-6,900	-6,400	-6,700	-6,300
9	SR 65	North of Pleasant Grove Boulevard	4	4	76,000	115,100	-2,800	-2,400	-2,400	-2,800	-2,700	-3,000	-2,700	-2,900	-2,500	-2,800	-2,500
10	SR 65	North of Stanford Ranch Road	4	4	82,000	124,700	-1,700	-1,400	-1,300	-1,700	-1,700	-1,800	-1,700	-1,700	-1,600	-1,600	-1,700
11	SR 65	North of I-80	4	4	84,000	127,800	-1,500	-1,300	-1,200	-1,800	-1,800	-1,800	-1,800	-1,600	-1,700	-1,600	-1,600
12	I-80	East of Rocklin Road	6	6	96,000	109,600	-300	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
13	I-80	East of SR 65	6	6	116,000	142,200	0	0	0	100	100	200	100	100	0	0	100
14	I-80	East of Douglas Boulevard	6	6	156,000	163,700	1,500	-1,700	-1,300	-1,600	-1,500	-2,300	-1,200	-1,000	-1,900	-800	-2,400
15	I-80	East of Riverside Avenue	6	6	163,000	219,100	-2,700	-2,600	-2,500	-3,600	-3,400	-3,600	-3,600	-3,300	-3,300	-3,200	-2,900
16	I-80	West of Riverside Avenue	8+2	8+2	179,000	232,700	-2,900	-2,800	-2,500	-3,800	-3,300	-3,800	-3,400	-3,600	-3,300	-3,200	-2,900
17	I-80	East of Northgate Boulevard	6	6	143,000	154,800	-2,700	-2,800	-1,700	-3,600	-3,000	-3,400	-2,700	-3,300	-2,900	-3,100	-2,600
18	Athens Avenue	East of Fiddyment Road	2	2	3,700	8,900	-5,700	-5,600	-5,300	-5,700	-5,200	-5,600	-5,300	-5,900	-5,600	-5,800	-5,600
19	Baseline Road	East of Pleasant Grove Road	2	4	9,950	11,900	-5,200	-3,900	-2,200	-4,500	-2,700	-4,400	-2,800	-4,600	-2,800	-4,300	-2,700
20	Baseline Road	East of Brewer Road	2	4	10,400	12,400	-4,800	-3,500	-2,000	-4,100	-2,500	-4,000	-2,600	-4,200	-2,600	-4,000	-2,500
21	Baseline Road	West of 16th Street	2	4	10,400	12,400	-4,800	-3,500	-2,000	-4,100	-2,500	-4,000	-2,600	-4,200	-2,600	-4,000	-2,500
22	Baseline Road	West of Watt Avenue	2	6	10,400	24,200	-1,900	-1,700	-1,300	-2,100	-1,600	-2,200	-1,600	-2,200	-1,700	-2,400	-1,600
23	Baseline Road	East of Watt Avenue	2	6	12,600	20,400	-2,500	-4,700	-1,600	-5,000	-2,000	-4,800	-2,000	-4,700	-2,100	-4,400	-2,000
24	Baseline Road	West of Walerga Road	2	6	12,600	34,200	-6,600	-7,700	-1,900	-8,200	-2,400	-7,700	-2,400	-7,600	-2,500	-6,700	-2,400
25	Baseline Road	East of Walerga Road	3	6	15,100	32,200	-2,000	-2,400	-900	-2,700	-1,100	-2,600	-1,200	-2,200	-1,200	-2,000	-1,200
26	Baseline Road	West of Woodcreek Oaks Boulevard	3	4	15,100	29,600	-1,500	-1,600	-600	-2,000	-800	-1,800	-900	-1,500	-1,000	-1,500	-800
27	Blue Oaks Boulevard	East of Watt Avenue	NA	6	NA	3,500	3,200	6,000	-200	7,000	-300	7,300	-300	7,500	-100	5,200	-100
28	Blue Oaks Boulevard	West of Fiddyment Road	NA	6	NA	14,000	2,100	2,800	200	4,100	200	3,800	200	3,900	100	3,000	100
29	Blue Oaks Boulevard	East of Fiddyment Road	2	6	8,200	27,300	200	1,500	-900	2,400	-900	1,600	-900	1,700	-1,000	800	-900
30	Blue Oaks Boulevard	West of SR 65	4	6	38,700	49,800	-1,900	-1,600	-1,600	-1,300	-1,300	-1,400	-1,300	-1,500	-1,400	-1,400	-1,300
31	Brewer Road	North of Sunset Boulevard West	2	2	200	500	-400	-400	-300	-400	-300	-300	-300	-300	-300	-300	-300
32	Brewer Road	South of Sunset Boulevard West	2	2	200	400	-100	-200	100	-200	100	-100	100	-100	100	-200	100
33	Brewer Road	North of Baseline Road	2	2	700	300	0	0	0	0	0	0	0	0	0	0	0
34	Catlett Road	East of SR 70/99	2	2	200	2,700	-800	-800	-500	-900	-600	-800	-400	-1,200	-1,100	-1,100	-1,000
35	Catlett Road	East of Pleasant Grove Road	2	2	100	500	0	0	100	-100	100	0	100	-300	-300	-300	-300
36	Cirby Way	East of Foothills Boulevard	4	6	38,900	61,000	-300	-400	-200	-600	-400	-600	-300	-400	-300	-300	-400

Table 12:
Estimated Change in Daily Traffic Volumes for Build Alternatives Compared to No-Build Alternative under 2020 Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	No-Build 2020 Daily Volume	Estimated Change in 2020 Daily Traffic Volumes Compared to No-Build Alternative											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5		
			2005	2020			With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
37	East Catlett Road	East of Brewer Road	2	2	200	900	-400	-300	-200	-400	-200	-300	-200	-700	-600	-600	-600
38	East Catlett Road	West of Fiddyment Road	2	2	200	700	0	0	100	0	100	0	100	-300	-300	-200	-300
39	Dowd Road	North of Sunset Boulevard West	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
40	Dryer Road West	South of Baseline Road	NA	4	NA	2,800	200	100	0	100	0	100	0	100	0	100	0
41	Elkhorn Boulevard	East of SR 70/99	2	6	16,300	30,900	-100	-100	-200	-100	-300	-200	-100	-100	-100	-200	-100
42	Elkhorn Boulevard	West of Watt Avenue	4	4	26,800	28,700	-700	-600	-600	-600	-700	-600	-600	-800	-700	-800	-400
43	Elkhorn Boulevard	East of Watt Avenue	4	6	23,020	35,500	-500	-600	-500	-700	-400	-800	-400	-800	-500	-600	-500
44	Elkhorn Boulevard	West of Walerga Road	4	6	25,700	35,600	-600	-700	-500	-600	-400	-700	-400	-700	-500	-600	-400
45	Elverta Road	East of SR 70/99	2	4	7,200	22,200	-2,400	-1,100	-600	-1,200	-700	-1,200	-700	-1,200	-600	-1,100	-600
46	Elverta Road	East of Rio Linda Boulevard	2	4	8,000	32,900	-1,800	-1,000	-500	-1,300	-700	-1,200	-800	-1,200	-800	-1,100	-800
47	Elverta Road	West of Watt Avenue	2	4	20,700	52,500	-1,100	-600	-400	-900	-400	-700	-400	-700	-500	-700	-400
48	Fiddyment Road	North of Sunset Boulevard West	2	2	2,800	12,500	-4,200	-4,400	-4,700	-4,100	-4,300	-4,100	-4,200	-4,200	-4,300	-4,300	-4,300
49	Fiddyment Road	South of Sunset Boulevard	2	2	4,000	12,500	-3,500	-3,700	-3,900	-3,300	-3,500	-3,300	-3,500	-3,500	-3,600	-3,600	-3,600
50	Fiddyment Road	North of Blue Oaks Boulevard	2	4	4,000	21,600	-3,000	-3,000	1,800	-3,000	1,500	-1,900	1,500	-1,900	1,500	-900	1,500
51	Fiddyment Road	North of Pleasant Grove Boulevard	2	4	11,800	26,600	-4,000	-3,400	800	-3,600	500	-3,200	500	-3,200	500	-2,400	500
52	Fiddyment Road	North of Baseline Road	2	6	19,600	46,400	-6,200	-6,100	-1,300	-6,500	-1,800	-6,000	-1,700	-5,900	-1,700	-5,000	-1,700
53	Foothills Boulevard	North of Blue Oaks Boulevard	4	4	3,400	15,900	1,200	1,400	2,500	1,300	2,600	1,200	2,600	1,100	2,700	1,300	2,700
54	Foothills Boulevard	South of Roseville Parkway	4	6	12,200	31,000	-1,100	-1,000	-400	-1,200	-500	-1,000	-500	-1,000	-500	-800	-600
55	Foothills Boulevard	North of Baseline Road	4	6	28,400	48,600	-1,000	-1,000	-500	-1,200	-600	-1,100	-600	-1,000	-600	-900	-600
56	Foothills Boulevard	South of Baseline Road	4	6	30,900	57,800	-600	-700	-300	-900	-400	-800	-400	-700	-500	-600	-400
57	Howsley Road	East of SR 70/99	2	2	800	1,400	-200	-400	-400	-500	-300	-500	-400	-400	-200	-400	-300
58	Industrial Avenue	North of Athens Avenue	2	4	4,600	23,100	-3,800	-3,800	-3,800	-3,800	-3,800	-3,800	-3,800	-3,800	-3,800	-3,800	-3,800
59	Industrial	North of Roseville Parkway	2	2	2,800	22,100	300	300	400	300	300	300	400	300	400	300	400
60	Junction Boulevard	East of Woodcreek Oaks Boulevard	4	4	6,100	4,400	-100	-100	0	-100	-100	-100	-100	-100	-100	-100	-100
61	Moore Road	West of Brewer Road	2	2	400	200	0	0	0	0	0	0	0	0	0	0	0
62	Nicolaus Road	East of Brewer Road	2	2	900	1,700	-1,000	-1,000	-1,000	-1,000	-1,000	-1,000	-1,000	-1,100	-1,100	-1,000	-1,000
63	Pacific Street	West of Sunset Boulevard	4	6	10,600	30,000	-300	-300	-200	-300	-200	-300	-300	-200	-300	-200	-300
64	PFE Road	East of Watt Avenue	2	4	4,700	3,500	-300	-100	0	-200	0	-200	0	-100	0	-100	0
65	Phillip Road	East of Brewer Road	2	2	100	400	-100	-200	0	-200	0	-100	0	-200	0	-200	0
66	Pleasant Grove Boulevard	West of Fiddyment Road	NA	4	NA	23,200	-900	-1,300	0	-1,200	0	-1,200	0	-1,000	-100	-900	-100
67	Pleasant Grove Boulevard	East of Fiddyment Road	4	4	3,700	19,400	-600	-800	-1,700	-600	-1,900	-600	-1,600	-1,000	-1,600	-1,000	-1,600
68	Pleasant Grove Boulevard	East of Woodcreek Oaks Boulevard	4	6	16,300	47,300	-3,500	-3,400	-2,200	-3,400	-2,400	-3,300	-2,400	-3,300	-2,500	-3,000	-2,400
69	Pleasant Grove Boulevard	West of SR 65	6	6	41,300	49,600	-1,000	-900	-900	-900	-800	-900	-900	-900	-900	-800	-800
70	Pleasant Grove Road	North of Sankey Road	2	4	1,500	5,300	-1,100	-1,000	-1,000	-1,100	-1,100	-1,100	-1,100	-1,200	-1,100	-1,100	-1,200

Table 12:
Estimated Change in Daily Traffic Volumes for Build Alternatives Compared to No-Build Alternative under 2020 Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	No-Build 2020 Daily Volume	Estimated Change in 2020 Daily Traffic Volumes Compared to No-Build Alternative										
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2020			With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
71	Pleasant Grove Road	North of Riego Road	2	4	1,700	3,900	-400	-300	-200	-200	-200	-200	-200	200	600	400	500
72	Pleasant Grove Road	South of Baseline Road	2	2	1,500	2,400	-1,000	-900	-500	-1,100	-500	-1,000	-500	-800	-300	-700	-400
73	Riego Road	East of SR 70/99	2	4	9,900	11,100	-4,000	-3,200	-2,000	-3,400	-2,400	-3,400	-2,400	-3,500	-2,400	-3,300	-2,300
74	Riego Road	West of Pleasant Grove Road	2	4	9,900	11,000	-4,100	-3,000	-1,500	-3,200	-1,700	-3,000	-1,700	-3,700	-2,600	-3,500	-2,500
75	Sankey Road	East of SR 70/99	2	4	400	1,800	-800	-900	-800	-900	-900	-900	-900	-1,800	-1,800	-1,800	-1,800
76	Sankey Road	West of Pleasant Grove Road	2	4	200	1,800	-800	-900	-800	-900	-900	-900	-900	-500	-200	-400	-200
77	Sierra College Boulevard	South of English Colony Way	2	4	11,000	33,100	-200	-100	0	-200	0	-200	-100	-200	-100	-100	-100
78	Sierra College Boulevard	North of King Road	2	4	11,000	32,400	-300	-200	-100	-300	-100	-300	-200	-200	-100	-200	-100
79	Wildcat Boulevard	North of Whitney Ranch Parkway	4	4	3,700	25,900	1,000	900	900	1,000	1,100	1,200	900	1,000	1,000	1,000	1,000
80	Sunset Boulevard	East of Fiddyment Boulevard	NA	6	NA	4,000	-2,100	-2,000	-1,900	-2,000	-1,900	-1,800	-1,900	-1,800	-1,900	-1,800	-1,900
81	Sunset Boulevard	West of SR 65	2	4	8,000	36,400	-3,600	-3,600	-3,700	-3,800	-3,600	-3,700	-3,600	-3,700	-3,500	-3,600	-3,600
82	Sunset Boulevard	East of SR 65	4	6	7,100	20,700	900	800	800	900	900	1,000	900	1,000	900	1,000	900
83	Sunset Boulevard	East of Blue Oaks Boulevard	6	2	9,800	38,100	-600	-500	-300	-700	-500	-600	-600	-600	-600	-500	-500
84	Sunset Boulevard West	West of Brewer Road	2	2	600	1,400	-900	-1,000	-700	-1,100	-800	-1,000	-800	-1,100	-900	-1,100	-800
85	Sunset Boulevard West	East of Brewer Road	2	2	600	700	-500	-500	-500	-500	-500	-600	-500	-600	-600	-600	-600
86	Sunset Boulevard West	West of Fiddyment Road	2	2	600	1,400	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500
87	Twelve Bridges Drive	West of SR 65	2	4	6,000	21,200	-2,900	-2,900	-2,800	-2,900	-2,800	-2,900	-2,900	-2,900	-2,900	-2,900	-2,800
88	Twelve Bridges Drive	East of SR 65	4	6	5,100	37,700	100	0	0	0	-100	0	100	0	0	0	-100
89	Valley View Parkway	West of Park Drive	NA	4	NA	10,300	600	600	500	600	600	600	600	600	600	600	500
90	Walerga Road	South of Baseline Road	2	4	14,900	31,800	-1,600	-1,000	-200	-1,200	-300	-1,000	-300	-900	-200	-600	-300
91	Walerga Road	North of Elverta Road	4	4	22,700	41,400	-1,300	-1,000	-200	-1,100	-300	-900	-300	-900	-200	-600	-300
92	Washington Boulevard	South of Blue Oaks Boulevard	2	4	4,800	24,700	-2,500	-2,200	-1,700	-2,100	-1,700	-2,200	-1,700	-2,100	-1,800	-2,000	-1,700
93	Washington Boulevard	North of Pleasant Grove Boulevard	2	4	6,205	34,000	-3,500	-3,200	-2,600	-3,200	-2,700	-3,200	-2,700	-3,100	-2,700	-3,000	-2,700
94	Watt Avenue	North of Pleasant Grove Boulevard	NA	6	NA	3,200	3,300	5,500	-200	5,200	-300	4,300	-400	4,700	-100	3,200	-100
95	Watt Avenue	North of Baseline Road	NA	6	NA	3,200	14,000	5,500	-200	5,200	-300	4,300	-400	4,700	-100	3,200	-100
96	Watt Avenue	South of Baseline Road	2	6	7,100	4,900	6,000	2,600	-200	2,400	-300	1,900	-400	2,100	-300	1,200	-300
97	Watt Avenue	North of Elverta Road	4	4	19,400	34,600	1,900	0	-200	-200	-300	-400	-400	-200	-300	-400	-400
98	Watt Avenue	North of Elkhorn Boulevard	4	6	38,700	38,000	500	200	300	0	100	0	0	200	100	200	-200
99	Watt Avenue	North of Airbase Drive	6	6	47,100	62,600	-300	-100	0	-300	-100	-200	0	-200	-100	-100	0
100	Watt Avenue	North of I-80	6	6	62,600	72,400	-200	-500	-500	-500	200	-300	100	-400	-100	-100	-100
101	West Side Drive	North of Blue Oaks Boulevard	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
102	West Side Drive	North of Baseline Road	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
103	Whitney Ranch Parkway	East of SR 65	NA	6	NA	29,800	2,900	2,300	1,500	2,900	2,300	2,900	2,300	2,600	2,200	2,400	2,200

Table 12:
Estimated Change in Daily Traffic Volumes for Build Alternatives Compared to No-Build Alternative under 2020 Conditions

Roadway		Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	No-Build 2020 Daily Volume	Estimated Change in 2020 Daily Traffic Volumes Compared to No-Build Alternative									
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2020			With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
104	Whitney Ranch Parkway	East of University Avenue	NA	6	NA	18,200	3,200	2,600	2,200	3,100	2,900	3,300	2,800	3,000	2,800	2,800	2,600
105	Whitney Ranch Parkway	East of Wildcat Boulevard	NA	4	NA	9,800	1,400	1,300	1,100	1,400	1,300	1,500	1,300	1,400	1,300	1,400	1,300
106	Woodcreek Oak Boulevard	South of Pleasant Grove Boulevard	2	4	11,900	24,200	-3,200	-3,000	-800	-3,300	-900	-3,200	-1,100	-2,700	-1,100	-2,400	-1,100
107	16th Street	North of Baseline Road	NA	NA	NA	0	0	0	0	0	0	0	0	0	0	0	0
108	16th Street	South of Baseline Road	NA	4	NA	3,300	900	600	100	600	100	500	100	500	100	400	100
109	16th Street	North of Elverta Road	2	2	400	13,600	100	0	-100	-100	-100	0	-100	0	-100	-100	-100
110	Blue Oaks Boulevard	East of Lonetree Boulevard	4	4	9,500	19,500	-1,000	-900	-600	-900	-600	-900	-600	-900	-600	-800	-600

Notes
[1] +2 = Plus two HOV lanes
[2] Traffic volumes on state highways are from 2004. Counts on some local roadways were taken prior to 2005
[3] Two general locations for a potential interchange on Placer Parkway at the future extension of Watt Avenue were identified with Alternative 1 – a north and a south location (see Figure 4 for assumed interchange locations)

Source: DKS Associates, 2006

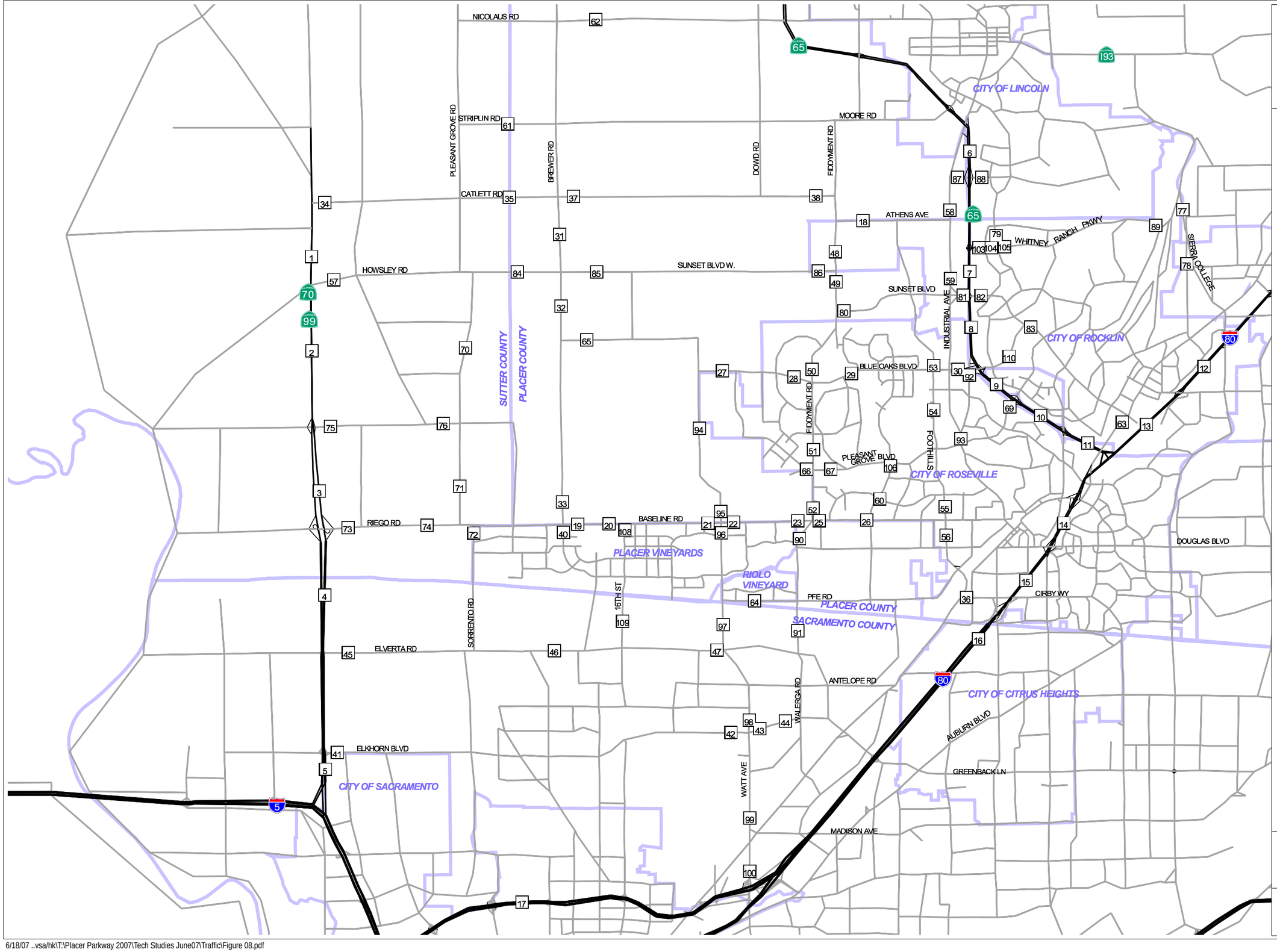

FIGURE 8
Location of Roadway Segments for 2020 Traffic Analysis

Cities and Specific Plan Areas

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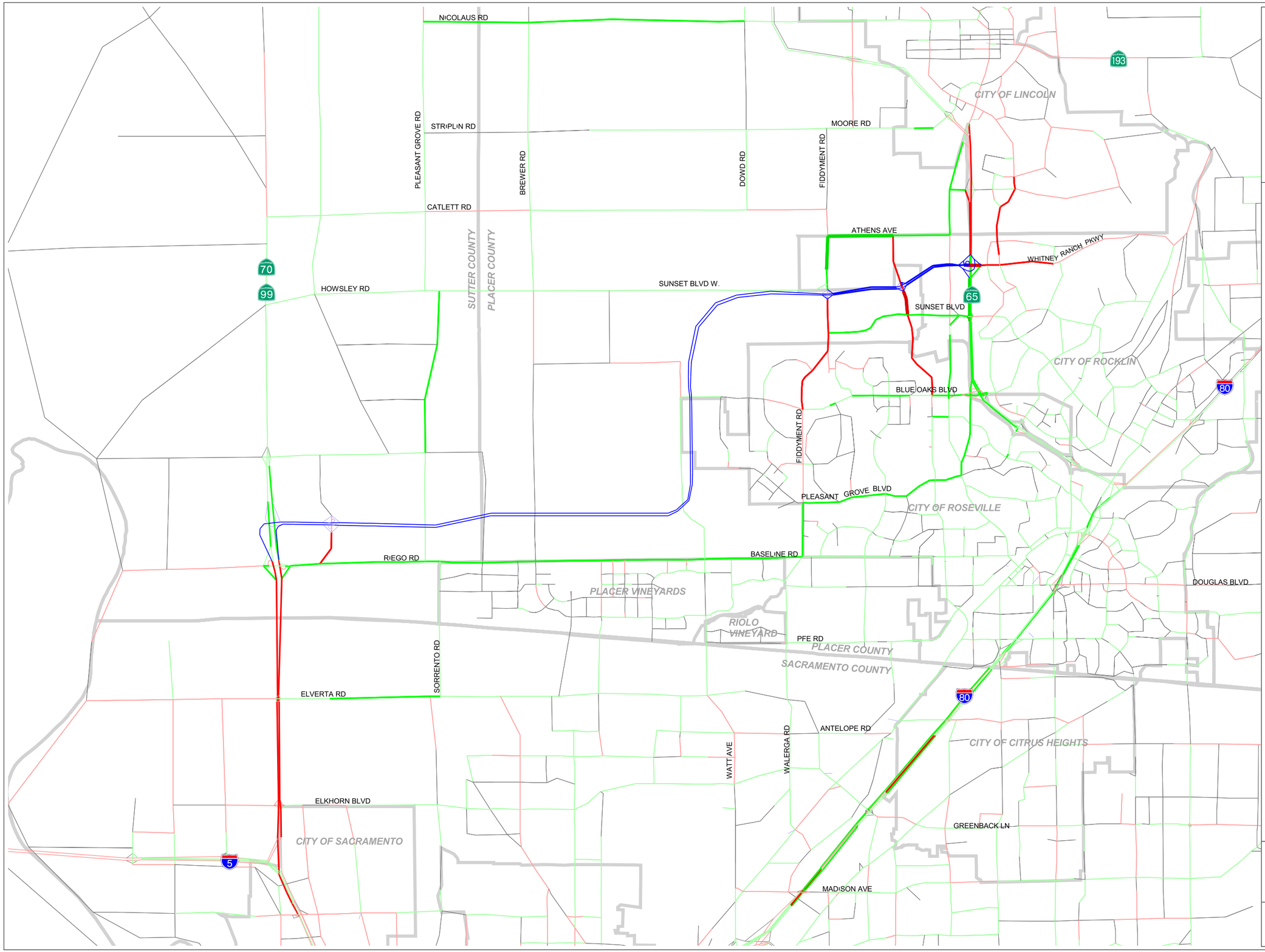
FIGURE 9
Changes in 2020 Daily Traffic Volumes

Alternative 1 Without Watt Interchange Compared to No Build Alternative



Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

[1] Project roadways are Placer Parkway and its interchanges. See Tables 9 & 10 for Daily Volumes on Placer Parkway.

[2] See Table 12 for Change in Daily Volumes for non-project roadways.

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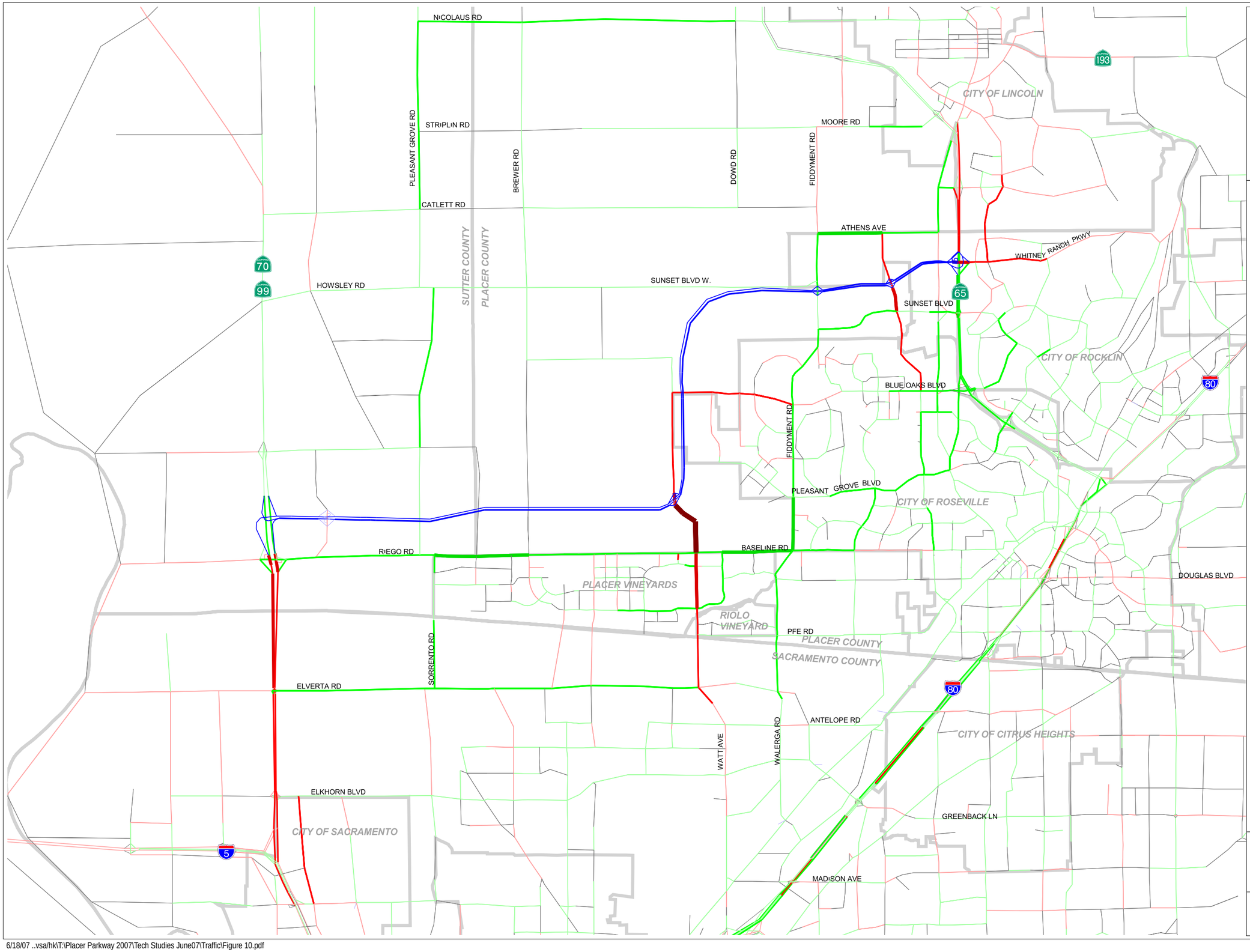
FIGURE 10
Changes in 2020 Daily Traffic Volumes

Alternative 1
With
Watt South Interchange
Compared to
No Build Alternative



Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

1 Project Roadways are Placer Parkway and its Interchanges. See Tables 9 & 10 for Daily Volumes on Placer Parkway

2 See Table 12 for Change in Daily Volumes for Non- project Roadways.

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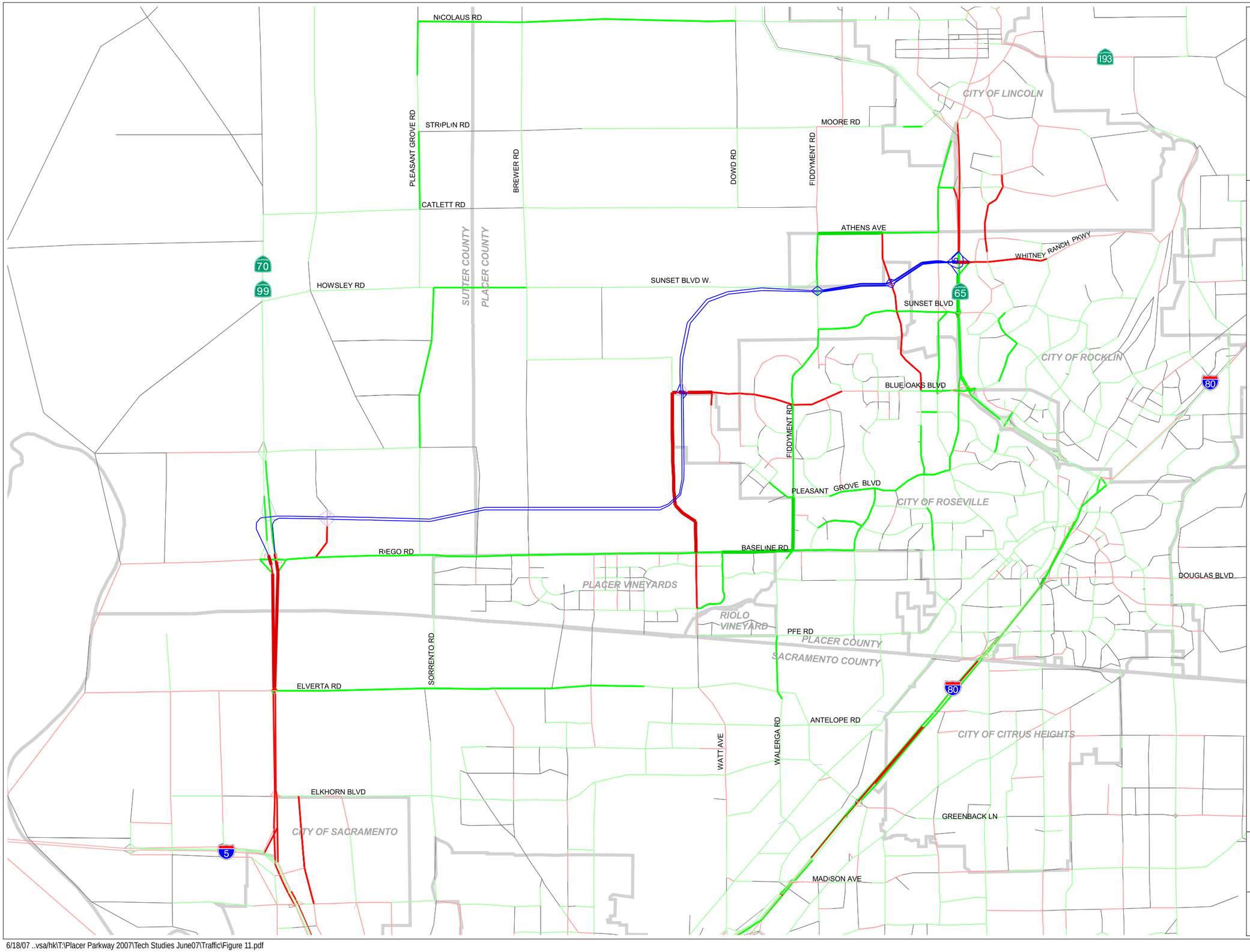
FIGURE 11
Changes in 2020 Daily Traffic Volumes

Alternative 1
With
Watt North Interchange
Compared to
No Build Alternative



Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

1 Project Roadways are Placer Parkway and its Interchanges. See Tables 9 & 10 for Daily Volumes on Placer Parkway.

2 See Table 12 for Change in Daily Volumes for Non-Project Roadways.

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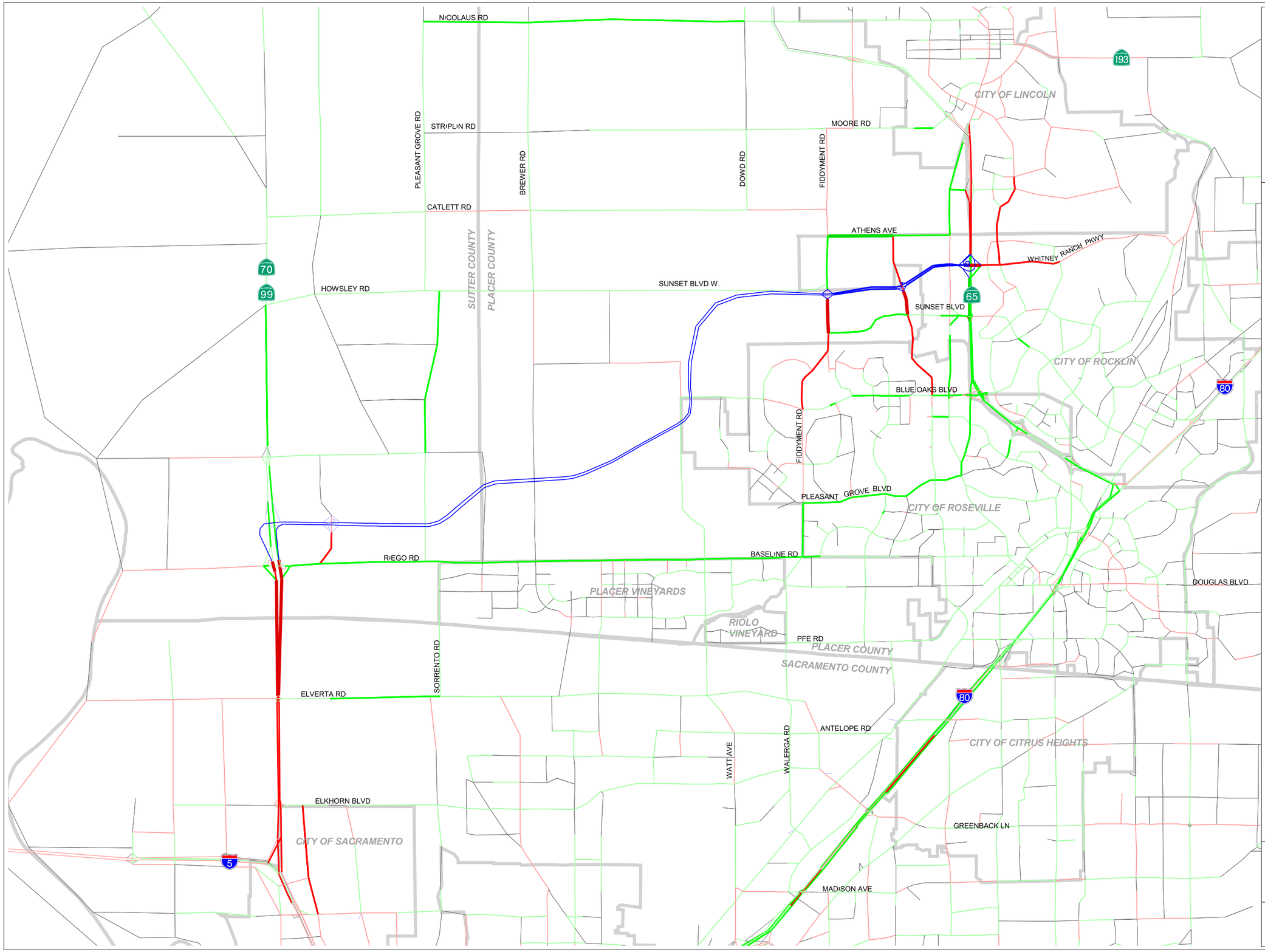
FIGURE 12
Changes in 2020 Daily Traffic Volumes

Alternative 2 Without Watt Interchange Compared to No Build Alternative



Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

[1] Project Roadways are Placer Parkway and its Interchanges. See Tables 9 & 10 for Daily Volumes on Placer Parkway.

[2] See Table 12 for Change in Daily Volumes for Non-Project Roadways.

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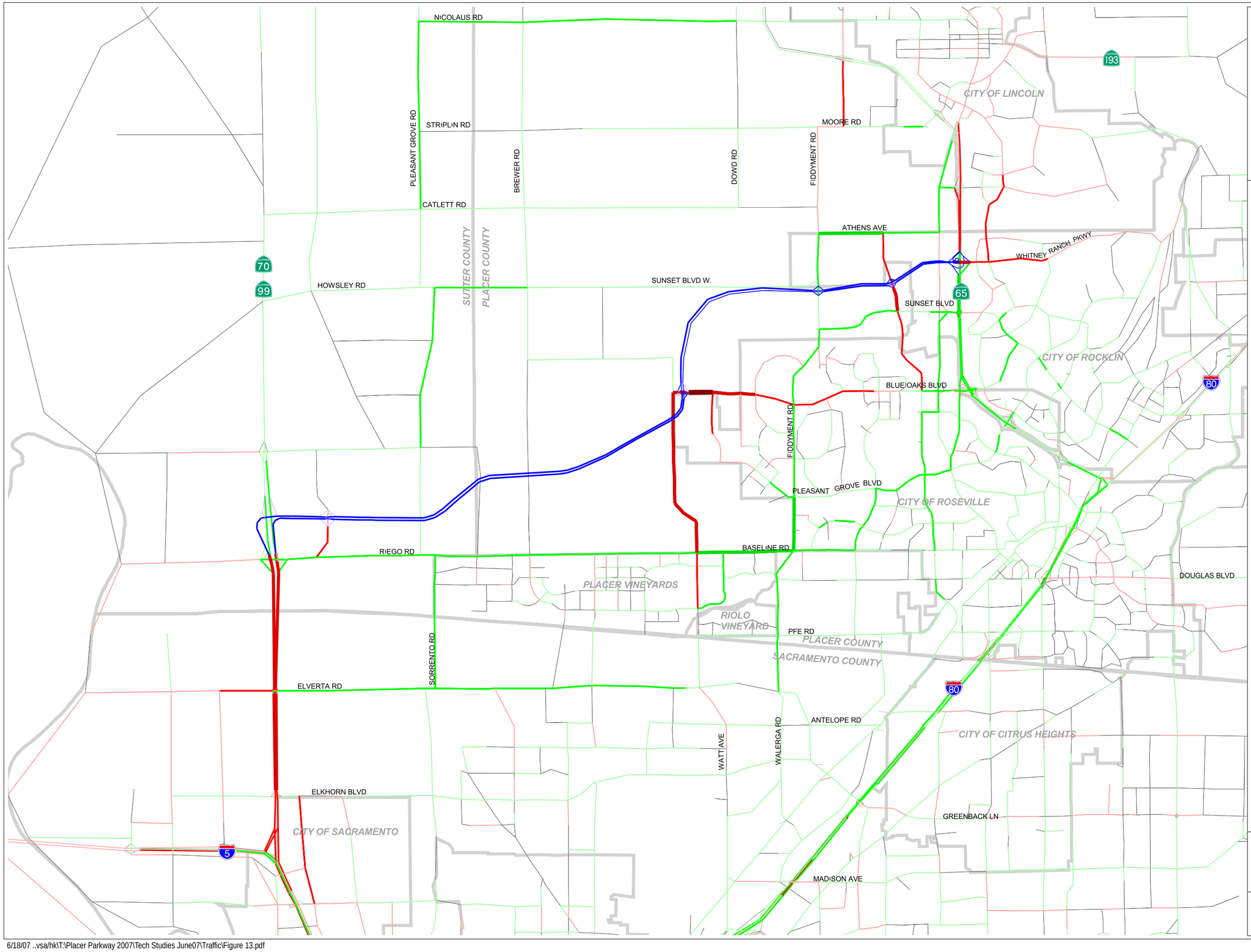

FIGURE 13
Changes in 2020 Daily Traffic Volumes

Alternative 2 With Watt Interchange Compared to No Build Alternative

Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

1 Project Roadways are Placer Parkway and its Interchanges. See Tables 9 & 10 for Daily Volumes on Placer Parkway.

2 See Table 12 for Change in Daily Volumes for Non-Project Roadways.

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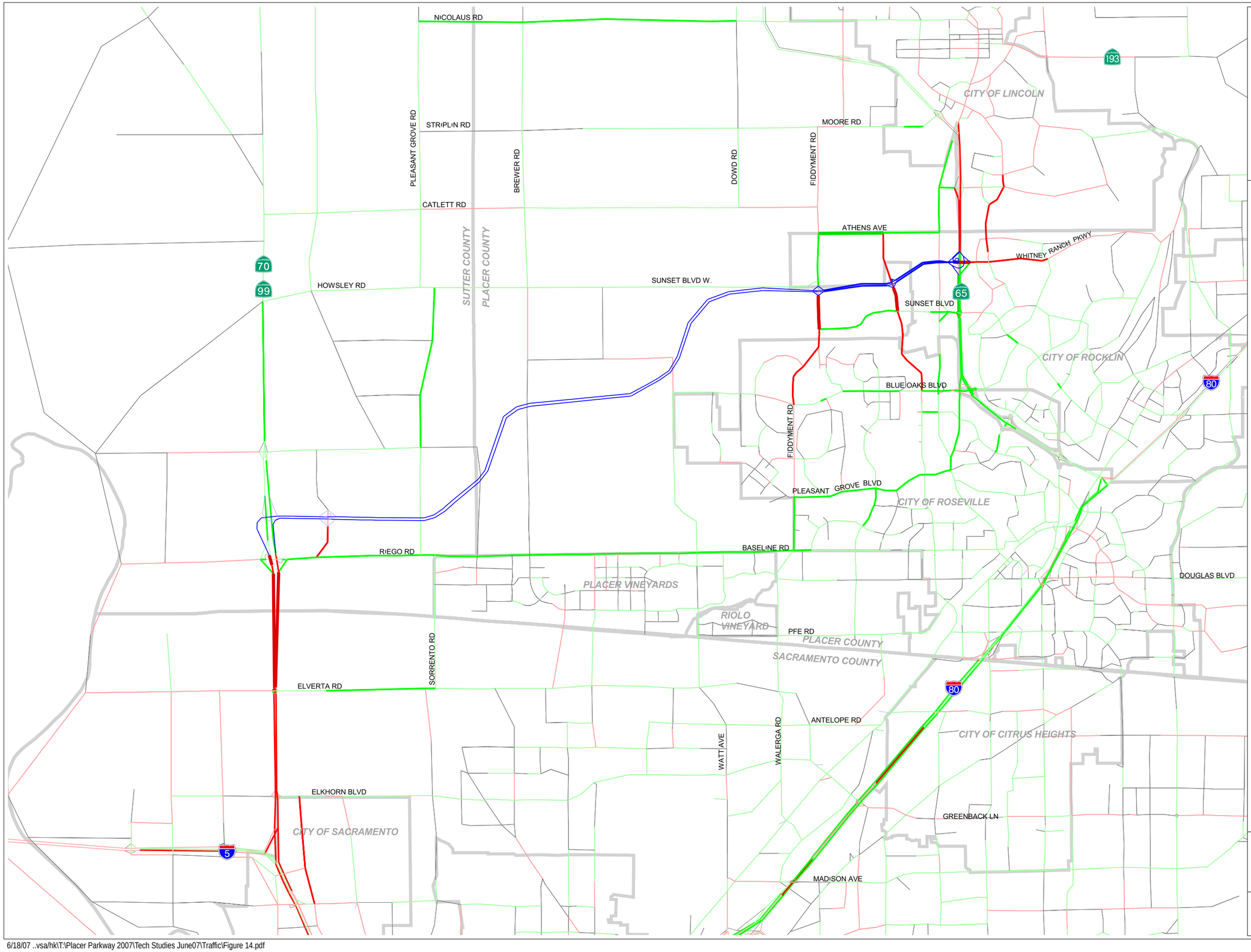

FIGURE 14
Changes in 2020 Daily Traffic Volumes

Alternative 3 Without Watt Interchange Compared to No Build Alternative

Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

[1] Project Roadways are Placer Parkway and its Interchanges. See Tables 9 & 10 for Daily Volumes on Placer Parkway.

[2] See Table 12 for Change in Daily Volumes for Non-Project Roadways.

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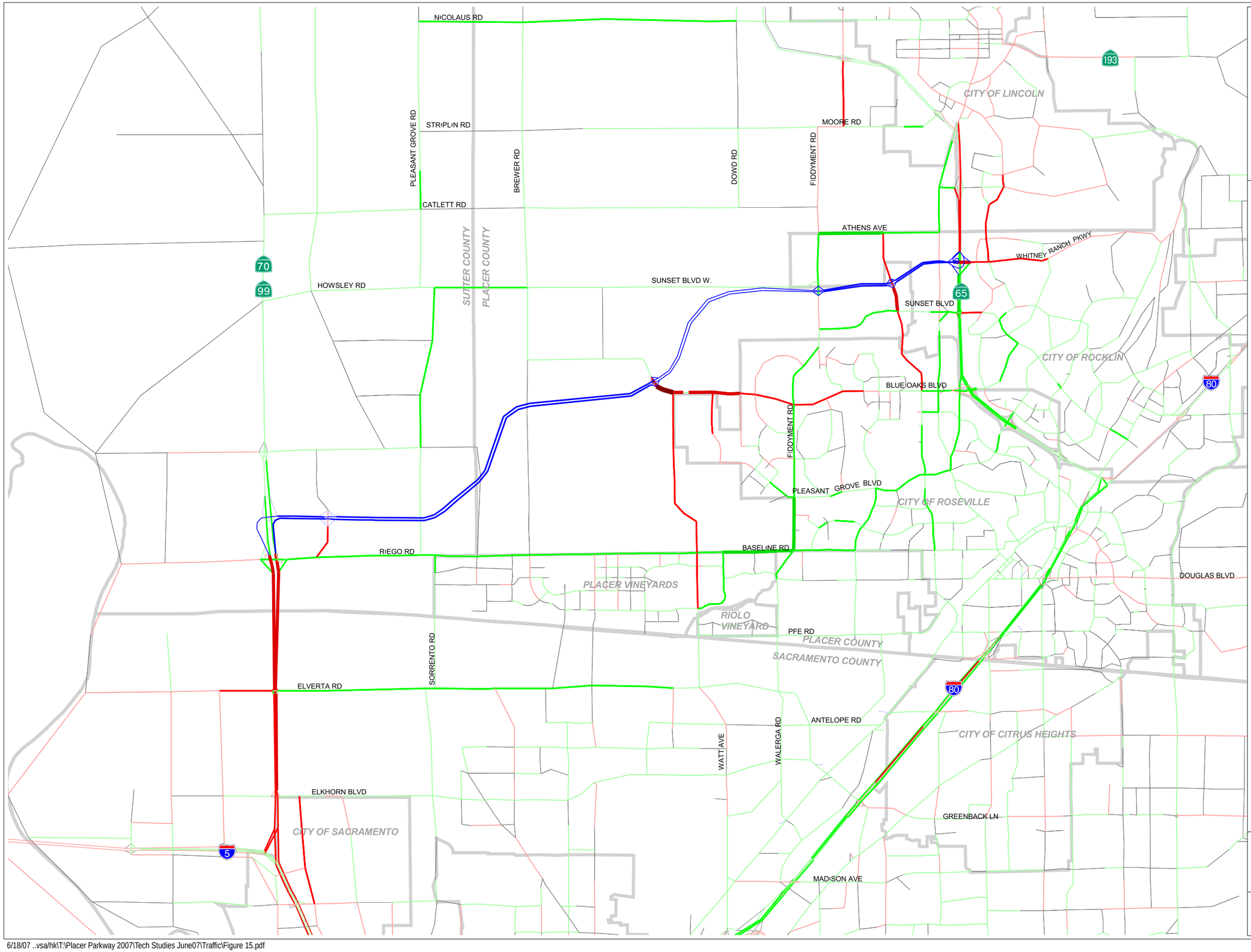

FIGURE 15
Changes in 2020 Daily Traffic Volumes

Alternative 3 With Watt Interchange Compared to No Build Alternative

Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

1 Project Roadways are Placer Parkway and its Interchanges. See Tables 9 & 10 for Daily Volumes on Placer Parkway.

2 See Table 12 for Change in Daily Volumes for Non-Project Roadways.

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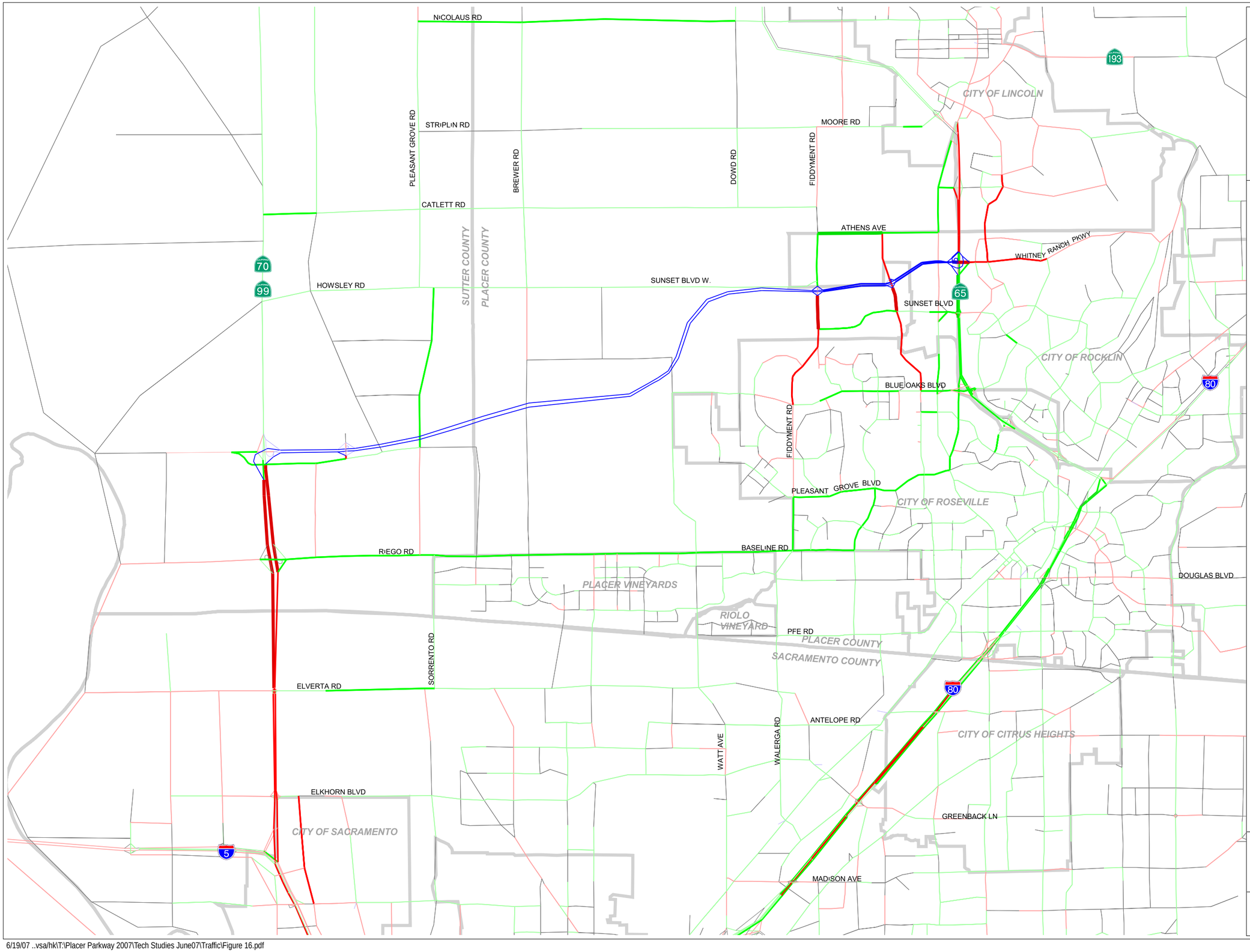
FIGURE 16
Changes in 2020 Daily Traffic Volumes

Alternative 4 Without Watt Interchange Compared to No Build Alternative



Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

[1] Project Roadways are Placer Parkway and its Interchanges. See Tables 9 & 10 for Daily Volumes on Placer Parkway.

[2] See Table 12 for Change in Daily Volumes for Non-Project Roadways.

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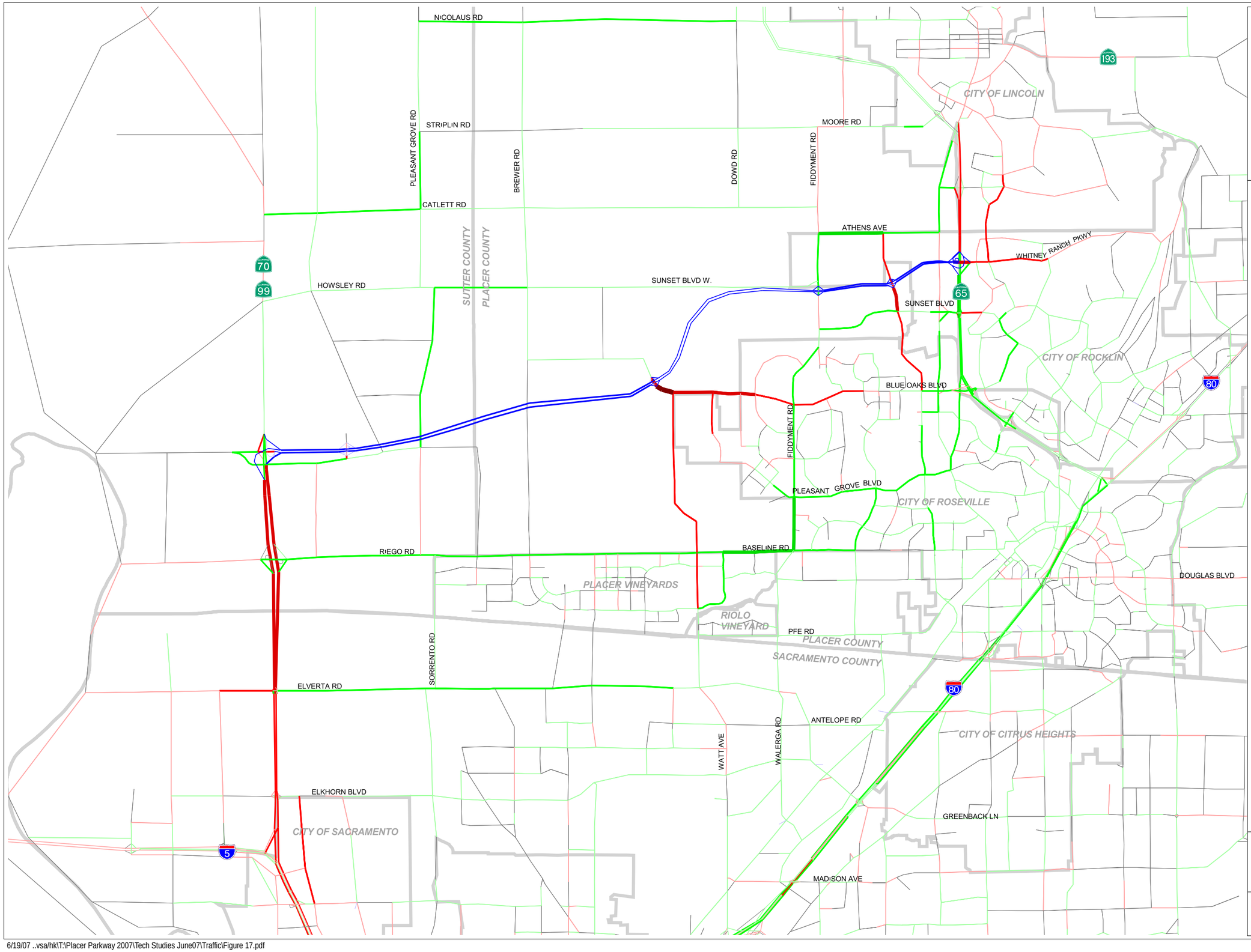
FIGURE 17
Changes in 2020 Daily Traffic Volumes

Alternative 4 With Watt Interchange Compared to No Build Alternative



Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

[1] Project Roadways are Placer Parkway and its Interchanges. See Tables 9 & 10 for Daily Volumes on Placer Parkway.

[2] See Table 12 for Change in Daily Volumes for Non-Project Roadways.

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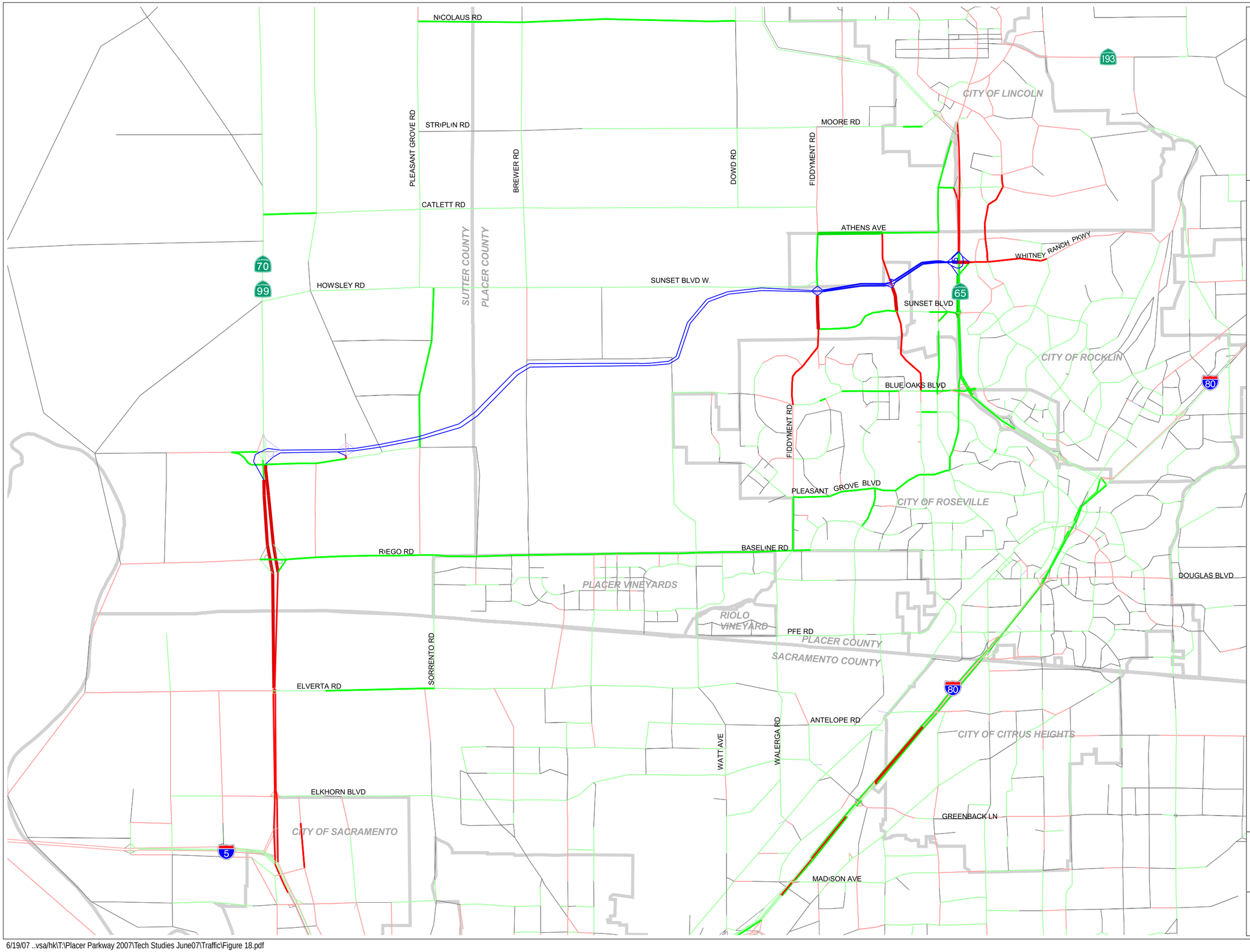
FIGURE 18
Changes in 2020 Daily Traffic Volumes

Alternative 5 Without Watt Interchange Compared to No Build Alternative



Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

1 Project Roadways are Placer Parkway and its Interchanges. See Tables 9 & 10 for Daily Volumes on Placer Parkway.

2 See Table 12 for Change in Daily Volumes for Non-Project Roadways.

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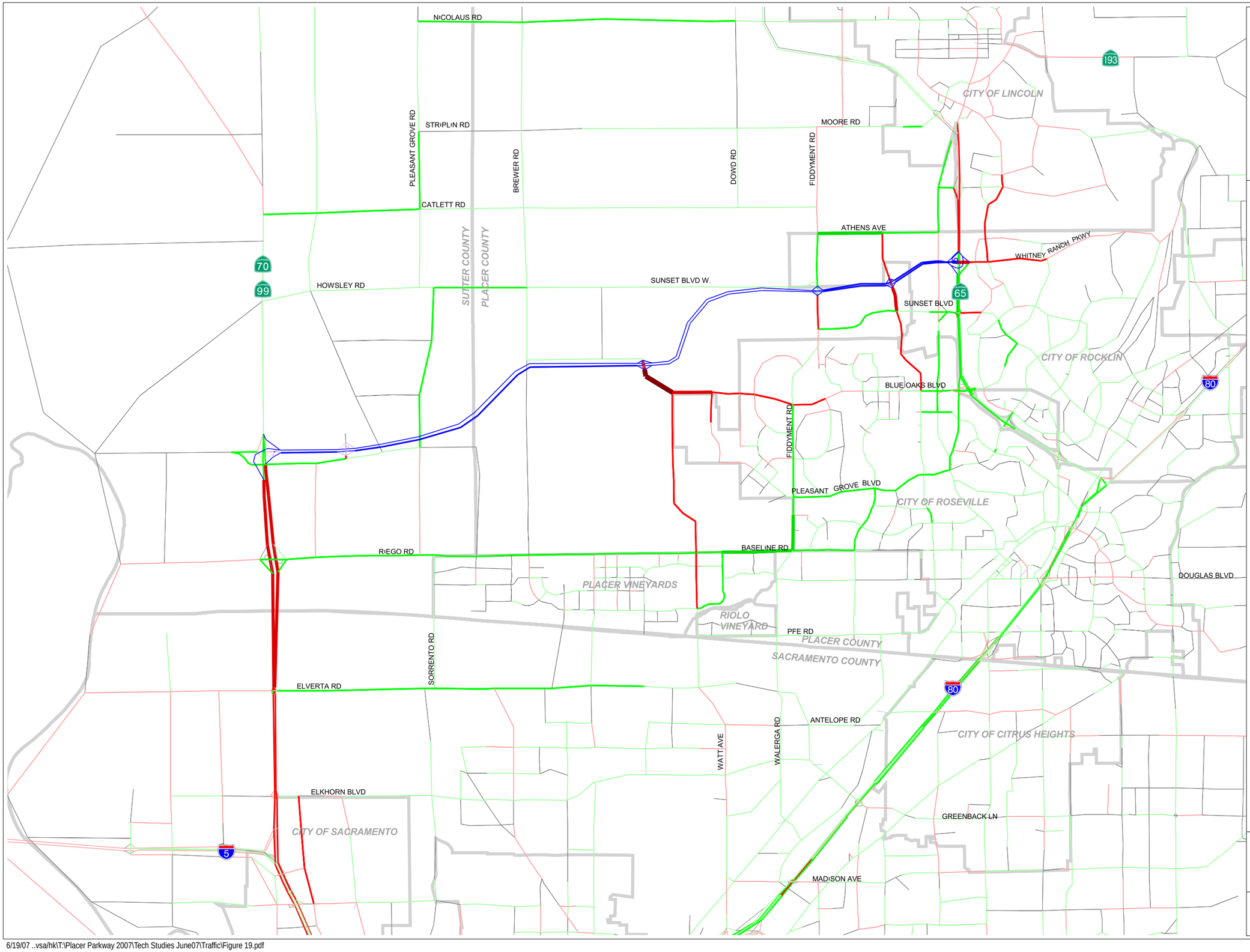
FIGURE 19
Changes in 2020 Daily Traffic Volumes

Alternative 5 With Watt Interchange Compared to No Build Alternative



Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

[1] Project Roadways are Placer Parkway and its Interchanges. See Tables 9 & 10 for Daily Volumes on Placer Parkway.

[2] See Table 12 for Change in Daily Volumes for Non-Project Roadways.

Tier 1 EIS/EIR
Transportation
Technical Report

June 2007

Table 13:
Projected 2020 Level of Service on Placer Parkway with 4 Travel Lanes

		Average Daily Volume										
		Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
	Segment	With Watt South	With Watt North	With Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
1	East of SR 70/99	A	A	A	B	A	B	A	B	A	A	A
2	East of Pacific Street	A	A	A	B	A	B	A	B	A	A	A
3	East of South Sutter Road	A	A	A	B	A	B	A	B	A	A	A
4	East of Watt Avenue	A	A	A	B	A	A	A	A	A	A	A
5	East of Fiddyment Road	B	B	B	B	B	B	B	B	B	B	B
6	West of SR 65	B	B	B	B	B	B	B	B	B	B	B

Source: DKS Associates, 2006

Table 14:
Estimated Volume/Capacity Ratios on Roadway Segments for Build Alternatives under 2020 Conditions

Roadway		Segment	Travel Lanes[1]		2005[2] Volume/ Capacity Ratio	Estimated 2020 Volume/Capacity Ratios on Roadway Segment (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2020		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
1	SR 70/99	North of Howsley Road	4	4	0.54	0.80	0.79	0.79	0.79	0.79	0.78	0.79	0.79	0.80	0.79	0.79	0.79
2	SR 70/99	North of Sankey Road	4	4	0.54	0.82	0.81	0.80	0.80	0.80	0.80	0.80	0.80	0.81	0.81	0.81	0.81
3	SR 70/99	North of Riego Road	4	4	0.54	0.64	0.59	0.60	0.61	0.60	0.60	0.60	0.60	0.86	0.81	0.84	0.81
4	SR 70/99	North of Elverta Road	4	4	0.59	0.76	0.89	0.91	0.87	0.97	0.91	0.96	0.92	0.94	0.90	0.92	0.90
5	SR 70/99	North of I-5	4	4	0.66	1.04	1.10	1.11	1.09	1.15	1.12	1.14	1.12	1.13	1.11	1.12	1.11
6	SR 65	North of Twelve Bridge	4	4	0.56	1.31	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34
7	SR 65	North of Sunset Boulevard	4	4	0.66	1.55	1.38	1.38	1.38	1.37	1.38	1.37	1.37	1.37	1.38	1.37	1.38
8	SR 65	North of Blue Oaks Boulevard	4	4	0.60	1.59	1.50	1.50	1.51	1.49	1.50	1.49	1.50	1.49	1.50	1.50	1.50
9	SR 65	North of Pleasant Grove Boulevard	4	4	1.06	1.60	1.56	1.57	1.57	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56
10	SR 65	North of Stanford Ranch Road	4	4	1.14	1.73	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71
11	SR 65	North of I-80	4	4	1.17	1.78	1.75	1.76	1.76	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
12	I-80	East of Rocklin Road	6	6	0.89	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
13	I-80	East of SR 65	6	6	1.07	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
14	I-80	East of Douglas Boulevard	6	6	1.44	1.30	1.31	1.29	1.29	1.29	1.29	1.28	1.29	1.29	1.28	1.29	1.28
15	I-80	East of Riverside Avenue	6	6	1.51	1.74	1.72	1.72	1.72	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.72
16	I-80	West of Riverside Avenue	8+2	8+2	0.99	1.29	1.28	1.28	1.28	1.27	1.27	1.27	1.27	1.27	1.27	1.28	1.28
17	I-80	East of Northgate Boulevard	6	6	1.32	1.08	1.06	1.06	1.06	1.05	1.05	1.05	1.06	1.05	1.05	1.05	1.06
18	Athens Avenue	East of Fiddyment Road	2	2	0.15	0.36	0.13	0.13	0.14	0.13	0.15	0.13	0.14	0.12	0.13	0.12	0.13
19	Baseline Road	East of Pleasant Grove Road	2	4	0.40	0.30	0.17	0.20	0.24	0.19	0.23	0.19	0.23	0.18	0.23	0.19	0.23
20	Baseline Road	East of Brewer Road	2	4	0.42	0.31	0.19	0.22	0.26	0.21	0.25	0.21	0.25	0.21	0.25	0.21	0.25
21	Baseline Road	West of 16th Street	2	4	0.42	0.31	0.19	0.22	0.26	0.21	0.25	0.21	0.25	0.21	0.25	0.21	0.25
22	Baseline Road	West of Watt Avenue	2	6	0.42	0.40	0.37	0.38	0.38	0.37	0.38	0.37	0.38	0.37	0.38	0.36	0.38
23	Baseline Road	East of Watt Avenue	2	6	0.70	0.38	0.33	0.29	0.35	0.29	0.34	0.29	0.34	0.29	0.34	0.30	0.34
24	Baseline Road	West of Walerga Road	2	6	0.70	0.63	0.51	0.49	0.60	0.48	0.59	0.49	0.59	0.49	0.59	0.51	0.59
25	Baseline Road	East of Walerga Road	3	6	0.84	0.60	0.56	0.55	0.58	0.55	0.58	0.55	0.57	0.56	0.57	0.56	0.57
26	Baseline Road	West of Woodcreek Oaks Boulevard	3	4	0.84	0.82	0.78	0.78	0.81	0.77	0.80	0.77	0.80	0.78	0.79	0.78	0.80
27	Blue Oaks Boulevard	East of Watt Avenue	NA	6	NA	0.06	0.12	0.18	0.06	0.19	0.06	0.20	0.06	0.20	0.06	0.16	0.06
28	Blue Oaks Boulevard	West of Fiddyment Road	NA	6	NA	0.26	0.30	0.31	0.26	0.34	0.26	0.33	0.26	0.33	0.26	0.31	0.26
29	Blue Oaks Boulevard	East of Fiddyment Road	2	6	0.46	0.51	0.51	0.53	0.49	0.55	0.49	0.54	0.49	0.54	0.49	0.52	0.49
30	Blue Oaks Boulevard	West of SR 65	4	6	0.97	0.83	0.80	0.80	0.80	0.81	0.81	0.81	0.81	0.80	0.81	0.81	0.81
31	Brewer Road	North of Sunset Boulevard West	2	2	0.01	0.02	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
32	Brewer Road	South of Sunset Boulevard West	2	2	0.01	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.02	0.01	0.02	0.01	0.02
33	Brewer Road	North of Baseline Road	2	2	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
34	Catlett Road	East of SR 70/99	2	2	0.01	0.11	0.08	0.08	0.09	0.07	0.08	0.08	0.09	0.06	0.06	0.06	0.07
35	Catlett Road	East of Pleasant Grove Road	2	2	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
36	Cirby Way	East of Foothills Boulevard	4	6	1.08	1.13	1.12	1.12	1.13	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
37	East Catlett Road	East of Brewer Road	2	2	0.01	0.04	0.02	0.02	0.03	0.02	0.03	0.02	0.03	0.01	0.01	0.01	0.01
38	East Catlett Road	West of Fiddyment Road	2	2	0.01	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02

Table 14:
Estimated Volume/Capacity Ratios on Roadway Segments for Build Alternatives under 2020 Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Volume/ Capacity Ratio	Estimated 2020 Volume/Capacity Ratios on Roadway Segment (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2020		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
39	Dowd Road	North of Sunset Boulevard West	NA	NA	NA												
40	Dryer Road West	South of Baseline Road	NA	4	NA	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
41	Elkhorn Boulevard	East of SR 70/99	2	6	0.56	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57
42	Elkhorn Boulevard	West of Watt Avenue	4	4	0.74	0.80	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.79
43	Elkhorn Boulevard	East of Watt Avenue	4	6	0.64	0.66	0.65	0.65	0.65	0.64	0.65	0.64	0.65	0.64	0.65	0.65	0.65
44	Elkhorn Boulevard	West of Walerga Road	4	6	0.71	0.66	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
45	Elverta Road	East of SR 70/99	2	4	0.28	0.62	0.55	0.59	0.60	0.58	0.60	0.58	0.60	0.58	0.60	0.59	0.60
46	Elverta Road	East of Rio Linda Boulevard	2	4	0.44	0.91	0.86	0.89	0.90	0.88	0.89	0.88	0.89	0.88	0.89	0.88	0.89
47	Elverta Road	West of Watt Avenue	2	4	1.15	1.46	1.43	1.44	1.45	1.43	1.45	1.44	1.45	1.44	1.44	1.44	1.45
48	Fiddyment Road	North of Sunset Boulevard West	2	2	0.16	0.50	0.33	0.32	0.31	0.34	0.33	0.34	0.33	0.33	0.33	0.33	0.33
49	Fiddyment Road	South of Sunset Boulevard	2	2	0.22	0.50	0.36	0.35	0.34	0.37	0.36	0.37	0.36	0.36	0.36	0.36	0.36
50	Fiddyment Road	North of Blue Oaks Boulevard	2	4	0.22	0.60	0.52	0.52	0.65	0.52	0.64	0.55	0.64	0.55	0.64	0.58	0.64
51	Fiddyment Road	North of Pleasant Grove Boulevard	2	4	0.66	0.74	0.63	0.64	0.76	0.64	0.75	0.65	0.75	0.65	0.75	0.67	0.75
52	Fiddyment Road	North of Baseline Road	2	6	1.09	0.86	0.74	0.75	0.84	0.74	0.83	0.75	0.83	0.75	0.83	0.77	0.83
53	Foothills Boulevard	North of Blue Oaks Boulevard	4	4	0.09	0.44	0.48	0.48	0.51	0.48	0.51	0.48	0.51	0.47	0.52	0.48	0.52
54	Foothills Boulevard	South of Roseville Parkway	4	6	0.34	0.57	0.55	0.56	0.57	0.55	0.56	0.56	0.56	0.56	0.56	0.56	0.56
55	Foothills Boulevard	North of Baseline Road	4	6	0.79	0.90	0.88	0.88	0.89	0.88	0.89	0.88	0.89	0.88	0.89	0.88	0.89
56	Foothills Boulevard	South of Baseline Road	4	6	0.86	1.07	1.06	1.06	1.06	1.05	1.06	1.06	1.06	1.06	1.06	1.06	1.06
57	Howsley Road	East of SR 70/99	2	2	0.03	0.06	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.04
58	Industrial Avenue	North of Athens Avenue	2	4	0.26	0.64	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54
59	Industrial	North of Roseville Parkway	2	2	0.16	1.23	1.24	1.24	1.25	1.24	1.24	1.24	1.25	1.24	1.25	1.24	1.25
60	Junction Boulevard	East of Woodcreek Oaks Boulevard	4	4	0.17	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
61	Moore Road	West of Brewer Road	2	2	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
62	Nicolaus Road	East of Brewer Road	2	2	0.04	0.07	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.03	0.03
63	Pacific Street	West of Sunset Boulevard	4	6	0.29	0.56	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
64	PFE Road	East of Watt Avenue	2	4	0.26	0.10	0.09	0.09	0.10	0.09	0.10	0.09	0.10	0.09	0.10	0.09	0.10
65	Phillip Road	East of Brewer Road	2	2	0.00	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.02	0.01	0.02	0.01	0.02
66	Pleasant Grove Boulevard	West of Fiddyment Road	NA	4	NA	0.64	0.62	0.61	0.64	0.61	0.64	0.61	0.64	0.62	0.64	0.62	0.64
67	Pleasant Grove Boulevard	East of Fiddyment Road	4	4	0.10	0.54	0.52	0.52	0.49	0.52	0.49	0.52	0.49	0.51	0.49	0.51	0.49
68	Pleasant Grove Boulevard	East of Woodcreek Oaks Boulevard	4	6	0.45	0.88	0.81	0.81	0.84	0.81	0.83	0.81	0.83	0.81	0.83	0.82	0.83
69	Pleasant Grove Boulevard	West of SR 65	6	6	0.76	0.92	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
70	Pleasant Grove Road	North of Sankey Road	2	4	0.08	0.15	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.12	0.12	0.11
71	Pleasant Grove Road	North of Riego Road	2	4	0.09	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.13	0.12	0.12
72	Pleasant Grove Road	South of Baseline Road	2	2	0.08	0.10	0.06	0.06	0.08	0.05	0.08	0.06	0.08	0.06	0.08	0.07	0.08

Table 14:
Estimated Volume/Capacity Ratios on Roadway Segments for Build Alternatives under 2020 Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Volume/ Capacity Ratio	Estimated 2020 Volume/Capacity Ratios on Roadway Segment (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2020		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
73	Riego Road	East of SR 70/99	2	4	0.55	0.31	0.20	0.22	0.25	0.21	0.24	0.21	0.24	0.21	0.24	0.22	0.24
74	Riego Road	West of Pleasant Grove Road	2	4	0.50	0.28	0.17	0.20	0.24	0.20	0.23	0.20	0.23	0.18	0.21	0.19	0.21
75	Sankey Road	East of SR 70/99	2	4	0.02	0.05	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.00	0.00	0.00
76	Sankey Road	West of Pleasant Grove Road	2	4	0.01	0.05	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04
77	Sierra College Boulevard	South of English Colony Way	2	4	0.61	0.92	0.91	0.92	0.92	0.91	0.92	0.91	0.92	0.91	0.92	0.92	0.92
78	Sierra College Boulevard	North of King Road	2	4	0.61	0.90	0.89	0.89	0.90	0.89	0.90	0.89	0.89	0.89	0.90	0.89	0.90
79	Wildcat Boulevard	North of Whitney Ranch Parkway	4	4	0.10	0.72	0.75	0.74	0.74	0.75	0.75	0.75	0.74	0.75	0.75	0.75	0.75
80	Sunset Boulevard	East of Fiddyment Boulevard	NA	6	NA	0.16	0.08	0.08	0.08	0.08	0.08	0.09	0.08	0.09	0.08	0.09	0.08
81	Sunset Boulevard	West of SR 65	2	4	0.44	1.01	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
82	Sunset Boulevard	East of SR 65	4	6	0.20	0.38	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
83	Sunset Boulevard	East of Blue Oaks Boulevard	6	2	0.18	0.71	0.69	0.70	0.70	0.69	0.70	0.69	0.69	0.69	0.69	0.70	0.70
84	Sunset Boulevard West	West of Brewer Road	2	2	0.02	0.06	0.02	0.02	0.03	0.01	0.02	0.02	0.02	0.01	0.02	0.01	0.02
85	Sunset Boulevard West	East of Brewer Road	2	2	0.02	0.03	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00
86	Sunset Boulevard West	West of Fiddyment Road	2	2	0.02	0.06	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
87	Twelve Bridges Drive	West of SR 65	2	4	0.33	0.59	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
88	Twelve Bridges Drive	East of SR 65	4	6	0.09	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
89	Valley View Parkway	West of Park Drive	NA	4	NA	0.29	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
90	Walerga Road	South of Baseline Road	2	4	0.83	0.88	0.84	0.86	0.88	0.85	0.88	0.86	0.88	0.86	0.88	0.87	0.88
91	Walerga Road	North of Elverta Road	4	4	1.37	1.15	1.11	1.12	1.14	1.12	1.14	1.13	1.14	1.13	1.14	1.13	1.14
92	Washington Boulevard	South of Blue Oaks Boulevard	2	4	0.27	0.69	0.62	0.63	0.64	0.63	0.64	0.63	0.64	0.63	0.64	0.63	0.64
93	Washington Boulevard	North of Pleasant Grove Boulevard	2	4	0.34	0.94	0.85	0.86	0.87	0.86	0.87	0.86	0.87	0.86	0.87	0.86	0.87
94	Watt Avenue	North of Pleasant Grove Boulevard	NA	6	NA	0.06	0.12	0.16	0.06	0.16	0.05	0.14	0.05	0.15	0.06	0.12	0.06
95	Watt Avenue	North of Baseline Road	NA	6	NA	0.06	0.32	0.16	0.06	0.16	0.05	0.14	0.05	0.15	0.06	0.12	0.06
96	Watt Avenue	South of Baseline Road	2	6	0.39	0.09	0.20	0.14	0.09	0.14	0.09	0.13	0.08	0.13	0.09	0.11	0.09
97	Watt Avenue	North of Elverta Road	4	4	0.54	0.96	1.01	0.96	0.96	0.96	0.95	0.95	0.95	0.96	0.95	0.95	0.95
98	Watt Avenue	North of Elkhorn Boulevard	4	6	1.08	0.70	0.71	0.71	0.71	0.70	0.71	0.70	0.70	0.71	0.71	0.71	0.70
99	Watt Avenue	North of Airbase Drive	6	6	0.87	1.16	1.15	1.16	1.16	1.15	1.16	1.16	1.16	1.16	1.16	1.16	1.16
100	Watt Avenue	North of I-80	6	6	1.16	1.34	1.34	1.33	1.33	1.33	1.34	1.34	1.34	1.33	1.34	1.34	1.34
101	West Side Drive	North of Blue Oaks Boulevard	NA	NA	NA												
102	West Side Drive	North of Baseline Road	NA	NA	NA												
103	Whitney Ranch	East of SR 65	NA	6	NA	0.55	0.61	0.59	0.58	0.61	0.59	0.61	0.59	0.60	0.59	0.60	0.59

Table 14:
Estimated Volume/Capacity Ratios on Roadway Segments for Build Alternatives under 2020 Conditions

Roadway		Segment	Travel Lanes[1]		2005[2] Volume/ Capacity Ratio	Estimated 2020 Volume/Capacity Ratios on Roadway Segment (with and without Potential Watt Interchange)											
						No-Build	Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2020			With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
	Parkway																
104	Whitney Ranch Parkway	East of University Avenue	NA	6	NA	0.34	0.40	0.39	0.38	0.39	0.39	0.40	0.39	0.39	0.39	0.39	0.39
105	Whitney Ranch Parkway	East of Wildcat Boulevard	NA	4	NA	0.27	0.31	0.31	0.30	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
106	Woodcreek Oak Boulevard	South of Pleasant Grove Boulevard	2	4	0.33	0.67	0.58	0.59	0.65	0.58	0.65	0.58	0.64	0.60	0.64	0.61	0.64
107	16th Street	North of Baseline Road	NA	NA	NA												
108	16th Street	South of Baseline Road	NA	4	NA	0.09	0.12	0.11	0.09	0.11	0.09	0.11	0.09	0.11	0.09	0.10	0.09
109	16th Street	North of Elverta Road	2	2	0.02	0.54	0.55	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54
110	Blue Oaks Boulevard	East of Lonetree Boulevard	4	4	0.26	05.4	0.51	0.52	0.53	0.52	0.53	0.52	0.53	0.52	0.53	0.52	0.53

Notes

Shaded cells represent potential LOS impacts based on policies of jurisdictions and agencies in analysis study area
[1] +2 = Plus two HOV lanes
[2] Levels of service on state highways are from 2004
[3] Two general locations for a potential interchange on Placer Parkway at the future extension of Watt Avenue were identified with Alternative 1 – a north and a south location (see Figure 4 for assumed interchange locations)

Source: DKS Associates, 2006

Table 15:
Estimated Roadway Segment Levels of Service for Build Alternatives under 2020 Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Level of Service	Estimated 2020 Roadway Segment Level of Service (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2020		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
1	SR 70/99	North of Howsley Road	4	4	A	C	C	C	C	C	C	C	C	C	C	C	C
2	SR 70/99	North of Sankey Road	4	4	A	D	D	D	D	D	C	D	D	D	D	D	D
3	SR 70/99	North of Riego Road	4	4	A	B	A	B	B	A	B	B	B	D	D	D	D
4	SR 70/99	North of Elverta Road	4	4	A	C	D	E	D	E	E	E	E	E	E	E	D
5	SR 70/99	North of I-5	4	4	B	F	F	F	F	F	F	F	F	F	F	F	F
6	SR 65	North of Twelve Bridge	4	4	A	F	F	F	F	F	F	F	F	F	F	F	F
7	SR 65	North of Sunset Boulevard	4	4	B	F	F	F	F	F	F	F	F	F	F	F	F
8	SR 65	North of Blue Oaks Boulevard	4	4	A	F	F	F	F	F	F	F	F	F	F	F	F
9	SR 65	North of Pleasant Grove Boulevard	4	4	F	F	F	F	F	F	F	F	F	F	F	F	F
10	SR 65	North of Stanford Ranch Road	4	4	F	F	F	F	F	F	F	F	F	F	F	F	F
11	SR 65	North of I-80	4	4	F	F	F	F	F	F	F	F	F	F	F	F	F
12	I-80	East of Rocklin Road	6	6	D	F	F	F	F	F	F	F	F	F	F	F	F
13	I-80	East of SR 65	6	6	F	F	F	F	F	F	F	F	F	F	F	F	F
14	I-80	East of Douglas Boulevard	6	6	F	F	F	F	F	F	F	F	F	F	F	F	F
15	I-80	East of Riverside Avenue	6	6	F	F	F	F	F	F	F	F	F	F	F	F	F
16	I-80	West of Riverside Avenue	8+2H	8+2	F	F	F	F	F	F	F	F	F	F	F	F	F
17	I-80	East of Northgate Boulevard	6	6	F	F	F	F	F	F	F	F	F	F	F	F	F
18	Athens Avenue	East of Fiddyment Road	2	2	B	A	A	A	A	A	A	A	A	A	A	A	A
19	Baseline Road	East of Pleasant Grove Road	2	4	D	A	A	A	A	A	A	A	A	A	A	A	A
20	Baseline Road	East of Brewer Road	2	4	D	A	A	A	A	A	A	A	A	A	A	A	A
21	Baseline Road	West of 16th Street	2	4	D	A	A	A	A	A	A	A	A	A	A	A	A
22	Baseline Road	West of Watt Avenue	2	6	D	A	A	A	A	A	A	A	A	A	A	A	A
23	Baseline Road	East of Watt Avenue	2	6	C	A	A	A	A	A	A	A	A	A	A	A	A
24	Baseline Road	West of Walerga Road	2	6	C	B	A	A	A	A	A	A	A	A	A	A	A
25	Baseline Road	East of Walerga Road	3	6	D	A	A	A	A	A	A	A	A	A	A	A	A
26	Baseline Road	West of Woodcreek Oaks Boulevard	3	4	D	D	C	C	D	C	D	C	C	C	C	C	D
27	Blue Oaks Boulevard	East of Watt Avenue	NA	6	NA	A	A	A	A	A	A	A	A	A	A	A	A
28	Blue Oaks Boulevard	West of Fiddyment Road	NA	6	NA	A	A	A	A	A	A	A	A	A	A	A	A
29	Blue Oaks Boulevard	East of Fiddyment Road	2	6	A	A	A	A	A	A	A	A	A	A	A	A	A
30	Blue Oaks Boulevard	West of SR 65	4	6	**E**	D	C	D	D	D	D	D	D	D	D	D	D
31	Brewer Road	North of Sunset Boulevard West	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
32	Brewer Road	South of Sunset Boulevard West	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
33	Brewer Road	North of Baseline Road	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
34	Catlett Road	East of SR 70/99	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
35	Catlett Road	East of Pleasant Grove Road	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
36	Cirby Way	East of Foothills Boulevard	4	6	F	F	F	F	F	F	F	F	F	F	F	F	F
37	East Catlett Road	East of Brewer Road	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
38	East Catlett Road	West of Fiddyment Road	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A

Table 15:
Estimated Roadway Segment Levels of Service for Build Alternatives under 2020 Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Level of Service	Estimated 2020 Roadway Segment Level of Service (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2020		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
39	Dowd Road	North of Sunset Boulevard West	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
40	Dryer Road West	South of Baseline Road	NA	4	NA	A	A	A	A	A	A	A	A	A	A	A	A
41	Elkhorn Boulevard	East of SR 70/99	2	6	E	A	A	A	A	A	A	A	A	A	A	A	A
42	Elkhorn Boulevard	West of Watt Avenue	4	4	C	C	C	C	C	C	C	C	C	C	C	C	C
43	Elkhorn Boulevard	East of Watt Avenue	4	6	B	B	B	B	B	B	B	B	B	B	B	B	B
44	Elkhorn Boulevard	West of Walerga Road	4	6	C	B	B	B	B	B	B	B	B	B	B	B	B
45	Elverta Road	East of SR 70/99	2	4	A	B	A	A	B	A	A	A	A	A	B	A	B
46	Elverta Road	East of Rio Linda Boulevard	2	4	A	E	D	D	E	D	D	D	D	D	D	D	D
47	Elverta Road	West of Watt Avenue	2	4	F	F	F	F	F	F	F	F	F	F	F	F	F
48	Fiddyment Road	North of Sunset Boulevard West	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
49	Fiddyment Road	South of Sunset Boulevard	2	2	B	A	A	A	A	A	A	A	A	A	A	A	A
50	Fiddyment Road	North of Blue Oaks Boulevard	2	4	A	B	A	A	B	A	B	A	B	A	B	A	B
51	Fiddyment Road	North of Pleasant Grove Boulevard	2	4	B	C	B	B	C	B	C	B	C	B	C	B	C
52	Fiddyment Road	North of Baseline Road	2	6	F	D	C	C	D	C	D	C	D	C	D	C	D
53	Foothills Boulevard	North of Blue Oaks Boulevard	4	4	A	A	A	A	A	A	A	A	A	A	A	A	A
54	Foothills Boulevard	South of Roseville Parkway	4	6	A	A	A	A	A	A	A	A	A	A	A	A	A
55	Foothills Boulevard	North of Baseline Road	4	6	C	E	D	D	D	D	D	D	D	D	D	D	D
56	Foothills Boulevard	South of Baseline Road	4	6	D	F	F	F	F	F	F	F	F	F	F	F	F
57	Howsley Road	East of SR 70/99	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
58	Industrial Avenue	North of Athens Avenue	2	4	A	B	A	A	A	A	A	A	A	A	A	A	A
59	Industrial	North of Roseville Parkway	2	2	A	F	F	F	F	F	F	F	F	F	F	F	F
60	Junction Boulevard	East of Woodcreek Oaks Boulevard	4	4	A	A	A	A	A	A	A	A	A	A	A	A	A
61	Moore Road	West of Brewer Road	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
62	Nicolaus Road	East of Brewer Road	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
63	Pacific Street	West of Sunset Boulevard	4	6	A	A	A	A	A	A	A	A	A	A	A	A	A
64	PFE Road	East of Watt Avenue	2	4	A	A	A	A	A	A	A	A	A	A	A	A	A
65	Phillip Road	East of Brewer Road	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
66	Pleasant Grove Boulevard	West of Fiddyment Road	NA	4	NA	B	B	B	B	B	B	B	B	B	B	B	B
67	Pleasant Grove Boulevard	East of Fiddyment Road	4	4	A	A	A	A	A	A	A	A	A	A	A	A	A
68	Pleasant Grove Boulevard	East of Woodcreek Oaks Boulevard	4	6	A	D	D	D	D	D	D	D	D	D	D	D	D
69	Pleasant Grove Boulevard	West of SR 65	6	6	C	E	E	E	E	E	E	E	E	E	E	E	E
70	Pleasant Grove Road	North of Sankey Road	2	4	A	A	A	A	A	A	A	A	A	A	A	A	A
71	Pleasant Grove Road	North of Riego Road	2	4	A	A	A	A	A	A	A	A	A	A	A	A	A
72	Pleasant Grove Road	South of Baseline Road	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A

Table 15:
Estimated Roadway Segment Levels of Service for Build Alternatives under 2020 Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Level of Service	Estimated 2020 Roadway Segment Level of Service (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2020		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
73	Riego Road	East of SR 70/99	2	4	A	A	A	A	A	A	A	A	A	A	A	A	A
74	Riego Road	West of Pleasant Grove Road	2	4	A	A	A	A	A	A	A	A	A	A	A	A	A
75	Sankey Road	East of SR 70/99	2	4	A	A	A	A	A	A	A	A	A	A	A	A	A
76	Sankey Road	West of Pleasant Grove Road	2	4	A	A	A	A	A	A	A	A	A	A	A	A	A
77	Sierra College Boulevard	South of English Colony Way	2	4	B	E	E	E	E	E	E	E	E	E	E	E	E
78	Sierra College Boulevard	North of King Road	2	4	B	E	D	D	D	D	D	D	D	D	D	D	D
79	Wildcat Boulevard	North of Whitney Ranch Parkway	4	4	A	C	C	C	C	C	C	C	C	C	C	C	C
80	Sunset Boulevard	East of Fiddyment Boulevard	NA	6	NA	A	A	A	A	A	A	A	A	A	A	A	A
81	Sunset Boulevard	West of SR 65	2	4	A	F	E	E	E	E	E	E	E	E	E	E	E
82	Sunset Boulevard	East of SR 65	4	6	A	A	A	A	A	A	A	A	A	A	A	A	A
83	Sunset Boulevard	East of Blue Oaks Boulevard	6	2	A	C	B	B	C	B	B	B	B	B	B	B	B
84	Sunset Boulevard West	West of Brewer Road	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
85	Sunset Boulevard West	East of Brewer Road	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
86	Sunset Boulevard West	West of Fiddyment Road	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
87	Twelve Bridges Drive	West of SR 65	2	4	A	A	A	A	A	A	A	A	A	A	A	A	A
88	Twelve Bridges Drive	East of SR 65	4	6	A	B	C	B	B	B	B	B	C	B	B	B	B
89	Valley View Parkway	West of Park Drive	NA	4	NA	A	A	A	A	A	A	A	A	A	A	A	A
90	Walerga Road	South of Baseline Road	2	4	D	D	D	D	D	D	D	D	D	D	D	D	D
91	Walerga Road	North of Elverta Road	4	4	F	F	F	F	F	F	F	F	F	F	F	F	F
92	Washington Boulevard	South of Blue Oaks Boulevard	2	4	A	B	B	B	B	B	B	B	B	B	B	B	B
93	Washington Boulevard	North of Pleasant Grove Boulevard	2	4	A	E	D	D	D	D	D	D	D	D	D	D	D
94	Watt Avenue	North of Pleasant Grove Boulevard	NA	6	NA	A	A	A	A	A	A	A	A	A	A	A	A
95	Watt Avenue	North of Baseline Road	NA	6	NA	A	A	A	A	A	A	A	A	A	A	A	A
96	Watt Avenue	South of Baseline Road	2	6	A	A	A	A	A	A	A	A	A	A	A	A	A
97	Watt Avenue	North of Elverta Road	4	4	A	E	F	E	E	E	E	E	E	E	E	E	E
98	Watt Avenue	North of Elkhorn Boulevard	4	6	F	C	C	C	C	C	C	C	C	C	C	C	C
99	Watt Avenue	North of Airbase Drive	6	6	D	F	F	F	F	F	F	F	F	F	F	F	F
100	Watt Avenue	North of I-80	6	6	F	F	F	F	F	F	F	F	F	F	F	F	F
101	West Side Drive	North of Blue Oaks Boulevard	NA	NA	NA												
102	West Side Drive	North of Baseline Road	NA	NA	NA												
103	Whitney Ranch Parkway	East of SR 65	NA	6	NA	A	B	A	A	B	A	B	A	B	A	A	A
104	Whitney Ranch Parkway	East of University Avenue	NA	6	NA	A	A	A	A	A	A	A	A	A	A	A	A

Table 15:
Estimated Roadway Segment Levels of Service for Build Alternatives under 2020 Conditions

Roadway		Segment	Travel Lanes[1]		2005[2] Level of Service	Estimated 2020 Roadway Segment Level of Service (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2020		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
105	Whitney Ranch Parkway	East of Wildcat Boulevard	NA	4	NA	A	A	A	A	A	A	A	A	A	A	A	A
106	Woodcreek Oak Boulevard	South of Pleasant Grove Boulevard	2	4	A	B	A	A	B	A	B	A	B	A	B	B	B
107	16th Street	North of Baseline Road	NA	NA	NA												
108	16th Street	South of Baseline Road	NA	4	NA	A	A	A	A	A	A	A	A	A	A	A	A
109	16th Street	North of Elverta Road	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
110	Blue Oaks Boulevard	East of Lonetree Boulevard	4	4	A	A	A	A	A	A	A	A	A	A	A	A	A

Notes

Shaded cells represent potential level of service impacts based on policies of jurisdictions and agencies in analysis study area
[1] +2H = Plus two HOV lanes
[2] Levels of service on state highways are from 2004
[3] Two general locations for a potential interchange on Placer Parkway at the future extension of Watt Avenue were identified with Alternative 1 – a north and a south location (see Figure 4 for assumed interchange locations)

Source: DKS Associates, 2006

The comparison between the No-Build Alternative and the build alternatives under 2020 conditions indicates that there would be significant LOS impacts on some roadway segments. These impacts are discussed in Section 5.3.

5.2.3 Changes in System-Wide Congestion and Delay

The Parkway would have an impact on travel patterns in a fairly wide area. While some roadway segments would have increases in traffic volumes due to Placer Parkway, a larger number of roadway segments would have decreases in traffic volumes. In addition to measuring changes in traffic volumes and LOS on individual roadway segments (discussed in the previous sections), the following systemwide measures were defined to show the impacts and benefits to the roadway system as a whole:

- Vehicle-miles of travel on congested roadways
- Vehicle delay.

These two system-wide measures were estimated using the travel demand model for the following two areas:

- **The TASA,** shown with the assumed 2020 roadway network in Figure 6, covers the area where the travel model shows "significant" changes in traffic volumes, although the percentage of roadways that would be affected by Placer Parkway decreases on the fringes of that area. The TASA extends from Nicolaus Road on the north to I-80 on the south, and from Sierra College Boulevard on the east to west of SR 70/99. This area covers portions of eight jurisdictions: Placer County, Sutter County, Sacramento County, the cities of Roseville, Rocklin, Lincoln, and Sacramento, and the Town of Loomis.

- **The Analysis Focus Area,** also shown in Figure 6, is the area close to the build alternatives and represents the area where most of the transportation benefits of constructing Placer Parkway would occur.

Tables 16 and 17 show the projected VMT on congested roadways during commute periods under the 2020 and 2040 conditions, respectively, for the full TASA (shown in Figure 6). Tables 18 and 19 show this same information, but as percentages of the total VMT in the full TASA.

Tables 20 and 21 show the projected VMT on congested roadways during commute periods under the 2020 and 2040 conditions, respectively, for the Analysis Focus Area (also shown in Figure 6). Tables 22 and 23 show this same information, but as percentages of the total VMT in the Analysis Focus Area.

VMT was summarized in those tables separately for roadways that would operate at LOS F for 1 hour, 2 hours, and for 3 or more hours. Key conclusions are:

- Compared to the No-Build Alternative, all build alternatives would increase the total VMT in the TASA.

- Compared to the No-Build Alternative, all build alternatives would reduce the amount of VMT on congested roadways, especially in the Analysis Focus Area. For each alternative, the scenarios with a Watt Avenue interchange would provide a larger reduction in VMT on congested roadways than without this interchange.

Vehicle delay can be measured in a number of ways. For this analysis, vehicle delay was defined as the additional travel time that vehicles would take to travel on a roadway segment beyond the time that it would take under a given LOS threshold. The added travel time was measured system-wide for three LOS thresholds:

Table 16:
Estimated 2020 VMT by Level of Service Category – TASA

LOS	Facility Type	Estimated 2020 VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within Transportation Analysis Area[1]											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South	With Watt North	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
A-C	Freeways	783,404	1,014,253	992,769	926,863	1,007,529	951,203	1,000,643	945,733	979,300	924,452	963,672	924,832
	Arterials	3,168,878	3,195,936	3,195,386	3,165,458	3,200,093	3,179,646	3,206,020	3,174,364	3,190,324	3,166,313	3,198,582	3,163,456
	Subtotal	3,952,282	4,210,189	4,188,155	4,092,321	4,207,622	4,130,849	4,206,663	4,120,097	4,169,624	4,090,765	4,162,254	4,088,288
D	Freeways	372,023	431,984	436,935	464,020	448,120	453,093	449,674	462,941	429,499	456,021	436,997	454,936
	Arterials	590,948	546,882	551,586	574,268	537,870	550,541	528,863	572,296	548,638	557,134	546,993	560,818
	Subtotal	962,971	978,866	988,521	1,038,288	985,990	1,003,634	978,537	1,035,237	978,137	1,013,155	983,990	1,015,754
E	Freeways	600,076	552,787	555,018	529,607	546,811	565,692	541,599	556,874	576,375	591,716	555,414	572,261
	Arterials	501,279	456,977	459,358	473,730	471,540	476,592	476,157	477,583	466,949	488,811	466,343	479,859
	Subtotal	1,101,355	1,009,764	1,014,376	1,003,337	1,018,351	1,042,284	1,017,756	1,034,457	1,043,324	1,080,527	1,021,757	1,052,120
F1	Freeways	540,138	548,418	596,099	595,271	579,850	532,855	576,792	540,849	593,799	599,708	602,975	582,817
	Arterials	490,627	506,238	498,871	505,970	500,064	514,422	498,774	493,396	489,908	489,659	492,312	503,802
	Subtotal	1,030,765	1,054,656	1,094,970	1,101,241	1,079,914	1,047,277	1,075,566	1,034,245	1,083,707	1,089,367	1,095,287	1,086,619
F2	Freeways	222,847	220,937	166,119	216,267	204,404	225,114	210,742	239,016	209,436	172,892	208,065	199,253
	Arterials	159,325	136,279	139,048	139,063	137,382	137,276	132,268	135,269	152,749	144,414	144,921	143,375
	Subtotal	382,172	357,216	305,167	355,330	341,786	362,390	343,010	374,285	362,185	317,306	352,986	342,628
F3	Freeways	370,650	316,558	322,339	295,067	296,625	315,973	299,216	303,518	291,188	303,700	304,074	312,399
	Arterials	406,685	387,921	392,011	397,510	389,079	394,704	396,252	401,116	386,507	399,524	388,750	397,002
	Subtotal	777,335	704,479	714,350	692,577	685,704	710,677	695,468	704,634	677,695	703,224	692,824	709,401
All	Freeways	2,889,138	3,084,937	3,069,279	3,027,095	3,083,339	3,043,930	3,078,666	3,048,931	3,079,597	3,048,489	3,071,197	3,046,498
	Arterials	5,317,742	5,230,233	5,236,260	5,255,999	5,236,028	5,253,181	5,238,334	5,254,024	5,235,075	5,245,855	5,237,901	5,248,312
	Total	8,206,880	8,315,170	8,305,539	8,283,094	8,319,367	8,297,111	8,317,000	8,302,955	8,314,672	8,294,344	8,309,098	8,294,810

[1] See Figure 6 for TASA Source: DKS Associates, 2006

Table 17:
Summary of 2020 VMT by Level of Service Category – TASA

LOS	Facility Type	Estimated 2020 VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within Transportation Analysis Area[1]											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South	With Watt North	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
A-E	Freeways	1,755,503	1,999,024	1,984,722	1,920,490	2,002,460	1,969,988	1,991,916	1,965,548	1,985,174	1,972,189	1,956,083	1,952,029
	Arterials	4,261,105	4,199,795	4,206,330	4,213,456	4,209,503	4,206,779	4,211,040	4,224,243	4,205,911	4,212,258	4,211,918	4,204,133
	Subtotal	6,016,608	6,198,819	6,191,052	6,133,946	6,211,963	6,176,767	6,202,956	6,189,791	6,191,085	6,184,447	6,168,001	6,156,162
F	Freeways	1,133,635	1,085,913	1,084,557	1,106,605	1,080,879	1,073,942	1,086,750	1,083,383	1,094,423	1,076,300	1,115,114	1,094,469
	Arterials	1,056,637	1,030,438	1,029,930	1,042,543	1,026,525	1,046,402	1,027,294	1,029,781	1,029,164	1,033,597	1,025,983	1,044,179
	Subtotal	2,190,272	2,116,351	2,114,487	2,149,148	2,107,404	2,120,344	2,114,044	2,113,164	2,123,587	2,109,897	2,141,097	2,138,648
Total	Freeways	2,889,138	3,084,937	3,069,279	3,027,095	3,083,339	3,043,930	3,078,666	3,048,931	3,079,597	3,048,489	3,071,197	3,046,498
	Arterials	5,317,742	5,230,233	5,236,260	5,255,999	5,236,028	5,253,181	5,238,334	5,254,024	5,235,075	5,245,855	5,237,901	5,248,312
	Subtotal	8,206,880	8,315,170	8,305,539	8,283,094	8,319,367	8,297,111	8,317,000	8,302,955	8,314,672	8,294,344	8,309,098	8,294,810

[1] See Figure 6 for TASA Source: DKS Associates, 2006

Table 18:
Estimated Percentage of 2020 VMT by Level of Service Category – TASA

LOS	Facility Type	Percentage of VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within Transportation Analysis Area[1]											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South	With Watt North	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
A-C	Freeways	27.1%	32.9%	32.3%	30.6%	32.7%	31.2%	32.5%	31.0%	31.8%	30.3%	31.4%	30.4%
	Arterials	59.6%	61.1%	61.0%	60.2%	61.1%	60.5%	61.2%	60.4%	60.9%	60.4%	61.1%	60.3%
	Subtotal	48.2%	50.6%	50.4%	49.4%	50.6%	49.8%	50.6%	49.6%	50.1%	49.3%	50.1%	49.3%
D	Freeways	12.9%	14.0%	14.2%	15.3%	14.5%	14.9%	14.6%	15.2%	13.9%	15.0%	14.2%	14.9%
	Arterials	11.1%	10.5%	10.5%	10.9%	10.3%	10.5%	10.1%	10.9%	10.5%	10.6%	10.4%	10.7%
	Subtotal	11.7%	11.8%	11.9%	12.5%	11.9%	12.1%	11.8%	12.5%	11.8%	12.2%	11.8%	12.2%
E	Freeways	20.8%	17.9%	18.1%	17.5%	17.7%	18.6%	17.6%	18.3%	18.7%	19.4%	18.1%	18.8%
	Arterials	9.4%	8.7%	8.8%	9.0%	9.0%	9.1%	9.1%	9.1%	8.9%	9.3%	8.9%	9.1%
	Subtotal	13.4%	12.1%	12.2%	12.1%	12.2%	12.6%	12.2%	12.5%	12.5%	13.0%	12.3%	12.7%
F1	Freeways	18.7%	17.8%	19.4%	19.7%	18.8%	17.5%	18.7%	17.7%	19.3%	19.7%	19.6%	19.1%
	Arterials	9.2%	9.7%	9.5%	9.6%	9.6%	9.8%	9.5%	9.4%	9.4%	9.3%	9.4%	9.6%
	Subtotal	12.6%	12.7%	13.2%	13.3%	13.0%	12.6%	12.9%	12.5%	13.0%	13.1%	13.2%	13.1%
F2	Freeways	7.7%	7.2%	5.4%	7.1%	6.6%	7.4%	6.8%	7.8%	6.8%	5.7%	6.8%	6.5%
	Arterials	3.0%	2.6%	2.7%	2.6%	2.6%	2.6%	2.5%	2.6%	2.9%	2.8%	2.8%	2.7%
	Subtotal	4.7%	4.3%	3.7%	4.3%	4.1%	4.4%	4.1%	4.5%	4.4%	3.8%	4.2%	4.1%
F3	Freeways	12.8%	10.3%	10.5%	9.7%	9.6%	10.4%	9.7%	10.0%	9.5%	10.0%	9.9%	10.3%
	Arterials	7.6%	7.4%	7.5%	7.6%	7.4%	7.5%	7.6%	7.6%	7.4%	7.6%	7.4%	7.6%
	Subtotal	9.5%	8.5%	8.6%	8.4%	8.2%	8.6%	8.4%	8.5%	8.2%	8.5%	8.3%	8.6%
All	Freeways	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Arterials	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[1]See Figure 6 for TASA Source: DKS Associates, 2006

Table 19:
Summary of the Percentage of 2020 VMT by Level of Service Category – TASA

LOS	Facility Type	Percentage of VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within Transportation Analysis Area[1]											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South	With Watt North	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
A-E	Freeways	60.8%	64.8%	64.7%	63.4%	64.9%	64.7%	64.7%	64.5%	64.5%	64.7%	63.7%	64.1%
	Arterials	80.1%	80.3%	80.3%	80.2%	80.4%	80.1%	80.4%	80.4%	80.3%	80.3%	80.4%	80.1%
	Subtotal	73.3%	74.5%	74.5%	74.1%	74.7%	74.4%	74.6%	74.5%	74.5%	74.6%	74.2%	74.2%
F	Freeways	39.2%	35.2%	35.3%	36.6%	35.1%	35.3%	35.3%	35.5%	35.5%	35.3%	36.3%	35.9%
	Arterials	19.9%	19.7%	19.7%	19.8%	19.6%	19.9%	19.6%	19.6%	19.7%	19.7%	19.6%	19.9%
	Subtotal	26.7%	25.5%	25.5%	25.9%	25.3%	25.6%	25.4%	25.5%	25.5%	25.4%	25.8%	25.8%
Total	Freeways	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Arterials	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Subtotal	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[1]See Figure 6 for TASA Source: DKS Associates, 2006

Table 20:
Estimated 2020 VMT by Level of Service Category – Analysis Focus Area

LOS	Facility Type	Estimated 2020 VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within Analysis Focus Area[1]											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South	With Watt North	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
A-C	Freeways	72,856	298,014	281,010	230,604	294,419	248,956	288,615	252,232	261,091	224,279	252,011	222,086
	Arterials	879,948	931,634	938,775	904,948	936,263	910,490	939,712	914,844	935,391	902,442	930,742	900,981
	Subtotal	952,804	1,229,648	1,219,785	1,135,552	1,230,682	1,159,446	1,228,327	1,167,076	1,196,482	1,126,721	1,182,753	1,123,067
D	Freeways	24,409	14,604	13,047	23,765	13,045	20,594	13,032	20,574	13,035	20,597	13,019	22,193
	Arterials	152,538	111,368	106,455	136,274	106,847	128,808	108,055	124,477	113,196	132,921	114,046	133,650
	Subtotal	176,947	125,972	119,502	160,039	119,892	149,402	121,087	145,051	126,231	153,518	127,065	155,843
E	Freeways	89,491	55,905	61,185	58,005	57,590	62,810	57,461	61,403	77,887	93,818	77,799	90,310
	Arterials	113,037	77,004	80,624	85,852	81,791	84,263	78,689	80,748	81,036	91,316	84,146	87,462
	Subtotal	202,528	132,909	141,809	143,857	139,381	147,073	136,150	142,151	158,923	185,134	161,945	177,772
F1	Freeways	27,624	84,813	81,723	80,963	86,166	80,085	85,987	81,665	96,264	82,117	95,900	79,534
	Arterials	117,756	105,284	102,570	108,912	104,716	110,064	104,407	112,347	100,147	102,004	98,784	108,927
	Subtotal	145,380	190,097	184,293	189,875	190,882	190,149	190,394	194,012	196,411	184,121	194,684	188,461
F2	Freeways	53,615	52,082	52,581	51,690	26,386	52,442	26,369	26,359	52,542	47,802	52,352	52,232
	Arterials	12,254	10,027	10,469	15,699	9,100	13,287	9,312	13,909	10,456	16,348	12,360	15,085
	Subtotal	65,869	62,109	63,050	67,389	35,486	65,729	35,681	40,268	62,998	64,150	64,712	67,317
F3	Freeways	42,170	26,477	26,498	26,472	53,427	26,427	53,381	52,703	26,493	26,484	26,562	26,478
	Arterials	31,740	28,101	27,718	29,764	27,729	31,624	29,614	31,779	27,765	30,196	28,602	29,757
	Subtotal	73,910	54,578	54,216	56,236	81,156	58,051	82,995	84,482	54,258	56,680	55,164	56,235
All	Freeways	310,165	531,895	516,044	471,499	531,033	491,314	524,845	494,936	527,312	495,097	517,643	492,833
	Arterials	1,307,273	1,263,418	1,266,611	1,281,449	1,266,446	1,278,536	1,269,789	1,278,104	1,267,991	1,275,227	1,268,680	1,275,862
	Total	1,617,438	1,795,313	1,782,655	1,752,948	1,797,479	1,769,850	1,794,634	1,773,040	1,795,303	1,770,324	1,786,323	1,768,695

[1]See Figure 6 for Analysis Focus Area Source: DKS Associates, 2006

Table 21:
Summary of 2020 VMT by Level of Service Category – Analysis Focus Area

LOS	Facility Type	Estimated 2020 VMT by Level of Service Category (3-Hour a.m. and 3-Hour p.m. Commute Periods) within Analysis Focus Area[1]											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South	With Watt North	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
A-E	Freeways	186,756	368,523	355,242	312,374	365,054	332,360	359,108	334,209	352,013	338,694	342,829	334,589
	Arterials	1,145,523	1,120,006	1,125,854	1,127,074	1,124,901	1,123,561	1,126,456	1,120,069	1,129,623	1,126,679	1,128,934	1,122,093
	Subtotal	1,332,279	1,488,529	1,481,096	1,439,448	1,489,955	1,455,921	1,485,564	1,454,278	1,481,636	1,465,373	1,471,763	1,456,682
F	Freeways	123,409	163,372	160,802	159,125	165,979	158,954	165,737	160,727	175,299	156,403	174,814	158,244
	Arterials	161,750	143,412	140,757	154,375	141,545	154,975	143,333	158,035	138,368	148,548	139,746	153,769
	Subtotal	285,159	306,784	301,559	313,500	307,524	313,929	309,070	318,762	313,667	304,951	314,560	312,013
Total	Freeways	310,165	531,895	516,044	471,499	531,033	491,314	524,845	494,936	527,312	495,097	517,643	492,833
	Arterials	1,307,273	1,263,418	1,266,611	1,281,449	1,266,446	1,278,536	1,269,789	1,278,104	1,267,991	1,275,227	1,268,680	1,275,862
	Subtotal	1,617,438	1,795,313	1,782,655	1,752,948	1,797,479	1,769,850	1,794,634	1,773,040	1,795,303	1,770,324	1,786,323	1,768,695

[1]See Figure 6 for Analysis Focus Area Source: DKS Associates, 2006

Table 22:
Estimated Percentage of 2020 VMT by Level of Service Category – Analysis Focus Area

LOS	Facility Type	Percentage of VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) with Analysis Focus Area[1]											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South	With Watt North	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
A-C	Freeways	23.5%	56.0%	54.5%	48.9%	55.4%	50.7%	55.0%	51.0%	49.5%	45.3%	48.7%	45.1%
	Arterials	67.3%	73.7%	74.1%	70.6%	73.9%	71.2%	74.0%	71.6%	73.8%	70.8%	73.4%	70.6%
	Subtotal	58.9%	68.5%	68.4%	64.8%	68.5%	65.5%	68.4%	65.8%	66.6%	63.6%	66.2%	63.5%
D	Freeways	7.9%	2.7%	2.5%	5.0%	2.5%	4.2%	2.5%	4.2%	2.5%	4.2%	2.5%	4.5%
	Arterials	11.7%	8.8%	8.4%	10.6%	8.4%	10.1%	8.5%	9.7%	8.9%	10.4%	9.0%	10.5%
	Subtotal	10.9%	7.0%	6.7%	9.1%	6.7%	8.4%	6.7%	8.2%	7.0%	8.7%	7.1%	8.8%
E	Freeways	28.9%	10.5%	11.9%	12.3%	10.8%	12.8%	10.9%	12.4%	14.8%	18.9%	15.0%	18.3%
	Arterials	8.6%	6.1%	6.4%	6.7%	6.5%	6.6%	6.2%	6.3%	6.4%	7.2%	6.6%	6.9%
	Subtotal	12.5%	7.4%	8.0%	8.2%	7.8%	8.3%	7.6%	8.0%	8.9%	10.5%	9.1%	10.1%
F1	Freeways	8.9%	15.9%	15.8%	17.2%	16.2%	16.3%	16.4%	16.5%	18.3%	16.6%	18.5%	16.1%
	Arterials	9.0%	8.3%	8.1%	8.5%	8.3%	8.6%	8.2%	8.8%	7.9%	8.0%	7.8%	8.5%
	Subtotal	9.0%	10.6%	10.3%	10.8%	10.6%	10.7%	10.6%	10.9%	10.9%	10.4%	10.9%	10.7%
F2	Freeways	17.3%	9.8%	10.2%	11.0%	5.0%	10.7%	5.0%	5.3%	10.0%	9.7%	10.1%	10.6%
	Arterials	0.9%	0.8%	0.8%	1.2%	0.7%	1.0%	0.7%	1.1%	0.8%	1.3%	1.0%	1.2%
	Subtotal	4.1%	3.5%	3.5%	3.8%	2.0%	3.7%	2.0%	2.3%	3.5%	3.6%	3.6%	3.8%
F3	Freeways	13.6%	5.0%	5.1%	5.6%	10.1%	5.4%	10.2%	10.6%	5.0%	5.3%	5.1%	5.4%
	Arterials	2.4%	2.2%	2.2%	2.3%	2.2%	2.5%	2.3%	2.5%	2.2%	2.4%	2.3%	2.3%
	Subtotal	4.6%	3.0%	3.0%	3.2%	4.5%	3.3%	4.6%	4.8%	3.0%	3.2%	3.1%	3.2%
All	Freeways	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Arterials	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[1]See Figure 6 for Analysis Focus Area Source: DKS Associates, 2006

Table 23:
Summary of the Percentage of 2020 VMT by Level of Service Category – Analysis Focus Area

LOS	Facility Type	Percentage of VMT by Level of Service Category (3-Hour a.m. and 3-Hour p.m. Commute Periods)											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South	With Watt North	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
A-E	Freeways	60.8%	60.2%	69.3%	68.8%	66.3%	68.7%	67.6%	68.4%	67.5%	66.8%	68.4%	66.2%
	Arterials	80.1%	87.6%	88.6%	88.9%	88.0%	88.8%	87.9%	88.7%	87.6%	89.1%	88.4%	89.0%
	Subtotal	73.3%	82.4%	82.9%	83.1%	82.1%	82.9%	82.3%	82.8%	82.0%	82.5%	82.8%	82.4%
F	Freeways	39.2%	39.8%	30.7%	31.2%	33.7%	31.3%	32.4%	31.6%	32.5%	33.2%	31.6%	33.8%
	Arterials	19.9%	12.4%	11.4%	11.1%	12.0%	11.2%	12.1%	11.3%	12.4%	10.9%	11.6%	11.0%
	Subtotal	26.7%	17.6%	17.1%	16.9%	17.9%	17.1%	17.7%	17.2%	18.0%	17.5%	17.2%	17.6%
Total	Freeways	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Arterials	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Subtotal	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[1]See Figure 6 for Analysis Focus Area Source: DKS Associates, 2006

- > LOS D – the added travel time for vehicles faced with LOS E and F conditions
- > LOS E – the added travel time for vehicles faced with LOS F conditions
- > LOS F2 – the added travel time for vehicles faced with LOS F3+ conditions.

Table 24 shows the projected vehicle delay during the 3-hour a.m. and 3-hour p.m. peak commute periods combined under the 2020 conditions for the full TASA (shown in Figure 6). Table 25 shows this same information for the Analysis Focus Area (also shown in Figure 6). These tables indicate that Placer Parkway would significantly reduce vehicle hours of delay, especially in the Analysis Focus Area. Vehicle delay would be lower for scenarios with a Watt Avenue interchange than without that interchange.

5.2.4 Traffic Effects of Potential Interchange at Watt Avenue

As discussed in Section 2.4, an extension of Watt Avenue to Placer Parkway (from Baseline Road to a new Blue Oaks Boulevard Extension) is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto the Placer Parkway via a new interchange (see Figure 4). A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. However, the connection of Placer Parkway to a potential Watt Avenue could affect future travel patterns in the area, including use of the Parkway. Based on direction from previous planning studies, this Technical Study and the Tier 1 EIS/EIR evaluate each corridor alternative with and without a Watt Avenue interchange.

The changes in traffic volumes due to each build alternative with and without a potential Watt Avenue interchange are described in Tables 9 through 12 and Figures 9 through 19. A review of these tables and figures indicates that a Watt Avenue interchange would increase volumes on some roadway segments and decrease volumes on others. The effects of a Watt Avenue interchange are summarized below.

An interchange between Placer Parkway to a potential Watt Avenue extension would result in higher traffic volumes on some roadways in the TASA than without that interchange. The roadway segments that would have the most substantial increase in traffic volume due to a Watt Avenue interchange are as follows:

- Placer Parkway
- Watt Avenue north of Elverta Road
- SR 70/99 south of Placer Parkway
- Blue Oaks Boulevard west of Foothills Boulevard.

A limited number of other roadway segments would also have higher traffic volumes with a Watt Avenue interchange than without that interchange, primarily in the vicinity of this potential interchange.

While north of Elverta Road Watt Avenue would have higher volumes with the Watt Avenue interchange than without that interchange, south of Elkhorn Boulevard the interchange would result in small decreases in traffic volumes, except for Alternative 1. Under all build alternatives, a Watt Avenue interchange would result in very small changes in traffic volumes on the Watt Avenue/I-80 interchange ramps and overpass. At the request of Caltrans, projected traffic volumes on the ramps to the I-80/SR 51/Watt Avenue interchange have been provided for each alternative. These estimates (see Table 26) show that traffic volumes will increase on some of the Watt Avenue/I-80 interchange ramps between 2005 and 2020, but the 2020 volumes on these ramps would only change marginally as a result of any of the build alternatives.

Table 24:
Estimated Vehicle Hours of Delay within the TASA[4]

LOS	Facility Type	Estimated 2020 Vehicle Hours of Delay (3-Hour a.m. and 3-Hour p.m. Commute Periods)											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
>D[1]	Freeways	11,551	10,795	10,749	10,709	10,781	10,727	10,836	10,750	10,770	10,743	10,849	10,755
	Arterials	24,143	23,242	23,020	23,497	23,177	23,545	23,145	23,659	23,139	23,758	23,405	23,627
	Total	35,694	34,037	33,769	34,206	33,958	34,272	33,981	34,409	33,909	34,501	34,254	34,382
>E[2]	Freeways	7,250	6,528	6,471	6,433	6,497	6,460	6,546	6,476	6,441	6,448	6,524	6,463
	Arterials	17,827	17,209	16,983	17,350	17,141	17,420	17,110	17,516	17,094	17,629	17,329	17,488
	Total	25,077	23,737	23,454	23,783	23,638	23,880	23,656	23,992	23,535	24,077	23,853	23,951
>F2[3]	Freeways	3,720	3,196	3,138	3,094	3,138	3,125	3,172	3,131	3,106	3,122	3,180	3,134
	Arterials	12,727	12,313	12,076	12,354	12,247	12,405	12,228	12,486	12,150	12,617	12,396	12,454
	Total	16,447	15,509	15,214	15,448	15,385	15,530	15,400	15,617	15,256	15,739	15,576	15,588

Notes:
[1] > LOS D is the added travel time for vehicles faced with LOS E and F conditions in the TASA during the 3-hour a.m. and p.m. commute periods
[2] >LOS E is the added travel time for vehicles faced with LOS F conditions in the TASA during the 3-hour a.m. and p.m. commute periods
[3] > LOS F2 is the added travel time for vehicles faced with LOS F3+ conditions in the TASA during the 3-hour a.m. and p.m. commute periods
[4] See Figure 6 for TASA

Source: DKS Associates, 2006

Table 25:
Estimated Vehicle Hours of Delay within Analysis Focus Area[4]

LOS	Facility Type	Estimated 2020 VH Delay by Level of Service Category (3-Hour a.m. and 3-Hour p.m. Commute Periods)											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
>D	Freeways	1,465	1,184	1,219	1,182	1,264	1,212	1,253	1,221	1,272	1,234	1,266	1,235
	Arterials	2,531	2,050	2,063	2,348	2,040	2,338	2,080	2,352	2,113	2,355	2,132	2,357
	Total	3,996	3,234	3,282	3,530	3,304	3,550	3,333	3,573	3,385	3,589	3,398	3,592
>E	Freeways	987	667	693	670	721	688	714	693	689	688	690	691
	Arterials	1,423	1,120	1,128	1,338	1,112	1,338	1,146	1,347	1,169	1,350	1,179	1,348
	Total	2,410	1,787	1,821	2,008	1,833	2,026	1,860	2,040	1,858	2,038	1,869	2,039
>F2	Freeways	519	257	259	258	257	251	257	250	259	259	265	261
	Arterials	708	535	542	674	537	681	555	682	553	681	566	676
	Total	1,227	792	801	932	794	932	812	932	812	940	831	937

Notes:
[1] > LOS D is the added travel time for vehicles faced with LOS E and F conditions in the TASA during the 3-hour a.m. and p.m. commute periods
[2] >LOS E is the added travel time for vehicles faced with LOS F conditions in the TASA during the 3-hour a.m. and p.m. commute periods
[3] > LOS F2 is the added travel time for vehicles faced with LOS F3+ conditions in the TASA during the 3-hour a.m. and p.m. commute periods
[4] See Figure 6 for Analysis Focus Area

Source: DKS Associates, 2006

Table 26:
Projected 2020 Daily Traffic Volumes on I-80/SR 51/Watt Avenue Interchange Ramps

Ramp	2005 Average Daily Volume	2020 Average Daily Volume										
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South[1]	With Watt North[1]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
Eastbound I-80 Off-ramp to Watt Avenue	8,100	9,900	10,000	10,000	9,800	10,000	10,000	10,000	9,900	9,900	10,000	10,000	9,900
Westbound I-80 Off-ramp to Watt Avenue	8,800	11,700	11,600	11,600	11,800	11,600	11,500	11,700	11,700	11,600	11,700	11,600	11,600
Northbound Watt Avenue On-ramp to Westbound I-80	5,600	5,700	5,700	5,800	5,700	5,700	5,700	5,700	5,800	5,700	5,700	5,800	5,700
Southbound Watt Avenue On-ramp to Westbound I-80	4,500	10,200	10,200	10,200	10,300	10,100	10,200	10,200	10,300	10,100	10,300	10,200	10,200
Eastbound SR 51 Off-ramp to Northbound Watt Avenue	7,300	9,300	9,300	8,900	9,200	9,000	9,300	9,200	9,300	9,000	9,400	9,300	9,300
Northbound Watt Avenue On-ramp to Eastbound SR 51	7,700	10,700	10,800	10,700	11,000	10,600	10,800	10,800	10,900	10,800	10,900	10,800	10,800
Southbound Watt Avenue On-ramp to Eastbound SR 51	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Southbound Watt Avenue On-ramp to Westbound SR 51	8,300	9,600	9,600	9,600	9,500	9,600	9,900	9,700	9,900	9,900	9,700	9,700	9,600

[1] Two general locations for a potential interchange on Placer Parkway at the future extension of Watt Avenue were identified with Alternative 1 – a north and a south location (see Figure 4 for assumed interchange locations)
Note: SR 51 is commonly called the Capitol City Freeway

Source: DKS Associates, 2006

An interchange between Placer Parkway and a potential Watt Avenue extension would result in lower traffic volumes on a number of roadways in the TASA than without that interchange. The roadway segments that would have the most substantial reduction in traffic volume due to a Watt Avenue interchange are as follows:

- Portions of SR 65 near Placer Parkway
- Portions of I-80
- Baseline Road
- Riego Road
- Fiddyment Road south of Placer Parkway
- Walerga Road

A number of other roadway segments would also have lower volumes with a Watt Avenue interchange than without that interchange, including:

- Portions of Foothill Boulevard, Woodcreek Oaks Boulevard, Washington Boulevard, Industrial Avenue, and Pleasant Grove Boulevard in the City of Roseville
- Portions of Catlett Road/East Catlett Road, Sierra College Boulevard
- Portions of Elkhorn Boulevard, Elverta Road, and Walerga Road in north Sacramento County

5.3 ANALYSIS OF CUMULATIVE (2040) CONDITIONS

5.3.1 Changes in Traffic Volumes

Table 27 summarizes the projected 2040 daily traffic volumes on segments of the Parkway under each alternative. For Alternatives 1 through 5, traffic forecasts were made both with and without a potential interchange at the future extension of Watt Avenue. For Alternative 1, two general locations for this potential interchange – a north and a south location – were sited. See Figure 4 for assumed interchange locations along the Placer Parkway corridor alternatives. Table 28 shows the 2040 projected daily volumes on each of the assumed on- and off-ramps to Placer Parkway under each alternative.

Table 29 compares estimated 2040 daily traffic volumes on study area roadways under each Placer Parkway alternative to each other and to 2005 traffic volumes. The change in traffic volumes on study area roadways for Alternatives 1 through 5 compared to the No-Build Alternative are also shown in Table 30. The locations of the volume changes provided in Tables 29 and 30 are shown on Figure 20.

To help show how the Parkway would affect traffic patterns and volumes, a set of "difference plots" were prepared that show which roadways would have increases and which would have decreases in volumes due to a build alternative when compared to the No-Build Alternative. On Figure 21 through Figure 31, these differences are shown for each alternative with red colors on roadways that would receive increases in volumes (compared to the No-Build Alternative), and green colors on roadways with decreases in volume. The width of the red or green bands on each roadway provides an indication of the magnitude of the change in traffic volumes (compared to the No-Build Alternative with larger changes having the widest band widths).

These figures show that compared to the No-Build Alternative, Alternatives 1 through 5 would decrease traffic on many arterial/collector roadway segments in western Roseville, unincorporated portions of west Placer County, and unincorporated portions of south Sutter County. While all of the build alternatives would decrease traffic volumes on many roadway segments, they would all cause increases in traffic volumes on the following:

Table 27:
Projected 2040 Daily Traffic Volumes on Placer Parkway Mainline

Number	Segment	Lanes	Average Daily Volume										
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			With Watt South[1]	With Watt North[1]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
1	East of SR 70/99	6	55,200	47,400	40,300	52,800	44,500	51,500	45,300	62,300	52,200	59,700	51,700
2	East of Pacific Street	6	71,000	54,600	42,800	63,300	49,200	61,300	50,600	73,100	57,600	68,700	56,300
3	East of South Sutter Road[2]	6	82,800	59,300	45,100	75,400	55,800	72,100	57,800	73,100	57,600	68,700	56,300
4	East of Watt Avenue	6	62,300	57,800	45,100	63,400	55,800	63,200	57,800	62,400	57,600	59,300	56,300
5	East of Fiddyment Road	6	66,000	64,600	60,200	66,700	64,200	67,400	65,200	67,000	65,200	66,700	64,600
6	East of Foothills	6	70,800	70,400	68,500	71,700	71,000	72,500	71,700	72,300	71,500	71,800	71,200
7	West of SR 65	6	55,200	47,400	40,300	52,800	44,500	51,500	45,300	62,300	52,200	59,700	51,700

[1] Two general locations for a potential interchange on Placer Parkway at the future extension of Watt Avenue were identified with Alternative 1 – a north and a south location (see Figure 4 for assumed interchange locations)

Source: DKS Associates, 2006

Table 28:
Projected 2040 Daily Traffic Volumes on Placer Parkway Ramps

Number	Ramp	Lanes	Average Daily Volume										
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			With Watt South[1]	With Watt North[1]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
1	Northbound SR 70/99 On Ramp to Eastbound Placer Parkway	2	23,400	20,800	18,000	23,300	20,000	23,100	20,400	25,200	23,000	24,700	22,700
2	Southbound SR 70/99 On Ramp to Eastbound Placer Parkway	1	5,300	3,700	3,100	4,000	3,200	3,800	3,200	4,100	2,700	3,800	2,700
3	Westbound Placer Parkway Off Ramp to Northbound SR 70/99	2	5,700	4,200	3,200	4,500	3,400	4,100	3,400	4,600	2,200	4,300	2,200
4	Westbound Placer Parkway Off Ramp to Southbound SR 70/99	1	20,800	18,800	16,000	21,000	18,000	20,600	18,300	19,300	18,300	19,200	18,400
5	Eastbound On Ramp from Northbound Pacific Road	1	8,000	5,200	4,000	6,100	4,700	5,900	4,800	13,400	12,100	13,100	11,900
6	Westbound On Ramp from Northbound Pacific Road	1	700	1,100	1,300	800	1,300	900	1,100	7,500	7,800	7,500	7,800
7	Eastbound On Ramp from Southbound Pacific Road	1	3,000	1,900	1,400	2,300	1,800	2,300	1,800	1,100	400	900	400
8	Westbound On Ramp from Southbound Pacific Road	1	1,600	1,900	2,000	1,900	2,000	1,800	1,900	1,800	2,100	1,900	2,100
9	Eastbound Off Ramp to Pacific Road	1	3,700	4,200	4,900	3,900	4,800	3,900	4,700	13,400	12,100	13,100	11,900
10	Westbound Off Ramp to Pacific Road	1	10,800	7,200	5,300	8,600	6,200	8,100	6,400	13,200	11,400	12,600	11,100
11	Eastbound On Ramp from Northbound South Sutter Road 2	1	9,200	7,000	5,800	9,200	7,200	8,700	7,400	0	0	0	0
12	Westbound On Ramp from Northbound South Sutter Road 2	1	2,200	3,000	3,400	2,500	3,100	2,700	3,100	0	0	0	0
13	Eastbound On Ramp from Southbound South Sutter Road 2	1	900	500	500	1,300	900	1,300	1,000	0	0	0	0

Table 28:
Projected 2040 Daily Traffic Volumes on Placer Parkway Ramps

Number	Ramp	Lanes	Average Daily Volume										
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			With Watt South[1]	With Watt North[1]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
14	Westbound On Ramp from Southbound South Sutter Road 2	1	1,700	1,800	1,900	1,800	1,900	1,800	1,900	0	0	0	0
15	Eastbound Off Ramp to South Sutter Road 2	1	3,700	4,300	4,500	4,100	4,200	4,100	4,200	0	0	0	0
16	Westbound Off Ramp to South Sutter Road 2	1	9,200	6,300	5,800	9,900	7,700	9,400	8,000	0	0	0	0
17	Eastbound On Ramp from Northbound Watt Avenue	1	13,000	3,300	0	2,800	0	12,000	0	12,300	0	9,200	0
18	Westbound On Ramp from Northbound Watt Avenue	1	12,400	12,800	0	15,100	0	14,600	0	15,900	0	2,200	0
19	Eastbound On Ramp from Southbound Watt Avenue	1	4,100	12,200	0	12,000	0	100	0	100	0	0	0
20	Westbound On Ramp from Southbound Watt Avenue	1	14,800	2,800	0	5,100	0	300	0	1,000	0	10,900	0
21	Eastbound Off Ramp to Watt Avenue	1	27,500	16,700	0	20,900	0	16,000	0	17,100	0	13,400	0
22	Westbound Off Ramp to Watt Avenue	1	17,100	15,400	0	14,200	0	10,200	0	10,900	0	7,900	0
23	Eastbound On Ramp from Northbound Fiddyment	1	12,700	12,600	15,500	12,400	15,300	13,000	15,200	13,100	15,300	13,400	15,300
24	Westbound On Ramp from Northbound Fiddyment	1	5,500	5,000	4,400	5,500	5,500	4,900	5,700	4,800	5,800	4,100	5,600
25	Eastbound On Ramp from Southbound Fiddyment	1	3,100	2,900	3,300	2,500	3,100	2,600	3,100	2,500	2,800	2,500	2,900
26	Westbound On Ramp from Southbound Fiddyment	1	6,600	5,700	5,100	6,500	6,800	6,700	7,100	6,500	6,900	6,300	6,700
27	Eastbound Off Ramp to Fiddyment	1	13,200	11,100	10,400	12,300	13,100	13,100	13,600	12,900	13,400	11,800	13,100
28	Westbound Off Ramp to Fiddyment	1	13,100	13,200	16,000	12,700	15,500	13,200	15,500	13,200	15,400	13,500	15,500
29	Eastbound On Ramp from Northbound Foothills	1	8,100	8,200	8,400	8,100	8,300	8,200	8,300	8,200	8,300	8,100	8,300
30	Westbound On Ramp from Northbound Foothills	1	5,000	4,800	4,900	5,000	5,400	4,800	5,600	4,800	5,800	4,900	5,600
31	Eastbound On Ramp from Southbound Foothills	1	2,600	2,700	2,500	2,700	2,600	2,500	2,600	2,400	2,600	2,400	2,600
32	Westbound On Ramp from Southbound Foothills	1	2,900	2,800	2,000	3,000	2,400	2,900	2,400	2,900	2,300	2,900	2,400
33	Eastbound Off Ramp to Foothills	1	8,800	8,400	7,000	8,700	7,700	8,600	7,900	8,400	7,800	8,400	7,700
34	Westbound Off Ramp to Foothills	1	10,900	11,000	11,300	10,900	11,300	10,800	11,400	10,800	11,400	10,900	11,400
35	Northbound SR 65 Off Ramp to Sunset Boulevard	1	7,200	7,200	8,200	7,200	8,400	7,600	8,500	7,600	8,600	7,900	8,600
36	Southbound SR 65 Off Ramp to Sunset Boulevard	1	6,900	6,900	7,300	6,700	7,200	6,900	7,200	6,800	7,200	7,000	7,200
37	Southbound SR 65 On Ramp to Westbound Placer Parkway	1	14,800	14,800	14,000	15,100	14,400	15,000	14,400	15,000	14,400	14,800	14,400
38	Eastbound Placer Parkway Off Ramp to Northbound SR 65	1	11,700	11,700	10,900	12,000	11,200	11,700	11,100	11,600	11,100	11,400	11,000
39	Eastbound Placer Parkway Off Ramp to Southbound SR 65	1	9,700	9,600	11,000	9,500	11,600	10,200	11,800	10,200	11,800	10,600	11,700
40	Sunset On Ramp to Northbound SR 65	1	8,700	8,700	9,200	8,600	9,200	8,900	9,300	8,900	9,300	9,100	9,300
41	Sunset On Ramp to Southbound SR 65	1	1,500	1,300	1,600	1,500	1,600	1,500	1,600	1,500	1,600	1,500	1,600

[1] Two general locations for a potential interchange on Placer Parkway at the future extension of Watt Avenue were identified with Alternative 1 – a north and a south location (see Figure 4 for assumed interchange locations)

Source: DKS Associates, 2006

Table 29:
Estimated Daily Traffic Volumes for Build Alternatives under Cumulative (2040) Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	Estimated 2040 Daily Traffic Volumes (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2040		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
1	SR 70/99	North of Howsley Road	4	4	29,000	48,100	47,300	46,300	46,400	46,300	46,100	46,100	45,900	46,800	45,600	46,500	45,600
2	SR 70/99	North of Sankey Road	4	4	29,000	51,600	48,900	47,600	47,800	47,700	47,200	47,400	47,100	48,000	46,600	47,700	46,600
3	SR 70/99	North of Riego Road	4	4	29,000	68,900	53,700	55,200	56,200	54,700	55,800	55,100	55,600	96,100	91,900	94,600	91,500
4	SR 70/99	North of Elverta Road	4	6	32,000	129,700	148,000	147,200	144,200	150,000	146,900	149,700	147,300	147,700	145,400	146,700	145,000
5	SR 70/99	North of I-5	4	6	47,500	155,100	162,300	162,300	160,800	163,400	162,200	163,400	162,300	162,600	161,400	162,200	161,000
6	SR 65	North of Twelve Bridge	4	6	40,000	140,100	148,800	148,700	148,300	148,400	148,000	148,400	148,000	148,200	147,700	148,100	147,800
7	SR 65	North of Sunset Boulevard	4	6	47,500	144,500	131,000	130,400	132,800	130,000	132,800	130,900	133,000	130,800	132,900	131,400	132,900
8	SR 65	North of Blue Oaks Boulevard	4	6	43,000	154,000	149,800	149,900	153,100	148,700	152,900	149,900	153,000	149,800	153,100	150,600	153,100
9	SR 65	North of Pleasant Grove Boulevard	4	6	76,000	163,600	159,900	161,200	162,000	160,700	161,900	160,700	161,800	160,700	161,900	160,900	161,800
10	SR 65	North of Stanford Ranch Road	4	6	82,000	175,700	173,800	174,700	174,600	174,200	174,300	174,100	174,300	174,100	174,300	174,100	174,400
11	SR 65	North of I-80	4	6	84,000	170,500	167,800	168,300	167,800	167,800	167,900	167,500	167,500	167,700	167,700	167,500	167,700
12	I-80	East of Rocklin Road	6	6	96,000	124,200	123,200	123,300	123,100	123,300	123,100	123,200	123,200	123,200	123,100	123,100	123,100
13	I-80	East of SR 65	6	6	116,000	161,500	160,800	161,000	160,800	161,100	160,900	160,900	161,000	161,000	160,800	160,800	160,900
14	I-80	East of Douglas Boulevard	6	6+2	156,000	190,100	186,900	187,300	188,400	186,000	188,100	187,300	186,900	188,000	187,300	189,300	187,200
15	I-80	East of Riverside Avenue	6	6+2	163,000	247,900	244,200	244,000	244,400	243,300	243,300	243,300	243,700	243,500	243,300	243,100	243,200
16	I-80	West of Riverside Avenue	8+2	8+2	179,000	258,800	254,000	254,100	254,500	253,300	253,700	253,300	253,800	253,500	253,400	253,200	253,600
17	I-80	East of Northgate Boulevard	6	6+2	143,000	193,700	188,300	189,900	190,500	188,900	190,000	188,600	189,800	188,700	189,900	189,000	189,400
18	Athens Avenue	East of Fiddyment Road	2	4	3,700	34,400	25,000	24,900	26,500	24,900	26,500	25,100	26,500	25,100	26,200	25,100	26,300
19	Baseline Road	East of Pleasant Grove Road	2	6	9,950	79,600	66,100	75,500	78,700	75,300	78,200	75,400	78,200	73,000	76,800	74,100	76,800
20	Baseline Road	East of Brewer Road	2	6	10,400	59,800	46,900	53,900	56,300	50,900	55,100	51,300	55,000	52,400	55,300	52,900	55,500
21	Baseline Road	West of 16th Street	2	6	10,400	63,900	52,200	58,600	60,500	55,900	59,600	56,200	59,300	57,300	59,600	57,700	59,700
22	Baseline Road	West of Watt Avenue	2	6	10,400	60,100	49,400	52,900	54,400	55,700	57,600	56,100	57,300	56,500	57,800	57,000	58,000
23	Baseline Road	East of Watt Avenue	2	6	12,600	56,500	48,200	49,700	53,100	49,100	52,500	49,900	52,400	50,500	52,700	51,200	52,900
24	Baseline Road	West of Walerga Road	2	6	12,600	47,900	44,700	42,900	45,700	42,200	44,700	43,000	44,700	43,400	45,000	44,200	45,300
25	Baseline Road	East of Walerga Road	3	6	15,100	64,200	61,600	59,900	60,600	59,400	60,200	59,800	60,000	60,000	60,300	60,200	60,300
26	Baseline Road	West of Woodcreek Oaks Boulevard	3	4	15,100	47,100	46,500	45,800	46,000	45,500	45,300	45,600	45,800	46,000	45,800	46,200	46,100
27	Blue Oaks Boulevard	East of Watt Avenue	NA	6	NA	39,300	33,200	45,500	36,700	48,200	36,400	44,200	36,400	44,100	36,800	41,800	36,900
28	Blue Oaks Boulevard	West of Fiddyment Road	NA	6	NA	30,900	27,800	33,200	30,300	35,300	30,100	32,600	30,100	32,600	30,200	31,100	30,200
29	Blue Oaks Boulevard	East of Fiddyment Road	2	6	8,200	43,500	39,500	44,800	41,100	46,200	40,900	44,400	40,900	44,600	41,100	43,100	41,100
30	Blue Oaks Boulevard	West of SR 65	4	6	38,700	65,200	59,200	60,700	59,300	61,500	59,000	60,300	59,000	60,500	58,800	60,000	58,900
31	Brewer Road	North of Sunset Boulevard West	2	2	200	2,900	1,100	1,000	1,600	800	1,200	1,100	1,100	900	1,400	1,000	1,400
32	Brewer Road	South of Sunset Boulevard West	2	2	200	3,500	600	1,400	2,500	1,200	2,500	2,300	2,400	1,200	2,400	1,400	2,400
33	Brewer Road	North of Baseline Road	2	2	700	500	300	300	300	300	300	300	300	300	300	300	300
34	Catlett Road	East of SR 70/99	2	2	200	7,000	2,200	2,300	3,600	2,000	3,300	2,500	3,200	2,000	3,100	2,100	3,100
35	Catlett Road	East of Pleasant Grove Road	2	2	100	4,400	1,500	1,600	2,200	1,300	1,700	1,400	1,600	1,100	1,500	1,200	1,500
36	Cirby Way	East of Foothills Boulevard	4	6	38,900	69,900	69,200	68,900	68,900	68,800	68,900	68,800	68,900	68,800	68,800	68,900	68,900
37	East Catlett Road	East of Brewer Road	2	2	200	4,100	2,500	2,200	2,900	1,800	2,400	2,100	2,300	1,800	2,000	2,000	2,100

Table 29:
Estimated Daily Traffic Volumes for Build Alternatives under Cumulative (2040) Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	Estimated 2040 Daily Traffic Volumes (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2040		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
38	East Catlett Road	West of Fiddyment Road	2	2	200	11,300	10,900	10,300	11,500	10,200	11,600	11,100	11,500	11,000	11,500	11,000	11,500
39	Dowd Road	North of Sunset Boulevard West	NA	6	NA	43,300	34,500	37,200	37,700	37,800	37,200	36,300	37,100	36,100	37,400	36,200	37,400
40	Dryer Road West	South of Baseline Road	NA	4	NA	20,200	22,800	23,500	22,200	23,700	22,500	23,500	22,300	23,200	22,200	23,200	22,200
41	Elkhorn Boulevard	East of SR 70/99	2	6	16,300	60,500	60,200	60,500	60,400	60,200	60,600	60,600	60,500	60,400	60,500	60,400	60,200
42	Elkhorn Boulevard	West of Watt Avenue	4	4	26,800	39,000	38,000	38,400	38,500	38,200	38,700	38,300	38,400	38,300	38,300	38,400	38,400
43	Elkhorn Boulevard	East of Watt Avenue	4	6	23,020	44,500	43,100	43,400	44,000	43,700	44,100	43,500	43,800	43,500	43,800	44,100	43,800
44	Elkhorn Boulevard	West of Walerga Road	4	6	25,700	45,100	43,700	44,000	44,600	44,300	44,700	44,200	44,500	44,100	44,500	44,800	44,400
45	Elverta Road	East of SR 70/99	2	4	7,200	53,200	51,600	52,900	53,200	53,000	53,300	52,900	53,400	53,300	53,800	53,400	53,700
46	Elverta Road	East of Rio Linda Boulevard	2	4	8,000	49,500	46,400	47,600	48,300	47,100	47,900	47,400	48,000	47,800	48,400	47,800	48,200
47	Elverta Road	West of Watt Avenue	2	4	20,700	62,200	60,700	61,800	61,700	61,400	61,600	61,400	61,600	61,300	61,600	61,400	61,700
48	Fiddyment Road	North of Sunset Boulevard West	2	6	2,800	37,900	41,900	40,500	39,400	41,400	41,800	42,400	42,200	41,900	41,600	41,500	41,400
49	Fiddyment Road	South of Sunset Boulevard	2	6	4,000	44,800	48,100	46,100	47,200	46,200	49,200	47,700	49,600	46,900	48,600	46,500	48,400
50	Fiddyment Road	North of Blue Oaks Boulevard	2	4	4,000	36,400	32,500	33,600	38,500	33,600	38,200	34,200	38,200	34,200	38,200	35,200	38,400
51	Fiddyment Road	North of Pleasant Grove Boulevard	2	4	11,800	36,400	32,200	34,100	36,800	33,800	36,400	34,400	36,400	34,600	36,400	35,300	36,600
52	Fiddyment Road	North of Baseline Road	2	6	19,600	40,800	36,500	37,600	40,100	37,200	39,100	37,900	39,300	38,000	39,600	38,600	39,500
53	Foothills Boulevard	North of Blue Oaks Boulevard	4	4	3,400	37,300	32,500	32,600	34,700	32,600	34,800	32,800	34,900	32,900	34,900	33,000	34,800
54	Foothills Boulevard	South of Roseville Parkway	4	6	12,200	39,400	37,600	38,000	38,600	38,000	38,700	38,000	38,400	38,100	38,600	38,200	38,600
55	Foothills Boulevard	North of Baseline Road	4	6	28,400	51,000	49,600	49,800	50,300	49,600	50,100	49,700	50,100	49,800	50,100	49,900	50,200
56	Foothills Boulevard	South of Baseline Road	4	6	30,900	69,300	69,000	68,900	68,800	68,700	68,600	68,600	68,800	68,600	68,600	68,800	68,900
57	Howsley Road	East of SR 70/99	2	2	800	7,500	4,500	4,500	4,700	4,500	4,500	4,400	4,400	4,100	4,300	4,300	4,300
58	Industrial Avenue	North of Athens Avenue	2	4	4,600	33,900	25,000	24,900	25,100	24,900	25,100	24,900	25,100	24,900	25,100	24,900	25,100
59	Industrial	North of Roseville Parkway	2	2	2,800	30,900	31,000	31,100	31,400	31,100	31,600	31,200	31,600	31,100	31,500	31,300	31,600
60	Junction Boulevard	East of Woodcreek Oaks Boulevard	4	4	6,100	10,800	9,800	9,500	9,800	9,500	9,700	9,400	9,500	9,400	9,600	9,600	9,600
61	Moore Road	West of Brewer Road	2	2	400	2,400	300	400	400	300	300	300	300	300	300	300	300
62	Nicolaus Road	East of Brewer Road	2	2	900	8,800	5,500	5,500	5,900	5,200	5,400	5,200	5,400	5,000	5,200	5,100	5,200
63	Pacific Street	West of Sunset Boulevard	4	6	10,600	31,200	31,000	31,200	31,100	31,100	31,100	31,100	31,100	31,100	31,100	31,000	31,100
64	PFE Road	East of Watt Avenue	2	4	4,700	16,200	16,300	15,500	15,800	15,600	16,100	15,500	15,800	16,100	16,000	16,000	16,000
65	Phillip Road	East of Brewer Road	2	2	100	3,300	600	1,400	2,500	1,100	2,400	2,300	2,400	1,200	2,400	1,400	2,400
66	Pleasant Grove Boulevard	West of Fiddyment Road	NA	4	NA	55,600	54,700	53,500	54,500	53,800	54,800	53,700	54,400	54,000	54,600	54,200	54,500
67	Pleasant Grove Boulevard	East of Fiddyment Road	4	4	3,700	42,800	42,100	40,400	40,700	40,600	40,500	40,400	40,500	40,600	40,700	40,700	40,700
68	Pleasant Grove Boulevard	East of Woodcreek Oaks Boulevard	4	4	16,300	67,700	64,300	62,400	63,200	62,300	62,900	62,200	62,700	62,500	63,000	62,700	63,100
69	Pleasant Grove Boulevard	West of SR 65	6	6	41,300	58,400	56,800	57,100	57,200	57,000	57,300	57,000	57,200	57,000	57,200	57,100	57,200
70	Pleasant Grove Road	North of Sankey Road	2	4	1,500	23,900	16,900	15,800	16,300	14,500	15,100	14,500	15,000	15,300	15,400	15,400	15,500
71	Pleasant Grove Road	North of Riego Road	2	4	1,700	27,300	26,700	26,400	26,500	26,300	26,300	26,200	26,200	25,900	27,400	26,700	27,500

Table 29:
Estimated Daily Traffic Volumes for Build Alternatives under Cumulative (2040) Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	Estimated 2040 Daily Traffic Volumes (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2040		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
72	Pleasant Grove Road	South of Baseline Road	2	2	1,500	22,900	21,000	22,300	22,800	22,200	22,900	22,500	22,800	22,100	22,600	22,300	22,600
73	Riego Road	East of SR 70/99	2	6	9,900	71,200	61,300	63,100	63,900	62,300	63,600	62,200	63,500	65,600	67,500	66,100	67,500
74	Riego Road	West of Pleasant Grove Road	2	6	9,900	69,100	57,300	67,100	69,900	67,100	70,000	67,400	69,800	62,000	64,700	62,700	64,700
75	Sankey Road	East of SR 70/99	2	4	400	26,100	18,700	18,900	19,100	19,000	19,300	19,000	19,300	7,200	6,700	7,000	6,600
76	Sankey Road	West of Pleasant Grove Road	2	4	200	28,700	18,000	20,100	22,300	20,600	22,500	20,800	22,500	23,800	26,900	24,600	26,700
77	Sierra College Boulevard	South of English Colony Way	2	4	11,000	31,700	33,000	33,000	33,200	33,000	33,300	33,200	33,300	33,200	33,300	33,200	33,300
78	Sierra College Boulevard	North of King Road	2	4	11,000	30,900	31,700	31,600	31,800	31,600	31,900	31,700	31,900	31,700	31,900	31,800	31,900
79	Wildcat Boulevard	North of Whitney Ranch Parkway	4	4	3,700	23,600	27,800	27,900	27,500	27,900	27,500	28,000	27,700	28,000	27,600	27,900	27,600
80	Sunset Boulevard	East of Fiddyment Boulevard	NA	6	NA	28,700	21,100	21,600	22,600	21,700	22,500	21,700	22,600	21,600	22,500	21,900	22,600
81	Sunset Boulevard	West of SR 65	2	6	8,000	83,600	66,400	66,600	67,700	66,300	67,800	66,500	67,800	66,600	67,800	66,700	67,900
82	Sunset Boulevard	East of SR 65	4	6	7,100	38,800	38,200	38,000	38,200	38,300	38,400	38,500	38,500	38,500	38,400	38,400	38,400
83	Sunset Boulevard	East of Blue Oaks Boulevard	6	6	9,800	43,400	43,700	43,600	44,000	43,500	44,100	43,700	44,100	43,800	44,100	44,000	44,100
84	Sunset Boulevard West	West of Brewer Road	2	2	600	13,200	7,000	7,300	8,300	6,000	7,600	6,800	7,500	5,400	6,700	5,700	6,800
85	Sunset Boulevard West	East of Brewer Road	2	2	600	10,900	5,400	5,400	5,500	4,400	4,800	4,200	4,700	3,700	4,000	3,800	4,100
86	Sunset Boulevard West	West of Fiddyment Road	2	2	600	8,200	6,900	6,400	8,800	5,500	8,600	6,000	8,600	5,700	8,100	5,700	8,100
87	Twelve Bridges Drive	West of SR 65	2	4	6,000	26,900	22,500	22,600	22,400	22,600	22,400	22,500	22,400	22,500	22,400	22,500	22,400
88	Twelve Bridges Drive	East of SR 65	4	6	5,100	41,600	40,000	40,000	39,900	40,100	39,900	40,000	39,900	40,000	39,900	40,000	39,900
89	Valley View Parkway	West of Park Drive	NA	2	NA	12,700	15,400	15,300	15,400	15,400	15,500	15,500	15,500	15,600	15,500	15,600	15,500
90	Walerga Road	South of Baseline Road	2	4	14,900	34,000	30,900	32,100	32,600	31,800	32,400	32,200	32,600	32,300	32,600	32,300	32,400
91	Walerga Road	North of Elverta Road	4	4	22,700	56,400	55,300	55,100	55,200	55,100	55,600	55,100	55,600	55,600	55,700	55,400	55,600
92	Washington Boulevard	South of Blue Oaks Boulevard	2	4	4,800	30,400	25,400	27,200	27,600	27,300	27,200	27,200	27,500	27,400	27,300	27,200	27,500
93	Washington Boulevard	North of Pleasant Grove Boulevard	2	4	6,205	41,500	36,500	37,500	38,000	37,400	37,800	37,600	37,900	37,600	37,900	37,600	37,900
94	Watt Avenue	North of Pleasant Grove Boulevard	NA	6	NA	19,900	17,600	27,900	19,000	28,200	18,900	27,500	18,900	29,000	19,100	26,200	19,100
95	Watt Avenue	North of Baseline Road	NA	6	NA	36,400	49,600	40,000	38,100	37,500	35,800	37,000	35,700	37,500	35,700	36,600	35,800
96	Watt Avenue	South of Baseline Road	2	6	7,100	41,200	47,000	42,400	41,500	42,600	41,800	42,300	41,500	42,600	41,800	42,200	41,700
97	Watt Avenue	North of Elverta Road	4	6	19,400	58,900	58,700	58,400	58,700	58,200	58,200	58,300	58,300	58,200	58,700	58,500	58,700
98	Watt Avenue	North of Elkhorn Boulevard	4	6	38,700	51,500	51,100	51,300	51,700	51,400	51,200	51,000	51,500	51,100	51,700	51,500	51,400
99	Watt Avenue	North of Airbase Drive	6	6	47,100	73,700	72,800	73,200	73,500	73,100	73,500	73,000	73,500	73,000	73,600	73,400	73,500
100	Watt Avenue	North of I-80	6	6	62,600	85,800	85,100	85,300	85,600	85,400	85,500	85,300	85,700	85,600	86,300	85,700	85,600
101	West Side Drive	North of Blue Oaks Boulevard	NA	6	NA	57,200	50,100	53,400	55,600	54,700	55,200	53,400	55,200	53,400	55,700	53,800	55,700
102	West Side Drive	North of Baseline Road	NA	6	NA	36,900	32,700	34,500	36,400	33,800	35,600	33,900	35,700	34,400	35,600	34,600	35,700
103	Whitney Ranch Parkway	East of SR 65	NA	6	NA	47,500	62,000	61,800	59,500	62,200	60,100	61,900	60,300	61,800	60,100	61,300	60,100
104	Whitney Ranch Parkway	East of University Avenue	NA	6	NA	26,200	38,500	38,400	36,900	38,700	37,300	38,700	37,500	38,500	37,400	38,200	37,400
105	Whitney Ranch Parkway	East of Wildcat Boulevard	NA	4	NA	14,900	19,300	19,300	19,200	19,400	19,300	19,500	19,400	19,500	19,400	19,500	19,400

Table 29:
Estimated Daily Traffic Volumes for Build Alternatives under Cumulative (2040) Conditions

Roadway		Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	Estimated 2040 Daily Traffic Volumes (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2040		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
106	Woodcreek Oak Boulevard	South of Pleasant Grove Boulevard	2	4	11,900	31,600	29,000	28,400	29,200	28,000	28,900	28,300	28,800	28,500	29,000	28,600	29,100
107	16th Street	North of Baseline Road	NA	4	NA	43,300	40,300	42,000	42,100	41,300	42,300	41,400	42,200	41,800	42,400	41,800	42,300
108	16th Street	South of Baseline Road	NA	4	NA	28,300	28,100	28,000	27,700	27,800	27,700	27,700	27,600	27,900	28,000	28,000	28,000
109	16th Street	North of Elverta Road	2	2	400	25,100	24,300	24,300	24,300	24,300	24,800	24,200	24,600	24,400	24,700	24,900	24,600
110	Blue Oaks Boulevard	East of Lonetree Boulevard	4	4	9,500	21,500	19,500	19,400	20,500	19,400	20,500	19,600	20,500	19,700	20,500	19,900	20,500

Notes
[1] +2 = Plus two HOV lanes
[2] Traffic volumes on state highways are from 2004. Counts on some local roadways were taken prior to 2005
[3] Two general locations for a potential interchange on Placer Parkway at the future extension of Watt Avenue were identified with Alternative 1 – a north and a south location (see Figure 4 for assumed interchange locations)

Source: DKS Associates, 2006

Table 30:
Estimated Change in Daily Traffic Volumes for Build Alternatives Compared to No-Build Alternative under Cumulative (2040) Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	No-Build 2040 Daily Volume	Estimated Change in 2040 Daily Traffic Volumes Compared to No-Build Alternative										
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2040			With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
1	SR 70/99	North of Howsley Road	4	4	29,000	48,100	-800	-1,800	-1,700	-1,800	-2,000	-2,000	-2,200	-1,300	-2,500	-1,600	-2,500
2	SR 70/99	North of Sankey Road	4	4	29,000	51,600	-2,700	-4,000	-3,800	-3,900	-4,400	-4,200	-4,500	-3,600	-5,000	-3,900	-5,000
3	SR 70/99	North of Riego Road	4	4	29,000	68,900	-15,200	-13,700	-12,700	-14,200	-13,100	-13,800	-13,300	27,200	23,000	25,700	22,600
4	SR 70/99	North of Elverta Road	4	6	32,000	129,700	18,300	17,500	14,500	20,300	17,200	20,000	17,600	18,000	15,700	17,000	15,300
5	SR 70/99	North of I-5	4	6	47,500	155,100	7,200	7,200	5,700	8,300	7,100	8,300	7,200	7,500	6,300	7,100	5,900
6	SR 65	North of Twelve Bridge	4	6	40,000	140,100	8,700	8,600	8,200	8,300	7,900	8,300	7,900	8,100	7,600	8,000	7,700
7	SR 65	North of Sunset Boulevard	4	6	47,500	144,500	-13,500	-14,100	-11,700	-14,500	-11,700	-13,600	-11,500	-13,700	-11,600	-13,100	-11,600
8	SR 65	North of Blue Oaks Boulevard	4	6	43,000	154,000	-4,200	-4,100	-900	-5,300	-1,100	-4,100	-1,000	-4,200	-900	-3,400	-900
9	SR 65	North of Pleasant Grove Boulevard	4	6	76,000	163,600	-3,700	-2,400	-1,600	-2,900	-1,700	-2,900	-1,800	-2,900	-1,700	-2,700	-1,800
10	SR 65	North of Stanford Ranch Road	4	6	82,000	175,700	-1,900	-1,000	-1,100	-1,500	-1,400	-1,600	-1,400	-1,600	-1,400	-1,600	-1,300
11	SR 65	North of I-80	4	6	84,000	170,500	-2,700	-2,200	-2,700	-2,700	-2,600	-3,000	-3,000	-2,800	-2,800	-3,000	-2,800
12	I-80	East of Rocklin Road	6	6	96,000	124,200	-1,000	-900	-1,100	-900	-1,100	-1,000	-1,000	-1,000	-1,100	-1,100	-1,100
13	I-80	East of SR 65	6	6	116,000	161,500	-700	-500	-700	-400	-600	-600	-500	-500	-700	-700	-600
14	I-80	East of Douglas Boulevard	6	6+2	156,000	190,100	-3,200	-2,800	-1,700	-4,100	-2,000	-2,800	-3,200	-2,100	-2,800	-800	-2,900
15	I-80	East of Riverside Avenue	6	6+2	163,000	247,900	-3,700	-3,900	-3,500	-4,600	-4,600	-4,600	-4,200	-4,400	-4,600	-4,800	-4,700
16	I-80	West of Riverside Avenue	8+2	8+2	179,000	258,800	-4,800	-4,700	-4,300	-5,500	-5,100	-5,500	-5,000	-5,300	-5,400	-5,600	-5,200
17	I-80	East of Northgate Boulevard	6	6+2	143,000	193,700	-5,400	-3,800	-3,200	-4,800	-3,700	-5,100	-3,900	-5,000	-3,800	-4,700	-4,300
18	Athens Avenue	East of Fiddyment Road	2	4	3,700	34,400	-9,400	-9,500	-7,900	-9,500	-7,900	-9,300	-7,900	-9,300	-8,200	-9,300	-8,100
19	Baseline Road	East of Pleasant Grove Road	2	6	9,950	79,600	-13,500	-4,100	-900	-4,300	-1,400	-4,200	-1,400	-6,600	-2,800	-5,500	-2,800
20	Baseline Road	East of Brewer Road	2	6	10,400	59,800	-12,900	-5,900	-3,500	-8,900	-4,700	-8,500	-4,800	-7,400	-4,500	-6,900	-4,300
21	Baseline Road	West of 16th Street	2	6	10,400	63,900	-11,700	-5,300	-3,400	-8,000	-4,300	-7,700	-4,600	-6,600	-4,300	-6,200	-4,200
22	Baseline Road	West of Watt Avenue	2	6	10,400	60,100	-10,700	-7,200	-5,700	-4,400	-2,500	-4,000	-2,800	-3,600	-2,300	-3,100	-2,100
23	Baseline Road	East of Watt Avenue	2	6	12,600	56,500	-8,300	-6,800	-3,400	-7,400	-4,000	-6,600	-4,100	-6,000	-3,800	-5,300	-3,600
24	Baseline Road	West of Walerga Road	2	6	12,600	47,900	-3,200	-5,000	-2,200	-5,700	-3,200	-4,900	-3,200	-4,500	-2,900	-3,700	-2,600
25	Baseline Road	East of Walerga Road	3	6	15,100	64,200	-2,600	-4,300	-3,600	-4,800	-4,000	-4,400	-4,200	-4,200	-3,900	-4,000	-3,900
26	Baseline Road	West of Woodcreek Oaks Boulevard	3	4	15,100	47,100	-600	-1,300	-1,100	-1,600	-1,800	-1,500	-1,300	-1,100	-1,300	-900	-1,000
27	Blue Oaks Boulevard	East of Watt Avenue	NA	6	NA	39,300	-6,100	6,200	-2,600	8,900	-2,900	4,900	-2,900	4,800	-2,500	2,500	-2,400
28	Blue Oaks Boulevard	West of Fiddyment Road	NA	6	NA	30,900	-3,100	2,300	-600	4,400	-800	1,700	-800	1,700	-700	200	-700
29	Blue Oaks Boulevard	East of Fiddyment Road	2	6	8,200	43,500	-4,000	1,300	-2,400	2,700	-2,600	900	-2,600	1,100	-2,400	-400	-2,400
30	Blue Oaks Boulevard	West of SR 65	4	6	38,700	65,200	-6,000	-4,500	-5,900	-3,700	-6,200	-4,900	-6,200	-4,700	-6,400	-5,200	-6,300
31	Brewer Road	North of Sunset Boulevard West	2	2	200	2,900	-1,800	-1,900	-1,300	-2,100	-1,700	-1,800	-1,800	-2,000	-1,500	-1,900	-1,500
32	Brewer Road	South of Sunset Boulevard West	2	2	200	3,500	-2,900	-2,100	-1,000	-2,300	-1,000	-1,200	-1,100	-2,300	-1,100	-2,100	-1,100
33	Brewer Road	North of Baseline Road	2	2	700	500	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
34	Catlett Road	East of SR 70/99	2	2	200	7,000	-4,800	-4,700	-3,400	-5,000	-3,700	-4,500	-3,800	-5,000	-3,900	-4,900	-3,900
35	Catlett Road	East of Pleasant Grove Road	2	2	100	4,400	-2,900	-2,800	-2,200	-3,100	-2,700	-3,000	-2,800	-3,300	-2,900	-3,200	-2,900
36	Cirby Way	East of Foothills Boulevard	4	6	38,900	69,900	-700	-1,000	-1,000	-1,100	-1,000	-1,100	-1,000	-1,100	-1,100	-1,000	-1,000
37	East Catlett Road	East of Brewer Road	2	2	200	4,100	-1,600	-1,900	-1,200	-2,300	-1,700	-2,000	-1,800	-2,300	-2,100	-2,100	-2,000
38	East Catlett Road	West of Fiddyment Road	2	2	200	11,300	-400	-1,000	200	-1,100	300	-200	200	-300	200	-300	200
39	Dowd Road	North of Sunset Boulevard West	NA	6	NA	43,300	-8,800	-6,100	-5,600	-5,500	-6,100	-7,000	-6,200	-7,200	-5,900	-7,100	-5,900

Table 30:
Estimated Change in Daily Traffic Volumes for Build Alternatives Compared to No-Build Alternative under Cumulative (2040) Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	No-Build 2040 Daily Volume	Estimated Change in 2040 Daily Traffic Volumes Compared to No-Build Alternative											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2040			With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
40	Dryer Road West	South of Baseline Road	NA	4	NA	20,200	2,600	3,300	2,000	3,500	2,300	3,300	2,100	3,000	2,000	3,000	2,000
41	Elkhorn Boulevard	East of SR 70/99	2	6	16,300	60,500	-300	0	-100	-300	100	100	0	-100	0	-100	-300
42	Elkhorn Boulevard	West of Watt Avenue	4	4	26,800	39,000	-1,000	-600	-500	-800	-300	-700	-600	-700	-700	-600	-600
43	Elkhorn Boulevard	East of Watt Avenue	4	6	23,020	44,500	-1,400	-1,100	-500	-800	-400	-1,000	-700	-1,000	-700	-400	-700
44	Elkhorn Boulevard	West of Walerga Road	4	6	25,700	45,100	-1,400	-1,100	-500	-800	-400	-900	-600	-1,000	-600	-300	-700
45	Elverta Road	East of SR 70/99	2	4	7,200	53,200	-1,600	-300	0	-200	100	-300	200	100	600	200	500
46	Elverta Road	East of Rio Linda Boulevard	2	4	8,000	49,500	-3,100	-1,900	-1,200	-2,400	-1,600	-2,100	-1,500	-1,700	-1,100	-1,700	-1,300
47	Elverta Road	West of Watt Avenue	2	4	20,700	62,200	-1,500	-400	-500	-800	-600	-800	-600	-900	-600	-800	-500
48	Fiddyment Road	North of Sunset Boulevard West	2	6	2,800	37,900	4,000	2,600	1,500	3,500	3,900	4,500	4,300	4,000	3,700	3,600	3,500
49	Fiddyment Road	South of Sunset Boulevard	2	6	4,000	44,800	3,300	1,300	2,400	1,400	4,400	2,900	4,800	2,100	3,800	1,700	3,600
50	Fiddyment Road	North of Blue Oaks Boulevard	2	4	4,000	36,400	-3,900	-2,800	2,100	-2,800	1,800	-2,200	1,800	-2,200	1,800	-1,200	2,000
51	Fiddyment Road	North of Pleasant Grove Boulevard	2	4	11,800	36,400	-4,200	-2,300	400	-2,600	0	-2,000	0	-1,800	0	-1,100	200
52	Fiddyment Road	North of Baseline Road	2	6	19,600	40,800	-4,300	-3,200	-700	-3,600	-1,700	-2,900	-1,500	-2,800	-1,200	-2,200	-1,300
53	Foothills Boulevard	North of Blue Oaks Boulevard	4	4	3,400	37,300	-4,800	-4,700	-2,600	-4,700	-2,500	-4,500	-2,400	-4,400	-2,400	-4,300	-2,500
54	Foothills Boulevard	South of Roseville Parkway	4	6	12,200	39,400	-1,800	-1,400	-800	-1,400	-700	-1,400	-1,000	-1,300	-800	-1,200	-800
55	Foothills Boulevard	North of Baseline Road	4	6	28,400	51,000	-1,400	-1,200	-700	-1,400	-900	-1,300	-900	-1,200	-900	-1,100	-800
56	Foothills Boulevard	South of Baseline Road	4	6	30,900	69,300	-300	-400	-500	-600	-700	-700	-500	-700	-700	-500	-400
57	Howsley Road	East of SR 70/99	2	2	800	7,500	-3,000	-3,000	-2,800	-3,000	-3,000	-3,100	-3,100	-3,400	-3,200	-3,200	-3,200
58	Industrial Avenue	North of Athens Avenue	2	4	4,600	33,900	-8,900	-9,000	-8,800	-9,000	-8,800	-9,000	-8,800	-9,000	-8,800	-9,000	-8,800
59	Industrial	North of Roseville Parkway	2	2	2,800	30,900	100	200	500	200	700	300	700	200	600	400	700
60	Junction Boulevard	East of Woodcreek Oaks Boulevard	4	4	6,100	10,800	-1,000	-1,300	-1,000	-1,300	-1,100	-1,400	-1,300	-1,400	-1,200	-1,200	-1,200
61	Moore Road	West of Brewer Road	2	2	400	2,400	-2,100	-2,000	-2,000	-2,100	-2,100	-2,100	-2,100	-2,100	-2,100	-2,100	-2,100
62	Nicolaus Road	East of Brewer Road	2	2	900	8,800	-3,300	-3,300	-2,900	-3,600	-3,400	-3,600	-3,400	-3,800	-3,600	-3,700	-3,600
63	Pacific Street	West of Sunset Boulevard	4	6	10,600	31,200	-200	0	-100	-100	-100	-100	-100	-100	-100	-200	-100
64	PFE Road	East of Watt Avenue	2	4	4,700	16,200	100	-700	-400	-600	-100	-700	-400	-100	-200	-200	-200
65	Phillip Road	East of Brewer Road	2	2	100	3,300	-2,700	-1,900	-800	-2,200	-900	-1,000	-900	-2,100	-900	-1,900	-900
66	Pleasant Grove Boulevard	West of Fiddyment Road	NA	4	NA	55,600	-900	-2,100	-1,100	-1,800	-800	-1,900	-1,200	-1,600	-1,000	-1,400	-1,100
67	Pleasant Grove Boulevard	East of Fiddyment Road	4	4	3,700	42,800	-700	-2,400	-2,100	-2,200	-2,300	-2,400	-2,300	-2,200	-2,100	-2,100	-2,100
68	Pleasant Grove Boulevard	East of Woodcreek Oaks Boulevard	4	4	16,300	67,700	-3,400	-5,300	-4,500	-5,400	-4,800	-5,500	-5,000	-5,200	-4,700	-5,000	-4,600
69	Pleasant Grove Boulevard	West of SR 65	6	6	41,300	58,400	-1,600	-1,300	-1,200	-1,400	-1,100	-1,400	-1,200	-1,400	-1,200	-1,300	-1,200
70	Pleasant Grove Road	North of Sankey Road	2	4	1,500	23,900	-7,000	-8,100	-7,600	-9,400	-8,800	-9,400	-8,900	-8,600	-8,500	-8,500	-8,400
71	Pleasant Grove Road	North of Riego Road	2	4	1,700	27,300	-600	-900	-800	-1,000	-1,000	-1,100	-1,100	-1,400	100	-600	200
72	Pleasant Grove Road	South of Baseline Road	2	2	1,500	22,900	-1,900	-600	-100	-700	0	-400	-100	-800	-300	-600	-300
73	Riego Road	East of SR 70/99	2	6	9,900	71,200	-9,900	-8,100	-7,300	-8,900	-7,600	-9,000	-7,700	-5,600	-3,700	-5,100	-3,700
74	Riego Road	West of Pleasant Grove Road	2	6	9,900	69,100	-11,800	-2,000	800	-2,000	900	-1,700	700	-7,100	-4,400	-6,400	-4,400

Table 30:
Estimated Change in Daily Traffic Volumes for Build Alternatives Compared to No-Build Alternative under Cumulative (2040) Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	No-Build 2040 Daily Volume	Estimated Change in 2040 Daily Traffic Volumes Compared to No-Build Alternative										
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2040			With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
75	Sankey Road	East of SR 70/99	2	4	400	26,100	-7,400	-7,200	-7,000	-7,100	-6,800	-7,100	-6,800	-18,900	-19,400	-19,100	-19,500
76	Sankey Road	West of Pleasant Grove Road	2	4	200	28,700	-10,700	-8,600	-6,400	-8,100	-6,200	-7,900	-6,200	-4,900	-1,800	-4,100	-2,000
77	Sierra College Boulevard	South of English Colony Way	2	4	11,000	31,700	1,300	1,300	1,500	1,300	1,600	1,500	1,600	1,500	1,600	1,500	1,600
78	Sierra College Boulevard	North of King Road	2	4	11,000	30,900	800	700	900	700	1,000	800	1,000	800	1,000	900	1,000
79	Wildcat Boulevard	North of Whitney Ranch Parkway	4	4	3,700	23,600	4,200	4,300	3,900	4,300	3,900	4,400	4,100	4,400	4,000	4,300	4,000
80	Sunset Boulevard	East of Fiddyment Boulevard	NA	6	NA	28,700	-7,600	-7,100	-6,100	-7,000	-6,200	-7,000	-6,100	-7,100	-6,200	-6,800	-6,100
81	Sunset Boulevard	West of SR 65	2	6	8,000	83,600	-17,200	-17,000	-15,900	-17,300	-15,800	-17,100	-15,800	-17,000	-15,800	-16,900	-15,700
82	Sunset Boulevard	East of SR 65	4	6	7,100	38,800	-600	-800	-600	-500	-400	-300	-300	-300	-400	-400	-400
83	Sunset Boulevard	East of Blue Oaks Boulevard	6	6	9,800	43,400	300	200	600	100	700	300	700	400	700	600	700
84	Sunset Boulevard West	West of Brewer Road	2	2	600	13,200	-6,200	-5,900	-4,900	-7,200	-5,600	-6,400	-5,700	-7,800	-6,500	-7,500	-6,400
85	Sunset Boulevard West	East of Brewer Road	2	2	600	10,900	-5,500	-5,500	-5,400	-6,500	-6,100	-6,700	-6,200	-7,200	-6,900	-7,100	-6,800
86	Sunset Boulevard West	West of Fiddyment Road	2	2	600	8,200	-1,300	-1,800	600	-2,700	400	-2,200	400	-2,500	-100	-2,500	-100
87	Twelve Bridges Drive	West of SR 65	2	4	6,000	26,900	-4,400	-4,300	-4,500	-4,300	-4,500	-4,400	-4,500	-4,400	-4,500	-4,400	-4,500
88	Twelve Bridges Drive	East of SR 65	4	6	5,100	41,600	-1,600	-1,600	-1,700	-1,500	-1,700	-1,600	-1,700	-1,600	-1,700	-1,600	-1,700
89	Valley View Parkway	West of Park Drive	NA	2	NA	12,700	2,700	2,600	2,700	2,700	2,800	2,800	2,800	2,900	2,800	2,900	2,800
90	Walerga Road	South of Baseline Road	2	4	14,900	34,000	-3,100	-1,900	-1,400	-2,200	-1,600	-1,800	-1,400	-1,700	-1,400	-1,700	-1,600
91	Walerga Road	North of Elverta Road	4	4	22,700	56,400	-1,100	-1,300	-1,200	-1,300	-800	-1,300	-800	-800	-700	-1,000	-800
92	Washington Boulevard	South of Blue Oaks Boulevard	2	4	4,800	30,400	-5,000	-3,200	-2,800	-3,100	-3,200	-3,200	-2,900	-3,000	-3,100	-3,200	-2,900
93	Washington Boulevard	North of Pleasant Grove Boulevard	2	4	6,205	41,500	-5,000	-4,000	-3,500	-4,100	-3,700	-3,900	-3,600	-3,900	-3,600	-3,900	-3,600
94	Watt Avenue	North of Pleasant Grove Boulevard	NA	6	NA	19,900	-2,300	8,000	-900	8,300	-1,000	7,600	-1,000	9,100	-800	6,300	-800
95	Watt Avenue	North of Baseline Road	NA	6	NA	36,400	13,200	3,600	1,700	1,100	-600	600	-700	1,100	-700	200	-600
96	Watt Avenue	South of Baseline Road	2	6	7,100	41,200	5,800	1,200	300	1,400	600	1,100	300	1,400	600	1,000	500
97	Watt Avenue	North of Elverta Road	4	6	19,400	58,900	-200	-500	-200	-700	-700	-600	-600	-700	-200	-400	-200
98	Watt Avenue	North of Elkhorn Boulevard	4	6	38,700	51,500	-400	-200	200	-100	-300	-500	0	-400	200	0	-100
99	Watt Avenue	North of Airbase Drive	6	6	47,100	73,700	-900	-500	-200	-600	-200	-700	-200	-700	-100	-300	-200
100	Watt Avenue	North of I-80	6	6	62,600	85,800	-700	-500	-200	-400	-300	-500	-100	-200	500	-100	-200
101	West Side Drive	North of Blue Oaks Boulevard	NA	6	NA	57,200	-7,100	-3,800	-1,600	-2,500	-2,000	-3,800	-2,000	-3,800	-1,500	-3,400	-1,500
102	West Side Drive	North of Baseline Road	NA	6	NA	36,900	-4,200	-2,400	-500	-3,100	-1,300	-3,000	-1,200	-2,500	-1,300	-2,300	-1,200
103	Whitney Ranch Parkway	East of SR 65	NA	6	NA	47,500	14,500	14,300	12,000	14,700	12,600	14,400	12,800	14,300	12,600	13,800	12,600
104	Whitney Ranch Parkway	East of University Avenue	NA	6	NA	26,200	12,300	12,200	10,700	12,500	11,100	12,500	11,300	12,300	11,200	12,000	11,200
105	Whitney Ranch Parkway	East of Wildcat Boulevard	NA	4	NA	14,900	4,400	4,400	4,300	4,500	4,400	4,600	4,500	4,600	4,500	4,600	4,500
106	Woodcreek Oak Boulevard	South of Pleasant Grove Boulevard	2	4	11,900	31,600	-2,600	-3,200	-2,400	-3,600	-2,700	-3,300	-2,800	-3,100	-2,600	-3,000	-2,500
107	16th Street	North of Baseline Road	NA	4	NA	43,300	-3,000	-1,300	-1,200	-2,000	-1,000	-1,900	-1,100	-1,500	-900	-1,500	-1,000

Table 30:
Estimated Change in Daily Traffic Volumes for Build Alternatives Compared to No-Build Alternative under Cumulative (2040) Conditions

Roadway		Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	No-Build 2040 Daily Volume	Estimated Change in 2040 Daily Traffic Volumes Compared to No-Build Alternative										
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2040			With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
108	16th Street	South of Baseline Road	NA	4	NA	28,300	-200	-300	-600	-500	-600	-600	-700	-400	-300	-300	-300
109	16th Street	North of Elverta Road	2	2	400	25,100	-800	-800	-800	-800	-300	-900	-500	-700	-400	-200	-500
110	Blue Oaks Boulevard	East of Lonetree Boulevard	4	4	9,500	21,500	-2,000	-2,100	-1,000	-2,100	-1,000	-1,900	-1,000	-1,800	-1,000	-1,600	-1,000

Notes
[1] +2 = Plus two HOV lanes
[2] Traffic volumes on state highways are from 2004. Counts on some local roadways were taken prior to 2005
[3] Two general locations for a potential interchange on Placer Parkway at the future extension of Watt Avenue were identified with Alternative 1 – a north and a south location (see Figure 4 for assumed interchange locations)
Source: DKS Associates, 2006

FIGURE 20
Location of Roadway Segments for 2040 Traffic Analysis

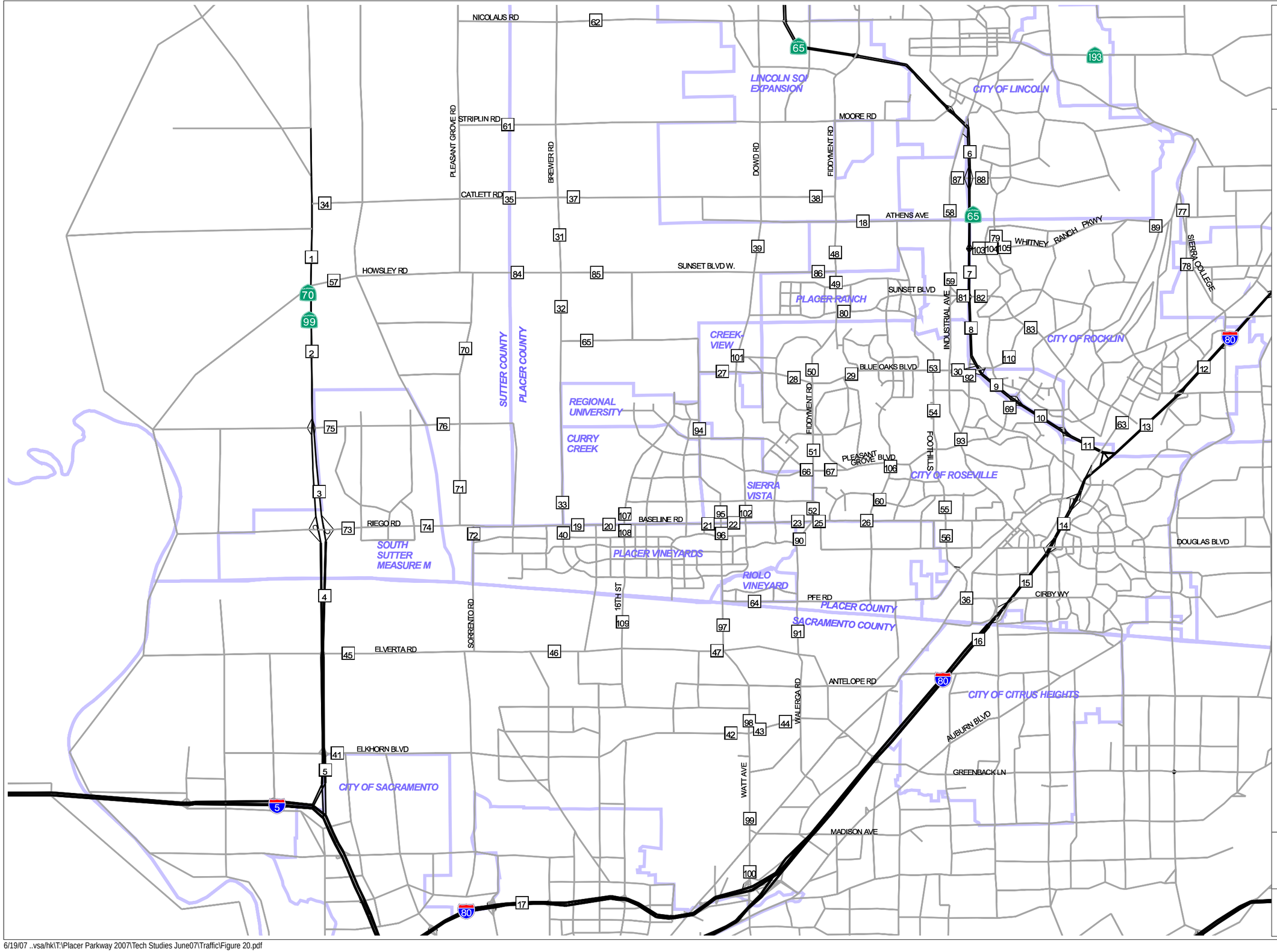


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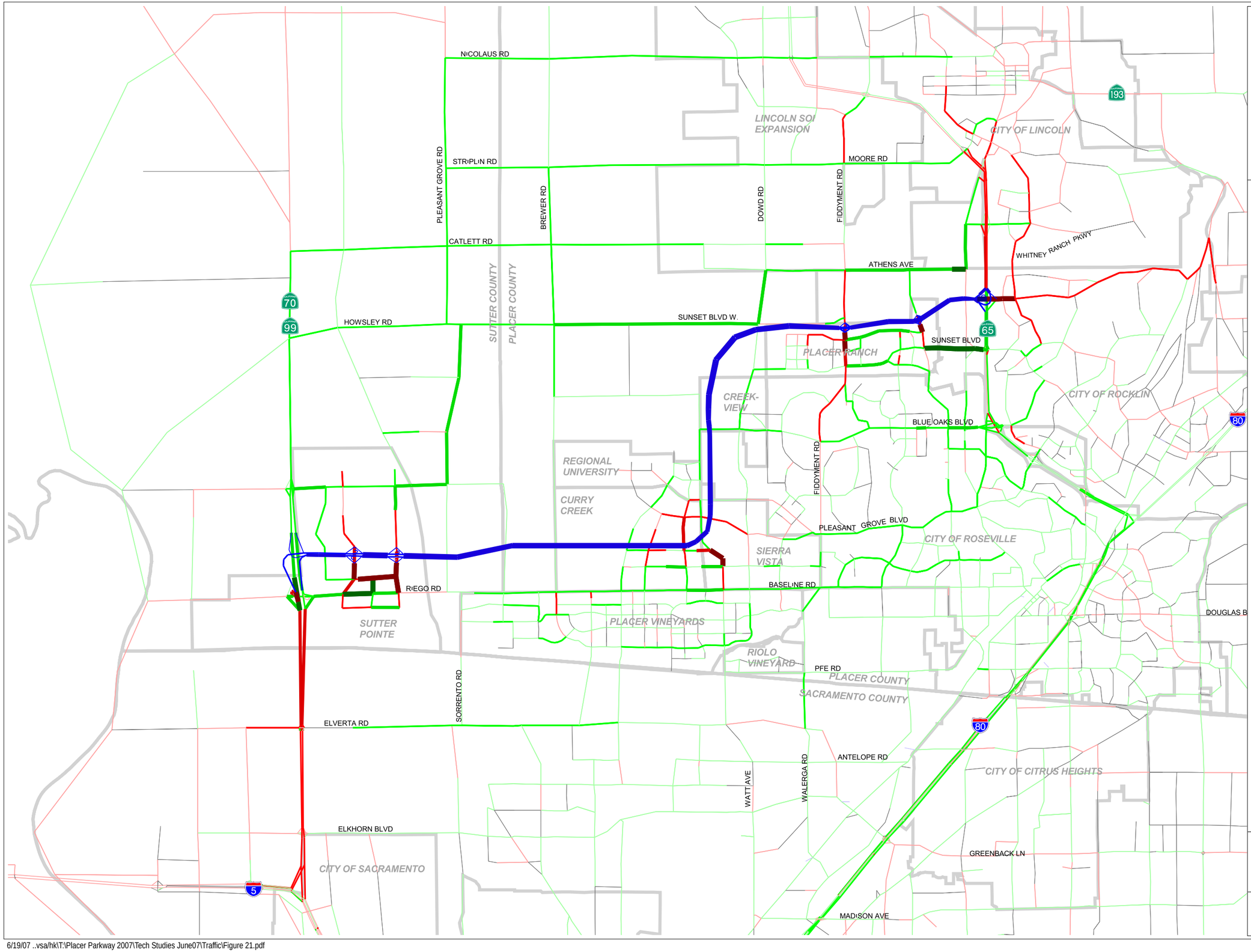
FIGURE 21
Changes in 2040 Daily Traffic Volumes

Alternative 1 Without Watt Interchange Compared to No Build Alternative



Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

[1] Project Roadways are Placer Parkway and its Interchanges. See Tables 26 & 27 for Daily Volumes on Placer Parkway.

[2] See Table 29 for Change in Daily Volumes for Non-Project Roadways.

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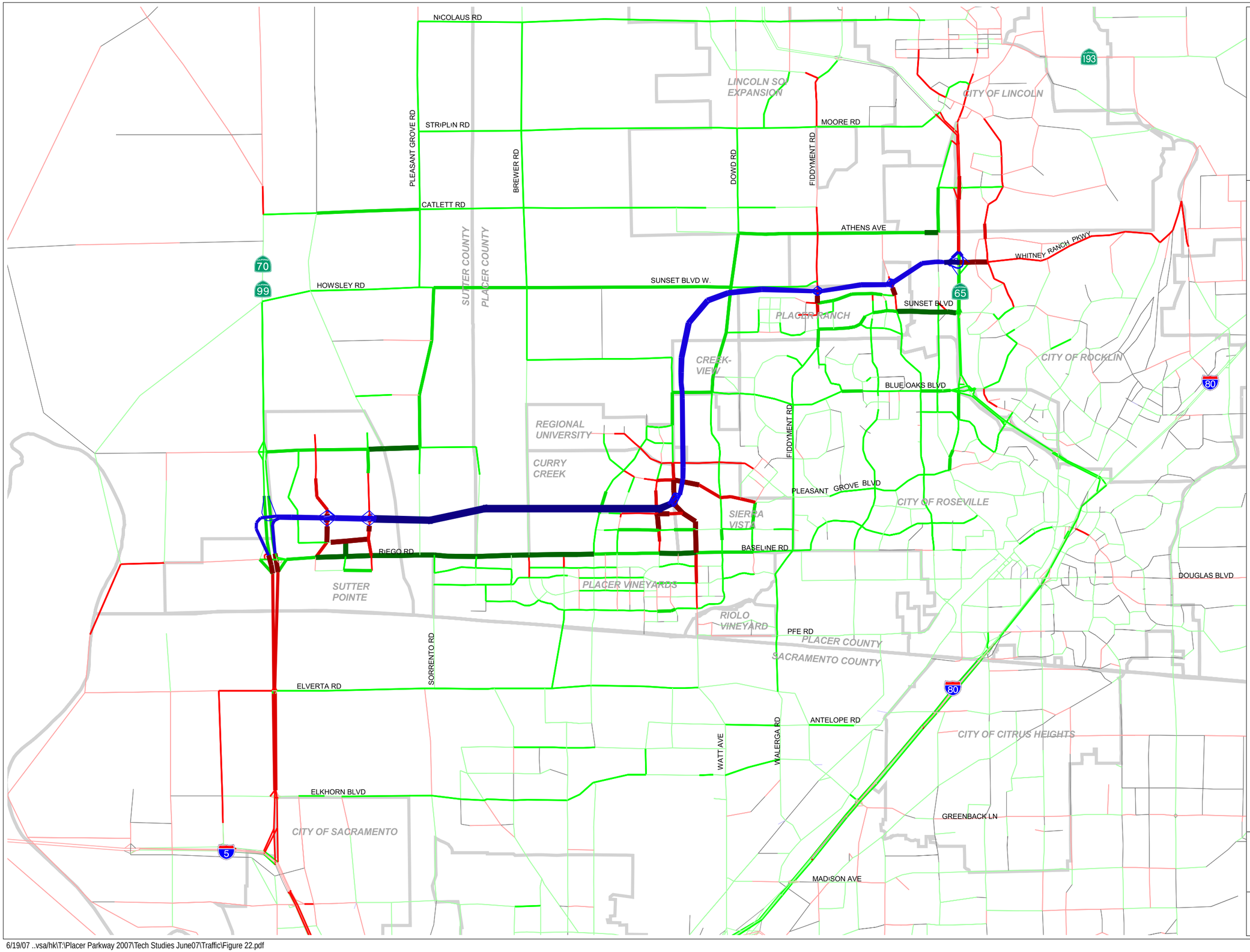
FIGURE 22
Changes in 2040 Daily Traffic Volumes

Alternative 1
With
Watt South Interchange
Compared to
No Build Alternative



Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

1 Project Roadways are Placer Parkway and its interchanges. See Tables 26 & 27 for Daily Volumes on Placer Parkway

2 See Table 29 for Change in Daily Volumes for non- project roadways.

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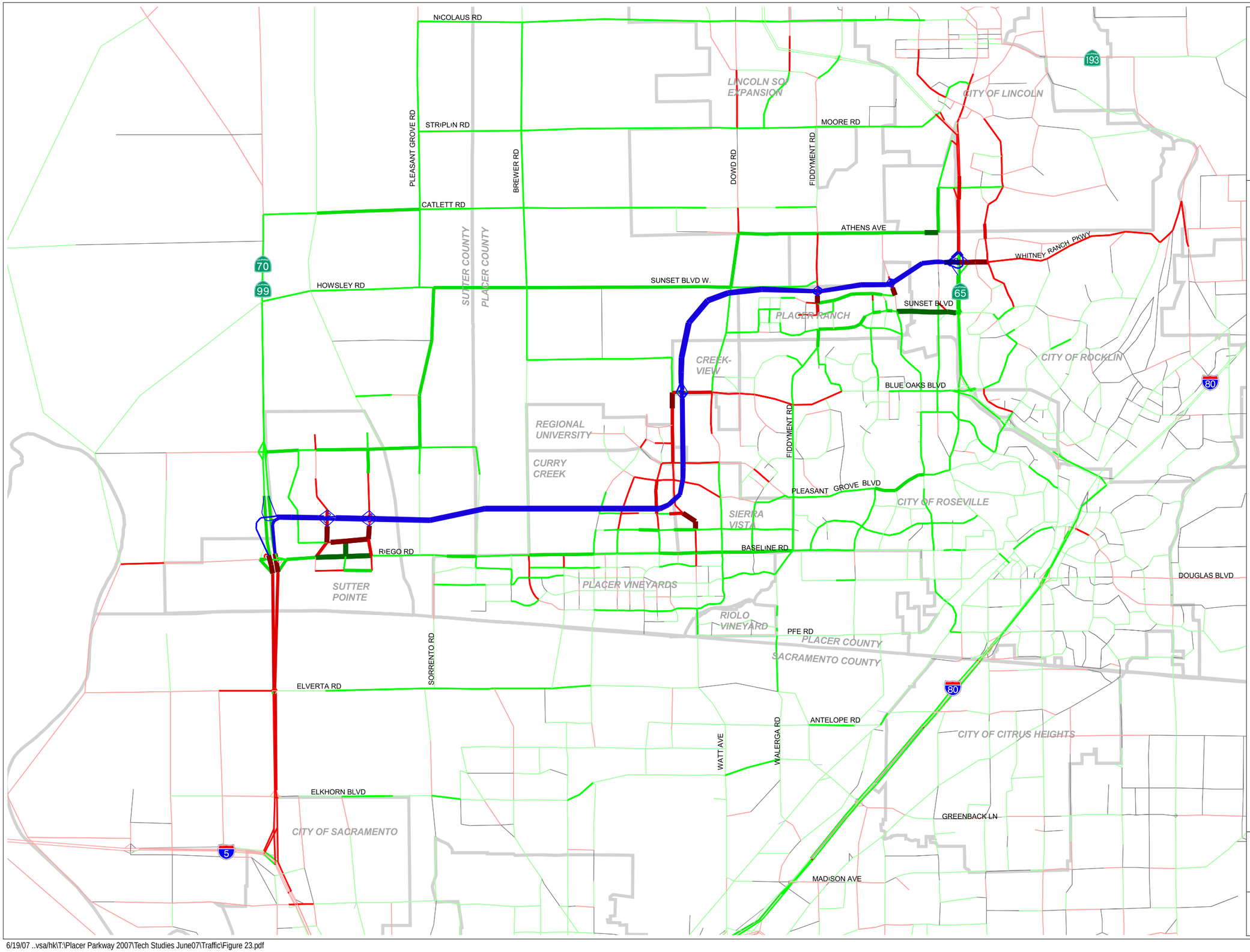
FIGURE 23
Changes in 2040 Daily Traffic Volumes

Alternative 1
With
Watt North Interchange
Compared to
No Build Alternative



Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

[1] Project Roadways are Placer Parkway and its Interchanges. See Tables 26 & 27 for Daily Volumes on Placer Parkway.

[2] See Table 29 for Change in Daily Volumes for Non- Project Roadways.

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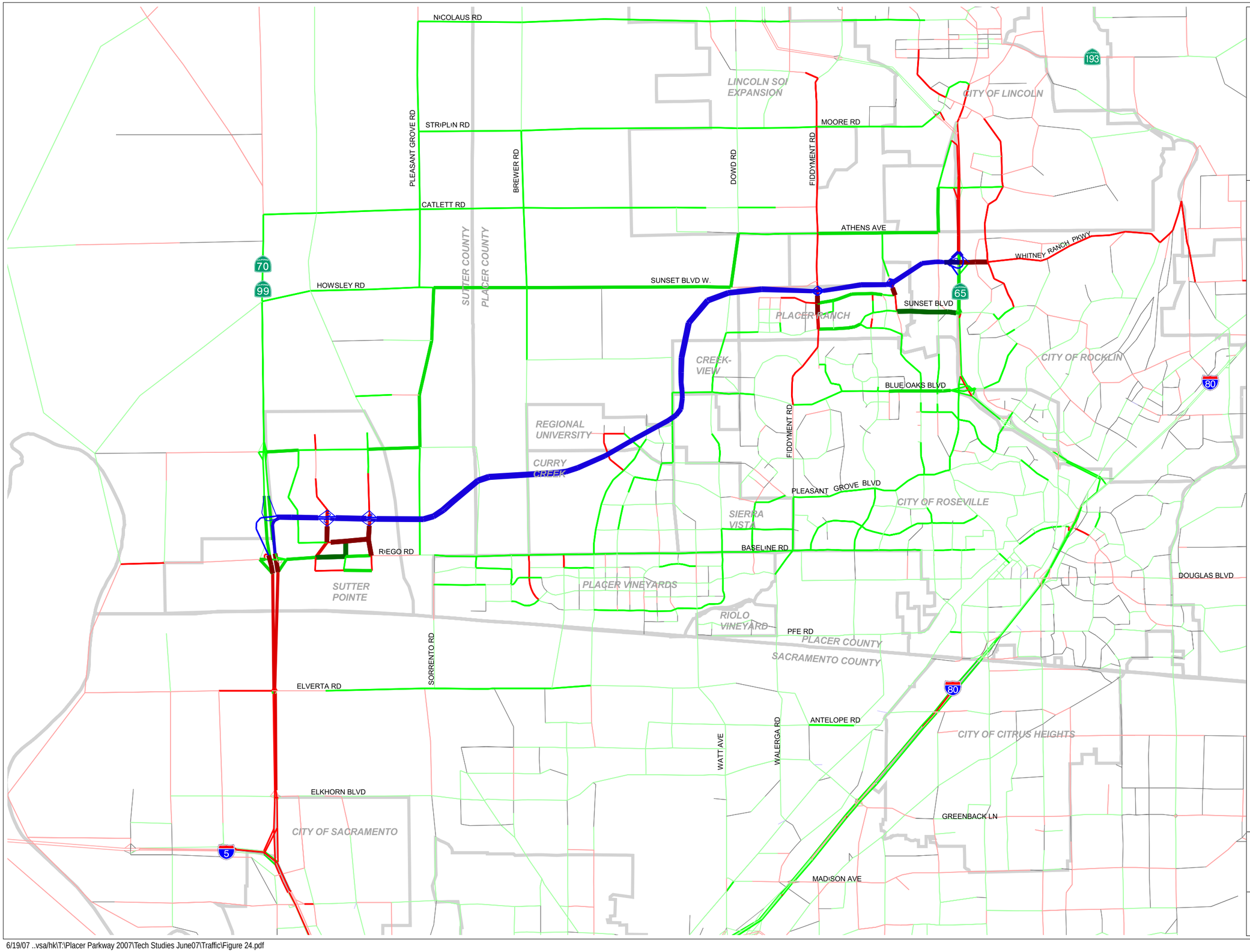
FIGURE 24
Changes in 2040 Daily Traffic Volumes

Alternative 2 Without Watt Interchange Compared to No Build Alternative



Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

1 Project Roadways are Placer Parkway and its Interchanges. See Tables 26 & 27 for Daily Volumes on Placer Parkway.

2 See Table 29 for Change in Daily Volumes for Non- Project Roadways.

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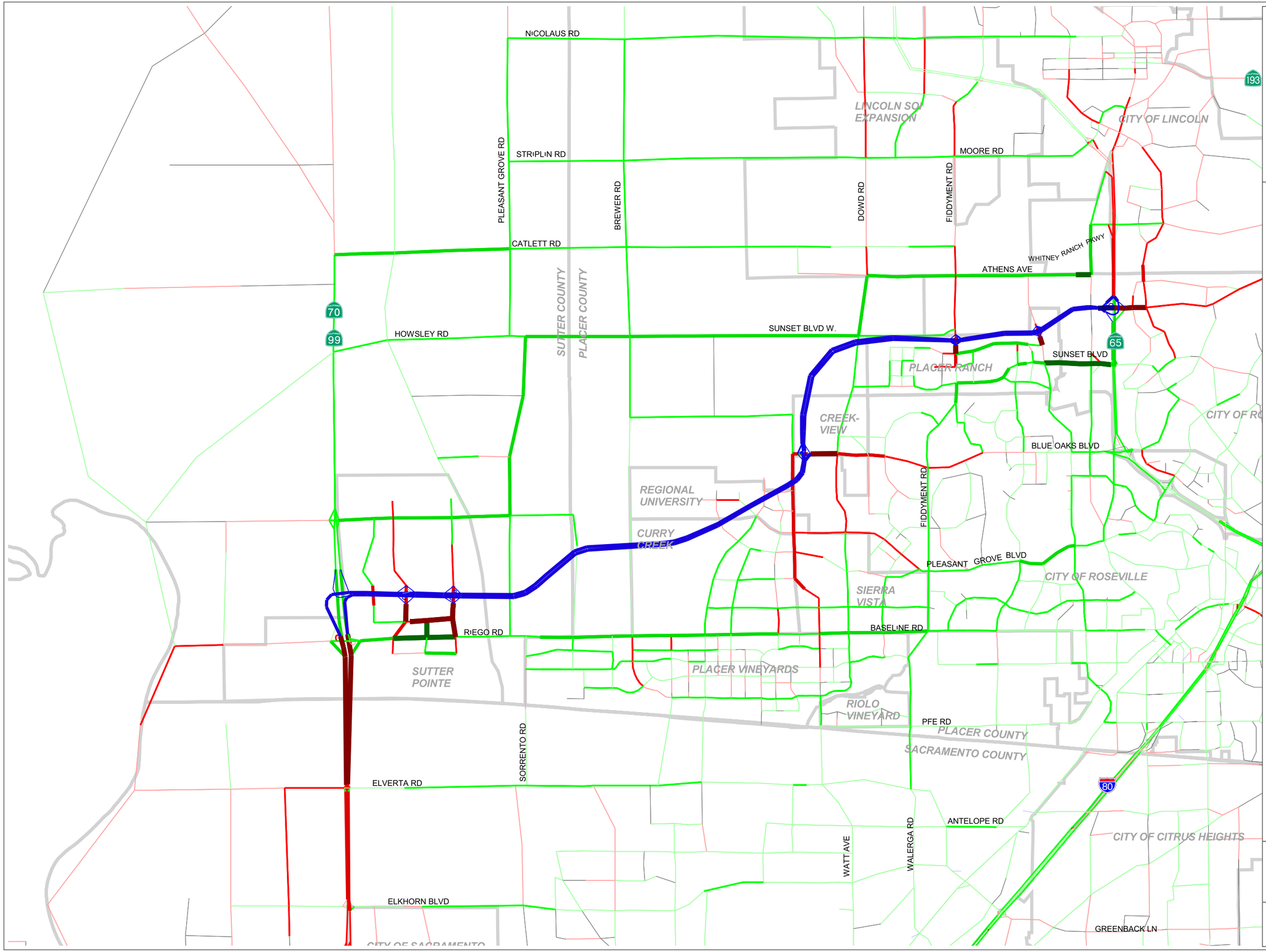

FIGURE 25
Changes in 2040 Daily Traffic Volumes

Alternative 2
With
Watt Interchange
Compared to
No Build Alternative

Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

1 Project Roadways are Placer Parkway and its Interchanges. See Tables 26 & 27 for Daily Volumes on Placer Parkway.

2 See Table 29 for Change in Daily Volumes for Non- Project Roadways.

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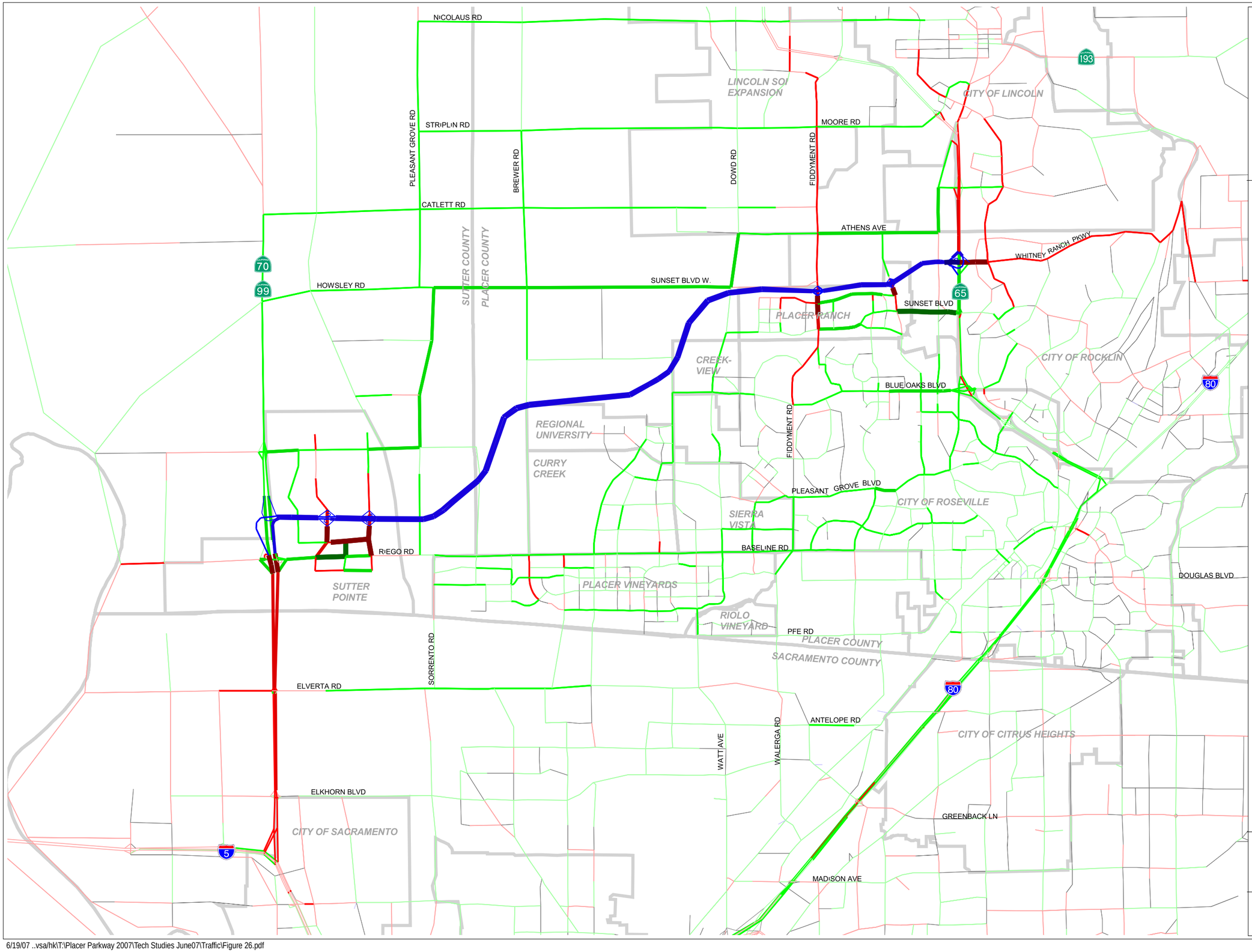
FIGURE 26
Changes in 2040 Daily Traffic Volumes

Alternative 3 Without Watt Interchange Compared to No Build Alternative



Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

1 Project Roadways are Placer Parkway and its Interchanges. See Tables 26 & 27 for Daily Volumes on Placer Parkway.

2 See Table 29 for Change in Daily Volumes for Non- Project Roadways.

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FIGURE 27
Changes in 2040 Daily Traffic Volumes

Alternative 3
With
Watt Interchange
Compared to
No Build Alternative

NICOLAUS RD
STRIPLIN RD
CATLETT RD
HOWSLEY RD
RIEGO RD
ELVERTA RD
ELKHORN BLVD
PLEASANT GROVE RD
BREWER RD
SUTTER COUNTY
PLACER COUNTY
DOWD RD
FIDDYMENT RD
MOORE RD
ATHENS AVE
SUNSET BLVD W.
SUNSET BLVD
WHITNEY RANCH PKWY
BLUE OAKS BLVD
PLEASANT GROVE BLVD
BASELINE RD
PFE RD
DOUGLAS BLVD
ANTELOPE RD
GREENBACK LN
MADISON AVE
SORRENTO RD
WATT AVE
WALERGA RD
LINCOLN SOI EXPANSION
CITY OF LINCOLN
PLACER RANCH
CREEK-VIEW
CITY OF ROCKLIN
REGIONAL UNIVERSITY
CURRY CREEK
SIERRA VISTA
CITY OF ROSEVILLE
SUTTER POINTE
PLACER VINEYARDS
RIOLO VINEYARD
PLACER COUNTY
SACRAMENTO COUNTY
CITY OF CITRUS HEIGHTS
CITY OF SACRAMENTO
70
99
65
193
80
5

Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

1 Project Roadways are Placer Parkway and its Interchanges. See Tables 26 & 27 for Daily Volumes on Placer Parkway.

2 See Table 29 for Change in Daily Volumes for Non- Project Roadways.

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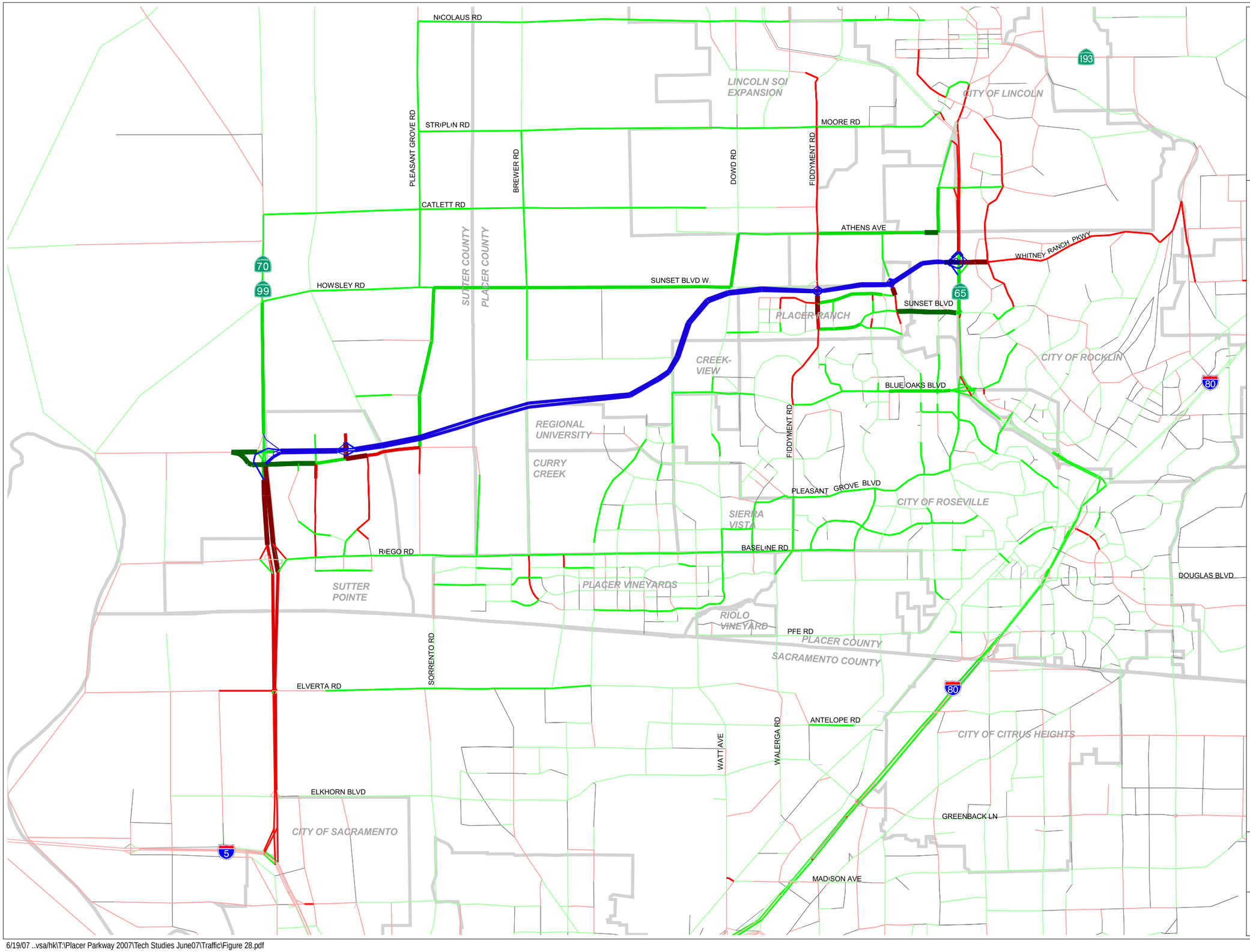
FIGURE 28
Changes in 2040 Daily Traffic Volumes

Alternative 4 Without Watt Interchange Compared to No Build Alternative



Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

[1] Project Roadways are Placer Parkway and its Interchanges. See Tables 26 & 27 for Daily Volumes on Placer Parkway.

[2] See Table 29 for Change in Daily Volumes for Non- Project Roadways.

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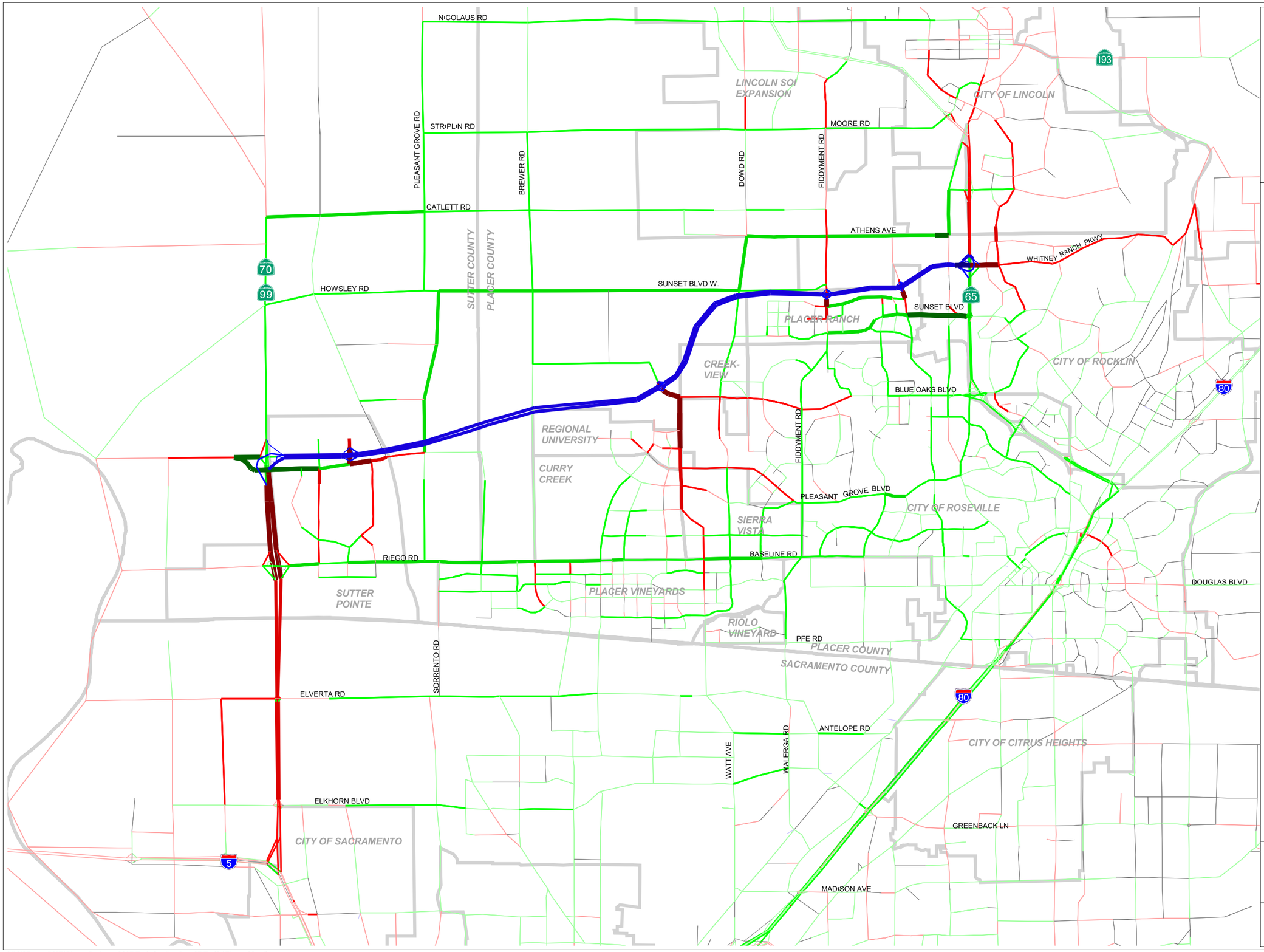
FIGURE 29
Changes in 2040 Daily Traffic Volumes

Alternative 4 With Watt Interchange Compared to No Build Alternative



Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

1 Project Roadways are Placer Parkways and its Interchanges. See Tables 26 & 27 for Daily Volumes on Placer Parkway.

2 See Table 29 for Change in Daily Volumes for Non- Project Roadways.

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6/19/07 ..vsa/hk\T:\Placer Parkway 2007\Tech Studies June07\Traffic\Figure 29.pdf

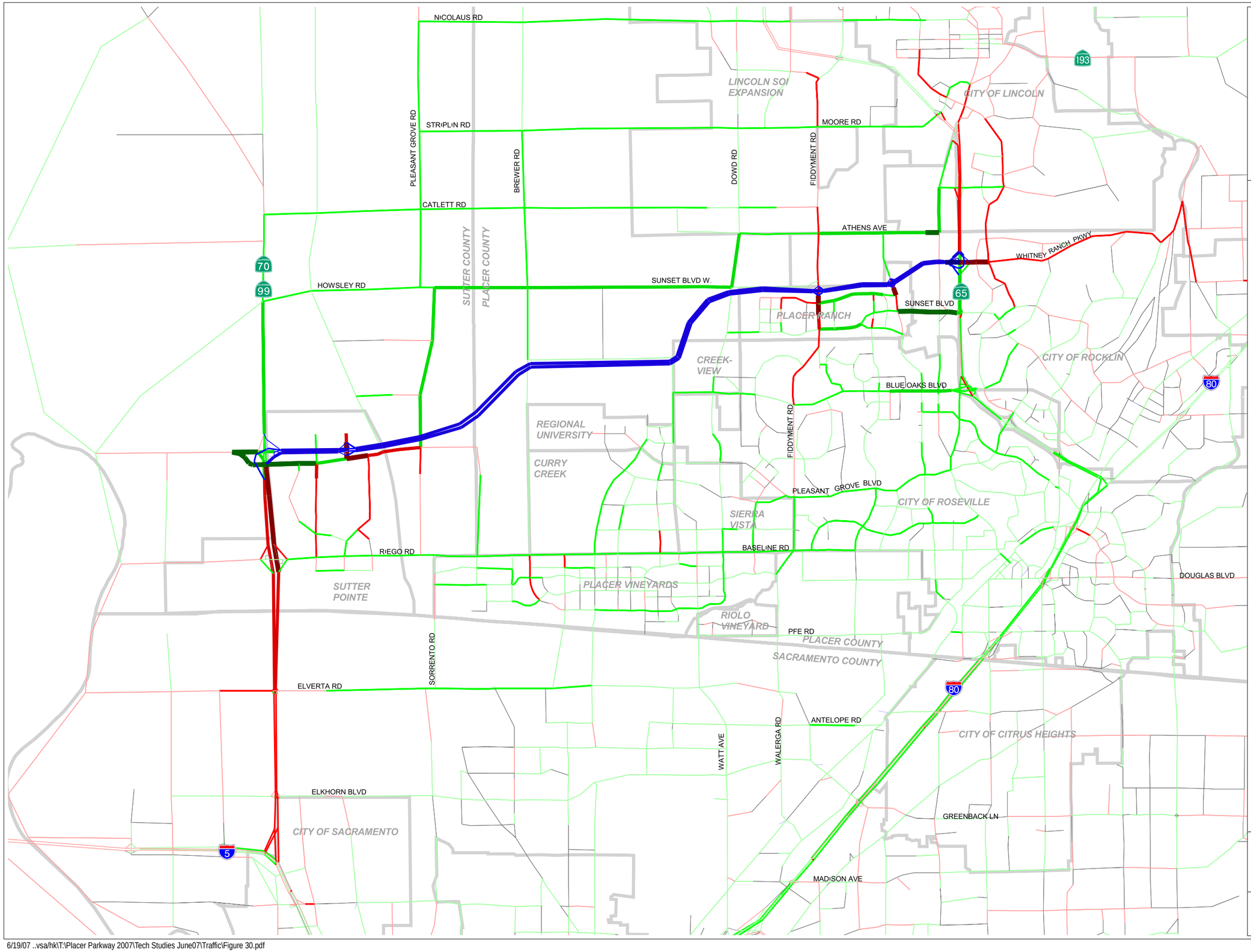

FIGURE 30
Changes in 2040 Daily Traffic Volumes

Alternative 5 Without Watt Interchange Compared to No Build Alternative

Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

[1] Project Roadways are Placer Parkway and its Interchanges. See Tables 26 & 27 for Daily Volumes on Placer Parkway.

[2] See Table 29 for Change in Daily Volumes for Non- Project Roadways.

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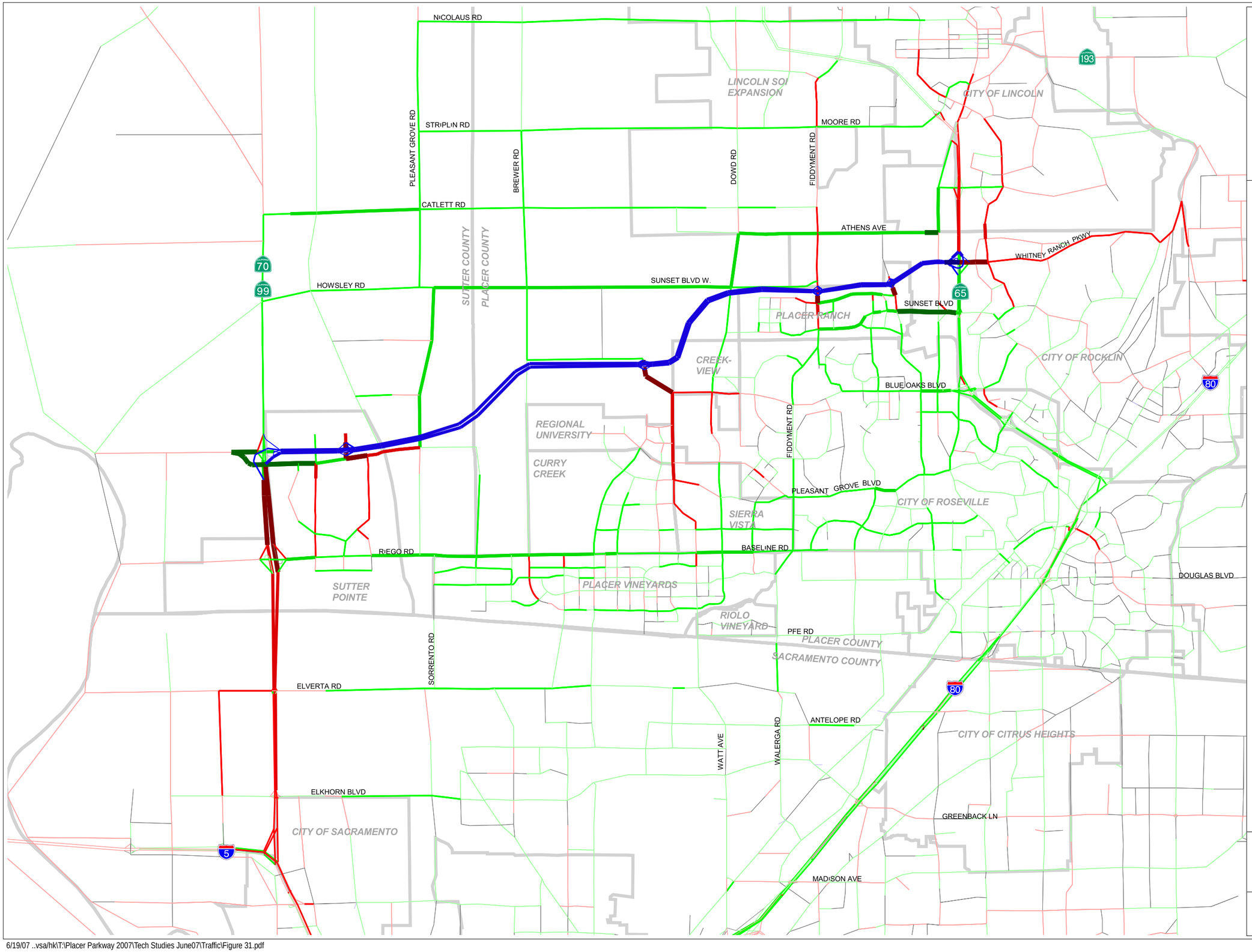
FIGURE 31
Changes in 2040 Daily Traffic Volumes

Alternative 5 With Watt Interchange Compared to No Build Alternative



Total Volume on Project Roadways[1]
- 0
- 1-1,000
- 1,000-10,000
- 10,000-20,000
- 20,000-40,000
- >40,000

Change in Volume on Non-Project Roadways[2]
- <-10,000
- 5,000-10,000 Decrease
- 1,000-5,000 Decrease
- 100-1,000 Decrease
- 1-100 Decrease
- No Change
- 1-100 Increase
- 100-1,000 Increase
- 1,000-5,000 Increase
- 5,000-10,000 Increase
- >10,000 Increase

Cities and Specific Plan Areas

Notes:

1 Project Roadways are Placer Parkway and its Interchanges. See Tables 26 & 27 for Daily Volumes on Placer Parkway.

2 See Table 29 for Change in Daily Volumes for Non- Project Roadways.

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- SR 70/99 south of where Placer Parkway would connect to this state highway
- SR 65 north of where Placer Parkway would connect to this state highway
- Rocklin's Whitney Ranch Parkway and the future Valley View Parkway
- Some roadways near future Placer Parkway interchanges.

5.3.2 Changes in Traffic Levels of Service

The Purpose and Need Statement for the Parkway indicates that the roadway would be designed to "improve travel times between the SR 65 corridor and SR 70/99 by maintaining a travel speed at or near the free flow speed of the Parkway, which on a freeway reflects LOS C to D conditions." Table 31 shows the estimated 2040 LOS on segments of Placer Parkway based on four- or six-lane configurations with and without a Watt Avenue interchange. This table shows that in 2040:

- All Parkway segments would operate at LOS C or better conditions with any of the build alternatives if six lanes are provided.

- Some Parkway segments would operate at LOS E or F conditions with some of the build alternatives if four lanes are provided.

Table 32 shows the estimated volume/capacity ratio in 2040 on key roadway segments under each project alternative. Table 33 provides the resulting LOS on these roadway segments.

The comparison between the No-Build Alternative and the other alternatives under 2040 conditions indicates that there would be significant LOS impacts on some roadway segments. These impacts are discussed Section 5.3.4.

5.3.3 Changes in System-Wide Congestion and Delay

Placer Parkway would have an impact on travel patterns in a fairly wide area. While some roadway segments would have increases in traffic volumes due to the Parkway, a larger number of roadway segments would have decreases in traffic volumes. In addition to measuring changes in traffic volumes and levels of service on individual roadway segments (discussed in the previous sections), the following system-wide measures were defined to show the impacts and benefits to the roadway system as a whole:

- Vehicle-miles of travel on congested roadways
- Vehicle delay.

These two system-wide measures were estimated for using the travel demand model for the following two areas:

- **The TASA,** shown with the assumed 2040 roadway network in Figure 7, covers the area where the travel model shows "significant" changes in traffic volumes, although the percentage of roadways that would be affected by Placer Parkway decreases on the fringes of that area. The TASA extends from Nicolaus Road on the north to I-80 on the south, and from Sierra College Boulevard on the east to west of SR 70/99. This area covers portions of eight jurisdictions: Placer County, Sutter County, Sacramento County, the cities of Roseville, Rocklin, Lincoln, and Sacramento, and the Town of Loomis.

- **The AFA,** also shown in Figure 7, is the area close to the build alternatives and represents the area where most of transportation benefits of constructing Placer Parkway would occur.

Table 31:
Projected 2040 Level of Service on Placer Parkway with 4 or 6 Travel Lanes

	Segment	Average Daily Volume																					
		Alternative 1						Alternative 2				Alternative 3				Alternative 4				Alternative 5			
		With Watt South[1]		With Watt North[1]		Without Watt		With Watt		Without Watt		With Watt		Without Watt		With Watt		Without Watt		With Watt		Without Watt	
		4 lanes	6 lanes	4 lanes	6 lanes	4 lanes	6 lanes	4 lanes	6 lanes	4 lanes	6 lanes	4 lanes	6 lanes	4 lanes	6 lanes	4 lanes	6 lanes	4 lanes	6 lanes	4 lanes	6 lanes	4 lanes	6 lanes
1	East of SR 70/99	D	B	C	B	B	B	C	B	C	B	C	B	C	B	D	B	C	B	D	B	C	B
2	East of Pacific Street	E	C	C	B	C	B	D	B	C	B	D	B	C	B	F	C	D	B	E	C	D	B
3	East of South Sutter Road 2	F	D	D	B	C	B	F	C	D	B	F	C	D	B	F	C	D	B	E	C	D	B
4	East of Watt Avenue	D	B	D	B	C	B	D	B	D	B	D	B	D	B	D	B	D	B	D	B	D	B
5	East of Fiddyment Road	D	C	D	C	D	B	D	C	D	C	E	C	D	C	E	C	D	C	D	C	D	C
6	West of SR 65	E	C	E	C	E	C	E	C	E	C	F	C	E	C	F	C	E	C	E	C	E	C

Shaded cells represent segments that would operate at LOS E or F conditions.

[1] Two general locations for a potential interchange on Placer Parkway at the future extension of Watt Avenue were identified with Alternative 1 – a north and a south location (see Figure 4 for assumed interchange locations)

Source: DKS Associates, 2006

Table 32:
Estimated Volume/Capacity Ratios on Roadway Segments for Build Alternatives under Cumulative (2040) Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Volume/ Capacity Ratio	Estimated 2040 Roadway Segment Volume/Capacity Ratio (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2040		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
1	SR 70/99	North of Howsley Road	4	4	0.54	0.89	0.88	0.86	0.86	0.86	0.85	0.85	0.85	0.87	0.84	0.86	0.84
2	SR 70/99	North of Sankey Road	4	4	0.54	0.96	0.91	0.88	0.89	0.88	0.87	0.88	0.87	0.89	0.86	0.88	0.86
3	SR 70/99	North of Riego Road	4	4	0.54	0.96	0.75	0.77	0.78	0.76	0.78	0.77	0.77	1.33	1.28	1.31	1.27
4	SR 70/99	North of Elverta Road	4	6	0.59	1.20	1.37	1.36	1.34	1.39	1.36	1.39	1.36	1.37	1.35	1.36	1.34
5	SR 70/99	North of I-5	4	6	0.66	1.44	1.50	1.50	1.49	1.51	1.50	1.51	1.50	1.51	1.49	1.50	1.49
6	SR 65	North of Twelve Bridge	4	6	0.56	1.30	1.38	1.38	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
7	SR 65	North of Sunset Boulevard	4	6	0.66	1.34	1.21	1.21	1.23	1.20	1.23	1.21	1.23	1.21	1.23	1.22	1.23
8	SR 65	North of Blue Oaks Boulevard	4	6	0.60	1.43	1.39	1.39	1.42	1.38	1.42	1.39	1.42	1.39	1.42	1.39	1.42
9	SR 65	North of Pleasant Grove Boulevard	4	6	1.06	1.51	1.48	1.49	1.50	1.49	1.50	1.49	1.50	1.49	1.50	1.49	1.50
10	SR 65	North of Stanford Ranch Road	4	6	1.14	1.63	1.61	1.62	1.62	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61
11	SR 65	North of I-80	4	6	1.17	1.58	1.55	1.56	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
12	I-80	East of Rocklin Road	6	6	0.89	1.15	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
13	I-80	East of SR 65	6	6	1.07	1.50	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49
14	I-80	East of Douglas Boulevard	6	6+2	1.44	1.17	1.15	1.16	1.16	1.15	1.16	1.16	1.15	1.16	1.16	1.17	1.16
15	I-80	East of Riverside Avenue	6	6+2	1.51	1.53	1.51	1.51	1.51	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
16	I-80	West of Riverside Avenue	8+2	8+2	0.99	1.44	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
17	I-80	East of Northgate Boulevard	6	6+2	1.32	1.35	1.31	1.32	1.32	1.31	1.32	1.31	1.32	1.31	1.32	1.31	1.32
18	Athens Avenue	East of Fiddyment Road	2	4	0.15	0.96	0.69	0.69	0.74	0.69	0.74	0.70	0.74	0.70	0.73	0.70	0.73
19	Baseline Road	East of Pleasant Grove Road	2	6	0.40	1.33	1.10	1.26	1.31	1.26	1.30	1.26	1.30	1.22	1.28	1.24	1.28
20	Baseline Road	East of Brewer Road	2	6	0.42	1.00	0.78	0.90	0.94	0.85	0.92	0.86	0.92	0.87	0.92	0.88	0.93
21	Baseline Road	West of 16th Street	2	6	0.42	1.07	0.87	0.98	1.01	0.93	0.99	0.94	0.99	0.96	0.99	0.96	1.00
22	Baseline Road	West of Watt Avenue	2	6	0.42	1.11	0.91	0.98	1.01	1.03	1.07	1.04	1.06	1.05	1.07	1.06	1.07
23	Baseline Road	East of Watt Avenue	2	6	0.70	1.05	0.89	0.92	0.98	0.91	0.97	0.92	0.97	0.94	0.98	0.95	0.98
24	Baseline Road	West of Walerga Road	2	6	0.70	0.89	0.83	0.79	0.85	0.78	0.83	0.80	0.83	0.80	0.83	0.82	0.84
25	Baseline Road	East of Walerga Road	3	6	0.84	1.19	1.14	1.11	1.12	1.10	1.11	1.11	1.11	1.11	1.12	1.11	1.12
26	Baseline Road	West of Woodcreek Oaks Boulevard	3	4	0.84	1.31	1.29	1.27	1.28	1.26	1.26	1.27	1.27	1.28	1.27	1.28	1.28
27	Blue Oaks Boulevard	East of Watt Avenue	NA	6	NA	0.73	0.61	0.84	0.68	0.89	0.67	0.82	0.67	0.82	0.68	0.77	0.68
28	Blue Oaks Boulevard	West of Fiddyment Road	NA	6	NA	0.57	0.51	0.61	0.56	0.65	0.56	0.60	0.56	0.60	0.56	0.58	0.56
29	Blue Oaks Boulevard	East of Fiddyment Road	2	6	0.46	0.81	0.73	0.83	0.76	0.86	0.76	0.82	0.76	0.83	0.76	0.80	0.76
30	Blue Oaks Boulevard	West of SR 65	4	6	0.97	1.09	0.99	1.01	0.99	1.03	0.98	1.01	0.98	1.01	0.98	1.00	0.98
31	Brewer Road	North of Sunset Boulevard West	2	2	0.01	0.12	0.04	0.04	0.06	0.03	0.05	0.04	0.04	0.04	0.06	0.04	0.06
32	Brewer Road	South of Sunset Boulevard West	2	2	0.01	0.14	0.02	0.06	0.10	0.05	0.10	0.09	0.10	0.05	0.10	0.06	0.10
33	Brewer Road	North of Baseline Road	2	2	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
34	Catlett Road	East of SR 70/99	2	2	0.01	0.28	0.09	0.09	0.14	0.08	0.13	0.10	0.13	0.08	0.12	0.08	0.12
35	Catlett Road	East of Pleasant Grove Road	2	2	0.00	0.18	0.06	0.06	0.09	0.05	0.07	0.06	0.06	0.04	0.06	0.05	0.06
36	Cirby Way	East of Foothills Boulevard	4	6	1.08	1.29	1.28	1.28	1.28	1.27	1.28	1.27	1.28	1.27	1.27	1.28	1.28
37	East Catlett Road	East of Brewer Road	2	2	0.01	0.16	0.10	0.09	0.12	0.07	0.10	0.08	0.09	0.07	0.08	0.08	0.08

Table 32:
Estimated Volume/Capacity Ratios on Roadway Segments for Build Alternatives under Cumulative (2040) Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Volume/ Capacity Ratio	Estimated 2040 Roadway Segment Volume/Capacity Ratio (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2040		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
38	East Catlett Road	West of Fiddyment Road	2	2	0.01	0.45	0.44	0.41	0.46	0.41	0.46	0.44	0.46	0.44	0.46	0.44	0.46
39	Dowd Road	North of Sunset Boulevard West	NA	6	NA	0.72	0.58	0.62	0.63	0.63	0.62	0.61	0.62	0.60	0.62	0.60	0.62
40	Dryer Road West	South of Baseline Road	NA	4	NA	0.56	0.63	0.65	0.62	0.66	0.63	0.65	0.62	0.64	0.62	0.64	0.62
41	Elkhorn Boulevard	East of SR 70/99	2	6	0.91	1.12	1.11	1.12	1.12	1.11	1.12	1.12	1.12	1.12	1.12	1.12	1.11
42	Elkhorn Boulevard	West of Watt Avenue	4	4	0.74	1.08	1.06	1.07	1.07	1.06	1.08	1.06	1.07	1.06	1.06	1.07	1.07
43	Elkhorn Boulevard	East of Watt Avenue	4	6	0.64	0.82	0.80	0.80	0.81	0.81	0.82	0.81	0.81	0.81	0.81	0.82	0.81
44	Elkhorn Boulevard	West of Walerga Road	4	6	0.71	0.84	0.81	0.81	0.83	0.82	0.83	0.82	0.82	0.82	0.82	0.83	0.82
45	Elverta Road	East of SR 70/99	2	4	0.40	1.48	1.43	1.47	1.48	1.47	1.48	1.47	1.48	1.48	1.49	1.48	1.49
46	Elverta Road	East of Rio Linda Boulevard	2	4	0.44	1.38	1.29	1.32	1.34	1.31	1.33	1.32	1.33	1.33	1.34	1.33	1.34
47	Elverta Road	West of Watt Avenue	2	4	1.15	1.73	1.69	1.72	1.71	1.71	1.71	1.71	1.71	1.70	1.71	1.71	1.71
48	Fiddyment Road	North of Sunset Boulevard West	2	6	0.11	0.70	0.78	0.75	0.73	0.77	0.77	0.79	0.78	0.78	0.77	0.77	0.77
49	Fiddyment Road	South of Sunset Boulevard	2	6	0.16	0.83	0.89	0.85	0.87	0.86	0.91	0.88	0.92	0.87	0.90	0.86	0.90
50	Fiddyment Road	North of Blue Oaks Boulevard	2	4	0.22	1.01	0.90	0.93	1.07	0.93	1.06	0.95	1.06	0.95	1.06	0.98	1.07
51	Fiddyment Road	North of Pleasant Grove Boulevard	2	4	0.66	1.01	0.89	0.95	1.02	0.94	1.01	0.96	1.01	0.96	1.01	0.98	1.02
52	Fiddyment Road	North of Baseline Road	2	6	1.09	0.76	0.68	0.70	0.74	0.69	0.72	0.70	0.73	0.70	0.73	0.71	0.73
53	Foothills Boulevard	North of Blue Oaks Boulevard	4	4	0.09	1.04	0.90	0.91	0.96	0.91	0.97	0.91	0.97	0.91	0.97	0.92	0.97
54	Foothills Boulevard	South of Roseville Parkway	4	6	0.34	0.73	0.70	0.70	0.71	0.70	0.72	0.70	0.71	0.71	0.71	0.71	0.71
55	Foothills Boulevard	North of Baseline Road	4	6	0.79	0.94	0.92	0.92	0.93	0.92	0.93	0.92	0.93	0.92	0.93	0.92	0.93
56	Foothills Boulevard	South of Baseline Road	4	6	0.86	1.28	1.28	1.28	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.28
57	Howsley Road	East of SR 70/99	2	2	0.03	0.30	0.18	0.18	0.19	0.18	0.18	0.18	0.18	0.16	0.17	0.17	0.17
58	Industrial Avenue	North of Athens Avenue	2	4	0.26	0.94	0.69	0.69	0.70	0.69	0.70	0.69	0.70	0.69	0.70	0.69	0.70
59	Industrial	North of Roseville Parkway	2	2	0.16	1.72	1.72	1.73	1.74	1.73	1.76	1.73	1.76	1.73	1.75	1.74	1.76
60	Junction Boulevard	East of Woodcreek Oaks Boulevard	4	4	0.17	0.30	0.27	0.26	0.27	0.26	0.27	0.26	0.26	0.26	0.27	0.27	0.27
61	Moore Road	West of Brewer Road	2	2	0.02	0.10	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
62	Nicolaus Road	East of Brewer Road	2	2	0.04	0.35	0.22	0.22	0.24	0.21	0.22	0.21	0.22	0.20	0.21	0.20	0.21
63	Pacific Street	West of Sunset Boulevard	4	6	0.29	0.58	0.57	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.57	0.58
64	PFE Road	East of Watt Avenue	2	4	0.26	0.45	0.45	0.43	0.44	0.43	0.45	0.43	0.44	0.45	0.44	0.44	0.44
65	Phillip Road	East of Brewer Road	2	2	0.00	0.13	0.02	0.06	0.10	0.04	0.10	0.09	0.10	0.05	0.10	0.06	0.10
66	Pleasant Grove Boulevard	West of Fiddyment Road	NA	4	NA	1.54	1.52	1.49	1.51	1.49	1.52	1.49	1.51	1.50	1.52	1.51	1.51
67	Pleasant Grove Boulevard	East of Fiddyment Road	4	4	0.10	1.19	1.17	1.12	1.13	1.13	1.13	1.12	1.13	1.13	1.13	1.13	1.13
68	Pleasant Grove Boulevard	East of Woodcreek Oaks Boulevard	4	4	0.45	1.88	1.79	1.73	1.76	1.73	1.75	1.73	1.74	1.74	1.75	1.74	1.75
69	Pleasant Grove Boulevard	West of SR 65	6	6	0.76	1.08	1.05	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
70	Pleasant Grove Road	North of Sankey Road	2	4	0.08	0.66	0.47	0.44	0.45	0.40	0.42	0.40	0.42	0.43	0.43	0.43	0.43
71	Pleasant Grove Road	North of Riego Road	2	4	0.09	0.76	0.74	0.73	0.74	0.73	0.73	0.73	0.73	0.72	0.76	0.74	0.76

Table 32:
Estimated Volume/Capacity Ratios on Roadway Segments for Build Alternatives under Cumulative (2040) Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Volume/ Capacity Ratio	Estimated 2040 Roadway Segment Volume/Capacity Ratio (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2040		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
72	Pleasant Grove Road	South of Baseline Road	2	2	0.06	0.92	0.84	0.89	0.91	0.89	0.92	0.90	0.91	0.88	0.90	0.89	0.90
73	Riego Road	East of SR 70/99	2	6	0.55	1.32	1.14	1.17	1.18	1.15	1.18	1.15	1.18	1.21	1.25	1.22	1.25
74	Riego Road	West of Pleasant Grove Road	2	6	0.50	1.15	0.96	1.12	1.17	1.12	1.17	1.12	1.16	1.03	1.08	1.05	1.08
75	Sankey Road	East of SR 70/99	2	4	0.02	0.73	0.52	0.53	0.53	0.53	0.54	0.53	0.54	0.20	0.19	0.19	0.18
76	Sankey Road	West of Pleasant Grove Road	2	4	0.01	0.80	0.50	0.56	0.62	0.57	0.63	0.58	0.63	0.66	0.75	0.68	0.74
77	Sierra College Boulevard	South of English Colony Way	2	4	0.61	0.88	0.92	0.92	0.92	0.92	0.93	0.92	0.93	0.92	0.93	0.92	0.93
78	Sierra College Boulevard	North of King Road	2	4	0.61	0.86	0.88	0.88	0.88	0.88	0.89	0.88	0.89	0.88	0.89	0.88	0.89
79	Wildcat Boulevard	North of Whitney Ranch Parkway	4	4	0.10	0.66	0.77	0.78	0.76	0.78	0.76	0.78	0.77	0.78	0.77	0.78	0.77
80	Sunset Boulevard	East of Fiddyment Boulevard	NA	6	NA	0.53	0.39	0.40	0.42	0.40	0.42	0.40	0.42	0.40	0.42	0.41	0.42
81	Sunset Boulevard	West of SR 65	2	6	0.44	1.55	1.23	1.23	1.25	1.23	1.26	1.23	1.26	1.23	1.26	1.24	1.26
82	Sunset Boulevard	East of SR 65	4	6	0.20	0.72	0.71	0.70	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
83	Sunset Boulevard	East of Blue Oaks Boulevard	6	6	0.18	0.80	0.81	0.81	0.81	0.81	0.82	0.81	0.82	0.81	0.82	0.81	0.82
84	Sunset Boulevard West	West of Brewer Road	2	2	0.02	0.53	0.28	0.29	0.33	0.24	0.30	0.27	0.30	0.22	0.27	0.23	0.27
85	Sunset Boulevard West	East of Brewer Road	2	2	0.02	0.44	0.22	0.22	0.22	0.18	0.19	0.17	0.19	0.15	0.16	0.15	0.16
86	Sunset Boulevard West	West of Fiddyment Road	2	2	0.02	0.33	0.28	0.26	0.35	0.22	0.34	0.24	0.34	0.23	0.32	0.23	0.32
87	Twelve Bridges Drive	West of SR 65	2	4	0.33	0.75	0.63	0.63	0.62	0.63	0.62	0.63	0.62	0.63	0.62	0.63	0.62
88	Twelve Bridges Drive	East of SR 65	4	6	0.09	0.77	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
89	Valley View Parkway	West of Park Drive	NA	2	NA	0.71	0.86	0.85	0.86	0.86	0.86	0.86	0.86	0.87	0.86	0.87	0.86
90	Walerga Road	South of Baseline Road	2	4	0.83	0.94	0.86	0.89	0.91	0.88	0.90	0.89	0.91	0.90	0.91	0.90	0.90
91	Walerga Road	North of Elverta Road	4	4	1.26	1.57	1.54	1.53	1.53	1.53	1.54	1.53	1.54	1.54	1.55	1.54	1.54
92	Washington Boulevard	South of Blue Oaks Boulevard	2	4	0.27	0.84	0.71	0.76	0.77	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
93	Washington Boulevard	North of Pleasant Grove Boulevard	2	4	0.34	1.15	1.01	1.04	1.06	1.04	1.05	1.04	1.05	1.04	1.05	1.04	1.05
94	Watt Avenue	North of Pleasant Grove Boulevard	NA	6	NA	0.37	0.33	0.52	0.35	0.52	0.35	0.51	0.35	0.54	0.35	0.49	0.35
95	Watt Avenue	North of Baseline Road	NA	6	NA	0.67	0.92	0.74	0.71	0.69	0.66	0.69	0.66	0.69	0.66	0.68	0.66
96	Watt Avenue	South of Baseline Road	2	6	0.39	0.76	0.87	0.79	0.77	0.79	0.77	0.78	0.77	0.79	0.77	0.78	0.77
97	Watt Avenue	North of Elverta Road	4	6	0.54	1.09	1.09	1.08	1.09	1.08	1.08	1.08	1.08	1.08	1.09	1.08	1.09
98	Watt Avenue	North of Elkhorn Boulevard	4	6	1.08	0.95	0.95	0.95	0.96	0.95	0.95	0.94	0.95	0.95	0.96	0.95	0.95
99	Watt Avenue	North of Airbase Drive	6	6	0.87	1.36	1.35	1.36	1.36	1.35	1.36	1.35	1.36	1.35	1.36	1.36	1.36
100	Watt Avenue	North of I-80	6	6	1.16	1.59	1.58	1.58	1.59	1.58	1.58	1.58	1.59	1.59	1.60	1.59	1.59
101	West Side Drive	North of Blue Oaks Boulevard	NA	6	NA	1.06	0.93	0.99	1.03	1.01	1.02	0.99	1.02	0.99	1.03	1.00	1.03
102	West Side Drive	North of Baseline Road	NA	6	NA	0.68	0.61	0.64	0.67	0.63	0.66	0.63	0.66	0.64	0.66	0.64	0.66
103	Whitney Ranch Parkway	East of SR 65	NA	6	NA	0.88	1.15	1.14	1.10	1.15	1.11	1.15	1.12	1.14	1.11	1.14	1.11

Table 32:
Estimated Volume/Capacity Ratios on Roadway Segments for Build Alternatives under Cumulative (2040) Conditions

Roadway		Segment	Travel Lanes[1]		2005[2] Volume/ Capacity Ratio	Estimated 2040 Roadway Segment Volume/Capacity Ratio (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2040		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
104	Whitney Ranch Parkway	East of University Avenue	NA	6	NA	0.49	0.71	0.71	0.68	0.72	0.69	0.72	0.69	0.71	0.69	0.71	0.69
105	Whitney Ranch Parkway	East of Wildcat Boulevard	NA	4	NA	0.41	0.54	0.54	0.53	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54
106	Woodcreek Oak Boulevard	South of Pleasant Grove Boulevard	2	4	0.33	0.88	0.81	0.79	0.81	0.78	0.80	0.79	0.80	0.79	0.81	0.79	0.81
107	16th Street	North of Baseline Road	NA	4	NA	1.20	1.12	1.17	1.17	1.15	1.18	1.15	1.17	1.16	1.18	1.16	1.18
108	16th Street	South of Baseline Road	NA	4	NA	0.79	0.78	0.78	0.77	0.77	0.77	0.77	0.77	0.78	0.78	0.78	0.78
109	16th Street	North of Elverta Road	2	2	0.02	1.00	0.97	0.97	0.97	0.97	0.99	0.97	0.98	0.98	0.99	1.00	0.98
110	Blue Oaks Boulevard	East of Lonetree Boulevard	4	4	0.26	0.60	0.54	0.54	0.57	0.54	0.57	0.54	0.57	0.55	0.57	0.55	0.57

Notes

Numbers in bold represent LOS F conditions
Shaded cells represent potential LOS impacts based on policies of jurisdictions and agencies in TASA.
[1] +2 = Plus two HOV lanes
[2] Levels of service on state highways are from 2004.
[3] Two general locations for a potential interchange on Placer Parkway at the future extension of Watt Avenue were identified with Alternative 1 – a north and a south location (see Figure 4 for assumed interchange locations)

Source: DKS Associates, 2006

Table 33:
Estimated Roadway Segment Level of Service for Build Alternatives under Cumulative (2040) Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Level of Service	Estimated 2040 Roadway Segment Levels of Service (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2040		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
1	SR 70/99	North of Howsley Road	4	4	A	D	D	D	D	D	D	D	D	D	D	D	D
2	SR 70/99	North of Sankey Road	4	4	A	E	E	D	D	D	D	D	D	D	D	D	D
3	SR 70/99	North of Riego Road	4	4	A	E	C	D	D	C	D	D	D	F	F	F	F
4	SR 70/99	North of Elverta Road	4	6	A	F	F	F	F	F	F	F	F	F	F	F	F
5	SR 70/99	North of I-5	4	6	B	F	F	F	F	F	F	F	F	F	F	F	F
6	SR 65	North of Twelve Bridge	4	6	A	F	F	F	F	F	F	F	F	F	F	F	F
7	SR 65	North of Sunset Boulevard	4	6	B	F	F	F	F	F	F	F	F	F	F	F	F
8	SR 65	North of Blue Oaks Boulevard	4	6	A	F	F	F	F	F	F	F	F	F	F	F	F
9	SR 65	North of Pleasant Grove Boulevard	4	6	F	F	F	F	F	F	F	F	F	F	F	F	F
10	SR 65	North of Stanford Ranch Road	4	6	F	F	F	F	F	F	F	F	F	F	F	F	F
11	SR 65	North of I-80	4	6	F	F	F	F	F	F	F	F	F	F	F	F	F
12	I-80	East of Rocklin Road	6	6	D	F	F	F	F	F	F	F	F	F	F	F	F
13	I-80	East of SR 65	6	6	F	F	F	F	F	F	F	F	F	F	F	F	F
14	I-80	East of Douglas Boulevard	6	6+2	F	F	F	F	F	F	F	F	F	F	F	F	F
15	I-80	East of Riverside Avenue	6	6+2	F	F	F	F	F	F	F	F	F	F	F	F	F
16	I-80	West of Riverside Avenue	8+2H	8+2	F	F	F	F	F	F	F	F	F	F	F	F	F
17	I-80	East of Northgate Boulevard	6	6+2	F	F	F	F	F	F	F	F	F	F	F	F	F
18	Athens Avenue	East of Fiddyment Road	2	4	B	E	B	B	C	B	C	B	C	B	C	B	C
19	Baseline Road	East of Pleasant Grove Road	2	6	D	F	F	F	F	F	F	F	F	F	F	F	F
20	Baseline Road	East of Brewer Road	2	6	D	E	C	D	E	D	E	D	E	D	E	D	E
21	Baseline Road	West of 16th Street	2	6	D	F	D	E	F	E	E	E	E	E	E	E	E
22	Baseline Road	West of Watt Avenue	2	6	D	F	E	E	F	F	F	F	F	F	F	F	F
23	Baseline Road	East of Watt Avenue	2	6	C	F	D	E	E	E	E	E	E	E	E	E	E
24	Baseline Road	West of Walerga Road	2	6	C	D	D	C	D	C	D	C	D	D	D	D	D
25	Baseline Road	East of Walerga Road	3	6	D	F	F	F	F	F	F	F	F	F	F	F	F
26	Baseline Road	West of Woodcreek Oaks Boulevard	3	4	D	F	F	F	F	F	F	F	F	F	F	F	F
27	Blue Oaks Boulevard	East of Watt Avenue	NA	6	NA	C	B	D	B	D	B	D	B	D	B	C	B
28	Blue Oaks Boulevard	West of Fiddyment Road	NA	6	NA	A	A	B	A	B	A	B	A	B	A	A	A
29	Blue Oaks Boulevard	East of Fiddyment Road	2	6	A	D	C	D	C	D	C	D	C	D	C	C	C
30	Blue Oaks Boulevard	West of SR 65	4	6	E	F	E	F	E	F	E	F	E	F	E	F	E
31	Brewer Road	North of Sunset Boulevard West	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
32	Brewer Road	South of Sunset Boulevard West	2	2	A	B	A	A	A	A	A	A	A	A	A	A	A
33	Brewer Road	North of Baseline Road	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
34	Catlett Road	East of SR 70/99	2	2	A	C	A	A	B	A	B	A	B	A	B	A	B
35	Catlett Road	East of Pleasant Grove Road	2	2	A	B	A	A	A	A	A	A	A	A	A	A	A
36	Cirby Way	East of Foothills Boulevard	4	6	F	F	F	F	F	F	F	F	F	F	F	F	F
37	East Catlett Road	East of Brewer Road	2	2	A	B	A	A	A	A	A	A	A	A	A	A	A
38	East Catlett Road	West of Fiddyment Road	2	2	A	D	D	D	D	D	D	D	D	D	D	D	D
39	Dowd Road	North of Sunset Boulevard West	NA	6	NA	C	A	B	B	B	B	B	B	B	B	B	B

Table 33:
Estimated Roadway Segment Level of Service for Build Alternatives under Cumulative (2040) Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Level of Service	Estimated 2040 Roadway Segment Levels of Service (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2040		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
40	Dryer Road West	South of Baseline Road	NA	4	NA	A	B	B	B	B	B	B	B	B	B	B	B
41	Elkhorn Boulevard	East of SR 70/99	2	6	E	F	F	F	F	F	F	F	F	F	F	F	F
42	Elkhorn Boulevard	West of Watt Avenue	4	4	C	F	F	F	F	F	F	F	F	F	F	F	F
43	Elkhorn Boulevard	East of Watt Avenue	4	6	B	D	C	D	D	D	D	D	D	D	D	D	D
44	Elkhorn Boulevard	West of Walerga Road	4	6	C	D	D	D	D	D	D	D	D	D	D	D	D
45	Elverta Road	East of SR 70/99	2	4	A	F	F	F	F	F	F	F	F	F	F	F	F
46	Elverta Road	East of Rio Linda Boulevard	2	4	A	F	F	F	F	F	F	F	F	F	F	F	F
47	Elverta Road	West of Watt Avenue	2	4	F	F	F	F	F	F	F	F	F	F	F	F	F
48	Fiddyment Road	North of Sunset Boulevard West	2	6	A	C	C	C	C	C	C	C	C	C	C	C	C
49	Fiddyment Road	South of Sunset Boulevard	2	6	B	D	D	D	D	D	E	D	E	D	E	D	D
50	Fiddyment Road	North of Blue Oaks Boulevard	2	4	A	F	E	E	F	E	F	E	F	E	F	E	F
51	Fiddyment Road	North of Pleasant Grove Boulevard	2	4	B	F	D	E	F	E	F	E	F	E	F	E	F
52	Fiddyment Road	North of Baseline Road	2	6	F	C	B	B	C	B	C	C	C	C	C	C	C
53	Foothills Boulevard	North of Blue Oaks Boulevard	4	4	A	F	E	E	E	E	E	E	E	E	E	E	E
54	Foothills Boulevard	South of Roseville Parkway	4	6	A	C	B	C	C	C	C	C	C	C	C	C	C
55	Foothills Boulevard	North of Baseline Road	4	6	C	E	E	E	E	E	E	E	E	E	E	E	E
56	Foothills Boulevard	South of Baseline Road	4	6	D	F	F	F	F	F	F	F	F	F	F	F	F
57	Howsley Road	East of SR 70/99	2	2	A	C	B	B	B	B	B	B	B	B	B	B	B
58	Industrial Avenue	North of Athens Avenue	2	4	A	E	B	B	B	B	B	B	B	B	B	B	B
59	Industrial	North of Roseville Parkway	2	2	A	F	F	F	F	F	F	F	F	F	F	F	F
60	Junction Boulevard	East of Woodcreek Oaks Boulevard	4	4	A	A	A	A	A	A	A	A	A	A	A	A	A
61	Moore Road	West of Brewer Road	2	2	A	A	A	A	A	A	A	A	A	A	A	A	A
62	Nicolaus Road	East of Brewer Road	2	2	A	C	B	B	C	B	B	B	B	B	B	B	B
63	Pacific Street	West of Sunset Boulevard	4	6	A	A	A	A	A	A	A	A	A	A	A	A	A
64	PFE Road	East of Watt Avenue	2	4	A	A	A	A	A	A	A	A	A	A	A	A	A
65	Phillip Road	East of Brewer Road	2	2	A	B	A	A	A	A	A	A	A	A	A	A	A
66	Pleasant Grove Boulevard	West of Fiddyment Road	NA	4	NA	F	F	F	F	F	F	F	F	F	F	F	F
67	Pleasant Grove Boulevard	East of Fiddyment Road	4	4	A	F	F	F	F	F	F	F	F	F	F	F	F
68	Pleasant Grove Boulevard	East of Woodcreek Oaks Boulevard	4	4	A	F	F	F	F	F	F	F	F	F	F	F	F
69	Pleasant Grove Boulevard	West of SR 65	6	6	C	F	F	F	F	F	F	F	F	F	F	F	F
70	Pleasant Grove Road	North of Sankey Road	2	4	A	B	A	A	A	A	A	A	A	A	A	A	A
71	Pleasant Grove Road	North of Riego Road	2	4	A	C	C	C	C	C	C	C	C	C	C	C	C
72	Pleasant Grove Road	South of Baseline Road	2	2	A	E	E	E	E	E	E	E	E	E	E	E	E
73	Riego Road	East of SR 70/99	2	6	A	F	F	F	F	F	F	F	F	F	F	F	F
74	Riego Road	West of Pleasant Grove Road	2	6	A	F	E	F	F	F	F	F	F	F	F	F	F

Table 33:
Estimated Roadway Segment Level of Service for Build Alternatives under Cumulative (2040) Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Level of Service	Estimated 2040 Roadway Segment Levels of Service (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2040		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
75	Sankey Road	East of SR 70/99	2	4	A	C	A	A	A	A	A	A	A	A	A	A	A
76	Sankey Road	West of Pleasant Grove Road	2	4	A	C	A	A	B	A	B	A	B	B	C	B	C
77	Sierra College Boulevard	South of English Colony Way	2	4	B	D	E	E	E	E	E	E	E	E	E	E	E
78	Sierra College Boulevard	North of King Road	2	4	B	D	D	D	D	D	D	D	D	D	D	D	D
79	Wildcat Boulevard	North of Whitney Ranch Parkway	4	4	A	B	C	C	C	C	C	C	C	C	C	C	C
80	Sunset Boulevard	East of Fiddyment Boulevard	NA	6	NA	A	A	A	A	A	A	A	A	A	A	A	A
81	Sunset Boulevard	West of SR 65	2	6	A	F	F	F	F	F	F	F	F	F	F	F	F
82	Sunset Boulevard	East of SR 65	4	6	A	C	C	C	C	C	C	C	C	C	C	C	C
83	Sunset Boulevard	East of Blue Oaks Boulevard	6	6	A	D	D	D	D	D	D	D	D	D	D	D	D
84	Sunset Boulevard West	West of Brewer Road	2	2	A	D	C	C	C	C	C	C	C	B	C	B	C
85	Sunset Boulevard West	East of Brewer Road	2	2	A	D	B	B	B	B	B	B	B	B	B	B	B
86	Sunset Boulevard West	West of Fiddyment Road	2	2	A	C	C	C	C	B	C	C	C	B	C	B	C
87	Twelve Bridges Drive	West of SR 65	2	4	A	C	B	B	B	B	B	B	B	B	B	B	B
88	Twelve Bridges Drive	East of SR 65	4	6	A	C	C	C	C	C	C	C	C	C	C	C	C
89	Valley View Parkway	West of Park Drive	NA	2	NA	C	D	D	D	D	D	D	D	D	D	D	D
90	Walerga Road	South of Baseline Road	2	4	D	E	D	D	E	D	E	D	E	D	E	D	E
91	Walerga Road	North of Elverta Road	4	4	F	F	F	F	F	F	F	F	F	F	F	F	F
92	Washington Boulevard	South of Blue Oaks Boulevard	2	4	A	D	C	C	C	C	C	C	C	C	C	C	C
93	Washington Boulevard	North of Pleasant Grove Boulevard	2	4	A	F	F	F	F	F	F	F	F	F	F	F	F
94	Watt Avenue	North of Pleasant Grove Boulevard	NA	6	NA	A	A	A	A	A	A	A	A	A	A	A	A
95	Watt Avenue	North of Baseline Road	NA	6	NA	B	E	C	C	B	B	B	B	B	B	B	B
96	Watt Avenue	South of Baseline Road	2	6	A	C	D	C	C	C	C	C	C	C	C	C	C
97	Watt Avenue	North of Elverta Road	4	6	A	F	F	F	F	F	F	F	F	F	F	F	F
98	Watt Avenue	North of Elkhorn Boulevard	4	6	F	E	E	E	E	E	E	E	E	E	E	E	E
99	Watt Avenue	North of Airbase Drive	6	6	D	F	F	F	F	F	F	F	F	F	F	F	F
100	Watt Avenue	North of I-80	6	6	F	F	F	F	F	F	F	F	F	F	F	F	F
101	West Side Drive	North of Blue Oaks Boulevard	NA	6	NA	F	E	E	F	F	F	E	F	E	F	E	F
102	West Side Drive	North of Baseline Road	NA	6	NA	B	B	B	B	B	B	B	B	B	B	B	B
103	Whitney Ranch Parkway	East of SR 65	NA	6	NA	D	F	F	F	F	F	F	F	F	F	F	F
104	Whitney Ranch Parkway	East of University Avenue	NA	6	NA	A	C	C	B	C	B	C	B	C	B	C	B
105	Whitney Ranch Parkway	East of Wildcat Boulevard	NA	4	NA	A	A	A	A	A	A	A	A	A	A	A	A
106	Woodcreek Oak Boulevard	South of Pleasant Grove Boulevard	2	4	A	D	D	C	D	C	D	C	D	C	D	C	D

Table 33:
Estimated Roadway Segment Level of Service for Build Alternatives under Cumulative (2040) Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Level of Service	Estimated 2040 Roadway Segment Levels of Service (with and without Potential Watt Interchange)											
							Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
			2005	2040		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
107	16th Street	North of Baseline Road	NA	4	NA	F	F	F	F	F	F	F	F	F	F	F	F
108	16th Street	South of Baseline Road	NA	4	NA	C	C	C	C	C	C	C	C	C	C	C	C
109	16th Street	North of Elverta Road	2	2	A	F	E	E	E	E	E	E	E	E	E	E	E
110	Blue Oaks Boulevard	East of Lonetree Boulevard	4	4	A	B	A	A	A	A	A	A	A	A	A	A	A

Notes

Shaded cells represent potential LOS impacts based on policies of jurisdictions and agencies in analysis study area.
[1] +2 = Plus two HOV lanes
[2] Levels of service on state highways are from 2004.
[3] Two general locations for a potential interchange on Placer Parkway at the future extension of Watt Avenue were identified with Alternative 1 – a north and a south location (see Figure 4 for assumed interchange locations)

Source: DKS Associates, 2006

Tables 34 and 35 show the projected VMT on congested roadways during commute periods under the 2040 conditions for the TASA (shown in Figure 7). Tables 36 and 37 show this same information but as percentages of the total VMT in the TASA.

Tables 38 and 39 show the projected VMT on congested roadways during commute periods under the 2040 conditions for the AFA (also shown in Figure 7). Tables 40 and 41 show this same information but as percentages of the total VMT in the AFA.

VMT was summarized in those tables separately for roadways that would operate at LOS F for 1 hour, 2 hours, and for 3 or more hours. Key conclusions that can be drawn from this table are:

- Compared to the No-Build Alternative, Alternatives 1 through 5 would increase the total VMT in the TASA.

- Compared to the No-Build Alternative, Alternatives 1 through 5 would reduce the amount of VMT on congested roadways, especially in the AFA. For each alternative, the scenarios with a Watt Avenue interchange would provide a larger reduction in the amount of VMT on congested roadways than without this interchange.

Vehicle delay can be measured in a number of ways. For this analysis, vehicle delay was defined as the additional travel time that vehicle would take to travel on a roadway segment beyond the time that it would take under a given LOS threshold. The added travel time was measured for three LOS thresholds:

- > LOS D – the added travel time for vehicles faced with LOS E and F conditions
- > LOS E – the added travel time for vehicles faced with LOS F conditions
- > LOS F2 – the added travel time for vehicles faced with LOS F3+ conditions.

Table 42 shows the projected vehicle delay during the 3-hour a.m. and 3-hour p.m. peak commute periods combined under the 2040 conditions for the TASA (shown in Figure 7). Table 43 shows this same information for the AFA (also shown in Figure 7). These tables indicate that Placer Parkway would significantly reduce vehicle hours of delay, especially in the AFA. Vehicle delay would be lower for scenarios with a Watt Avenue interchange than without that interchange.

5.3.4 Traffic Effects of Potential Interchange at Watt Avenue

As discussed in Section 2.4, an extension of Watt Avenue to Placer Parkway (from Baseline Road to a new Blue Oaks Boulevard Extension) is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto the Placer Parkway via a new interchange (see Figure 4). A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. However, the connection of Placer Parkway to a potential Watt Avenue interchange could affect future travel patterns in the area, including use of the Parkway. Based on direction from previous planning studies, this Technical Study and the Tier 1 EIS/EIR evaluate each corridor alternative with and without a Watt Avenue interchange.

The changes in traffic volumes due to each corridor alternative with and without a potential Watt Avenue interchange are described in Tables 27 through 30 and Figures 21 through 31. A review of these tables and figures indicates that a Watt Avenue interchange would increase volumes on some roadway segments and decrease volumes on others. The effects of a Watt Avenue interchange are summarized below.

The connection of Placer Parkway to a potential Watt Avenue interchange would result in higher traffic volumes on some roadways in the TASA than the same corridor alternative without that interchange. The roadway segments that would have the most substantial increase in traffic volume due to a Watt Avenue interchange are the following:

Table 34:
Estimated 2040 VMT by Level of Service Category – TASA

LOS	Facility Type	Estimated 2040 of VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within Analysis Area[1]											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South	With Watt North	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
A-C	Freeways	829,955	1,347,512	1,242,323	1,188,354	1,288,781	1,242,900	1,269,753	1,240,058	1,288,282	1,216,600	1,258,252	1,237,994
	Arterials	4,042,124	4,158,935	4,199,916	4,167,627	4,173,356	4,158,448	4,184,526	4,152,311	4,192,580	4,147,769	4,175,327	4,162,094
	Subtotal	4,872,079	5,506,447	5,442,239	5,355,981	5,462,137	5,401,348	5,454,279	5,392,369	5,480,862	5,364,369	5,433,579	5,400,088
D	Freeways	305,699	334,793	366,477	333,796	350,654	324,335	338,269	323,353	316,444	326,997	339,858	307,455
	Arterials	926,242	963,806	898,735	890,341	920,669	880,087	891,097	876,812	868,698	887,789	890,103	864,501
	Subtotal	1,231,941	1,298,599	1,265,212	1,224,137	1,271,323	1,204,422	1,229,366	1,200,165	1,185,142	1,214,786	1,229,961	1,171,956
E	Freeways	356,838	584,446	538,413	498,666	534,231	498,256	560,961	507,786	528,840	518,880	562,862	521,935
	Arterials	856,620	785,257	759,963	836,926	763,256	829,034	791,627	836,733	776,253	834,073	785,619	833,812
	Subtotal	1,213,458	1,369,703	1,298,376	1,335,592	1,297,487	1,327,290	1,352,588	1,344,519	1,305,093	1,352,953	1,348,481	1,355,747
F1	Freeways	825,378	721,889	726,048	753,559	761,076	763,620	733,166	776,692	795,610	793,326	765,001	779,338
	Arterials	942,283	817,929	902,456	809,422	869,671	850,655	864,941	830,899	893,909	821,683	853,806	838,520
	Subtotal	1,767,661	1,539,818	1,628,504	1,562,981	1,630,747	1,614,275	1,598,107	1,607,591	1,689,519	1,615,009	1,618,807	1,617,858
F2	Freeways	344,473	319,215	340,579	378,052	314,539	359,648	334,426	348,398	331,115	350,775	312,879	358,398
	Arterials	316,309	319,410	303,368	350,380	318,511	346,203	320,305	358,969	312,969	346,464	329,581	328,409
	Subtotal	660,782	638,625	643,947	728,432	633,050	705,851	654,731	707,367	644,084	697,239	642,460	686,807
F3	Freeways	1,026,117	976,374	975,727	950,470	965,970	952,727	965,849	948,129	947,271	936,772	960,777	930,072
	Arterials	1,262,369	1,024,407	1,064,518	1,117,157	1,072,647	1,091,133	1,071,670	1,101,328	1,078,747	1,120,946	1,097,925	1,130,622
	Subtotal	2,288,486	2,000,781	2,040,245	2,067,627	2,038,617	2,043,860	2,037,519	2,049,457	2,026,018	2,057,718	2,058,702	2,060,694
All	Freeways	3,688,460	4,284,229	4,189,567	4,102,897	4,215,251	4,141,486	4,202,424	4,144,416	4,207,562	4,143,350	4,199,629	4,135,192
	Arterials	8,345,947	8,069,744	8,128,956	8,171,853	8,118,110	8,155,560	8,124,166	8,157,052	8,123,156	8,158,724	8,132,361	8,157,958
	Total	12,034,407	12,353,973	12,318,523	12,274,750	12,333,361	12,297,046	12,326,590	12,301,468	12,330,718	12,302,074	12,331,990	12,293,150

See Figure 7 for TASA Source: DKS Associates, 2006

Table 35:
Summary of Estimated 2040 VMT by Level of Service Category – TASA

LOS	Facility Type	Estimated 2040 VMT by Level of Service Category (3-Hour a.m. and 3-Hour p.m. Commute Periods)											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South	With Watt North	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
A-E	Freeways	1,492,492	2,266,751	2,147,213	2,020,816	2,173,666	2,065,491	2,168,983	2,071,197	2,133,566	2,062,477	2,160,972	2,067,384
	Arterials	5,824,986	5,907,998	5,858,614	5,894,894	5,857,281	5,867,569	5,867,250	5,865,856	5,837,531	5,869,631	5,851,049	5,860,407
	Subtotal	7,317,478	8,174,749	8,005,827	7,915,710	8,030,947	7,933,060	8,036,233	7,937,053	7,971,097	7,932,108	8,012,021	7,927,791
F	Freeways	2,195,968	2,017,478	2,042,354	2,082,081	2,041,585	2,075,995	2,033,441	2,073,219	2,073,996	2,080,873	2,038,657	2,067,808
	Arterials	2,520,961	2,161,746	2,270,342	2,276,959	2,260,829	2,287,991	2,256,916	2,291,196	2,285,625	2,289,093	2,281,312	2,297,551
	Subtotal	4,716,929	4,179,224	4,312,696	4,359,040	4,302,414	4,363,986	4,290,357	4,364,415	4,359,621	4,369,966	4,319,969	4,365,359
Total	Freeways	3,688,460	4,284,229	4,189,567	4,102,897	4,215,251	4,141,486	4,202,424	4,144,416	4,207,562	4,143,350	4,199,629	4,135,192
	Arterials	8,345,947	8,069,744	8,128,956	8,171,853	8,118,110	8,155,560	8,124,166	8,157,052	8,123,156	8,158,724	8,132,361	8,157,958
	Subtotal	12,034,407	12,353,973	12,318,523	12,274,750	12,333,361	12,297,046	12,326,590	12,301,468	12,330,718	12,302,074	12,331,990	12,293,150

See Figure 7 for TASA Source: DKS Associates, 2006

Table 36:
Estimated 2040 VMT by Level of Service Category – TASA

LOS	Facility Type	Percentage of VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) with Analysis Area[1]											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South	With Watt North	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
A-C	Freeways	22.5%	31.5%	29.7%	29.0%	30.6%	30.0%	30.2%	29.9%	30.6%	29.4%	30.0%	29.9%
	Arterials	48.4%	51.5%	51.7%	51.0%	51.4%	51.0%	51.5%	50.9%	51.6%	50.8%	51.3%	51.0%
	Subtotal	40.5%	44.6%	44.2%	43.6%	44.3%	43.9%	44.2%	43.8%	44.4%	43.6%	44.1%	43.9%
D	Freeways	8.3%	7.8%	8.7%	8.1%	8.3%	7.8%	8.0%	7.8%	7.5%	7.9%	8.1%	7.4%
	Arterials	11.1%	11.9%	11.1%	10.9%	11.3%	10.8%	11.0%	10.7%	10.7%	10.9%	10.9%	10.6%
	Subtotal	10.2%	10.5%	10.3%	10.0%	10.3%	9.8%	10.0%	9.8%	9.6%	9.9%	10.0%	9.5%
E	Freeways	9.7%	13.6%	12.9%	12.2%	12.7%	12.0%	13.3%	12.3%	12.6%	12.5%	13.4%	12.6%
	Arterials	10.3%	9.7%	9.3%	10.2%	9.4%	10.2%	9.7%	10.3%	9.6%	10.2%	9.7%	10.2%
	Subtotal	10.1%	11.1%	10.5%	10.9%	10.5%	10.8%	11.0%	10.9%	10.6%	11.0%	10.9%	11.0%
F1	Freeways	22.4%	16.8%	17.3%	18.4%	18.1%	18.4%	17.4%	18.7%	18.9%	19.1%	18.2%	18.8%
	Arterials	11.3%	10.1%	11.1%	9.9%	10.7%	10.4%	10.6%	10.2%	11.0%	10.1%	10.5%	10.3%
	Subtotal	14.7%	12.5%	13.2%	12.7%	13.2%	13.1%	13.0%	13.1%	13.7%	13.1%	13.1%	13.2%
F2	Freeways	9.3%	7.5%	8.1%	9.2%	7.5%	8.7%	8.0%	8.4%	7.9%	8.5%	7.5%	8.7%
	Arterials	3.8%	4.0%	3.7%	4.3%	3.9%	4.2%	3.9%	4.4%	3.9%	4.2%	4.1%	4.0%
	Subtotal	5.5%	5.2%	5.2%	5.9%	5.1%	5.7%	5.3%	5.8%	5.2%	5.7%	5.2%	5.6%
F3	Freeways	27.8%	22.8%	23.3%	23.2%	22.9%	23.0%	23.0%	22.9%	22.5%	22.6%	22.9%	22.5%
	Arterials	15.1%	12.7%	13.1%	13.7%	13.2%	13.4%	13.2%	13.5%	13.3%	13.7%	13.5%	13.9%
	Subtotal	19.0%	16.2%	16.6%	16.8%	16.5%	16.6%	16.5%	16.7%	16.4%	16.7%	16.7%	16.8%
All	Freeways	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Arterials	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

See Figure 7 for TASA Source: DKS Associates, 2006

Table 37:
Summary of Estimated 2040 VMT by Level of Service Category – TASA

LOS	Facility Type	Estimated 2040 VMT by Level of Service Category (3-Hour a.m. and 3-Hour p.m. Commute Periods)											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South	With Watt North	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
A-E	Freeways	40.5%	52.9%	51.3%	49.3%	51.6%	49.9%	51.6%	50.0%	50.7%	49.8%	51.5%	50.0%
	Arterials	69.8%	73.2%	72.1%	72.1%	72.2%	71.9%	72.2%	71.9%	71.9%	71.9%	71.9%	71.8%
	Subtotal	60.8%	66.2%	65.0%	64.5%	65.1%	64.5%	65.2%	64.5%	64.6%	64.5%	65.0%	64.5%
F	Freeways	59.5%	47.1%	48.7%	50.7%	48.4%	50.1%	48.4%	50.0%	49.3%	50.2%	48.5%	50.0%
	Arterials	30.2%	26.8%	27.9%	27.9%	27.8%	28.1%	27.8%	28.1%	28.1%	28.1%	28.1%	28.2%
	Subtotal	39.2%	33.8%	35.0%	35.5%	34.9%	35.5%	34.8%	35.5%	35.4%	35.5%	35.0%	35.5%
Total	Freeways	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Arterials	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Subtotal	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

See Figure 7 for TASA
Source: DKS Associates, 2006

Table 38:
Estimated 2040 VMT by Level of Service Category – Analysis Focus Area

LOS	Facility Type	Percentage of VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) with Analysis Area[1]											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South	With Watt North	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
A-C	Freeways	72,932	596,507	545,685	491,067	573,193	522,427	554,958	528,277	570,687	506,630	560,904	503,631
	Arterials	1,399,909	1,501,748	1,546,710	1,498,043	1,520,827	1,511,530	1,538,763	1,503,171	1,542,912	1,504,859	1,532,035	1,508,849
	Subtotal	1,472,841	2,098,255	2,092,395	1,989,110	2,094,020	2,033,957	2,093,721	2,031,448	2,113,599	2,011,489	2,092,939	2,012,480
D	Freeways	84,086	108,893	91,577	49,550	94,527	48,124	87,994	49,627	61,228	61,312	68,122	61,191
	Arterials	351,236	409,962	346,555	362,944	364,323	329,411	337,465	339,213	321,547	337,256	339,419	325,976
	Subtotal	435,322	518,855	438,132	412,494	458,850	377,535	425,459	388,840	382,775	398,568	407,541	387,167
E	Freeways	74,137	142,033	135,609	106,695	136,559	109,474	146,777	108,243	128,140	120,566	161,584	123,951
	Arterials	351,069	293,190	281,415	321,276	282,273	331,115	290,286	330,665	288,617	324,367	291,875	328,826
	Subtotal	425,206	435,223	417,024	427,971	418,832	440,589	437,063	438,908	416,757	444,933	453,459	452,777
F1	Freeways	129,239	98,298	85,982	126,409	97,854	126,711	98,930	126,879	139,423	130,522	99,434	126,683
	Arterials	369,020	255,104	305,425	256,037	304,417	260,168	301,613	255,056	292,778	266,020	289,434	265,401
	Subtotal	498,259	353,402	391,407	382,446	402,271	386,879	400,543	381,935	432,201	396,542	388,868	392,084
F2	Freeways	64,236	19,678	31,687	37,549	19,652	37,671	19,720	37,628	19,673	37,607	19,635	37,571
	Arterials	100,864	101,343	93,932	116,956	83,320	115,838	99,085	118,605	114,665	103,024	107,176	103,291
	Subtotal	165,100	121,021	125,619	154,505	102,972	153,509	118,805	156,233	134,338	140,631	126,811	140,862
F3	Freeways	77,739	133,115	132,723	125,428	133,226	126,076	133,179	126,240	128,361	121,261	128,110	121,086
	Arterials	341,847	173,962	197,187	240,346	207,161	236,909	199,276	236,732	204,186	245,092	206,947	248,444
	Subtotal	419,586	307,077	329,910	365,774	340,387	362,985	332,455	362,972	332,547	366,353	335,057	369,530
All	Freeways	502,369	1,098,524	1,023,263	936,698	1,055,011	970,483	1,041,558	976,894	1,047,512	977,898	1,037,789	974,113
	Arterials	2,913,945	2,735,309	2,771,224	2,795,602	2,762,321	2,784,971	2,766,488	2,783,442	2,764,705	2,780,618	2,766,886	2,780,787
	Total	3,416,314	3,833,833	3,794,487	3,732,300	3,817,332	3,755,454	3,808,046	3,760,336	3,812,217	3,758,516	3,804,675	3,754,900

See Figure 7 for Analysis Focus Area Source: DKS Associates, 2006

Table 39:
Estimated 2040 VMT by Level of Service Category – Analysis Focus Area

LOS	Facility Type	Estimated 2040 VMT by Level of Service Category (3-Hour a.m. and 3-Hour p.m. Commute Periods)											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South	With Watt North	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
A-E	Freeways	231,155	847,433	772,871	647,312	804,279	680,025	789,729	686,147	760,055	688,508	790,610	688,773
	Arterials	2,102,214	2,204,900	2,174,680	2,182,263	2,167,423	2,172,056	2,166,514	2,173,049	2,153,076	2,166,482	2,163,329	2,163,651
	Subtotal	2,333,369	3,052,333	2,947,551	2,829,575	2,971,702	2,852,081	2,956,243	2,859,196	2,913,131	2,854,990	2,953,939	2,852,424
F	Freeways	271,214	251,091	250,392	289,386	250,732	290,458	251,829	290,747	287,457	289,390	247,179	285,340
	Arterials	811,731	530,409	596,544	613,339	594,898	612,915	599,974	610,393	611,629	614,136	603,557	617,136
	Subtotal	1,082,945	781,500	846,936	902,725	845,630	903,373	851,803	901,140	899,086	903,526	850,736	902,476
Total	Freeways	502,369	1,098,524	1,023,263	936,698	1,055,011	970,483	1,041,558	976,894	1,047,512	977,898	1,037,789	974,113
	Arterials	2,913,945	2,735,309	2,771,224	2,795,602	2,762,321	2,784,971	2,766,488	2,783,442	2,764,705	2,780,618	2,766,886	2,780,787
	Subtotal	3,416,314	3,833,833	3,794,487	3,732,300	3,817,332	3,755,454	3,808,046	3,760,336	3,812,217	3,758,516	3,804,675	3,754,900

See Figure 7 for Analysis Focus Area Source: DKS Associates, 2006

Table 40:
Estimated 2040 VMT by Level of Service Category – Analysis Focus Area

LOS	Facility Type	Percentage of VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) with Analysis Area[1]											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South	With Watt North	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
A-C	Freeways	14.5%	54.3%	53.3%	52.4%	54.3%	53.8%	53.3%	54.1%	54.5%	51.8%	54.0%	51.7%
	Arterials	48.0%	54.9%	55.8%	53.6%	55.1%	54.3%	55.6%	54.0%	55.8%	54.1%	55.4%	54.3%
	Subtotal	43.1%	54.7%	55.1%	53.3%	54.9%	54.2%	55.0%	54.0%	55.4%	53.5%	55.0%	53.6%
D	Freeways	16.7%	9.9%	8.9%	5.3%	9.0%	5.0%	8.4%	5.1%	5.8%	6.3%	6.6%	6.3%
	Arterials	12.1%	15.0%	12.5%	13.0%	13.2%	11.8%	12.2%	12.2%	11.6%	12.1%	12.3%	11.7%
	Subtotal	12.7%	13.5%	11.5%	11.1%	12.0%	10.1%	11.2%	10.3%	10.0%	10.6%	10.7%	10.3%
E	Freeways	14.8%	12.9%	13.3%	11.4%	12.9%	11.3%	14.1%	11.1%	12.2%	12.3%	15.6%	12.7%
	Arterials	12.0%	10.7%	10.2%	11.5%	10.2%	11.9%	10.5%	11.9%	10.4%	11.7%	10.5%	11.8%
	Subtotal	12.4%	11.4%	11.0%	11.5%	11.0%	11.7%	11.5%	11.7%	10.9%	11.8%	11.9%	12.1%
F1	Freeways	25.7%	8.9%	8.4%	13.5%	9.3%	13.1%	9.5%	13.0%	13.3%	13.3%	9.6%	13.0%
	Arterials	12.7%	9.3%	11.0%	9.2%	11.0%	9.3%	10.9%	9.2%	10.6%	9.6%	10.5%	9.5%
	Subtotal	14.6%	9.2%	10.3%	10.2%	10.5%	10.3%	10.5%	10.2%	11.3%	10.6%	10.2%	10.4%
F2	Freeways	12.8%	1.8%	3.1%	4.0%	1.9%	3.9%	1.9%	3.9%	1.9%	3.8%	1.9%	3.9%
	Arterials	3.5%	3.7%	3.4%	4.2%	3.0%	4.2%	3.6%	4.3%	4.1%	3.7%	3.9%	3.7%
	Subtotal	4.8%	3.2%	3.3%	4.1%	2.7%	4.1%	3.1%	4.2%	3.5%	3.7%	3.3%	3.8%
F3	Freeways	15.5%	12.1%	13.0%	13.4%	12.6%	13.0%	12.8%	12.9%	12.3%	12.4%	12.3%	12.4%
	Arterials	11.7%	6.4%	7.1%	8.6%	7.5%	8.5%	7.2%	8.5%	7.4%	8.8%	7.5%	8.9%
	Subtotal	12.3%	8.0%	8.7%	9.8%	8.9%	9.7%	8.7%	9.7%	8.7%	9.7%	8.8%	9.8%
All	Freeways	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Arterials	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

See Figure 7 for Analysis Focus Area Source: DKS Associates, 2006

Table 41:
Estimated 2040 VMT by Level of Service Category – Analysis Focus Area

LOS	Facility Type	Estimated 2040 VMT by Level of Service Category (3-Hour a.m. and 3-Hour p.m. Commute Periods)											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South	With Watt North	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
A-E	Freeways	46.0%	77.1%	75.5%	69.1%	76.2%	70.1%	75.8%	70.2%	72.6%	70.4%	76.2%	70.7%
	Arterials	72.1%	80.6%	78.5%	78.1%	78.5%	78.0%	78.3%	78.1%	77.9%	77.9%	78.2%	77.8%
	Subtotal	68.3%	79.6%	77.7%	75.8%	77.8%	75.9%	77.6%	76.0%	76.4%	76.0%	77.6%	76.0%
F	Freeways	54.0%	22.9%	24.5%	30.9%	23.8%	29.9%	24.2%	29.8%	27.4%	29.6%	23.8%	29.3%
	Arterials	27.9%	19.4%	21.5%	21.9%	21.5%	22.0%	21.7%	21.9%	22.1%	22.1%	21.8%	22.2%
	Subtotal	31.7%	20.4%	22.3%	24.2%	22.2%	24.1%	22.4%	24.0%	23.6%	24.0%	22.4%	24.0%
Total	Freeways	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Arterials	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Subtotal	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

See Figure 7 for Analysis Focus Area Source: DKS Associates, 2006

Table 42:
Estimated 2040 Vehicle Hours of Delay within TASA[4]

LOS	Facility Type	Estimated 2040 Vehicle Hours of Delay (3-Hour a.m. and 3-Hour p.m. Commute Periods)											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
>D[1]	Freeways	25,426	25,380	25,626	25,240	25,419	25,708	25,447	25,460	25,323	25,223	25,479	24,850
	Arterials	75,349	65,929	67,835	69,379	67,590	69,369	67,487	69,640	67,727	70,270	68,158	70,079
	Total	100,775	91,309	93,461	94,619	93,009	95,077	92,934	95,100	93,050	95,493	93,637	94,929
>E[2]	Freeways	18,939	18,988	19,210	18,822	19,023	19,263	19,039	19,031	18,897	18,792	19,046	18,438
	Arterials	62,261	54,111	55,843	57,181	55,554	57,187	55,487	57,448	55,709	58,093	56,125	57,897
	Total	81,200	73,099	75,053	76,003	74,577	76,450	74,526	76,479	74,606	76,885	75,171	76,335
>F2[3]	Freeways	12,485	12,645	12,812	12,396	12,664	12,795	12,654	12,572	12,543	12,374	12,647	12,039
	Arterials	49,842	43,069	44,464	45,578	44,205	45,668	44,168	45,901	44,323	46,511	44,675	46,312
	Total	62,327	55,714	57,276	57,974	56,869	58,463	56,822	58,473	56,866	58,885	57,322	58,351

Notes:
[1] > LOS D is the added travel time for vehicles faced with LOS E and F conditions in the TASA during the 3-hour a.m. and p.m. commute periods
[2] >LOS E is the added travel time for vehicles faced with LOS F conditions in the TASA during the 3-hour a.m. and p.m. commute periods
[3] > LOS F2 is the added travel time for vehicles faced with LOS F3+ conditions in the TASA during the 3-hour a.m. and p.m. commute periods
[4] See Figure 7 for TASA

Source: DKS Associates, 2006

Table 43:
Estimated 2040 Vehicle Hours of Delay within Analysis Focus Area[4]

LOS	Facility Type	Estimated 2040 VH Delay by Level of Service Category (3-Hour a.m. and 3-Hour p.m. Commute Periods)											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South[3]	With Watt North[3]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
>D	Freeways	2,770	3,793	3,719	3,563	3,819	3,719	3,878	3,753	3,742	3,573	3,715	3,525
	Arterials	17,317	10,989	11,881	13,056	11,912	13,090	11,878	12,995	12,298	13,377	12,107	13,345
	Total	20,087	14,782	15,600	16,619	15,731	16,809	15,756	16,748	16,040	16,950	15,822	16,870
>E	Freeways	1,805	2,862	2,792	2,624	2,885	2,766	2,932	2,797	2,775	2,614	2,750	2,571
	Arterials	12,952	7,634	8,389	9,415	8,407	9,462	8,385	9,374	8,786	9,755	8,609	9,718
	Total	14,757	10,496	11,181	12,039	11,292	12,228	11,317	12,171	11,561	12,369	11,359	12,289
>F2	Freeways	1,029	1,998	1,940	1,722	2,036	1,840	2,037	1,865	1,901	1,704	1,856	1,666
	Arterials	9,308	5,087	5,581	6,478	5,611	6,541	5,603	6,465	5,940	6,823	5,779	6,771
	Total	10,337	7,085	7,521	8,200	7,647	8,381	7,640	8,330	7,841	8,527	7,635	8,437

Notes:
[1] > LOS D is the added travel time for vehicles faced with LOS E and F conditions in the TASA during the 3-hour a.m. and p.m. commute periods
[2] >LOS E is the added travel time for vehicles faced with LOS F conditions in the TASA during the 3-hour a.m. and p.m. commute periods
[3] > LOS F2 is the added travel time for vehicles faced with LOS F3+ conditions in the TASA during the 3-hour a.m. and p.m. commute periods
[4] See Figure 7 for Analysis Focus Area

Source: DKS Associates, 2006

- Placer Parkway
- Watt Avenue north of Elverta Road
- SR 70/99 south of Placer Parkway
- Blue Oaks Boulevard west of Foothills Boulevard.

A limited number of other roadway segments would also have higher traffic volumes with a Watt Avenue interchange than without that interchange, but these segments would be located primarily near this potential interchange.

While north of Elverta Road, Watt Avenue would have higher volumes with the Watt Avenue interchange than without that interchange; south of Elkhorn Boulevard the interchange would result in small decreases in traffic volumes. Under all alternatives a Watt Avenue interchange would result in very small changes (increases or decreases) in traffic volumes on the Watt Avenue/I-80 interchange ramps and overpass. At the request of Caltrans, projected traffic volumes on the ramps to the I-80/Watt Avenue interchange have been provided for each alternative. These estimates (see Table 44) show that traffic volumes will increase on the Watt Avenue/I-80 interchange ramps between 2005 and 2040, but the 2040 volumes on these ramps would only change marginally due to any of the build alternatives.

The connection of Placer Parkway to a potential Watt Avenue interchange would result in lower traffic volumes on a number of roadways in the TASA than the same corridor alternative without that interchange. The roadway segments that would have the most substantial reduction in traffic volume due to a Watt Avenue interchange are the following:

- Portions of SR 65 near Placer Parkway
- Portions of I-80
- Baseline Road
- Riego Road
- Fiddyment Road south of Placer Parkway
- Walerga Road.

A number of other roadway segments would also have lower volumes with a Watt Avenue connection than without that connection, including the following:

- Portions of Foothill Boulevard, Woodcreek Oaks Boulevard, Washington Boulevard, Industrial Avenue, and Pleasant Grove Boulevard in the City of Roseville
- Portions of Catlett Road/East Catlett Road, Sierra College Boulevard
- Portions of Elkhorn Boulevard, Elverta Road and Walerga Road in north Sacramento County.

5.4 POTENTIAL IMPACTS AND MITIGATION STRATEGIES

5.4.1 Traffic Impacts and Mitigation Strategies under 2020 Conditions

The comparison between the No-Build Alternative and the other alternatives under 2020 conditions indicates that there would be significant LOS impacts on the roadway segments discussed below.

Impact T-1: Under all of the corridor alternatives/Watt Avenue interchange scenarios, Placer Parkway would add traffic to SR 70/99 between I-5 and Riego Road and would cause a significant impact on the LOS of this freeway segment.

Table 44:
Projected 2040 Daily Traffic Volumes on I-80/SR 51/Watt Avenue Interchange Ramps

Ramp	2005 Average Daily Volume	2040 Average Daily Volume											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
		No-Build	With Watt South[1]	With Watt North[1]	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt	With Watt	Without Watt
Eastbound I-80 Off-ramp to Watt Avenue	8,100	11,300	11,400	11,500	11,700	11,600	11,500	11,500	11,500	11,400	11,500	11,500	11,400
Westbound I-80 Off-ramp to Watt Avenue	8,800	12,600	12,500	12,600	12,700	12,600	12,600	12,700	12,800	12,900	12,900	12,700	12,700
Northbound Watt Avenue On-ramp to Westbound I-80	5,600	6,300	6,200	6,400	6,300	6,200	6,200	6,300	6,300	6,200	6,300	6,300	6,300
Southbound Watt Avenue On-ramp to Westbound I-80	4,500	12,100	11,900	12,100	12,100	12,100	12,000	12,100	12,100	12,400	12,200	11,900	12,000
Eastbound SR 51 Off-ramp to Northbound Watt Avenue	7,300	12,800	12,500	12,700	12,600	12,600	12,500	12,600	12,800	12,600	12,800	12,800	12,600
Northbound Watt Avenue On-ramp to Eastbound SR 51	7,700	10,400	10,700	10,700	10,700	10,800	10,700	10,700	10,600	10,700	10,600	10,500	10,800
Southbound Watt Avenue On-ramp to Eastbound SR 51	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Southbound Watt Avenue On-ramp to Westbound SR 51	8,300	11,900	11,700	11,800	11,900	11,800	12,000	11,800	12,000	11,600	12,000	11,800	11,800

[1] Two general locations for a potential interchange on Placer Parkway at the future extension of Watt Avenue were identified with Alternative 1 – a north and a south location (see Figure 4 for assumed interchange locations)
Note: SR 51 is commonly called the Capitol City Freeway

Source: DKS Associates, 2006

Caltrans District 3's Draft Transportation Concept Report (TCR) for SR 99 (May 2004) is a long-range planning document for SR 99 within Sacramento, Sutter, and Butte counties. In addition to a 20-year Route Concept, the TCR includes an Ultimate Concept, which is the ultimate goal for the route beyond the 20-year planning horizon. In the TCR, the 125 miles of SR 99 in District 3 were divided into 15 segments. Placer Parkway would have a significant impact on Segment 4 (I-5 to the Sutter County Line) and on a portion of Segment 5 (Sutter County Line to the SR 70/99 wye).

The 20-year Route Concept calls for upgrading the existing expressway portion of the route between Elkhorn Boulevard and the SR 70/99 wye (north of Catlett Road) to freeway standards and to widen this segment to six lanes. The Ultimate Concept calls for eight freeway lanes on SR 70/99 between I-5 and the SR 70/99 wye.

The 2020 No-Build Alternative assumed that SR 70/99 would be upgraded to a freeway status from I-5 to Riego Road through the construction of interchanges at Elverta Road and Riego Road, but would remain a four-lane facility. With the construction of any of the Placer Parkway alternatives, auxiliary lanes were assumed to be added to SR 70/99 south of the on-ramps and off-ramps to Placer Parkway.

SR 70/99 would operate at LOS F conditions in 2020 between I-5 and Elkhorn Boulevard under the No-Build Alternative. All of the alternatives, with and without a potential interchange on the Parkway at Watt Avenue, would add traffic to SR 70/99 from I-5 to Elkhorn Boulevard, and thereby lengthen the period of time during the peak period when SR 70/99 would operate at LOS F conditions.

This is considered a ***significant impact*** under all alternatives/scenarios.

Mitigation Strategies for Impact T-1: The following strategies (individually or in combinations) could reduce the project's impact's on SR 70/99 by decreasing the length of time spent in LOS F conditions during the morning and evening peak periods:

> **Strategy T-1a:** Add HOV lanes to SR 70/99 between Placer Parkway and I-5.
>
> **Strategy T-1b:** Construct a controlled-access roadway parallel to SR 70/99 between Riego Road and Elkhorn Boulevard. The roadway could carry short to medium-range trips between future growth areas in south Sutter County and Northern Sacramento County that would otherwise use SR 70/99.
>
> **Strategy T-1c:** Provide substantial transit services in the SR 70/99 Corridor, including express bus services during commute periods, and frequent all-day services from urban areas of Sutter and South/west Placer counties to the Natomas area and Downtown Sacramento.
>
> **Strategy T-1d:** Identify "fair share" contributions for new development in portions of Placer, Sutter, and Yuba counties that would contribute traffic to SR 70/99 to help fund improvements to SR 70/99.

The growth in traffic demand on SR 70/99 will stem from development over a wide area. Traffic impact fees on this new development are a potential source of funding for improvements in the SR 70/99 corridor. To adequately spread the cost of improvements on a fair-share basis, a mechanism, such as a multi-jurisdictional Joint Powers Authority that covers portions of Placer, Sutter and Yuba counties, would need to be established to collect fees, and plan, design, and construct improvements.

Impact T-2: Under all of the corridor alternatives/Watt Avenue interchange scenarios, Placer Parkway would add traffic to SR 65 between Placer Parkway and the SR 65 Lincoln Bypass, and would cause a significant impact on the LOS of this freeway segment.

Caltrans District 3's TCR for SR 65 (July 2001) is a long-range planning document for SR 65 in Sacramento and Yuba counties. In addition to a 20-year Route Concept, the TCR includes an Ultimate Concept, which is the ultimate goal for the route beyond the 20-year planning horizon. In the TCR, SR 65 in District 3 was divided into six segments. Placer Parkway would have a significant impact on Segment 2 (between Blue Oaks Boulevard and Industrial Avenue).

The 20-year Route Concept calls for upgrading the existing expressway portion of the route between Blue Oaks Boulevard and the Industrial Avenue to freeway standards. The Ultimate Concept calls for six freeway lanes on this segment of SR 65.

The 2020 No-Build Alternative assumed a four-lane freeway for SR 65 from I-80 to the City of Lincoln, including construction of the SR 65 Lincoln Bypass. With the construction of any of the Placer Parkway alternatives, auxiliary lanes were assumed to be added to SR 65 north and south of the on-ramps and off-ramps to Placer Parkway.

The development forecasts for 2020 include substantial development along the SR 65 Corridor in Placer County. Substantial development is also expected in Yuba and Sutter counties north of the Placer Parkway study area. The anticipated development by 2020 is projected to increase traffic volumes along SR 65 dramatically.

SR 65 would operate at LOS F conditions in 2020 between I-80 and the SR 65 Lincoln Bypass under the No-Build Alternative. All of the build alternatives, with and without a potential interchange on the Parkway at Watt Avenue, would add traffic to SR 65 from the proposed Placer Parkway and the SR 65 Lincoln Bypass, and thereby lengthen the period of time during the peak period when SR 65 would operate at LOS F conditions.

This is considered a ***significant impact*** under all alternatives.

Mitigation Strategies for Impact T-2: Several strategies were identified that by themselves or in combinations could mitigate the LOS impacts on this segment of SR 65. These are as follows:

> **Strategy T-2a:** Widen SR 65 to six lanes between Placer Parkway and the SR 65 Lincoln Bypass.
>
> **Strategy T-2b:** Provide additional north–south capacity on local roadways parallel to SR 65.
>
> **Strategy T-2c:** Provide substantial transit services in the SR 65 Corridor.
>
> **Strategy T-2d:** Identify "fair share" contributions for new development that would contribute traffic to SR 65 to help fund improvements to SR 65.

The growth in traffic demand on SR 65 will stem from development over a wide area. Traffic impact fees on this new development are a potential source of funding for improvements in the SR 65 corridor. The South Placer Regional Transportation Authority (SPRTA), which currently collects traffic impact fees for various improvements to regional roadways in South Placer County (called Tier 1 projects), has

considered additional fees for a set of "Tier 2" projects that would include improvements to SR 65 between Lincoln and I-80.

Impact T-3: Under one scenario, Placer Parkway would add traffic to Watt Avenue between Elverta Road and the Placer County line and would cause a significant impact on the LOS of this roadway segment.

Watt Avenue would operate at LOS E conditions in 2020 between the Elverta Road and the Placer County Line, and LOS F under Alternative 1 with the southern location for a potential interchange on Placer Parkway at Watt Avenue.

This is considered a ***significant impact*** under one scenario.

Mitigation Strategies for Impact T-3: The following strategies were identified to mitigate the LOS impacts on this segment of Watt Avenue:

> **Strategy T-3a:** Construct six lanes on Watt Avenue between Elverta Road and the Placer County line.
>
> **Strategy T-3b:** Identify "fair share" contributions for new development that contribute traffic to Watt Avenue to help fund improvements to Watt Avenue.

This segment of Watt Avenue was assumed to have four lanes in 2020 under all alternatives/scenarios but the Sacramento County General Plan calls for it to ultimately have six lanes.

The growth in traffic demand on Watt Avenue will stem from development in portions of Sacramento and Placer County. Traffic impact fees on this new development are a potential source of funding for improvements to Watt Avenue. Sacramento County has development fees for roadway and transit improvements and they are currently updating those fees.

To spread the cost of improvements on a fair-share basis to portions of both Placer and Sacramento counties, some mechanism, such as a multi-jurisdictional Joint Powers Authority that covers portions of Placer and Sacramento counties, would need to be established.

Impact T-4: Under all corridor alternatives/Watt Avenue interchange scenarios, Placer Parkway would reduce system-wide traffic congestion levels and vehicle delay.

As shown in Tables 18 and 19, compared to the No-Build Alternative, all of the build alternatives would decrease the percentage of vehicle-miles of travel on congested roadways in the TASA. Tables 22 and 23 indicate that the percent reduction in vehicle-miles of travel on congested roadways would be even greater in the Analysis Focus Area.

Tables 24 and 25 indicate that all of the build alternatives would significantly reduce vehicle-hours of delay, especially in the AFA. Vehicle delay would be lower for scenarios with a Watt Avenue interchange than without that interchange.

This impact is considered ***less than significant*** under all alternatives.

5.4.2 Traffic Impacts and Mitigation Strategies under 2040 Conditions

The comparison between the No-Build Alternative and the other alternatives under 2040 conditions indicates that there would be significant LOS impacts on the roadway segments discussed below.

Impact T-5: Under all of the corridor alternatives/Watt Avenue interchange scenarios, Placer Parkway would add traffic to SR 70/99 between I-5 and Riego Road, and would cause a significant impact on the LOS of this freeway segment.

Caltrans District 3's Draft TCR for SR 99 (May 2004) is a long-range planning document for SR 99 within Sacramento, Sutter and Butte counties. In addition to a 20-year Route Concept, the TCR includes an Ultimate Concept, which is the ultimate goal for the route beyond the 20-year planning horizon. In the TCR, the 125 miles of SR 99 in District 3 were divided into 15 segments. Placer Parkway would have a significant impact on Segment 4 (I-5 to the Sutter County Line), and on a portion of Segment 5 (Sutter County Line to the SR 70/99 wye).

The 20-year Route Concept calls for upgrading the existing expressway portion of the route between Elkhorn Boulevard and the SR 70/99 wye (north of Catlett Road) to freeway standards and to widen this segment to six lanes. The Ultimate Concept calls for eight freeway lanes on SR 70/99 between I-5 and the SR 70/99 wye.

The 2040 No-Build Alternative assumed six lanes on SR 70/99 from I-5 to Riego Road, which is consistent with the 20-year Route Concept in the TCR. With the construction of any of the Placer Parkway alternatives, auxiliary lanes were assumed to be added to SR 70/99 south of the on-ramps and off-ramps to Placer Parkway.

Outside of Placer County and south Sutter County, the 2040 development forecasts are based on SACOG's Preferred Blueprint Scenario and include substantial development along the SR 70/99 Corridor. Substantial development is expected in Yuba and Sutter counties north of the Placer Parkway study area. Development is also anticipated in the Natomas Visioning Area, an area of north Sacramento County just south of the study area that was not assumed to have development in SACOG's previous 2025 forecasts for the Metropolitan Transportation Plan. The anticipated development by 2040 is projected to increase traffic volumes along SR 70/99 dramatically.

SR 70/99 would operate at LOS F conditions in 2040 between I-5 and Riego Road under the No-Build Alternative. All of the build alternatives, with and without a potential interchange at Watt Avenue, would add traffic to SR 70/99 from I-5 to the Parkway and thereby lengthen the period of time during the peak period where SR 70/99 would operate at LOS F conditions. Under Alternatives 4 and 5, Placer Parkway would connect to SR 70/99 further north than under Alternatives 1, 2 and 3, and thus a longer stretch of SR 70/99 would be impacted under those two alternatives.

This is considered a ***significant impact*** under all alternatives.

Mitigation Strategies for Impact T-5: Several strategies were identified that by themselves or in combinations could mitigate the LOS impacts on this segment of SR 70/99. These are as follows:

> **Strategy T-5a:** Add HOV lanes to SR 70/99 between Placer Parkway and I-5.
>
> **Strategy T-5b:** Construct a controlled-access roadway parallel to SR 70/99 between Riego Road and Elkhorn Boulevard. The roadway could carry short to medium-range

trips between future growth areas in south Sutter County and Northern Sacramento County that would otherwise use SR 70/99.

Strategy T-5c: Provide substantial transit services in the SR 70/99 Corridor, particularly express bus services during commute periods.

Strategy T-5d: Identify "fair share" contributions for new development in portions of Placer, Sutter, and Yuba counties that would contribute traffic to SR 70/99 to help fund improvements to SR 70/99.

The growth in traffic demand on SR 70/99 will stem from development over a wide area. Traffic impact fees on this new development are a potential source of funding for improvements in the SR 70/99 corridor. To adequately spread the cost of improvements on a fair-share basis, a mechanism, such as a multi-jurisdictional Joint Powers Authority that covers portions of Placer, Sutter, and Yuba counties, would need to be established to collect fees, and plan, design, and construct improvements.

Impact T-6: Under those scenarios with a Watt Avenue interchange near its intersection with Blue Oaks Boulevard, Placer Parkway would add traffic to Blue Oaks Boulevard between Watt Avenue and Westside Drive and would cause a significant impact on the LOS of this roadway segment.

Under the No-Build Alternative, the assumed six-lane segment of Blue Oaks Boulevard between the future Watt Avenue extension and Westside Drive in West Roseville would operate at LOS C conditions in 2040. This segment would operate at LOS D conditions under the following build alternatives and potential Watt Avenue interchange scenarios:

- Alternative 1 with a northern location for a potential Watt Avenue interchange
- Alternative 2 with a potential Watt Avenue interchange
- Alternative 3 with a potential Watt Avenue interchange
- Alternative 4 with a potential Watt Avenue interchange.

The change from LOS C to LOS D condition on this roadway segment is considered a ***significant impact*** for these alternatives.

Mitigation Strategies for Impact T-6: The following strategies were identified to mitigate the LOS impacts on this segment of Blue Oaks Boulevard:

Strategy T-6a: Provide adequate lanes at the Blue Oaks Boulevard/ Westside Drive and Blue Oaks Boulevard/Watt Avenue intersections.

Strategy T-6b: Widen Blue Oaks Boulevard from six to eight lanes between Westside Drive and Watt Avenue.

Strategy T-6c: Identify "fair share" contributions for new development that would contribute traffic to Blue Oaks Boulevard to help fund improvements to Blue Oaks Boulevard.

The location of a potential interchange on Placer Parkway with Watt Avenue is unknown, but a northern location near the intersection of Watt Avenue with Blue Oaks is a likely location under all alternatives. If an interchange is constructed on Placer Parkway at a northern location, peak hour traffic volumes along

Blue Oaks Boulevard would need to be studied in more detail to determine what improvements are needed to meet the City Of Roseville's LOS C standard.

The segment of Blue Oaks Boulevard between Watt Avenue and Westside Drive was assumed to have six lanes under all scenarios. A segment-based analysis suggests a widening of this segment to eight lanes to mitigate the LOS impact. However, Roseville's LOS policy focuses on the operations of signalized intersections during the p.m. peak hour at buildout of the City's entitled land uses. Construction of adequate turn lanes at the intersections of Blue Oaks Boulevard/Westside Drive and Blue Oaks Boulevard/Watt Avenue may provide LOS C conditions without the need for a widening of this segment to eight lanes.

The growth in traffic demand on Blue Oaks Boulevard will stem from development over portions of Roseville, Lincoln and unincorporated Placer County. Traffic impact fees on this new development are a potential source of funding for improvements to Blue Oaks Boulevard, and all three of these jurisdictions have traffic impact fees for roadway improvements within their jurisdictions. To adequately spread the cost of improvements on a fair-share basis, a mechanism, such as a multi-jurisdictional Joint Powers Authority that covers portions of several jurisdictions, would need to be established. Placer County and the City of Roseville have established a Joint Powers Authority that covers portions of those jurisdictions to fund certain roadway improvements in west Placer County including Fiddyment Road and Walerga Road.

Impact T-7: Under some scenarios, Placer Parkway would add traffic to Fiddyment Road north of the future Blue Oaks Boulevard and would cause a significant impact on the LOS of this roadway segment.

The four-lane segment of Fiddyment Road north of Blue Oaks Boulevard would operate at LOS E conditions in 2040 under the No-Build Alternative. This segment would operate at LOS F conditions under all of the build alternatives if there is no interchange on Placer Parkway at Watt Avenue.

This is considered a ***significant impact*** under some scenarios.

Mitigation Strategies for Impact T-7: The following strategies were identified to mitigate the LOS impacts on this segment of Fiddyment Road:

> **Strategy T-7a:** Provide adequate lanes at the Fiddyment Road/Blue Oaks Boulevard and Fiddyment Road/North Hayden Parkway intersections.
>
> **Strategy T-7b:** Widen Fiddyment Road to six lanes between Blue Oaks Boulevard and the Roseville City limits.
>
> **Strategy T-7c:** Construct an interchange on Placer Parkway at Watt Avenue.
>
> **Strategy T-7d:** Identify "fair share" contributions for new development that would contribute traffic to Fiddyment Road to help fund improvements to Fiddyment Road.

Based on discussions with the City of Roseville, the segment of Fiddyment Road between Blue Oaks Boulevard and the Roseville City limits was assumed to have four lanes under all scenarios. A segment-based analysis suggests a widening of this segment to six lanes to mitigate the LOS impact. However, Roseville's LOS policy focuses on the operations of signalized intersections during the p.m. peak hour at buildout of the City's entitled land uses. Construction of adequate turn lanes at the intersections of Fiddyment Road/Blue Oaks Boulevard and Fiddyment Road/North Hayden Parkway may provide LOS C conditions without the need for a widening of this segment to six lanes.

Since this segment of Fiddyment Road would not have a significant LOS impact if an interchange is constructed on Placer Parkway, this interchange could be considered as a mitigation measure.

The growth in traffic demand on Fiddyment Road will stem from development over portions of Roseville, Lincoln, and unincorporated Placer County. Traffic impact fees on this new development are a potential source of funding for improvements to Fiddyment Road. To adequately spread the cost of improvements on a fair-share basis, a mechanism, such as a multi-jurisdictional Joint Powers Authority that covers portions of several jurisdictions, would need to be established. Placer County and the City of Roseville have established a Joint Powers Authority that covers portions of those jurisdictions to fund certain roadway improvements in west Placer County including Fiddyment Road and Walerga Road.

Impact T-8: Under all corridor alternatives/Watt Avenue interchange scenarios, Placer Parkway would add traffic to Sierra College Boulevard between the future Valley View Parkway (in the proposed Clover Valley area of the City of Rocklin) and English Colony Way, and would cause a significant impact on the LOS of this roadway segment.

The segment of Sierra College Boulevard between Valley View Parkway and English Colony Way would operate at LOS D conditions in 2040 under the No-Build Alternative. This segment would operate at LOS E conditions under all of the alternatives with or without an interchange on Placer Parkway at Watt Avenue.

This is considered a ***significant impact*** under all alternatives/scenarios.

Mitigation Strategies for Impact T-8: The following strategies were identified to mitigate the LOS impacts on this segment of Sierra College Boulevard:

> **Strategy T-8a:** Provide adequate turn lanes at the Sierra College Boulevard/Valley View Parkway and Sierra College Boulevard/English Colony Way intersections.
>
> **Strategy T-8b:** Widen Sierra College Boulevard to six lanes between Valley View Parkway and English Colony Way.
>
> **Strategy T-8c:** Identify "fair share" contributions for new development that would contribute traffic to Sierra College Boulevard to help fund improvements to Sierra College Boulevard.

The segment of Sierra College Boulevard between Valley View Parkway and English Colony Way was assumed to have four lanes under all scenarios. A segment-based analysis suggests a widening of this segment to six lanes. However, the intersections along Sierra College Boulevard are "T" intersections with relatively low traffic volumes on its cross streets. Due to those conditions, the daily capacity of this segment may be greater than those used for this analysis. Construction of adequate turn lanes at the intersections of Sierra College Boulevard/Valley View Parkway and Sierra College Boulevard/English Colony Way may provide LOS C conditions without the need for a widening of this segment to six lanes.

The growth in traffic demand on Sierra College Boulevard will stem from development over a wide area. Traffic impact fees on this new development are a potential source of funding for improvements to Sierra College Boulevard. The SPRTA currently collects traffic impact fees for various improvements to regional roadways in South Placer County, including widening this section of Sierra College Boulevard to four lanes. Additional improvements to this section of Sierra College Boulevard could be incorporated into the SPRTA fees.

Impact T-9: Under all of the corridor alternatives/Watt Avenue interchange scenarios, Placer Parkway would add traffic to Valley View Parkway and would cause a significant impact on the LOS of this roadway segment.

Valley View Parkway (in the proposed Clover Valley area of the City of Rocklin) would operate at LOS C conditions in 2040 under the No-Build Alternative. This two-lane segment would operate at LOS D conditions under all of the alternatives with or without an interchange on Placer Parkway at Watt Avenue.

This is considered a ***significant impact*** under all alternatives/scenarios.

Mitigation Strategies for Impact T-8: The following strategies were identified to mitigate the LOS impacts on this segment of Valley View Parkway:

> **Strategy T-9a:** Provide adequate turn lanes at the Valley View Parkway/Sierra College Boulevard and Valley View Parkway/Park Drive intersections.
>
> **Strategy T-9b:** Widen Valley View Parkway to four lanes.
>
> **Strategy T-9c:** Identify "fair share" contributions for new development that would contribute traffic to Valley View Parkway to help fund improvements to Valley View Parkway.

Based on input from the City of Rocklin, Valley View Parkway through the Clover Valley area of Rocklin was assumed to have two lanes under all scenarios. A segment-based analysis suggests a widening of this segment to four lanes to mitigate the LOS impact. However, the intersections along Valley View Parkway/Sierra College Boulevard would have relatively low traffic volumes on its cross streets. Due to those conditions, the daily capacity of this segment may be greater than those used for this analysis. Construction of adequate turn lanes at the intersections of Valley View Parkway/Sierra College Boulevard and Valley View Parkway/Park Drive may provide LOS C conditions without the need for widening this segment to four lanes.

The growth in traffic demand on Valley View Parkway will stem from development in portions of Rocklin and unincorporated Placer County. Traffic impact fees on this new development are a potential source of funding for improvements to Valley View Parkway. The City of Rocklin has development fees for roadway improvements. To spread the cost of improvements on a fair-share basis to portions of both Rocklin and unincorporated Placer County, some mechanism, such as a multi-jurisdictional Joint Powers Authority that covers portions of Rocklin and unincorporated Placer County, would need to be established.

Impact T-10: Under all of the corridor alternatives/Watt Avenue interchange scenarios, Placer Parkway would add traffic to Whitney Ranch Parkway between SR 65 and University Avenue and would cause a significant impact on the LOS of this roadway segment.

Whitney Ranch Parkway would operate at LOS D conditions in 2040 between SR 65 and University Avenue in the City of Rocklin under the No-Build Alternative. This segment would operate at LOS F conditions under all of the alternatives with or without an interchange on Placer Parkway at Watt Avenue.

This is considered a ***significant impact*** under all alternatives/scenarios.

Mitigation Strategies for Impact T-10: The following strategies were identified to mitigate the LOS impacts on this segment of Whitney Ranch Parkway:

> **Strategy T-10a:** Widen Whitney Ranch Parkway to eight lanes west of University Avenue
>
> **Strategy T-10b:** Identify "fair share" contributions for new development that would contribute traffic to Whitney Ranch Parkway to help fund improvements to Whitney Ranch Parkway.

The growth in traffic demand on Whitney Ranch Parkway will stem from development in portions of the cities of Rocklin and Lincoln, as well as unincorporated Placer County. Traffic impact fees on this new development are a potential source of funding for improvements to Whitney Ranch Parkway. The City of Rocklin has development fees for roadway improvements. To spread the cost of improvements on a fair-share basis to portions of several jurisdictions, some mechanism, such as a multi-jurisdictional Joint Powers Authority, would need to be established.

Impact T-11: Under all corridor alternatives/Watt Avenue interchange scenarios, Placer Parkway would reduce system-wide traffic congestion levels and vehicle delay.

As shown in Tables 36 and 37, compared to the No-Build Alternative, all of the build alternatives would decrease the percentage of vehicle-miles of travel on congested roadways in the TASA. Tables 40 and 41 indicate that the percent reduction in vehicle-miles of travel on congested roadways would be even greater in the AFA.

Tables 42 and 43 indicate that all of the build alternatives would significantly reduce vehicle-hours of delay, especially in the AFA. Vehicle delay would be lower for scenarios with a Watt Avenue interchange than without that interchange.

This impact is considered ***less than significant*** under all alternatives.

5.4.3 Transit Impacts and Mitigation Strategies

Impact T-12: Under all corridor alternatives/Watt Avenue interchange scenarios, Placer Parkway would not significantly impact existing or planned transit facilities or services.

While there are a number of existing transit routes and services within the urbanized portion of the broad traffic analysis study area (shown in Figure 1), only a couple of transit routes travel near the proposed build alternatives, and those are located along SR 65, SR 70/99, or in the western portion of the City of Roseville.

The transit operators in Placer County intend to expand services to new growth areas near the build alternatives once sufficient development occurs in those areas. However, the timing and level of future transit services, as well as actual routes for expanded services, is not known and will depend on funding. As discussed in Section 3.4, the transit system assumptions for the No-Build Alternative were based on the "Funded Constrained Alternative" that was recently evaluated by PCTPA as part of the Placer County Long-Range Transit Plan, and reflects the adopted Short-Range (2012) Transit Plans for each transit provider in the area plus some additional transit services.

Placer Parkway would have a significant impact on transit if it would 1) directly remove or obstruct existing and planned transit facilities, routes, or services; or 2) substantially impact travel times on existing or planned transit routes.

Placer Parkway would be a controlled-access facility with interchanges or grade-separations at all existing or planned roadways along its route between SR 65 and SR 70/99. This facility could be readily designed to avoid direct impacts on existing and planned transit facilities, routes, or services. Placer Parkway would reduce traffic volumes on most local roadways, except for roadway segments near interchanges along Placer Parkway. Thus, the Parkway would generally have a positive impact on transit travel times in the transportation analysis area.

This impact is considered ***less than significant*** under all alternatives.

5.4.4 Bikeway Impacts and Mitigation Strategies

Impact T-11: Under all scenarios, Placer Parkway would not significantly impact existing or planned bikeways.

Placer Parkway would have a significant impact on bicycles if it would directly remove or obstruct existing and planned bicycle facilities/bikeways. Placer Parkway would be a controlled-access facility with interchanges or grade-separations at all existing or planned roadways along its route between SR 65 and SR 70/99. This facility could be readily designed to avoid direct impacts on existing and planned bicycle facilities/bikeways.

This impact is considered ***less than significant*** under all alternatives.

6.0 ANALYSES TO BE UNDERTAKEN IN TIER 2

This Transportation Technical Report is prepared in support of a Tier 1 EIS/EIR. The project, or Proposed Action, is the selection and acquisition of a specific corridor within which the future Placer Parkway may be constructed if a decision is made to construct the Parkway. The objective of the Proposed Action is to select and preserve a 500- to 1,000-foot-wide corridor in the project study area. No design or construction work will occur as the result of the Proposed Action, although conceptual designs have been developed to the extent required for environmental analysis. Such designs are entirely conceptual and would be subject to further engineering analysis and refinement during the Tier 2 analysis. Once the Tier 1 EIS/EIR is completed and a corridor is selected, corridor acquisition will begin. This can be accomplished through a combination of mechanisms, including but not limited to fee simple acquisition, purchase of rights of first refusal, grants or transfers of land, grants or purchases of permanent easements, and similar means.

"Tiering" is a streamlining tool for large infrastructure projects with several stages or phases. It is a way to focus environmental studies in the planning process at an appropriate level of detail in each phase of the project. The first Tier document (Tier 1) allows an agency to focus on broad topics such as general location, mode choice, area-wide air quality and land use, and other environmental issues. Second tier (Tier 2) documents involve more focused environmental analyses and review that address a narrower geographical area, a more focused set of issues, and a specific roadway alignment. A Tier 2 document relies on a summary of the work in the Tier 1 document, thereby avoiding unnecessary repetition. The Tier 2 document can then focus on additional details available in later stages of project planning such as design, construction, operation, and maintenance of the project.

The transportation analysis for the Tier 2 EIS/EIR would involve the following elements:

- Evaluation of Existing Plus Project Conditions.
- Revised travel demand forecasts that will be based on the updated Metropolitan Transportation Plan (MTP) that will be adopted in 2007 and have a horizon year of 2032.
- A more detailed analysis of traffic impacts from the project than Tier 1, including:
  - Evaluation of peak-hour operations at all major intersections along roadways that would be impacted by Placer Parkway using the intersection analysis methodology from each jurisdiction.
  - Evaluation of peak-hour operations at each interchange along Placer Parkway, including merge, diverge, and weaving analyses using Highway Capacity Manual (HCM) methodologies.
  - Evaluation of peak-hour operations along SR 65 and along SR 70/99 near Placer Parkway, including mainline, merge, diverge, and weaving analyses using HCM methodologies.
- An updated evaluation of the potential for impacts to transit and bikeway impacts based on the latest information on existing and planned developments in the vicinity of the project.

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APPENDIX A: TRAVEL MODEL REFINEMENTS AND VALIDATION

Overview of Model Refinements

The travel forecasting tool used for the Placer Parkway Corridor Preservation Tier 1 EIS/EIR is the Sacramento Metropolitan Travel Demand Model, or "SACMET" model. This model was used for development of the 2006 Metropolitan Transportation Plan (MTP), and for regional air quality conformity analyses. It has provided the basis for recent highway and transit alternatives analyses and environmental documents. SACOG continually maintains SACMET, updating base year and forecast year demographic data and networks, and working with a technical advisory committee to periodically update and enhance the model. Finally, many local jurisdictions use the model as the basis for general plans and environmental studies.

Documentation on this model is provided in *"Sacramento Regional Travel Demand Model Version 2001 – SACMET 01 (SACOG and DKS Associates, March 2002).*

The six-county SACMET model includes a regional system of about 1,300 traffic analysis zones (TAZs). The zones correspond generally with census tracts. While the SACMET zones are appropriately sized for regional forecasts to major existing transportation facilities (i.e., freeways and major arterials), zones in the corridor and tributary areas are too big to adequately distinguish among alignment alternatives within the Placer Parkway corridor.

The Placer County Travel Demand Model, which has been used by the jurisdictions in Placer County to prepare General Plans and Capital Improvement Programs has quite fine zonal and network detail in Placer County, and has been repeatedly refined and improved for over 10 years. Outside of Placer County, this model aggregates data imported from SACMET.

To refine the network detail of SACMET for Placer Parkway, the Placer County model's network was chosen as a suitable resource. The detailed network for Placer County was "grafted" into SACMET, and south Sutter County was split from nine zones to a new system of 35 zones. In total, about 1,300 zones were added to the starting SACMET zone system of 1,142 zones. The resulting Placer Parkway Tier 1 EIS version network has about 2,600 zones.

Within the refined network area, SACOG's 2000 household and employment estimates had to be split down to the finer zone system. In Placer County, the Placer County model's detailed land use (dwelling units and building areas in several categories) was converted to approximate equivalent households and employment in SACMET's categories.

The Placer County model represents residences as single-family, multi-family, and age-restricted households. The SACMET model's residential data, with its three-way classification detail (household size, workers in the household, and household income), does not distinguish between single-family, multi-family, or age-restricted. To split SACMET's cross-classified households into the refined zones, an iterative proportional factoring (IPF) was estimated that maintains control totals of each household category in each regional analysis district, while allowing for a different classification distribution in single-versus multi-family housing unit types. Units in age-restricted developments act as single-family in the IPF process, but are overridden by a cross-classification distribution in the 2000 SACOG regional household travel survey for households with all members age 55 and up in Placer County, western El Dorado County, and Folsom.

Validation Results

It is important to test the model's accuracy and make appropriate adjustments to its equations, parameters, and assumptions through a validation process. Validation refers to the systematic comparison of the model outputs for a base year (i.e., 2000) to observed travel behavior. The validation of the enhanced SACMET model for the Placer Parkway Corridor Preservation Tier 1 EIS/EIR focused on vehicle volume counts on roadway segments (or links in the model networks). The performance of the model in predicting traffic volumes by functional class, volume class, and "screenlines" was evaluated.

The model validation was conducted and presented to the Technical Advisory Committee for their review in 2004.

To validate the refined version of SACMET for the Placer Parkway Corridor Preservation Tier 1 EIS/EIR, this model was first run with 2000-2001 network and land use data, and the resulting highway volumes compared to traffic counts. Table A-1 presents a comparison of total daily volumes on each of several screenlines in and near the Placer Parkway corridor; Figure A-1 shows the locations of these screenlines. This summary shows that the model's traffic volumes on all high-volume screenlines are within 10 percent of traffic counts, and that the combined model volume on all screenlines is within 3 percent of traffic counts.

Table A-2 presents a comparison of travel model volumes to traffic counts summarized by volume range and functional classification for an area between Elkhorn Boulevard and Nicolaus Road and between SR 70/99 and Sierra College Boulevard. This summary shows that it is stable for low- and high-volume ranges and that the combined model volume on all 799 count locations is within 3 percent of traffic counts.

The validation produced results that were within acceptable tolerances for a sub-regional travel model following best practices in travel demand forecasting. The TAC concurred that the travel model was acceptable for use on the Placer Parkway Corridor Preservation Tier 1 EIS/EIR.

Table A-1
Screenline Validation Summary: Model to Count Comparison
Draft 2000/2001 Validation Model
Refined Version of SACMET Model for Placer Parkway Corridor Preservation Tier 1 EIS/EIR

Screenline[1]		Daily Traffic Volume		Model/Count Ratio
		Model	Counts	
NS 1	East of SR 70/99	11,500	11,200	1.03
NS 2	Sutter/Placer County Line	14,800	17,000	0.87
NS 3	East of Fiddyment Road	23,800	30,600	0.78
NS 4	West of Industrial Avenue	101,600	102,200	0.99
NS 5	East of SR 65	245,000	271,700	0.90
NS 6	West of Sierra College Boulevard	191,000	211,700	0.90
EW 1	North of Nicolaus Road	37,900	46,400	0.82
EW 2	South of Catlett Road	65,800	62,100	1.06
EW 3	South of Blue Oaks Boulevard	146,700	134,100	1.09
EW 4	North of Douglas Boulevard	352,900	371,200	0.95
EW 5	Sacramento/Placer County Line	387,500	382,500	1.01
EW 6	West of I-80	187,400	183,100	1.02
EW 7	East of I-80	79,500	81,600	0.97
Total All Screenlines		**1,845,400**	**1,905,400**	**0.97**

[1] See Figure A-1 for location of screenlines

Figure A-1

SCREENLINES FOR VALIDATION OF REFINED SACMET MODEL

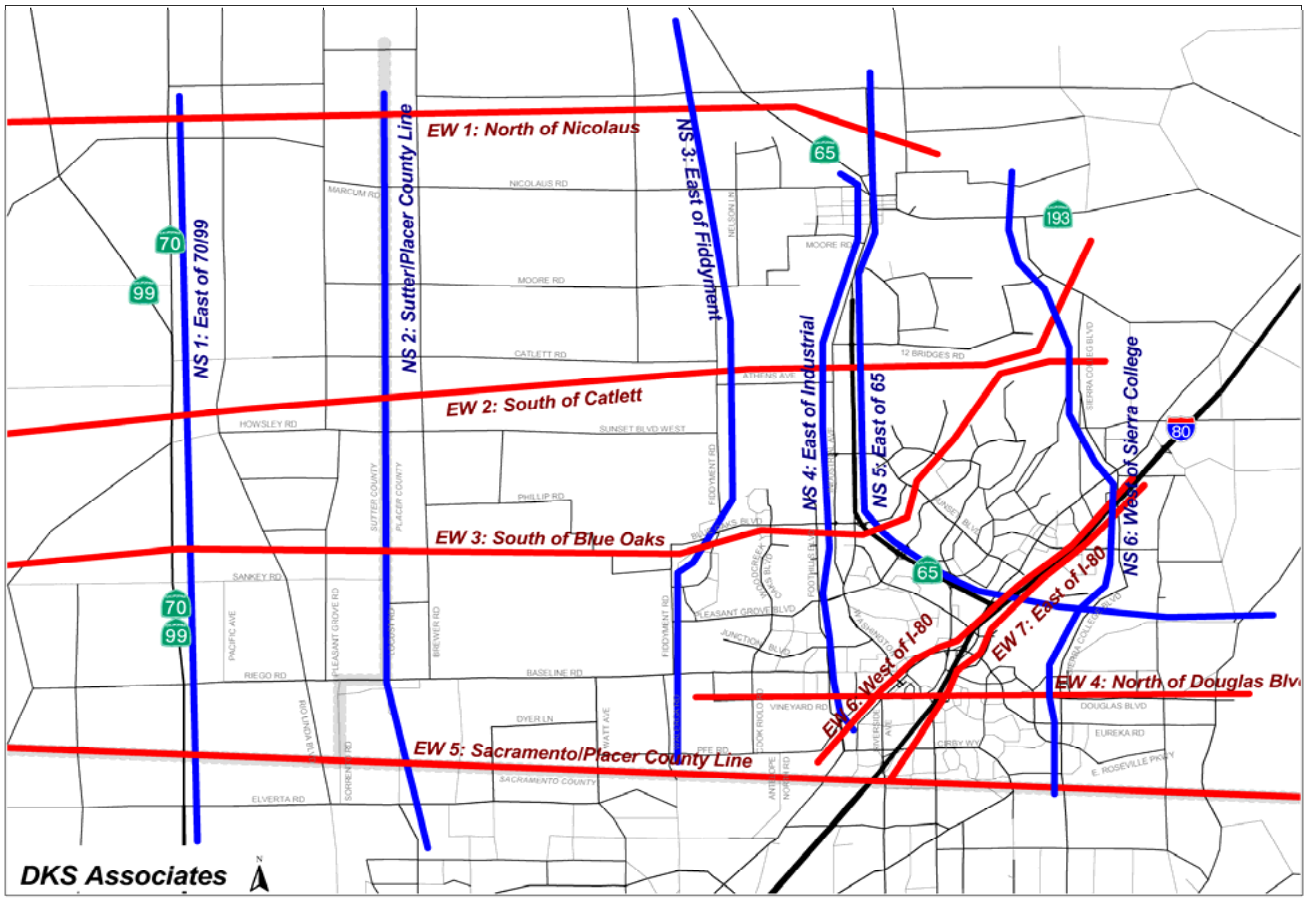

Table A-2
Model Validation Summary: Model to Count Comparison
Draft 2000/2001 Validation Model
Refined Version of SACMET Model for Placer Parkway Corridor Preservation Tier 1 EIS/EIR

Daily Volume Range (per direction)	Counted Links	Daily Traffic Volume		Model/Count
		Model	Count	
1-499	48	10,477	11,824	0.89
500-999	61	49,176	45,567	1.08
1,000-1,999	78	99,665	117,716	0.85
2,000-4,999	192	622,189	641,022	0.97
5,000-9,999	199	1,378,232	1,432,637	0.96
10,000-19,999	169	2,240,729	2,277,536	0.98
20,000-49,999	36	945,572	971,831	0.97
50,000+	16	1,154,652	1,210,450	0.95
Total	**799**	**6,500,692**	**6,708,583**	**0.97**

	Functional Classification	Counted Links	Daily Traffic Volume		Model/Count
			Model	Count	
1	Freeway	34	1,634,201	1,683,006	0.97
2	Expressway	20	293,463	263,786	1.11
3	Major Arterial	399	3,535,696	3,654,082	0.97
4	Minor Arterial	182	602,626	656,329	0.92
5	Collector	130	166,286	216,389	0.77
6	Ramps	34	268,420	234,991	1.14
	Total	**799**	**6,500,692**	**6,708,583**	**0.97**

Summary covers portion of regional model network that is north of Elkhorn Boulevard and west of Sierra College Boulevard

APPENDIX B: IMPLICATIONS OF TOLL ROAD FACILITY

Introduction

As part of the preliminary evaluation of potential funding options to facilitate the project and subsequent Placer Parkway implementation, PCTPA has conducted an initial assessment of the feasibility of developing Placer Parkway as a toll road. This option, along with several others, including a possible county-wide sales tax and increased private development contributions, is being considered to address project development constraints associated with Federal and state transportation funding limitations. Potential consideration of the feasibility of the Parkway as a toll road was also requested during the corridor alternatives identification process, with several local jurisdictions and developers expressing interest in examining the Parkway's toll road potential. The following discussion summarizes the potential feasibility of Placer Parkway as a toll road, and includes general toll road design/operational aspects, and toll road considerations for the corridor alternatives analysis.

It should be noted that the potential development of Placer Parkway as a toll road is speculative at this time and the discussion is presented for informational purposes only. Federal law restricts tolling on highways constructed with federal-aid highway funds. To establish a toll road or toll lane, it often is necessary to obtain federal authorization for tolling. Innovative finance techniques that rely on federal funds to pay bonds, or that use federal loans or loan guarantees to support a project's financing, are considered federal funding, and would require FHWA approval (AASHTO Practitioner's Handbook – 03, July 2006, "Managing the NEPA Process for Toll Lanes and Toll Roads"). Special action by the California Legislature is required to authorize any new toll roads. There are no existing funding plans that classify Placer Parkway as a toll road facility, and extensive planning, funding, and design investigations would be required before a final decision could be made. At the Tier 1 EIS/EIR level of analysis it is not appropriate to perform a detailed analysis of a potential project element associated with such a high degree of uncertainty; should a future decision be made to develop Placer Parkway as a toll road, then this will be included in a Tier 2 project level environmental analysis.

Toll Road Feasibility Analysis

In 2005, the SPRTA Board retained HDR|HLB Decision Economics (HDR|HLB) to assess, on a very preliminary basis, whether the future Placer Parkway would be a feasible toll road. Specifically, the study's focus was to determine if the future Placer Parkway would be a good candidate to attract private investment and would be an innovative funding mechanism.

The Feasibility Analysis for Placer Parkway as a Toll Road – Final Report (January 9, 2006) concluded that Placer Parkway:

- Meets the criteria for a successful toll road project.
- May generate sufficient traffic and toll revenues to cover private investment costs. It may require some public contribution to increase its private investment attractiveness.

The report recommended several 'next steps':

- Reviewing all forecasting assumptions for traffic and revenue potentials.
- Building a detailed financial plan reflecting all funding sources including non-toll sources such as developer fees and interest earnings on operating reserves.

- Evaluating the financial feasibility of the investment by assessing the debt coverage under various scenarios, and risk level.

Toll Road Design/Operational Aspects

Toll roads are generally limited access highways for which users pay a fee to use the road. They are frequently joint publicly/privately funded ventures and are usually employed to provide an alternative and/or additional source of road funding to government revenue, which is not tied to annual federal or state budgetary processes. The funds from toll revenues can be dedicated to the support of construction and maintenance for a particular road, thereby ensuring that maintenance funds in particular do not compete with the requirements of other roads in the network.

Design concepts for toll facilities range from high-occupancy toll (HOT) lanes, express toll lanes (ETL), or a toll road in which all lanes are tolled. Specific factors include: toll lanes vs. toll road, type of toll facility, payment options, rates, and toll plazas/others. Tolls are usually collected at multiple entry or exit points on a toll road via either Electronic Toll Collection (ETC) or cash. Many toll roads operate a system of Differential Pricing; time-of-day pricing and tolls that vary by other factors like facility location, season, day-of-week, or air quality impact. Toll roads may also employ Dynamic Pricing; which comprises tolls that vary in real time in response to changing congestion levels. Toll road pricing frequently includes High Occupancy Vehicle (HOV) discounts.

Toll Road Considerations for Corridor Alternatives Analysis

Given the speculative nature of implementing Placer Parkway as a toll facility, travel demand forecasts assume tolls were not prepared. Instead, a preliminary assessment was conducted to determine how tolls on Placer Parkway might affect the travel demand forecasts for the corridor alternatives.

The project's travel forecasting model "assigns" traffic to Placer Parkway because Placer Parkway would provide the shortest travel time for those trips. Some people who would use Placer Parkway without tolls would use other roadways if tolls were implemented on Placer Parkway. Of course, the amount of traffic that would use a segment of a toll road would depend on the amount of the toll for the various trips using that segment. In general, shorter-distance trips would be more likely to divert to other local roadways due to the existence of tolls than longer-distance trips because the added travel time for short distance trips would typically be low. Longer-distance trips would typically receive the largest travel time benefit and thus would more likely use the toll road.

The amount of short-distance versus long-distance trips that would use the corridor alternatives can be determined through the travel demand model by analyzing the origins and destinations of trips that would use Placer Parkway. The model was used to analyze travel patterns for the most northern and most southern corridor alternatives: Alternatives 1 and 5. The objective of this analysis was to identify any travel pattern differences between these two corridor alignment alternatives to determine if a toll facility might impact them differently. This analysis indicates the following:

- Alternative 1 with a Watt Avenue interchange would have a somewhat higher level of short-distance trips (that may divert to local roads due to tolls) than Alternative 5 with a Watt Avenue interchange. Placer Parkway is projected to have higher traffic volumes for Alternative 1 than Alternative 5.

- There would be more short-distance trips with a Watt Avenue interchange than without that interchange for all corridor alignment alternatives.

- All of the corridor alternatives would have a significant amount of short-distance trips on the east and west ends of the Parkway – trips between SR 65 and destinations in the Sunset Industrial Area or between SR 70/99 and the proposed Sutter Pointe (Measure M) area in south Sutter County.

- Under all corridor alternatives, most of the trips using the central segment of Placer Parkway would be longer distance and thus more likely to use a toll road.

Based on this preliminary assessment, it is unlikely that the potential future development of Placer Parkway as a toll road would result in substantially different impacts for any of the corridor alignment alternatives, and thus does not appear to be a contributing factor to the selection or rejection of any of the project alternatives. Any potential impacts that would be associated with the development of a toll road would depend on the specifics of the tolling scheme that is used, but in general would be common to all alternatives.

PLACER PARKWAY
CORRIDOR PRESERVATION

DRAFT
VISUAL IMPACT ASSESSMENT

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR

June 29, 2007

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

Caltrans

FHWA

Prepared by

URS Corporation

for
South Placer Regional Transportation Authority
California Department of Transportation
Federal Highway Administration

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Draft

VISUAL IMPACT ASSESSMENT

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR
Placer and Sutter Counties, California

Prepared by:

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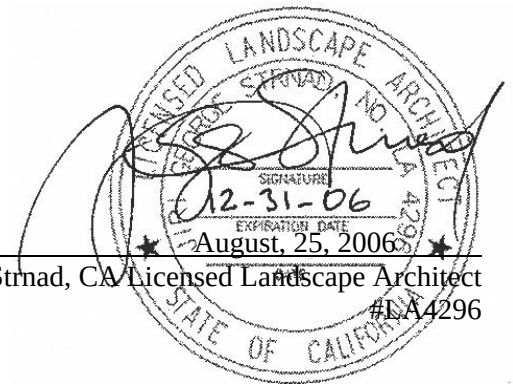
Visual Resource Specialist



August, 25, 2006
Jiri George Strnad, CA Licensed Landscape Architect
#LA4296

June 2007

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LIST OF ACRONYMS

CEQA	California Environmental Quality Act
EBL	Eligible Bridge List
FHWA	Federal Highway Administration
LORS	Laws Ordinances Regulations Standards
m	Meters
MCE	Maximum Creditable Event
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
PCCP	Placer County Conservation Plan
PCPTA	Placer County Transportation Planning Agency
PRSP	Placer Ranch Specific Plan
PVSP	Placer Vineyards Specific Plan
PGWWTP	Pleasant Grove Wastewater Treatment Plant
ROW	Right of Way
SPRTA	South Placer Regional Transportation Authority
SR	State Route
Tier 1 EIS/EIR	Tier 1 Environmental Impact Statement/Program Environmental Impact Report
URS	URS Corporation
VIA	Visual Impact Assessment
VIAHP	Visual Impact Assessment for Highway Projects
WRSP	West Roseville Specific Plan

VISUAL IMPACT ASSESSMENT
PLACER PARKWAY CORRIDOR PRESERVATION TIER 1 EIS/PROGRAM EIR

1.0 INTRODUCTION

1.1 TIER 1 EIS/PROGRAM EIR

The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the South Placer Regional Transportation Authority (SPRTA) propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking State Route (SR) 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1).

The planning for Placer Parkway involves two phases: (1) the present action, selection of a corridor (titled the Placer Parkway Corridor Preservation Project), and (2) the future selection of a precise alignment within the corridor and a decision whether or not to build the Parkway. If a build alternative is selected and pursued after the second phase, the ultimate Placer Parkway project would be constructed and operated. Throughout this document the term "Proposed Action" is used to describe the selection of a corridor to preserve. The document generally uses the term "Parkway" to mean the ultimate roadway, including construction and operation, except where context indicates otherwise.

As stated, the action to be considered based on this Tier 1 analysis involves only the selection of a corridor to preserve, which has limited environmental effects by itself. However, the ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. In order to describe the effects of the ultimate Placer Parkway project to the greatest extent feasible at this early stage, the Tier 1 EIS/EIR also addresses the potential effects of construction and operation of the future roadway. This discussion of the roadway is necessarily limited, however, because only the general concepts of the roadway design and location are known at this time. If a corridor is selected and preserved at Tier 1, a subsequent Tier 2 analysis will evaluate the Parkway itself in detail—the specific roadway "footprint" within the selected corridor, including construction and operation of the roadway.

1.2 CORRIDOR SELECTION AND PRESERVATION

The concept for the Placer Parkway is over a decade old. Placer County's 1994 General Plan depicts a "plan line" for it. Two planning studies helped to refine the concept:

- DKS Associates, 2000 Placer Parkway Interconnect Study/Conceptual Plan
- DKS Associates, 2001 Project Study Report (Project Development Support) for Placer Parkway

Placer Parkway is cited as a high priority regional transportation project by the Sacramento Area Council of Governments (SACOG) 2025 Metropolitan Transportation Plan and the 2027 Placer County Regional Transportation Plan. The project vicinity and surrounding area include some of the fastest growing communities in the Sacramento region. A number of large urban development proposals are being considered by Placer and Sutter counties. New development is expected to add a significant amount of residential, commercial, industrial, and educational uses.

A 2½-year screening and public outreach program that involved local jurisdictions (the Technical Advisory Committee); regional, state, and federal agencies; stakeholder groups that included representatives from planning and public works departments of all affected cities and counties,

environmental, business, agricultural, development, and homeowner interests (the Study Advisory Committee); and elected officials (the Policy Advisory Committee), resulted in the identification of five potential corridors for the Parkway. The Tier 1 Environmental Impact Statement/Program Environmental Impact Report will analyze these five corridor alternatives along with a No-Build Alternative.

Other potential transportation modes such as bus rapid transit may be developed in the corridor in the future, although they are not proposed as part of the current project. The width of the corridor for the Placer Parkway is to vary from approximately 500 feet in the Eastern and Western segments to approximately 1,000 feet wide in the Central Segment. Depending upon the alternative, the corridor's length ranges from a minimum of 14.2 miles to a maximum of 16.2 miles. The selected corridor would contain the roadway, including the median, travel lanes, shoulder, associated access ramps and a no-development buffer zone.

Corridor acquisition may not be completed until after Tier 2, as funding becomes available. Portions of the selected corridor will be preserved as a no-development buffer zone. The buffer would be maintained as a zone where development is either not permitted or is severely restricted. This is intended to restrict access to the proposed interchanges, protect the rural character of agriculturally designated areas in the vicinity of the Parkway as far as possible subject to future development, and to maximize opportunities to incorporate adjacent sensitive areas. It is intended that the buffer would be owned and managed in the future to achieve these objectives. For subsequent Tier 2 (project-level) environmental reviews, the size of this buffer zone could be considered flexible for agriculturally designated land undergoing urban development. In the Tier 2 environmental review, the specific buffer size and location would be determined. This determination would be based on performance standards on a case-by-case basis, depending on the land use needs of future approved development, and taking into account the primary objective of restricting future access to the Parkway.

Project proponents are considering employment of several land management and control mechanisms in order to ensure that the buffer would be effectively maintained as an area where development would either not be permitted, and where construction of any additional access onto the Parkway would not be allowed. These mechanisms could include land use controls, land purchase/leases, general plan amendments, zoning/overlay zoning changes, covenants/deed restrictions, agricultural/conservation easements, urban growth boundaries, etc. "Layering" or using several of these methods would provide more assurance the buffers would be permanent, or at least more difficult to undo.

1.3 TECHNICAL STUDY OBJECTIVE

This Visual Impact Assessment has been prepared to support the Tier 1 Environmental Impact Statement/Program Environmental Impact Report. It presents a Tier 1/Program assessment of potential impacts related to visual resources for five corridor alternatives and the No-Build Alternative as described in Chapter 2.0.

The scope of work performed for this report is based on the Caltrans Local Assistance Procedures Manual (Caltrans, 2006), as modified for purposes of Tier 1/Program analysis by agreement of Caltrans; the Caltrans Highway Design Manual (HDM) (Caltrans, 2001a); and the Caltrans Environmental Handbook (Caltrans, 2004) on preparing a visual impact assessment. In addition, the evaluation considered guidance from the Federal Highway Administration (FHWA), Environmental Checklists for Draft and Final Environmental Documents (FHWA, 1998a; FHWA, 1998b).

This report is organized as follows:

Chapter 2 The Proposed Action
Chapter 3 Methodology

Chapter 4	Regulatory Setting
Chapter 5	Affected Environment
Chapter 6	Potential Direct Impacts
Chapter 7	Secondary and Indirect Impacts
Chapter 8	Cumulative Impacts
Chapter 9	Watt Avenue Interchange
Chapter 10	Avoidance, Minimization and/or Mitigation Strategies
Chapter 11	Analyses to be Undertaken in Tier 2
Chapter 12	References

This report also includes figures and tables, which show the project location, each action alternative, and pertinent technical information prepared to evaluate the action alternatives.

Throughout this document, the Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report is referred to as the Tier 1 EIS/EIR.

2.0 THE PROPOSED ACTION

The Proposed Action for the Placer Parkway Corridor Preservation Project is to select and preserve a 500- to 1,000-foot-wide corridor in the project study area, within which the future four- or six-lane Placer Parkway may be constructed. The ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction, and operation of the Parkway. Although the action taken at Tier 1 on the Placer Parkway Corridor Preservation Project is limited, the underlying project whose effects are studied in this document is the Placer Parkway. To the extent feasible at this early stage, the Tier 1 EIS/EIR addresses the potential effects of construction and operation of the future roadway.

2.1 THE PROJECT STUDY AREA

The project study area is an area of approximately 33,460 acres located in Placer and Sutter Counties, with a small section located in Sacramento County (see Figures 1-1 and 2-1). The portion of the study area in Sacramento County is located in the extreme southwest corner of the study area and does not include any of the proposed corridor alignment alternatives. It extends from SR 70/SR 99 in the west to SR 65 in the east, with the northern boundary extending to Sunset Boulevard West and the southern boundary located adjacent to Baseline and Riego Roads.

For the purposes of the analysis the study area is divided into three segments:

- Western Segment: the Western Segment extends from SR 70/99 to Pleasant Grove Road in Sutter County.
- Central Segment: the Central Segment extends from Pleasant Grove Road in Sutter County to approximately 2,300 feet north of Pleasant Grove Creek in Placer County.
- Eastern Segment: the Eastern Segment extends from approximately 2,300 feet north of Pleasant Grove Creek to SR 65 in Placer County.

2.2 CORRIDOR ALTERNATIVES

The following subsections describe the corridor alternatives, which are depicted on Figure 2-1, and are numbered according to location from south to north in the study area.

2.2.1 The No-Build Alternative

Under the No-Build alternative, land for the Parkway would not be acquired and the Parkway would not be constructed.

2.2.2 Alternative 1 – the Red Alternative

Alternative 1 would extend from SR 70/99 approximately ½ mile north of Riego Road, eastward approximately 1 mile north of Baseline Road to approximately Watt Avenue, proceeding north and transitioning in an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 16.2 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.3 Alternative 2 – the Orange Alternative

Alternative 2 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed northeast, then in a northerly direction south of Pleasant Grove Creek, transitioning to an easterly direction before it reaches Sunset Boulevard West, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.4 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.4 Alternative 3 – the Blue Alternative

Alternative 3 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed north along the Sutter/Placer County Line, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.6 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.5 Alternative 4 – the Yellow Alternative

Alternative 4 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.3 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.2.6 Alternative 5 – the Green Alternative

Alternative 5 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 4,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.2 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.3 PARKWAY DESIGN ASSUMPTIONS

Although the Parkway would be designed and construction-level impacts analyzed during Tier 2, for the purpose of this report and the Tier 1 EIS/Program EIR, several assumptions have been made about potential design and configuration concepts. These assumptions would be subject to further development and refinement, and specific decisions about design of the roadway would be made during the Tier 2 process. For example, the number, location, and design of over-crossings would be determined at the time of final Parkway design, in consultation with local jurisdictions. The following sections outline assumptions for the future roadway.

Preliminary costs estimates for the Parkway range from $600 to $650 million (2005 dollars). This includes costs for right-of-way, design, construction, and environmental mitigation for the four- to six-lane facility. The funding situation has spurred interest in exploring other more creative funding options.

These include a county-wide sales tax, more developer contributions, and tolling facilities. The Technical Report and Tier 1 EIS/Program EIR do not make any assumptions about funding sources.

2.3.1 Conceptual Roadway Configuration

The Parkway would be a high-speed, limited access roadway. Depending upon the timing of adjacent urban development proposals and funding, the Parkway may be designed and constructed incrementally in segments. These could be built as a four-lane (interim) roadway until a six-lane segment is warranted, or as the full six-lane facility. A preliminary conceptual cross section (see Figure 2-2) was developed to facilitate the Tier 1/Program evaluation. It illustrates both four-lane (two lanes in both directions) and six-lane (three lanes in both directions) configurations within the 500- to 1,000-foot corridor widths. The roadway would include a central median approximately 100 to 134 feet wide, depending on local conditions and reflecting Caltrans safety guidance. The Parkway would be designed and constructed to Caltrans standards, unless specific design exceptions are granted. For the purposes of the Tier 1 EIS/ Program EIR, the Parkway's opening year is assumed to be 2020.

Access would be provided at the western and eastern ends of the Parkway, where existing areas of dense development are already located or planned. Access would be restricted for the 7-mile Parkway Central Segment. The analysis assumes no interchanges in this segment. (A possible future extension of Watt Avenue or another nearby roadway may be considered in the Central Segment as a separate project.)

2.3.2 Conceptual Roadway Elevation

As the study area is comprised of relatively flat terrain, the majority of the future Placer Parkway is assumed to be at-grade. As necessary, bridges would be used to span certain features and improvements such as the Union Pacific Railroad tracks along Industrial Boulevard, Pleasant Grove Creek, the Natomas East Main Drainage Canal, and floodplains. Generally, the approximate height of bridges is expected to range from 10 feet above streams to 30 feet above the railroad. Culverts would be used at smaller creek crossings as appropriate, depending on local conditions and permit requirements. The Pleasant Grove Creek floodplain would be crossed by bridges (one in each direction) supported by abutments located approximately 800 feet on either side of the creek to avoid the riparian habitat associated with the creek.

Within the 100-year floodplain, the roadway would be elevated such that the bottom of any new bridges would be above the 100-year water surface elevation. The roadway support structures and bridges would be designed to minimize environmental impact, not impede stream and flood flows, and allow for the unobstructed passage of potential future streamside uses such as maintenance equipment, bikeways, or trails.

Throughout the project study area, the assumptions for creek and floodplain crossings include typical engineering specifications:

- a maximum bridge span of approximately 150 feet;
- for bridge spans exceeding 150 feet, assume one column, approximately 4 feet in diameter, every 150 feet; and
- all columns placed outside of the ordinary high water (OHW) level.

To maintain existing and future local roadway connectivity (for emergency access, farming operations, and community access), over-crossings would be constructed to convey traffic over the Parkway. These over-crossings would not connect to the Parkway. Parkway access would be via the interchanges described below.

2.3.3 Interchange Concepts

The analysis assumes that the location of interchanges (see Figure 2-1) is as follows.

- SR 70/99 (at ½ mile north of Riego Road or at Sankey Road)
- One or two locations to be determined in southern Sutter County
- Fiddyment Road
- Foothills Boulevard
- SR 65 at Whitney Ranch Parkway

The following discussion outlines concepts and assumptions for the six interchanges that could potentially serve Placer Parkway.

2.3.3.1 Western Segment

Within the Western Segment of the Parkway, a high-speed, freeway-to-freeway type interchange would connect the Parkway with SR 70/99 at one of following potential locations depending on the project alternative (see Section 2.2). Placer Parkway would terminate at SR 70/99.

- **Placer Parkway/SR 70/99 Interchange at North of Riego Road.** This alternative concept uses "braided" ramps to eliminate weaving problems or conflicts with the future SR 70/99 at Riego Road interchange being developed by Sutter County and Caltrans.

- **Placer Parkway/SR 70/99 Interchange at Sankey Road.** Under this alternative concept, the existing two-lane Sankey Road would be realigned to the south of Placer Parkway and the proposed freeway-to-freeway interchange, extending from approximately ¼ mile west of SR 70/99 to approximately ¼ mile east of the Union Pacific railroad tracks. There would be no direct access to SR 70/99 or Placer Parkway from the realigned Sankey Road.

Depending on the final alignment selected, one or two additional arterial interchanges would also be located in south Sutter County. Conceptual locations are identified for purposes of this Tier 1/Program analysis (see Figure 2-1). The actual location of these interchanges would be developed in the Tier 2 phase, based on Sutter County requirements.

2.3.3.2 Central Segment

Within the Central Segment of the Parkway, there would not be any access proposed as part of the Project in the 7-mile segment between Fiddyment Road and Pleasant Grove Road. Please see Section 2.4 regarding a potential connection to a future extension of Watt Avenue (Figure 2-3) which could be proposed and constructed by others in the Central Segment; such an interchange is not part of the Placer Parkway.

2.3.3.3 Eastern Segment

Within the Eastern Segment of the Parkway, a signalized high-speed freeway-to-freeway and local access interchange would connect the Parkway to SR 65 at Whitney Ranch Parkway (Figure 2-1). From SR 65 eastward Placer Parkway would terminate and become Whitney Ranch Parkway east of the SR 65 exit ramp intersection. Traffic signals would be provided at the exit ramp terminals. This interchange would be approximately 1 mile north of a planned SR 65/Sunset Boulevard interchange and 1.2 miles south of the existing Twelve Bridges interchange.

As part of this interchange, auxiliary lanes would be required on SR 65 in both directions to enhance traffic operations on the north side of the future SR 65/Sunset Boulevard interchange. The southbound SR 65 exit-ramp at Sunset Boulevard is being designed to accommodate an additional auxiliary lane required for the future Placer Parkway/Whitney Ranch Parkway interchange to minimize the reconstruction of this ramp in the future. Within the Eastern Segment of the Parkway, from SR 65 westward, two interchanges with local roadways would be constructed, one at Foothills Boulevard and one at Fiddyment Road, as depicted on Figure 2-1.

The future interchange on Placer Parkway at Fiddyment Road would be located near the existing intersection of Fiddyment Road and Sunset Boulevard West. To provide acceptable traffic operations, additional distance needs to be provided between the Fiddyment Road/Sunset Boulevard West intersection and the Fiddyment Road/Placer Parkway westbound off-ramp intersection. Therefore, Sunset Boulevard West will need to be realigned to the north as it nears Fiddyment Road.

2.3.4 Landscaping Concept

For the purposes of this environmental analysis, preliminary landscaping concepts have been developed for Placer Parkway. These are entirely conceptual and would be subject to further refinement during the Tier 2 environmental process. It is anticipated that landscaping would be used to reflect local topography and vistas in the study area and complement the varying character of land adjacent to the Parkway corridor. Landscape design would vary within the Parkway's three segments depending on corridor width and type and density of surrounding land uses. Landscaping would be used within the median and the Parkway buffer zone to enhance the aesthetics of the Parkway, and would be used to provide screening and enhance local and long distance views. Where appropriate, more concentrated plantings would be considered to buffer the Parkway from future adjacent land uses that may be incompatible with the Parkway concept, and to prevent unwanted intrusion into shoulder or median areas. Landscape design would likely include a mix of compatible native and non-native plants that may require some irrigation. Wherever possible, native plant species would be used in line with Caltrans policy. Where possible and depending on availability, feasibility and cost, recycled water would be used for irrigation.

During a future design phase, lighting elements would be designed for safety and would consider the proposed landscaping plan in order to minimize potential aesthetic impacts (e.g., shielding lighting elements, using lower-voltage lighting, and proposing lighting fixtures that conform with the visual character of the area).

2.4 POTENTIAL WATT AVENUE INTERCHANGE

The Placer County General Plan includes a number of new roadways that may be needed in Placer County, according to travel demand forecasts. An extension of Watt Avenue to Placer Parkway (from Baseline Road to a new Blue Oaks Boulevard Extension) is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto the Placer Parkway via a new interchange (see Figure 2-3). A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. It would be subject to independent future environmental analysis and review and is not being fully evaluated within this Technical Report or Tier 1 EIS/Program EIR. However, the connection of Placer Parkway to a potential Watt Avenue extension could affect future travel patterns in the area, including use of the Parkway. Based on direction from previous planning studies, this Technical Study and the Tier 1 EIS/Program EIR will evaluate each corridor alternative with and without a Watt Avenue interchange. This evaluation does not predetermine the construction or alignment of a potential Watt Avenue or nearby roadway extension or the precise locations of any potential interchanges with Placer Parkway.

2.5 AGENCY PERMITS AND APPROVALS

The Proposed Action would preserve a preferred corridor for a future transportation facility. In the future, permits and approvals would be obtained from appropriate agencies prior to construction of the Parkway. These permits and approvals may include specific design or mitigation requirements that would be incorporated into the project.

2.6 SUBSEQUENT TIER 2 INFORMATION

As noted earlier, the design and construction of Placer Parkway—including its interchanges and over-crossings, and ancillary features such as stream crossings, safety devices, stormwater management structures, and similar improvements—would be evaluated in a subsequent Tier 2 environmental review process once a corridor has been identified. Chapter 11 provides more detailed information regarding Tier 2 studies.

3.0 METHODOLOGY

The National Environmental Policy Act (NEPA) requires " . . . the use [of] all practical means . . . to assure . . . esthetically . . . pleasing surroundings." FHWA regulations governing compliance with NEPA included the Visual Impact Assessment for Highway Projects (VIAHP) manual (1981). The methodology used in this visual impact study follows the guidelines outlined in this publication, and adheres to guidance within CEQA, and that published by Sutter and Placer Counties, the cities of Roseville, Rocklin, and Lincoln, and Caltrans (see Chapter 4, Regulatory Setting).

Evaluation of visual impacts is often considered highly subjective, even where established federal methodology and guidance are used. Adherence to a clear, comprehensive and understandable visual impact assessment (VIA) methodology helps to ensure that the potential visual impacts associated with a project are evaluated objectively, and that public opinion, concerns and input are taken into account throughout. The FHWA methodology utilized to conduct this VIA follows four principal steps:

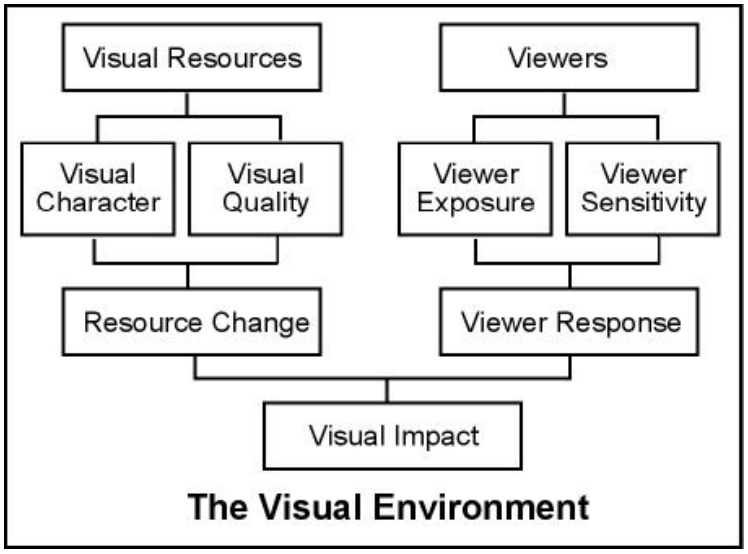
1. Define the affected environment, including project setting and viewshed.

2. Identify key views for visual assessment.

3. Assess the visual impacts of project, including resource change and viewer response.

4. Propose methods to mitigate adverse visual impacts.

The following diagram illustrates the FHWA definition of a visual impact:



As this diagram above illustrates, VIAHP guidelines define "visual impact" as follows: resource change + viewer response = visual impact.

3.1 RESOURCE CHANGE

To evaluate "resource change," the presence, character, and quality of visual resources in the study area must be determined.

3.1.1 Visual Character

Visual character is descriptive and non-evaluative. Landscape visual character (e.g., water, vegetation, and manmade development) is usually described by identifying *landscape types* that form *visual units*. These units include *pattern elements* (form, line, color, texture) and *pattern character* (dominance, scale, diversity, continuity). Any change to these visual units cannot be described as positive or negative until compared with the viewer response to change. For instance, if there is public preference for the established visual character of an area's landscape, any change that would contrast the character of the landscape can be evaluated.

3.1.2 Visual Quality

The FHWA VIA Manual uses three criteria to measure visual quality: vividness, intactness, and unity. An area or landscape unit is considered to have high visual quality if it is rated high for all three criteria. These are defined as follows:

- Vividness: The visual power or memorability of landscape components as they combine in distinctive visual patterns.
- Intactness: The visual integrity of the natural and human-built landscape and its freedom from encroaching elements. It can be present in well-kept urban and rural landscapes, as well as in natural settings.
- Unity: The visual coherence and compositional harmony of the landscape considered as a whole. It frequently attests to the careful design of individual components in the landscape.

Vividness is assessed using landform and landcover. Landform vividness is frequently determined by the pattern elements of form or line, such as the strongly defined skyline of a mountain landscape. Landcover is comprised of water, surface geology, vegetation, and manmade development. Areas with high vividness, for example, often contain water, which creates a vivid landscape component as a result of linear visual effects (such as a shoreline or the sharp edge of a waterfall) and color. Intactness can be assessed in terms of the quality of the natural visual appearance of an area. Low intactness occurs when an unsightly manmade element ("eyesore") encroaches into an undisturbed natural area. High intactness is attributable to the natural visual order of an untouched landscape, such as the Redwood National Forest. Unity is generally used as a measure of how manmade and natural elements work together within the same visual unit. Manmade environments with no visual relation to natural landform or landcover patterns are usually considered to lack visual unity.

As the evaluation of visual character and quality is highly subjective, FHWA Landscape Unit Checklist/Visual Inventory and Analysis worksheets (Figure 3-1) are used as an assessment tool. Appendix A contains completed worksheets used for the visual impact analysis outlined subsequently in Chapter 6.

3.2 VIEWER RESPONSE

To evaluate *viewer response*, one must define the viewers (*of* and *from* the project), their exposure, and their sensitivity. Viewer response is a measurement of existing viewers. FHWA does not require a visual analysis to hypothesize future viewers who may be impacted by a project. Therefore, a Visual Impact Assessment analyzes impacts of a future project on existing viewers.

3.2.1 Viewer Exposure

Viewer exposure is determined by assessing the *number* of viewers exposed to the resource change and the type of viewer activity, the physical *location* of the viewer, as well as the *duration* of their view. Duration of view is influenced by location of the viewer. A viewer traveling in a vehicle experiences a limited duration of a particular view while a resident may have a view that is constant. Viewer exposure is also affected by features such as topography or the built environment, which may block or partially obscure views. All such factors are considered when assessing viewer exposure of a project. High viewer exposure can increase the need for design modifications early in project development in order to avoid or minimize adverse visual impacts.

3.2.2 Viewer Sensitivity

Viewer sensitivity is defined as viewer *activity*, *awareness*, local *values*, and cultural *significance* of the visual resource. Understanding viewers' concern for scenic quality and the viewers' response to change of the visual resources that make up the view helps to determine viewer sensitivity. Often communities may place visual significance on landscape components and areas that would otherwise appear unexceptional in a visual resource analysis; in effect assessment of viewer sensitivity takes into account local values and goals.

4.0 REGULATORY SETTING

This VIA has been prepared in accordance with relevant federal, state and local laws, regulations, guidance, and planning policies. These are summarized below.

4.1 FEDERAL REGULATIONS

4.1.1 National Environmental Policy Act

NEPA requires that proposed federal projects consider potential effects that the project would likely have on the environment. The U.S. Environmental Protection Agency considers visual resources an integral part of the environment and as such includes the topic in NEPA.

4.1.2 FHWA Visual Impact Assessment for Highway Projects

FHWA regulations governing compliance with NEPA are described in Chapter 3 and include the Visual Impact Assessment for Highway Projects (VIAHP) manual (1981).

4.1.3 National Historic Preservation Act of 1966

The VIAHP Manual sets out FHWA's approach to implementation of the National Historic Preservation Act (NHPA). This act, along with its 1976 implementing regulations defined "the criteria of adverse effect (Section 800.8), including the introduction of visual, audible or atmospheric elements that are out of character with the property or alter its setting." A historic district, Reclamation District No. 1000, has been identified within the study area, therefore adherence to these aesthetic regulations apply. This district is a rural historic landscape that has been determined to be historically significant for the reclamation and flood control activities that have occurred within the Sacramento River Basin for the Sacramento Flood Control Project.

4.1.4 Department of Transportation Act, Section 4(f)

This law serves to preserve and protect public parks and recreational lands, wildlife and waterfowl refuges, and historic sites. There are no federally recognized parks and recreational lands, wildlife or waterfowl refuges within the study area. There was found to be one historic resource, as defined in Section 4(f), within the study area (see Section 4.1.3, above).

4.1.5 Wild and Scenic Rivers Act

Originally adopted as law in 1968 the Wild and Scenic Rivers Act designated select rivers which, "possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values . . ." in order to preserve them in their "free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations.". There are no federally designated scenic rivers within the study area.

4.2 STATE REGULATIONS

4.2.1 California Scenic Highway Program

California's Scenic Highway Program was created by the Legislature in 1963. Its purpose is to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Section 260 et seq. There are no state designated scenic highways within the study area.

4.2.2 California Environmental Quality Act

Appendix G of the State CEQA Guidelines specifies that a significant impact would occur if a project would have a substantial, demonstrable negative aesthetic effect. Specifically, a significant impact to visual resources:

- Has a substantial adverse effect on a scenic vista;
- Substantially damages scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrades the existing visual character or quality of the site and its surroundings; or
- Creates a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.

4.3 LOCAL REGULATIONS AND GUIDANCE

General Plans for Placer County, Sutter County, Sacramento County, the City of Roseville, the City of Rocklin, and the City of Lincoln were reviewed for guidelines relevant to visual resources. Table 4-1 below shows a summary of relevant visual resource guidelines contained within these plans.

Table 4-1
Summary of General Plan Policies and Goals (P&Gs)

Document	P&Gs	Requirements
Sutter County General Plan	Land Use Visual and Scenic Routes *Goal 1.H*	To preserve and protect the visual and scenic resources of the area.
	Land Use Visual and Scenic Routes *Policy 1.H-1*	The County shall require that new development be designed to utilize vegetation for screening structures and parking areas.
	Conservation/Open Space – Natural Resources *Goal 4.E*	To conserve, protect, and enhance open space lands and natural resources in Sutter County.
	Conservation/Open Space – Natural Resources *Goal 4.E-1*	The County shall support the preservation of natural land forms, natural vegetation, and natural resources as open space to the maximum extent feasible.
Placer County General Plan	Land Use Visual and Scenic Resources *Policy 1.K.3*	The County shall require that new development in rural areas incorporates landscaping that provides a transition between the vegetation in developed areas and adjacent open space or undeveloped areas.

Table 4-1 (Continued)
Summary of General Plan Policies and Goals (P&Gs)

Document	P&Gs	Requirements
Placer County General Plan (continued)	Land Use Visual and Scenic Resources *Policy 1.K.4*	The County shall require that new development incorporates sound soil conservation practices and minimizes land alterations. Land alterations should comply with the following guidelines: a. Limit cuts and fills; b. Limit grading to the smallest practical area of land; c. Limit land exposure to the shortest practical amount of time; d. Replant graded areas to ensure establishment of plant cover before the next rainy season; and e. Create grading contours that blend with the natural contours on site or with contours on property immediately adjacent to the area of development.
	Land Use Visual and Scenic Resources *Policy 1.K.5*	The County shall require that new roads, parking, and utilities be designed to minimize visual impacts. Unless limited by geological or engineering constraints, utilities should be installed underground and roadways and parking areas should be designed to fit the natural terrain.
	Land Use Scenic Routes *Policy 1.L.3*	The County shall protect and enhance scenic corridors through such means as design review, sign control, undergrounding utilities, scenic setbacks, density limitations, planned unit developments, grading and tree removal standards, open space easements, and land conservation contracts.
	Land Use Scenic Routes *Policy 1.L.4*	The County shall provide for landscaping and/or landscaped mounding along designated scenic corridors where desirable to maintain and improve scenic qualities and screen unsightly views.
	Land Use Scenic Routes *Policy 1.L.8*	The County shall include aesthetic design considerations in road construction, reconstruction, or maintenance for all scenic routes under County jurisdiction.
	Land Use Development Form and Design *Goal 1.O*	To promote and enhance the quality and aesthetics of development in Placer County
	Land Use Development Form and Design *Policy 1.O.9*	The County shall discourage the use of outdoor lighting that shines unnecessarily onto adjacent properties or into the night sky.
	Recreational & Cultural Resources Recreational Trails *Goal 5.C*	To develop a system of interconnected hiking, riding, and bicycling trails and paths suitable for active recreation and transportation circulation.

Table 4-1 (Continued)
Summary of General Plan Policies and Goals (P&Gs)

Document	P&Gs	Requirements
Placer County General Plan (continued)	Recreational & Cultural Resources Recreational Trails *Policy 5.C.4*	The County shall require the proponents of new development to dedicate rights-of-way and/or the actual construction of segments of the Countywide trail system pursuant to trails plans contained in the County's various community plans.
	Recreational & Cultural Resources Recreational Trails *Policy 5.C.5*	The County shall encourage the preservation of linear open space along rail corridors and other public easements for future use as trails.
County of Sacramento General Plan	Land Use Element Agricultural-Recreation Reserve	This designation identifies lands that have potential recreational value, but which would remain in agricultural or related and compatible open space use for the plan period. The location and extent of this category is generally determined by the presence of scenic, aesthetic, wildlife or other resources which require special protection and which may have potential recreational value. The intent of the General Plan is that these lands remain in agricultural uses through the plan period, although some low-intensity recreational uses which do not require the provision of urban services or flood protection may be permitted. Such recreational uses may be either publicly or privately owned and must be compatible with adjoining agricultural and natural preserve uses.
	Land Use Element Visual Quality *LU-24*	Require overhead light fixtures to be shaded and directed away from adjacent residential areas.
County of Sacramento General Plan	Land Use Element Visual Quality *LU-25*	Require exterior lighting to be low-intensity and only used where necessary for safety and security purposes.
	Circulation Element *Policy CI-6*. *Implementation Item B*	Prepare new Transportation Improvement Standards that better integrate pedestrian, transit, and bicycle access and aesthetics.
	Circulation Element *Policy CI-16*	Sacramento County shall implement a program to buffer land uses from each other and transportation system facilities that is effective, aesthetically pleasing, and minimizes the amount of land lost to buffers.
	Open Space Element *Policy OS-10*	Permit development clustering in urban areas where grouping of units at a higher density would facilitate on-site protection of woodlands, wetlands, steep slopes, urban stream corridors, scenic areas, or other appropriate natural features as open space.
	Open Space Element *Key Open Space Concepts*	Open space linkages in the urban environment are also important because they provide definition and scale to neighborhoods and visual, psychological relief to the pervasiveness of urban sprawl. They also create the opportunity for attractive, safe transportation corridors for non-vehicular travel.

Table 4-1 (Continued)
Summary of General Plan Policies and Goals (P&Gs)

Document	P&Gs	Requirements
Roseville General Plan	Land Use Element Growth Management *Goal 13*	New development to the west of Fiddyment Road shall be consistent with the City's desire to establish an edge along the western boundary of the City that fosters a physical separation from County lands through a system of connected open space; a well-defined sense of entry to City from west; opportunities for habitat preservation and recreation; and view preservation corridors that provide an aesthetic and recreational resource for residents.
	Land Use Element Community Design *Policy 8*	Encourage and promote the preservation of historic and/or unique, culturally and architecturally significant buildings, features, and visual environments.
City of Rocklin General Plan	Conservation, Development, and the Utilization of Natural Resources *Goal OCR- 53*	To consider the visual qualities of development projects and project compatibility with surrounding areas, especially when projects are proposed in urbanizing areas abutting rural or semi-rural areas where significant natural resource values exist.
City of Lincoln General Plan	Land Use *Goal LU-12*	To enhance the urban form while maintaining visual and physical access to distinctive environmental features.
	Land Use Open Space Views *Policy LU-12.1*	The City shall maintain visual access to hillside views by regulating building orientation, height, and bulk.
City of Lincoln General Plan	Land Use Open Space Views *Policy LU-12.3*	To enhance views of hillsides, open space, and other distinctive views within the community, project designs would be expected to maintain some viewshed by regulating building orientation, height, and mass.
	Land Use Visual Access to Creeks and Wetland Areas *Policy LU-12.6*	Wherever practical, the City would encourage new development to be oriented towards adjacent creeks and wetland areas and provide visual access to these areas.
	Open Space and Conservation Protect Natural Resources *Policy OSC-1.1*	The City shall strive to protect natural resource areas, fish and wildlife habitat areas, scenic areas, open space areas and parks from encroachment or destruction by incompatible development.
	Open Space and Conservation Encourage Planting of Native Vegetation *Policy OSC-5.4*	The City shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native vegetation, and ensure that a maximum number and variety of well-adapted plants are maintained.

5.0 AFFECTED ENVIRONMENT

5.1 STUDY AREA

The study area is located in southwestern Placer County and southeastern Sutter County, just over a mile north of Sacramento County (Figure 1-1). The study area largely consists of flat agricultural lands (as shown in the photograph, right), with interspersed rural development surrounded by the peaks of the Sierra Nevada to the east, the Sutter Buttes to the northwest, and the Inner Coastal Range to the West. Some industrial development occurs in the westernmost and easternmost portions of the study area. More dense urban development is located adjacent to the eastern end of the study area, in the incorporated cities of Lincoln and Rocklin. The City of Roseville lies to the south of the Eastern Segment and to the east of the Central Segment of the project.

Approximately 91 percent of the parcels within the study area support various forms of agriculture, including pasture/grazing land (for cattle or sheep), cultivated agriculture (such as rice production), or other ranchland (Mara Feeney and Associates, 2006).

5.2 LANDSCAPE UNITS

FHWA guidance defines affected environment in terms of landscape units, or outdoor rooms. Landscape units are defined as an area or volume of distinct landscape character, which forms a spatially enclosed unit at ground level; it may include more than one landscape type. There are three dominant landscape units, each having their own distinct character. These are the Western, Central and Eastern Segment Landscape Units (Figure 5-1).

The Western Segment Landscape Unit is characterized by an agricultural/urban co-dominant landscape character. Key features include the north-south running SR 70/99 corridor and the intersecting Cross and Natomas East Main Drainage canals. Primary local roadways include sections of Riego Road and Sankey Road which run east-west through the landscape unit. The Western Segment Landscape Unit also contains several industrial facilities that add to the urbanized character of this area. The Western Segment Landscape Unit includes industrial, agricultural and/or rural, urban roadway and waterway landscape types.

The Central Segment Landscape Unit is predominantly agricultural in character. Although local roadways, including Sunset Boulevard West, Philips Road, Brewer Road, and Baseline Road, traverse the landscape unit, they are subordinate to the agricultural/rural uses surrounding them. In addition, no state or federal highways run through the Central Landscape Unit area. The Central Segment Landscape Unit is made up of predominantly agricultural and/or rural landscape types.

The Eastern Segment Landscape Unit is characterized as predominantly urban with agricultural influences. This Landscape Unit is directly adjacent to three incorporated cities (Lincoln, Rocklin, and Roseville) and is intersected by SR 65 at its easternmost edge. The Eastern Segment Landscape Unit includes urban development, urban roadway, and agricultural/rural landscape types.

Within each landscape unit select viewsheds (including combinations of foreground, middle ground, and background views) have been identified and classified as representative Landscape Unit Viewshed Locations. Background views from all Segment Landscape Units include views of the Inner Coastal Range to the West, the Sutter Buttes to the northwest and views of the peaks of the Sierra Nevada to the east. In total, twenty-two Viewshed Locations (Figure 5-1) were selected and are inventoried further in this chapter, illustrated in Figures 5-2 through 5-23, and described in Tables A-1 through A-22 in Appendix A.

5.2.1 Visual Character

5.2.1.1 Western Segment Landscape Unit

The visual character for the Western Segment Landscape Unit is generally described as agricultural in nature with minimal influence from development. The Western Segment Landscape Unit includes unincorporated portions of Sutter and Sacramento counties and is approximately 10,402 acres (approximately 29 percent of the study area). SR 70/99 runs north to south along the western edge of the segment, while major east to west arterials include Riego Road (rural arterial), Sankey Road (rural roadway), Howsley Road (roadway), and Pleasant Grove Road (rural arterial), which straddles the border between the Western and Central segments. Other infrastructure in this segment landscape unit includes the Union Pacific Railroad, which runs north to south in the middle of the segment landscape unit, as well as a fire station near Sankey Road. Water features in the Western Segment Landscape Unit include Pleasant Grove Creek, the Cross Canal, the Natomas East Main Drainage Canal, Steelhead Creek, and scattered vernal pool wetland complexes. As in the Central Segment Landscape Unit, the majority of land use in this area is cultivated agricultural land in both Sacramento and Sutter counties, with interspersed pockets of development, including rural roadways, rural residences, and scattered industrial land uses.

Background views from the Western Segment Landscape Unit include views of the Inner Coastal Range to the West, the Sutter Buttes to the northwest and views of the peaks of the Sierra Nevada to the east. The Western Segment Landscape Unit contains industrial/commercial uses within Sutter County, including the Sysco facility along Pacific Avenue near the intersection of Sankey Road, and an industrial park located south of the Sysco facility. As in the Eastern Segment Landscape Unit, these industrial facilities are located near a major highway, in this case SR 70/99, which is approximately 1 mile west. There are also areas of rural residential development located on or near Pleasant Grove Road within this landscape unit. Land use in this area of Sutter County is rice production with scattered rural residences (also see Appendix A (Landscape Unit/Visual Inventory Worksheets), Tables A-8, A-1, and A-2).

5.2.1.2 Central Segment Landscape Unit

The Central Segment Landscape Unit has a visual character that is agricultural in nature with large expanses of relatively undeveloped or farmed lands. The Central Segment Landscape Unit encompasses parts of unincorporated Placer and Sutter counties and is the largest of the three segment landscape units. It includes approximately 15,292 acres (approximately 43 percent of the study area). The major roadways include Baseline Road, Riego Road, Sankey Road, and Pleasant Grove Road that straddles the border between the Western and Central segments. The public land uses existing within this segment landscape unit include the planned City of Roseville's Retention Basin near Phillip Road, and a small wildlife preserve near the Brewer Road crossing of Curry Creek. Water-related features in the Central Segment Landscape Unit include Pleasant Grove Creek, Steelhead Creek, Curry Creek, a small water ski park/catfish farm near the intersection of Baseline Road and Locust Road, and various vernal pool and wetland complexes located throughout the segment landscape unit. Background views from the Central Segment Landscape Unit include views of the Inner Coastal Range to the West, the Sutter Buttes to the northwest and views of the peaks of the Sierra Nevada to the east. The predominant land uses in this segment landscape unit are agricultural, with small enclaves of rural residential uses (specifically near

Baseline and Pleasant Grove roads). In addition, there is a small industrial wood fabrication facility located near the rural residential homes close to the intersection of Baseline and Pleasant Grove roads (also see Appendix A, Tables A-4 through A-13).

5.2.1.3 Eastern Segment Landscape Unit

The Eastern Segment Landscape Unit is characterized as a varied landscape which includes agricultural land, areas of dense residential development, and areas developed as major roadways. The Eastern Segment Landscape Unit is approximately 9,754 acres in size (approximately 28 percent of the study area) and includes areas within the City of Rocklin, the City of Roseville, and unincorporated Placer County. SR 65 and several regional arterial roadways such as Sunset Boulevard, Blue Oaks Boulevard, Pleasant Grove Boulevard, and Baseline Road run through portions of this segment landscape unit. Large regional facilities and infrastructure in this segment landscape unit include the Western Regional Sanitary Landfill/Materials Recovery Facility, the Pleasant Grove Wastewater Treatment Plant (PGWWTP), the newly constructed Roseville Energy Park (REP), and Sacramento Municipal Utilities District (SMUD)/Western Area Power Authority (WAPA) power lines. Streams in this segment landscape unit include a small tributary of Orchard Creek in the northern part of the eastern segment, north of the proposed corridor alignment, Pleasant Grove Creek, and Curry Creek. This segment landscape unit also contains the largest area of vernal pool and wetland complexes, specifically in the area adjacent to the existing PGWWTP. Background views from the Eastern Segment Landscape Unit include views of the Inner Coastal Range to the West, the Sutter Buttes to the northwest and views of the peaks of the Sierra Nevada to the east. The current land use in the easternmost portion of this segment landscape unit is a mixture of industrial and commercial uses near the SR 65 corridor. Public facilities, including the landfill and the PGWWTP, grazing land, or idle farmland, cultivated agricultural land, and a few rural residences are located in the western portion of this segment landscape unit (also see Appendix A, Tables A-12 through A-22).

5.2.2 Visual Quality

In addition to inventorying visual character for each of the landscape units, existing visual quality was assessed. Visual quality ratings are defined by the FHWA by assessing three criteria: vividness, intactness, and unity (see Chapter 3 for descriptions).

All three factors (vividness, intactness, and unity) must be rated high to indicate high visual quality for a study area. Table 5-1 indicates ratings for the three landscape units in relation to the FHWA's three criteria.

Table 5-1
FHWA Visual Quality Assessment

Segment Landscape Units	FHWA Criteria		
	Vividness	Intactness	Unity
Western	Moderate	Low	Low
Central	Moderate	Low	Moderate
Eastern	Moderate/Low	Low	Low

Each segment landscape unit's overall visual quality rating is moderate to low. There are no areas of high visual quality affected by the project corridor alignment alternatives. Appendix A comprises completed FHWA Landscape Unit Checklist/Visual Inventory and Analysis Worksheets for each of the Viewshed

Locations within the three identified landscape units; these provide a thorough analysis of visual character/quality.

5.3 EXISTING PROJECT VIEWSHED

A viewshed is defined as the visual limits of the views located from a proposed project or location. It comprises views from, and of, that location. For the purposes of this report the viewshed includes views to and from the corridor alternatives, discussed by segment landscape unit.

The VIAHP Manual defines three distinct distance zones for the assessment of potential visual impacts. These are: foreground views (0 to ¼ – ½ mile), middle ground views (¼ – ½ mile to 3 – 5 miles), and background views (3 – 5 miles to infinite miles). The flat topography of the area lends itself to broad, expansive views, which comprise all three distance zones.

Principal travel corridors are important to an analysis of aesthetic features because they define the vantage point for the largest number of viewers. Within the study area there are numerous roadways, many of which traverse large portions of their respective study area segment landscape units. In addition, numerous roadways just outside the study area have views to the project corridors. As required by FHWA guidelines, a variety of roadways (and the segment landscape units they view) were chosen to help represent a wide variety of traveler views of the project within the study area (see Figure 5-1).

- SR 70/99 — Western Segment Landscape Unit
- Pleasant Grove Road — Western Segment Landscape Unit/Central Segment Landscape Unit
- Keys Road — Western Segment Landscape Unit/Central Segment Landscape Unit
- Sankey Road — Western Segment Landscape Unit/Central Segment Landscape Unit
- Riego/Baseline Road — Western Segment Landscape Unit/Central Segment Landscape Unit/Eastern Segment Landscape Unit
- Locust Road — Central Segment Landscape Unit
- County Acres Lane — Central Segment Landscape Unit
- Sunset Boulevard West — Central Segment Landscape Unit/Eastern Segment Landscape Unit
- Watt Avenue — Central Segment Landscape Unit/Eastern Segment Landscape Unit
- SR 65 — Eastern Segment Landscape Unit
- Industrial Avenue — Eastern Segment Landscape Unit
- Whitney Boulevard — Eastern Segment Landscape Unit
- Twelve Bridges Road — Eastern Segment Landscape Unit
- Athens Avenue — Eastern Segment Landscape Unit
- Fiddyment Road — Eastern Segment Landscape Unit
- Sunset Boulevard — Eastern Segment Landscape Unit

Other views taken into account include nearby residential views at the western boundary of the City of Roseville; specifically, backyard views from the Crocker Ranch Homes, as well as views from residences along Westhills Drive and Del Webb Boulevard. Background views from all Segment Landscape Units include views of the Inner Coastal Range to the West, the Sutter Buttes to the northwest and views of the peaks of the Sierra Nevada to the east. All analyzed views correspond to the twenty-two Viewshed Locations, which have been chosen to help identify and assess possible aesthetic concerns of the project. Twenty-two viewshed locations are shown in Figures 5-2 through 5-23 and listed in Section 5.4 below.

Several of these figures show land within the area of the West Roseville Specific Plan (WRSP), which was approved in 2004. Since the aerial photographs of this area were taken, this land has been extensively graded and continues to change as additional improvements proposed within the WRSP are implemented.

5.3.1 Existing Viewshed Lighting

FHWA guidance requires assessment of nighttime views and changes to lighting and glare. Placer Parkway would require installation of nighttime lighting fixtures. Existing lighting sources in the study area are limited to the developed areas, which are predominantly in the Eastern Segment Landscape Unit. At the Tier 1 stage, detailed design information on potential location, types and quantity of project lighting is not available, and therefore analysis of impacts from proposed lighting are not included in this assessment. These elements would be evaluated within the Tier 2 level analysis.

5.4 EXISTING VIEWER SENSITIVITY/VIEWER EXPOSURE

5.4.1 Viewer Sensitivity

Viewer sensitivity relates directly to the viewshed in which a potential project would be located. The viewshed includes all areas where physical changes associated with the project are visible from a sensitive viewpoint, and it is influenced by existing topography, vegetation, and structures. As described in Section 3.1.3, viewer sensitivity is defined as viewer *activity*, *awareness*, local *values*, and cultural *significance* of the visual resource.

For purposes of this visual analysis, the project viewshed consists of a wide variety of foreground, middleground and background views. These foreground and middleground viewsheds generally follows the study area boundary. Background views of the surrounding landscapes (including, but not limited to, the snowy peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range) are found throughout all viewshed landscape units.

The sensitivities of different types of viewers within the foreground, middleground and background of the study area vary depending upon viewer activity and awareness of and familiarity with the surrounding environment. The following describes the comparative sensitivity of the various types of viewers in decreasing order of sensitivity.

Recreational Viewers. Recreational viewers, including those at park locations, playgrounds, baseball fields etc., particularly those with views of the Parkway, would be most sensitive to change because the nature of their viewing experience is often focused on their visual surroundings.

Residents. Residents, particularly those with views of the Parkway from their homes, would be most sensitive to potential visual impacts because of the relative permanency of their viewing experience.

Workers. Employees of retail, industrial, and professional establishments within the viewshed of the Parkway would be considered sensitive viewers because they have frequent opportunities to experience the views from their workplaces and routinely visit the area. These views can be fleeting or lengthy in duration.

Pedestrians. Pedestrians would be considered sensitive viewers, as they would be directly within the viewshed and would have lengthy exposure to views.

Regular Motorists. Regular motorists (including regular railroad riders) would be those who live in the study area or who commute through it on a regular basis and are familiar with the surrounding views.

However, their sensitivity to these views would be less compared to that of pedestrians, as passage of drivers through the study area is quicker and their attention likely to be less focused on visual qualities.

Occasional Motorists. Occasional motorists (including occasional railroad riders) are typically nonresident, non-commuter tourists. These motorists would have short duration, temporary views of the Parkway and would therefore be considered less sensitive than regular motorists.

5.4.2 Viewer Exposure

In addition to viewer sensitivity, viewer exposure to the future Parkway must also be assessed. Viewer exposure is typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, duration of their view, speed at which the viewer moves, and position of the viewer. In order to help assess existing viewer exposure, existing population and traveler counts were analyzed and included for the study area and adjacent localities (Figure 5-24). U.S. Census data are updated intermittently. Therefore, it should be noted that year 2000 data (the most current data available) were used to assess existing conditions for this project. In addition, it should be noted that Census population numbers are helpful when assessing the general number of potential residential viewers within the region; however, since Census numbers are generated by Census block groups, the actual location of these population numbers can vary within that Census block group itself. In addition, traffic counts throughout the region were provided by DKS Associates, dated 2007. Viewer activity would vary throughout the region. While the number of potential viewers can generally be assessed by reviewing Census and Average Daily Count numbers, viewer activity, duration of views, speed at which the viewer is moving (for traveler views), and position of the viewer would vary.

5.5 EXISTING TYPICAL VIEWSHEDS

Based upon assessment of viewer sensitivity and viewer exposure as defined in Section 5.4.2, and, the extent of the viewshed, twenty-two viewsheds and three landscape units for this project have been identified. Viewshed locations within the three identified landscape units represent typical key views of various sensitivities within the project vicinity from a variety of view distances (foreground, middleground, and background).

Although project features (e.g., interchange locations) were taken into account when selecting typical viewshed locations, per FHWA guidelines the main factors for choosing Viewshed Locations are viewer sensitivity (viewer activity, awareness, local values, and cultural significance of the area) and viewer exposure (number of viewers, type of activity, location of viewer, and duration of view).

5.5.1 Landscape Unit Viewshed Locations

Twenty-two representative landscape unit viewshed locations (Figures 5-2 through 5-23), along with existing visual quality ratings for each view are listed below. Viewshed Locations have been grouped by Landscape Unit affected. Numbering of viewshed locations is purely for identification purposes only and is not meant to reflect ranking or priority of views. Where viewshed locations overlap (i.e., the viewshed location has views to more than one landscape unit), the viewshed location is included in the primary affected landscape unit inventories list only. Several representative landscape unit viewshed locations have either a foreground, middle-ground or background view of the project or have a combination of views, and represent a variety of combinations of views and viewers affected.

Western Segment Landscape Unit Viewshed Locations:

Viewshed #1: Western Segment Landscape Unit – Eastbound traveler views on Riego Road at SR 70/99 Intersection looking northeast toward project. Sutter County. *(Typical Viewshed #1, see Figure 5-2, see also Appendix Table A-1.)* Existing visual quality rating is Low.

Viewshed #2: Western Segment Landscape Unit – Northbound traveler views on SR 70/99 at Sankey Road looking east toward project. County of Sutter County. *(Typical Viewshed #2, see Figure 5-3, see also Appendix Table A-2.)* Existing visual quality rating is Low.

Viewshed #3: Western Segment Landscape Unit – Southbound traveler views on SR 70/99 looking south toward Sankey Road intersection. Sutter County. *(Typical Viewshed #3, see Figure 5-4, see also Appendix Table A-3.)* Existing visual quality rating is Low.

Central Segment Landscape Unit Viewshed Locations:

Viewshed #4 Central Segment Landscape Unit – Eastbound traveler on Sunset Boulevard West between Pettigrew Road and Dinky Lane looking south toward proposed project. Placer County. *(Typical Viewshed #4, see Figure 5-5, see also Appendix Table A-4.)* Existing visual quality rating is Low.

Viewshed #5: Western/Central Segment Landscape Units – Eastbound traveler on Sunset Boulevard West at Pleasant Grove Road intersection (project would be in distant background). Sutter County. *(Typical Viewshed #5, see Figure 5-6, see also Appendix Table A-5.)* Existing visual quality rating is Moderate.

Viewshed #6: Western/Central Segment Landscape Units – Southbound traveler on Pleasant Grove Road at Keys Road intersection looking southeast toward project. Sutter County. *(Typical Viewshed #6, see Figure 5-7, see also Appendix Table A-6.)* Existing visual quality rating is Moderate.

Viewshed #7: Western/Central Segment Landscape Units – Southbound traveler on Pleasant Grove Road near Sankey Road looking east toward project. Sutter County. *(Typical Viewshed #7, see Figure 5-8, see also Appendix Table A-7.)* Existing visual quality rating is High.

Viewshed #8: Western/Central Segment Landscape Units – Northbound traveler on Pleasant Grove Road at Riego Road/Baseline Road looking north toward project. Sutter/Placer County. *(Typical Viewshed #8, see Figure 5-9, see also Appendix Table A-8.)* Existing visual quality rating is Moderate.

Viewshed #9: Central Segment Landscape Unit – Northbound traveler just off Locust Road at Baseline Road looking north toward project. Sutter/Placer County. *(Typical Viewshed #9, see Figure 5-10, see also Appendix Table A-9.)* Existing visual quality rating is Low.

Viewshed #10: Central Segment Landscape Unit – Eastbound traveler on Baseline Road at Country Acres Lane looking north toward project. Placer County. *(Typical Viewshed #10, see Figure 5-11, see also Appendix Table A-10.)* Existing visual quality rating is Low.

Viewshed #11: Central/Eastern Segment Landscape Units – Westbound traveler on Baseline Road at Watt Avenue looking northwest toward project. Placer County. *(Typical Viewshed #11, see Figure 5-12, see also Appendix Table A-11.)* Existing visual quality rating is Low.

Viewshed #12: Central/Eastern Segment Landscape Units – Residential views/Westbound traveler on Westhills Drive at Fiddyment Road looking west toward project. City of Roseville/Placer County. Note that the area of the WRSP shown in this figure has been substantially graded and developed since the aerial photograph was taken. *(Typical Viewshed #12, see Figure 5-13, see also Appendix Table A-12.)* Existing visual quality rating is Low.

Viewshed #13: Central/Eastern Segment Landscape Units – Residential views/Northbound traveler on Fiddyment Road at Del Webb Boulevard looking west toward project. City of Roseville, Placer County. Note that the area of the WRSP shown in this figure has been substantially graded and developed since the aerial photograph was taken. *(Typical Viewshed #13, see Figure 5-14, see also Appendix Table A-13.)* Existing visual quality rating is Moderate.

Eastern Segment Landscape Unit Viewshed Locations:

Viewshed #14: Eastern Segment Landscape Unit – Northbound traveler on Industrial Avenue at Pleasant Grove Creek Bridge (proposed project would be behind bridge in this photo). City of Roseville, Placer County. *(Typical Viewshed #14, see Figure 5-15, see also Appendix Table A-14.)* Existing visual quality rating is Low.

Viewshed #15: Eastern Segment Landscape Unit – Northbound traveler on SR 65 at Placer County/City of Roseville/City of Rocklin merge looking north toward project. City of Rocklin/City of Roseville, Placer County. *(Typical Viewshed #15, see Figure 5-16, see also Appendix Table A-15.)* Existing visual quality rating is Low.

Viewshed #16: Eastern Segment Landscape Unit – Northbound traveler on SR 65 at Whitney Boulevard looking northwest toward proposed project. Placer County. *(Typical Viewshed #16, see Figure 5-17, see also Appendix Table A-16.)* Existing visual quality rating is Low.

Viewshed #17: Eastern Segment Landscape Unit – Westbound traveler on Whitney Boulevard at SR 65 looking west toward proposed project. Placer County. *(Typical Viewshed #17, see Figure 5-18, see also Appendix Table A-17.)* Existing visual quality rating is Low.

Viewshed #18: Eastern Segment Landscape Unit – Westbound traveler on Twelve Bridges Road at SR 65 looking southwest toward proposed project. City of Lincoln, Placer County. *(Typical Viewshed #18, see Figure 5-19, see also Appendix Table A-18.)* Existing visual quality rating is Low.

Viewshed #19: Eastern Segment Landscape Unit – Westbound traveler on Athens Avenue between Fiddyment Road and SR 65 looking south toward proposed project. Placer County. *(Typical Viewshed #19, see Figure 5-20, see also Appendix Table A-19.)* Existing visual quality rating is High.

Viewshed #20: Eastern Segment Landscape Unit – Southbound traveler on Fiddyment Road between Athens and Sunset Boulevard West looking south toward proposed project. Placer County. *(Typical Viewshed #20, see Figure 5-21, see also Appendix Table A-20.)* Visual quality rating is Moderate.

Viewshed #21: Eastern Segment Landscape Unit – Residential backyard views within Crocker Ranch Homes at Mt. Tamalpais Drive near Big Bear Drive looking north toward proposed project. City of Roseville, Placer County. *(Typical Viewshed #21, see Figure 5-22, see also Appendix Table A-21.)* Visual quality rating is Low.

Viewshed #22: Eastern Segment Landscape Unit – Westbound traveler views on Sunset Boulevard West at Fiddyment Road looking west down Sunset Boulevard West toward proposed project. Placer County. *(Typical Viewshed #22, see Figure 5-23, see also Appendix Table A-22.)* Visual quality rating is Low.

The viewshed locations identified above include a variety of representative views "of" and "from" a variety of locations within each of the identified Landscape Units. Table 5-2 below identifies existing Visual Character/Quality and Viewer Sensitivity/Exposure by Landscape Unit based upon this analysis.

Table 5-2
Existing Visual Character/Quality and Viewer Sensitivity/Exposure by Landscape Unit

Segment Landscape Unit	Visual Character	Visual Quality	Viewer Sensitivity	Viewer Exposure
Western	Agricultural/Urban Co-Dominant	Moderate/ Low	Moderate	Moderate
Central	Agricultural with Urban Influence	Moderate	Low/Moderate	Low/Moderate
Eastern	Urban with Agricultural Influence	Moderate/ Low	Moderate/High	Moderate/High

6.0 POTENTIAL DIRECT IMPACTS

As specified in FHWA Guidelines, visual resource change is the sum of the change in visual character and change in visual quality. The first step in determining visual resource change is to assess the compatibility of the project with the visual character of the existing landscape. The second step is to compare the visual quality of the existing resources with projected visual quality after the project is constructed.

The viewer response to project changes is the sum of viewer exposure and viewer sensitivity to the project. The resulting level of visual impact is determined by combining the severity of resource change with the degree to which people are likely to oppose the change.

The FHWA has defined the following measures of visual impact levels:

- **Low** – Minor adverse change to the existing visual resource, with low viewer response to change in the visual environment. May or may not require mitigation.
- **Moderate** – Moderate adverse change to the visual resource with moderate viewer response. Impact can be mitigated within 5 years using conventional practices.
- **Moderately High** – Moderate adverse visual resource change with high viewer response or high adverse visual resource change with moderate viewer response. Extraordinary mitigation practices may be required. Landscape treatment required would generally take longer than 5 years to mitigate.
- **High –** A high level of adverse change to the resource or a high level of viewer response to visual change such that architectural design and landscape treatment cannot mitigate the impacts. Viewer response level is high. An alternative project design may be required to avoid highly adverse impacts.

6.1 NO-BUILD ALTERNATIVE

Under the No-Build Alternative, land for the future construction of the Placer Parkway would not be acquired and the Placer Parkway would not be constructed. No impacts to visual resources would occur as a result of the No-Build Alternative.

6.2 ALTERNATIVE 1 – THE RED ALTERNATIVE

Figure 2-1 indicates the proposed Alternative 1 corridor through the project's three identified landscape units (Western, Central and Eastern). Per FHWA guidelines, potential visual impacts are assessed by reviewing resource change (changes to visual character and visual quality) and viewer response to those changes (identified by assessing viewer sensitivity and viewer exposure). In order to understand potential changes and overall impacts from Alternative 1, potential impacts relating to resource change and viewer response (per Landscape Unit) were assessed. Potential visual impacts of Alternative 1 are described in Sections 6.2.1 through 6.2.3. A summary of potential impacts of Alternative 1 are included in Section 6.2.4.

6.2.1 Western Segment Landscape Unit

6.2.1.1 Resource Change

See Appendix A for FHWA Inventory Sheets of Visual Character for each Viewshed Location within the landscape unit.

Visual Character

Under Alternative 1, visual character in the Western Segment Landscape Unit would change from predominantly agricultural in nature with urban influences, to a shared urban and agricultural character. The Parkway would bring co-dominance between agricultural- and urban-based forms, lines, colors, and textures. Agricultural pattern elements (flat forms, clean lines, green/natural undertones and rich rural textures) currently dominate the Western Segment Landscape Unit. The influence of additional urban pattern elements (linear and concrete forms, more dominant roadway and structural lines, gray and black color undertones, and concrete/pavement textures) would create a strong change in visual character, and would increase the visual diversity of the study area; a process already began with the implementation of the WRSP, which has introduced grading and other pre-construction improvements to the area. Landscaping and other mitigation strategies are identified to help soften the change in character (see Chapter 10, Avoidance, Minimization, and/or Mitigation Strategies).

The continuity of farming lands in the Western Segment Landscape Unit for Alternative 1 is currently broken up by rural roadways, rural residences, and scattered industrial land uses. Alternative 1 would result in a change in character within the Western Segment Landscape Unit, as agricultural land is converted to highway use. Changes to the visual character with the Parkway would include the introduction of new, highly visible structures, including two or three interchanges, with both a freeway-to-freeway interchange, bridges, and local street over crossings (Figure 5-1). The scale and dominance of these changes in conjunction with the existing flat natural environmental would change existing panoramic views of the area. Consequently, due to changes in the form, line, color, and textures introduced by the Parkway creating changes in scale, continuity, diversity, and dominance, under Alternative 1, the character of the Western Segment Landscape Unit would be characterized as agricultural/urban co-dominant (see Table 6-1).

Visual Quality

Alternative 1 would not affect the characterization of visual quality in the Western Segment Landscape Unit, which would remain moderate to low. Under Alternative 1, the Western Segment Landscape Unit would continue to be characterized as having moderate visual intactness, and the addition of the Parkway would further contribute to the lack of integrity of the landscape. Existing unity for the Western Segment Landscape Unit is considered low, as agricultural areas are interspersed with roadways and limited urban development. Background views from the Western Segment Landscape Unit would continue to include views of the Inner Coastal Range to the West, the Sutter Buttes to the northwest and views of the peaks of the Sierra Nevada to the east. The Parkway would further reduce this unity. Overall, the Western Segment Landscape Unit under Alternative 1 would maintain a moderate/low visual quality rating (Table 6-1).

6.2.1.2 Viewer Response

Viewer Sensitivity

Viewer sensitivity is defined by the FHWA as follows: The preferences, values, and opinions of different viewer groups can be documented in the following ways: viewer activity and awareness, local values and cultural significance of the visual resource (FHWA, 1981, p. 68). Local values and cultural significance of the visual resource are difficult to obtain at this preliminary phase of project development (Tier 1 EIS/EIR). However, based upon a limited review of viewers surrounding the project alternative, a sensitivity rating is given for each Viewshed Location within the area. The viewshed locations identified in Section 5.4 that relate to the Western Segment Landscape Unit under Alternative 1 comprise Viewshed Locations #1-3, and #5-8 (see Section 5.5.1).

Under Alternative 1, viewer sensitivity to the Western Segment Landscape Unit has been classified as Moderate/High since the viewer's concern for scenic quality and change to the existing visual setting is anticipated to be high. Currently most viewers within the study area are commuters using existing roadways, and therefore existing viewer sensitivity is low. Viewer sensitivity may change with the introduction of new major structures associated with the Parkway, such as the freeway-to-freeway interchange and one or two additional interchanges within this landscape unit. Although viewer focus would likely be on the Parkway itself, new structures would create visual interest and would heighten traveler viewer sensitivity to the project. Heightened viewer sensitivity would also occur as agricultural lands are utilized for the Parkway. In addition, there are scattered rural residences and some residential communities that would have views of the Parkway with the introduction of this alternative. Viewer sensitivity under Alternative 1 would shift from Moderate (Table 5-2) to Moderate/High Sensitivity (Table 6-1).

Viewer Exposure

Viewer exposure is defined by the FHWA as the degree to which viewers are exposed to a view by their physical location, the number of people viewing, and the duration of view (FHWA). Figure 5-24 shows population and traffic counts for exposed viewers within the region. This figure shows physical location, the number of people viewing and the duration of view (e.g., residential – long duration, travelers – shorter duration). The Viewshed Locations identified in Section 5.4 that relate to the Western Segment Landscape Unit under Alternative 1 include Viewshed Locations #1-3 and #5-8 (see Section 5.5.1).

Alternative 1 would create a change in viewer exposure from and of the Parkway. The majority of viewers of Alternative 1 within the Western Segment Landscape Unit would be travelers viewing the project from SR 70/99. Existing traffic along this major roadway can be characterized as moderate to heavy and continuous. Existing exposure for views from SR 70/99 of Alternative 1, however, can be characterized as moderate to low since most viewers would be exposed to changes in views for minimal duration (while traveling) at high rates of speed. Alternative 1 would add vehicular capacity to the study area, thereby adding additional viewers from Alternative 1. In addition, Alternative 1 would potentially have recreational/commuter bicycle viewers in the study area who would have longer, continual views of Alternative 1. The number of viewers would remain moderate to heavy. Existing residences within the study area would have stationary views (in addition to moving views to and from their homes) of Alternative 1. The number of residences (see Census population counts shown on Figure 5-24) with views of the alternative are characterized as low for the Western Segment Landscape Unit. However, the frequency of exposure for these residences is high. Although over-crossings and interchanges would be visible from a variety of nearby residential viewers and travelers, the existing flat topography minimizes direct views of the roadway itself for most viewsheds within the Western Segment Landscape Unit. Overall viewer exposure of the Western Segment Landscape Unit under Alternative 1 would shift from Moderate (Table 5-2) to Moderate/High (Table 6-1).

6.2.2 Central Segment Landscape Unit

6.2.2.1 Resource Change

Visual Character

Under Alternative 1, the character in the Central Segment Landscape Unit would remain agricultural in nature but would have a stronger urban influence due to the addition of the Parkway. The resource area would change from predominantly agricultural in nature with large expanses of relatively undeveloped or farmed lands to a mix of urban- and rural-influences. Agricultural pattern elements (flat forms, clean lines, green/natural undertones and rich rural textures) currently dominate the Central Segment Landscape Unit. Alternative 1 would introduce urban-based forms, lines, colors and textures to a relatively rural

area; a process already began with the implementation of the WRSP, which has introduced grading and other pre-construction improvements to the area. The influence of urban pattern elements (linear and concrete forms, more dominant roadway and structural lines, gray and black color undertones, and concrete/pavement textures) would increase visual diversity. Landscaping and other mitigation is proposed to help soften the change in character (see also Chapter 10, Avoidance, Minimization, and/or Mitigation Strategies). Even with the inclusion of the Parkway, the Central Segment Landscape Unit itself would remain agricultural in nature but the additional urban pattern elements will unquestionably add to the urban influence already found in the region.

The continuity of farming lands in the Central Segment Landscape Unit area is currently broken up by rural roadways. Alternative 1 would cause a distinct change in character for a corridor within this landscape unit, as agricultural areas are utilized for the Parkway. Changes to the visual character with the project would include the introduction of new highly visible structures, including a bridge over Pleasant Grove Creek, and local street over-crossings. The scale and dominance of these changes in conjunction with the existing flat natural environmental would impede some existing panoramic views and add views to other areas of the region. Alternative 1 will create changes in the form, line, color, and textures introduced by the Parkway creating changes in scale, continuity, diversity and dominance. However, under Alternative 1, the character of the Central Segment Landscape Unit would remain agricultural with a urban influence.

Visual Quality

Alternative 1 would not affect the existing vividness of the Central Segment Landscape Unit, which is characterized as moderate, reflecting its flat rural terrain. Background views from the Central Segment Landscape Unit would continue to include views of the Inner Coastal Range to the West, the Sutter Buttes to the northwest and views of the peaks of the Sierra Nevada to the east. The existing low intactness rating of the Central Segment Landscape Unit would not be substantially affected by Alternative 1. Urban development (including rural roadways and scattered residences/businesses) intermixed with rural development (agricultural fields) has already changed the original natural setting that once existed. Alternative 1 would only add to the lack of integrity of the landscape, further lowering the intactness of the area. Existing unity for the Central Segment Landscape Unit is considered moderate. Man-made natural landscapes (e.g., agricultural areas) co-exist with the rural roadways and limited rural-based development, but the overall harmony of the agricultural setting in the region remains unified. Alternative 1 would result in the Central Segment Landscape Unit becoming less predominantly agricultural in nature. The introduction of a man-made, urban feature would decrease the unity of the area to low. Overall, the Central Segment Landscape Unit under Alternative 1 would maintain a moderate visual quality rating.

6.2.2.2 Viewer Response

Viewer Sensitivity

A representation of viewers within the landscape unit have been included to help evaluate potential viewer sensitivity to Alternative 1. To help with this evaluation, a sensitivity rating has been assigned for each Viewshed Location within the landscape unit. The viewshed locations identified in Section 5.4 that relate to the Central Segment Landscape Unit under Alternative 1 include Viewshed Locations #4-13 (see Section 5.5.1).

Under Alternative 1, viewer sensitivity to the Central Segment Landscape Unit has been classified as Moderate/High since the viewer's concern for scenic quality and change to existing visual is anticipated to be high. Currently most viewers within the study area are commuters using existing roadways, and therefore existing viewer sensitivity to the proposed Alternative is low. Viewer sensitivity may change

with the introduction of proposed structures associated with the alternative, such as the over-crossings within this landscape unit. Although viewer focus would likely be on the alternative itself, new structures would create visual interest and would heighten traveler viewer sensitivity of the project. In addition, heightened viewer sensitivity from nearby residences (and other viewers) of the alternative would occur as agricultural lands are converted to urban Parkway uses. Viewer sensitivity under Alternative 1 would shift from Low/Moderate to Moderate/High.

Viewer Exposure

Figure 5-24 shows population (Census of Population and Housing, 2000) and existing traffic counts for exposed viewers within the region. This figure presents a representative physical location, number of people viewing, and duration of view (e.g., residential – long duration, travelers – shorter duration). The viewshed locations identified in Section 5.4 that relate to the Central Segment Landscape Unit under Alternative 1 comprise Viewshed Locations #7, 8, 9, 10, 11, 12, and 13 (see Section 5.5.1). (See comments in Western Segment Landscape Unit about Figure 5-24.)

Alternative 1 would create a change in viewer exposure from and to the Parkway. Although existing traffic through the landscape unit is characterized as moderate to heavy and continuous, the existing exposure for the majority of viewers is characterized as moderate to low since most viewers would be exposed to changes in views for minimal duration (while traveling) at high rates of speed. In addition, Alternative 1 would potentially have recreational/commuter bicycle viewers in the study area who would have longer, continual views of Alternative 1. Viewers in existing residences within the study area would primarily have stationary views of Alternative 1, and would experience relatively high exposure to these views. Over-crossings and interchanges would be visible from a variety of nearby viewers and travelers and existing flat topography allows direct views of the roadway itself for viewsheds in close proximity to Alternative 1 within the Central Segment Landscape Unit. Overall viewer exposure of the Central Segment Landscape Unit under Alternative 1 would shift from Low/Moderate to Moderate.

6.2.3 Eastern Segment Landscape Unit

6.2.3.1 Resource Change

Visual Character

Under Alternative 1, the character of the Eastern Segment Landscape Unit would change dramatically. Substantial additional urban influences would be introduced to the character of the area (e.g., three new interchanges including a freeway-to-freeway interchange and local street overcrossings). The Eastern Segment Landscape Unit includes views from portions of the following incorporated cities within Placer County: Rocklin, Roseville, and Lincoln. Agricultural lands and rural development surround the urban development, but of the three landscape units, the Eastern Segment Landscape Unit contains the most urban character. This segment landscape unit contains a mixture of industrial and commercial uses including large regional facilities and infrastructure. Alternative 1 would introduce additional urban-based forms, lines, colors and textures, creating a stronger urban influence. Linear and concrete forms, more dominant roadway and structural lines, gray and black color undertones, and concrete/pavement textures would add to the urban characterization of the area. However, agricultural pattern elements (flat forms, clean lines, green/natural undertones and rich rural textures) would remain a dominant influence. Landscaping and other mitigation is proposed to help soften the edges of these mixed areas (see also Chapter 10, Avoidance, Minimization, and/or Mitigation Strategies).

The Eastern Segment Landscape Unit is characterized as diverse, with areas of flat, rural agricultural lands adjacent to large-scale residential developments lying within and adjacent to the alternative corridor. Currently there are few above-ground structures, over-crossings or interchanges within the

Eastern Segment Landscape Unit of Alternative 1. Urban influences in the Eastern Segment Landscape Unit do include the Union Pacific Railroad and the Rio Bravo biomass power plant property in the vicinity of Industrial Boulevard. Changes in visual character would affect views of and from the Parkway from surrounding areas. Consequently, due to changes in the form, line, color, and textures introduced by Alternative 1 creating changes in scale, continuity, diversity and dominance, the character of the Eastern Segment Landscape Unit would shift from Urban with Agricultural influence to Agricultural/Urban Co-Dominant.

Visual Quality

Alternative 1 would not substantially affect the vividness of the Eastern Segment Landscape Unit, which would remain moderate to low. This segment landscape unit is typified by a mix of agricultural lands and dense residential developments. Notable visual features consist of industrial and commercial structures. Background views from the Eastern Segment Landscape Unit would continue to include views of the Inner Coastal Range to the West, the Sutter Buttes to the northwest and views of the peaks of the Sierra Nevada to the east. The addition of the alternative would contribute further to the lack of integrity of the landscape, further lowering the intactness of the area. Existing unity for the Eastern Segment Landscape Unit is considered low, with agricultural landscapes interspersed with roadways and areas of urban development. Alternative 1 would further disrupt this existing low level of visual unity. Overall, the Eastern Segment Landscape Unit under Alternative 1 would maintain a moderate to low visual quality rating.

6.2.3.2 Viewer Response

Viewer Sensitivity

The viewshed locations identified in Section 5.4 that relate to the Eastern Segment Landscape Unit under Alternative 1 include Viewshed Locations #14-22 and #11-13 (see Section 5.5.1).

Under Alternative 1, viewer sensitivity to the Eastern Segment Landscape Unit has been classified as Moderate/High. Currently most viewers within the study area are commuters using existing roadways. Viewer sensitivity would change with the introduction of new major structures associated with the alternative, such as the freeway-to-freeway interchange and over-crossings. Although viewer focus would likely be on the Parkway itself, new structures would create visual interest and would heighten traveler viewer sensitivity of the project. Heightened viewer sensitivity would also occur for those viewers within the region who view the alternative on a regular basis (e.g., residents and commuters). Viewer sensitivity under Alternative 1 would shift from Low/Moderate to Moderate/High.

Viewer Exposure

Figure 5-24 shows population and traffic counts for exposed viewers within the region. This figure shows physical location, the number of people viewing and the duration of view (e.g., residential – long duration, travelers – shorter duration) for Alternative 1 within the Eastern Segment Landscape Unit. The viewshed locations identified in Section 5.4 that relate to the Eastern Segment Landscape Unit under Alternative 1 comprise Viewshed Locations #14-22 and #11-13 (see Section 5.5.1).

The Eastern Segment Landscape Unit currently has a Moderate/High viewer exposure due to the large numbers of residential and traveler viewers within the area. The majority of traveler viewers of Alternative 1 within the Eastern Segment Landscape Unit would have views from SR 65. Existing traffic along this major roadway can be characterized as moderate to heavy and continuous. Most viewers of Alternative 1 from SR 65 would be exposed to changes in views for minimal duration (while traveling) at high rates of speed. Alternative 1 would add vehicular capacity to the study area, thereby adding

additional viewers from Alternative 1. In addition, Alternative 1 would potentially have recreational/ commuter bicycle viewers in the study area who would have longer, continual views of Alternative 1. The number of viewers would remain moderate to heavy. Viewers in existing residences within the study area would have primarily stationary views of Alternative 1 and would experience relatively high exposure to these views. The number of residences (see Census population counts shown on Figure 5-24) with views of Alternative 1 are characterized as high for the Eastern Segment Landscape Unit because of the nearby developed areas (including potential views from the three surrounding incorporated cities). Although over-crossings and interchanges would be visible from a variety of nearby residential viewers and travelers, the existing flat topography minimizes direct views of the roadway itself for many viewsheds at a greater distance from the alternative within the Eastern Segment Landscape Unit. Overall viewer exposure of the Eastern Segment Landscape Unit with Alternative 1 in place would remain unchanged at Moderate/High.

6.2.4 Summary of Potential Visual Impacts

For Alternative 1 potential visual impacts are found to be Moderate/High, as defined by FHWA criteria. This conclusion was made based on analyzing the changes to the resource area (reviewing potential changes to visual character and visual quality) as well as reviewing anticipated viewer response to that change (as identified by analyzing viewer sensitivity and viewer exposure) by landscape unit (Western, Central, and Eastern segment landscape units). Table 6-1 below illustrates the summary of potential visual impacts, by Landscape Unit with Alternative 1 in place using FHWA visual impact methodology.

Table 6-1
Summary of Potential Visual Impacts of Alternative 1
(FHWA Criteria)

Segment Landscape Unit	Resource Change		Viewer Response		Potential Impact
	Visual Character	Visual Quality	Viewer Sensitivity	Viewer Exposure	
Western	Agricultural/Urban Co-Dominant	Moderate/Low	Moderate/High	Moderate/High	Moderate/High
Central	Agricultural with Urban Influence	Moderate	Moderate/High	Moderate	Moderate
Eastern	Agricultural/Urban Co-Dominant	Moderate/Low	Moderate/High	Moderate/High	Moderate/High

In addition to FHWA visual impact assessment methodology, state-level CEQA guidelines (as identified in Section 4.2.2) are often used to help identify visual impact significance. The summaries in Table 6-2 identify the potential level of significance under CEQA per visual impact criteria with build alternatives in place. For CEQA, while potential impacts vary somewhat among alternatives, in general impacts are similar, which results in the same level of significance for each alternative for a given CEQA significance criteria. These two summary tables provide a preliminary assessment of potential visual impacts associated with existing conditions with Alternative 1 in place.

Based on a Tier 1 analysis, Alternative 1 is consistent with local General Plan policies and goals. It includes a buffer between the roadway and adjacent uses, incorporates context-appropriate landscaping concepts, and would be compatible with planned trail systems. Roadway design details have not been developed for this Tier 1 EIS/EIR.

6.3 ALTERNATIVE 2 – THE ORANGE ALTERNATIVE

Figure 2-1 identifies the proposed Alternative 2 corridor through the project's three identified segment landscape units (Western, Central and Eastern). Potential visual impacts of Alternative 2 are described in Sections 6.3.1 through 6.3.3. Potential impacts of Alternative 2 are summarized in Section 6.3.4.

6.3.1 Western Segment Landscape Unit

The Western Segment Landscape Unit of Alternative 2 is the same as that for Alternative 1. Therefore, the potential impacts for this segment landscape unit are the same as discussed for Alternative 1.

6.3.2 Central Segment Landscape Unit

The potential impacts for Alternative 2 through the Central Segment are virtually the same as Alternative 1 (see Section 6.2.2). The following focuses on impacts which differ among alternatives.

Table 6-2
Potential CEQA Aesthetic Impacts with Build Alternatives in Place

CEQA Guidelines Appendix G Significance Criteria	Alternative 1	Level of Significance
Has a substantial adverse effect on a scenic vista?	The study area contains few scenic vistas. Agricultural surroundings and rural-urban mixed uses typify the area. Although there are creek crossings and locally scenic roadways and vistas, there are no state scenic areas or roadways in the project vicinity. Surrounding land uses provide views from residential, commercial, and other rural-use views. All Segment Landscape Units would continue to have background views of the Inner Coastal Range to the West, the Sutter Buttes to the northwest and views of the peaks of the Sierra Nevada to the east. Although the Parkway would change the existing setting, it would preserve an agricultural "Parkway" look and feel as efforts will be made to design the Parkway to be as visually compatible as possible with the character of the surrounding area through the use of appropriate design techniques, such as landscaping, lighting and grading. The Parkway, by adding additional lanes and creating local roadway overpasses, would also allow more viewers access to the vistas in the area.	Less Than Significant
Substantially damages scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	There are no designated state scenic highways within the project vicinity. In fact, there are no officially designated or eligible Scenic Highways in Sutter County or Placer County. The nearest Eligible State Scenic Highway (SR 49) in Placer County has no views of the study area. Sacramento County has officially Designated State Scenic Highways, but again, none are within views of the study area. Therefore, no impact to a State Designated Scenic Highway is anticipated as a result of any of the build alternatives.	No Impact

Table 6-2 (Continued)
Potential CEQA Aesthetic Impacts with Build Alternatives in Place

CEQA Guidelines Appendix G Significance Criteria	Alternative 1	Level of Significance
Substantially degrades the existing visual character or quality of the site and its surroundings?	The project comprises the selection and preservation of a corridor for the future construction of Placer Parkway -- a new east-west connector between SR 65 and SR 70/99. The vision for the Parkway is to preserve the agricultural character of the area, and it would be designed to avoid degradation of the existing quality or character of the roadway corridor and its surroundings. Although project features (e.g., freeway-to-freeway connectors at either end, interchanges, and local street overcrossings) would be significant additions to the study area, with proper mitigation the project would strive to keep the integrity, character, and overall viewshed of the study area intact. Temporary aesthetic impacts may occur during construction; however, it is anticipated that the visual character and quality of the site and surroundings would remain consistent with existing viewsheds overall with proper mitigation. Although future mitigation measures would be suggested once a project-level environmental document is required, general mitigation strategies are recommended to maintain visual integrity of the project area as well as to keep the overall agricultural nature of the project vicinity. These are listed in Chapter 10 of this document.	Potentially Significant Impact
Creates a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	The project, by necessity, would include the installation of nighttime lighting fixtures. Mitigation strategies (see Chapter 10) are proposed to reduce potential impacts. The effectiveness of mitigation in reducing impacts to a less than significant level would be evaluated in Tier 2.	Potentially Significant Impact

6.3.2.1 Resource Change

Visual Character

The Visual Character within the Central Segment Landscape Unit of Alternative 2 is similar to that for Alternative 1; agricultural with urban influence. Alternative 2, however, crosses many branches of Curry Creek, thereby adding additional urban influences to the rural agricultural setting and character of the area. In addition, the distance from Country Acres residences is farther for Alternative 2 than from Alternative 1, hence urban influences with this alternative will likely be more out of character with the existing setting. Even with these differences, the overall visual character for the Central Segment Landscape Unit with Alternative 2 in place will continue to be characterized as agricultural with an urban influence.

Visual Quality

The Visual Quality within the Central Segment Landscape Unit of Alternative 2 is similar to that for Alternative 1. Therefore, the potential impacts for this segment landscape unit are the same as discussed for Alternative 1. The additional creek crossings associated with Alternative 2 will likely degrade the existing scenic quality more than under Alternative 1; this is the main difference between the two alternatives. Therefore, although the visual quality for both alternatives remains unchanged, both being classified as having moderate to low scenic visual quality, Alternative 2 will likely have a lower visual quality rating than Alternative 1.

6.3.2.2 Viewer Response

The Viewer Sensitivity and Exposure for Alternative 2 is similar to that for Alternative 1 in the Central Segment Landscape Unit. The key difference is that Alternative 2 is farther away from the majority of traveler views and residential views (particularly from Country Acres residents). Impacts from viewer sensitivity and viewer exposure, therefore, would be slightly less for Alternative 2 within the Central Segment Landscape Unit than for Alternative 1. These differences are noted below.

Viewer Sensitivity

The Viewer Sensitivity for Alternative 2 is similar to that for Alternative 1 in the Central Segment Landscape Unit. The key difference is that Alternative 2 is farther away from the majority of traveler views and residential views (particularly from Country Acres residents). Impacts from viewer sensitivity, therefore, would be slightly lessened for Alternative 2 within the Central Segment Landscape Unit than from Alternative 1. Overall, viewer sensitivity for the Central Segment Landscape Unit with Alternative 2 in place would shift from Low/Moderate to Moderate.

Viewer Exposure

The Viewer Exposure for Alternative 2 is similar to that for Alternative 1 in the Central Segment Landscape Unit. The key difference is that Alternative 2 is farther away from the majority of traveler views and residential views (particularly from Country Acres residents). Impacts to viewer exposure, therefore, would be slightly lessened for Alternative 2 within the Central Segment Landscape Unit than from Alternative 1. Viewer exposure for the Central Segment Landscape Unit with Alternative 1 in place would remain similar to existing conditions, categorized as Moderate/High.

6.3.3 Eastern Segment Landscape Unit

The Eastern Segment Landscape Unit of Alternative 2 is the same as that for Alternative 1. Therefore, the potential impacts for this segment landscape unit are the same as discussed for Alternative 1.

6.3.4 Summary of Potential Visual Impacts

For Alternative 2 potential visual impacts are found to be Moderate/High, as defined by FHWA criteria. This conclusion was made based on analyzing the changes to the resource area (reviewing potential changes to visual character and visual quality) as well as reviewing anticipated viewer response to that change (as identified by analyzing viewer sensitivity and viewer exposure) by landscape unit (Western, Central, and Eastern segment landscape units). Table 6-3 below illustrates the summary of potential visual impacts, by landscape unit with Alternative 2 in place using FHWA visual impact methodology.

Table 6-3
Summary of Potential Visual Impacts of Alternative 2
(FHWA Criteria)

Segment Landscape Unit	Resource Change		Viewer Response		Potential Impact
	Visual Character	Visual Quality	Viewer Sensitivity	Viewer Exposure	
Western	Agricultural/Urban Co-Dominant	Moderate/Low	Moderate/High	Moderate/High	Moderate/High
Central	Agricultural with Urban Influence	Moderate	Moderate	Moderate	Moderate
Eastern	Agricultural/Urban Co-Dominant	Moderate/Low	Moderate/High	Moderate/High	Moderate/High

In addition to FHWA visual impact assessment methodology, state-level CEQA guidelines (as identified in Section 4.3.2) are often used to help identify visual impact significance (see Table 6-2). From a CEQA perspective, potential impacts of Alternative 2 are similar to Alternative 1.

Based on a Tier 1 analysis, Alternative 2 is consistent with local General Plan policies and goals. It includes a buffer between the roadway and adjacent uses, incorporates context-appropriate landscaping concepts, and would be compatible with planned trail systems. Roadway design details have not been developed for this Tier 1 EIS/EIR.

6.4 ALTERNATIVE 3 – THE BLUE ALTERNATIVE

Figure 2-1 identifies the proposed Alternative 3 corridor through the project's three identified landscape units (Western, Central and Eastern). Potential visual impacts of Alternative 3 are described in Sections 6.4.1 through 6.4.3. The potential impacts of Alternative 1 are summarized in Section 6.4.4.

6.4.1 Western Segment Landscape Unit

The Western Segment Landscape Unit of Alternative 3 is the same as that for Alternative 1. Therefore, the potential impacts for this segment landscape unit are the same as discussed for Alternative 1.

6.4.2 Central Segment Landscape Unit

Although Alternative 3 varies from Alternative 1 within the Central Segment Landscape Unit, the potential impacts for both are similar. Therefore, the reader should review the discussions for Alternative 1 wherever it is cited. The following discussions cover only the ways in which the impacts of Alternative 3 differ from those of Alternative 1.

6.4.2.1 Viewer Response

The Resource Changes within the Central Segment Landscape Unit of Alternative 3 are similar to that for Alternative 1. The key difference is that Alternative 3 is farther from the majority of traveler views assessed (e.g., Viewshed Locations #9 through #13). Additional Viewshed Locations that were assessed for this alternative are discussed below. Overall, impacts from viewer sensitivity and viewer exposure for Alternative 3 would be less than both those for Alternative 1 and Alternative 2 within the Central Segment Landscape Unit. These differences are noted below.

Viewer Sensitivity

The Viewer Sensitivity for Alternative 3 is similar to that of Alternative 1 and Alternative 2 in the Central Segment Landscape Unit. The key difference is that Alternative 3 is farther from the majority of traveler views and residential views (particularly from Country Acres residents). Impacts from viewer sensitivity, therefore, would be slightly less for Alternative 3 than from either Alternative 1 or Alternative 2 within the Central Segment Landscape Unit. Overall, viewer sensitivity for the Central Segment Landscape Unit with Alternative 3 in place would shift from Low/Moderate to Moderate.

Viewer Exposure

The Viewer Exposure for Alternative 3 is similar to that for Alternative 1 and Alternative 2 in the Central Segment Landscape Unit. The key difference is that Alternative 3 is farther from the majority of traveler views and residential views (particularly from Country Acres residents). Impacts to viewer exposure, therefore would be slightly lessened for Alternative 3 within the Central Segment Landscape Unit than from Alternative 1 or Alternative 2. Viewer exposure for the Central Segment Landscape Unit with Alternative 3 in place would shift from Low/Moderate to Moderate.

6.4.3 Alternative 3 – Eastern Segment Landscape Unit

The Eastern Segment Landscape Unit of Alternative 3 is the same as that for Alternative 1. Therefore, the potential impacts for this segment landscape unit are the same as discussed for Alternative 1.

6.4.4 Summary of Potential Visual Impacts

For Alternative 3 potential visual impacts are found to be Moderate/High, as defined by FHWA criteria. This conclusion was made based on analyzing the changes to the resource area (reviewing potential changes to visual character and visual quality) as well as reviewing anticipated viewer response to that change (as identified by analyzing viewer sensitivity and viewer exposure) by landscape unit (Western, Central, and Eastern segment landscape units). Table 6-4 below illustrates the summary of potential visual impacts, by Landscape Unit with Alternative 3 in place using FHWA visual impact methodology.

Table 6-4
Summary of Potential Visual Impacts of Alternative 3
(FHWA Criteria)

Segment Landscape Unit	Resource Change		Viewer Response		Potential Impact
	Visual Character	Visual Quality	Viewer Sensitivity	Viewer Exposure	
Western	Agricultural/Urban Co-Dominant	Moderate/Low	Moderate/High	Moderate/High	Moderate/High
Central	Agricultural with Urban Influence	Moderate	Moderate	Moderate	Moderate
Eastern	Agricultural/Urban Co-Dominant	Moderate/Low	Moderate/High	Moderate/High	Moderate/High

In addition to FHWA visual impact assessment methodology, State-level CEQA guidelines (as identified in Section 4.2.2) are often used to help identify visual impact significance (see Table 6-2). From a CEQA perspective, potential impacts of Alternative 3 are similar to Alternative 1.

Based on a Tier 1 analysis, Alternative 3 is consistent with local General Plan policies and goals. It includes a buffer between the roadway and adjacent uses, incorporates context-appropriate landscaping concepts, and would be compatible with planned trail systems. Roadway design details have not been developed for this Tier 1 EIS/EIR.

6.5 ALTERNATIVE 4 – THE YELLOW ALTERNATIVE

Figure 2-1 identifies the proposed Alternative 4 corridor through the project's three identified landscape units (Western, Central, and Eastern). Potential visual impacts of Alternative 4 are described in Sections 6.5.1 through 6.5.3. The potential impacts of Alternative 4 are summarized in Section 6.5.4.

6.5.1 Western Segment Landscape Unit

6.5.1.1 Resource Change

Visual Character

Under Alternative 4, the character of the Western Segment Landscape Unit would change from predominantly agricultural in nature with urban influences, to a shared urban and agricultural character. The Parkway would bring co-dominance between agricultural- and urban-based forms, lines, colors, and

textures. These agricultural pattern elements (flat forms, clean lines, green/natural undertones and rich rural textures) currently dominate the Western Segment Landscape Unit. The influence of additional urban pattern elements (linear and concrete forms, more dominant roadway and structural lines, gray and black color undertones, and concrete/pavement textures) would add diversity to the area. Landscaping and other mitigation is proposed to help soften the change in character (see also Chapter 10, Avoidance, Minimization, and/or Mitigation Strategies). The continuity of farming lands in the Western Segment Landscape Unit for Alternative 4 is currently broken up by rural roadways, rural residences, and scattered industrial land uses. Currently there are no above-ground roadway structures, over-crossings, or interchanges within the Western Segment Landscape Unit area. Alternative 4 would change this existing visual character with the introduction of the roadway and associated features (most predominantly the freeway-to-freeway interchange at Sankey Road). This would include conversion of agricultural land to highway use. Changes in visual character would affect views "of" and "from" the road from surrounding areas. The scale and dominance of these changes in conjunction with the existing flat natural environmental allow for vast unimpeded panoramic views of the area. Character change would greatly affect the existing roadway(s) as well as the surrounding nature of the area.

Consequently, due to changes in the form, line, color, and textures introduced by Alternative 4 creating changes in scale, continuity, diversity, and dominance, the character of the Western Segment Landscape Unit would shift from agriculturally dominant to urban and agriculturally co-dominant.

Visual Quality

Under Alternative 4, vividness of the Western Segment Landscape Unit would remain characterized as moderate. The rural nature of the project vicinity is typical of the area and includes very few notable foreground/middleground visual features. Background views from the Western Segment Landscape Unit would however, continue to include views of the Inner Coastal Range to the West, the Sutter Buttes to the northwest and views of the peaks of the Sierra Nevada to the east. Alternative 4 would affect the intactness of the Western Segment Landscape Unit by introducing additional urban structures/roadway (most notably the freeway-to-freeway interchange at Sankey Road). Consequently the visual quality of the area would remain characterized as low. In addition, Alternative 4 would contribute further to the lack of landscape integrity of the area. Existing unity for the Western Segment Landscape Unit is considered low and would remain low. Manmade natural landscapes (e.g., agricultural areas) currently co-exist with the roadways and limited urban development. This visual quality would be similar under Alternative 4. With the introduction of Alternative 4, the Western Segment Landscape Unit unity would degrade further. Overall, the Western Segment Landscape Unit would maintain a moderate/low visual quality rating under Alternative 4.

6.5.1.2 Viewer Response

Viewer Sensitivity

Under Alternative 4, viewer sensitivity to the Western Segment Landscape Unit has been classified as Moderate/High since the viewer's concern for scenic quality and change to existing visual is anticipated to be moderate. Currently most viewers within the study area are commuters using existing roadways, and therefore existing viewer sensitivity is low. Viewer sensitivity may change with the introduction of the Parkway. In addition, the realignment of Sankey Road would bring heightened sensitivity to those familiar with the existing roadway. Although viewer focus would likely be on the freeway itself, new structures would create visual interest and would heighten traveler viewer sensitivity of the project. Heightened viewer sensitivity would also occur as agricultural lands are utilized for the Parkway.

Viewer Exposure

Alternative 4 would create a change in viewer exposure from and of the Parkway. The majority of viewers of Alternative 4 within the Western Segment Landscape Unit would be traveler views from SR 70/99. Existing traffic along this major roadway can be characterized as moderate to heavy and continuous.

Existing exposure for views from SR 70/99 of Alternative 4, however, can be characterized as moderate to low since most viewers would be exposed to changes in views for minimal duration (while traveling) at high rates of speed. Sankey Road, once it is converted and realigned, would dramatically change the exposure to nearby viewers. Alternative 4 would add vehicular capacity to the study area, thereby adding additional viewers from and to Alternative 4. In addition, Alternative 4 would potentially have recreational/commuter bicycle viewers in the study area who would have longer, continual views of Alternative 4. The number of viewers would remain moderate to heavy. Viewers in existing residences within the study area would primarily have stationary views of Alternative 4, and the frequency of exposure to these views for these residences is relatively high. The number of residences with views of the alternative are characterized as low for the Western Segment Landscape Unit (see Census population counts shown on Figure 5-24). Although over-crossings and interchanges would be visible from a variety of nearby residential viewers and travelers, the existing flat topography minimizes direct views of the roadway itself for most viewsheds within the Western Segment Landscape Unit. Overall viewer exposure of the Western Segment Landscape Unit under Alternative 4 would shift from Moderate to Moderate/High.

6.5.2 Central Segment Landscape Unit

Although Alternative 4 varies from Alternative 1 within the Central Segment Landscape Unit, the potential impacts for both similar. Therefore, the reader should review the discussions for Alternative 1 wherever it is cited. The following discussions cover only the ways in which the impacts for Alternative 4 differ from those of Alternative 1.

6.5.2.1 Resource Change

Visual Character

The Visual Character within the Central Segment Landscape Unit of Alternative 4 is similar to that for Alternative 1. Although each alternative would clearly cause substantial resource changes, the precise extent of such effects cannot be defined at the Tier 1 level. This level of detail would be included in the Tier 2 visual analysis. Until that time, potential impacts for Alternative 4 within the Central Segment Landscape Unit are considered the same as discussed for Alternative 1.

Visual Quality

The Visual Quality within the Central Segment Landscape Unit of Alternative 4 is similar to that for Alternative 1. Although each alternative would clearly cause substantial resource changes, the precise extent of such effects cannot be defined at the Tier 1 level. This level of detail would be included in the Tier 2 visual analysis. Until that time, potential impacts for Alternative 4 within the Central Segment Landscape Unit are considered the same as discussed for Alternative 1.

6.5.2.2 Viewer Response

The Viewer Sensitivity and Exposure for Alternative 4 is similar to that for Alternative 1 in the Central Segment Landscape Unit. The key difference is that Alternative 4 is farther away from the majority of traveler views and residential views (particularly from Country Acres residents). Impacts from viewer sensitivity and viewer exposure, therefore, would be less for Alternative 4 within the Central Segment Landscape Unit than impacts associated with Alternative 1. These differences are noted below.

Viewer Sensitivity

The Viewer Sensitivity for Alternative 4 is similar to that for Alternative 1 in the Central Segment Landscape Unit. The key difference is that Alternative 4 is farther away from the majority of traveler views and residential views (particularly from Country Acres residents). Impacts from viewer sensitivity, therefore, would be slightly less for Alternative 4 within the Central Segment Landscape Unit than for

Alternative 1. Overall, viewer sensitivity for the Central Segment Landscape Unit with Alternative 4 in place would shift from Low/Moderate to Moderate.

Viewer Exposure

The Viewer Exposure for Alternative 4 is similar to that for Alternative 1 in the Central Segment Landscape Unit. The key difference is that Alternative 4 is farther away from the majority of traveler views and residential views (particularly from Country Acres residents). Impacts to viewer exposure, therefore, would be slightly less for Alternative 4 within the Central Segment Landscape Unit than for Alternative 1. Viewer exposure for the Central Segment Landscape Unit with Alternative 4 in place would remain similar to existing conditions, categorized at Moderate/High.

6.5.3 Eastern Segment Landscape Unit

The Eastern Segment Landscape Unit of Alternative 4 is the same as that for Alternative 1. Therefore, the potential impacts for this segment landscape unit are the same as discussed for Alternative 1.

6.5.4 Summary of Potential Visual Impacts

For Alternative 4 potential visual impacts are found to be Moderate, as defined by FHWA criteria. This conclusion was made based on analyzing the changes to the resource area (reviewing potential changes to visual character and visual quality) as well as reviewing anticipated viewer response to that change (as identified by analyzing viewer sensitivity and viewer exposure) by landscape unit (Western, Central, and Eastern segment landscape units). Table 6-5 illustrates the summary of potential visual impacts, by Landscape Unit with Alternative 4 in place using FHWA visual impact methodology.

Table 6-5
Summary of Potential Visual Impacts of Alternative 4
(FHWA Criteria)

Segment Landscape Unit	Resource Change		Viewer Response		Potential Impact
	Visual Character	Visual Quality	Viewer Sensitivity	Viewer Exposure	
Western	Agricultural/Urban Co-Dominant	Moderate/Low	Moderate	Moderate/High	Moderate
Central	Agricultural with Urban Influence	Moderate	Moderate	Moderate	Moderate
Eastern	Agricultural/Urban Co-Dominant	Moderate/Low	Moderate/High	Moderate/High	Moderate/High

In addition to FHWA visual impact assessment methodology, state-level CEQA guidelines (as identified in Section 4.2.2) are often used to help identify visual impact significance (see Table 6-2). From a CEQA perspective, potential impacts of Alternative 4 are similar to Alternative 1.

Based on a Tier 1 analysis, Alternative 4 is consistent with local General Plan policies and goals. It includes a buffer between the roadway and adjacent uses, incorporates context-appropriate landscaping concepts, and would be compatible with planned trail systems. Roadway design details have not been developed for this Tier 1 EIS/EIR.

6.6 ALTERNATIVE 5 – THE GREEN ALTERNATIVE

Figure 2-1 identifies the proposed Alternative 5 corridor through the project's three identified landscape units (Western, Central, and Eastern). Potential visual impacts of Alternative 1 are described in Sections 6.6.1 through 6.6.3. The potential impacts of Alternative 5 are summarized in Section 6.6.4.

6.6.1 Alternative 5 – Western Segment Landscape Unit

The Western Segment Landscape Unit of Alternative 5 is the same as that for Alternative 4. Therefore, the potential impacts for this segment landscape unit are the same as discussed for Alternative 4.

6.6.2 Alternative 5 – Central Segment Landscape Unit

The Central Segment Landscape Unit of Alternative 5 is similar to that for Alternative 4. The resource change and viewer response, in fact would be the same for both alternatives. Therefore, the potential impacts for Alternative 5 within the Central Segment Landscape Unit are the same as discussed for Alternative 4.

6.6.3 Alternative 5 – Eastern Segment Landscape Unit

The Eastern Segment Landscape Unit of Alternative 4 is the same as that for Alternative 1. Therefore, the potential impacts for this segment landscape unit are the same as discussed for Alternative 1.

6.6.4 Summary of Potential Visual Impacts

For Alternative 5 potential visual impacts are found to be Moderate, as defined by FHWA criteria. This conclusion was made based on analyzing the changes to the resource area (reviewing potential changes to visual character and visual quality) as well as reviewing anticipated viewer response to that change (as identified by analyzing viewer sensitivity and viewer exposure) by landscape unit (Western, Central, and Eastern segment landscape units). Table 6-6 below illustrates the summary of potential visual impacts, by landscape unit with Alternative 5 in place using FHWA visual impact methodology.

Table 6-6
Summary of Potential Visual Impacts of Alternative 5
(FHWA Criteria)

Segment Landscape Unit	Resource Change		Viewer Response		Potential Impact
	Visual Character	Visual Quality	Viewer Sensitivity	Viewer Exposure	
Western	Agricultural/Urban Co-Dominant	Moderate/Low	Moderate	Moderate/High	Moderate
Central	Agricultural with Urban Influence	Moderate	Moderate	Moderate	Moderate
Eastern	Agricultural/Urban Co-Dominant	Moderate/Low	Moderate/High	Moderate/High	Moderate/High

In addition to FHWA visual impact assessment methodology, state-level CEQA guidelines (as identified in Section 4.2.2) are often used to help identify visual impact significance (see Table 6-2). From a CEQA perspective, the potential impacts of Alternative 5 are similar to those of Alternative 1.

Based on a Tier 1 analysis, Alternative 5 is consistent with local General Plan policies and goals. It includes a buffer between the roadway and adjacent uses, incorporates context-appropriate landscaping

concepts, and would be compatible with planned trail systems. Roadway design details have not been developed for this Tier 1 EIS/EIR.

6.7 COMPARISON OF ALTERNATIVES

Potential impacts for the five build alternatives, by segment landscape unit, are summarized in Table 6-7. The No-Build Alternative is not shown on Table 6-7 because no impacts would be associated with this alternative.

Table 6-7
Comparison of Aesthetic Impacts with Alternatives in Place

Alternative	Segment Landscape Unit	Visual Character	Visual Quality	Viewer Sensitivity	Viewer Exposure
Alternative 1	Western	Agricultural/Urban Co-Dominant	Moderate/ Low	Moderate/High	Moderate/High
	Central	Agricultural with Urban Influence	Moderate	Moderate/High	Moderate
	Eastern	Agricultural/Urban Co-Dominant	Moderate/ Low	Moderate/High	Moderate/High
Alternative 2	Western	Agricultural/Urban Co-Dominant	Moderate/ Low	Moderate/High	Moderate/High
	Central	Agricultural with Urban Influence	Moderate	Moderate	Moderate
	Eastern	Agricultural/Urban Co-Dominant	Moderate/ Low	Moderate/High	Moderate/High
Alternative 3	Western	Agricultural/Urban Co-Dominant	Moderate/ Low	Moderate/High	Moderate/High
	Central	Agricultural with Urban Influence	Moderate	Moderate	Moderate
	Eastern	Agricultural/Urban Co-Dominant	Moderate/ Low	Moderate/High	Moderate/High
Alternative 4	Western	Agricultural/Urban Co-Dominant	Moderate/ Low	Moderate	Moderate/High
	Central	Agricultural with Urban Influence	Moderate	Moderate	Moderate
	Eastern	Agricultural/Urban Co-Dominant	Moderate/ Low	Moderate/High	Moderate/High
Alternative 5	Western	Agricultural/Urban Co-Dominant	Moderate/ Low	Moderate	Moderate/High
	Central	Agricultural with Urban Influence	Moderate	Moderate	Moderate
	Eastern	Agricultural/Urban Co-Dominant	Moderate/ Low	Moderate/High	Moderate/High

Table 6-8 below shows a summary and ranking of the five build alternatives based upon the information provided in Tables 6-1 through 6-6 and the summary table, Table 6-7. A ranking of 1 indicates the least potential for aesthetic impacts among the five build alternatives, as rated by FHWA criteria.

Table 6-8
Summary and Ranking of Alternatives by Aesthetic Impact Rating

Alternative	Visual Character*	Visual Quality*	Viewer Sensitivity*	Viewer Exposure*	Impact Ranking (Lowest to Highest)
Alternative 4	Moderate/High	Moderate/Low	Moderate/High	Moderate	1
Alternative 5	Moderate/High	Moderate/Low	Moderate/High	Moderate	1
Alternative 3	Moderate	Moderate/Low	Moderate/High	Moderate	3
Alternative 2	Moderate	Moderate/Low	High	Moderate	5
Alternative 1	Moderate	Moderate/Low	High	Moderate	5

1 = least potential impacts 5 = greatest potential impacts

*With Build Alternative in place.

Alternatives 4 and 5 would have potentially Moderate impacts using FHWA visual impact criteria. Using CEQA significance thresholds, these impacts would likely be significant; however, with mitigation incorporated they could potentially be mitigated to a less-than-significant level.

Alternative 3 would have more impacts than Alternatives 4 and 5 and would be considered Moderate/ High using FHWA visual impact criteria. These impacts would be considered potentially significant using CEQA thresholds.

Alternatives 1 and 2 would have the most visual impacts of all alternatives; having potentially Moderate/ High impacts using FHWA visual impact criteria. These impacts would also be considered significant visual impacts under CEQA.

7.0 SECONDARY AND INDIRECT IMPACTS

Recent FHWA, EPA, and Caltrans guidance on growth inducement (Mare Island Accord, 2006) advises that analysis of potential impacts associated with growth should include an evaluation of the effects of growth on resources of concern. The following discussion presents a qualitative evaluation of potential secondary and indirect impacts of Anticipated Growth (see below for definition) on human and environmental resources in the study area.

The Council on Environmental Quality (CEQ) provided clarification of the terminology "indirect impacts" when it issued the National Environmental Policy Act in 1978. Secondary and indirect impacts are defined as impacts "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." Moreover, indirect effects ". . . may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems."

A key term used in this section is "Anticipated Growth." This is defined as the growth that is anticipated in the study area as described in the relevant General Plans and adopted regional forecasts, such as the SACOG Blueprint scenario including additional growth that may occur as a result of major new development proposals that have not yet been formally approved. It is possible that this additional growth may accelerate the rate of buildout in the study area, but it is not ultimately expected to result in any greater levels of development than is presented in adopted regional forecasts.

The following discussion considers secondary and indirect impacts on visual resource that may occur as a result of direct impacts associated with the Parkway, and also as a result of anticipated growth. The study area for the analysis of secondary and indirect impacts is shown in Figure 7-1.

7.1 GROWTH INDUCEMENT SCENARIO

NEPA and CEQA both require environmental analyses to consider the effects of a project on growth. Caltrans defines growth inducement as the relationship between a proposed project and growth. This section summarizes the relationship between the Placer Parkway project and regional growth, and discusses potential secondary and indirect effects of the project related to growth inducement.

Placer Parkway would be growth inducing, as a component of the rapidly evolving urban matrix in western Placer County. While the project study area is predominately undeveloped at this time, parts of the study area are within local General Plan designations allowing urban growth. In addition, numerous proposals for major new development projects in and around the study area depicted on Figure 7-2 that are currently in various stages of the approval and entitlement process. Portions of the surrounding area (especially northern Sacramento County and southwestern Placer County) have developed very rapidly over the past several decades. This has occurred as a result of many factors, including continuing net population growth statewide, strong employment growth in the Sacramento region, relative housing affordability, and location amenities.

Population and employment growth projections for California and the Sacramento Region in general, and for southwestern Placer County and south Sutter County in particular (described in detail in the Tier 1 EIS/EIR Community Impact Assessment), indicate that that development pressures in the project vicinity will remain relatively intense, irrespective of the Placer Parkway project. Between 1950 and 2000, the California population more than tripled. During the same period, population in the six-county SACOG region increased by more than 800 percent (DOF, 2006). Projections and established goals and policies from a wide range of sources, including SACOG, Placer, Sacramento and Sutter counties, and the Cities of Roseville, Rocklin and Lincoln, confirm that relatively high rates of population and employment growth and housing and commercial development are anticipated in the six-county region by 2050. Between 2000 and 2050, California's population is expected to increase from approximately 34 million to 55 million. During the same time period, SACOG projects that the region's growth will double, from

1.9 million in 2000 to 3.95 million in 2050, with the Roseville-Rocklin-Lincoln area remaining one of the fastest growing areas in the region (Levy and Doche-Boulos, 2005; SACOG, 2006).

Placer Parkway would be growth inducing because it would help support changes in the amount of growth beyond current general plan levels, and could influence the pace and location of some development. It is likely that Placer Parkway could help to implement the various specific development proposals in the study area, since it would serve to relieve traffic congestion associated with these proposals. Furthermore, the Parkway could affect the timing of development in the vicinity of the proposed interchange locations, particularly those proposed near vacant land adjacent to rapidly developing areas or areas now proposed for urban development. However, as the Parkway would be a limited-access road located in an area that is already undergoing extensive and rapid urbanization, its potential to facilitate growth that would not have otherwise occurred is limited. It could result in different land uses, or more intensive land uses, in the vicinity of interchanges where land use plans are still being developed and have not yet been approved. Also, it could hasten the buildout of planned commercial and industrial uses, especially in the Sunset Industrial Area and proposed Placer Ranch Specific Plan area, as well as in the proposed South Sutter County SPSP area.

In the longer term, improved access provided to lands in the Western and Eastern segments could be a factor in stimulating additional growth and development in areas west of SR 70/99 not protected by the Natomas Basin HCP, or north of the Sutter SPSP area, or north of Sunset Boulevard West in Placer County. Although growth is anticipated in these areas over time (as reflected in SACOG's preferred Blueprint scenario, the Sutter County General Plan, and the City of Lincoln General Plan), such development is not reflected in general plans at present and has not been formally proposed by landowners. By providing improved access to adjacent areas, Placer Parkway could be one of many factors that would encourage growth in these areas sooner than this might otherwise occur.

The factors influencing growth in the region are complex. Placer Parkway is one of several major urban development proposals in the region. While the Parkway would contribute to regional growth, including growth beyond the level identified in current general plans, it is not feasible to quantify the amount of its contribution. A single new transportation facility such as the Parkway is only one of the many factors contributing to regional growth, and it is speculative to assign a particular quantity of growth to any one factor.

Furthermore, several factors serve to limit the likely effect of the Parkway on growth, including the following:

- No interchanges are proposed for any areas that are not already approved or proposed for development;
- All approved and proposed residential development that has not already been built is projected to be built out prior to 2020, when the Parkway is proposed to open; and
- Real estate market pressures in the area have been and continue to be intense without the Parkway, and local government jurisdictions have been supportive of processing development applications in spite of anticipated regional transportation challenges.

It is unlikely that the choice of one Placer Parkway alternative over another would substantially change expected patterns of growth and development in the project study area and the surrounding region. In the Western Segment, all corridor alignment alternatives would provide new access to an area that is currently undeveloped farmland, but that is proposed for mixed use urban development. The three more southerly alignments (Alternatives 1, 2, and 3) would provide two interchanges in the South Sutter SPSP area, while the more northerly alignments (Alternatives 4 and 5) would provide only one interchange in this area, approximately one mile farther north of the more southerly alignments in the Western Segment. Since none of the alternative alignments would include any intersections in the Central Segment, there would be little

difference in growth inducement effects among the alternatives in this segment. In the Eastern Segment, two interchanges are proposed within the existing Sunset Industrial Area Plan, in an area proposed for the Placer Ranch Specific Plan. While these interchanges would provide new access to a currently undeveloped area, this area is planned for growth. In the Eastern Segment all alternatives would follow an identical alignment, so there would be no differences in growth inducement effects among the alternatives.

A future interchange at Watt Avenue could be growth inducing, because it would provide major new regional access to a portion of the study area that is currently rural and undeveloped, although both conceptual interchange locations are now surrounded by formal development proposals or land controlled by development interests. A Watt Avenue interchange is not proposed as part of the project.

7.2 SECONDARY AND INDIRECT EFFECT EVALUATION

7.2.1 No-Build Alternative

Under the No-Build Alternative, land for the Parkway would not acquired and the Parkway would not be constructed. There would not be any secondary or indirect impacts on visual resources under the No-Build Alternative.

7.2.2 Build Alternatives

Secondary and indirect impacts on visual resources could occur as a result of anticipated growth, and also as a result of direct impacts associated with the Parkway.

Anticipated growth associated with the Parkway would result in additional development in the study area. These projects could have adverse impacts on visual resources. Such impacts would be considered to be direct impacts of these projects and subject to independent environmental review. Although it is not feasible to perform a detailed evaluation of these projects at this stage as specific design details are not known, potential impacts are taken into account in the Placer Parkway 2040 Cumulative analysis (see Section 7.2). This analysis evaluates a 2040 cumulative scenario, which is considered to be an appropriate projection of future development. This scenario includes full-residential build-out in Placer County west of Sierra College Boulevard, including general plan areas and major developments, and employment and population growth in line with SACOG forecasts. It assumes levels of growth and development will occur at the higher end of a potential feasible range and therefore represents a reasonable maximum development scenario for which cumulative and secondary and indirect impacts have been analyzed.

Placer Parkway would result in a conversion of portions of a rural area into a more urban landscape. This could result in a perceived reduction in the visual quality of the existing natural environment. The Parkway would also result in changes in the type of viewer in the study area. The presence of the Parkway would result in changes to the viewer exposure (e.g., number, location, and duration of existing viewers) to the area. The Parkway would introduce numerous commuters to the area, who would experience short-duration views of the surrounding landscape from the Parkway, in contrast to the limited number of existing viewers who comprise primarily of local residents and agricultural workers.

Alternatives 1, 2, and 3 would potentially have more interchanges than Alternatives 4 and 5 (six versus five) and therefore bring more visually dominant man-made/urban structures to the area. This will increase the urban influences in the area, consequently adding more “grey” than “green” with future growth (i.e., more pavement and structures than natural elements). In addition, the positioning of Alternatives 1 and 2, are closer in vicinity to an existing frequently traveled local roadway, Baseline Road, thereby introducing additional light, movement, and urban feel to the area. This could have a secondary impact of bringing in more urbanization to an area now dominated by rural influences.

8.0 CUMULATIVE IMPACTS

8.1 CUMULATIVE IMPACT SCENARIO

Analysis of cumulative impacts is required under NEPA and CEQA. Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that should be the focus of cumulative impact analysis. The Council on Environmental Quality (CEQ)'s regulations (CEQ, 1987) explicitly state that cumulative impacts must be evaluated along with the direct and indirect effects of each alternative.

FHWA has requested that cumulative conditions for the analysis of project alternatives in the EIS/EIR for Placer Parkway be based on development levels that are 20 years beyond the projected opening of the Parkway. For planning purposes, Placer County Transportation Planning Agency (PCTPA) has identified 2020 as the opening year of the Parkway. Cumulative impacts are therefore being evaluated for the year 2040. This 2040 scenario includes the following projects (Figure 7-2):

- Full build-out of all residential land in Placer County west of Sierra College Boulevard, including current general plan areas and the following major development proposals in West Placer County:
  - The Creekview and Sierra Vista Specific Plan areas in Roseville's Memorandum of Understanding (MOU) Remainder Area
  - The Sphere of Influence expansion areas of Lincoln
  - The Placer Vineyards, the Regional University, Placer Ranch Specific Plan in unincorporated Placer County
  - The Curry Creek Community Plan area
- Growth in retail employment in Placer County that balances the growth in residential development by matching SACOG's countywide estimate of about 0.32 employees per dwelling unit from their 2025 forecasts.
- Growth in total employment levels in Placer County that balances the growth in residential development by matching SACOG's 1.3 employee per dwelling unit from their 2025 forecasts.
- Full build-out of the residential development in the proposed South Sutter SPSP area along with a non-residential development level that balances the residential development in that area.
- Estimated 2040 developments in all other portions of SACOG's six-county region based on assuming a constant rate for the development growth between 2005 levels and the 2050 Preferred Blueprint scenario for each of SACOG's traffic analysis zones (TAZs).

8.2 CUMULATIVE IMPACT EVALUATION

Future planned and proposed development is considered in order to take into account the level at which viewers would be exposed to and potentially impacted by the Parkway along with projects planned for the area in subsequent years. Figure 7-2 shows future planned/proposed development within the study area. As

is evident from the figure, the area under consideration for the Parkway will undergo substantial growth with many Specific Plans, proposals for development, and other guiding documents in various stages of review and implementation. The 2040 Cumulative Development scenario (Section 8.1) would result in many more potential viewers residing in and traveling through the study area. Following is a description of the potential cumulative impacts associated with each Placer Parkway build alternative when considered in conjunction with other planned and proposed development in the study area.

8.2.1 No-Build Alternative

Under the No-Build Alternative, land for the Parkway would not be acquired and the Parkway would not be constructed. These would not be any cumulative impacts on visual resources under the No-Build Alternative.

8.2.2 Alternative 1 – The Red Alternative

8.2.2.1 Western Segment Landscape Unit – Planned/Proposed Development

With the addition of the Sutter Pointe Specific Plan (SPSP) (in full buildout), there would be an increase in potential viewers of Alternative 1 in the landscape unit, but also more views from the Parkway would be created due to increased traveler capacity. Along with increased numbers of people/viewers there would also be an expanded built environment (versus the existing open, agricultural aesthetic). The proposed built environment of SPSP would also obscure/screen views (of and from the proposed Alternative 1) of many potential viewers. While the Parkway would change the visual character of the region, it may, when combined with the visual effect of the SPSP, have a reduced impact as compared to direct impacts discussed in Chapter 6, as it would more readily blend with the changing nature of the landscape, which would be shifting from rural/agricultural to more urban/commercial. Nevertheless, when considering Alternative 1 together with the SPSP, there would be a cumulatively significant impact to the existing visual resources. Placer Parkway would provide a cumulatively considerable contribution to this impact, resulting in a cumulatively significant impact of the Parkway.

8.2.2.2 Central Segment Landscape Unit – Planned/Proposed Development

The Central Segment Landscape Unit would undergo considerable growth if the multiple planned/proposed projects identified for this area occur. The following development could be located within the Central Segment Landscape Unit and, if built, would contribute to an overall shift in visual character from predominantly rural agricultural to a mix of rural/agricultural and urban commercial/residential. This would be a cumulatively significant visual impact.

Regional University Specific Plan

A preliminary draft of this proposed Specific Plan is under review by Placer County planning staff. The proposed Regional University Specific Plan has been conceptualized as a 1,100-acre mixed-use community, with two primary components: a University campus and an adjoining community. The Plan Area is currently open agricultural land that lies between Alternatives 1 and 4, and which would be bisected by Alternative 2.

Curry Creek Community Plan (Placer County)

This Community Plan has been generally identified for land west of Roseville's sphere of influence and south of the Regional University Specific Plan area (Alternatives 1 and 2 would cross the plan area). There are no publicly available concepts or proposals for this area, although a mixed use concept is envisioned. It is estimated that the Plan would not be completed before January 2008.

Placer Vineyards Specific Plan

The proposed 5,148-acre Placer Vineyards (PVSP) area lies south of all build alternatives. It would include approximately 14,132 dwelling units, 140 acres of commercial retail development, and 930 acres of parkland. At full build-out (along a 20- to 30-year timeframe) the development is expected to bring 33,000 residents to the area (Placer Vineyards New Revised Draft Specific Plan EIR, March 2006). The PVSP is also analyzing an alternative scenario that reflects the SACOG Blueprint Scenario (see Section 8.1). This scenario assumes an area of 5,148 acres for the PVSP, with approximately 21,631 dwelling units.

Sierra Vista Specific Plan

In June 2005, the City of Roseville began efforts to process the ±2,000-acre Sierra Vista Specific Plan area, the western portion of which falls in the Central Segment Landscape Unit. The project is envisioned as mixed use with a strong residential component. In July 2005, the City Council approved a comprehensive work program for the Plan and at the City Council hearing on August 17, 2005, the necessary funding agreements and consultant contracts for the planning effort were approved. City staff and the landowner team are currently in the process of identifying key project issues, including the location of natural resources (such as wetlands and oak trees) within the plan area. A project schedule has not yet been developed for the plan.

Reason Farms Environmental Preserve

In 2003, the Roseville City Council approved the acquisition of two parcels of land that total approximately 1,700 acres along Pleasant Grove Creek. These properties were acquired for the purpose of constructing a stormwater retention basin, in addition to providing potential open space and recreational opportunities for the City of Roseville. The Parks and Recreation Department is in the preliminary stages of updating the Master Plan, including refining it for the recreational aspects of the project. The recreational components will be balanced with the considerations for the recreational needs of the city, and the need to properly manage the natural resources within and surrounding the project site.

Future proposed uses of the City of Roseville's Reason Farms Retention Basin include certain recreational uses such as picnicking, hiking, horseback riding, and model airplane flying. The City of Roseville held public workshops in the spring of 2006 to obtain community input on the concept master plan for the Retention Basin and it is continuing to modify the conceptual plan for the Retention Basin based on input received from the public and from the Park and Recreation Commission. A Final Supplemental EIR on the master plan is expected before the end of 2007 (Morse, 2006).

It is evident that the City of Roseville is considering the Placer Parkway concept in its planning for the Retention Basin, as indicated by the Placer Parkway corridor concept line shown on the current Master Plan, and it appears that recreational uses are generally planned for the central area of the Retention Basin, away from the southeastern area where the Placer Parkway would cross the property. Until the plan is finalized, the location of specific recreation facilities will not be confirmed.

AKT Development

In addition to the Regional University Specific Plan area, AKT Development owns thousands of acres of undeveloped agricultural land within the Central and Eastern segments of the Parkway project (adjacent to and west of the West Roseville Specific Plan area, including land within the Curry Creek Community Plan area). This land is currently in agricultural production, including rice farming. The current Placer County General Plan land use designations for these properties allow for agricultural land uses on 80-acre minimum lot sizes.

Alternative 1 would be located within the proposed Curry Creek Community Plan area, land owned by AKT Development, as well as the Regional University Specific Plan area. It would be located along the western boundary of the Sierra Vista Specific Plan area, and the City of Roseville Retention Basin. As previously discussed in Section 6.2.2, visual impacts are found to be high (as defined by FHWA criteria) for Alternative 1 within the Central Segment Landscape Unit. For this segment landscape unit, Alternative 1 would introduce a moderate to high level of adverse change to the resource area, and a high level of viewer response to visual change is anticipated. Architectural design and landscape treatments can help mitigate these potential impacts, but not below a level of significance. This conclusion was made based on analyzing the changes to the resource area (reviewing potential changes to visual character and visual quality) as well as reviewing anticipated viewer response to that change (as identified by analyzing viewer sensitivity and viewer exposure).

When considered in combination with all the projects proposed for the Central Segment Landscape Unit, the visual impact of the proposed Alternative 1 is diminished, yet still significant, due to the increase in number of potential viewers. Under present conditions, if the Parkway were built, it would contrast greatly with the existing rural/agricultural aesthetic. However, in 2040, assuming projects occur as is currently planned/proposed, Placer Parkway would not be as visible due to the fact that it would be more similar to the surrounding environment. When considering Alternative 1 with the planned/proposed developments in the Central Segment, there will be a cumulatively significant visual impact. Placer Parkway would provide a cumulatively considerable contribution to this impact, resulting in a cumulatively significant impact of the Parkway.

8.2.2.3 Eastern Segment Landscape Unit – Planned/Proposed Development

Like the Central Segment Landscape Unit, the Eastern Segment would undergo substantial growth if the multiple planned/proposed projects identified for this area occur. The following development projects fall within the Central Segment Landscape Unit and if built would continue the shift in the visual character of this area from rural agricultural mixed with urban/residential to predominantly urban commercial/ residential. Some developments would, in effect, expand the boundaries of Roseville westward.

West Roseville Specific Plan

The West Roseville Specific Plan (WRSP) area is located within the Eastern Segment Landscape Unit. The WRSP was approved by the City Council in February 2004 and annexed to the City August 18, 2004. While it is an approved development, it is just now undergoing initial construction phases. The character of the Plan area will be different in 2040 than at present. With the WRSP, the City of Roseville's total area is now 35.98 square miles. The community is particularly proud of the plan's concept of a Village Center that would provide a mix of land uses in proximity to each other to encourage pedestrian and transit access. Other amenities provided include over 10 miles of class I bicycle trails, a high school, middle school and four elementary schools, a regional soccer complex, a natural oak grove regional park, and offsite open space mitigation and significant air quality mitigation exceeding city standards.

Creekview Specific Plan

In June 2005, the City of Roseville began efforts to process the ±530-acre Creekview Specific Plan area (northwest of the WRSP). The project is envisioned as mixed use with a strong residential component. In July 2005, the City Council approved a comprehensive work program for the Plan and at the August 17, 2005, City Council hearing the necessary funding agreements and consultant contracts for the planning effort were approved. City staff and the landowner teams are currently in the process of identifying key project issues, including the location of natural resources (such as wetlands and oak trees) within the Plan areas. A project schedule has not yet been developed for the Plan.

Placer Ranch Specific Plan

The Placer Ranch Specific Plan (PRSP) is currently being drafted and is intended to define a mixture of industrial, commercial, office and professional, residential, and educational land uses on approximately 2,213 acres surrounding a portion of the Parkway as it travels through the Eastern Segment Landscape Unit. The Plan would add 6,700 dwelling units and use 290 acres for a 25,000 student University site. The PRSP Notice of Preparation acknowledges that the Parkway is expected to be routed through the northern portion of the PRSP site.

Sunset Industrial Area Plan

The Sunset Industrial Area Plan (SIAP) is a community plan that further refines the goals and policies of the Placer County General Plan. The 8,883-acre SIAP area is bounded on the north by the City of Lincoln, on the east by the City of Rocklin, and on the south by the City of Roseville. West of the SIAP lies a large area of agricultural land within Placer County. The SIAP Area includes a variety of industrial and warehousing uses located along Industrial Boulevard, as well as business park developments along SR 65. SIAP was established to improve opportunities for industrial development in the plan area to attract new industries, retain existing industries, and allow them to expand. In addition, the area was planned to provide facilities that would help all area businesses to thrive. The Parkway would bisect the 1997 SIAP area in unincorporated Placer County in the Eastern Segment of the study area. Development within this area is guided by the Placer County General Plan and the SIAP.

Brookfield

Brookfield Communities controls property north of the proposed Creekview Specific Plan area, south of Sunset Boulevard West, and northeast of the WRSP area. The property is currently undeveloped and no development is proposed at the present time. Existing land use designations on the property allow for agricultural land uses on 80-acre minimum parcels. The Parkway would cut across the Brookfield property.

As previously described in Section 6.2.3, for Alternative 1 within the Eastern Segment Landscape Unit, visual impacts are found to be high, as defined by FHWA criteria. For this segment landscape unit, Alternative 1 would introduce a moderate to high level of adverse change to the resource area and a high level of viewer response to visual change is anticipated. Architectural design and landscape treatments can help mitigate these potential impacts, but not below a level of significance. This conclusion was made based on analyzing the changes to the resource area (reviewing potential changes to visual character and visual quality) as well as reviewing anticipated viewer response to that change (as identified by analyzing viewer sensitivity and viewer exposure). More viewers will reside in and travel through the area, and thus be exposed to views of the Parkway. The Parkway would not be as visually prominent when contrasted with the development that is proposed to occur. When considering Alternative 1 with the planned/proposed developments in the Eastern Segment, there will be a cumulatively significant visual impact. Placer Parkway would provide a cumulatively considerable contribution to this impact, resulting in a cumulatively significant impact of the Parkway.

8.2.3 Alternative 2 – The Orange Alternative

8.2.3.1 Western Segment Landscape Unit – Planned/Proposed Development

The Western Segment Landscape Unit of Alternative 2 is the same as that for Alternative 1. Therefore, the potential cumulative impacts for this segment landscape unit would be the same as discussed for Alternative 1.

8.2.3.2 Central Segment Landscape Unit – Planned/Proposed Development

Although Alternative 1 varies from Alternative 2 within the Central Segment Landscape Unit, the potential cumulative impacts for both are similar as they would travel through the same planned/proposed development areas. Because Alternative 2 would bisect the proposed Regional University Specific Plan, its contribution to cumulative visual impacts would be greater than under Alternative 1.

8.2.3.3 Eastern Segment Landscape Unit – Planned/Proposed Development

The Eastern Segment Landscape Unit of Alternative 2 is the same as that for Alternative 1. Therefore, the potential cumulative impacts for this segment landscape unit are the same as discussed for Alternative 1.

8.2.4 Alternative 3 – The Blue Alternative

8.2.4.1 Western Segment Landscape Unit – Planned/Proposed Development

The Western Segment Landscape Unit of Alternative 3 is the same as that for Alternative 1. Therefore, the potential cumulative impacts for this segment landscape unit would be the same as discussed for Alternative 1.

8.2.4.2 Central Segment Landscape Unit – Planned/Proposed Development

Alternative 3 would not cross directly through any of the numerous development projects planned for the Central Segment Landscape Unit. However, Alternative 3 would contribute to the overall urban influences encroaching on the area in 2040 and would contribute to cumulatively significant visual impacts. Section 6.4.2 previously identified that, for Alternative 3 within the Central Segment Landscape Unit, visual impacts are found to be moderate, as defined by FHWA criteria. For this segment landscape unit, Alternative 3 would introduce a moderate level of adverse change to the resource area, and a high level of viewer response to visual change is anticipated. Architectural design and landscape treatments can help mitigate these potential impacts, but not below a level of significance. This conclusion was made based on analyzing the changes to the resource area (reviewing potential changes to visual character and visual quality) as well as reviewing anticipated viewer response to that change (as identified by analyzing viewer sensitivity and viewer exposure). When considering Alternative 1 with the planned/proposed developments in the Central Segment, there will be a cumulatively significant visual impact. Placer Parkway would provide a cumulatively considerable contribution to this impact, resulting in a cumulatively significant impact of the Parkway.

8.2.4.3 Eastern Segment Landscape Unit – Planned/Proposed Development

The Eastern Segment Landscape Unit of Alternative 3 is the same as that for Alternative 1. Therefore, the potential cumulative impacts for this segment landscape unit are the same as discussed for Alternative 1.

8.2.5 Alternative 4 – The Yellow Alternative

8.2.5.1 Western Segment Landscape Unit – Planned/Proposed Development

Under Alternative 4, within the Western Segment Landscape Unit, visual impacts are found to be moderate, as defined by FHWA criteria. For this segment landscape unit, Alternative 4 would introduce a moderate level of adverse change to the resource area and a high level of viewer response to visual change is anticipated. Architectural design and landscape treatments can help mitigate these potential impacts, but not below a level of significance. This conclusion was made based on analyzing the changes to the resource area (reviewing potential changes to visual character and visual quality) as well as

reviewing anticipated viewer response to that change (as identified by analyzing viewer sensitivity and viewer exposure). These factors are described below.

As for Alternatives 1, 2, and 3, whose cumulative impacts are described above, with the addition of SPSP (in full build-out) there would be an increase in potential viewers of Alternative 4 in the landscape unit, but also more views from the Parkway would be created due to increased traveler capacity. Along with increased numbers of people/viewers there would also be an expanded built environment (versus the existing open, agricultural aesthetic). The planned/proposed built environment of SPSP would also obscure/screen views (of and from the proposed Alternative 1) of many potential viewers. While Placer Parkway would change the visual character of the region, it may, when combined with the visual effect of the SPSP project, have a reduced impact as compared to direct impacts described in Chapter 6, as it would more readily blend with the changing nature of the landscape that would be shifting from rural/agricultural to more urban/commercial. Nevertheless, when considering Alternative 4 together with SPSP, there would be a cumulatively significant impact to the existing visual resources. Placer Parkway would provide a cumulatively considerable contribution to this impact, resulting in a cumulatively significant impact of the Parkway.

8.2.5.2 Central Segment Landscape Unit – Planned/Proposed Development

Despite the large amount of planned development for the Central Segment Landscape Unit, Alternative 4 would travel through predominantly agricultural/rural land. The Regional University Specific Plan development area would be just south of Alternative 4 and would shift the aesthetic for much of the central area to more urban/residential. For Alternative 4 within the Central Segment Landscape Unit, cumulative visual impacts would be significant. For this segment landscape unit, Alternative 4 would introduce a moderate level of adverse change to the resource area, and a high level of viewer response to visual change is anticipated. Architectural design and landscape treatments can help mitigate these potential impacts, but not below a level of significance. This conclusion was made based on analyzing the changes to the resource area (reviewing potential changes to visual character and visual quality) as well as reviewing anticipated viewer response to that change (as identified by analyzing viewer sensitivity and viewer exposure). When considering Alternative 1 with the planned/proposed developments in the Central Segment, there will be a cumulatively significant visual impact. Placer Parkway would provide a cumulatively considerable contribution to this impact, resulting in a cumulatively significant impact of the Parkway.

8.2.5.3 Eastern Segment Landscape Unit – Planned/Proposed Development

The Eastern Segment Landscape Unit of Alternative 4 is the same as that for Alternative 1. Therefore, the potential cumulative impacts for this segment landscape unit are the same as discussed for Alternative 1.

8.2.6 Alternative 5 – The Green Alternative

8.2.6.1 Western Segment Landscape Unit – Planned/Proposed Development

The Western Segment Landscape Unit of Alternative 5 is the same as that for Alternative 4. Therefore, the potential cumulative impacts for this segment landscape unit are the same as discussed for Alternative 4.

8.2.6.2 Central Segment Landscape Unit – Planned/Proposed Development

The Central Segment Landscape Unit of Alternative 5 is similar to that for Alternative 4. The resource change and viewer response would also be similar for both alternatives. Therefore, the potential cumulative impacts for Alternative 5 within the Central Segment Landscape Unit are generally the same

as discussed for Alternative 4. However, Alternative 5 would run just south of the Reason Farms Environmental Preserve where land has been set aside for various recreational uses within the City of Roseville Retention Basin property. While Alternative 5 would be adjacent to the Preserve it appears that recreational uses are generally planned for the central area of the Retention Basin property, away from the southeastern area where the Placer Parkway would border the property. Consequently, Alternative 5 would have a slightly greater impact than Alternative 4 due to its closer proximity to an area intended for preservation as an undeveloped area suitable for informal recreation.

8.2.6.3 Eastern Segment Landscape Unit – Planned/Proposed Development

The Eastern Segment Landscape Unit of Alternative 5 is the same as that for Alternative 1. Therefore, the potential cumulative impacts for this segment landscape unit are the same as discussed for Alternative 1.

8.3 SUMMARY OF CUMULATIVE IMPACTS ON VISUAL RESOURCES

Figure 7-2 illustrates planned and potential development in and near the study area. The combined visual effect of this development would change the visual character of the region. In fact, the extensive development, while bringing more potential viewers to the area, may diminish the visual impact of the Parkway as it would more readily blend with the changing nature of the landscape, which would be shifting from rural/agricultural to more urban/residential. Because there would be an increase in residents and potential viewers in the area, the potential cumulative impacts should continue to be assessed. It is recommended that the Tier 2 EIS/EIR continue to consider cumulative impacts in the visual analysis performed at that time.

All corridor alignments alternatives in conjunction with the planned and proposed development in and near the study area will contribute to a change in visual character and quality of the study area. By 2040, the study area will consist of much more built environment versus farming environment, many more structures/ roads versus open space; essentially, the area will shift from rural to urban/suburban. This will result in a cumulatively significant visual impact. Placer Parkway's incremental contribution to cumulative impacts related to planned/proposed development in the area would be cumulatively considerable. Placer Parkway's cumulative visual impacts would therefore be significant.

9.0 WATT AVENUE INTERCHANGE

As shown on Figure 2-3, four potential locations are assumed for the Watt Avenue interchange. The first location (Option One) for the interchange, associated only with Alternative 1, would be located near and potentially cross Curry Creek. Option One would most likely have potential impacts relating to both resource change and viewer response. Resource change (consisting of visual character and visual quality) would change as follows: visual character would shift slightly from predominantly agricultural with urban influences to a stronger urban influenced agricultural character; visual quality is currently rated as low within the Central Segment Landscape Unit (where the proposed location lies), therefore the visual quality will likely degrade further but still remain low for this connection option. Viewer response (consisting of viewer sensitivity and viewer exposure) for this connection option is likely to be as follows: viewer sensitivity will most likely be heightened. The structure in and of itself will be a dramatic change for traveler views from the Parkway as well as for travelers and residents and other views of the connection; viewer exposure will also increase. Travelers along the Parkway will add additional viewers of and from the Parkway, adding to the viewer exposure of Option One. In summary, potential visual impacts associated with Option One would likely be Moderate/High.

The second potential location for the Watt Avenue interchange, which would apply to Alternative 1 (Option Two) and also Alternative 2, is located outside of the Pleasant Grove Creek floodplain south of Pleasant Grove Creek. The potential impacts of this interchange on visual character and quality would be less than for Alternative 1 (Option One). This option would be located along the edges of the proposed Curry Creek Community Plan and the open space buffer in the adopted West Roseville Specific Plan, and only with some portion outside of any current proposed development. It also would not span a creek. Because it is partly anticipated that viewer response to this interchange location under these circumstances would be more favorable, there would be less of an impact to aesthetic resources than under Option One. Potential visual impacts with this alternative connection in place would likely be Moderate to Moderate/High.

The other two potential Watt Avenue interchange locations are associated with Alternatives 3 through 5. These locations are outside of any area of proposed development. While they would still be visible, the visual impacts would be less than those associated with either of the other two potential locations under Alternative 1, Option 2, or Alternative 2. Under Alternatives 3 and 4, a Watt Avenue connection would be most visible from the northern portion of the Curry Creek Community Plan, in which no development proposals are available. Under Alternative 5, recreational users of the City of Roseville Retention Basin would be in close proximity to a Watt Avenue connection. The likely proximity to these viewers from this future development would likely result in Moderate to Moderate/High visual impacts under Alternatives 3, 4, and 5.

10.0 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION STRATEGIES

FHWA mandates that a qualitative aesthetic approach should be taken to mitigate for visual quality loss. This approach addresses the actual cumulative loss of visual quality that would occur in the project viewshed when the project is implemented. This qualitative approach is based on visual resource change and viewer response considering regional future planned development. Chapter 8 provides additional discussion of cumulative impacts.

Potential mitigation strategies that would likely be implemented to reduce potential adverse effects are identified below. A Supplemental Visual Impact Assessment would be produced once the project is further defined and Tier 2 analysis commences. It is recommended that all suggested future mitigation be reviewed by the Caltrans District Landscape Architect.

The suggested mitigation strategies are arranged by project feature and are listed in order of effectiveness. All visual mitigation strategies would be designed and implemented with the concurrence of the Caltrans District Landscape Architect, or as defined by FHWA. Although not mandated, it is also assumed that local jurisdictions and the owner/operator of the roadway would also review the Visual Impact Assessment for compatibility with future planning efforts.

In order to reduce the likelihood and magnitude of potential adverse temporary and permanent visual impacts associated with activities of the Placer Parkway Project, the following aesthetic-related mitigation strategies are recommended:

1. Project features and treatments shall be designed to help complement the existing agricultural "look and feel" within south Sutter and southwestern Placer counties where agricultural activities are projected to continue. In accordance with the FHWA and Caltrans requirements, Caltrans District Landscape Architect shall review all project features and treatments before project design completion.

2. Landscaping concepts for Placer Parkway shall respect the topography and vistas in the study area and shall complement the varying character of land adjacent to the Parkway corridor. Where wetlands adjoin the Parkway, designs shall utilize appropriate wetland species to the extent practicable. At the time of the Tier 2 environmental review, a Landscaping Conceptual Plan shall be developed for the project, to be reviewed by the Caltrans District Landscape Architect (see Section II for further details).

3. Lighting elements shall be designed at the Tier 2 stage, and will be approved for safety and other features by Caltrans. Design shall consider requirements of the Landscaping Conceptual Plan for minimizing potential aesthetic impacts (e.g., shielding lighting elements, using lower voltage lighting for planting areas, and proposing lighting fixtures that complement the visual character of the area).

11.0 ANALYSES TO BE UNDERTAKEN IN TIER 2

The technical studies and reports that would be completed as part of Tier 2 include the following:

- Completion of a Visual Impact Analysis (VIA), as mandated by FHWA and Caltrans. This VIA would be a project-level VIA. It would evaluate all major design features, including, but not limited to interchanges, roadway/creek crossings, and lighting review; and

- Development of a Landscape Conceptual Plan (as required by the FHWA and Caltrans). This would incorporate use of native plant materials as much as possible and include selection of appropriate species, such as sycamores and poplars, in areas requiring drainage. Where appropriate, shrubs and ground cover plantings would be used in lieu of grasses to reduce irrigation requirements, with the exception of wetland areas, which would utilize appropriate wetland species. This plan would utilize guidance included in "Landscape Concepts" Dated December 7, 2005 as approved by the Caltrans Sacramento Office of Landscape Architecture and attached herein as Appendix B.

To better understand potential viewer response to the project, it is recommended that existing viewer conditions (e.g., existing population and travel counts) be updated with future evaluations of the study area. This would help better understand existing viewer exposure (number of viewers, location of viewers, and duration of current views) as well as viewer sensitivities to the project (to include: viewer activity, local values, cultural significance of the area).

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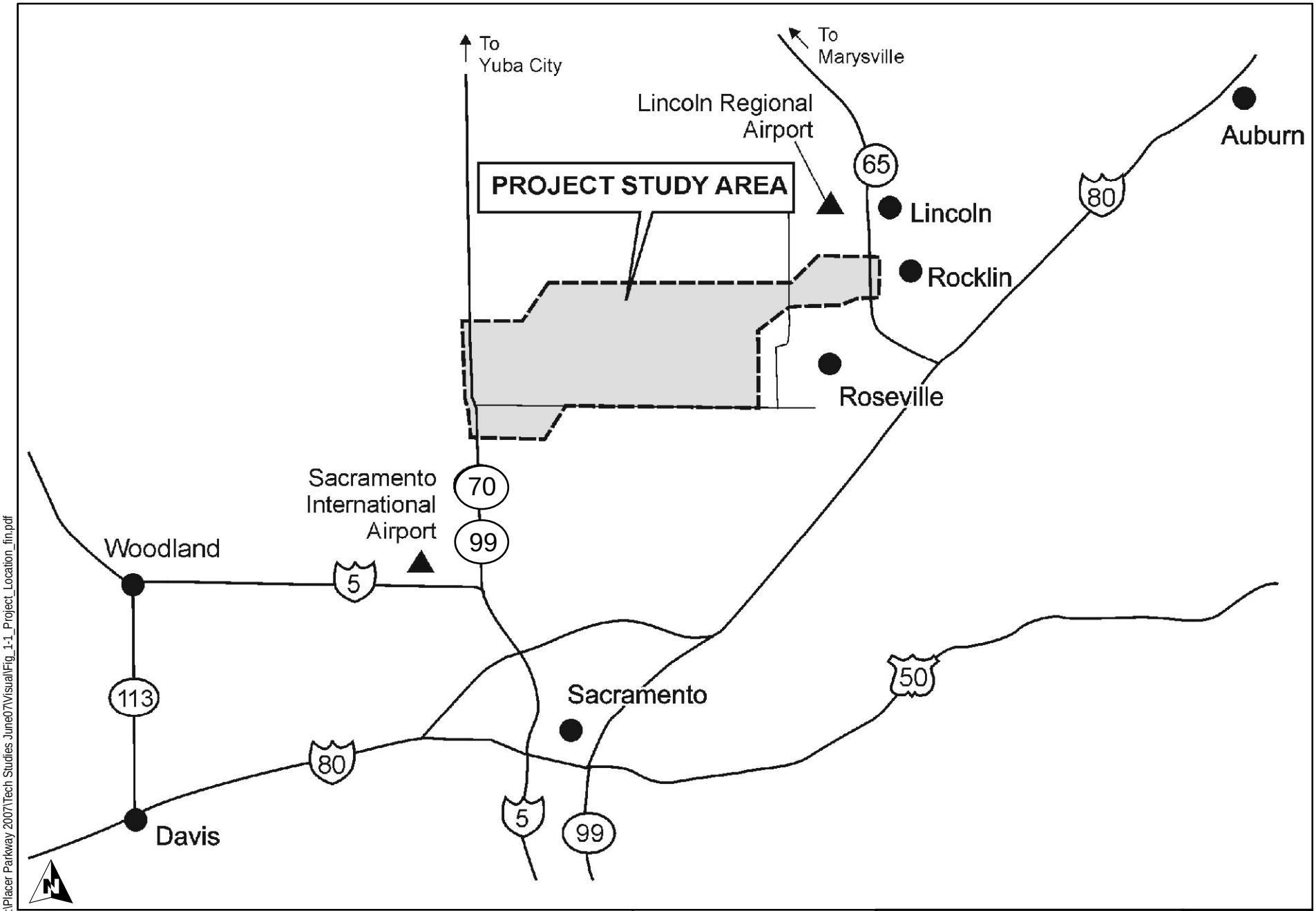
Figures



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PLACER PARKWAY

Tier 1 EIS/EIR
Visual Impact
Assessment

Project Location

Figure 1-1

June 2007

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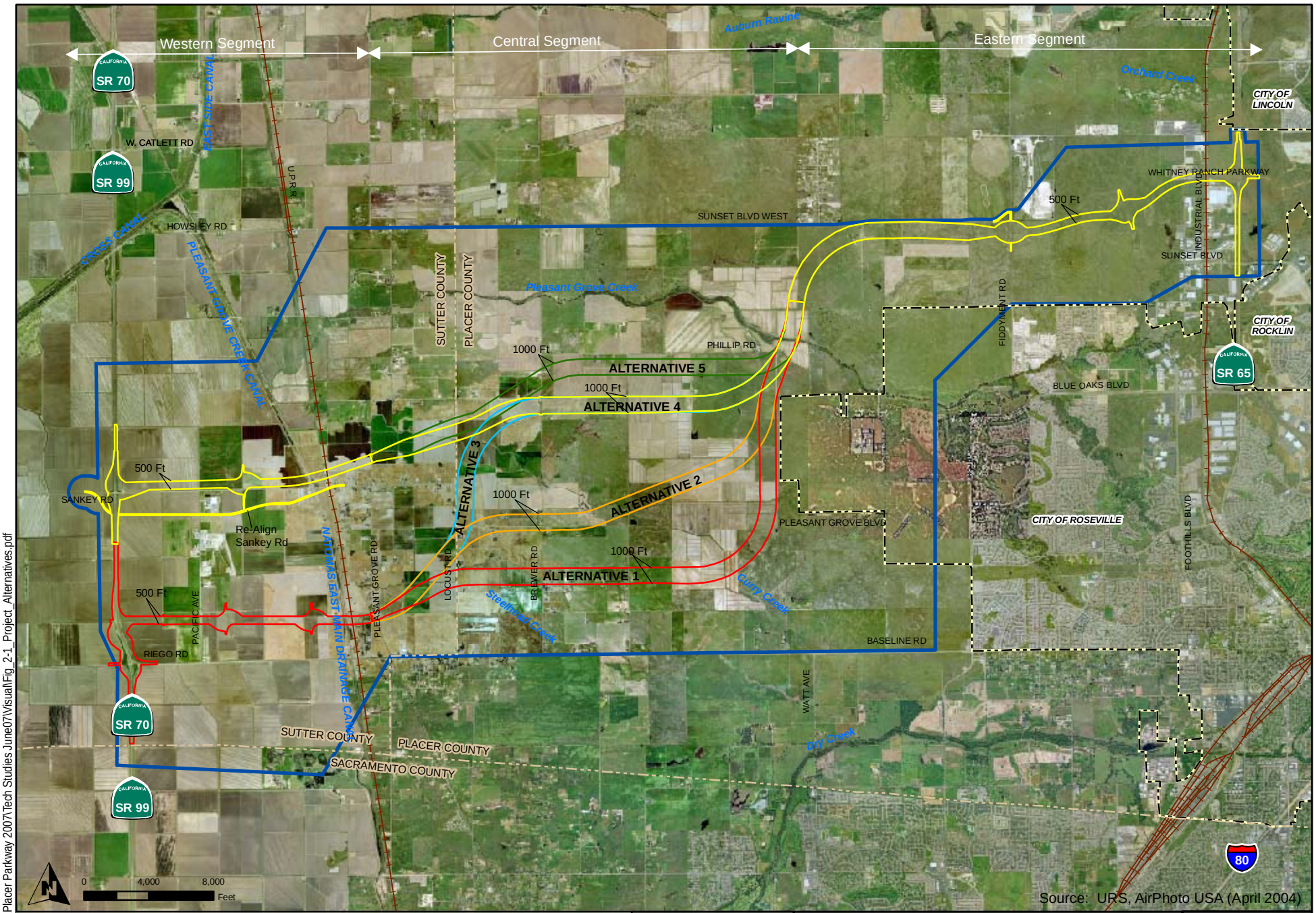

Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Visual Impact
Assessment

Project Alternatives

Figure 2-1

June 2007

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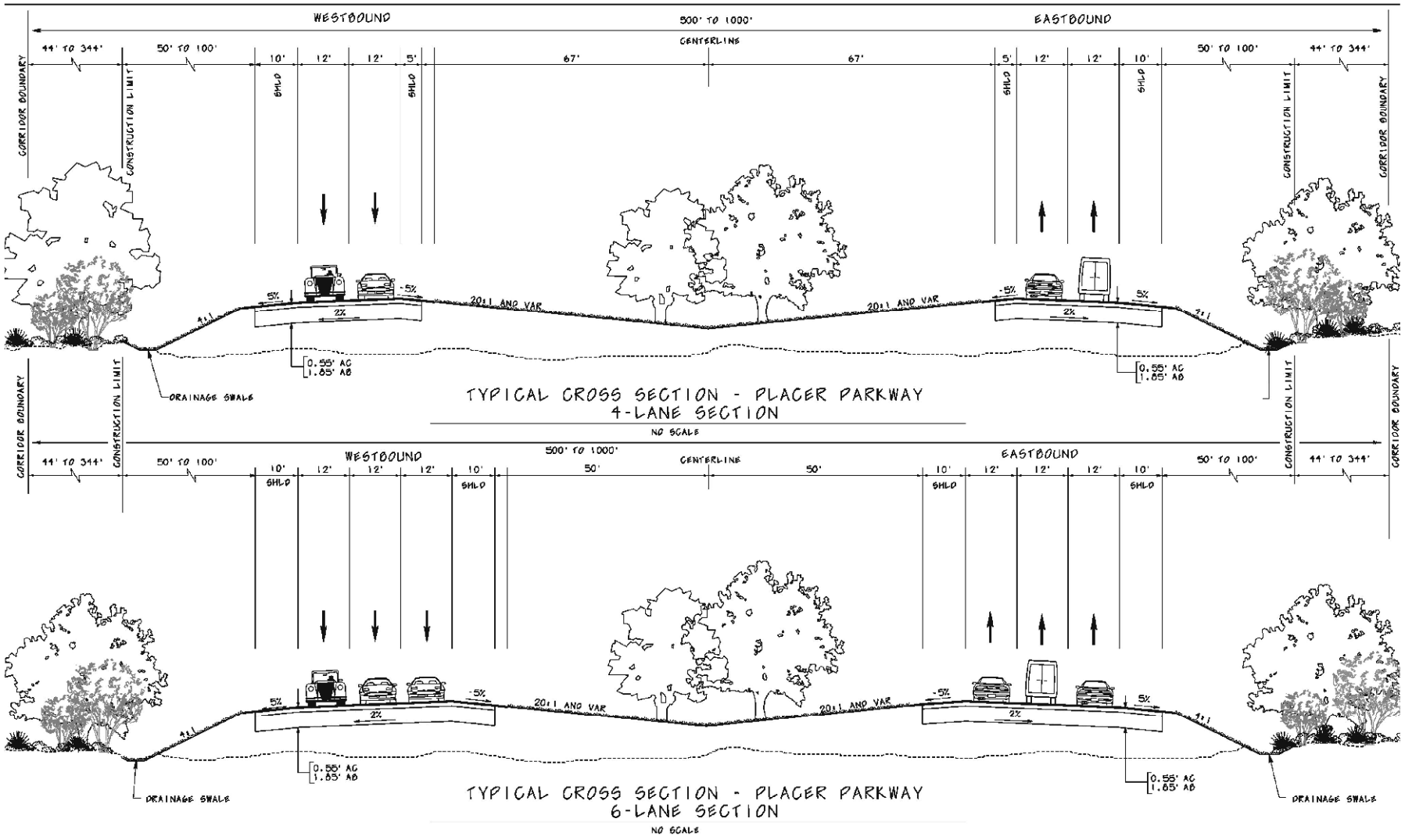

PLACER PARKWAY CORRIDOR PRESERVATION	Tier 1 EIS/EIR Visual Impact Assessment	Typical Cross Section (Conceptual)	***Figure 2-2*** ***June 2007***

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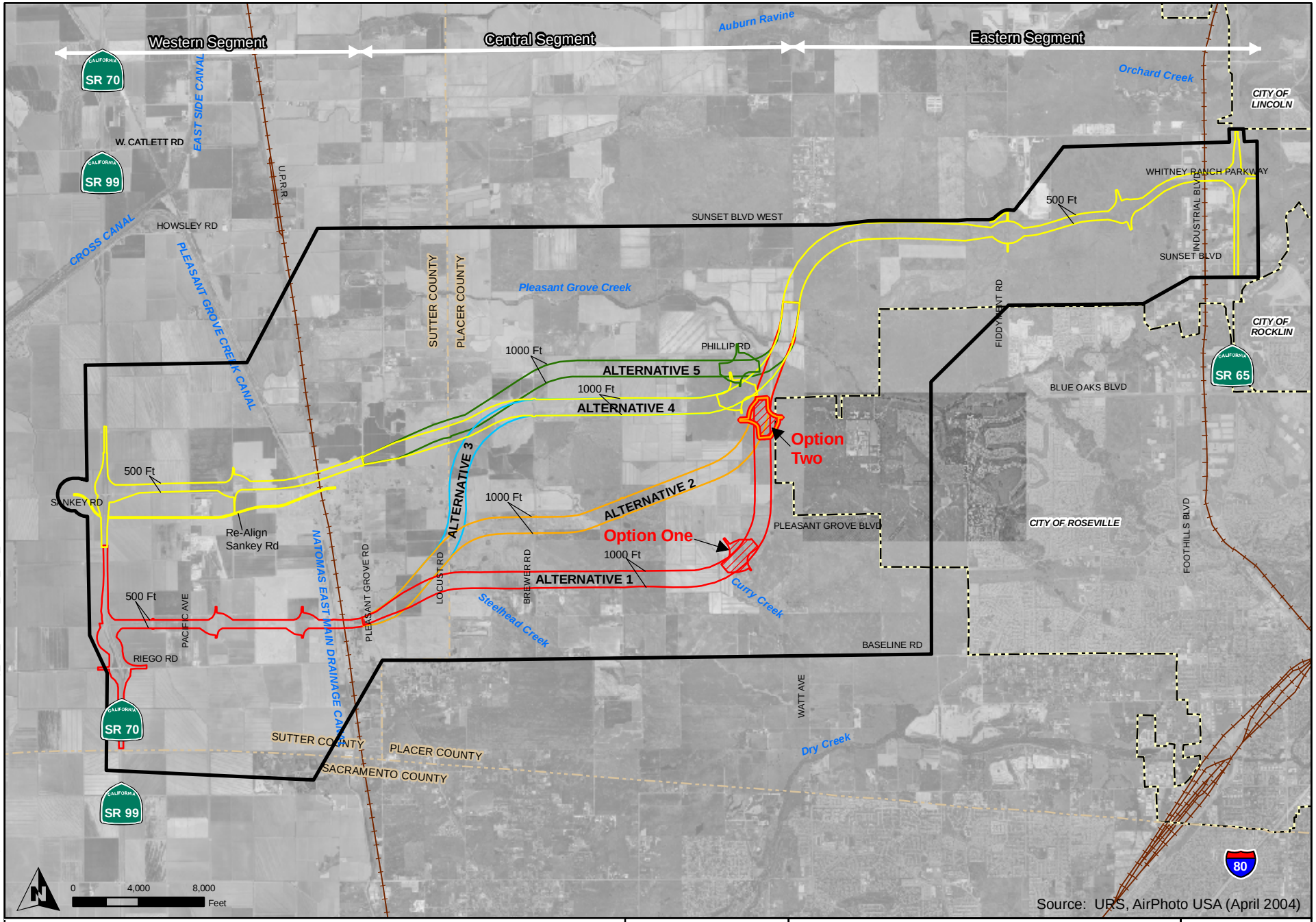
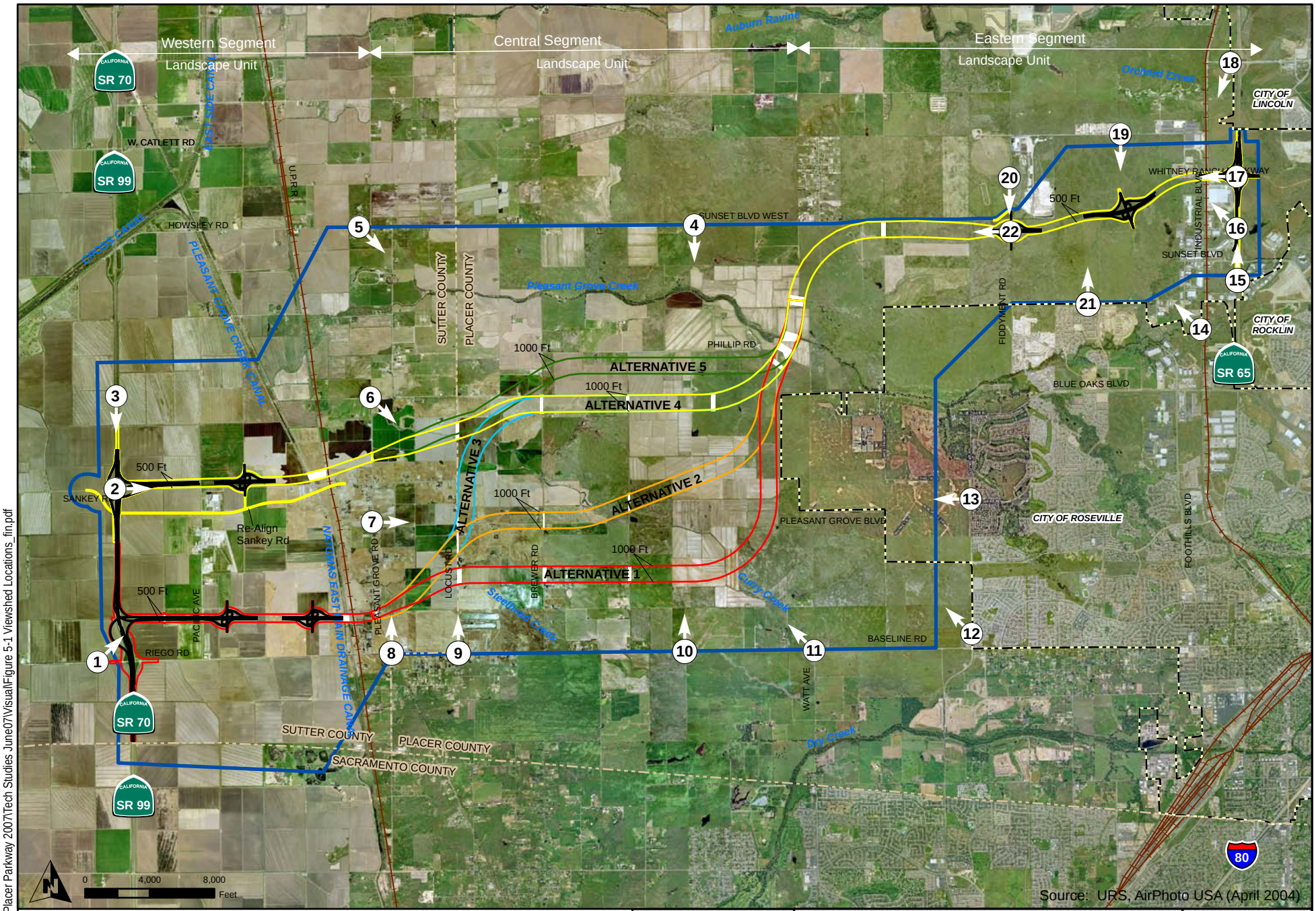


Tier 1 EIS/EIR
Visual Impact Assessment

Potential Watt Avenue Interchange

Figure 2-3

June 2007



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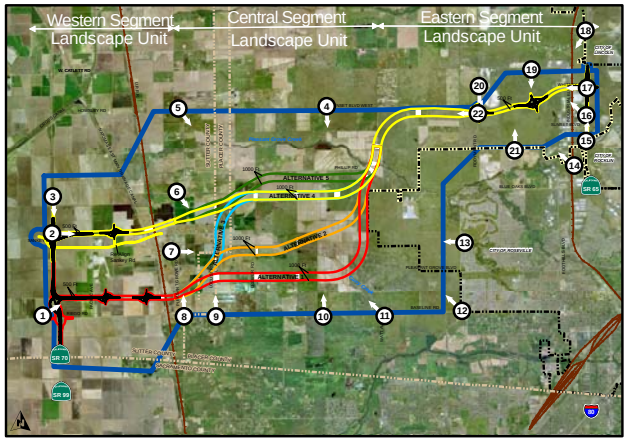


Viewshed #1 - Western Segment Landscape Unit - Eastbound traveler views on Riego Rd. @ SR-70/99 Intersection Looking northeast toward project.
County of Sutter, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID → Viewshed With View Direction

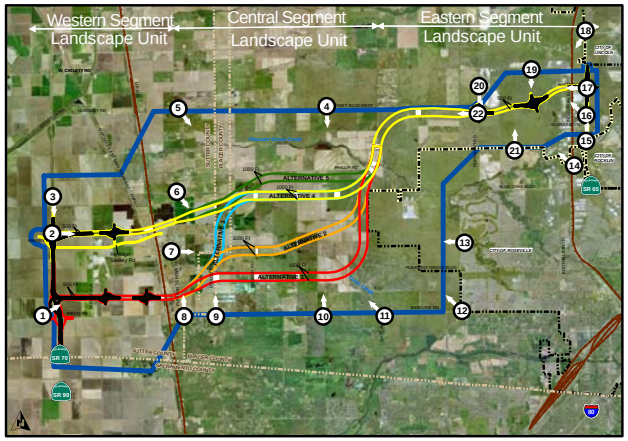
PLACER PARKWAY

Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #1
Western Segment Landscape Unit

Figure 5-2

June 2007



Viewshed #2 - Western Segment Landscape Unit - Northbound traveler views on SR-70/99 @ Sankey Rd. looking east toward project.
County of Sutter, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID Viewshed With View Direction

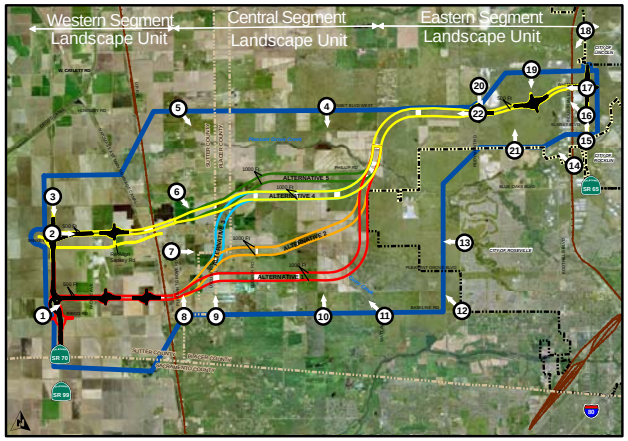
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #2
Western Segment Landscape Unit

Figure 5-3

June 2007



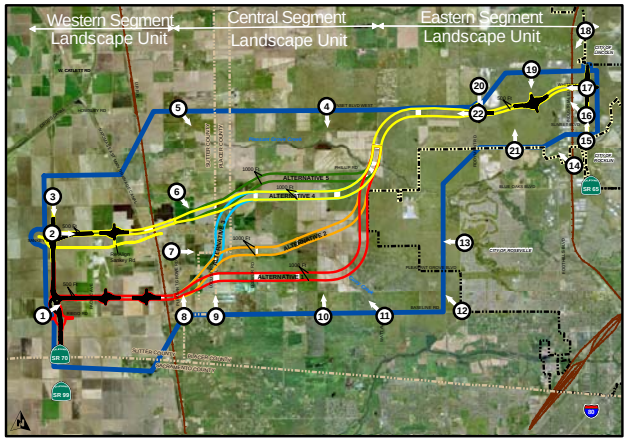
Viewshed #3 - Western Segment Landscape Unit - Southbound traveler views on SR-70/99 looking south toward proposed interchange improvements @ Sankey Rd.
County of Sutter, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID → Viewshed With View Direction

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR Visual Impact Assessment	Viewshed #3 Western Segment Landscape Unit	***Figure 5-4*** ***June 2007***



Viewshed #4 - Central Segment Landscape Unit - Eastbound traveler on Sunset Blvd. West between Pettigrew Rd. and Dinky Ln. looking south toward proposed project.
County of Placer, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID Viewshed With View Direction

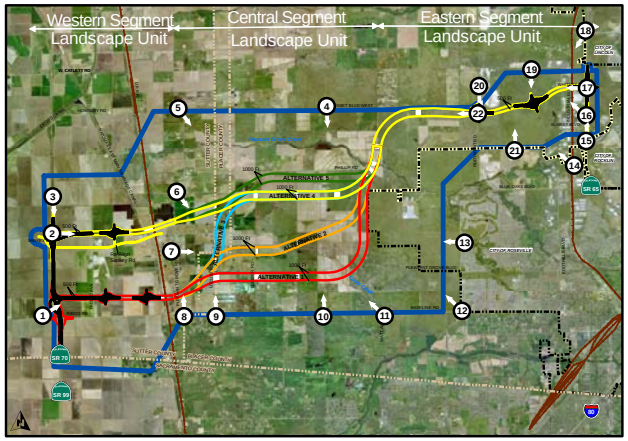
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #4
Central Segment Landscape Unit

Figure 5-5

June 2007



Viewshed #5 - Western/Central Segment Landscape Units - Eastbound traveler on Sunset Blvd. West at Pleasant Grove Rd. intersection (project would be in distant background).
County of Sutter, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID → Viewshed With View Direction

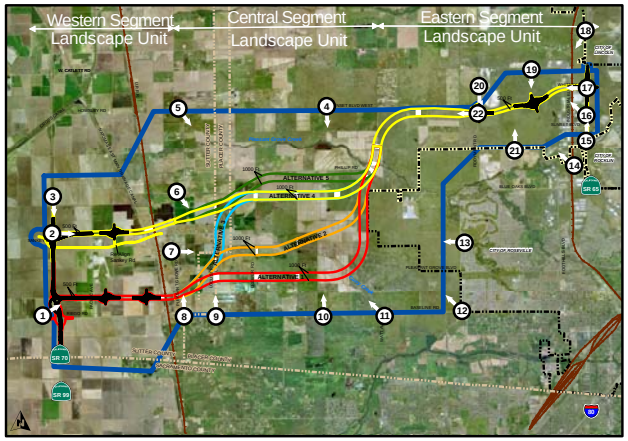
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #5
Western/Central Segment
Landscape Units

Figure 5-6

June 2007



Viewshed #6 - Western/Central Segment Landscape Units - Southbound traveler on Pleasant Grove Rd. at Keys Rd. intersection looking southeast toward project.
County of Sutter, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID | Viewshed With View Direction

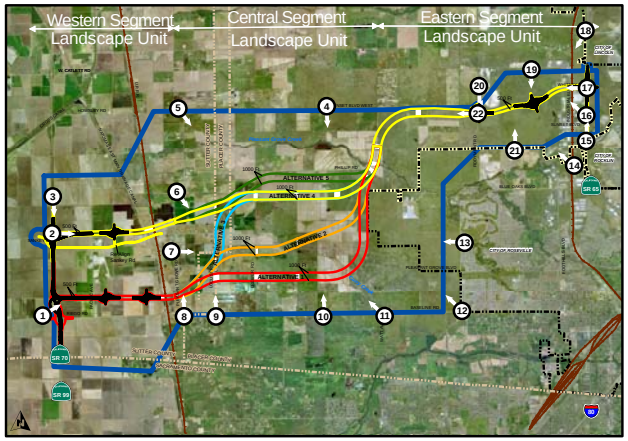
PLACER PARKWAY CORRIDOR PRESERVATION

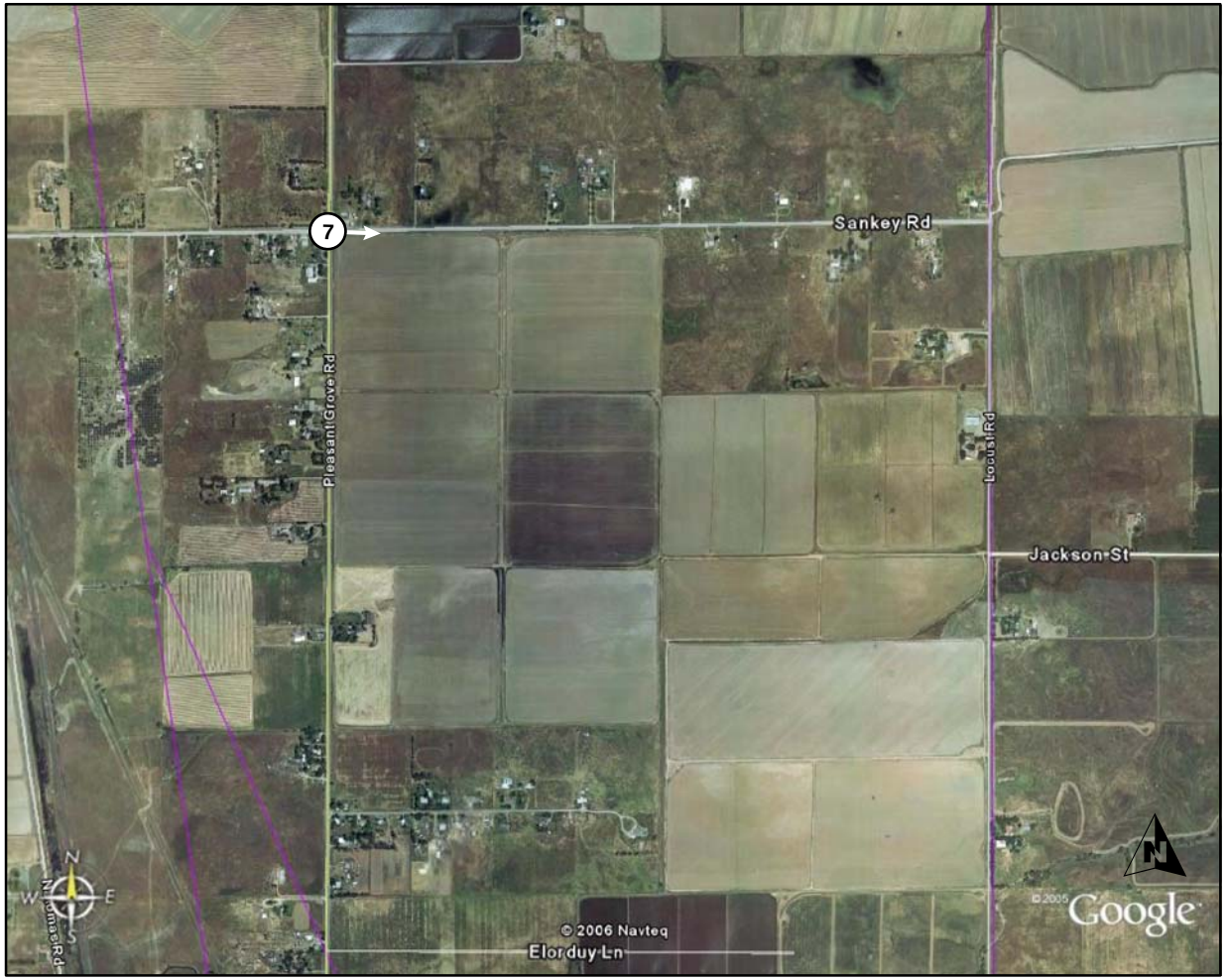
Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #6
Western/Central Segment
Landscape Units

Figure 5-7

June 2007





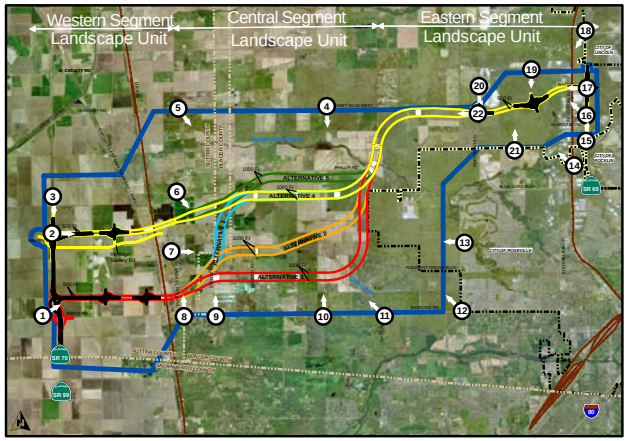
Viewshed #7 - Western/Central Segment Landscape Units - Southbound traveler on Pleasant Grove Rd. near Sankey Rd. looking east toward project. County of Sutter, CA

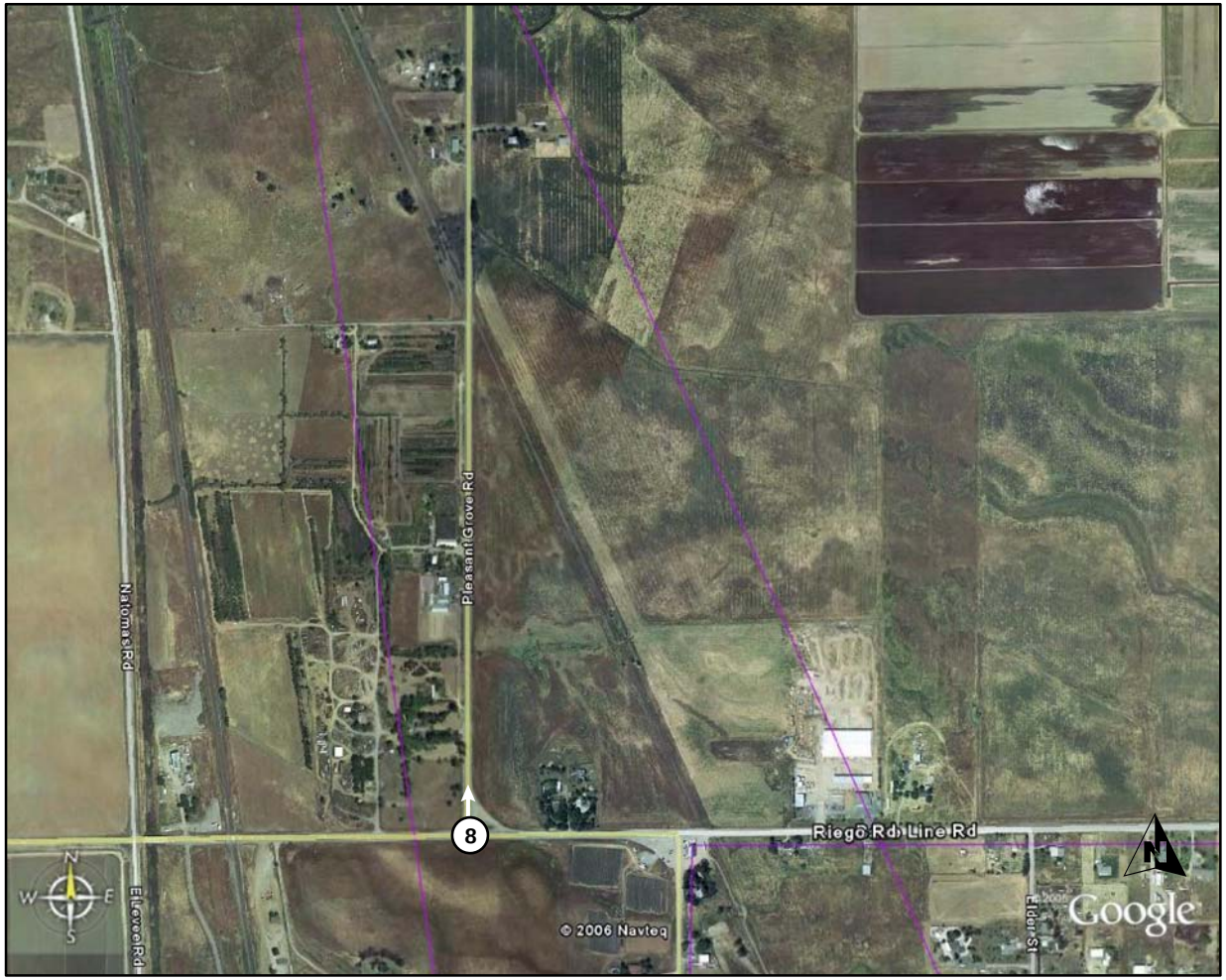
Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID → Viewshed With View Direction

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR Visual Impact Assessment	Viewshed #7 Western/Central Segment Landscape Units	***Figure 5-8*** ***June 2007***





Viewshed #8 - Western/Central Segment Landscape Units - Northbound traveler on Pleasant Grove Rd. at Riego Rd./Baseline Rd. looking north toward project. County of Sutter/County of Placer, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID → Viewshed With View Direction

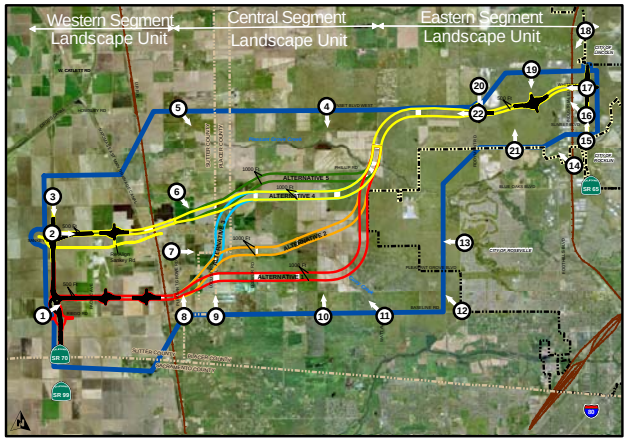
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #8
Western/Central Segment
Landscape Units

Figure 5-9

June 2007



Viewshed #9 - Central Segment Landscape Unit - Northbound traveler just off Locust Rd. at Baseline Rd. looking north toward project.
County of Sutter/County of Placer, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID Viewshed With View Direction

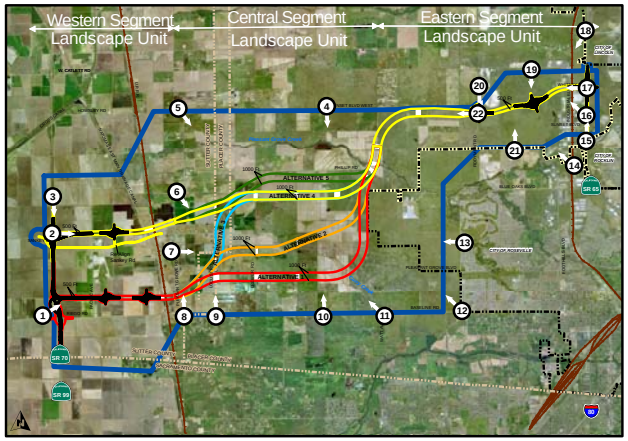
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #9
Central Segment Landscape Unit

Figure 5-10

June 2007



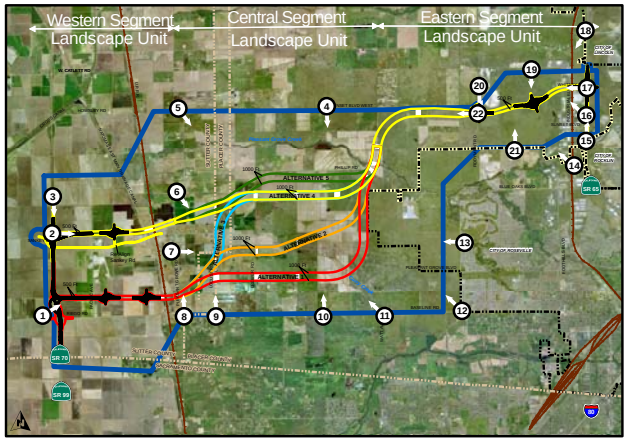
Viewshed #10 - Central Segment Landscape Unit - Eastbound traveler on Baseline Rd. @ Country Acres Ln. looking north toward project.
County of Placer, CA

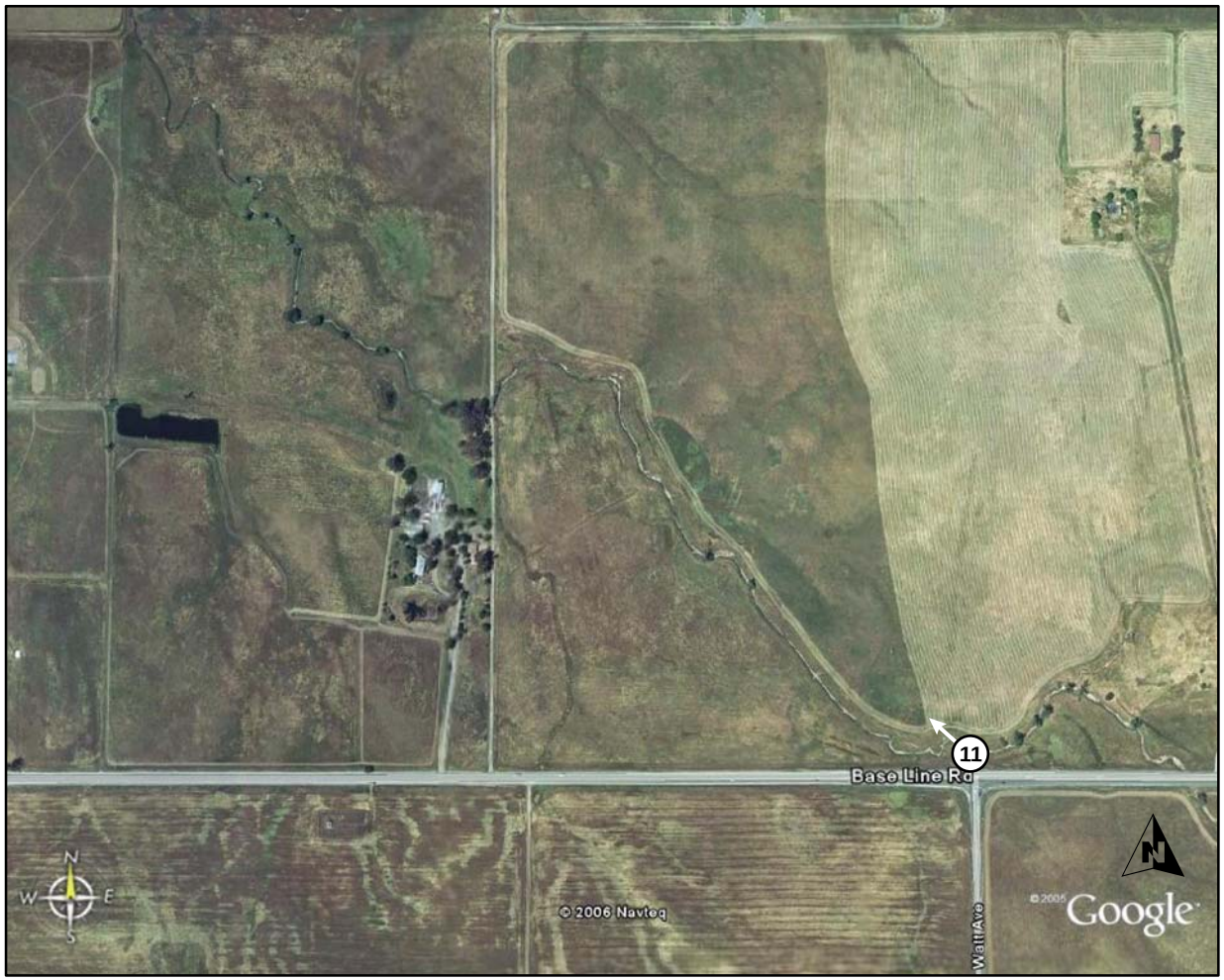
Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID Viewshed With View Direction

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR Visual Impact Assessment	Viewshed #10 Central Segment Landscape Unit	***Figure 5-11*** ***June 2007***





Viewshed #11 - Central/Eastern Segment Landscape Units - Westbound traveler on Baseline Rd. @ Watt Ave. looking northwest toward project.
County of Placer, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID → Viewshed With View Direction

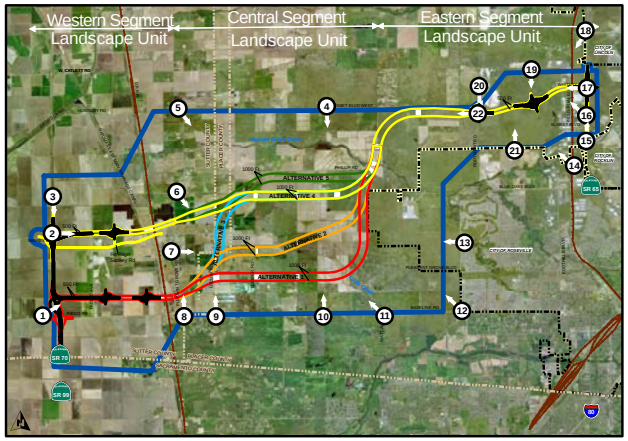
PLACER PARKWAY CORRIDOR PRESERVATION

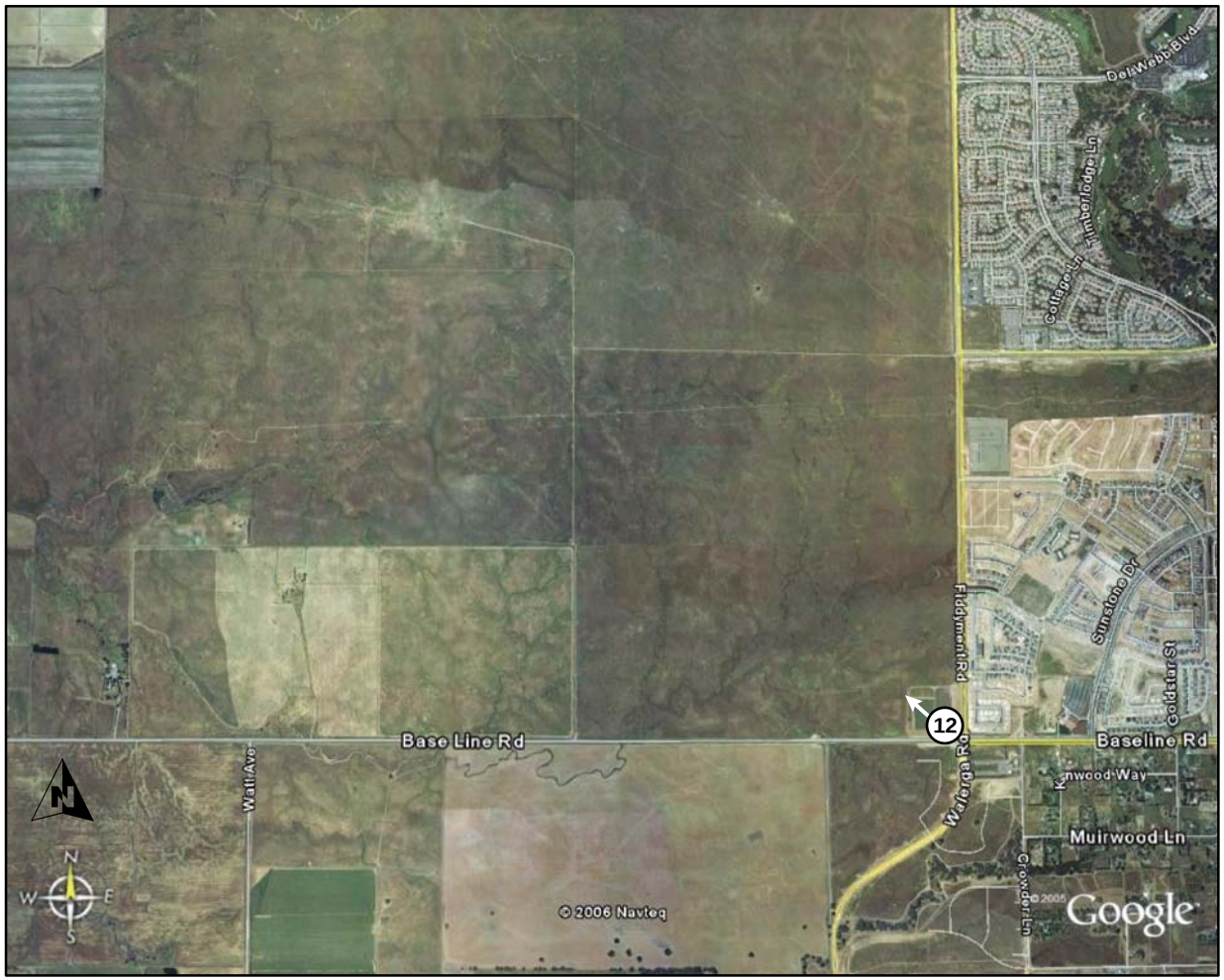
Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #11
Central/Eastern Segment
Landscape Units

Figure 5-12

June 2007





Viewshed #12 - Central/Eastern Segment Landscape Units - Residential views/Westbound traveler on Westhills Dr. @ Fiddyment Rd. looking west toward project.
City of Roseville/County of Placer, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID → Viewshed With View Direction

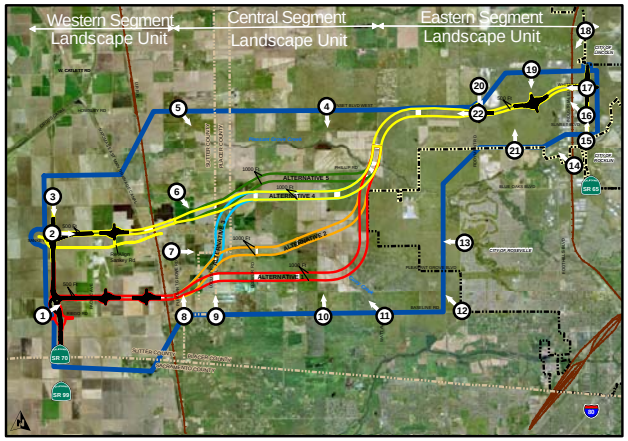
PLACER PARKWAY CORRIDOR PRESERVATION

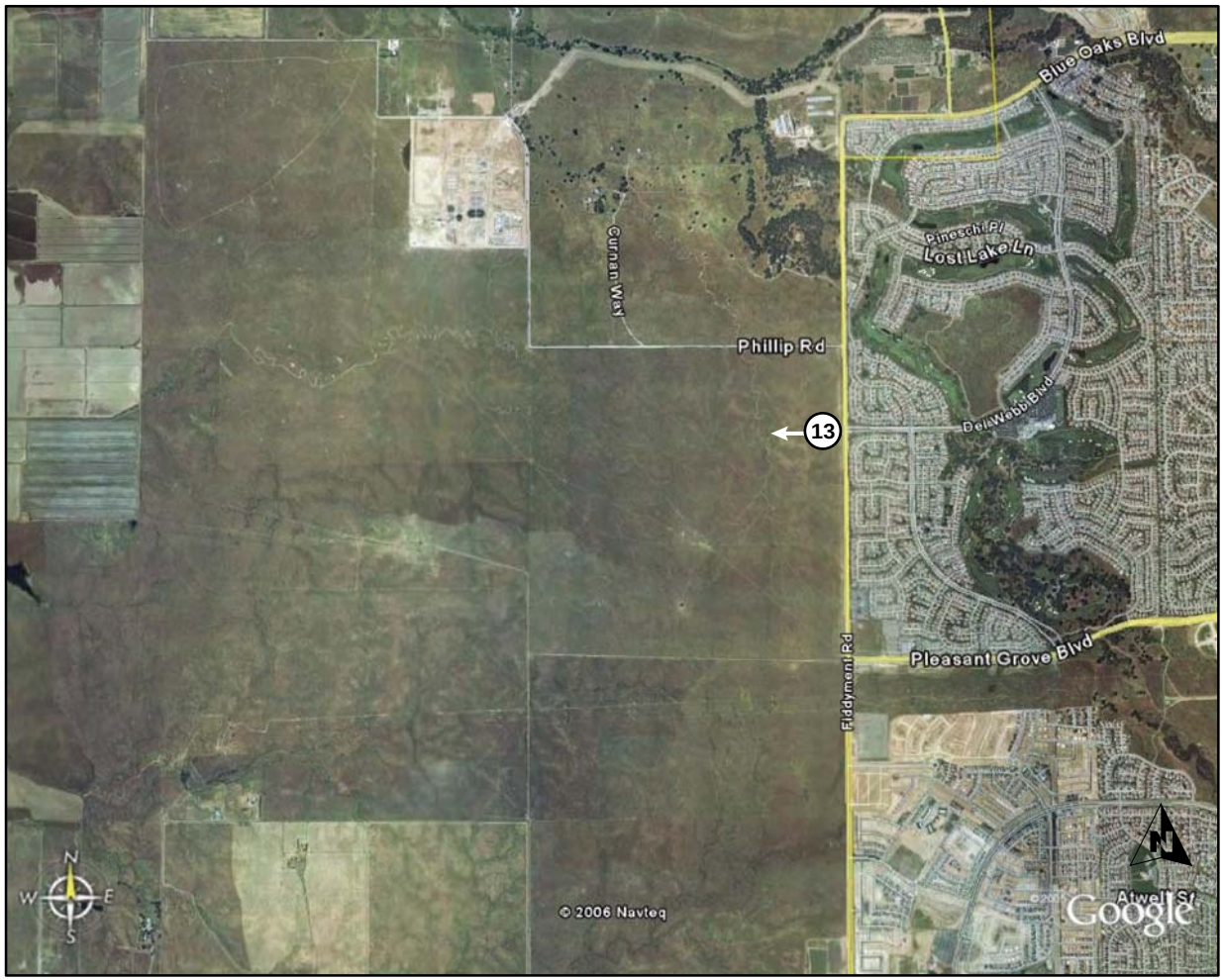
Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #12
Central/Eastern Segment
Landscape Units

Figure 5-13

June 2007





Viewshed #13 - Central/Eastern Segment Landscape Units - Residential views/Northbound traveler on Fiddyment Rd. @ Del Webb Blvd. looking west toward project.
City of Roseville/Placer County, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID Viewshed With View Direction

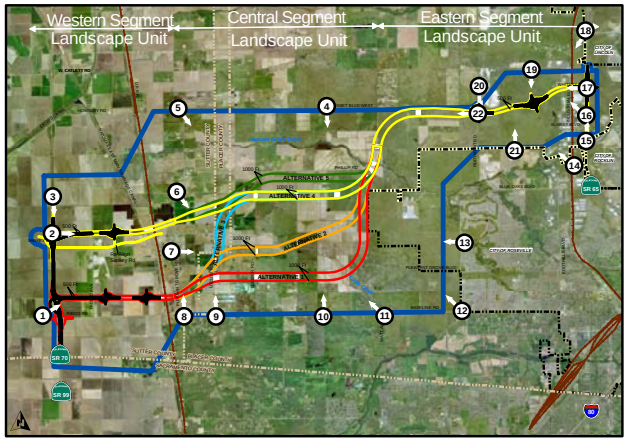
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #13
Central/Eastern Segment
Landscape Units

Figure 5-14

June 2007



Viewshed #14 - Eastern Segment Landscape Unit - Northbound traveler on Industrial Avenue @ Pleasant Grove Creek Bridge (proposed project would be behind bridge in this photo).
City of Roseville, Placer County, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID Viewshed With View Direction

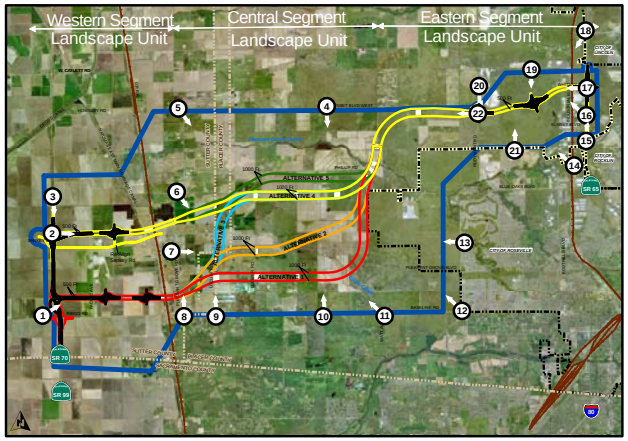
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #14
Eastern Segment Landscape Unit

Figure 5-15

June 2007



Viewshed #15 - Eastern Segment Landscape Unit - Northbound traveler on SR-65 @ Placer County/City of Roseville/City of Rocklin merge looking north toward project. County of Placer/City of Rocklin/City of Roseville, Placer County, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID Viewshed With View Direction

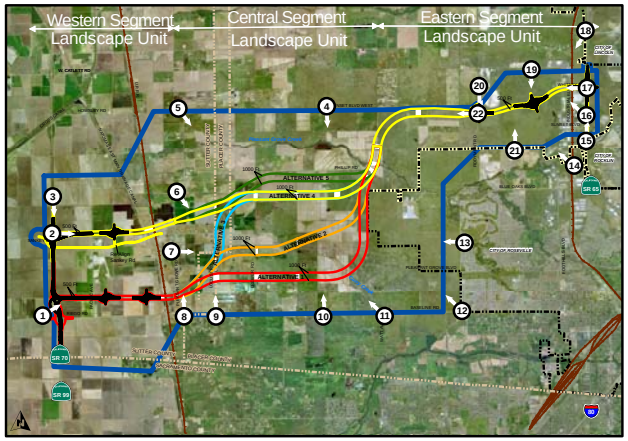
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #15
Eastern Segment Landscape Unit

Figure 5-16

June 2007



Viewshed #16- Eastern Segment Landscape Unit - Northbound traveler on SR-65 @ Whitney Ranch Parkway looking northwest toward proposed project. County of Placer, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID → Viewshed With View Direction

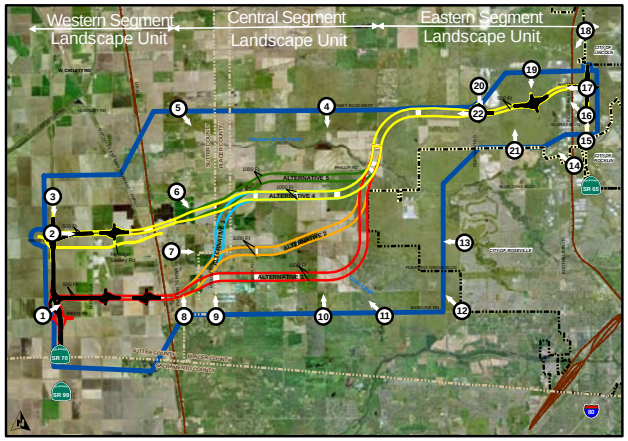
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #16
Eastern Segment Landscape Unit

Figure 5-17

June 2007



Viewshed #17 - Eastern Segment Landscape Unit - Westbound traveler on Whitney Ranch Parkway & SR-65 looking west toward proposed project. County of Placer, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID → Viewshed With View Direction

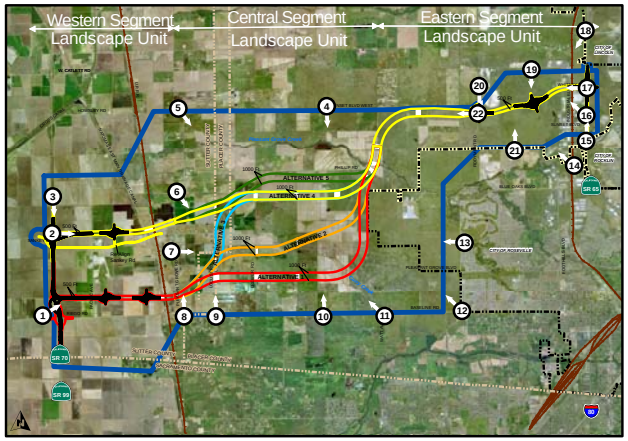
PLACER PARKWAY CORRIDOR PRESERVATION

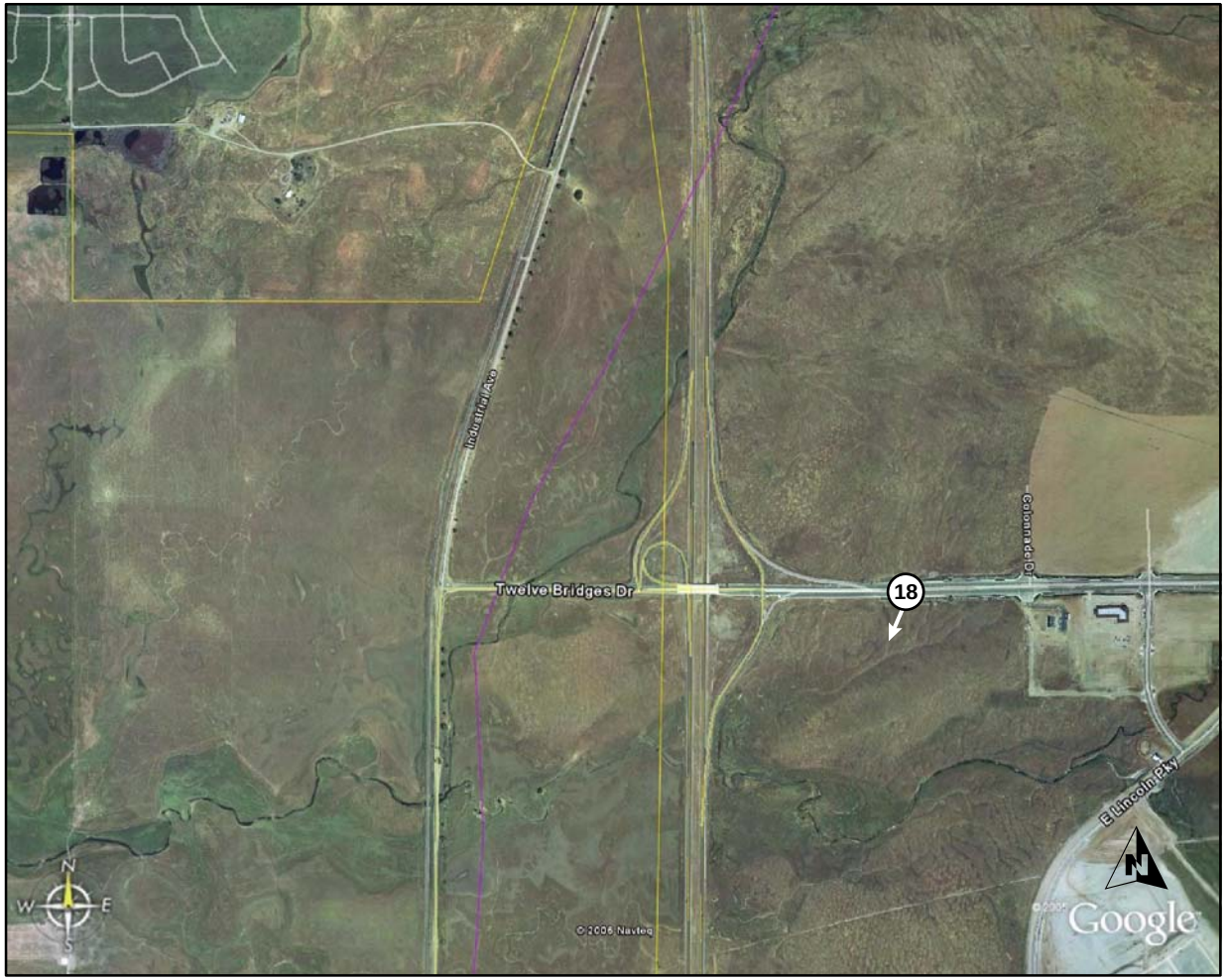
Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #17
Eastern Segment Landscape Unit

Figure 5-18

June 2007





Viewshed #18 - Eastern Segment Landscape Unit - Westbound traveler on Twelve Bridges Road @ SR-65 looking southwest toward proposed project.
City of Lincoln, Placer County, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID Viewshed With View Direction

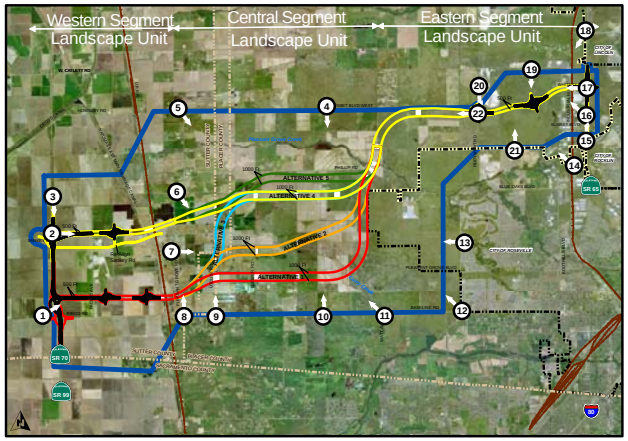
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #18
Eastern Segment Landscape Unit

Figure 5-19

June 2007



Viewshed #19 - Eastern Segment Landscape Unit - Westbound traveler on Athens Ave. between Fiddyment Rd. and SR-65 looking south toward proposed project.
County of Placer, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID Viewshed With View Direction

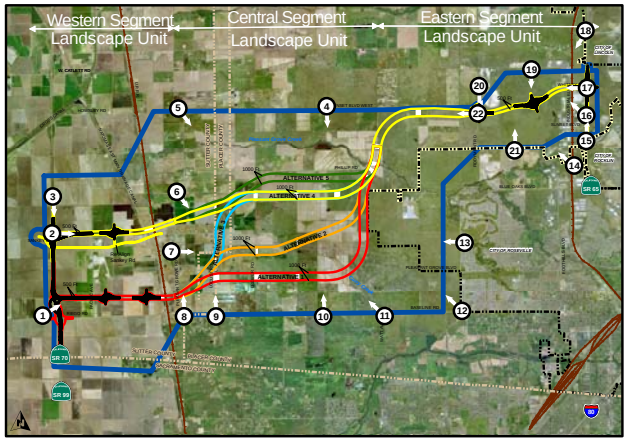
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #19
Eastern Segment Landscape Unit

Figure 5-20

June 2007



Viewshed #20 - Eastern Segment Landscape Unit - Southbound traveler on Fiddyment Rd. between Athens Ave. and Sunset Blvd. West looking south toward proposed project.
County of Placer, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID Viewshed With View Direction

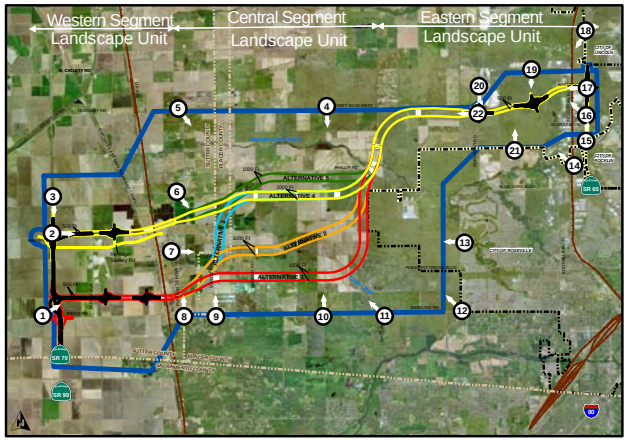
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #20
Eastern Segment Landscape Unit

Figure 5-21

June 2007



Viewshed #21 - Eastern Segment Landscape Unit - Residential backyard views within Crocker Ranch Homes @ Mt. Tamalpais Dr. near Big Bear Dr. looking north toward proposed project.
City of Roseville, Placer County, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID Viewshed With View Direction

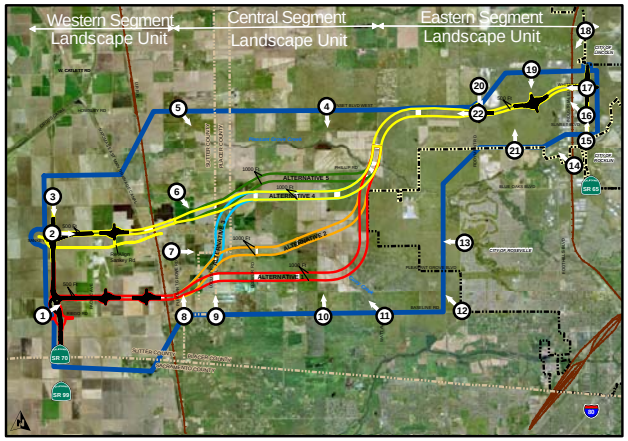
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #21
Eastern Segment Landscape Unit

Figure 5-22

June 2007



Viewshed #22 - Eastern Segment Landscape Unit - Westbound traveler views within Sunset Blvd. West @ Fiddyment Rd. looking west down Sunset Blvd. West toward proposed project.
County of Placer, CA

Source: URS, Google Earth (April 2006)

Alternative 1 | Alternative 4 | County Boundary | Interchanges
Alternative 2 | Alternative 5 | City Boundary | Overcrossing
Alternative 3 | Study Area Boundary | ID Viewshed With View Direction

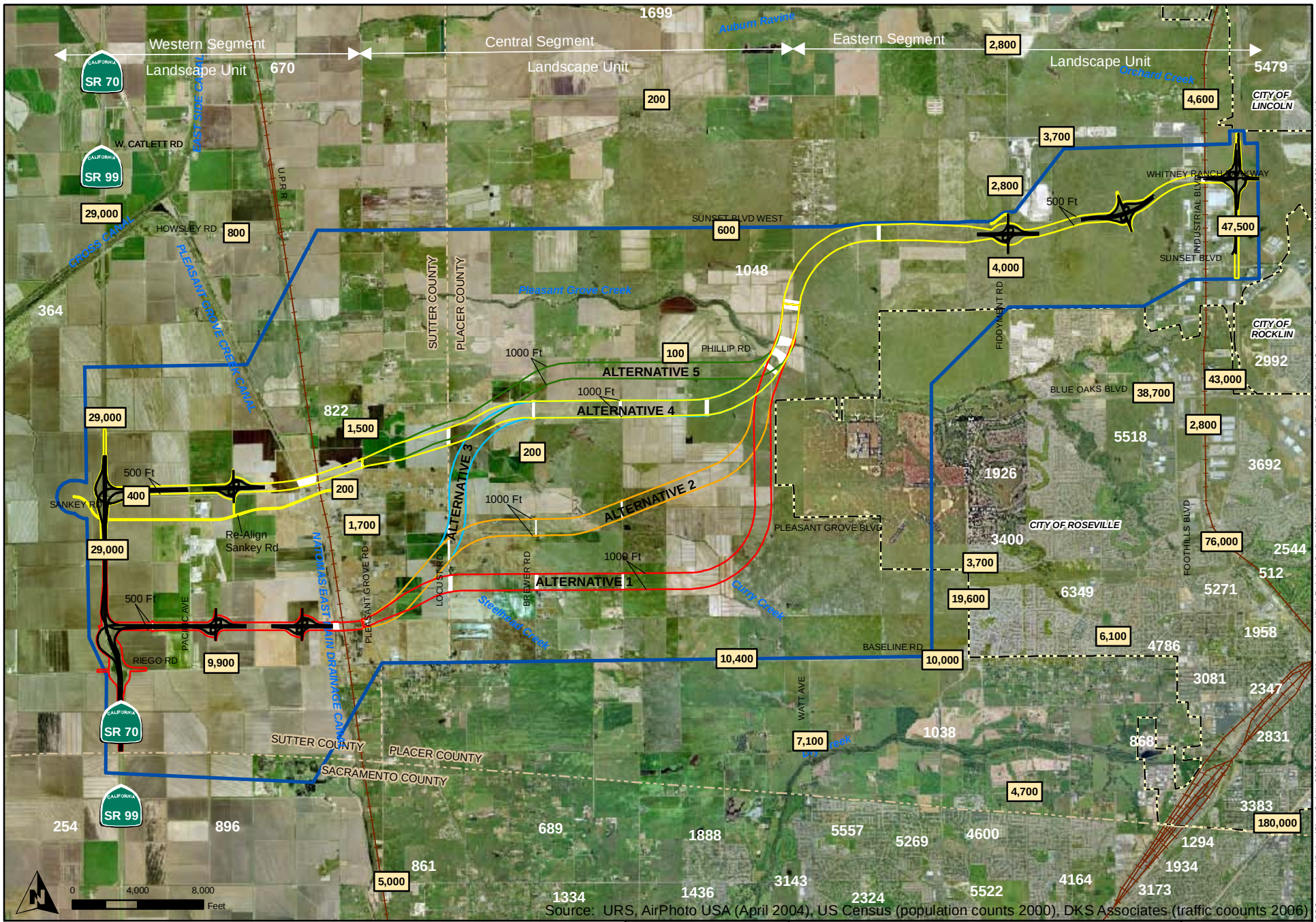
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Visual Impact
Assessment

Viewshed #22
Eastern Segment Landscape Unit

Figure 5-23

June 2007



Source: URS, AirPhoto USA (April 2004), US Census (population counts 2000), DKS Associates (traffic coounts 2006)

Tier 1 EIS/EIR
Visual Impact
Assessment

Potential Sensitive Receptor Counts Residential/Traveler Within Study Area Existing Conditions

Figure 5-24

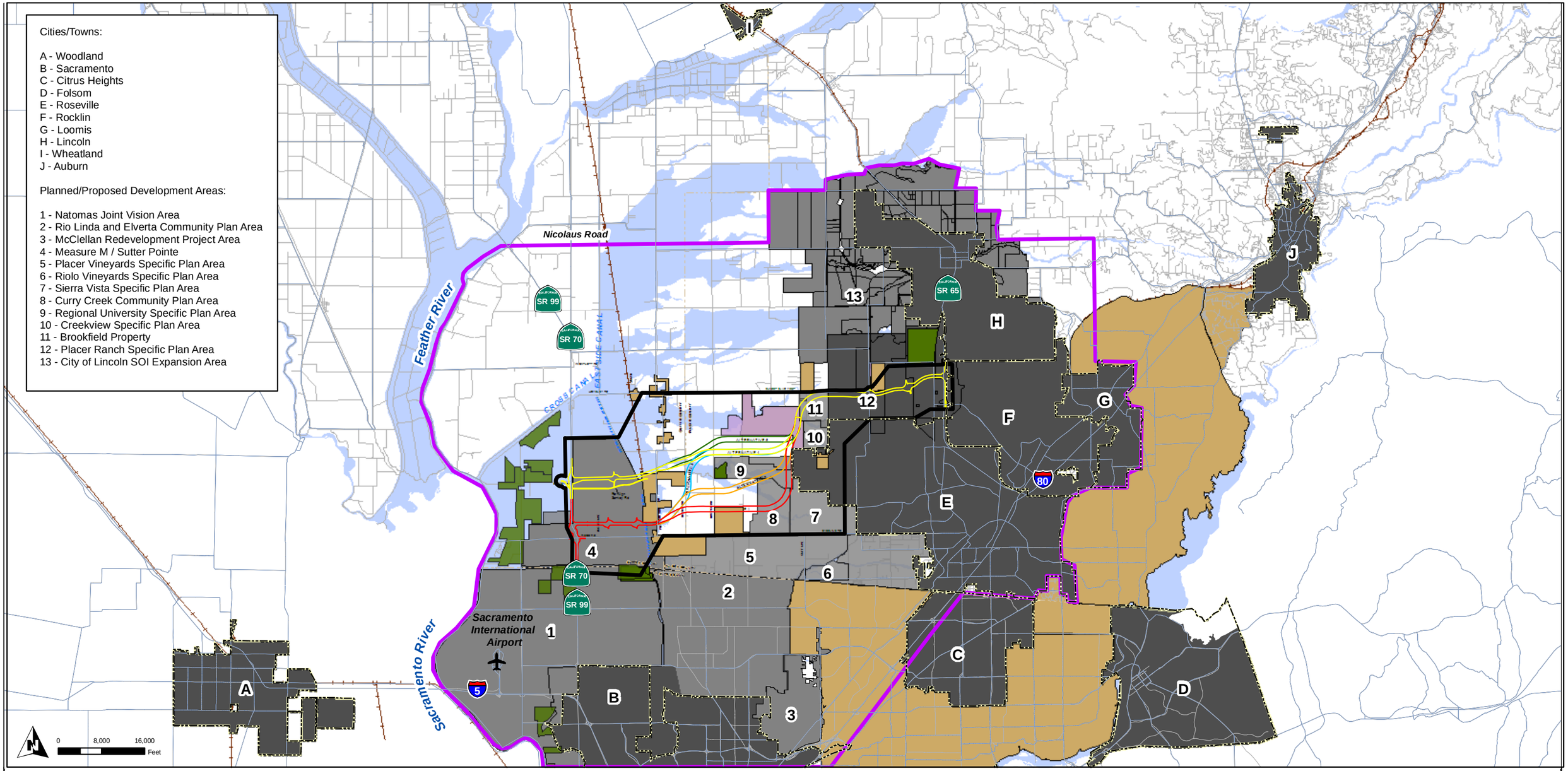
June 2007

Cities/Towns:

A - Woodland
B - Sacramento
C - Citrus Heights
D - Folsom
E - Roseville
F - Rocklin
G - Loomis
H - Lincoln
I - Wheatland
J - Auburn

Planned/Proposed Development Areas:

1 - Natomas Joint Vision Area
2 - Rio Linda and Elverta Community Plan Area
3 - McClellan Redevelopment Project Area
4 - Measure M / Sutter Pointe
5 - Placer Vineyards Specific Plan Area
6 - Riolo Vineyards Specific Plan Area
7 - Sierra Vista Specific Plan Area
8 - Curry Creek Community Plan Area
9 - Regional University Specific Plan Area
10 - Creekview Specific Plan Area
11 - Brookfield Property
12 - Placer Ranch Specific Plan Area
13 - City of Lincoln SOI Expansion Area



County Boundary
Railroads
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Existing and Approved Development
Planned / Proposed Development (including future conservation areas)
Existing Conservation Areas
Developed Unincorporated Areas
Municipal Facilities
Study Area for Secondary and Indirect Impacts
Project Study Area Boundary
100 Year Floodplain Areas

Source: North Fork Associates;Mara Feeney Associates; Sutter County Planning Division; County of Sacramento Planning and Community Development Department; City of Sacramento Development Services Department; Sunset Industrial Area Plan; City of Lincoln Community Development Department; Natomas Basin HCP;Placer County Planning Deptartment; City of Sacramento; City of Roseville

PLACER PARKWAY
CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Visual Impact Assessment

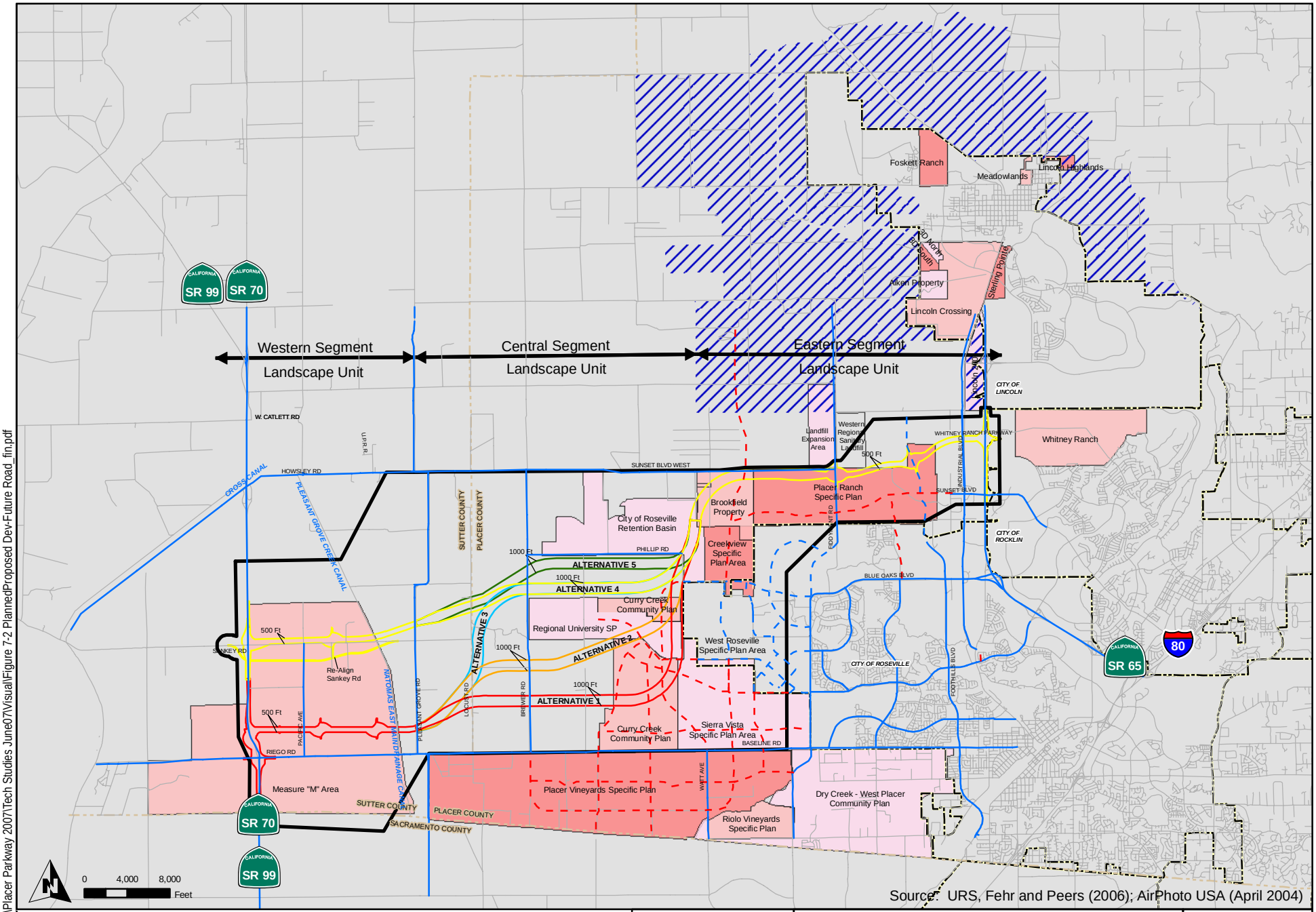
Secondary and Indirect Impact Analysis Study Area

Figure 7-1

June 2007

6/12/07 ..hk\T:\Placer Parkway 2007\Tech Studies June07\Visual\Fig_7-1_Secondary_and_Indirect_Impact_Analysis_Study_Area.pdf

URS Corporation L:\Projects\PlacerParkway2007_28066595\MXD\Current Working Documents\EIS\Chapter_3-0_Analysis_Framework\Fig_3-1_Secondary_and_Indirect_Impact_Analysis_Study_Area.mxd Date: 2/23/2007 12:55:17 PM Name: akkeele0



Study Area Boundary
City Boundary
County Boundary
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Roadways
Approved
Assumed
Existing
City of Lincoln Sphere of Influence
Planned/Proposed Development

PLACER PARKWAY CORRIDOR PRESERVATION

TIER 1 EIS/EIR Visual Impact Assessment

Planned/Proposed Development

Figure 7-2

June 2007

6/12/07 ..\vsa\hkT\Placer Parkway 2007\Tech Studies June07\Visual\Figure 7-2 PlannedProposed Dev-Future Road_fin.pdf

URS Corporation G:\gis\projects\15771\28066594\mxds\PlannedProposedDevelopment_visual.mxd Date: 7/17/2006 6:24:01 PM Name: msayles

Appendix A
Landscape Unit/Visual Inventory Worksheets

Appendix A

Table of Contents

Table A-1
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Western Segment Landscape Unit (Viewshed #1)**	**Weather**	**Cloudy/Sunny**
L/F District	**County: Sutter**		
L/F Section	**City:**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers. Irrigation canals are present. Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. SR 70/99 runs along the western edge of the landscape unit. Irrigation canals and a north/south railroad route are also within the landscape unit.
LANDFORM	**_2_ Mountains** **___ Steep Hills/Ridges** **___ Rolling Hills** **___ Undulating Land** **_3_ Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **___ Rivers** **___ Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-1 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ **Coniferous Woods** ___ **Deciduous Woods** ___ **Scrubland** 3 **Grassland** 3 **Pasture/Croplands** ___ **Parks/Lawns** 2 **Street Trees** 3 **Agriculture** ___ **Other**	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ **Urban Centers** ___ **Suburban Areas** ___ **Industrial Areas** ___ **Commercial Areas** ___ **Institutional Areas** ___ **Residential Areas** ___ **Historic Features** 1 **Highways** ___ **Railroads** 1 **Utility Lines** ___ **Towers/Structures** ___ **Docks/Piers/Boats** ___ **Bridges/Storage Yard** ___ **Embankments/Cuts/Pits** ___ **Billboards/Signs**		

Table A-2
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Western Segment Landscape Unit (Viewshed #2)**	**Weather**	**Cloudy/Sunny**
L/F District	**County: Sutter**		
L/F Section	**City:**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers. Irrigation canals are present. Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. SR 70/99 runs along the western edge of the landscape unit. Irrigation canals and a north/south railroad route are also within the landscape unit.
LANDFORM	**2 Mountains** **___ Steep Hills/Ridges** **2 Rolling Hills** **___ Undulating Land** **3 Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **___ Rivers** **1 Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-2 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ **Coniferous Woods** ___ **Deciduous Woods** ___ **Scrubland** 3 **Grassland** 3 **Pasture/Croplands** ___ **Parks/Lawns** 2 **Street Trees** 3 **Agriculture** ___ **Other**	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ **Urban Centers** ___ **Suburban Areas** ___ **Industrial Areas** ___ **Commercial Areas** ___ **Institutional Areas** 1 **Residential Areas** ___ **Historic Features** 1 **Highways** ___ **Railroads** 2 **Utility Lines** ___ **Towers/Structures** ___ **Docks/Piers/Boats** ___ **Bridges/Storage Yard** ___ **Embankments/Cuts/Pits** ___ **Billboards/Signs**		

Table A-3
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	
S.R. Number	**28066954.40300**	**Date**	**7/18/06**
Assessment Unit	**Western Segment Landscape Unit (Viewshed #3)**	**Weather**	**Sunny**
L/F District	**County: Sutter**		
L/F Section	**City:**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers. Irrigation canals are present. Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. SR 70/99 runs along the western edge of the landscape unit. Irrigation canals and a north/south railroad route are also within the landscape unit.
LANDFORM	**2 Mountains** **___ Steep Hills/Ridges** **2 Rolling Hills** **___ Undulating Land** **3 Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **___ Rivers** **___ Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-3 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ **Coniferous Woods** ___ **Deciduous Woods** ___ **Scrubland** 3 **Grassland** 3 **Pasture/Croplands** ___ **Parks/Lawns** 2 **Street Trees** 3 **Agriculture** ___ **Other**	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ **Urban Centers** ___ **Suburban Areas** ___ **Industrial Areas** ___ **Commercial Areas** ___ **Institutional Areas** ___ **Residential Areas** ___ **Historic Features** 1 **Highways** ___ **Railroads** 2 **Utility Lines** ___ **Towers/Structures** ___ **Docks/Piers/Boats** ___ **Bridges/Storage Yard** ___ **Embankments/Cuts/Pits** ___ **Billboards/Signs**		

Table A-4
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Central Segment Landscape Unit (Viewshed #4)**	**Weather**	**Cloudy**
L/F District	**County: Placer**		
L/F Section	**City:**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers. Two creek crossings. Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: The landscape unit is primarily rural with a mix of paved rural roads and developed properties.
LANDFORM	**2 Mountains** **____ Steep Hills/Ridges** **___ Rolling Hills** **___ Undulating Land** **3 Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **____ Rivers** **1 Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-4 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ **Coniferous Woods** ___ **Deciduous Woods** ___ **Scrubland** 3 **Grassland** 3 **Pasture/Croplands** ___ **Parks/Lawns** 1 **Street Trees** 1 **Agriculture** ___ **Other**	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would create diversity by bringing in contrasting urban features. Continuity: Existing continuity of the agricultural lands would be broken by strong urban influence.	
Land Cover MANMADE DEVELOPMENT	___ **Urban Centers** ___ **Suburban Areas** ___ **Industrial Areas** ___ **Commercial Areas** ___ **Institutional Areas** ___ **Residential Areas** ___ **Historic Features** 1 **Highways** ___ **Railroads** 1 **Utility Lines** ___ **Towers/Structures** ___ **Docks/Piers/Boats** ___ **Bridges/Storage Yard** 1 **Embankments/Cuts/Pits** ___ **Billboards/Signs**		

Table A-5
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Western/Central Segment Landscape Units (Viewshed #5)**	**Weather**	**Cloudy**
L/F District	**County: Sutter**		
L/F Section	**City:**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers. Irrigation canals are present. Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. SR 70/99 runs along the western edge of the landscape unit. Irrigation canals and a north/south railroad route are also within the landscape unit.
LANDFORM	**1 Mountains** **____ Steep Hills/Ridges** **___ Rolling Hills** **___ Undulating Land** **3 Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **1 Rivers** **1 Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-5 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ **Coniferous Woods** ___ **Deciduous Woods** ___ **Scrubland** **3** **Grassland** **3** **Pasture/Croplands** ___ **Parks/Lawns** **1** **Street Trees** **1** **Agriculture** ___ **Other**	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ **Urban Centers** ___ **Suburban Areas** ___ **Industrial Areas** ___ **Commercial Areas** ___ **Institutional Areas** **1** **Residential Areas** ___ **Historic Features** **1** **Highways** ___ **Railroads** **1** **Utility Lines** ___ **Towers/Structures** ___ **Docks/Piers/Boats** ___ **Bridges/Storage Yard** **1** **Embankments/Cuts/Pits** ___ **Billboards/Signs**		

Table A-6
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Western/Central Segment Landscape Units (Viewshed #6)**	**Weather**	**Cloudy**
L/F District	**County: Sutter**		
L/F Section	**City:**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers. Irrigation canals are present. Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. SR 70/99 runs along the western edge of the landscape unit. Irrigation canals and a north/south railroad route are also within the landscape unit.
LANDFORM	**2 Mountains** **___ Steep Hills/Ridges** **___ Rolling Hills** **___ Undulating Land** **3 Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **1 Rivers** **1 Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-6 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ **Coniferous Woods** ___ **Deciduous Woods** ___ **Scrubland** 3 **Grassland** 3 **Pasture/Croplands** ___ **Parks/Lawns** 1 **Street Trees** 1 **Agriculture** ___ **Other**	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ **Urban Centers** ___ **Suburban Areas** ___ **Industrial Areas** ___ **Commercial Areas** ___ **Institutional Areas** 1 **Residential Areas** ___ **Historic Features** 2 **Highways** ___ **Railroads** 2 **Utility Lines** ___ **Towers/Structures** ___ **Docks/Piers/Boats** ___ **Bridges/Storage Yard** 1 **Embankments/Cuts/Pits** ___ **Billboards/Signs**		

Table A-7
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Western/Central Segment Landscape Units (Viewshed #7)**	**Weather**	**Cloudy**
L/F District	**County: Sutter**		
L/F Section	**City:**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers. Irrigation canals are present. Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. SR 70/99 runs along the western edge of the landscape unit. Irrigation canals and a north/south railroad route are also within the landscape unit
LANDFORM	**2 Mountains** **___ Steep Hills/Ridges** **___ Rolling Hills** **___ Undulating Land** **3 Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **1 Rivers** **1 Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-7 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ **Coniferous Woods** ___ **Deciduous Woods** ___ **Scrubland** 3 **Grassland** 3 **Pasture/Croplands** ___ **Parks/Lawns** 1 **Street Trees** 3 **Agriculture** ___ **Other**	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ **Urban Centers** ___ **Suburban Areas** ___ **Industrial Areas** ___ **Commercial Areas** ___ **Institutional Areas** 2 **Residential Areas** ___ **Historic Features** 1 **Highways** ___ **Railroads** 2 **Utility Lines** ___ **Towers/Structures** ___ **Docks/Piers/Boats** ___ **Bridges/Storage Yard** 1 **Embankments/Cuts/Pits** ___ **Billboards/Signs**		

Table A-8
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Western/Central Segment Landscape Units (Viewshed #8)**	**Weather**	**Cloudy**
L/F District	**County:**		
L/F Section	**City:**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers. Irrigation canals are present. Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. SR 70/99 runs along the western edge of the landscape unit. Irrigation canals and a north/south railroad route are also within the landscape unit.
LANDFORM	**2 Mountains** **___ Steep Hills/Ridges** **___ Rolling Hills** **___ Undulating Land** **3 Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **1 Rivers** **1 Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-8 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ Coniferous Woods ___ Deciduous Woods ___ Scrubland 3 Grassland 3 Pasture/Croplands ___ Parks/Lawns 1 Street Trees 3 Agriculture ___ Other	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ Urban Centers ___ Suburban Areas ___ Industrial Areas ___ Commercial Areas ___ Institutional Areas 1 Residential Areas ___ Historic Features 1 Highways ___ Railroads 2 Utility Lines ___ Towers/Structures ___ Docks/Piers/Boats ___ Bridges/Storage Yard 1 Embankments/Cuts/Pits ___ Billboards/Signs		

Table A-9
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Central Segment Landscape Unit (Viewshed #9)**	**Weather**	**Cloudy/Sunny**
L/F District	**County:**		
L/F Section	**City:**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers. Irrigation canals are present. Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. SR 70/99 runs along the western edge of the landscape unit. Irrigation canals and a north/south railroad route are also within the landscape unit.
LANDFORM	**2 Mountains** **____ Steep Hills/Ridges** **___ Rolling Hills** **___ Undulating Land** **3 Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **1 Rivers** **1 Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-9 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ **Coniferous Woods** ___ **Deciduous Woods** ___ **Scrubland** 3 **Grassland** 3 **Pasture/Croplands** ___ **Parks/Lawns** 1 **Street Trees** 1 **Agriculture** ___ **Other**	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ **Urban Centers** ___ **Suburban Areas** ___ **Industrial Areas** ___ **Commercial Areas** ___ **Institutional Areas** 1 **Residential Areas** ___ **Historic Features** 1 **Highways** ___ **Railroads** 2 **Utility Lines** ___ **Towers/Structures** ___ **Docks/Piers/Boats** ___ **Bridges/Storage Yard** 1 **Embankments/Cuts/Pits** ___ **Billboards/Signs**		

Table A-10
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Central Segment Landscape Unit (Viewshed #10)**	**Weather**	**Cloudy/Sunny**
L/F District	**County: Placer**		
L/F Section	**City:**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers. Two creek crossings. Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: The landscape unit is primarily rural with a mix of paved rural roads and developed properties.
LANDFORM	**2 Mountains** **___ Steep Hills/Ridges** **___ Rolling Hills** **___ Undulating Land** **3 Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **1 Rivers** **1 Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-10 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ **Coniferous Woods** ___ **Deciduous Woods** ___ **Scrubland** 3 **Grassland** 3 **Pasture/Croplands** ___ **Parks/Lawns** 1 **Street Trees** 3 **Agriculture** ___ **Other**	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would create diversity by bringing in contrasting urban features. Continuity: Existing continuity of the agricultural lands would be broken by strong urban influence.	
Land Cover MANMADE DEVELOPMENT	___ **Urban Centers** ___ **Suburban Areas** ___ **Industrial Areas** ___ **Commercial Areas** ___ **Institutional Areas** 1 **Residential Areas** ___ **Historic Features** 1 **Highways** ___ **Railroads** 2 **Utility Lines** ___ **Towers/Structures** ___ **Docks/Piers/Boats** ___ **Bridges/Storage Yard** 1 **Embankments/Cuts/Pits** ___ **Billboards/Signs**		

Table A-11
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Central/Eastern Segment Landscape Units (Viewshed #11)**	**Weather**	**Cloudy/Sunny**
L/F District	**County: Placer**		
L/F Section	**City:**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers. Two creek crossings. Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: The landscape unit is primarily rural with a mix of paved rural roads and developed properties.
LANDFORM	**2 Mountains** **___ Steep Hills/Ridges** **___ Rolling Hills** **1 Undulating Land** **3 Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **___ Rivers** **1 Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-11 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover **VEGETATION**	___ **Coniferous Woods** ___ **Deciduous Woods** ___ **Scrubland** 3 **Grassland** 3 **Pasture/Croplands** ___ **Parks/Lawns** 1 **Street Trees** 3 **Agriculture** ___ **Other**	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would create diversity by bringing in contrasting urban features. Continuity: Existing continuity of the agricultural lands would be broken by strong urban influence.	
Land Cover **MANMADE DEVELOPMENT**	___ **Urban Centers** ___ **Suburban Areas** ___ **Industrial Areas** ___ **Commercial Areas** ___ **Institutional Areas** ___ **Residential Areas** ___ **Historic Features** 1 **Highways** ___ **Railroads** 2 **Utility Lines** ___ **Towers/Structures** ___ **Docks/Piers/Boats** ___ **Bridges/Storage Yard** ___ **Embankments/Cuts/Pits** ___ **Billboards/Signs**		

Table A-12
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Central/Eastern Segment Landscape Units (Viewshed #12)**	**Weather**	**Cloudy/Sunny**
L/F District	**County: Placer**		
L/F Section	**City: Roseville**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. A north/south railroad route runs through the landscape unit as well as SR 65 which follows the eastern edge of the landscape unit.
LANDFORM	**2 Mountains** **____ Steep Hills/Ridges** **___ Rolling Hills** **1 Undulating Land** **3 Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **____ Rivers** **1 Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-12 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ **Coniferous Woods** ___ **Deciduous Woods** ___ **Scrubland** 3 **Grassland** 3 **Pasture/Croplands** ___ **Parks/Lawns** 1 **Street Trees** 3 **Agriculture** ___ **Other**	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ **Urban Centers** ___ **Suburban Areas** ___ **Industrial Areas** ___ **Commercial Areas** ___ **Institutional Areas** ___ **Residential Areas** ___ **Historic Features** 1 **Highways** ___ **Railroads** 2 **Utility Lines** ___ **Towers/Structures** ___ **Docks/Piers/Boats** ___ **Bridges/Storage Yard** ___ **Embankments/Cuts/Pits** ___ **Billboards/Signs**		

Table A-13
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Central/Eastern Segment Landscape Units (Viewshed #13)**	**Weather**	**Cloudy/Sunny**
L/F District	**County: Placer**		
L/F Section	**City: Roseville**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. A north/south railroad route runs through the landscape unit as well as SR 65 which follows the eastern edge of the landscape unit.
LANDFORM	**_2_ Mountains** **_____Steep Hills/Ridges** **___ Rolling Hills** **___ Undulating Land** **_3_ Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **_____Rivers** **___ Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-13 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ **Coniferous Woods** ___ **Deciduous Woods** ___ **Scrubland** ___ **Grassland** ___ **Pasture/Croplands** ___ **Parks/Lawns** 1 **Street Trees** 1 **Agriculture** 2 **Other**	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ **Urban Centers** ___ **Suburban Areas** ___ **Industrial Areas** ___ **Commercial Areas** ___ **Institutional Areas** 2 **Residential Areas** ___ **Historic Features** 1 **Highways** ___ **Railroads** 2 **Utility Lines** ___ **Towers/Structures** ___ **Docks/Piers/Boats** ___ **Bridges/Storage Yard** ___ **Embankments/Cuts/Pits** ___ **Billboards/Signs**		

Table A-14
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Eastern Segment Landscape Unit (Viewshed #14)**	**Weather**	**Cloudy/Sunny**
L/F District	**County: Placer**		
L/F Section	**City: Roseville**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. A north/south railroad route runs through the landscape unit as well as SR 65 which follows the eastern edge of the landscape unit.
LANDFORM	**1 Mountains** **Steep Hills/Ridges** **Rolling Hills** **1 Undulating Land** **2 Plateaus/Plains** **Valleys** **Cliffs, Bluffs** **Points** **Beaches** **Other**	
Land Cover WATER	**Bays/Inlets** **1 Rivers** **1 Streams** **Lakes** **Ponds** **Marshes** **Waterfalls/Rapids**	

Table A-14 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ Coniferous Woods ___ Deciduous Woods ___ Scrubland ___ Grassland 3 Pasture/Croplands ___ Parks/Lawns 1 Street Trees 3 Agriculture ___ Other	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ Urban Centers 1 Suburban Areas 1 Industrial Areas ___ Commercial Areas ___ Institutional Areas 1 Residential Areas ___ Historic Features 2 Highways 1 Railroads 2 Utility Lines ___ Towers/Structures ___ Docks/Piers/Boats 1 Bridges/Storage Yard 1 Embankments/Cuts/Pits ___ Billboards/Signs		

Table A-15
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Eastern Segment Landscape Unit (Viewshed #15)**	**Weather**	**Cloudy**
L/F District	**County: Placer**		
L/F Section	**City:**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. A north/south railroad route runs through the landscape unit as well as SR 65 which follows the eastern edge of the landscape unit.
LANDFORM	**_1_ Mountains** **_____Steep Hills/Ridges** **___ Rolling Hills** **___ Undulating Land** **_3_ Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **_____Rivers** **___ Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-15 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ Coniferous Woods ___ Deciduous Woods ___ Scrubland ___ Grassland 3 Pasture/Croplands ___ Parks/Lawns 1 Street Trees 2 Agriculture ___ Other	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ Urban Centers 1 Suburban Areas 1 Industrial Areas ___ Commercial Areas ___ Institutional Areas ___ Residential Areas ___ Historic Features 2 Highways ___ Railroads 2 Utility Lines ___ Towers/Structures ___ Docks/Piers/Boats 1 Bridges/Storage Yard 1 Embankments/Cuts/Pits ___ Billboards/Signs		

Table A-16
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Eastern Segment Landscape Unit (Viewshed #16)**	**Weather**	**Cloudy**
L/F District	**County: Placer**		
L/F Section	**City:**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. A north/south railroad route runs through the landscape unit as well as SR 65 which follows the eastern edge of the landscape unit.
LANDFORM	**_1_ Mountains** **_____Steep Hills/Ridges** **___ Rolling Hills** **___ Undulating Land** **_3_ Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **_____Rivers** **___ Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-16 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ Coniferous Woods ___ Deciduous Woods ___ Scrubland 3 Grassland 3 Pasture/Croplands ___ Parks/Lawns 1 Street Trees 3 Agriculture ___ Other	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ Urban Centers ___ Suburban Areas 1 Industrial Areas 1 Commercial Areas ___ Institutional Areas ___ Residential Areas ___ Historic Features 2 Highways 1 Railroads 2 Utility Lines ___ Towers/Structures ___ Docks/Piers/Boats ___ Bridges/Storage Yard 1 Embankments/Cuts/Pits ___ Billboards/Signs		

Table A-17
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Eastern Segment Landscape Unit (Viewshed #17)**	**Weather**	**Cloudy**
L/F District	**County: Placer**		
L/F Section	**City:**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. A north/south railroad route runs through the landscape unit as well as SR 65 which follows the eastern edge of the landscape unit.
LANDFORM	**1 Mountains** **Steep Hills/Ridges** **Rolling Hills** **Undulating Land** **3 Plateaus/Plains** **Valleys** **Cliffs, Bluffs** **Points** **Beaches** **Other**	
Land Cover WATER	**Bays/Inlets** **1 Rivers** **Streams** **Lakes** **Ponds** **Marshes** **Waterfalls/Rapids**	

Table A-17 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ **Coniferous Woods** ___ **Deciduous Woods** ___ **Scrubland** 3 **Grassland** 3 **Pasture/Croplands** ___ **Parks/Lawns** ___ **Street Trees** 3 **Agriculture** ___ **Other**	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ **Urban Centers** ___ **Suburban Areas** 1 **Industrial Areas** 1 **Commercial Areas** ___ **Institutional Areas** ___ **Residential Areas** ___ **Historic Features** 2 **Highways** ___ **Railroads** 2 **Utility Lines** ___ **Towers/Structures** ___ **Docks/Piers/Boats** ___ **Bridges/Storage Yard** 1 **Embankments/Cuts/Pits** ___ **Billboards/Signs**		

Table A-18
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Eastern Segment Landscape Unit (Viewshed #18)**	**Weather**	**Cloudy**
L/F District	**County: Placer**		
L/F Section	**City: Lincoln**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. A north/south railroad route runs through the landscape unit as well as SR 65 which follows the eastern edge of the landscape unit.
LANDFORM	**2 Mountains** **___ Steep Hills/Ridges** **___ Rolling Hills** **1 Undulating Land** **3 Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **___ Rivers** **1 Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-18 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ **Coniferous Woods** ___ **Deciduous Woods** ___ **Scrubland** ___ **Grassland** 2 **Pasture/Croplands** ___ **Parks/Lawns** 1 **Street Trees** 2 **Agriculture** ___ **Other**	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ **Urban Centers** ___ **Suburban Areas** 1 **Industrial Areas** 1 **Commercial Areas** ___ **Institutional Areas** ___ **Residential Areas** ___ **Historic Features** 2 **Highways** ___ **Railroads** 2 **Utility Lines** ___ **Towers/Structures** ___ **Docks/Piers/Boats** ___ **Bridges/Storage Yard** 1 **Embankments/Cuts/Pits** ___ **Billboards/Signs**		

Table A-19
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Eastern Segment Landscape Unit (Viewshed #19)**	**Weather**	**Cloudy**
L/F District	**County: Placer**		
L/F Section	**City:**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. A north/south railroad route runs through the landscape unit as well as SR 65 which follows the eastern edge of the landscape unit.
LANDFORM	**2 Mountains** **___ Steep Hills/Ridges** **___ Rolling Hills** **1 Undulating Land** **3 Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **1 Rivers** **1 Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-19 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ Coniferous Woods ___ Deciduous Woods ___ Scrubland 2 Grassland 2 Pasture/Croplands ___ Parks/Lawns ___ Street Trees 3 Agriculture ___ Other	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ Urban Centers ___ Suburban Areas ___ Industrial Areas ___ Commercial Areas ___ Institutional Areas ___ Residential Areas ___ Historic Features 2 Highways ___ Railroads 2 Utility Lines ___ Towers/Structures ___ Docks/Piers/Boats ___ Bridges/Storage Yard 1 Embankments/Cuts/Pits ___ Billboards/Signs		

Table A-20
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Eastern Segment Landscape Unit (Viewshed #20)**	**Weather**	**Cloudy**
L/F District	**County: Placer**		
L/F Section	**City:**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. A north/south railroad route runs through the landscape unit as well as SR 65 which follows the eastern edge of the landscape unit.
LANDFORM	**2 Mountains** **___ Steep Hills/Ridges** **___ Rolling Hills** **2 Undulating Land** **2 Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **___ Rivers** **1 Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-20 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ Coniferous Woods ___ Deciduous Woods ___ Scrubland 2 Grassland 2 Pasture/Croplands ___ Parks/Lawns ___ Street Trees 3 Agriculture ___ Other	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ Urban Centers ___ Suburban Areas ___ Industrial Areas ___ Commercial Areas ___ Institutional Areas ___ Residential Areas ___ Historic Features 2 Highways ___ Railroads 2 Utility Lines ___ Towers/Structures ___ Docks/Piers/Boats ___ Bridges/Storage Yard 1 Embankments/Cuts/Pits ___ Billboards/Signs		

Table A-21
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Eastern Segment Landscape Unit (Viewshed #21)**	**Weather**	**Cloudy/Sunny**
L/F District	**County: Placer**		
L/F Section	**City: Roseville**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. A north/south railroad route runs through the landscape unit as well as SR 65 which follows the eastern edge of the landscape unit.
LANDFORM	**_2_ Mountains** **_____ Steep Hills/Ridges** **___ Rolling Hills** **_1_ Undulating Land** **_3_ Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **_____ Rivers** **___ Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-21 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ **Coniferous Woods** ___ **Deciduous Woods** ___ **Scrubland** 2 **Grassland** 2 **Pasture/Croplands** ___ **Parks/Lawns** ___ **Street Trees** 3 **Agriculture** ___ **Other**	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ **Urban Centers** ___ **Suburban Areas** 1 **Industrial Areas** 1 **Commercial Areas** ___ **Institutional Areas** ___ **Residential Areas** ___ **Historic Features** 2 **Highways** ___ **Railroads** 2 **Utility Lines** ___ **Towers/Structures** ___ **Docks/Piers/Boats** ___ **Bridges/Storage Yard** 1 **Embankments/Cuts/Pits** ___ **Billboards/Signs**		

Table A-22
FHWA's Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

Project Name	**Placer Parkway**	**Evaluator**	**Angela L. Leiba**
S.R. Number	**28066954.40300**	**Date**	**3/14/06**
Assessment Unit	**Eastern Segment Landscape Unit (Viewshed #22)**	**Weather**	**Cloudy**
L/F District	**County: Placer**		
L/F Section	**City:**		
L/F Province	**Community:**		

	Visual Information (Perception)	**Visual Character (Cognition)**
	Resource Supply: **3 High Prominence** **2 Moderate Prominence** **1 Present** **0 Absent**	**Landform:** Situated at the base of the Sierra foothills in northern California, the study area covers mostly flat rural and agriculture land with slight variations of topographic features (elev. approx. 250 feet). Background views to the peaks of the Sierra Nevada, the Sutter Buttes and the Inner Coastal Range are visible from this location. The project alternatives are proposed to cross Placer and Sutter Counties. Land Cover – Water: Various streams and creeks are along the study area. No rivers Land Cover – Vegetation: The landscape unit is mostly rural agriculture land with scattered commercial/industrial and residential landscaped areas. Vegetative land cover in the project vicinity consists predominantly of cultivated agricultural crops. Land Cover – Manmade Development: Land uses include agriculture, industrial/commercial, and residential. A north/south railroad route runs through the landscape unit as well as SR 65 which follows the eastern edge of the landscape unit.
LANDFORM	**2 Mountains** **___ Steep Hills/Ridges** **___ Rolling Hills** **___ Undulating Land** **3 Plateaus/Plains** **___ Valleys** **___ Cliffs, Bluffs** **___ Points** **___ Beaches** **___ Other**	
Land Cover WATER	**___ Bays/Inlets** **___ Rivers** **1 Streams** **___ Lakes** **___ Ponds** **___ Marshes** **___ Waterfalls/Rapids**	

Table A-22 (cont.)
Placer Parkway Landscape Unit Checklist/Visual Inventory and Analysis Worksheet

	Resource Supply	Pattern Elements	Pattern Character
Land Cover VEGETATION	___ **Coniferous Woods** ___ **Deciduous Woods** ___ **Scrubland** 3 **Grassland** 3 **Pasture/Croplands** ___ **Parks/Lawns** 1 **Street Trees** 1 **Agriculture** ___ **Other**	**Pattern Elements:** Form: Visual masses are dominated by low-lying agriculture areas broken up by roadways, industrial/commercial development and residential/urban structures. Line: Existing roadways, canals, and agricultural boundaries form the majority of lines in the region. Color: Fertile land, agricultural crops, and urban development provide variation in color. Texture: Urban textures contrast with agricultural lands in the region. **Pattern Character:** Dominance: Agricultural and urban features are co-dominant. Scale: Scale of project features would contrast with the flat, open expansive area. Diversity: Project would add to the existing urban diversity. Continuity: Currently the landscape unit lacks continuity of form and line. The project would add further to lack of continuity.	
Land Cover MANMADE DEVELOPMENT	___ **Urban Centers** ___ **Suburban Areas** ___ **Industrial Areas** ___ **Commercial Areas** ___ **Institutional Areas** ___ **Residential Areas** ___ **Historic Features** 1 **Highways** ___ **Railroads** 1 **Utility Lines** ___ **Towers/Structures** ___ **Docks/Piers/Boats** ___ **Bridges/Storage Yard** 1 **Embankments/Cuts/Pits** ___ **Billboards/Signs**		

Appendix B
Caltrans Landscape Concepts

LANDSCAPE CONCEPTS: Caltrans Sacramento Office of Landscape Architecture

DRAFT FOR INTERNAL REVIEW

December 7, 2005

Landscaping Concepts

Corridor alternatives lay along relatively flat topography with open vistas of rural agriculture and distant foothill ridges, with intermittent trees, farm buildings and residences. In the future, industrial, educational and residential uses may occur within the study area. Landscaping concepts for Placer Parkway will respect the topography and vistas in the study area and will complement the varying character of land adjacent to the Parkway corridor.

Landscaping treatment may vary depending upon the final corridor selected. Eastern and western segment treatment may be limited because of reduced corridor width and more urban adjacent land uses. The 7-mile-long wider central segment (Fiddyment Road to Pleasant Grove Road) may provide more opportunities for enhanced landscaping. More southerly alternatives may be more urban in character than those closer to Pleasant Grove Creek.

Landscaping will be installed within the Parkway's "buffer areas", i.e., the portions of the 500- and 1,000-foot-wide corridors not used as part of the roadway cross-section, as well as within the median. Landscaped buffer areas will incorporate fire-retardant low-maintenance plantings that are compatible with and may enhance the variety of existing landscape features in the study area such as Pleasant Grove Creek and vistas of the Sierra Foothills. Consideration will be given to incorporating distinctive landscaping areas where adjacent focal points could be emphasized, such as within the planned City of Roseville Retention Basin or the proposed industrial development in South Sutter County. Consideration will also be given to enhancing longer views from structures such as bridges over Pleasant Grove Creek and the Sutter County Cross-Canal. Within the Placer Parkway median, landscaping concepts include low grasses and/or low-growing ground cover that require minimal maintenance. This concept would be supplemented by selected shrub and/or tree plantings, with trees offset by a minimum of 40 feet from the planned 6-lane roadway. Concepts such as a meandering flow lane, pockets of plant densification combined with more widely spaced plantings, and consideration of texture and color differences to enhance interest will be considered. Reduction of fire hazards will be an important component of the landscaping plan.

Where appropriate, more concentrated plantings will be considered to buffer the Parkway from future adjacent land uses that may incompatible with the Parkway concept, and to prevent unwanted intrusion into shoulder or median areas. Plantings will likely include a mix of compatible native and non-native plants that may require some irrigation. The plant pallet will consider but not be limited to the following:

Trees

- Valley oak (*Quercus lobata*)
- Blue oak (*Quercus douglasii*)
- Interior live oak (*Quercus wislizenii*)
- Cottonwood (*Populus fremontii*)
- Oregon ash (*Fraxinus latifolia*)
- California sycamore (*Platanus racemosa*)

Shrubs

- Arroyo willow (*Salix lasiolepis*)
- Goodding's willow (*Salix gooddingii*)
- California buckeye (*Aesculus californica*)
- Coyote brush (*Baccharis pilularis*)
- Coffeeberry (*Rhamnus californica* and *R. crocea*)

- Ceanothus species (*Ceanothus* spp.)
- Western redbud (*Cercis occidentailis*)
- Buttonwillow (*Cephalanthus occidentalis*)
- California rose (*Rosa californica*)
- Blue elderberry (*Sambucus mexicana*)[1]
- California blackberry (*Rubus ursinus*)
- Manzanita species (*Arctostaphylos* spp.)

Grasses/Ground Covers

- Deergrass (*Muhlenbergia rigens*) – very nice shaped, large perennial bunchgrass
- Wildrye (*Leymus triticoides*)
- Coyote brush (*Baccharis pilularis*) – select varieties with lower, spreading growth forms
- Purple needlegrass (*Nassella pulchra*)

Use of recycled water for irrigation will be explored, and will depend on availability, feasibility and cost.

Lighting elements would be designed during a future design phase. Lighting elements would be designed for safety and would consider the proposed landscaping conceptual plan to minimize potential aesthetic impacts (e.g., shielding lighting elements, using lower voltage lighting, and proposing lighting fixtures that conform with the visual character of the area).

[1] Blue elderberry is the host plant for the federally listed valley elderberry longhorn beetle. This planting would be appropriate for sites not intended for future expansion of the roadway where the presence of the beetle's host plant would not conflict with maintenance requirements.

PLACER PARKWAY
CORRIDOR PRESERVATION

DRAFT
WATER QUALITY TECHNICAL MEMORANDUM

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR

June 29, 2007

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

Caltrans

FHWA

Prepared by

URS Corporation

for
South Placer Regional Transportation Authority
California Department of Transportation
Federal Highway Administration

The preparation of this report was financed in part through a planning grant from the Federal Highway Administration

Draft

WATER QUALITY TECHNICAL MEMORANDUM

Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR
Placer and Sutter Counties, California

June 2007

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LIST OF ACRONYMS

BMP	Best Management Practice
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CTR	California Toxics Rule
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
DO	dissolved oxygen
EC	electrical conductivity
ERP	Ecosystem Restoration Plan
FHWA	Federal Highway Administration
General Permit	NPDES General Permit for Stormwater Discharges Associated with Construction Activity
GIS	Geographic Information System
I-80	Interstate 80
LDM	Land Development Manual
MCL	Maximum Contaminant Level
mg/L	milligrams per liter
MOU	Memorandum of Understanding
mph	miles per hour
MS4	municipal separate storm sewer system
msl	mean sea level
MWQI	Municipal Water Quality Investigations
NBHCP	Natomas Basin Habitat Conservation Plan
NEMDC	Natomas East Main Drainage Canal
NEPA	National Environmental Policy Act
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
OHW	ordinary high water
PCTPA	Placer County Transportation Planning Agency
PDF	project design feature
Porter-Cologne	Porter-Cologne Water Quality Control Act
PSR	Project Study Report
RD 1000	Reclamation District No. 1000
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
SC	standard condition
SOI	Sphere of Influence
SPRTA	South Placer Regional Transportation Authority
SR	State Route
SWDR	Stormwater Data Report
SWMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
SWQA	Stormwater Quality Assessment
SWRCB	State Water Resources Control Board

TAZ	traffic analysis zone
TDS	total dissolved solids
Tier 1 EIS/EIR	Tier 1 Environmental Impact Statement/Program Environmental Impact Report
TOC	total organic carbon
U.S. EPA	U.S. Environmental Protection Agency
USCOE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WDR	Waste Discharge Requirement

WATER QUALITY TECHNICAL MEMORANDUM
PLACER PARKWAY CORRIDOR PRESERVATION TIER 1 EIS/ PROGRAM EIR

1.0 INTRODUCTION

1.1 TIER 1 EIS/PROGRAM EIR

The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the South Placer Regional Transportation Authority (SPRTA) propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking State Route (SR) 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1).

The planning for Placer Parkway involves two phases: (1) the present action, selection of a corridor (titled the Placer Parkway Corridor Preservation Project), and (2) the future selection of a precise alignment within the corridor and a decision whether or not to build the Parkway. If a build alternative is selected and pursued after the second phase, the ultimate Placer Parkway project would be constructed and operated. Throughout this document the term "Proposed Action" is used to describe the selection of a corridor to preserve. The document generally uses the term "Parkway" to mean the ultimate roadway, including construction and operation, except where context indicates otherwise.

As stated, the action to be considered based on this Tier 1 analysis involves only the selection of a corridor to preserve, which has limited environmental effects by itself. However, the ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction and operation of the Parkway. In order to describe the effects of the ultimate Placer Parkway project to the greatest extent feasible at this early stage, the Tier 1 EIS/EIR also addresses the potential effects of construction and operation of the future roadway. This discussion of the roadway is necessarily limited, however, because only the general concepts of the roadway design and location are known at this time. If a corridor is selected and preserved at Tier 1, a subsequent Tier 2 analysis will evaluate the Parkway itself in detail—the specific roadway "footprint" within the selected corridor, including construction and operation of the roadway.

1.2 CORRIDOR SELECTION AND PRESERVATION

The concept for the Placer Parkway is over a decade old. Placer County's 1994 General Plan depicts a "plan line" for it. Two planning studies helped to refine the concept:

- DKS Associates, 2000, Placer Parkway Interconnect Study/Conceptual Plan
- DKS Associates, 2001, Project Study Report (Project Development Support) for Placer Parkway

Placer Parkway is cited as a high-priority regional transportation project by the Sacramento Area Council of Governments (SACOG) 2025 Metropolitan Transportation Plan and the 2027 Placer County Regional Transportation Plan. The project vicinity and surrounding area include some of the fastest growing communities in the Sacramento region. A number of large urban development proposals are being considered by Placer and Sutter counties. New development is expected to add a significant amount of residential, commercial, industrial, and educational uses.

A 2½-year screening and public outreach program that involved local jurisdictions (the Technical Advisory Committee); regional, state, and federal agencies; stakeholder groups that included

representatives from planning and public works departments of all affected cities and counties, environmental, business, agricultural, development, and homeowner interests (the Study Advisory Committee); and elected officials (the Policy Advisory Committee), resulted in the identification of five potential corridors for the Parkway. The Tier 1 Environmental Impact Statement/Program Environmental Impact Report will analyze these five corridor alternatives along with a No-Build Alternative.

Other potential transportation modes such as bus rapid transit may be developed in the corridor in the future, although they are not proposed as part of the current project. The width of the corridor for the Placer Parkway is to vary from approximately 500 feet in the Eastern and Western segments to approximately 1,000 feet in the Central Segment. Depending upon the alternative, the corridor's length ranges from a minimum of 14.2 miles to a maximum of 16.2 miles. The selected corridor would contain the roadway, including the median, travel lanes, shoulder, associated access ramps and a no-development buffer zone.

Corridor acquisition may not be completed until after Tier 2, as funding becomes available. Portions of the selected corridor would be preserved as a no-development buffer zone. The buffer would be maintained as a zone where development is either not permitted or is severely restricted. This is intended to restrict access to the proposed interchanges, protect the rural character of agriculturally designated areas in the vicinity of the Parkway as far as possible subject to future development, and to maximize opportunities to incorporate adjacent sensitive areas. It is intended that the buffer would be owned and managed in the future to achieve these objectives. For subsequent Tier 2 (project-level) environmental reviews, the size of this buffer zone could be considered flexible for agriculturally designated land undergoing urban development. In the Tier 2 environmental review, the specific buffer size and location would be determined. This determination would be based on performance standards on a case-by-case basis, depending on the land use needs of future approved development, and taking into account the primary objective of restricting future access to the Parkway.

Project proponents are considering employment of several land management and control mechanisms in order to ensure that the buffer would be effectively maintained as an area where development would either not be permitted, and where construction of any additional access onto the Parkway would not be allowed. These mechanisms could include land use controls, land purchase/leases, general plan amendments, zoning/overlay zoning changes, covenants/deed restrictions, agricultural/conservation easements, urban growth boundaries, etc. "Layering" or using several of these methods would provide more assurance that the buffers would be permanent, or at least more difficult to undo.

1.3 TECHNICAL STUDY OBJECTIVE

This Water Quality Technical Memorandum has been prepared to support the Tier 1 Environmental Impact Statement/Program Environmental Impact Report. It presents a Tier 1/Program-level assessment of potential impacts related to water quality for five corridor alternatives and the No-Build Alternative as described in Chapter 2.

The scope of work performed for this report is based on the Caltrans Local Assistance Procedures Manual (Caltrans, 2006), as modified for purposes of Tier 1/Program analysis by agreement of Caltrans; the Caltrans Highway Design Manual (HDM) (Caltrans, 2001b); and the Caltrans Environmental Handbook (Caltrans, 2005) on preparing a Water Quality Technical Memorandum. In addition, the evaluation considered guidance from the FHWA Environmental Checklists for Draft and Final Environmental Documents (FHWA, 1998a; FHWA, 1998b).

This report is organized as follows:

Chapter 2	The Proposed Action
Chapter 3	Regulatory Setting
Chapter 4	Affected Environment
Chapter 5	Potential Direct Impacts
Chapter 6	Secondary and Indirect Impacts
Chapter 7	Cumulative Impacts
Chapter 8	Watt Avenue Interchange
Chapter 9	Avoidance, Minimization and/or Mitigation Strategies
Chapter 10	Analyses to be Undertaken in Tier 2
Chapter 11	References

This report also includes figures and tables, which show the project location, each build alternative, and pertinent technical information prepared to evaluate the build alternatives.

Throughout this document, the Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report is referred to as the Tier 1 EIS/EIR.

2.0 THE PROPOSED ACTION

The Proposed Action for the Placer Parkway Corridor Preservation Project is to select and preserve a 500- to 1,000-foot-wide corridor in the project study area, within which the future four- or six-lane Placer Parkway may be constructed. The ultimate Placer Parkway project involves the selection of a specific roadway alignment, and the design, construction, and operation of the Parkway. Although the action taken at Tier 1 on the Placer Parkway Corridor Preservation Project is limited, the underlying project whose effects are studied in this document is the Placer Parkway. To the extent feasible at this early stage, the Tier 1 EIS/EIR addresses the potential effects of construction and operation of the future roadway.

2.1 THE PROJECT STUDY AREA

The project study area is an area of approximately 33,460 acres located in Placer and Sutter counties, with a small section located in Sacramento County (see Figures 1-1 and 1-2). The portion of the study area that is located in Sacramento County is located in the extreme southwest corner of the study area and does not include any of the proposed corridor alignment alternatives. It extends from SR 70/SR 99 in the west to SR 65 in the east, with the northern boundary extending to Sunset Boulevard West and the southern boundary located adjacent to Baseline and Riego roads.

For the purposes of the analysis the study area is divided into three segments:

- Western Segment: the Western Segment extends from SR 70/99 to Pleasant Grove Road in Sutter County.
- Central Segment: the Central Segment extends from Pleasant Grove Road in Sutter County to approximately 2,300 feet north of Pleasant Grove Creek in Placer County.
- Eastern Segment: the Eastern Segment extends from approximately 2,300 feet north of Pleasant Grove Creek to SR 65 in Placer County.

2.2 CORRIDOR ALTERNATIVES

The following subsections describe the corridor alternatives, which are depicted on Figure 2-1, and are numbered according to location from south to north in the study area.

2.2.1 The No-Build Alternative

Under the No-Build Alternative, the project would not be implemented. A Placer Parkway corridor would not be selected/preserved, and the future Placer Parkway would not be constructed.

2.2.2 Alternative 1 – the Red Alternative

Alternative 1 would extend from SR 70/99 approximately ½ mile north of Riego Road, eastward approximately 1 mile north of Baseline Road to approximately Watt Avenue, proceeding north and transitioning in an easterly direction before it reaches Sunset Boulevard West, then in an easterly direction connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 16.2 miles long. This alternative would include six interchanges as described in Section 2.3.3.

2.2.3 Alternative 2 – the Orange Alternative

Alternative 2 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed northeast, then in a northerly direction south of Pleasant Grove Creek, transitioning to an easterly direction before it reaches Sunset Boulevard West, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.4 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.4 Alternative 3 – the Blue Alternative

Alternative 3 would extend from SR 70/99 approximately ½ mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed north along the Sutter/Placer County Line, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 15.6 miles long. This alternative would include six interchanges, as described in Section 2.3.3.

2.2.5 Alternative 4 – the Yellow Alternative

Alternative 4 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.3 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.2.6 Alternative 5 – the Green Alternative

Alternative 5 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 4,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway. From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment is 14.2 miles long. This alternative would include five interchanges, as described in Section 2.3.3.

2.3 PARKWAY DESIGN ASSUMPTIONS

Although the Parkway would be designed and construction-level impacts analyzed during Tier 2, for the purpose of this report and the Tier 1 EIS/Program EIR, several assumptions have been made about potential design and configuration concepts. These assumptions would be subject to further development and refinement, and specific decisions about design of the roadway would be made during the Tier 2 process. For example, the number, location, and design of over-crossings would be determined at the time of final Parkway design, in consultation with local jurisdictions. The following sections outline assumptions for the future roadway.

Preliminary costs estimates for the Parkway range from $600 to $650 million (2005 dollars). This includes costs for right-of-way, design, construction, and environmental mitigation for the four- to six-lane facility. The funding situation has spurred interest in exploring other more creative funding options.

These include a county-wide sales tax, more developer contributions, and tolling facilities. The Technical Report and Tier 1 EIS/Program EIR do not make any assumptions about funding sources.

2.3.1 Conceptual Roadway Configuration

The Parkway would be a high-speed, limited access roadway. Depending upon the timing of adjacent urban development proposals and funding, the Parkway may be designed and constructed incrementally in segments. These could be built as a four-lane (interim) roadway until a six-lane segment is warranted, or as the full six-lane facility. A preliminary conceptual cross section (see Figure 2-2) was developed to facilitate the Tier 1/Program evaluation. It illustrates both four-lane (two lanes in both directions) and six-lane (three lanes in both directions) configurations within the 500- to 1,000-foot corridor widths. The roadway would include a central median approximately 100 to 134 feet wide, depending on local conditions and reflecting Caltrans safety guidance. The Parkway would be designed and constructed to Caltrans standards, unless specific design exceptions are granted. For the purposes of the Tier 1 EIS/Program EIR, the Parkway's opening year is assumed to be 2020.

Access would be provided at the western and eastern ends of the Parkway, where existing areas of dense development are already located or planned. Access would be restricted for the 7-mile Parkway Central Segment. The analysis assumes no interchanges in this segment. (A possible future extension of Watt Avenue or another nearby roadway may be considered in the Central Segment as a separate project.)

2.3.2 Conceptual Roadway Elevation

As the study area is comprised of relatively flat terrain, the majority of the future Placer Parkway is assumed to be at-grade. As necessary, bridges would be used to span certain features and improvements such as the Union Pacific Railroad tracks along Industrial Boulevard, Pleasant Grove Creek, the Natomas East Main Drainage Canal, and floodplains. Generally, the approximate height of bridges is expected to range from 10 feet above streams to 30 feet above the railroad. Culverts would be used at smaller creek crossings as appropriate, depending on local conditions and permit requirements. The Pleasant Grove Creek floodplain would be crossed by bridges (one in each direction) supported by abutments located approximately 800 feet on either side of the creek to avoid the riparian habitat associated with the creek.

Within the 100-year floodplain, the roadway would be elevated such that the bottom of any new bridges would be above the 100-year water surface elevation. The roadway support structures and bridges would be designed to minimize environmental impact, not impede stream and flood flows, and allow for the unobstructed passage of potential future streamside uses such as maintenance equipment, bikeways, or trails.

Throughout the project study area, the assumptions for creek and floodplain crossings include typical engineering specifications:

- a maximum bridge span of approximately 150 feet;
- for bridge spans exceeding 150 feet, assume one column, approximately 4 feet in diameter, every 150 feet; and
- all columns placed outside of the ordinary high water (OHW) level.

To maintain existing and future local roadway connectivity (for emergency access, farming operations, and community access), over-crossings would be constructed to convey traffic over the Parkway. These over-crossings would not connect to the Parkway. Parkway access would be via the interchanges described below.

2.3.3 Interchange Concepts

The analysis assumes that the location of interchanges (see Figure 2-1) is as follows:

- SR 70/99 (at ½ mile north of Riego Road or at Sankey Road)
- One or two locations to be determined in southern Sutter County
- Fiddyment Road
- Foothills Boulevard
- SR 65 at Whitney Ranch Parkway

The following discussion outlines concepts and assumptions for the six interchanges that could potentially serve Placer Parkway.

2.3.3.1 Western Segment

Within the Western Segment of the Parkway, a high-speed, freeway-to-freeway type interchange would connect the Parkway with SR 70/99 at one of following potential locations depending on the project alternative (see Section 2.2). Placer Parkway would terminate at SR 70/99.

- **Placer Parkway/SR 70/99 Interchange at North of Riego Road.** This alternative concept uses "braided" ramps to eliminate weaving problems or conflicts with the future SR 70/99 at Riego Road interchange being developed by Sutter County and Caltrans.

- **Placer Parkway/SR 70/99 Interchange at Sankey Road.** Under this alternative concept, the existing two-lane Sankey Road would be realigned to the south of Placer Parkway and the proposed freeway-to-freeway interchange, extending from approximately ¼ mile west of SR 70/99 to approximately ¼ mile east of the Union Pacific railroad tracks. There would be no direct access to SR 70/99 or Placer Parkway from the realigned Sankey Road.

Depending on the final alignment selected, one or two additional interchanges would also be located in south Sutter County. Conceptual locations are identified for purposes of this Tier 1/Program analysis (see Figure 2-1). The actual location of these interchanges would be developed in the Tier 2 phase, based on Sutter County requirements.

2.3.3.2 Central Segment

Within the Central Segment of the Parkway, there would not be any access proposed as part of the project in the 7-mile segment between Fiddyment Road and Pleasant Grove Road. Please see Section 2.4 regarding a potential connection to a future extension of Watt Avenue (Figure 2-3) which could be proposed and constructed by others in the Central Segment; such an interchange is not part of the Placer Parkway.

2.3.3.3 Eastern Segment

Within the Eastern Segment of the Parkway, a signalized high-speed freeway-to-freeway and local access interchange would connect the Parkway to SR 65 at Whitney Ranch Parkway (Figure 2-1). From SR 65 eastward Placer Parkway would terminate and become Whitney Ranch Parkway east of the SR 65 exit ramp intersection. Traffic signals would be provided at the exit ramp terminals. This interchange would be approximately 1 mile north of a planned SR 65/Sunset Boulevard interchange and 1.2 miles south of the existing Twelve Bridges interchange.

As part of this interchange, auxiliary lanes would be required on SR 65 in both directions to enhance traffic operations on the north side of the future SR 65/Sunset Boulevard interchange. The southbound SR 65 exit-ramp at Sunset Boulevard is being designed to accommodate an additional auxiliary lane required for the future Placer Parkway/Whitney Ranch Parkway interchange to minimize the reconstruction of this ramp in the future. Within the Eastern Segment of the Parkway, from SR 65 westward, two interchanges with local roadways would be constructed, one at Foothills Boulevard and one at Fiddyment Road, as depicted on Figure 2-1.

The future interchange on Placer Parkway at Fiddyment Road would be located near the existing intersection of Fiddyment Road and Sunset Boulevard West. To provide acceptable traffic operations, additional distance needs to be provided between the Fiddyment Road/Sunset Boulevard West intersection and the Fiddyment Road/Placer Parkway westbound off-ramp intersection. Therefore, Sunset Boulevard West will need to be realigned to the north as it nears Fiddyment Road.

2.3.4 Landscaping Concept

For the purposes of this environmental analysis, preliminary landscaping concepts have been developed for Placer Parkway. These are entirely conceptual and would be subject to further refinement during the Tier 2 environmental process. It is anticipated that landscaping would be used to reflect local topography and vistas in the study area and complement the varying character of land adjacent to the Parkway corridor. Landscape design would vary within the Parkway's three segments depending on corridor width and type and density of surrounding land uses. Landscaping would be used within the median and the Parkway buffer zone to enhance the aesthetics of the Parkway, and would be used to provide screening, and enhance local and long-distance views. Where appropriate, more concentrated plantings would be considered to buffer the Parkway from future adjacent land uses that may be incompatible with the Parkway concept, and to prevent unwanted intrusion into shoulder or median areas. Landscape design would likely include a mix of compatible native and non-native plants that may require some irrigation. Wherever possible, native plant species would be used in line with Caltrans policy. Where possible and depending on availability, feasibility and cost, recycled water would be used for irrigation.

During a future design phase, lighting elements would be designed for safety and would consider the proposed landscaping plan in order to minimize potential aesthetic impacts (e.g., shielding lighting elements, using lower-voltage lighting, and proposing lighting fixtures that conform with the visual character of the area).

2.4 POTENTIAL WATT AVENUE INTERCHANGE

The Placer County General Plan includes a number of new roadways that may be needed in Placer County, according to travel demand forecasts. An extension of Watt Avenue to Placer Parkway (from Baseline Road to a new Blue Oaks Boulevard Extension) is included as a planned future roadway in the Placer County General Plan. This extension could provide access onto the Placer Parkway via a new interchange (see Figure 2-3). A Watt Avenue extension and/or interchange is not part of the project or future Placer Parkway. It would be subject to independent future environmental analysis and review and is not being fully evaluated within this Technical Report or Tier 1 EIS/Program EIR. However, the connection of Placer Parkway to a potential Watt Avenue extension could affect future travel patterns in the area, including use of the Parkway. Based on direction from previous planning studies, this Technical Study and the Tier 1 EIS/Program EIR will evaluate each corridor alternative with and without a Watt Avenue interchange. This evaluation does not predetermine the construction or alignment of a potential Watt Avenue or nearby roadway extension or the precise locations of any potential interchanges with Placer Parkway.

2.5 AGENCY PERMITS AND APPROVALS

The Proposed Action would preserve a preferred corridor for a future transportation facility. In the future, permits and approvals would be obtained from appropriate agencies prior to construction of the Parkway. These permits and approvals may include specific design or mitigation requirements that would be incorporated into the project.

2.6 SUBSEQUENT TIER 2 INFORMATION

As noted earlier, the design and construction of Placer Parkway — including its interchanges and over-crossings, and ancillary features such as stream crossings, safety devices, stormwater management structures, and similar improvements — would be evaluated in a subsequent Tier 2 environmental review process, once a corridor has been identified. Chapter 10 provides more detailed information regarding Tier 2 studies.

3.0 REGULATORY SETTING

3.1 CLEAN WATER ACT

The Clean Water Act is a 1977 amendment to the Federal Water Pollution Control Act of 1972, which establishes the basic structure for regulating discharges of pollutants to waters of the United States. Section 303 of the Clean Water Act (CWA) requires states to adopt water quality standards.

The State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCBs) regulate activities in "waters of the United States" through Section 401 of the CWA . A 401 Certification will be necessary to obtain a 404 permit for construction activities that would impact "waters of the United States".

The U.S. Army Corps of Engineers (USCOE) regulates the placement of fill or dredged materials that affect waters of the United States, which include stream courses and jurisdictional wetlands (wetlands that are designated and regulated under the CWA). The USCOE regulates these activities under the authority of Section 404 of the Clean Water Act. The USCOE would regulate any development that affects jurisdictional wetlands. As part of the 404 permit, coordination with U.S. Fish and Wildlife Service (USFWS) would be required.

3.2 THE PORTER-COLOGNE WATER QUALITY CONTROL ACT OF 1969

The Porter-Cologne Water Quality Control Act (Porter-Cologne) is the principal law governing water quality regulation in California. This statute established the SWRCB and the nine RWQCBs, which are charged with implementing its provisions. Porter-Cologne establishes a comprehensive program for the protection of water quality and the beneficial uses of water. It applies to surface waters, wetlands, and groundwater and to both point and nonpoint sources. Porter-Cologne is found in the California Water Code beginning with Section 13000. In addition, Title 23 of the California Code of Regulations (CCR) contains administrative and regulatory elements of water quality and quantity management in California. The SWRCB was formed in 1967 when the State Water Rights Board and the SWQCB were merged by the State Legislature, based on the realization that decisions affecting water quality and water rights are inseparable. Under its dual legal authority, the SWRCB allocates rights to the use of surface water and, together with the nine RWQCBs, protects water quality in all waters of the state.

The study area is located within Region 5 — the Central Valley River Basin RWQCB. The SWRCB provides program guidance and oversight, allocates funds, and reviews RWQCB decisions. The RWQCBs have responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions.

Porter-Cologne also incorporates many provisions of the Clean Water Act (CWA) such as delegation to the SWRCB and RWQCBs of the National Pollutant Discharge Elimination System (NPDES) permitting program.

3.3 NPDES STORMWATER DISCHARGE PERMITS

Surface water quality is regulated by the NPDES, developed by the U.S. Environmental Protection Agency (U.S. EPA) in accordance with Section 303 of the CWA. In the state of California, the SWRCB administers the NPDES program, with implementation and enforcement by the RWQCBs. The NPDES program, designed to protect surface water quality, is applicable to all discharges to waters of the United States, including stormwater discharges associated with municipal drainage systems, construction activities, industrial operations, and "point sources" (such as wastewater treatment plant discharges and other direct discharges to water bodies).

The California SWRCB Water Quality Order 99-08-DWQ: The NPDES General Permit for Stormwater Discharges Associated With Construction Activity (General Permit) authorizes a general permit for stormwater discharges associated with construction activities that disturb one or more acre of land. Construction activities subject to the permit include cleaning, grubbing, grading, stockpiling, and excavation activities. The General Permit requires submittal of a Notice of Intent (NOI) to comply with the permit and the development of a Stormwater Pollution Prevention Plan (SWPPP) that must address the following:

- Plans for implementation of structural and operational Best Management Practices (BMPs) to prevent and control impacts to surface water during construction;
- Inspection and maintenance of BMPs throughout all phases of construction;
- Monitoring of runoff quality during all phases of construction; and
- A plan for preventing and controlling post-construction impacts to runoff quality.

The Central Valley RWQCB (CVRWQCB) Order 5-00-175 "Waste Discharge Requirements General Order for Dewatering and Other Low Threat Discharges to Surface Waters" addresses potential discharges of low water quality–threat wastewater. Such discharges include: (1) short duration (four months or less) or (2) low flow (average dry weather discharge does not exceed 0.25 million gallons per day). Types of discharges covered by this permit include: (1) well development water; (2) construction dewatering; (3) pump/well testing; (4) pipeline/tank pressure testing; (5) pipeline/tank flushing or dewatering; (6) condensate; (7) water supply system; and (8) miscellaneous dewatering and low-threat discharges.

In 1999, the SWRCB issued an NPDES permit (Order No. 99-06-DWQ, CAS0000003) that regulates stormwater discharges from Caltrans facilities. The permit requires Caltrans to comply with the requirements of the Construction General Permit and regulates stormwater discharges from Caltrans rights-of-way both during and after construction. The permit requires Caltrans to maintain and implement an effective Stormwater Management Plan (SWMP) that identifies and describes BMPs used to control the discharge of pollutants to waters of the United States. Stormwater discharges from Caltrans facilities must meet water quality standards through implementation of permanent and temporary (construction) BMPs and other measures.

In April 2003, the SWRCB adopted an NPDES Phase II General Permit for the Discharge of Stormwater from small municipal separate storm sewer systems (MS4s) to provide NPDES permit coverage to municipalities that were not covered under the NPDES Phase I Rule for municipalities serving more than 100,000 people. Placer County and portions of Sutter County are designated within the NPDES Phase II General Permit. Under this permit, stormwater discharges shall not cause or contribute to an exceedance of water quality standards contained in a Statewide Water Quality Control Plan, the California Toxics Rule (CTR) or the applicable RWQCB Basin Plan. The applicable Basin Plan for the project area is the Water Quality Control Plan for the Sacramento River and the San Joaquin River Basins (CVRWQCB, 1998). The Basin Plan establishes water quality objectives, and implementation programs to meet stated objectives and to protect the beneficial uses of water in the basin, in compliance with the Clean Water Act and the state Porter-Cologne Water Quality Control Act.

The SWRCB regulates activities that could result in adverse impacts to groundwater quality. Policies and regulations promulgated by the SWRCB (either under its CWA authority or state-derived authority) are implemented and enforced by the CVRWQCB. Groundwater-related activities governed by NPDES permits or Waste Discharge Requirements (WDRs) issued by the CVRWQCB include aquifer reinjection, reclaimed water irrigation, and siting and design of waste management facilities (including wastewater treatment plants). The CVRWQCB also oversees local implementation of underground storage tank management programs and other programs related to prevention and control of groundwater impacts.

In general, SWRCB policy prohibits degradation of groundwater quality, and in cases where impacts occur, the CVRWQCB typically requires restoration of impacted aquifers such that residual concentrations do not exceed the U.S. EPA's Maximum Contaminant Levels (MCLs) for drinking water. In cases where the aquifer is hydraulically connected to a surface water body, water quality criteria for fresh water aquatic habitats may be imposed as standards for cleanup and restoration efforts.

3.4 CALIFORNIA LAKE AND STREAMBED ALTERATION PROGRAM

The California Department of Fish and Game's (CDFG's) Lake and Streambed Alteration Program (California Fish and Game Code Section 1600-1607) requires any project that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake or use materials from a streambed to notify the CDFG before beginning the project. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation.

3.5 LOCAL REGULATIONS

Sutter and Placer counties each have local regulations relevant to water quality.

3.5.1 Sutter County

Sutter County is responsible for reviewing and approving development plans within the unincorporated areas of the county. The Sutter County General Plan (Sutter County, 1996) contains specific goals and policies intended to minimize potential impacts to water quality.

Goal 3.D	To collect and dispose of stormwater in a safe and efficient manner.
Goal 4.A	To preserve and protect the water resources of the County.
4.A-1	The County shall require development setbacks from all water courses.
Goal 4.B	To protect wetland and riparian areas through Sutter County.
4.B-2	The County shall discourage direct discharge of surface runoff into wetland areas. New development shall be designed in such a manner that pollutants and siltation will not significantly affect wetlands.

Sutter County has developed Design Standards to regulate and guide the design and preparation of plans for construction of streets, highways drainage facilities.

Sutter County has a Grading and Erosion Prevention Ordinance that specifies permitting requirements and establishes design standards for drainage and erosion/sediment control. Grading plans must be designed to address long-term erosion and sediment control, and must include measures to be implemented to control erosion and prevent offsite discharge of sediments during construction activities such as grading and stockpiling of soils. An erosion and control plan showing all facilities and measures to be implemented to control erosion and prevent offsite discharge of sediment must be submitted for review and approval by the Public Works Director.

3.5.2 Placer County

Placer County is responsible for reviewing and approving development plans within the unincorporated areas of the county. The Placer County General Plan (Placer County, 2005) contains specific goals and policies intended to minimize potential impacts associated with water quality.

Goal 4.E To collect and dispose of stormwater in a manner that least inconveniences the public, reduces potential water-related damage, and enhances the environment.

4.E.10 The County shall strive to improve quality of runoff from urban and suburban development through use of appropriate and feasible mitigation measures including, but not limited to, artificial wetlands, grassy swales, infiltration/sedimentation basins, riparian setbacks, oil/grease separators, and other best management practices.

4.E.14 The County shall require projects that have significant impacts on the quantity and quality of surface water runoff to allocate land as necessary for the purpose of detaining post-project flows and/or for the incorporation of mitigation measures for water quality impacts related to urban runoff.

Goal 6.A To protect and enhance the natural qualities of Placer County's streams, creeks and groundwater.

Placer County's Grading and Erosion Prevention Ordinance (Article 15.48) (Placer County, 2006) regulates grading to avoid pollution of watercourses with hazardous materials, nutrients, sediments, or other earthen materials generated on or caused by surface runoff and to ensure that the intended use of a graded site is consistent with the Placer County General Plan and other Placer County ordinances, including the Zoning Ordinance, Flood Damage Prevention Ordinance (Article 15.52), Environmental Review Ordinance (Chapter 18 Placer County Code), and applicable chapters of the California Building Code. The Placer County Land Development Manual (LDM) provides details on developing and designing erosion/sediment control features and contains a storm drainage section that supplements the Stormwater Management Manual. The relevant elements of the LDM's storm drainage section must also be included in a stormwater management project. Grading plans must be designed to address long-term erosion and sediment control, and must include measures to be implemented to control erosion and prevent offsite discharge of sediments during construction activities such as grading and stockpiling of soils. An erosion and control plan showing all facilities and measures to be implemented to control erosion and prevent offsite discharge of sediment must be submitted for review and approval by the Public Works Director.

4.0 AFFECTED ENVIRONMENT

This section describes the existing conditions with respect to water quality. The hydrologic setting is based on existing available data, maps, and reports.

4.1 HYDROLOGY

The study area is located within the Sacramento River Basin, which is bounded by the Sierra Nevada mountains to the east, the Coast Ranges to the west, the Cascade Range and Trinity Mountains to the north, and the Delta-Central Sierra area to the south. The Sacramento River is the principal stream in the basin. Its major tributaries are the Pit and McCloud rivers, which join the Sacramento River from the north, and the Feather and American rivers, which are tributaries from the east.

The study area is located primarily in Sutter and Placer counties (Figure 1-1). A small portion of the study area is in Sacramento County; however, none of the proposed Parkway corridors are within Sacramento County. As shown on Figure 4-1, the majority of the study area is east of the Natomas Basin and is within the watersheds of Pleasant Grove Creek, Curry Creek, and the Natomas East Main Drainage Canal (a.k.a. Steelhead Creek). A small portion of the study area in the northeastern corner is within the Auburn Ravine watershed.

The existing topography of the study area is relatively flat. The area generally slopes from east to west, from elevation 165 feet above mean sea level (msl) in the northeastern corner to less than elevation 10 feet on the western edge within the Natomas Basin. In general, soils within the study area are categorized as hydrologic soil groups C and D, with C soils having zones of hardpan layers occurring less than 4 feet below ground surface (Quad Knopf, 2001). Localized areas with hydrologic soil groups A and B may be present, especially along Pleasant Grove Creek.

4.1.1 Natomas Basin

The western portion of the study area (approximately 23 percent) is located within the Natomas Basin (see Figure 4-1). The Natomas Basin is defined as land in Sacramento and Sutter counties bounded by the Sacramento River on the west and south, the Cross Canal on the north, the American River on the south and the Pleasant Grove Creek Canal and the Natomas East Main Drainage Canal on the east. The basin includes 53,000 acres and is about 15 miles long from north to south and about 6 miles wide from west to east (EDAW, 2005). Land in the basin is generally flat with elevations from 10 to 25 feet above msl, with some localized areas up to elevation 40 feet.

The Natomas Basin is completely enclosed by levees that prevent natural drainage out of the basin. All storm runoff must be collected and pumped out. Drainage within the basin has relied on the agricultural fields to hold runoff and act as de facto detention storage facilities. As agricultural land becomes urbanized with pavement and buildings replacing fields, peak runoff and the volume of storm runoff are increased. City/County of Sacramento, Reclamation District No. 1000 (RD 1000), and Sutter County have all established guidelines for drainage and flood control within the Natomas Basin.

4.1.2 Pleasant Grove Creek Watershed

Pleasant Grove Creek (see Figure 4-1) discharges to the Pleasant Grove Creek Canal, which conveys flow north to the Cross Canal and ultimately to the Sacramento River near Verona, California. The Pleasant Grove Creek watershed has a total drainage area of approximately 47 square miles upstream of the Cross Canal (CH2M Hill, 1993). Approximately 30 percent of the study area is within the Pleasant Grove Creek watershed.

Pleasant Grove Creek historically drained along its natural courses to the Sacramento River. RD 1001 was formed in 1911 and constructed a canal/levee system to reclaim lands east of the Feather River from flooding. The Pleasant Grove Creek Canal intercepts flow from Pleasant Grove Creek as well as flow from Curry Creek and flow from the Howsley tributaries north of Pleasant Grove Creek.

There are no long-term continuous streamflow measurements for Pleasant Grove Creek. A previous study evaluated potential increases in flooding due to development within the watershed. As part of these studies, flood hydrographs for Pleasant Grove Creek and its tributaries were developed in accordance with Placer County's Stormwater Management Manual. For the 1993 existing conditions, the 100-year peak flow for Pleasant Grove Creek was estimated to be on the order of 10,000 cubic feet per second (cfs) (CH2M Hill, 1993).

4.1.3 Curry Creek Watershed

Curry Creek (see Figure 4-1) also discharges to the Pleasant Grove Creek Canal. The total area of the Curry Creek watershed upstream of the Cross Canal is approximately 17 square miles (CH2M Hill, 1993). Approximately 29 percent of the study area is within the Curry Creek watershed.

There are no long-term continuous streamflow measurements for Curry Creek. A previous study evaluated potential increases in flooding due to development within these watersheds. As part of these studies, flood hydrographs for these creeks were developed in accordance with Placer County's Stormwater Management Manual. For the 1993 existing conditions, the 100-year peak flow for Curry Creek was estimated to be on the order of 1,000 cfs (CH2M Hill, 1993).

4.1.4 Auburn Ravine Watershed

Only a small portion of the study area, approximately 4 square miles in the northeastern corner, is within the Auburn Ravine watershed (see Figure 4-1). This portion of the study area drains to Orchard Creek, which is a tributary to Auburn Ravine.

The Auburn Ravine watershed totals approximately 79 square miles and slopes from east to west, ranging in elevation from 1,600 feet in the Sierra Nevada foothills near Auburn, California, to 30 feet near Sutter County (Placer County, 2002). Orchard Creek has a watershed of approximately 12 square miles (EIP, 1997). It originates east of the study area, near Sierra College Boulevard in the Twelve Bridges area. Orchard Creek flows westward under Fiddyment Road north of the study area and then joins Auburn Ravine.

The East Side Canal intercepts flow from Auburn Ravine, as well as other creeks farther north — Coon Creek, Bunkham Slough, Markham Ravine and King Slough — and then joins with the Pleasant Grove Creek Canal. Flows from both the East Side Canal and Pleasant Grove Canal combine to flow into the Natomas Cross Canal, where it is ultimately discharged into the Sacramento River.

There are no long-term continuous streamflow measurements for Auburn Ravine or Orchard Creek. The estimated peak flows for Auburn Ravine at the Cross Canal during the winter range from a few hundred cfs to more than 17,000 cfs for a 100-year storm event (Placer County, 2002).

Flows in Auburn Ravine are augmented by water imported from the Yuba, Bear, and American River watersheds, discharges from wastewater treatment facilities and irrigation water. Winter streamflows are comprised primarily of storm runoff supplemented by discharge from wastewater treatment facilities. During the summer months, when natural flows are low due to little or no rainfall, streamflows consist primarily of irrigation water deliveries and powerhouse discharges. Based on regulated streamflow data from the Nevada Irrigation District's gauge in Auburn Ravine below SR 65 for the period 1985 through

1997, average regulated streamflows vary from 117 cfs in January to 30 cfs in October (City of Lincoln, et al., 1998).

4.1.5 Natomas East Main Drainage Canal Watershed

The Natomas East Main Drainage Canal (NEMDC) watershed is approximately 180 square miles, of which 55 percent is drained by Dry Creek located south of the study area (DWR, 2003a). Approximately 14 percent of the study area is within the NEMDC watershed, specifically within the Steelhead Creek portion. Steelhead Creek drains the southern portion of the study area to the canal/creek, which then conveys the flow towards the south. The drainage area of the Steelhead Creek portion of the NEMDC is estimated to be approximately 9 square miles. NEMDC ultimately discharges via pumping into the Sacramento River.

There are no long-term continuous streamflow measurements for Steelhead Creek. Water levels in the canal at the El Camino Avenue bridge were measured from late summer/fall 2001 to June 2002. Stage measurements ranged from 12.47 to 25.55 feet, with the median value at 13.28 feet (DWR, 2003a).

4.2 WATER QUALITY

4.2.1 Introduction

Water quality affects the human and the natural environment, including fisheries, wildlife, recreation, and human health. Surface water quality can generally be characterized by surrounding land uses. The historical land use in the study area has been agricultural, primarily grazing and pasture. Typical constituents that would be expected in runoff from pasturelands would include nitrogen, phosphorus, and coliform bacteria. With recent urbanization in the study area, additional constituents that would be expected include oil, grease, metals, pesticides, and herbicides. Typical concentrations of chemical indicators of non-point–source pollutants according to land use that could be expected in stormwater runoff are summarized in Table 4-1. Water quality degradation from non-point–source pollutants is primarily the result of stormwater runoff carrying pollutants from the land surface to the receiving waters. If stormwater runoff from rural and urban areas contains excessive levels of pollutants (e.g., pesticides, herbicides, hydrocarbons); this can result in adverse effects on aquatic-dependent wildlife and fisheries.

In the study area, the urban/commercial uses that may contribute to non-point–source pollution include automobiles (tires, oil leaks, brake linings, catalytic converters), the improper use and disposal of chemicals (pesticides, fertilizers, herbicides, paints, paint thinners, solvents, petroleum chemicals), erosion of unprotected surfaces, structural surfaces (street pavement, galvanized pipes, roofing materials, wood preservatives), and solid waste (litter and debris, vegetative matter, pet droppings) (James M. Montgomery, 1992).

Stormwater runoff originating within the study area drains to Steelhead Creek, Pleasant Grove Creek, Curry Creek or Auburn Ravine, which are tributaries to the Sacramento River. This river is a primary source of water for the City of Sacramento as well as for the Sacramento-San Joaquin Delta and is important as a source of domestic water and for recreation, fisheries and wildlife habitats (James M. Montgomery, 1992). Key beneficial uses of the receiving waters are designated as municipal, domestic, and agricultural supply, recreation, and freshwater habitat (CVRWQCB, 1998); these beneficial uses depend, in part, on maintaining existing water quality. None of the creeks within the study area are on the RWQCB's 2002 list of designated impaired streams (i.e., the Section 303(d) list); however, the downstream section of the Sacramento River between Knights Landing and the Delta, approximately 16 miles long, is designated as an impaired stream for diazinon (agricultural source), mercury (abandoned mine source) and other toxicity from unknown sources (CVRWQCB, 2003). In 2005, the RWQCB prepared to delist diazinon from the

Section 303(d) list for this segment of the Sacramento River (RWQCB, 2005a; RWQCB, 2005b) because applicable water quality standards for this pollutant are not exceeded based on available data.

Table 4-1
Typical Concentrations of Non-Point–Source Pollutants in Stormwater

Land Use	Biological Oxygen Demand (pounds/acre/year)	Suspended Solids (pounds/acre/year)	Total Phosphorus (pounds/acre/year)	Total Nitrogen (pounds/acre/year)
Residential	24	545	0.32	4.0
Commercial	98	745	0.75	9.0
Recreation	1.3	420	0.06 to 0.2	2.3 to 4.4
Cropland, pasture and unused rural land	2.1 to 30	420 to 10,000	0.09 to 0.64	0.9 to 23
Source: EIP Associates, 2004.				

Water monitoring studies for the Sacramento River indicate that the river's water quality is generally of high quality (Quad Knopf, 2006). The water quality is primarily affected by land use practices within the watershed and associated urban runoff, stormwater discharges, agricultural runoff, effluent discharge from wastewater treatment plants, and acid mine drainage from abandoned mines. Certain priority pollutants (e.g., trace metals and pesticides) have been detected in the Sacramento River at levels above state water quality objectives; however, most monitored constituents, with the exception of some metals, typically meet water quality objectives. As a raw municipal water source, total dissolved solids (TDS), total organic carbon (TOC), and pathogen levels are of concern for the Sacramento River, but are currently at acceptable regulatory levels (Quad Knopf, 2006).

4.2.2 Natomas Basin

There are no streams within the Natomas Basin. Water is conveyed through the area via a system of canals. No water quality data are available for these canals.

4.2.3 Pleasant Grove Creek Watershed

Water quality sampling was conducted to support the Pleasant Grove/Curry Creek Ecosystem Restoration Plan (Foothill Associates, 2005). The results from quarterly sampling conducted from spring 2004 through spring 2005 at several locations within the Pleasant Grove Creek watershed indicate the following potential concerns related to water quality for the creek:

- Water temperature during summer ranged from 20.8°C to 25.0°C (69.4°F to 77°F), exceeding the 20°C (68°F) criteria set in the Basin Plan;
- Dissolved oxygen (DO) during summer was below the 5.0 milligrams per liter (mg/L) criteria set in the Basin Plan. Low flows, and the resulting stagnation and increased water temperatures, contributed to these low DO values; and
- Elevated levels of coliform and *Escherichia coli* (E. coli), which may be attributed to wildlife.

4.2.4 Curry Creek Watershed

Water quality sampling of Curry Creek was conducted quarterly from spring 2004 through spring 2005 at several locations within the Curry Creek watershed (Foothill Associates, 2005). The results, which are

similar to those for Pleasant Grove Creek, indicate the following potential concerns related to water quality:

- Water temperature during summer ranged from 20.8°C to 25.0°C, exceeding the criteria of 20°C set in the Basin Plan;
- DO during summer was below the 5.0 mg/L criteria set in the Basin Plan. Low flows, and the resulting stagnation and increased water temperatures, contributed to these low DO values;
- Elevated levels of coliform and E. coli, which may be attributed to wildlife; and
- Elevated levels of turbidity and total suspended solids.

4.2.5 Auburn Ravine Watershed

The Auburn Ravine/Coon Creek Ecosystem Restoration Plan (Placer County, 2002) contains preliminary data on heavy metals and a number of other constituents for Auburn Ravine. Cadmium, copper, and zinc were present at some times of the year at levels exceeding the California Toxic Rule objectives for aquatic life; however, other studies show that heavy metals did not exceed California Toxic Rule standards. In Auburn Ravine, the only metal that exceeds the standards at 50 mg/L hardness criterion is copper.

4.2.6 NEMDC Watershed

NEMDC, also known as Steelhead Creek, is a potentially significant cumulative source of urban loads of drinking water contaminants to the Sacramento-San Joaquin Delta. Water quality monitoring was performed from 1997 to June 2002 (DWR, 2003a). The monitoring site was on the NEMDC at the El Camino Avenue Bridge, just below the confluence with Arcade Creek. This location includes drainage from the entire 180-acre watershed, which includes drainage from the upper NEMDC area above the Dry Creek/NEMDC confluence, Dry Creek, Robla/Magpie Creeks, and Arcade Creek. The California Bay – Delta Authority (formerly CALFED) specifically identified the NEMDC as a priority site for assessment of sources and loads of drinking water contaminants of concern, and, therefore conducted the water quality investigation as part of the Municipal Water Quality Investigations (MWQIs) Urban Sources and Loads Project. Results indicated the following:

- TDS levels for water samples from NEMDC ranged from 58 to 338 mg/L and were higher overall than Sacramento area urban runoff, although the range of values was similar;
- Electrical conductivity (EC) was relatively high and ranged from 81 to 561 micrograms per liter (μg/L);
- Bromide levels were detected at levels above the Bay-Delta program target of concern of 0.05 mg/L for drinking water sources. Bromide levels averaged 0.054 mg/L, with a high value of 0.11 mg/L;
- Combined nitrate values were very high, often exceeding the MCL (10 mg/L as nitrogen). Of the total 64 combined samples, 22 exceeded the MCL, with high values of 22.8 mg/L and 16.3 mg/L; and
- Diazinon was detected in 9 of 14 samples ranging from <0.01 μg/L to 0.19 μg/L. These results are not unexpected due to the historically high concentrations and the level of concern about this pesticide in the Arcade Creek watershed.

5.0 POTENTIAL DIRECT IMPACTS

Potential impacts to water quality were evaluated through a quantitative comparison of the potential impact of each of the corridor alignment alternatives to relevant parameters affecting water quality. The criteria used in this analysis were developed to allow comparison of potential impacts to water quality associated with each of the corridor alignment alternatives. The focus of this Tier 1 analysis was to identify potential impacts that differentiate between proposed alternatives. For example, the measurement of impervious area quantifies the magnitude of that resource in the watersheds that would be potentially impacted by the project. An alternative that has more impervious area would potentially contribute more runoff and more pollutants. Comparison of the magnitude of impervious area for each alternative is a quantitative approach to comparing the relative potential impact of the various alternatives.

The grading involved in construction of the Parkway would decrease vegetative cover and increase the potential for soil erosion, and thereby could cause a temporary increase in suspended solids in runoff and local receiving waters. Surfaces disturbed during construction would be paved or vegetated and the potential for erosion would be very low after construction has been completed. In addition to impacts from erosion, impacts to runoff water quality during construction could potentially result from leaks or spills of fuel or hydraulic fluid used in construction equipment; outdoor storage of construction materials; or spills of paints, solvents, or other potentially hazardous materials commonly used in construction.

During operation, the Parkway would increase the overall amount of impervious surface in the study area, thereby increasing runoff. The most common contaminants in highway runoff are heavy metals, inorganic salts, aromatic hydrocarbons, and suspended solids that accumulate on the road surface as a result of regular highway operation and maintenance activities. Ordinary operations and the wear and tear of vehicles result in the dropping of oil, grease, rust, hydrocarbons, rubber particles, and other solid materials on the highway surface. These materials are washed off the highway during rain events. Receiving surface waters are susceptible to contamination from these sources (FHWA, 1999). Additionally, pollutants would tend to be flushed from impervious surfaces where they accumulate (e.g., paving) into drainage conveyances. Stormwater runoff from road surfaces and interchanges would be expected to contain oils, grease, and debris.

As stated in the Fact Sheet for Caltrans' NPDES Permit (SWRCB, 1999), discharges of stormwater from the Caltrans owned rights-of-way, properties, facilities, and activities, including stormwater management activities in construction, maintenance, and operation of state-owned highways within the State of California, have been shown to be contributors of pollutants to waters of the United States. As such, the discharge of stormwater may be causing or threatening to cause violations of water quality objectives. The quality and quantity of these discharges vary considerably and are affected by hydrology, geology, land use, season, and sequence and duration of hydrologic events. Pollutants occur in both the stormwater discharges and non-stormwater discharges. Pollutant sources from Caltrans rights-of-way, properties, facilities, and activities include motor vehicles, highway maintenance, construction site runoff, maintenance facility runoff, illegal dumping, spills, and landscaping care. Pollutant categories include metals (such as copper, lead, and zinc), synthetic organics (petroleum products and pesticides), sediment, nutrients (nitrogen and phosphorus fertilizers), debris, oxygen demanding substances (decaying vegetation, animal waste, and other organic matter), and other pollutants that may cause aquatic toxicity in the receiving waters.

Table 5-1 summarizes the evaluation criteria considered in the analysis of the corridor alternatives. These are described below.

Table 5-1
Summary of Criteria Used for Evaluation of Alternatives:
Water Quality

Evaluation Criteria	Regulatory Concerns (Potential Impacts)	Quantitative Evaluation Approach	Justification
Amount of Impervious Area	• Increase amount of runoff and amount of pollutants from roadway surface • Increase the potential for erosion during construction activities	Magnitude of area affected; lower value better	Potential increase in impervious area and resultant increase in runoff and pollutants may impact downstream areas; objective is to minimize the increase in impervious area Larger area disturbed during construction increases potential for erosion
	• BMPs required to offset increases in runoff and eliminate discharge of pollutants	Magnitude of area potentially available for BMPs; higher value better	Opportunities to site BMPs (e.g., ability to locate detention basins/swales within the right-of-way to attenuate peak runoff)
Stream Crossings	• Provide discharge point for pollutants to enter stream • Crossing may require streambed alteration • Restriction on construction activities in channels	Number of streams crossed by each alternative; lower number better	Alternative crossing may affect water quality of downstream segments; objective is to minimize the number of streams potentially affected Streambed alteration requires permit from CDFG Placement of fill in channel requires Section 404 permit
Amount of Watershed Downstream of Stream Crossing	• Increase impacts to downstream reaches	Magnitude of area affected; lower value better	Alternative may affect water quality discharge to stream; objective is to minimize the amount of stream potentially affected, therefore crossing lower in the watershed is preferable
Amount of Wetlands and Vernal Pool Complex Areas Crossed	• Potential for pollutants to be discharged into sensitive areas	Magnitude of area affected; lower value better	Alternative may affect water quality discharge to adjacent wetlands or vernal pool complex areas; objective is to minimize the number of areas potentially affected
Canal Crossings	• Potential for pollutants to enter canal	Number of canals crossed by each alternative; lower number better	Alternative crossing may affect water quality of canal; objective is to minimize the number canals potentially affected

Amount of Impervious Area. The increase in impervious area due to implementation of the project would result in increased peak flows and runoff volumes. Potential pollutants from the paved roadway surfaces would be carried by the increased runoff from the roads to the streams. Highly impervious surfaces create high velocities that easily transport solids or scour contaminants from surfaces. Roadway surfaces, which are impervious, also increase the likelihood for first-flush flows (low flows with high concentration of pollutants) to occur.

With respect to construction activities, the amount of paved area is indicative of the amount of soil that may be disturbed and require erosion controls and stabilization.

Stream Crossings. Stream crossings provide an opportunity for stormwater runoff that may contain pollutants to enter a waterway. Crossings may constrict or block natural streamflows that may result in erosion. Special considerations must be addressed when construction is performed in or near creeks, such as limiting fill placed in creeks and minimizing alteration of streams. Stream crossings in relation to the alternatives and segments are shown on Figure 5-1.

Amount of Watershed Downstream of Crossing. The location of stream crossings in relation to the watershed provides an indication on how much of the creek and watershed may be affected. Discharge of pollutants into the headwaters of a creek would affect the entire creek system, while discharge into the lower reaches would impact less of the system and may benefit from dilution effects of higher flows.

Amount of Wetlands and Vernal Pool Complex Areas Crossed. Ecologically sensitive areas are particularly vulnerable to contamination. Special considerations may be required to prevent discharge of pollutants to these areas from construction activities. Discharge of road runoff that may contain pollutants should not be directed to these areas. Wetlands and vernal pool complex areas in relation to the alternatives and segments are shown on Figure 5-2.

Canal Crossings. Similar to stream crossings described above, roads and bridges that cross canals may discharge pollutants into canals. Special provisions must be implemented at canal crossings to prevent impacts to water quality during construction and operations. Canal crossings in relation to the alternatives and segments are shown on Figure 5-1.

Comparative data were collated and evaluated for each corridor alignment alternative and its segments (i.e., western, central and eastern) using Geographic Information System (GIS) technology. Tables 5-2 and 5-3 summarize the information for each alternative and segment.

5.1 THE NO-BUILD ALTERNATIVE

Under the No-Build Alternative, land for the future construction of the Placer Parkway would not be acquired and the Parkway would not be constructed. No impacts to water quality would occur as a result of the No-Build Alternative.

5.2 ALTERNATIVE 1 – THE RED ALTERNATIVE

5.2.1 Alternative 1 – Western Segment

The Western Segment of Alternative 1 is located entirely within Sutter County. Most of this segment is within the Natomas Basin. The total length of this segment is approximately 15,300 feet along the centerline of the corridor. Three interchanges would be included along this segment, as shown on Figure 2-1.

Amount of Impervious Area. The estimated amount of impervious area associated with this segment is 322 acres (see Table 5-2). Most of this is in the Natomas Basin watershed (316 acres), with the remaining 6 acres in the NEMDC watershed. The amount of impervious area includes the road, shoulder, and interchanges.

Table 5-2
Summary of Corridor Alignment Alternatives: Water Quality Parameters

Alternative	Segment	Length (feet)	Number of Watersheds Traversed	Impervious Area (acres)	Wetlands Crossed (acres)	Vernal Pool Complex Areas Crossed (acres)	Inter-changes (#)	Number of Stream Crossings (#)	Canal Crossings (#)
1	Western	15,300	1	322	0.3	23	3	0	1
	Central	40,600	3	103	15.5	6	0	9	0
	Eastern	29,600	2	321	20.0	94	3	6	0
	Total	85,500	6	745	35.8	123	6	15	1
2	Western	15,300	1	322	0.3	23	3	0	1
	Central	36,400	3	94	10.6	7	0	5	0
	Eastern	29,600	2	321	20.0	94	3	6	0
	Total	81,300	5	737	30.9	124	6	11	1
3	Western	15,300	1	322	0.3	23	3	0	1
	Central	37,500	3	97	11.7	10	0	4	0
	Eastern	29,600	2	321	20.0	94	3	6	0
	Total	82,400	5	740	32.0	127	6	10	1
4	Western	15,300	1	223	0.3	9	2	0	1
	Central	30,600	2	80	8.0	4	0	3	0
	Eastern	29,600	2	321	20.0	94	3	6	0
	Total	75,500	4	624	28.3	107	5	9	1
5	Western	15,300	1	223	0.3	9	2	0	1
	Central	30,100	2	78	7.7	21	0	3	0
	Eastern	29,600	2	321	20.0	94	3	6	0
	Total	75,000	4	622	28.0	124	5	9	1

Notes:

Alternatives and segments are shown on Figures 2-1, 4-1, 5-1, and 5-2. Impervious area includes assumptions for paved road surface, paved shoulders and interchanges. Road surface assumes 6 lanes (three in each direction).

Table 5-3
Summary of Distribution of Watersheds Crossed by Corridor Alignment Alternatives

Alternative	Total Watershed Area [1] (sq. mi.)	Area Downstream of Crossing[1] (sq. mi.)	Area in Corridor [1] (sq. mi.)	Area Upstream of Crossing [1] (sq. mi.)	Percentage of Watershed Downstream of Crossing
Steelhead Creek Watershed					
1	9	2.7	0.7	5.6	48
2	9	1.8	0.6	6.6	27
3	9	1.6	0.3	7.1	21
4	9	0	0	0	0
5	9	0	0	0	0
Curry Creek Watershed					
1	17	10.2	0.5	6.3	63
2	17	8.3	0.5	8.2	52
3	17	3.6	0.8	12.6	26
4	17	1.5	0.9	14.6	14
5	17	1.6	0.8	14.6	14
Pleasant Grove Creek Watershed					
1	47	11	0.3	35.7	24
2	47	11	0.3	35.7	24
3	47	11.1	0.2	35.7	24
4	47	11.1	0.3	35.7	24
5	47	11	0.3	35.7	24
Auburn Ravine Watershed[2]					
1-5	79	0.4	0.2	0	99

Notes:
1. Areas based on information from CH2M Hill (1993).
2. The crossing is the same for all alternatives. Stream crossed is a minor tributary of Auburn Ravine. The total area of this tributary's watershed is approximately 0.6 square mile. The values in the table for area upstream and downstream of the crossing represent the areas within this tributary's watershed.

Stream Crossings. In this part of the study area, the canals have intercepted the former creeks; therefore, there are no creek crossings along this segment. As discussed in the Hydrology and Floodplain Technical Memorandum (URS, 2006), roughly half of the corridor associated with this segment would be within the 100-year floodplain, which is essentially an extensive and flat area.

Amount of Watershed Downstream of Crossing. Since there are no stream crossings within this segment, this criterion is not applicable.

Amount of Wetlands and Vernal Pool Complex Areas Crossed. This segment crosses approximately 0.3 acre of wetlands and approximately 23 acres of vernal pool complex area (see Figure 5-2).

Unless detailed mapping shows otherwise, it appears that the Parkway would not be able to avoid these areas. Special considerations with respect to selection and siting of BMPs may be required to ensure that the wetlands and vernal pool complex areas are not adversely affected by stormwater runoff from the Parkway.

Canal Crossings. This segment would cross the Natomas East Main Drainage Canal. Design of the roadway and crossing would need to include provisions to direct surface water runoff away from the canal and not allow direct discharge into the canal. This would be accomplished with gutters or scupper drains and collection pipes that would convey stormwater runoff to land by gravity flow.

5.2.2 Alternative 1 – Central Segment

The Central Segment of Alternative 1 is located in Sutter and Placer counties. It traverses three watersheds: the Natomas East Main Drainage Canal, Curry Creek, and Pleasant Grove Creek. The total length of this segment is approximately 40,600 feet along the centerline of the corridor. No interchanges are proposed along this segment.

Amount of Impervious Area. The estimated amount of impervious area associated with this segment is 103 acres. Approximately 51, 33, and 19 acres are within the NEMDC, Curry Creek, and Pleasant Grove Creek watersheds, respectively.

The total width of the proposed Parkway corridor is approximately 1,000 feet in the Central Segment. Accounting for the six travel lanes and the Parkway's shoulders leaves approximately 888 feet of unpaved area where BMPs, such as detention basins and swales, could be located either within the median or between the proposed shoulders and the corridor edge.

Stream Crossings. There are nine stream crossings within this segment: four on Steelhead Creek, three on Curry Creek, and two on Pleasant Grove Creek. This segment crosses approximately 7,000 feet of Steelhead Creek longitudinally. Depending on the alignment of the road within the corridor, realignment of this section of Steelhead Creek may be required. Realignment or reconfiguration of this creek would require a Streambed Alteration agreement from CDFG.

The segment crosses Curry Creek and its tributaries in three locations. Within the Pleasant Grove Creek watershed, this segment crosses the main stem of Pleasant Grove Creek and its northern tributary.

Depending on the length of the creek crossing, the creek flows, and whether the crossing is also within the floodplain, the road would either be elevated on a bridge or the creek would be placed in a culvert under the road. BMPs would be incorporated into the road crossing design such that there would be no direct discharge of stormwater runoff into the creek. Discharge from the roadway surface would be collected and conveyed to a location outside of the ordinary high water. The creek crossing would be designed and constructed to minimize the potential impacts to water quality.

Amount of Watershed Downstream of Crossing. The Central Segment of Alternative 1 crosses Steelhead Creek in several locations, all of which are in the lower portion of the watershed. Approximately 38 percent of the watershed is below these stream crossings (see Table 5-3). This segment crosses Curry Creek and its tributaries in three locations within the upper portion of the watershed. The estimated drainage areas above each crossing (southern, middle, and northern crossings), are approximately 4 square miles, 2 square miles, and less than 0.5 square mile, respectively. Approximately 63 percent of the watershed is below these stream crossings (see Table 5-3). In the lower portion of Pleasant Grove Creek watershed, this segment crosses the main stem of Pleasant Grove Creek and its northern tributary. The estimated total drainage area of Pleasant Grove Creek above the proposed Parkway crossing is approximately 30 square miles. The estimated drainage area for the northern

tributary to Pleasant Grove Creek above the Parkway crossing is approximately 5 square miles. Approximately 24 percent of the watershed is below these stream crossings (see Table 5-3).

Amount of Wetlands and Vernal Pool Complex Areas Crossed. This segment crosses approximately 15.5 acres of wetlands and approximately 5.5 acres of vernal pool complex area (see Figure 5-2).

Within the Curry Creek watershed, this segment runs alongside and immediately downstream of a large vernal pool complex area. It is unlikely that stormwater runoff from the roadway would discharge into this area.

A portion of this segment near the northern Pleasant Grove Creek tributary crossing passes through a vernal pool complex area. Depending on the final road alignment within the 1,000-foot corridor, it should be possible to site BMPs and avoid direct discharge of stormwater runoff from the roadway surface to the vernal pool complex area.

Canal Crossings. This segment does not cross any existing canals. Therefore, there would be no potential impacts to canals.

5.2.3 Alternative 1 – Eastern Segment

The Eastern Segment is located entirely within Placer County. Most of this segment is within the Pleasant Grove Creek watershed, with the portion nearest SR 65 within the Auburn Ravine watershed. The total road length of this segment is approximately 29,600 feet along the centerline of the corridor. Approximately 11,600 feet is within the Pleasant Grove Creek watershed and the remaining 8,000 feet is within the Auburn Ravine watershed. Three interchanges would be included along this segment, as shown on Figure 4-1; two of the three interchanges would be within the Pleasant Grove Creek watershed.

Amount of Impervious Area. The estimated amount of impervious area associated with this segment is 321 acres, of which approximately 299 acres are within Pleasant Grove Creek watershed and the remaining 22 acres are within Auburn Ravine. The amount of impervious area includes the road, shoulder, and interchanges.

The total width of the proposed Parkway corridor is approximately 1,000 feet west of Fiddyment Road and approximately 500 feet wide east of Fiddyment Road segment. The corridor includes a 100-foot unpaved median, six travel lanes, and the Parkway's shoulders. BMPs, such as detention basins and swales, could be located within the median. There would also be an opportunity to locate BMPs between the proposed roadway shoulders and the corridor edge (approximately 888 feet of unpaved area west of Fiddyment Road and approximately 388 feet of unpaved area east of Fiddyment Road).

Stream Crossings. Six new stream crossings are within this segment: four on tributaries of Pleasant Grove Creek and two on tributaries of Orchard Creek. All of these crossings are in the headwaters of the creeks; therefore, culverts would be used at these crossings. In addition, this segment includes three existing stream crossings along SR 65. These crossings would require modifications, such as extension of existing culverts, as part of adding the auxiliary lanes.

Amount of Watershed Downstream of Crossing. This segment crosses several tributaries of Pleasant Grove Creek within the headwaters of each tributary. These tributaries join the main stem of Pleasant Grove Creek within the lower portion of the watershed.

Similarly, this segment crosses the tributaries of Orchard Creek at their headwaters. These tributaries join Auburn Ravine in the lower portion of the watershed.

Amount of Wetlands and Vernal Pool Complex Areas Crossed. This segment crosses approximately 16 acres of wetlands and approximately 94 acres of vernal pool complex area (see Figure 5-2). Most of these areas are associated with Pleasant Grove Creek and its tributaries. A small portion is associated with the tributaries of Orchard Creek within the Auburn Ravine watershed.

All three of the Pleasant Grove Creek tributary crossings coincide with vernal pool complex areas. The three Orchard Creek tributary crossings appear to be adjacent to or immediately upstream of the vernal pool complex areas.

Depending on the final road alignment within the 1,000-foot corridor, it should be possible to site BMPs and avoid direct discharge of stormwater runoff from the roadway surface to the vernal pool complex area.

Canal Crossings. This segment does not cross any existing canals. Therefore, there would be no potential impacts to canals.

5.3 ALTERNATIVE 2 – THE ORANGE ALTERNATIVE

5.3.1 Alternative 2 – Western Segment

The Western Segment of Alternative 2 is the same as for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.3.2 Alternative 2 – Central Segment

The Central Segment of Alternative 2 traverses three watersheds: NEMDC, Curry Creek, and Pleasant Grove Creek. The total length of this segment is approximately 36,400 feet along the centerline of the corridor. Approximately 7,500 feet of the corridor is within Sutter County, with the remainder in Placer County. No interchanges are proposed along this segment.

Amount of Impervious Area. The estimated amount of impervious area associated with this segment is 94 acres. Approximately 41, 35, and 19 acres are within the NEMDC, Curry Creek, and Pleasant Grove Creek watersheds, respectively.

The total width of the proposed Parkway corridor is approximately 1,000 feet in the Central Segment. Accounting for the six travel lanes and the Parkway's shoulders leaves approximately 888 feet of unpaved area where BMPs, such as detention basins and swales, could be located either within the median or between the proposed shoulders and the corridor edge.

Stream Crossings. Five stream crossings are within this segment: one on Steelhead Creek, two on Curry Creek, and two on Pleasant Grove Creek. Culverts may be used at smaller creek crossings. Where creek crossings coincide with floodplain crossings, the road would be elevated on a bridge.

Depending on the length of the creek crossing, the creek flows, and whether the crossing is also within the floodplain, the road would either be elevated on a bridge or the creek would be culverted under the road. BMPs would be incorporated into the road crossing design such that stormwater runoff would not discharge directly into the creek. Discharge from the roadway surface would be collected and conveyed to a location outside of the ordinary high water level. The creek crossing would be designed and constructed to minimize the potential impacts to water quality.

Amount of Watershed Downstream of Crossing. The Central Segment of Alternative 2 crosses Steelhead Creek in the lower portion of the watershed. Approximately 27 percent of the watershed is below these stream crossings (see Table 5-3).

This segment crosses Curry Creek and its tributaries in three locations within the middle portion of the watershed. Approximately 52 percent of the watershed is below these stream crossings (see Table 5-3).

Within the Pleasant Grove Creek watershed, this segment crosses the main stem of Pleasant Grove Creek and its northern tributary within the lower portion of the watershed. The estimated total drainage area of Pleasant Grove Creek above the proposed Parkway crossing is approximately 30 square miles. The estimated drainage area for the northern tributary to Pleasant Grove Creek above the Parkway crossing is approximately 5 square miles. Approximately 24 percent of the watershed is below these stream crossings (see Table 5-3).

Amount of Wetlands and Vernal Pool Complex Areas Crossed. This segment crosses approximately 10.6 acres of wetlands and approximately 6.9 acres of vernal pool complex area (see Figure 5-2).

Canal Crossings. This segment does not cross any existing canals. Therefore, there would be no potential impacts to canals.

5.3.3 Alternative 2 – Eastern Segment

The Eastern Segment of Alternative 2 is the same as for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.4 ALTERNATIVE 3 – THE BLUE ALTERNATIVE

5.4.1 Alternative 3 – Western Segment

The Western Segment of Alternative 3 is the same as for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.4.2 Alternative 3 – Central Segment

The Central Segment of Alternative 3 traverses three watersheds: the NEMDC, Curry Creek, and Pleasant Grove Creek. The total length of this segment is approximately 37,900 feet along the centerline of the corridor. Approximately 7,500 feet of the corridor is within Sutter County, with the remainder in Placer County. No interchanges are proposed along this segment.

Amount of Impervious Area. The estimated amount of impervious area associated with this segment is 97 acres. Approximately 23, 58, and 16 acres are within the NEMDC, Curry Creek, and Pleasant Grove Creek watersheds, respectively.

The total width of the proposed Parkway corridor is approximately 1,000 feet in the Central Segment. Accounting for the six travel lanes and the Parkway's shoulders leaves approximately 888 feet of unpaved area where BMPs, such as detention basins and swales, could be located either within the median or between the proposed shoulders and the corridor edge.

Stream Crossings. Four stream crossings are within this segment: one on Steelhead Creek, one on Curry Creek, and two on Pleasant Grove Creek. Culverts or a bridge could be used at the Steelhead Creek crossing. The Curry Creek and Pleasant Grove Creek crossings coincide with floodplain crossings; therefore, the road would be elevated on a bridge.

Depending on the length of the creek crossing, the creek flows, and whether the crossing is also within the floodplain, the road would either be elevated on a bridge or the creek would be placed in a culvert under the road. BMPs would be incorporated into the road crossing design such that stormwater runoff would not discharge directly into the creek. Discharge from the roadway surface would be collected and conveyed to a location outside of the ordinary high water. The creek crossing would be designed and constructed such that the potential impacts to water quality would be less than significant.

Amount of Watershed Downstream of Crossing. The Central Segment of Alternative 3 crosses Steelhead Creek in the lower portion of the watershed. Approximately 21 percent of the watershed is below these stream crossings (see Table 5-3).

This segment crosses Curry Creek and its tributaries in three locations within the lower portion of the watershed. Approximately 26 percent of the watershed is below these stream crossings (see Table 5-3).

Within the Pleasant Grove Creek watershed, this segment crosses the main stem of Pleasant Grove Creek and its northern tributary within the lower portion of the watershed. The estimated total drainage area of Pleasant Grove Creek above the proposed Parkway crossing is approximately 30 square miles. The estimated drainage area for the northern tributary to Pleasant Grove Creek above the Parkway crossing is approximately 5 square miles. Approximately 24 percent of the watershed is below these stream crossings (see Table 5-3).

Amount of Wetlands and Vernal Pool Complex Areas Crossed. This segment crosses approximately 11.7 acres of wetlands and approximately 10.4 acres of vernal pool complex area (see Figure 5-2).

Within the Curry Creek watershed, the corridor runs near, but not adjacent to, a vernal pool complex for approximately 6,000 feet. Along this portion of the corridor, the proposed road would be upstream of the vernal pool complex and Curry Creek. Special considerations with respect to selection and siting of BMPs may therefore be required to ensure that the vernal pool complex area is not adversely affected by stormwater runoff from the Parkway.

Canal Crossings. This segment does not cross any existing canals. Therefore, there would be no potential impacts to canals.

5.4.3 Alternative 3 – Eastern Segment

The Eastern Segment of Alternative 3 is the same as for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.5 ALTERNATIVE 4 – THE YELLOW ALTERNATIVE

5.5.1 Alternative 4 – Western Segment

Most of the Western Segment of Alternative 4 is within the Natomas Basin. The total length of this segment is approximately 14,000 feet along the centerline of the corridor. Two interchanges would be included along this segment, as shown on Figure 4-1.

Amount of Impervious Area. The estimated amount of impervious area associated with this segment is 223 acres.

Stream Crossings. In this part of the study area, the canals have intercepted the former creeks; therefore, there are no creek crossings along this segment. As discussed in the Floodplain Technical Memorandum

(URS, 2006), essentially all of the Western Segment associated with Alternative 4 would be within the 100-year floodplain, which is an extensive area of flat land.

Amount of Watershed Downstream of Crossing. Since there are no stream crossings within this segment, this criterion is not applicable.

Amount of Wetlands and Vernal Pool Complex Areas Crossed. This segment crosses approximately 0.3 acre of wetlands and approximately 9 acres of vernal pool complex area (see Figure 5-2). Unless detailed mapping shows otherwise, it appears that the proposed roadway would not be able to avoid these areas. Special considerations with respect to selection and siting of BMPs may be required to ensure that the wetlands and vernal pool complex areas are not adversely affected by stormwater runoff from the Parkway.

Canal Crossings. This segment would cross the Pleasant Grove Creek Canal. This portion of the road would be elevated on a bridge. The approximate width of the canal at this crossing is on the order of 150 to 200 feet. Design of the roadway and crossing would need to include provisions to direct surface water runoff away from the canal and not allow direct discharge into the canal. This would be accomplished with gutters or scupper drains and collection pipes that would convey stormwater runoff to land by gravity flow.

5.5.2 Alternative 4 – Central Segment

The Central Segment of Alternative 4 traverses two watersheds: Curry Creek and Pleasant Grove Creek. The total length of this segment is approximately 31,200 feet along the centerline of the corridor. Approximately 11,000 feet of the corridor is within Sutter County, with the remainder in Placer County. No interchanges are proposed along this segment.

Amount of Impervious Area. The estimated amount of impervious area associated with this segment is 80 acres. Approximately 60 and 19 acres are within the Curry Creek and Pleasant Grove Creek watersheds, respectively.

The total width of the proposed Parkway corridor is approximately 1,000 feet in the Eastern Segment. Accounting for the six travel lanes and the Parkway's shoulders leaves approximately 888 feet of unpaved area where BMPs, such as detention basins and swales, could be located either within the median or between the proposed shoulders and the corridor edge.

Stream Crossings. Three stream crossings are within this segment: one on Curry Creek and two on Pleasant Grove Creek. The Curry Creek and Pleasant Grove Creek crossings coincide with floodplain crossings; therefore, the road would be elevated on a bridge.

Depending on the length of the creek crossing, the creek flows, and whether the crossing is also within the floodplain, the road would either be elevated on a bridge or the creek would be culverted under the road. BMPs would be incorporated into the road crossing design such that stormwater runoff would not discharge directly into the creek. Discharge from the roadway surface would be collected and conveyed to a location outside of the ordinary high water. The creek crossing would be designed and constructed to minimize potential impacts to water quality.

Amount of Watershed Downstream of Crossing. The Central Segment of Alternative 4 crosses Curry Creek in the lower portion of the watershed. Approximately 14 percent of the watershed is below these stream crossings (see Table 5-3).

Within the Pleasant Grove Creek watershed, this segment crosses the main stem of Pleasant Grove Creek and its northern tributary within the lower portion of the watershed. The estimated total drainage area of Pleasant Grove Creek above the proposed Parkway crossing is approximately 30 square miles. The estimated drainage

area for the northern tributary to Pleasant Grove Creek above the Parkway crossing is approximately 5 square miles. Approximately 24 percent of the watershed is below these stream crossings (see Table 5-3).

Amount of Wetlands and Vernal Pool Complex Areas Crossed. This segment crosses approximately 8 acres of wetlands and approximately 3.7 acres of vernal pool complex area (see Figure 5-2).

Depending on the alignment of the roadway within the corridor, it may be possible to avoid most of the wetlands and vernal pool complex areas. Similar to the Central Segment for Alternative 3, the corridor runs near, but not adjacent to, a vernal pool complex for approximately 6,000 feet within the Curry Creek watershed. Along this along this portion of the corridor, the proposed road would be upstream of the vernal pool complex and Curry Creek. Therefore, special considerations with respect to selection and siting of BMPs may be required to ensure that the vernal pool complex area is not adversely affected.

Canal Crossings. This segment does not cross any existing canals. Therefore, there would be no potential impacts to canals.

5.5.3 Alternative 4 – Eastern Segment

The Eastern Segment of Alternative 4 is the same as for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.6 ALTERNATIVE 5 – THE GREEN ALTERNATIVE

5.6.1 Alternative 5 – Western Segment

The Western Segment of Alternative 5 is the same as for Alternative 4. Therefore, the potential impacts for this segment are the same as discussed for Alternative 4.

5.6.2 Alternative 5 – Central Segment

The Central Segment of Alternative 5 traverses two watersheds: Curry Creek and Pleasant Grove Creek. The total length of this segment is approximately 30,500 feet along the centerline of the corridor. Approximately 11,000 feet of the corridor is within Sutter County, with the remainder in Placer County. No interchanges are proposed along this segment.

Amount of Impervious Area. The estimated amount of impervious area associated with this segment is 78 acres. Approximately 60 and 19 acres are within the Curry Creek and Pleasant Grove Creek watersheds, respectively.

The total width of the proposed Parkway corridor is approximately 1,000 feet in the Central Segment. Accounting for the six travel lanes and the Parkway's shoulders leaves approximately 888 feet of unpaved area where BMPs, such as detention basins and swales, could be located either within the median or between the proposed shoulders and the corridor edge.

Stream Crossings. Three stream crossings are within this segment: one on Curry Creek and two on Pleasant Grove Creek. The Curry Creek and Pleasant Grove Creek crossings coincide with floodplain crossings; therefore, the road would be elevated on a bridge.

Depending on the length of the creek crossing, the creek flows, and whether the crossing is also within the floodplain, the road would either be elevated on a bridge or the creek would be placed in a culvert under the road. BMPs would be incorporated into the road crossing design such that stormwater runoff would not discharge directly into the creek. Discharge from the roadway surface would be collected and

conveyed to a location outside of the ordinary high water. The creek crossing would be designed and constructed to minimize potential impacts to water quality.

Amount of Watershed Downstream of Crossing. The Central Segment of Alternative 5 crosses Curry Creek in the lower portion of the watershed. Approximately 14 percent of the watershed is below these stream crossings (see Table 5-3).

Within the Pleasant Grove Creek watershed, this segment crosses the main stem of Pleasant Grove Creek and its northern tributary within the lower portion of the watershed. The estimated total drainage area of Pleasant Grove Creek above the proposed Parkway crossing is approximately 30 square miles. The estimated drainage area for the northern tributary to Pleasant Grove Creek above the Parkway crossing is approximately 5 square miles. Approximately 24 percent of the watershed is below these stream crossings (see Table 5-3).

Amount of Wetlands and Vernal Pool Complex Areas Crossed. This segment crosses approximately 7.7 acres of wetlands and approximately 21 acres of vernal pool complex area (see Figure 5-2).

A section of the corridor (less than approximately 1,000 feet) runs through a vernal pool complex area within the Curry Creek watershed. Special considerations with respect to selection and siting of BMPs may therefore be required to ensure that the vernal pool complex area is not adversely affected by stormwater runoff from the Parkway.

Canal Crossings. This segment does not cross any existing canals. Therefore, there would be no potential impacts to canals.

5.6.3 Alternative 5 – Eastern Segment

The Eastern Segment of Alternative 5 is the same as for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

5.7 COMPARISON OF ALTERNATIVES

The five alternatives are summarized and ranked in Table 5-4. The No-Build Alternative is not shown on Table 5-4 because no impacts would be associated with this alternative.

Alternative 1 would be the longest route and would have the largest increase in impervious area, while Alternative 5 would be the shortest route and have the least amount of impervious area. The difference between these two alternatives is 123 acres, which is approximately 20 percent. Increased roadway surface increases the volume of runoff, and therefore Alternative 1 would have a greater potential impact to water quality. Three of the alternatives (Alternatives 1, 2, and 3) would have six interchanges, while the other two (Alternatives 4 and 5) would have five. The amount of impervious area associated with the interchanges is included in the amount of impervious area for each alternative.

Alternative 3 has the fewest stream crossings, while Alternative 1 has the most. Alternative 1 crosses Steelhead Creek longitudinally for approximately 7,000 feet; this may require relocation of the creek, or realignment of the corridor. Alternatives 4 and 5 cross Curry Creek lower in the watershed than do Alternatives 1, 2, and 3; therefore, these alternatives would have less potential impacts to the water quality of Curry Creek (i.e., less of Curry Creek would be affected by the project). In addition, Alternatives 4 and 5 avoid Steelhead Creek and thus potentially affect one less watershed and stream than do Alternatives 1, 2, and 3.

Table 5-4
Summary of Alternative Ranking: Water Quality

Alternative	Total Length		Impervious Area		Stream Crossings		Canal Crossings		Watersheds	
	Feet	Rank	Acres	Rank	Number	Rank	Number	Rank	Number	Rank
1	85,500	5	745	5	15	4	1	0	5	2
2	81,300	3	737	3	11	3	1	0	5	2
3	82,400	4	740	4	10	2	1	0	5	2
4	75,500	2	624	2	9	1	1	0	4	1
5	75,000	1	622	1	9	1	1	0	4	1

Alternative	Wetlands Crossed		Vernal Pool Complex Areas Crossed		Number of Interchanges		Amount of Curry Creek Watershed Downstream of Crossing	
	Acres	Rank	Acres	Rank	Number	Rank	Percentage	Rank
1	35.8	5	123	2	6	2	63	4
2	30.9	2	124	3	6	2	52	3
3	32	4	127	4	6	2	26	2
4	28.3	3	107	1	5	1	14	1
5	28	1	124	3	5	1	14	1

Note:
Rankings range from least impact per category (1) to most impact per category (5).

The corridor associated with Alternative 1 traverses the largest amount of wetlands; Alternative 3 traverses the largest amount of vernal pool complex areas. Alternative 5 would cross through the smallest amount of wetlands area and Alternative 4 would traverse the smallest amount of vernal pool complexes. Although they would not cross through a large venal pool complex area, Alternatives 3 and 4 would run nearby and upstream of approximately 6,000 feet of vernal pool complex area.

Therefore, from a water quality perspective, Alternative 1 would represent the corridor with the highest potential to impact water quality and Alternative 5 would represent the corridor with the least potential. However, all alternatives would be designed and constructed with appropriate mitigation to avoid any significant impacts to water quality.

6.0 SECONDARY AND INDIRECT IMPACTS

Recent FHWA, EPA, and Caltrans guidance on growth inducement (Mare Island Accord, 2006) advises that analysis of potential impacts associated with growth should include an evaluation of the effects of growth on resources of concern. The following discussion presents a qualitative evaluation of potential secondary and indirect impacts of Anticipated Growth (see below for definition) on human and environmental resources in the study area.

The Council on Environmental Quality (CEQ) provided clarification of the terminology "indirect impacts" when it issued the National Environmental Policy Act (NEPA) regulation in 1978. Secondary and Indirect impacts are defined as impacts "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." Moreover, indirect effects "may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems."

A key term used in this section is "Anticipated Growth." This is defined as the growth that is anticipated in the study area as described in the relevant General Plans and adopted regional forecasts, such as the SACOG Blueprint scenario (as detailed in other sections of this Community Impact Assessment), including additional growth that may occur as a result of major new development proposals that have not yet been formally approved. It is possible that this additional growth may accelerate the rate of buildout in the study area, but it is not ultimately expected to result in any greater levels of development than is presented in adopted regional forecasts.

The following discussion considers secondary and indirect impacts on water quality that may occur as a result of direct impacts associated with the Parkway, and also as a result of anticipated growth. The study area for the analysis of secondary and indirect impacts is shown on Figure 6-1.

6.1 GROWTH INDUCEMENT SCENARIO

NEPA and CEQA both require environmental analyses to consider the effects of a project on growth. Caltrans defines growth inducement as the relationship between a proposed project and growth. This section summarizes the relationship between the Parkway and regional growth, and discusses potential secondary and indirect effects of the project related to growth inducement.

Placer Parkway would be growth inducing, as a component of the rapidly evolving urban matrix in western Placer County. While the project study area is predominately undeveloped at this time, parts of the study area are within local General Plan designations allowing urban growth. In addition, numerous proposals for major new development projects in and around the study area depicted on Figure 6-2 that are currently in various stages of the approval and entitlement process. Portions of the surrounding area (especially northern Sacramento County and southwestern Placer County) have developed very rapidly over the past several decades. This has occurred as a result of many factors, including continuing net population growth statewide, strong employment growth in the Sacramento region, relative housing affordability, and location amenities.

Population and employment growth projections for California and the Sacramento Region in general, and for southwestern Placer County and south Sutter County in particular (described in detail in the Tier 1 EIS/EIR Community Impact Assessment), indicate that that development pressures in the project vicinity will remain relatively intense, irrespective of the Parkway. Between 1950 and 2000, the California population more than tripled. During the same period, population in the six-county SACOG region increased by more than 800 percent (DOF, 2006). Projections and established goals and policies from a wide range of sources, including SACOG, Placer, Sacramento and Sutter counties, and the Cities of

Roseville, Rocklin and Lincoln, confirm that relatively high rates of population and employment growth and housing and commercial development are anticipated in the six-county region by 2050. Between 2000 and 2050, California's population is expected to increase from approximately 34 million to 55 million. During the same time period, SACOG projects that the region's growth will double, from 1.9 million in 2000 to 3.95 million in 2050, with the Roseville-Rocklin-Lincoln area remaining one of the fastest growing areas in the region (Levy and Doche-Boulos, 2005; SACOG, 2006).

Placer Parkway would be growth inducing because it would help support changes in the amount of growth beyond current general plan levels, and could influence the pace and location of some development. It is likely that Placer Parkway could help to implement the various specific development proposals in the study area, since it would serve to relieve traffic congestion associated with these proposals. Furthermore, the Parkway could affect the timing of development in the vicinity of the proposed interchange locations, particularly those proposed near vacant land adjacent to rapidly developing areas or areas now proposed for urban development. However, as the Parkway would be a limited-access road located in an area that is already undergoing extensive and rapid urbanization, its potential to facilitate growth that would not have otherwise occurred is limited. It could result in different land uses, or more intensive land uses, in the vicinity of interchanges where land use plans are still being developed and have not yet been approved. Also, it could hasten the buildout of planned commercial and industrial uses, especially in the Sunset Industrial Area and proposed Placer Ranch Specific Plan area, as well as in the proposed Sutter Pointe Specific Plan area.

In the longer term, improved access provided to lands in the Western and Eastern segments could be a factor in stimulating additional growth and development in areas west of SR 70/99 not protected by the Natomas Basin HCP, or north of the Sutter Pointe Specific Plan area, or north of Sunset Boulevard West in Placer County. Although growth is anticipated in these areas over time (as reflected in SACOG's preferred Blueprint scenario, the Sutter County General Plan, and the City of Lincoln General Plan), such development is not reflected in general plans at present and has not been formally proposed by landowners. By providing improved access to adjacent areas, Placer Parkway could be one of many factors that would encourage growth in these areas sooner than this might otherwise occur.

The factors influencing growth in the region are complex. Placer Parkway is one of several major urban development proposals in the region. While the Parkway would contribute to regional growth, including growth beyond the level identified in current general plans, it is not feasible to quantify the amount of its contribution. A single new transportation facility such as the Parkway is only one of the many factors contributing to regional growth, and it is speculative to assign a particular quantity of growth to any one factor.

Furthermore, several factors serve to limit the likely effect of the Parkway on growth, including the following:

- No interchanges are proposed for any areas that are not already approved or proposed for development;
- All approved and proposed residential development that has not already been built is projected to be built out prior to 2020, when the Parkway is proposed to open; and
- Real estate market pressures in the area have been and continue to be intense without the Parkway, and local government jurisdictions have been supportive of processing development applications in spite of anticipated regional transportation challenges.

It is unlikely that the choice of one Placer Parkway alternative over another would substantially change expected patterns of growth and development in the project study area and the surrounding region. In the Western Segment, all corridor alignment alternatives would provide new access to an area that is

currently undeveloped farmland, but that is proposed for mixed use urban development. The three more southerly alignments (Alternatives 1, 2, and 3) would provide two interchanges in the Sutter Pointe Specific Plan area, while the more northerly alignments (Alternatives 4 and 5) would provide only one interchange in this area, approximately one mile farther north of the more southerly alignments in the Western Segment. Since none of the alternative alignments would include any intersections in the Central Segment, there would be little difference in growth inducement effects among the alternatives in this segment. In the Eastern Segment, two interchanges are proposed within the existing Sunset Industrial Area Plan, in an area proposed for the Placer Ranch Specific Plan. While these interchanges would provide new access to a currently undeveloped area, this area is planned for growth. In the Eastern Segment all alternatives would follow an identical alignment, so there would be no differences in growth inducement effects among the alternatives.

A future connection at Watt Avenue could be growth inducing, because it would provide major new regional access to a portion of the project study area that is currently rural and undeveloped, although both conceptual interchange locations are now surrounded by formal development proposals or land controlled by development interests. A Watt Avenue connection is not proposed as part of the Placer Parkway project.

6.2 SECONDARY AND INDIRECT EFFECT EVALUATION

6.2.1 No-Build Alternative

Under the No-Build Alternative, land for the Parkway would not be acquired and the Parkway would not be constructed. There would not be any secondary or indirect impacts on water quality under the No-Build Alternative.

6.2.2 Build Alternatives

Secondary and indirect impacts on water quality could occur as a result of anticipated growth and also as a result of direct impacts associated with the Parkway.

Anticipated growth would result in the creation of additional impervious surfaces and increased run-off in the study area that would most likely not have occurred in the absence of such growth. This would have adverse impacts on surface water quality in the study area. These impacts would be direct impacts of other projects not associated with Placer Parkway, and would be required to be analyzed as part of independent environmental review. Although it is not feasible to perform a detailed evaluation of these projects at this stage as specific design details are not known, potential impacts are taken into account in the Placer Parkway 2040 Cumulative analysis (see Section 7.2). This analysis evaluates a 2040 cumulative scenario, which is considered to be an appropriate projection of future development. This scenario includes full-residential build-out in Placer County west of Sierra College Boulevard, including general plan areas and major developments, and employment and population growth in line with SACOG forecasts. It assumes levels of growth and development will occur at the higher end of a potential feasible range and therefore represents a reasonable maximum development scenario for which cumulative and secondary and indirect impacts have been analyzed.

Although it is not possible to predict with any certainty where increased run-off will occur, it is reasonable to assume that secondary and indirect impacts associated with reduction in pervious land cover and increased run-off, either from the construction of the Parkway or as a result of growth induced by the Parkway, could adversely affect water quality. This could occur in a number of ways:

- Increased non-point source water pollution of surface water bodies through increased run-off from new developments;

- Impacts on aquatic flora and fauna as a result of degraded water quality and increased sedimentation; or
- Additional contamination of surface water bodies associated with new stream crossings required by new developments.

Secondary and indirect impacts are required to be mitigated through the NPDES Phase II General Permit for the Discharge of Stormwater.

7.0 CUMULATIVE IMPACTS

7.1 CUMULATIVE IMPACT SCENARIO

Analysis of cumulative impacts is required under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that are the focus of cumulative impact analysis. The CEQ's regulations (CEQ, 1987) explicitly state that cumulative impacts must be evaluated along with the direct and indirect effects of each alternative.

CEQA defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, §15355). Stated another way, "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the environmental document together with other projects causing related impacts" (CEQA Guidelines, §15130). Although a project may cause an individually limited or individually minor incremental impact that, by itself, is not significant, the increment may be "cumulatively considerable" and thus significant.

FHWA has requested that cumulative conditions for the analysis of project alternatives in the Tier 1 EIS/EIR for Placer Parkway be based on development levels that are 20 years beyond the projected opening of Placer Parkway. For planning purposes, Placer County Transportation Planning Agency (PCTPA) has identified 2020 as the opening year of the Parkway. Cumulative impacts are therefore being evaluated for the year 2040. This 2040 scenario includes the following projects (see Figure 6-2):

- Full build-out of all residential land in Placer County west of Sierra College Boulevard, including current general plan areas and the following major development proposals in West Placer County:
  - The Creekview and Sierra Vista Specific Plan areas in Roseville's Memorandum of Understanding (MOU) Remainder Area
  - The Sphere of Influence (SOI) expansion areas of Lincoln
  - The Placer Vineyards, Regional University and Community, and Placer Ranch Specific Plans in unincorporated Placer County
  - The Curry Creek Community Plan area
- Growth in retail employment in Placer County that balances the growth in residential development by matching SACOG's countywide estimate of about 0.32 employee per dwelling unit from their 2025 forecasts.
- Growth in total employment levels in Placer County that balances the growth in residential development by matching SACOG's 1.3 employees per dwelling unit from their 2025 forecasts.
- Full build-out of the residential development in the proposed Sutter Pointe Specific Plan area along with a non-residential development level that balances the residential development in that area.

- Estimated 2040 developments in all other portions of SACOG's six-county region based on assuming a constant rate for the development growth between 2005 levels and the 2050 Preferred Blueprint scenario for each of SACOG's traffic analysis zones (TAZs).

7.2 CUMULATIVE IMPACTS EVALUATION

The cumulative development scenario would result in development of a large portion of the study area and adjacent areas. This would result in an increase in impervious services and loss of water features such as streams, wetlands and vernal pools. The combined effects of increased areas of impervious surfaces associated with multiple projects, with the potential for the paved roadway surfaces to carry increased runoff from the roadway to the study area streams, could exacerbate adverse water quality impacts associated with individual projects through a corresponding increase in the volume and rate of runoff due to reduced percolation of surface water. Additionally, construction in, across, and/or over streams, wetlands and vernal pools, and canals has the potential to degrade water quality. The potential adverse impacts on water quality associated with this development would contribute to cumulative impacts to water quality in the study area.

Impacts associated with Placer Parkway include an increase in impervious area potentially resulting in increased peak flows and runoff volumes. The amount of impervious area associated with Placer Parkway would be roughly one square mile (ranging from approximately 0.98 square mile for Alternative 5 to approximately 1.2 square miles for Alternative 1). While this is a very small amount compared to the total area of the watersheds and the project's contribution to peak flows and volumes in the creeks would be expected to be small, when combined with potential upstream flow increases, the cumulative impacts on water quality could still be significant.

Mitigation strategies have been identified to reduce these impacts to less-than-significant levels. These include compliance with NPDES requirements during project construction and operations that require projects to develop and implement a Stormwater Pollution Prevention Plan; BMPs to prevent erosion, control runoff, reduce roadway and vehicle pollutants from entering watercourses; and prevent pollutants from being discharged off site. Other strategies include avoiding impacts by design (i.e., strategies to limit impacts from construction activities, and site planning and design features to avoid impacts) and implementation of Best Management Practices. Also, the requirements of the Pleasant Grove Creek/Curry Creek Watershed Management Groups and the Natomas Basin Habitat Conservation Plan would be identified and addressed in Tier 2.

In addition, Sutter County and Placer County General Plan policies and programs are intended to offset the potential direct and cumulative water quality problems that may arise from development. New developments are required to detain onsite drainage such that the rate of runoff is maintained at pre-development levels. Because peak runoff rates from new development would be maintained at pre-development levels, increase in channel erosion and sedimentation are not expected to occur. Given this regulatory environment, the relatively minor amount of impervious surface associated with Placer Parkway in comparison to the overall cumulative development scenario, and with development of the mitigation strategies identified in this report into enforceable mitigation measures, Placer Parkway's incremental contribution to cumulative impacts related to water quality would not be cumulatively considerable. Therefore, Placer Parkway's cumulative impacts associated with water quality would be less than significant.

The Sutter County and Placer County General Plan policies and programs are intended to offset the potential direct and cumulative flooding and water quality problems that may arise from development. New developments are required to detain onsite drainage such that the rate of runoff is maintained at pre-development levels. Because peak runoff rates from new development would be maintained at pre-

development levels, there would be no increases in peak flows. Both Sutter and Placer counties have ordinances that limit construction in floodplains, Given the specific policy directives of the General Plans, the project would have less than cumulatively considerable contributions to peak flows and floodplains. Although the amount of impervious area associated with the proposed Parkway would be approximately 1 square mile (ranging from approximately 0.98 square mile for Alternative 5 to approximately 1.2 square mile for Alternative 1), this is a very small portion of the total area of watershed and the project's contribution to peak flows and volumes in the creeks would be expected to be small and not cumulatively significant.

Construction activities must be performed in accordance with the NPDES General Permit for Construction Activities. New developments are required to detain onsite drainage such that the rate of runoff is maintained at pre-development levels. Assuming that the specific policy directives of the Community Plan are implemented, cumulative impacts related to water quality are not expected to occur.

8.0 WATT AVENUE INTERCHANGE

As shown on Figure 2-3, two general locations are proposed for the Watt Avenue interchange. Because the configuration of the interchanges would not likely change by location, the increase in impervious surface would be similar for all locations. The estimated amount of additional impervious area associated with the interchanges is approximately 65 acres. The first location for the interchange, associated only with Alternative 1 (Option One), would be located near and potentially cross Curry Creek. The other Watt Avenue interchange locations, which are associated with Alternative 1 (Option Two) and Alternatives 2 through 5, would be placed outside of the Pleasant Grove Creek floodplain limits and would not cross the creek; therefore, the potential impacts to water quality would be less for these options.

9.0 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION STRATEGIES

Table 9-1 summarizes the mitigation strategies to be considered for the project. Local, state, and federal agencies require the development of practical mitigation measures in response to the impacts of construction activities and ongoing project operations that discharge sediment and other undesirable elements to existing waterways. The measures considered for Placer Parkway have been categorized as standard conditions (SCs) and project design features (PDFs). SCs include the regulatory requirements dictated by local, state and/or federal mandates. These include the required compliance with NPDES permit requirements, as well as county ordinances (e.g., erosion and grading ordinance). PDFs include measures that can be incorporated into the design of the project to avoid, minimize, or reduce potential environmental impacts.

Table 9-1
Potential Mitigation Measures to be Considered in Tier 2
for Impacts to Surface Water Hydrology and Floodplains

Category	Measure
SC	• Meet Sutter County, Placer County, and RD 1000 requirements for siting and design of facilities • Comply with the water quality objectives of the Basin Plan through compliance with the NPDES Phase II General Permit and/or Caltrans NPDES Permit for the Discharge of Stormwater • Comply with the NPDES General Construction Activity Stormwater Permit; includes preparation and implementation of an SWPPP • Comply with the applicable county ordinances that require Erosion and Grading Plans • Comply with the applicable Caltrans and county NPDES Stormwater Permits; includes preparation and implementation of a WQMP
PDF	• Limit disturbance during construction to minimize impacts • Locate the alternative to avoid or minimize impacts to streams and ecologically sensitive areas (e.g., wetlands and vernal pool complex areas) • Design features to avoid impacts to water quality • Incorporate appropriate BMPs (e.g., provide appropriate detention and use vegetation to provide opportunities for particulate and pollutant settlement)

Notes:

BMP = Best Management Practice
MM = mitigation measure
PDF = project design feature
SC = standard condition
WQMP = Water Quality Management Plan

Based on identified impacts described above, the following key strategies for mitigation have been preliminarily identified and are discussed in further detail:

- Comply with NPDES requirements (construction and operations);
- Avoidance by design (Caltrans design guidance, consider future development in design);
- Implement Caltrans/Placer County/Sutter County BMPs;
- Identify and address, as needed, requirements of Pleasant Grove Creek/Curry Creek Watershed Management Groups; and

- Identify and address, as needed, Natomas Basin Habitat Conservation Plan requirements.

9.1 COMPLY WITH NPDES REQUIREMENTS (CONSTRUCTION AND OPERATIONS)

9.1.1 NPDES Requirements for Construction Activities

The General Permit authorizes a general permit for stormwater discharges associated with construction activities that disturb one or more acre of land. The General Permit requires submittal of an NOI to comply with the permit and the development of an SWPPP for construction activities. The SWPPP must describe BMPs, including erosion controls, sediment controls, and other controls to prevent stormwater from affecting offsite surface water bodies. The SWPPP must also include a stormwater monitoring program.

Each county has and enforces a Stormwater Ordinance and a Land Grading and Erosion Control Ordinance. These ordinances require construction sites to obtain a grading permit and implement erosion and sediment control measures to prevent adverse water quality and sedimentation impacts to existing drainage systems.

If the project involves discharge or places fill material into navigable water or wetlands, an application for a Section 404 permit must be submitted to the USCOE. This permit is required to ensure that discharge will not violate water quality standards.

If the project requires realignment of streams, which may include installation of culverts in streams, a Streambed Alteration agreement must be obtained from CDFG.

In the event that during detailed design, the need arises for dewatering during construction, the project would need to file an application for the Dewatering and Low Threat Discharges to Surface Waters Permit, Order No. 5-00-175 (NPDES CAG995001).

9.1.2 NPDES Requirements for Operations

As a major transportation project, the project must comply with the Caltrans statewide NPDES permit (SWRCB, 1999) and its Stormwater Management Plan (Caltrans, 2003b).

Pursuant to the Phase II NPDES General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems, the project also must incorporate long-term post-construction BMPs and monitoring to protect water quality and control runoff. Projects in Placer County must currently comply with these requirements. The portion of the study area within Sutter County is currently exempt from these requirements, but as development in the area progresses, would be expected to comply as well. Placer County is currently working with Sacramento County to prepare new water quality standards and a design manual for new projects in the Sacramento County and South Placer County regions. The design manual will provided guidance for selecting, designing, installing, and maintaining post-construction stormwater quality control measures. The new standards and guidelines would apply to roads that consist of 5 or more acres of impervious surface. To comply with federal and state CWA requirements, local agencies may be required to adhere to Low Impact Development (LID) principles in order to protect water quality in the interest of fish and wildlife. LID strategies that integrate BMPs to protect water quality may also reduce runoff quantity.

9.2 AVOIDANCE BY DESIGN

Design guidance can be found in various Caltrans documents, in particular the Project Planning and Design Guidelines (Caltrans, 2003a). To reduce the environmental impacts of highways and bridges on water quality, the following construction, site planning, and design practices should be considered.

Limit Impacts from Construction Activities

- Limit temporary disturbance to minimum areas necessary for construction;
- Restore disturbed areas to pre-project conditions;
- Stabilize disturbed soil areas to prevent erosion after construction; and
- Limit construction activities in or near creeks, including limiting amount of fill placed in creeks, wetlands or vernal pool complex areas.

Site Planning to Avoid Impacts

- Avoid or minimize stream crossings if possible;
- Align roadway within the corridor to decrease impervious cover by reducing the area of pavement or number of road miles, if possible;
- Provide sufficient setback distances in accordance with Caltrans and County requirements between the highway right-of-way and wetlands or riparian areas;
- Locate highways and bridges away from sensitive areas and establish buffer zones where possible; and
- Locate the alternative as low in the watershed as possible, to minimize the area affected.

Design Project Features to Avoid Impacts

- Design project features (e.g., culverts, drainage systems, and bridges) to avoid increasing flow velocities that may cause or contribute to downstream erosion and consider Low Impact Development (LID) principles where appropriate;
- Design project features to avoid direct discharge of roadway runoff that may contain pollutants into streams and other sensitive sites (e.g., wetlands and vernal pool complex areas);
- Disconnect and infiltrate runoff using structural runoff controls, such as vegetated swales; and
- Incorporate appropriate BMPs; e.g., provide appropriate detention and use vegetation to provide opportunities for particulate and pollutant settlement (see Section 9.3).

Additional guidance on these measures can be found in Caltrans' Stormwater Quality Handbook (Caltrans, 2003a), U.S. EPA's National Management Measures to Control Nonpoint Source Pollution from Urban Areas (U.S. EPA, 2005), and other similar publications.

9.3 IMPLEMENT BMPs

The Caltrans Project Planning and Design Guidelines (Caltrans, 2003a) Statewide Stormwater Management Plan (Caltrans, 2003b), and other Caltrans reference documents identify permanent and temporary BMPs that have been approved for statewide application. The BMPs fall into four categories: (1) design pollution prevention BMPs, (2) treatment BMPs, (3) construction site BMPs, and (4) maintenance BMPs. These BMPs must be considered during the planning and design process.

Permanent BMPs include both design pollution prevention and treatment BMPs. Design pollution prevention BMPs are permanent measures to improve stormwater quality (e.g., reduce erosion, manage

non-stormwater discharges, etc.) after construction is completed. These BMPs that should be considered for incorporation, as appropriate, into the design of Placer Parkway are listed below.

Consideration of Downstream Effects Related to Potentially Increased Flow

- Incorporate BMPs that address the first flush. Studies (Stenstrom and Kayhanian, 2005) have shown that BMPs are generally more effective in treating higher concentrations than lower concentrations. Therefore, selecting and applying BMPs to the first runoff, when concentrations are higher, will be a more effective strategy for two reasons: (1) more contaminated runoff is being treated and (2) the BMPs are likely to have higher removal efficiencies;
- Direct runoff from bridges to an onshore treatment system. Runoff can be conveyed via scupper drains and collection pipes or gutters onto the shore, from which it would be sent to a retention pond or other runoff treatment feature. The topography and approach slope at some bridge locations might preclude design of gravity flow collection and conveyance systems;
- Incorporate BMPs that will settle out particulates. Studies by Caltrans (e.g., Caltrans, 2003c) have found that the majority of the metals present in runoff are found in the particulate form; and
- Incorporate BMPs that will prevent downstream erosion.

Preservation of Existing Vegetation

- Existing vegetation should be preserved to the extent practical.

Concentrated Flow Conveyance Systems

- Incorporate features to eliminate or reduce concentration of discharge and thereby reduce erosion. Features could include ditches, berms, dikes and swales; overside drains; flared culvert end sections; and outlet protection/velocity dissipation devices.

Slope/Surface Protection Systems

- Incorporate vegetated surfaces and/or provide pavement to eliminate potential for erosion. The use of vegetation to cover soil areas should be maximized since vegetated surfaces prevent erosion, promote infiltration (which reduces runoff), and remove pollutants from stormwater.

Types of treatment BMPs that could be used to reduce the discharge of specific pollutants that may be associated with the project are summarized in Table 9-2.

9.4 IDENTIFY AND ADDRESS, AS NEEDED, PLEASANT GROVE CREEK/CURRY CREEK WATERSHED MANAGEMENT GROUPS' REQUIREMENTS

The Pleasant Grove/Curry Creek Ecosystem Restoration Plan (ERP) (Foothill Associates, 2005) addresses resource management and land use in the Pleasant Grove and Curry Creek watersheds and is intended to guide future planning, restoration, and land use management activities in the watersheds. Objectives from the ERP that may be relevant and should be considered during planning, design, and construction of Placer Parkway include the following:

Objective 3.1 Implement a regular program of water quality monitoring to characterize ambient conditions and to identify both the source (point and non-point) and constituent of discharges into surface waters.

Table 9-2
Pollutants of Concern and Applicable Treatment BMPs

Pollutant	Biofiltration Systems	Infiltration Basin	Detention Devices	Dry Weather Flow Diversions	Coarse Solids Removal Devices	Traction Sand Traps
Total Suspended Solids	✔	✔	✔	✔		✔
Nutrients		✔		✔		
Pesticides		✔		✔		
Particulate Metals	✔	✔	✔	✔		
Dissolved Metals		✔		✔		
Pathogens		✔		✔		
Litter	✔	✔	✔	✔	✔	
Biochemical Oxygen Demand		✔		✔		
Total Dissolved Solids		✔		✔		
Source: Caltrans, 2002.						

Objective 5.2 Protect, enhance or recreate natural riparian processes, particularly hydrology and associated high water events, to promote the natural cycle of channel movement and sediment deposition that create a mosaic of riparian vegetation types.

Objective 6.3 Integrate meaningful ecosystem protection and restoration opportunities with the development review and approval process to encourage low impact development and transportation planning.

Objective 6.4 Provide adequate enforcement of stormwater and other water quality regulations to protect any sensitive surrounding habitats from adverse impacts.

Objective 8.1 Control discharges into and human activities adjacent to the creeks to prevent unhealthy levels of anthropogenic bacteria.

Objective 8.2 Implement measures to prevent discharge of urban runoff containing contaminants (e.g., herbicides/pesticides, nutrients, and hydrocarbons) from existing and new development and roads.

Objective 8.3 Prevent excess sediment by controlling upland and channel erosion associated with increased runoff due to development of loss of stabilizing vegetation.

9.5 IDENTIFY AND ADDRESS, AS NEEDED, NATOMAS BASIN HABITAT CONSERVATION PLAN'S REQUIREMENTS

The purpose of the Natomas Basin Habitat Conservation Plan (NBHCP) (City of Sacramento et al., 2003) is to promote biological conservation in conjunction with economic and urban development within the basin. The goal of the NBHCP is to preserve, restore, and enhance habitat values while allowing urban development to proceed according to local land use plans. The NBHCP provides requirements regarding buffers between development and specific resource areas (e.g., garter snake habitat, wetlands, etc.),

grading and construction activity restrictions, management of vegetation control along ditches and canals, and application of herbicides and pesticides. Because pollutants such as petroleum compounds in urban runoff have been observed to have adverse effects on the giant garter snake and its food supply, stormwater runoff from the Parkway should not be discharged directly into habitat areas.

10.0 ANALYSES TO BE UNDERTAKEN IN TIER 2

The following technical studies will need to be completed as part of Tier 2.

- Prepare Stormwater Data Report (SWDR) that summarizes the stormwater quality issues of the project. Guidelines for the SWDR and its accompanying checklists are provided in Caltrans' Project Planning and Design Guide (Caltrans, 2002). For Tier 2, the SWDR and the checklists will be preliminary, since not all information will be available. The SWDR is updated as the project proceeds. The SWDR summarizes the information from the following checklists:

    1. Checklist SW-1 – Site Data Resources. This checklist includes the following categories for data collection: topographic, hydraulic, soils, climatic, and water quality.

    2. Checklist SW-2 – Stormwater Quality Issues Summary. This checklist includes existing background information on water quality and potential sensitive receiving waters or valuable habitats.

    3. Checklist SW-3 – Measures for Avoiding or Reducing Potential Stormwater Impacts. This checklist provides direction to the project designer on measures that should be considered to avoid or reduce potential stormwater impacts.

- Prepare Stormwater Quality Assessment (SWQA). This identifies applicable stormwater regulations and stormwater impacts to be mitigated. It also identifies the receiving water discharges, and evaluates the potential project-related stormwater impacts on the receiving water quality. Caltrans is preparing detailed information regarding the preparation of the SWQA; these guidelines will be available in the SWQA Guidance Document, Volume 5 of the Caltrans Standard Environmental Reference (web site http://www.dot.ca.gov/ser).

- Select applicable BMPs to be considered for design based on Caltrans and county guidance and considering needs of the Pleasant Grove/Curry Creek ERP and NBHCP. Guidelines for BMP selection and its accompanying checklists are provided in Caltrans' Project Planning and Design Guide (Caltrans, 2002). For Tier 2, BMP selection will be preliminary, since not all information will be available and will be refined as the project proceeds. BMPs should be selected based on the information presented in the SWDR and SWQA. The analysis should include reviewing and completing the following Caltrans decision trees and checklists:

    1. Design Pollution Prevention Decision Tree DPP-1
    2. Checklist DPP-1, Design Pollution Prevention BMPs
    3. Treatment Decision Tree T-1
    4. Checklist T-1, Treatment BMPs

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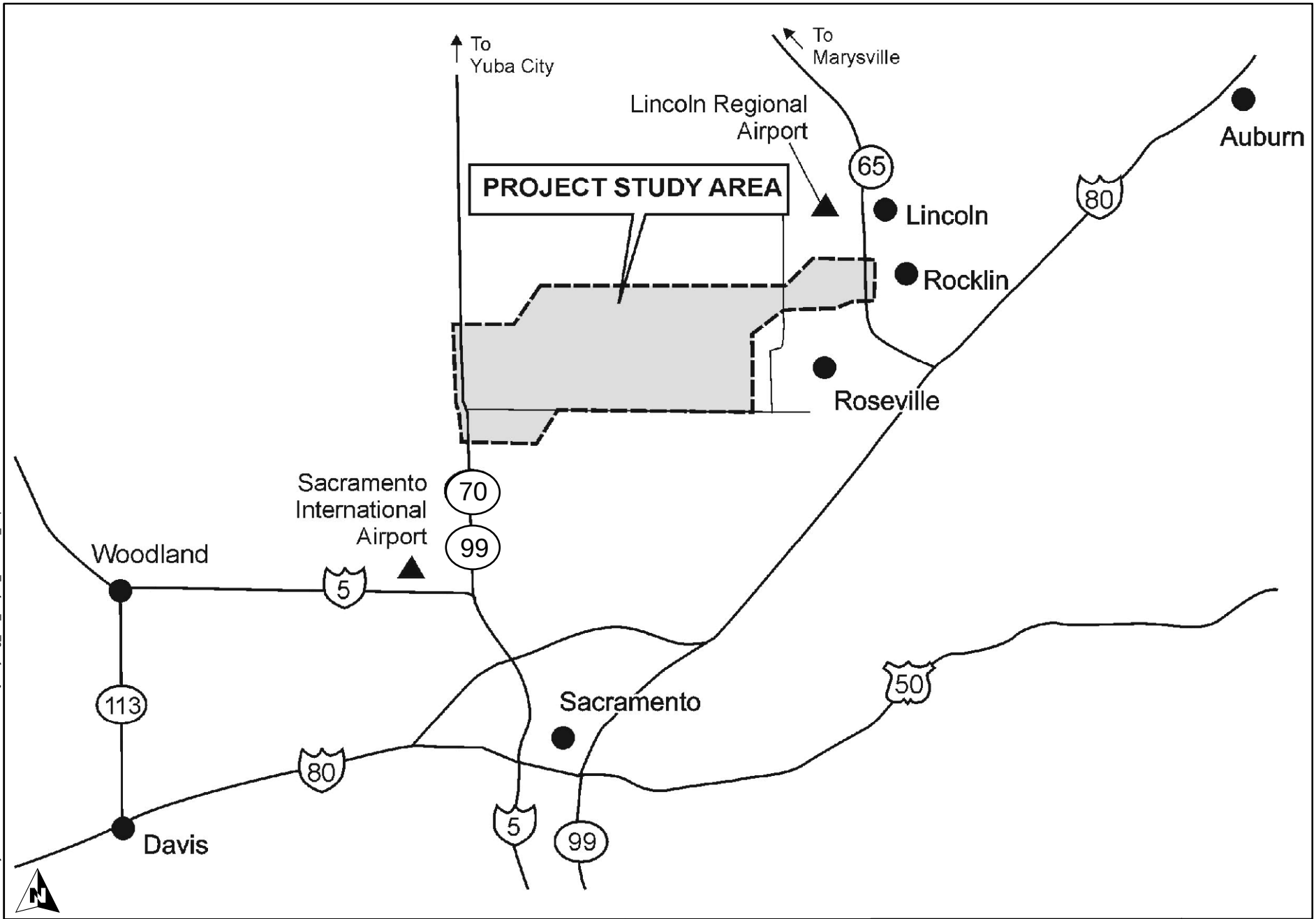

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PLACER PARKWAY

Tier 1 EIS/EIR
Water Quality
Technical Memorandum

Project Location

Figure 1-1

June 2007

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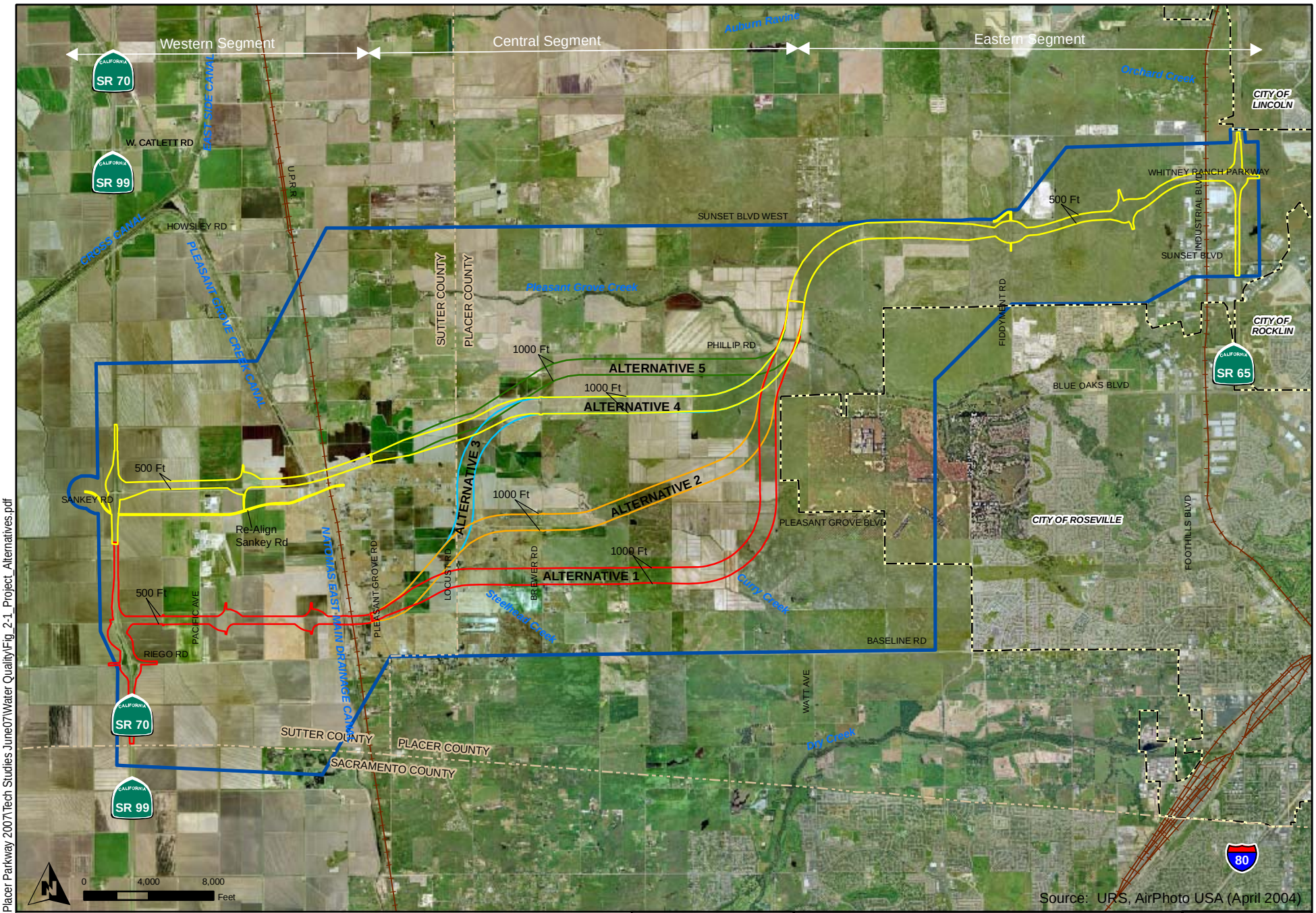
Western Segment
Central Segment
Eastern Segment
SR 70
SR 99
SR 65
SR 80
W. CATLETT RD
HOWSLEY RD
SANKEY RD
RIEGO RD
SUNSET BLVD WEST
SUNSET BLVD
WHITNEY RANCH PARKWAY
PHILLIP RD
BLUE OAKS BLVD
PLEASANT GROVE BLVD
BASELINE RD
FIDDYMENT RD
INDUSTRIAL BLVD
FOOTHILLS BLVD
PACIFIC AVE
PLEASANT GROVE RD
LOCUST RD
BREWER RD
WATT AVE
EAST SIDE CANAL
CROSS CANAL
PLEASANT GROVE CREEK CANAL
NATOMAS EAST MAIN DRAINAGE CANAL
UPRR
SUTTER COUNTY
PLACER COUNTY
SACRAMENTO COUNTY
Auburn Ravine
Orchard Creek
Pleasant Grove Creek
Steelhead Creek
Curry Creek
Dry Creek
CITY OF LINCOLN
CITY OF ROCKLIN
CITY OF ROSEVILLE
ALTERNATIVE 1
ALTERNATIVE 2
ALTERNATIVE 3
ALTERNATIVE 4
ALTERNATIVE 5
500 Ft
1000 Ft
Re-Align Sankey Rd
0
4,000
8,000
Feet
Source: URS, AirPhoto USA (April 2004)
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary
PLACER PARKWAY
Tier 1 EIS/EIR
Water Quality
Technical Memorandum
Project Alternatives
Figure 2-1
June 2007
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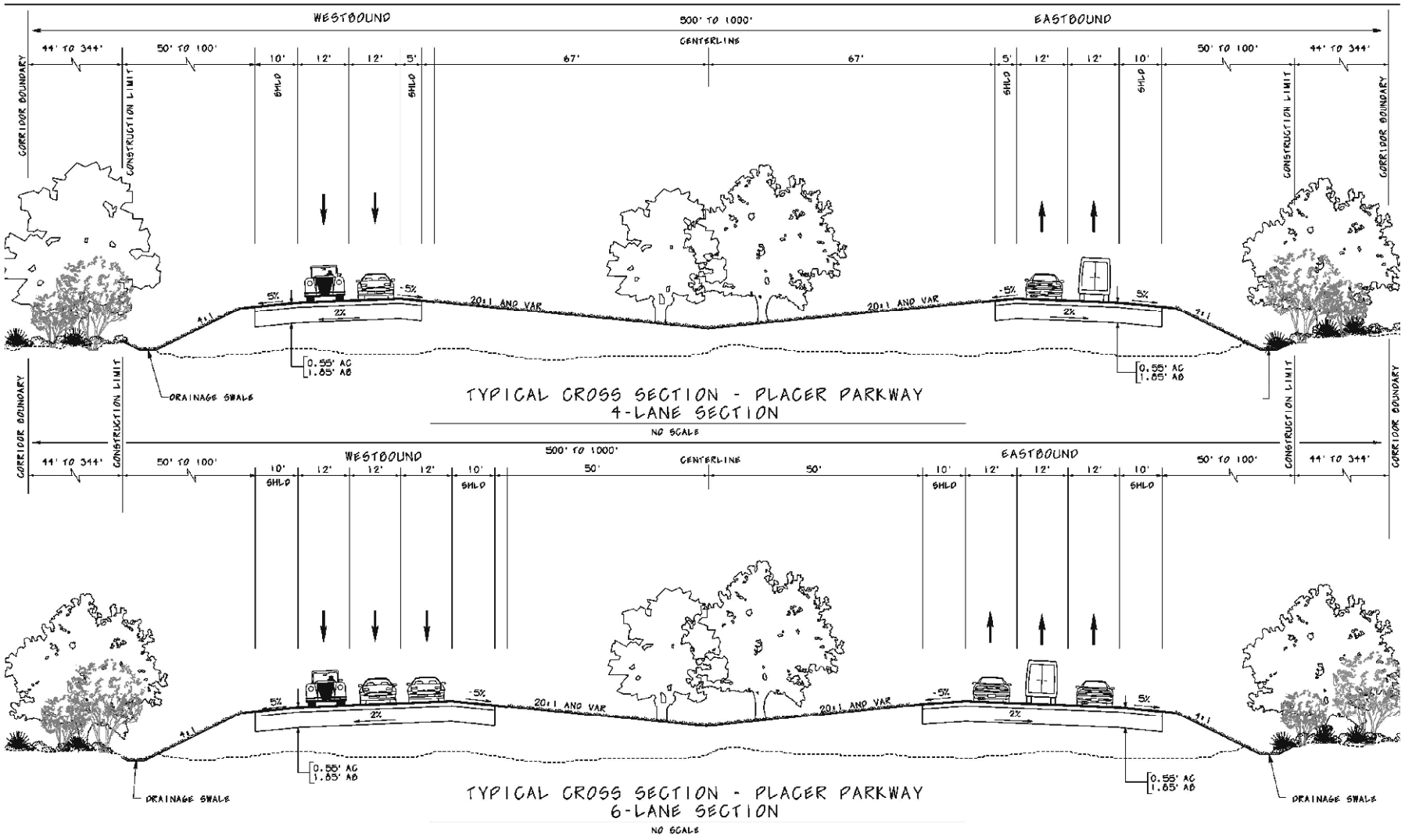
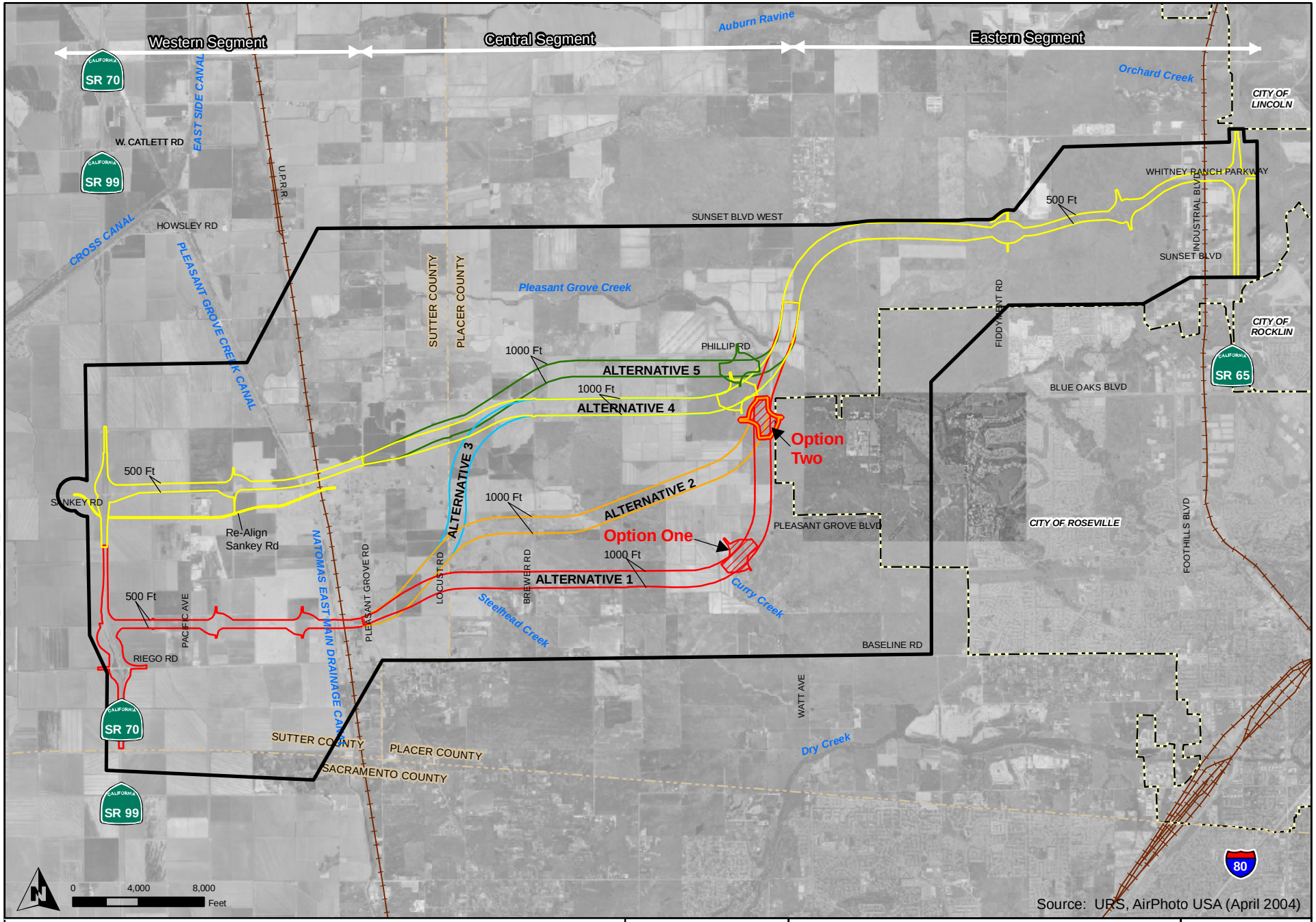


PLACER PARKWAY CORRIDOR PRESERVATION	Tier 1 EIS/EIR Water Quality Technical Memorandum	Typical Cross Section (Conceptual)	***Figure 2-2*** ***June 2007***

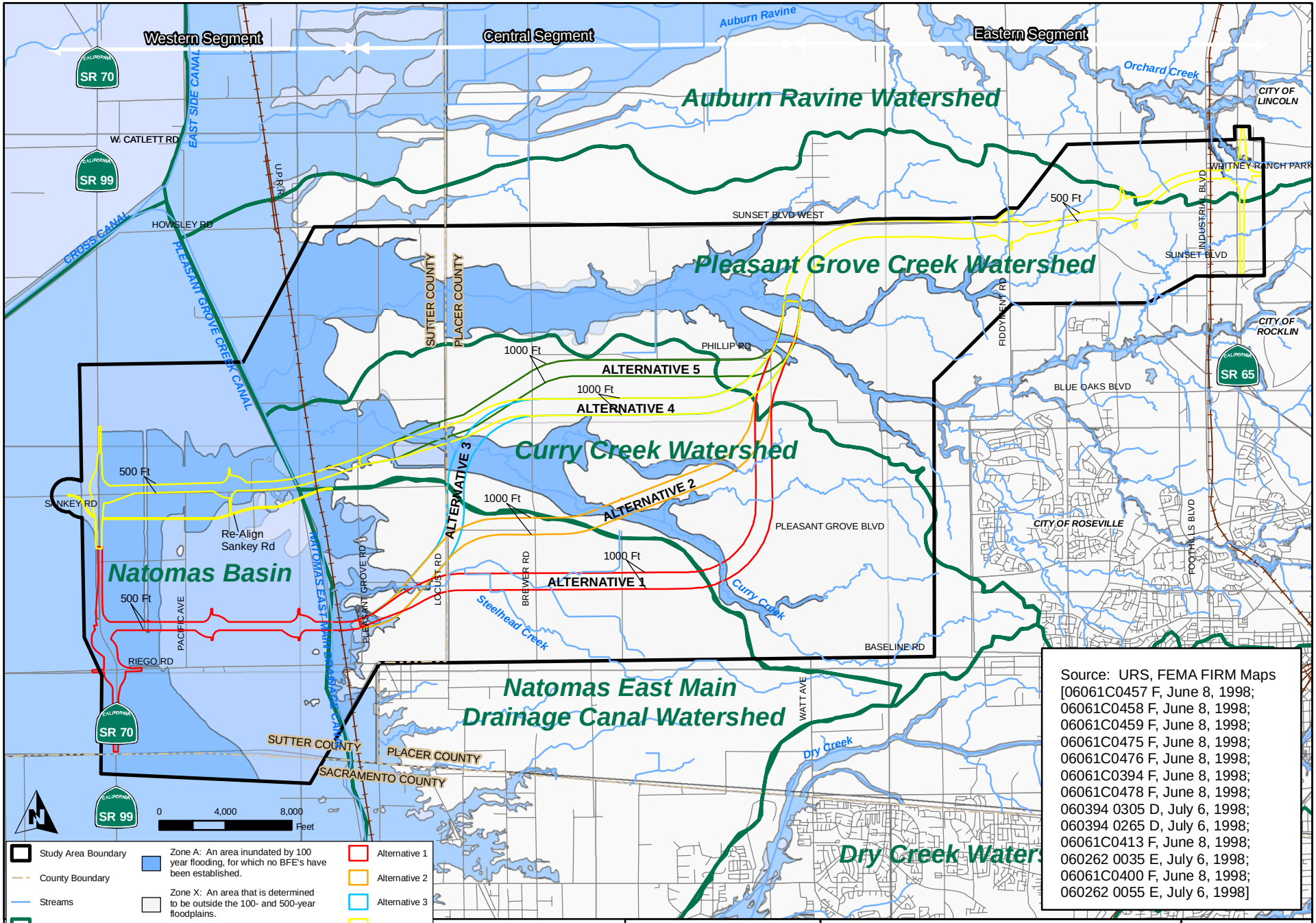


Tier 1 EIS/EIR
Water Quality
Technical Memorandum

Potential Watt Avenue Interchange

Figure 2-3

June 2007



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06061C0394 F, June 8, 1998;
06061C0478 F, June 8, 1998;
060394 0305 D, July 6, 1998;
060394 0265 D, July 6, 1998;
06061C0413 F, June 8, 1998;
060262 0035 E, July 6, 1998;
06061C0400 F, June 8, 1998;
060262 0055 E, July 6, 1998]

PLACER PARKWAY

Tier 1 EIS/EIR
Water Quality
Technical Memorandum

Watershed Boundaries

Figure 4-1

June 2007

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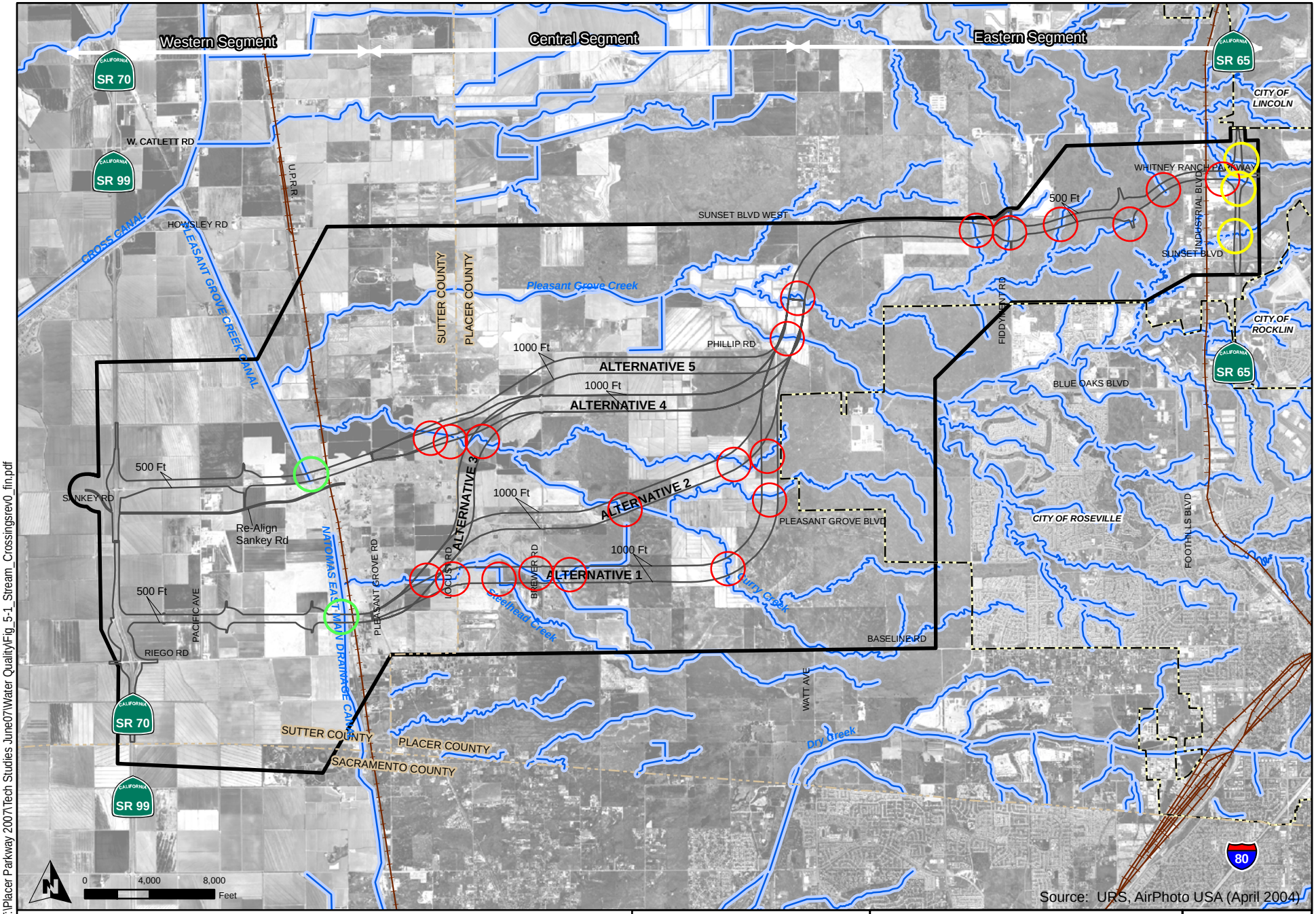

Alternative
Study Area Boundary
County Boundary
City Boundary
Stream
New Stream Crossing
Existing Canal Crossing
Existing Stream Crossing

PLACER PARKWAY

Tier 1 EIS/EIR
Water Quality
Technical Memorandum

Stream Crossings

Figure 5-1

June 2007

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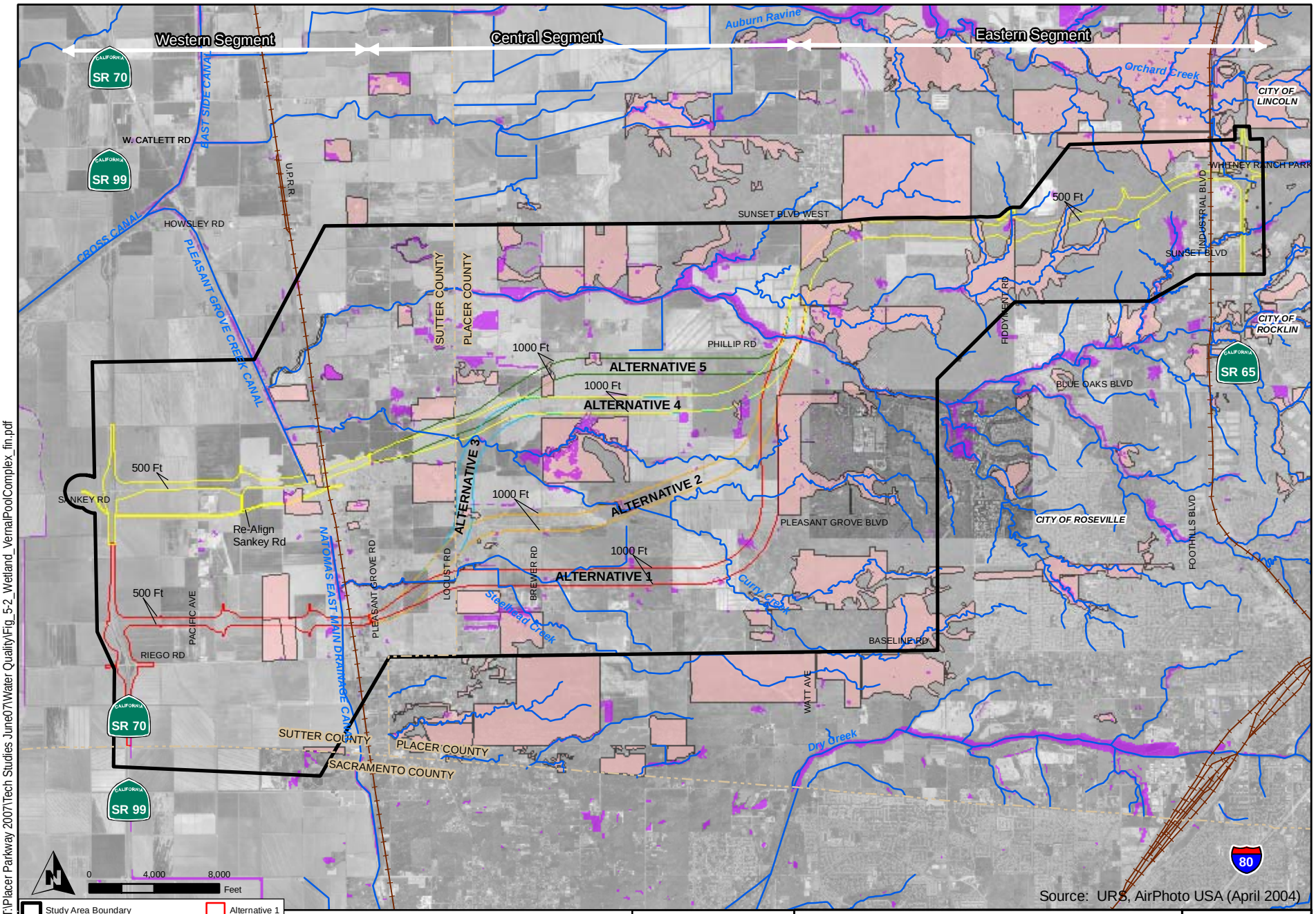

PLACER PARKWAY

Tier 1 EIS/EIR
Water Quality
Technical Memorandum

Watershed Boundaries, Wetlands, and Vernal Pool Complexes

Figure 5-2

June 2007

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Cities/Towns:

A - Woodland
B - Sacramento
C - Citrus Heights
D - Folsom
E - Roseville
F - Rocklin
G - Loomis
H - Lincoln
I - Wheatland
J - Auburn

Planned/Proposed Development Areas:

1 - Natomas Joint Vision Area
2 - Rio Linda and Elverta Community Plan Area
3 - McClellan Redevelopment Project Area
4 - Measure M / Sutter Pointe
5 - Placer Vineyards Specific Plan Area
6 - Riolo Vineyards Specific Plan Area
7 - Sierra Vista Specific Plan Area
8 - Curry Creek Community Plan Area
9 - Regional University Specific Plan Area
10 - Creekview Specific Plan Area
11 - Brookfield Property
12 - Placer Ranch Specific Plan Area
13 - City of Lincoln SOI Expansion Area

Nicolaus Road
Feather River
Sacramento River
Sacramento International Airport
SR 99
SR 70
SR 65
80
5
CROSS CANAL
EAST SIDE CANAL
0 8,000 16,000 Feet

County Boundary
Railroads
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Existing and Approved Development
Planned / Proposed Development (including future conservation areas)
Existing Conservation Areas
Developed Unincorporated Areas
Municipal Facilities
Study Area for Secondary and Indirect Impacts
Project Study Area Boundary
100 Year Floodplain Areas

Source: North Fork Associates;Mara Feeney Associates; Sutter County Planning Division; County of Sacramento Planning and Community Development Department; City of Sacramento Development Services Department; Sunset Industrial Area Plan; City of Lincoln Community Development Department; Natomas Basin HCP;Placer County Planning Deptartment; City of Sacramento; City of Roseville

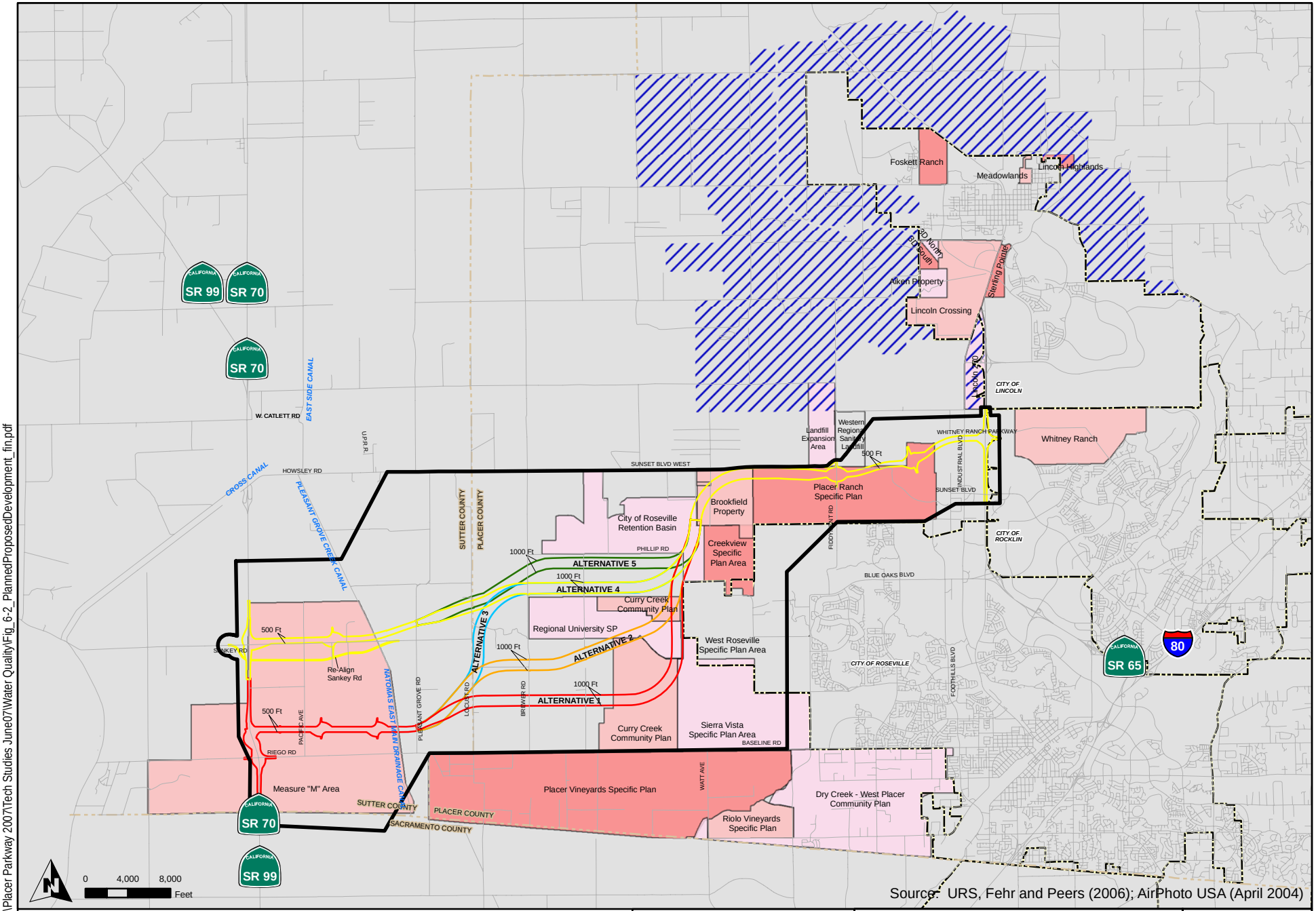
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Water Quality
Technical Memorandum

Secondary and Indirect Impact Analysis Study Area

Figure 6-1

June 2007



Source: URS, Fehr and Peers (2006); AirPhoto USA (April 2004)

Study Area Boundary
City Boundary
County Boundary
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
City of Lincoln Sphere of Influence
Planned/Proposed Development

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR
Water Quality
Technical Memorandum

Planned / Proposed Development

Figure 6-2

June 2007

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