DRAFT

Placer Parkway Corridor Preservation

Tier 1 Environmental Impact Statement/ Program Environmental Impact Report

Volume I

June 29, 2007

Prepared by

URS Corporation

In Association with
DKS Associates

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

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PLACER PARKWAY CORRIDOR PRESERVATION
IN THE COUNTIES OF SUTTER AND PLACER, STATE OF CALIFORNIA
FROM STATE ROUTE 70/99 TO STATE ROUTE 65

DRAFT TIER 1 ENVIRONMENTAL IMPACT STATEMENT/
PROGRAM ENVIRONMENTAL REPORT

Submitted Pursuant to: (State) Division 13, Public Resources Code
(Federal) 42 USC 4332(2)(c)

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration, and

THE STATE OF CALIFORNIA
Department of Transportation, and

SOUTH PLACER REGIONAL TRANSPORTATION AUTHORITY

June 21, 2007
Date of Approval

Celia McAdam
Executive Director
South Placer Regional Transportation Authority

25 June 2007
Date of Approval

Jon D Webb
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June 28, 2007
Date of Approval

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Abstract

Abstract: The proposed action would 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. Potential benefits from future implementation include reduction of anticipated congestion on both the local and regional transportation system and advancement of economic development goals in southwestern Placer County and south Sutter County. Potential impacts from future implementation include effects to socioeconomic and community resources, farmlands, cultural resources, traffic and transportation, air quality, noise, hydrology, temporary construction impacts, and growth impacts.

Comments on this document are due by August 20, 2007, and should be sent to Celia McAdam at the above address.

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GENERAL INFORMATION ABOUT THIS DOCUMENT

WHAT'S IN THIS DOCUMENT

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 in Chapter 1). Placer Parkway is intended to reduce anticipated congestion on both the local and regional transportation system and to advance economic development goals in south Sutter County and southwestern Placer County.

This document is a Draft Tier 1 Environmental Impact Statement/Program Environmental Impact Report, hereafter referred to as the Tier 1 EIS/EIR. This document describes why the project is being proposed, presents alternatives considered for the project, describes the affected environment, and presents the findings of evaluation of impacts associated with each of the alternatives.

WHAT YOU SHOULD DO

- Please read this Draft Tier 1 EIS/EIR.
- We welcome your comments. Comments can be made at the Public Hearings to be held in Yuba City (August 6, 2007) and Roseville (August 8, 2007), California, or you may send your written comments to the Placer County Transportation Planning Agency (PCTPA) by the deadline. Comments can be sent via regular mail to PCTPA, Attn: Celia McAdam, Executive Director, 299 Nevada St., Auburn, CA 95603, or via email to cmcadam@pctpa.org.
- Submit comments by the deadline (August 20, 2007).

Copies are available for review at the following locations:

Placer County Transportation Planning Agency
299 Nevada Street, Auburn, CA

Placer County Public Works Department
3091 County Center Drive, Auburn, CA

Placer County Library
350 Nevada Street, Auburn, CA

Placer County Library, Loomis
6050 Library Drive, Loomis, CA

Sutter County Library, Main Branch
7504 Forbes Avenue, Yuba City, CA

Sutter County Library, Pleasant Grove Branch
3093 Howsley Road, Pleasant Grove, CA

Sutter County Library, Browns Branch
1248 Pacific Avenue, Rio Oso, CA

Sutter County Planning Department
1130 Civic Center Blvd., Yuba City, CA

Sacramento County Planning Department
827 7th Street, Room 230, Sacramento, CA

Roseville Public Library - Downtown
225 Taylor Street, Roseville CA

Roseville Public Library - Maidu
1530 Maidu Drive, Roseville CA

Rocklin Library
5400 Fifth Street, Rocklin, CA

Lincoln Library
590 Fifth Street, Lincoln, CA

Sacramento County Library, North Natomas
2500 New Market Drive, Sacramento, CA

Sacramento County Public Library
828 I Street, Sacramento, CA

Sacramento County Library, North Highlands – Antelope
4235 Antelope Road, Antelope, CA

California State University
6000 J Street, Sacramento, CA

Sierra College Library
5000 Rocklin Road, Rocklin, CA

WHAT HAPPENS AFTER THIS

After comments are received from the public and reviewing agencies, FHWA, Caltrans, and SPRTA will prepare a Final Tier 1 EIS/EIR which will be made available for 30 days prior to FHWA making a decision in accordance with the National Environmental Policy Act (NEPA) regulations, 40 CFR Section 1502.19, and California Environmental Quality Act (CEQA) guidelines Section 15089. Following public comment, FHWA may select an alternative and a Record of Decision may be published in the Federal Register. In a parallel process, SPRTA may (1) certify the Final Tier 1 EIS/EIR as complete and approve a preferred corridor alignment alternative based on the Tier 1 studies, or (2) abandon the project, or (3) take some other action. If SPRTA approves a corridor alignment alternative based on the Tier 1 EIS/EIR, and funding is available, SPRTA and its member jurisdictions (Placer County and the cities of Roseville, Rocklin and Lincoln) could preserve ROW for all or part of the selected corridor. The Sutter County Board of Supervisors will separately consider formal adoption of the selected corridor within its jurisdiction, based on this Tier 1 EIS/EIR.

NEPA AND CEQA REQUIREMENTS

An important distinction between the requirements of NEPA and CEQA is in the determination of significance. Under NEPA, the environmental analysis is used to evaluate severity of potential environmental impacts. NEPA does not require that impacts be categorized in terms of potential significance in the environmental document. Under CEQA, potential significance of environmental impacts must be evaluated and disclosed in the environmental document.

Because SPRTA proposes the use of federal funds from FHWA and/or the project requires a FHWA approval action, the project is subject to federal as well as state environmental review requirements. Project documentation, therefore, has been prepared in compliance with both CEQA and NEPA. SPRTA is the project proponent and the lead agency under CEQA. Because of FHWA funding and/or approval, FHWA is lead agency under NEPA, with Caltrans acting as its agent and providing oversight for the NEPA process. Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA.

After comments are received from the public and reviewing agencies, SPRTA and FHWA may undertake additional environmental and/or engineering studies. A Final Tier 1 EIS/EIR will be circulated. The Final Tier 1 EIS/EIR will include responses to comments received on the Draft Tier 1 EIS/EIR and will identify the preferred alternative. Following circulation of the Final Tier 1 EIS/EIR, if the decision is made to approve the project, a Notice of Determination will be published for compliance with CEQA, and a Record of Decision will be published for compliance with NEPA.

THE PLACER PARKWAY CONCEPT AND TIERING

The concept for the Placer Parkway is more than a decade old. Placer County's 1994 General Plan depicts a "plan line" for the 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.

The FHWA, Caltrans, and SPRTA propose to select and preserve a corridor for the future construction of Placer Parkway, a new east-west roadway linking SR 70/99 in Sutter County east to SR 65 in Placer County (see Figure 1-1). Specifically, the action being considered and evaluated by FHWA, Caltrans and SPRTA 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. Placer Parkway is intended to reduce anticipated congestion on both the local and regional transportation system and to advance economic development goals in south Sutter County and southwestern Placer County.

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.

Each phase will be subject to its own environmental review, a process known as "tiered" environmental review under both state and federal law. The selection of a corridor is the subject of this Tier 1 EIS/EIR. As discussed below, to the degree feasible this Tier 1 EIS/EIR reviews the reasonably foreseeable environmental effects of the construction and operation of the Parkway. Selection of a more precise alignment within the corridor, and construction and operation of the Parkway, will be the subject of a later, Tier 2 environmental document.

"Tiering" is a streamlining tool for environmental review of large projects with several environmental review stages or phases. It is a way to focus environmental studies at an appropriate level of detail for each phase of the project. The Tier 1 document allows the agencies to focus on broad topics such as general location, mode choice, area-wide air quality and land use, and other environmental issues. The Tier 2 document involves more focused environmental analyses that address a narrower geographical area, a more focused set of issues, and a specific roadway alignment. The 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 proposed project.

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.

Given the existing and projected rapid growth in and around the study area, it is vital to select a corridor as early as feasible, so that the location of the future Placer Parkway can be considered in local jurisdictions' planning decisions. Also, it is important to select a corridor before new development reduces corridor options or increases right-of-way (ROW) acquisition costs. A tiered approach to

Parkway planning was selected in order to address these concerns and select a corridor for the Parkway before design and engineering are initiated. Although some designs for the Parkway have been developed during Tier 1, to the extent required for environmental analysis, such designs are entirely conceptual and are subject to further engineering and refinement during subsequent Tier 2 analysis. Construction-level engineering would not occur until a specific alignment for the Parkway is selected based on the Tier 2 environmental analysis.

Once the Tier 1 EIS/EIR is completed and a corridor is selected, local governmental agencies may take steps to preserve land within the selected corridor, using their own funds. 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.

PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of the Proposed Action is to preserve ROW for a new or upgraded east-west connector between SR 70/99 and SR 65 serving cities and unincorporated areas across south Sutter County and southwestern Placer County. Planned and proposed development in the project vicinity has been accelerating over the last few years, and opportunities for building a new or upgraded connector may be lost unless action is taken now to preserve ROW for project construction. It is apparent that it will become increasingly difficult and expensive to identify an appropriate corridor as a solution that meets the ultimate purpose of the proposed project. Failure to preserve a corridor as soon as feasible would risk losing the opportunity to reduce environmental impacts and costs because ongoing planning for development could result in approved projects that would foreclose opportunities for locating the roadway in areas that would minimize environmental impacts, leading to substantially higher mitigation costs.

Placer Parkway is intended to reduce anticipated congestion on both the local and regional transportation system and advance economic development goals in south Sutter County and southwestern Placer County. The project vicinity includes some of the fastest growing communities in the Sacramento Metropolitan region—Roseville, Rocklin, Lincoln, and the Sunset Industrial Plan Area. SACOG projects that the population in southwestern Placer County will nearly double between 2000 and 2025. Employment in the SR 65 high-technology corridor is expected to grow even faster than the population. The anticipated development to support this increased population and employment will dramatically increase travel demand over the next 20 years and beyond. The proposed Placer Parkway would be designed to reduce pressure on the existing transportation network and to address anticipated future congestion on the local roadway system in south Sutter County and southwestern Placer County.

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 Interstate 5 corridor in northern Sacramento County and access to the Sacramento International Airport. 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 70/99 and SR 65 corridors, avoiding urban growth inducement in areas not designated for development, and helping to preserve the rural character of south Sutter County and southwestern Placer County.

ANALYSIS FRAMEWORK

In most of the environmental analysis sections of this Tier 1 EIS/EIR, direct impacts as well as secondary and indirect impacts are evaluated by comparing 2004 existing conditions with and without the project. The traffic and transportation analysis includes a second evaluation of impacts comparing the projected conditions in the assumed opening year of Placer Parkway (2020) with and without the project. For the several analyses that rely at least in part on traffic information—Air Quality, Noise, and Energy—this 2020 evaluation of impacts with and without the project is also presented.

FHWA's guidelines recommend evaluation of a project's potential impacts projected forward 20 years after opening to ensure that the project is evaluated in the context of reasonably foreseeable future development, when anticipated future development in the study area would have occurred and when any potential direct, indirect or and/or cumulative impacts associated with the project would be evident. The cumulative impact analysis therefore considers 2040 as the cumulative development scenario against which the Parkway is evaluated.

OPENING YEAR – 2020

The 2020 Opening Year scenario reflects the following assumptions about development:

- Residential buildout of current general plans within Placer County.
- No development in the following major proposed projects that would require General Plan amendments:
  - The Creekview and Sierra Vista Specific Plans (CSP and SVSP) in Roseville's Annexation Area;
  - The Sphere of Influence (SOI) expansion areas of Lincoln;
  - The Regional University and Placer Ranch Specific Plans and Curry Creek Community Plan (RUSP and CCCP) area in unincorporated Placer County; and
  - Sutter Pointe (Measure M) area of 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's 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 employees 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 employee 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 south Sutter County and Placer County.

CUMULATIVE YEAR – 2040

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 reflects the following assumptions about development:

- Full buildout of all residential land in Placer County west of Sierra College Boulevard including: current general plan areas and the following major development proposals in western Placer County:
  - The CSP and SVSP in Roseville's SOI Annexation area;
  - The SOI expansion areas of Lincoln;
  - The Placer Vineyards, RUSP, and Placer Ranch Specific Plans in unincorporated Placer County; and
  - The CCCP 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 buildout of the residential development in the proposed Sutter Pointe (Measure M) area along with a nonresidential development level that balances the residential development in that area.
- Estimated 2040 development in all other portions of SACOG's six-county region based on a straight-line ratio for the development growth between 2005 levels and the 2050 Preferred Blueprint scenario for each of SACOG's Traffic Analysis Zones.

PROJECT ALTERNATIVES

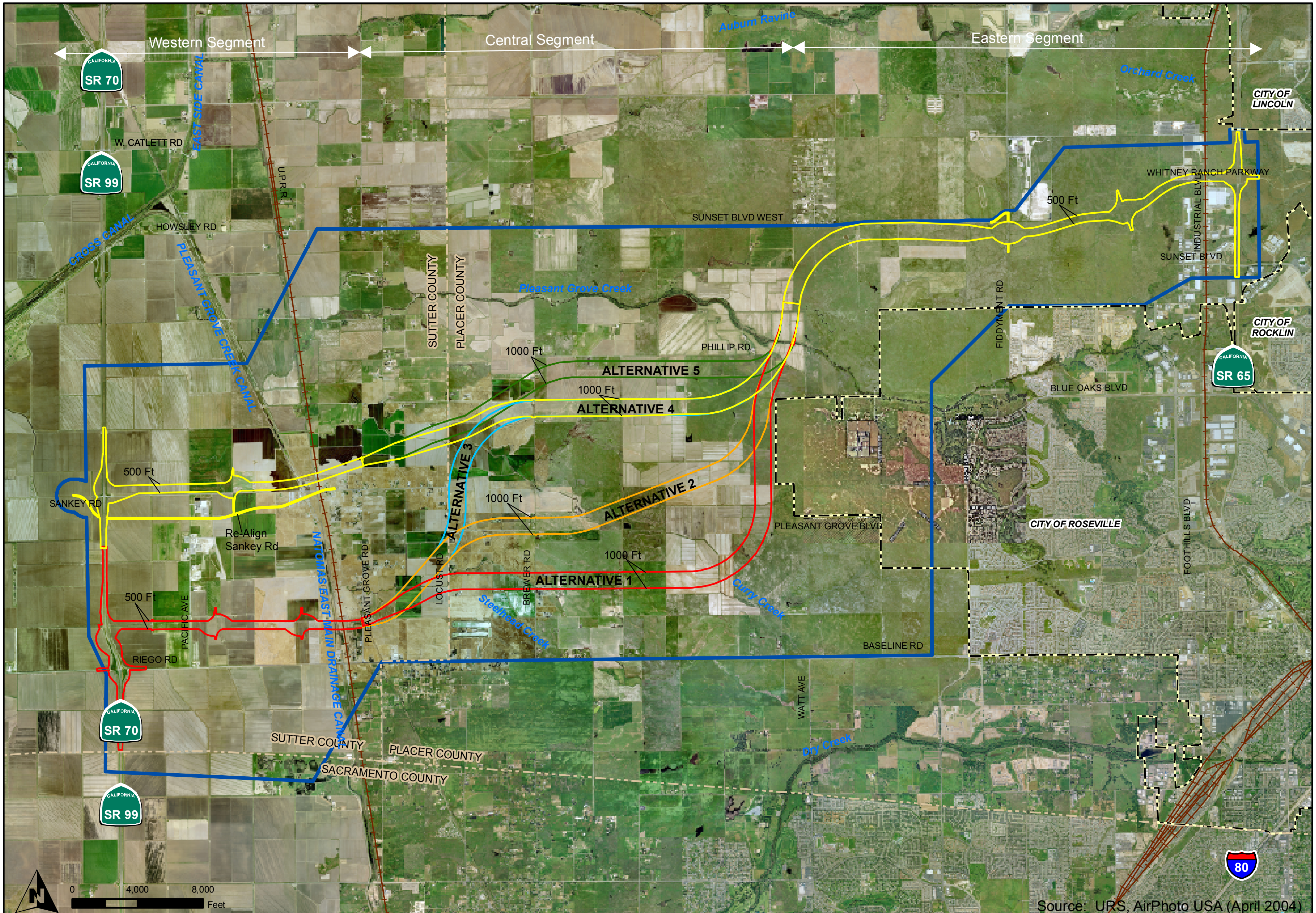
The project alternatives consist of a No-Build Alternative and five corridor build alternatives (build Alternatives 1 through 5) which are shown on Figure ES-1.

NO-BUILD ALTERNATIVE

For the purposes of this analysis, conditions without the project are described as the No-Build Alternative. For transportation, air quality, noise and energy, conditions were analyzed for 2004, 2020, and 2040. For the 2004 baseline environmental conditions, population, land use, employment, traffic and environmental conditions in the study area were analyzed. For the 2020 and 2040 analysis years, the No-Build Alternative reflects the assumptions for development described above.

BUILD ALTERNATIVES

The five build alternatives are shown on Figure ES-1, and provide that the width of the corridor is to vary from approximately 500 feet in the majority of the Eastern and Western segments to approximately 1,000 feet from Pleasant Grove Road to Fiddyment Road. 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.



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

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Project Alternatives

Figure ES-1

June 2007

Design Concept 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 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 was developed to facilitate the Tier 1 EIS/EIR evaluation (see Figure 2-2 in Chapter 2). It illustrates both four-lane configuration (two lanes in both directions) and six-lane configuration (three lanes in both directions) within the 500- to 1,000-foot corridor widths. The roadway would include a center 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. 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 segment between Pleasant Grove Road and Fiddyment Road. The analysis assumes no interchanges in this segment. The analysis assumes that the location of interchanges is as follows:

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

Alternative Descriptions. The Parkway build alternatives are summarized as follows:

Alternative 1 – the Red Alternative would extend from SR 70/99 approximately one-half 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.

Alternative 2 – the Orange Alternative would extend from SR 70/99 approximately one-half 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 alternative is 15.4 miles long

Alternative 3 – the Blue Alternative 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 alternative is 15.6 miles long.

Alternative 4 – the Yellow Alternative 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 alternative is 14.3 miles long.

Alternative 5 – the Green Alternative 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 alternative is 14.2 miles long.

SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS

Key differences among the corridor alignment alternatives are presented below. Table ES-1 summarizes the potential environmental impacts of these alternatives as required by NEPA. A separate evaluation of impacts as required by CEQA is provided in Chapter 5.

Land Use

The build alternatives would involve land use conversion ranging from a minimum of approximately 1,627 acres under Alternative 5 to a maximum of 1,918 acres under Alternative 1. They would result in bisecting a number of parcels ranging from a minimum of 26 parcels under Alternative 1 to a maximum of 35 parcels under Alternative 5.

All build alternatives could present similar potential inconsistencies with General Plan policies involving preservation of agriculturally designated areas.

Section 4.1 provides additional information on land use.

Socioeconomics

Three of the build alternatives, Alternatives 1, 4, and 5, would affect existing residential communities. All of the build alternatives would displace homes or farms, ranging from a minimum of three under Alternative 3 to a maximum of ten under Alternative 5. All of the build alternatives would affect the same two existing employment centers in the Sunset Industrial Area Plan. In addition, Alternatives 4 and 5 would also affect two other existing employment areas in Sutter County.

Section 4.2 provides additional information on socioeconomics.

Farmlands

The build alternatives would convert between 676.46 and 990.06 acres of farmland, including Prime Farmland, Farmland of Statewide Importance and Unique Farmland. Alternative 4 would affect the least – approximately 676 acres. Alternative 2 would affect the most – approximately 990.06 acres. Each alternative would convert Williamson Act contracted lands, ranging from a minimum under Alternative 1 of 119.85 acres to a maximum under Alternative 2 of 243.7 acres.

Section 4.4 provides additional information on farmlands.

Public Services and Utilities

The build alternatives would similarly affect one municipal facility, the City of Roseville Retention Basin property, although no retention facilities are planned in the area affected. There could also be future impacts on the Western Regional Sanitary Landfill Expansion area under the cumulative scenario.

Section 4.5 provides additional information on public services and utilities.

Visual and Aesthetics

Alternatives 1, 2, and 3 would result in Moderate/High visual impacts, while impacts associated with Alternatives 4 and 5 would be Moderate.

Section 4.6 provides additional information on visual and aesthetics.

Cultural Resources

No known archaeological sites would be affected by the build alternatives. All build alternatives could affect one built environment resource: Reclamation District No. 1000 Rural Historic District, which is a National Register of Historic Places (NRHP)–eligible and California Register of Historical Resources (CRHR)–eligible property. Alternatives 1, 2, and 3 could also affect three other properties that require further evaluation to determine NRHP and CRHR eligibility. All of the build alternative alignments are of similarly high paleontological sensitivity, and the alternatives could impact unknown paleontological resources.

Section 4.7 provides additional information on cultural resources.

Traffic and Transportation

All of the build alternatives would result in an increase in vehicle miles traveled (VMT), a decrease in Vehicle Hours of Delay (VHD), and improvements in Level of Service (LOS) on the majority of roadways in the study area.

Under the No-Build Alternative, VMT is projected to be 17,723,337 in the opening year. VMT for build alternatives would range from a minimum of 17,844,410 under Alternative 1 to a maximum of 17,871,704 under Alternative 5. In 2040 the No-Build Alternative VMT is projected to be 25,977,539, and VMT under the build alternatives would range from a minimum of 26,419,100 under Alternative 1 to a maximum of 26,482,608 under Alternative 3.

By 2040, portions of SR 70/99 and SR 65 would operate at LOS F with or without the project; the build alternatives would worsen the LOS on portions of them, as well as on four other roadways. Under all build alternatives, VHD would improve as compared to the No-Build Alternative.

Section 4.8 provides additional information on traffic and transportation.

Air Quality

Construction emissions would exceed the Placer County Air Pollution Control District (PCAPCD) and Feather River Air Quality Management District (FRAQMD) construction emissions thresholds for reactive organic gases (ROG), oxides of nitrogen (NO_X), and particulate matter less than or equal to 10 microns (PM_{10}). All build alternatives would exceed FRAQMD significance thresholds for ROG and NO_X during operation.

Section 4.9 provides additional information on air quality.

Noise

Three of the build alternatives would result in noise levels at a number of existing residential units exceeding 66 A-weighted decibels (dBA) in the opening year. This would range from a minimum of one unit being affected under Alternative 5 and a maximum of two units being affected under Alternatives 2 and 3. These impacts would be the same in 2040. No assumptions regarding new residential units were taken into account in these analyses.

The build alternatives would result in projected noise increases of more than 12 dBA on one roadway in 2020. This effect would also occur under the No-Build Alternative. In 2040, the number of such roadways would increase to ten for Alternatives 4 and 5, eleven for Alternatives 1, 2, and 3, and fifteen under the No-Build Alternative.

Section 4.10 provides additional information on noise.

Hydrology and Floodplains

All build alternatives would result in an increase in impervious area ranging from a minimum of 622 acres under Alternative 5 to a maximum of 745 acres under Alternative 4. These impacts would be mitigated according to regulatory and permit requirements.

All build alternatives would result in new stream or canal crossings. These would range from a minimum of ten crossings under Alternative 4 and a maximum of sixteen under Alternative 1. All build alternatives would also cross the 100-year and 500-year floodplains. Impacts would range from 269 acres under Alternative 1 to 370 acres under Alternatives 4 and 5. Impacts on the 500-year floodplain would range from a minimum of 87 acres under Alternative 5 to a maximum of 201 acres under Alternatives 2 and 3.

Section 4.11 provides additional information on hydrology and floodplains.

Water Quality

All build alternatives would result in an increase in impervious area ranging from a minimum of 622 acres under Alternative 5 to a maximum of 745 acres under Alternative 4. These impacts would be mitigated according to regulatory and permit requirements.

All build alternatives would traverse watersheds, with Alternatives 4 and 5 crossing four watersheds and Alternatives 1, 2, and 3 crossing five. These impacts would be mitigated according to regulatory and permit requirements.

Section 4.12 provides additional information on water quality.

Biological Resources

All build alternatives would affect biological resources. All build alternatives would affect riparian habitat, ranging from a minimum of 4.8 acres under Alternatives 4 and 5 to a maximum of 12.3 acres under Alternative 2. Build alternatives would also affect the habitat of special-status species. Potential giant garter snake habitat would be affected, ranging from a minimum of approximately 268 acres under Alternatives 4 and 5 to a maximum of approximately 340 acres under Alternatives 1, 2, and 3. Potential Swainson’s hawk and white-tailed kite nesting habitat would be affected, ranging from a minimum of 3.3 acres under Alternative 4 to a maximum of approximately 7.9 acres under Alternative 2. Potential

Swainson's hawk foraging habitat would be affected, ranging from a minimum of approximately 759 acres affected under Alternative 5 to a maximum of approximately 10,244 acres under Alternative 1. Potential Valley elderberry longhorn beetle habitat would be affected, ranging from a minimum of approximately 1.2 acres under Alternatives 3, 4, and 5 to a maximum of approximately 1.9 acres under Alternative 1.

All build alternatives would result in effects on wetlands ranging from a minimum of 28 acres under Alternative 5 to a maximum of 35.8 acres under Alternative 1. Effects on vernal pool complexes would range from a minimum of 107 acres under Alternative 4 to a maximum of 127 acres under Alternative 3.

Section 4.14 provides additional information on biological resources.

Hazardous Waste/Materials

All of the build alternatives would be located within the vicinity of potential sources of hazardous materials due to their proximity to sites of Recognized Environmental Concern. Three such sites are located in the vicinity of Alternatives 1, 2, and 3, and four are located in the vicinity of Alternatives 4 and 5. Potential hazards associated with these sites would be mitigated according to regulatory requirements.

Section 4.15 provides additional information on hazardous waste/materials.

AREAS OF CONTROVERSY

During the environmental review process for Placer Parkway, a number of issues have been encountered. These include:

- Growth inducement
- Coordinating and processing the proposed project with existing development, several proposed large-scale developments, and Placer County's proposed Natural Communities Conservation Plan/Habitat Conservation Plan
- Loss of agricultural land

OTHER REQUIRED ACTIONS

As the Proposed Action is to identify and acquire a corridor, it does not require environmental permits. Applications for necessary permits, approvals and agreements for construction of the Parkway will be prepared at the Tier 2 level of environmental review. At this Tier 1 level of review, it is not feasible to provide complete lists of the agencies that will use the Tier 2 EIS/EIR in their decision-making or a list of permits and other approvals required to implement the Parkway project. A preliminary list of agencies from which permits and/or approvals may be needed includes the U.S. Army Corps of Engineers, United States Fish and Wildlife Service, California Department of Fish and Game, Regional Water Quality Control Board, and Caltrans. As appropriate, information from this Tier 1 EIS/EIR may be used in the preparation of such applications. This list is subject to change in the Tier 2 EIS/EIR.

The following are other actions required for the Proposed Action based on the Placer Parkway Corridor Preservation Tier 1 EIS/EIR:

- Potential FHWA funding for land acquisition, Tier 2 studies, and ultimate construction of the Parkway

- Use of the Tier 1 EIS/EIR by Sutter County in its capacity as a Responsible Agency to adopt an official map of the ROW preservation area of the Parkway
- Certification of this Tier 1 EIS/EIR by SPRTA
- Selection of a preferred corridor alignment alternative by FHWA, Caltrans, and SPRTA.

Table ES-1
Summary of Potential Impacts from the Placer Parkway Alternatives

Potential Impact*		2004						2020	2040
		No-Build	Alternative 1 (Red)	Alternative 2 (Orange)	Alternative 3 (Blue)	Alternative 4 (Yellow)	Alternative 5 (Green)		
For Tier 1 analysis, direct impacts assume all resources within a corridor would be affected. This is an extremely conservative assumption, which is likely to overstate impacts.									
Land Use	Land Use Conversion	No impact	1,918.43 acres	1,836.78 acres	1,863.56 acres	1,627.64 acres	**1,623.47 acres**	Not analyzed**	Qualitative analysis only
	Potentially Bisected Parcels	No Impact	**26**	28	**26**	30	35	Not analyzed**	Qualitative analysis only
	Compatibility with Proposed Land Uses	No Impact	Depends on future land use approvals	Depends on future land use approvals	Depends on future land use approvals	Depends on future land use approvals	Depends on future land use approvals	Not analyzed**	Qualitative analysis only
	Conflict with General Plan Policies	No Impact	Unavoidable conflict with policies related to preservation of agricultural land	Unavoidable conflict with policies related to preservation of agricultural land	Unavoidable conflict with policies related to preservation of agricultural land	Unavoidable conflict with policies related to preservation of agricultural land	Unavoidable conflict with policies related to preservation of agricultural land	Not analyzed**	Quantitative analysis only
Socioeconomics	Number of Residential Communities Affected	No impact	1	**0**	**0**	1	1	Not analyzed**	Qualitative analysis only
	Number of Homes, Farmsteads Affected	No impact	4	4	**3**	7	10	Not analyzed**	Qualitative analysis only
	Number of Employment Centers Affected	No impact	**1**	**1**	**1**	2	2	Not analyzed**	Qualitative analysis only
Farmlands	Prime Farmland	No impact	195.07 acres	309.60 acres	265.20 acres	**161.35 acres**	168.09 acres	Not analyzed**	Qualitative analysis only
	Unique Farmland	No impact	**167.87 acres**	191.11 acres	203.26 acres	289.22 acres	388.69 acres	Not analyzed**	Qualitative analysis only
	Farmland of Statewide Importance	No impact	422 acres	464.13 acres	472.77 acres	**305.90 acres**	319.01 acres	Not analyzed**	Qualitative analysis only
	Williamson Act Land Affected	No impact	**119.85 acres**	243.70 acres	240.56 acres	240.62 acres	240.26 acres	Not analyzed**	Qualitative analysis only
Public Service and Utilities	Municipal Facilities Affected	No impact	108.5 acres City of Roseville Retention Basin	109 acres City of Roseville Retention Basin	100 acres City of Roseville Retention Basin	100 acres City of Roseville Retention Basin	**96 acres** City of Roseville Retention Basin	Not analyzed**	Potential encroachment into future Western Regional Sanitary Landfill expansion area
Visual and Aesthetics	Potential Level of Impact from Build Alternative	No impact	Moderate/High	Moderate/High	Moderate/High	**Moderate**	**Moderate**	Not analyzed**	Qualitative analysis only
Cultural Resources	Archaeological Resources	No impact	No identified impact	No identified impact	No identified impact	No identified impact	No identified impact	Not analyzed**	Qualitative analysis only
	Built Environment Resources	No impact	1 property and 3 potential properties	1 property and 3 potential properties	1 property and 3 potential properties	**1 property**	**1 property**	Not analyzed**	Qualitative analysis only
	Paleontological Resources	No impact	High sensitivity	High sensitivity	High sensitivity	High sensitivity	High sensitivity	Not analyzed**	Qualitative analysis only

* For the build alternatives, the greatest potential impact is shown in a shaded cell; the least potential impact is shown in **bold**. The greatest and least potential impacts are not identified for criteria resulting in identical impacts among all build alternatives.
** A quantitative analysis for this resource category was performed for existing conditions only (2004) in order to determine potential environmental impacts under Existing Plus Project conditions.

Table ES-1 (Continued)
Summary of Potential Impacts from the Placer Parkway Alternatives

Potential Impact*		2004						2020	2040
		No-Build	Alternative 1 (Red)	Alternative 2 (Orange)	Alternative 3 (Blue)	Alternative 4 (Yellow)	Alternative 5 (Green)		
For Tier 1 analysis, direct impacts assume all resources within a corridor would be affected. This is an extremely conservative assumption, which is likely to overstate impacts.									
Traffic and Transportation	Vehicle Miles of Travel (VMT)	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	**No-Build = 17,723,337** Alt 1 = 17,844,410 Alt 2 = 17,872,706 Alt 3 = 17,885,664 Alt 4 = 17,869,007 Alt 5 = 17,871,704	**No-Build = 25,977,539** Alt 1 = 26,419,100 Alt 2 = 26,472,170 Alt 3 = 26,482,608 Alt 4 = 26,476,869 Alt 5 = 26,455,500
	Level of Service Impacts	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	All Alternatives affect: • Portions of SR 70/99 • Portions of SR 65	All Alternatives affect: • Portions of SR 70/99 • Portions of SR 65 • Portions of Fiddyment Road • Portions of Sierra College Blvd • Portions of Valley View Parkway • Portions of Whitney Ranch Parkway
	Vehicle Hours of Delay 3-hour a.m. and 3-hour p.m. Commute Periods	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	LOS D: No Build = 35,694 **Alternative 1 = 34,206** Alternative 2 = 34,272 Alternative 3 = 34,409 Alternative 4 = 34,501 Alternative 5 = 34,382	LOS D: No Build = 100,775 **Alternative 1 = 94,619** Alternative 2 = 95,077 Alternative 3 = 95,100 Alternative 4 = 95,493 Alternative 5 = 94,929
		Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	LOS E: No Build = 25,077 **Alternative 1 = 23,783** Alternative 2 = 23,880 Alternative 3 = 23,992 Alternative 4 = 24,077 Alternative 5 = 23,951	LOS E: No Build = 81,200 **Alternative 1 = 76,003** Alternative 2 = 76,450 Alternative 3 = 76,479 Alternative 4 = 76,885 Alternative 5 = 76,335
		Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	LOS F2[1] No Build = 16,447 **Alternative 1 = 15,448** Alternative 2 = 15,530 Alternative 3 = 15,617 Alternative 4 = 15,739 Alternative 5 = 15,588	LOS F2[1] No Build = 62,327 **Alternative 1 = 57,974** Alternative 2 = 58,463 Alternative 3 = 58,473 Alternative 4 = 58,885 Alternative 5 = 58,351

[1] LOS F2 is the added travel time for vehicles faced with 3 hours or more of LOS F conditions during the 3-hour a.m. and p.m. commute periods.

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Table ES-1
Summary of Potential Impacts from the Placer Parkway Alternatives

Potential Impact*		2004						2020	2040
		No-Build	Alternative 1 (Red)	Alternative 2 (Orange)	Alternative 3 (Blue)	Alternative 4 (Yellow)	Alternative 5 (Green)		
For Tier 1 analysis, direct impacts assume all resources within a corridor would be affected. This is an extremely conservative assumption, which is likely to overstate impacts.									
Air Quality	Construction Emissions – ROG, NO_X, PM_{10}	No impact	Exceeds FRAQMD and PCAPCD significance thresholds	Exceeds FRAQMD and PCAPCD significance thresholds	Exceeds FRAQMD and PCAPCD significance thresholds	Exceeds FRAQMD and PCAPCD significance thresholds	Exceeds FRAQMD and PCAPCD significance thresholds	N/A	N/A
	Operational Emissions- reactive organic gases (ROG)	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Alts 1-5 exceed FRAQMD significance thresholds	Alts 1-5 exceed FRAQMD significance thresholds Alts 1-5 exceed PCAPCD significance thresholds
	Operational Emissions – carbon monoxide (CO)	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Significance thresholds not exceeded	Significance thresholds not exceeded
	Operational Emissions – nitrogen oxide (NO_X)	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Alts 1, 2, 3, 4, and 5 exceed FRAQMD significance thresholds	Alts 1-5 exceed FRAQMD significance thresholds Alts 2, 3, 4, and 5 exceed PCAPCD significance thresholds
	Operational Emissions – respirable particulate matter (PM_{10})	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Significance thresholds not exceeded	Significance thresholds not exceeded
	Operational Emissions – sulfur dioxide (SO_X)	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Significance thresholds not exceeded	Significance thresholds not exceeded
Noise and Vibration	Noise at Residential Units Exceeding Threshold (66 dBA)	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	**Alt 1 = 0** Alt 2 = 2 Alt 3 = 2 **Alt 4 = 0** Alt 5 = 1	**Alt 1 = 0** Alt 2 = 2 Alt 3 = 2 **Alt 4 = 0** Alt 5 = 1
	Number of Roadways with projected increases in traffic noise > 12 dBA	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	No-Build = 1 Alt 1 = 1 Alt 2 = 1 Alt 3 = 1 Alt 4 = 1 Alt 5 = 1	No-Build = 15 **Alt 1 = 11** Alt 2 = 11 Alt 3 = 11 **Alt 4 = 10** **Alt 5 = 10**

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Table ES-1
Summary of Potential Impacts from the Placer Parkway Alternatives

Potential Impact*		2004 No-Build	2004 Alternative 1 (Red)	2004 Alternative 2 (Orange)	2004 Alternative 3 (Blue)	2004 Alternative 4 (Yellow)	2004 Alternative 5 (Green)	2020	2040
For Tier 1 analysis, direct impacts assume all resources within a corridor would be affected. This is an extremely conservative assumption, which is likely to overstate impacts.									
Energy	Estimated Fuel Consumption	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	Similar to but less than 2020	**No-Build = 717,544 gallons** Alt 1 = 722,445 gallons Alt 2 = 723,591 gallons Alt 3 = 724,115 gallons Alt 4 = 723,441 gallons Alt 5 = 723,550 gallons	**No-Build = 1,051,722 gallons** Alt 1 = 1,069,599 gallons Alt 2 = 1,071,747 gallons Alt 3 = 1,072,170 gallons Alt 4 = 1,071,938 gallons Alt 5 = 1,071,072 gallons
Hazardous Materials/Waste	Number of RECs potentially located within alignment	No impact	**3**	**3**	**3**	4	4	Not analyzed**	Qualitative analysis only
Hydrology and Floodplains	New Impervious Area	No impact	745 acres	737 acres	740 acres	624 acres	**622 acres**	Not analyzed**	Qualitative analysis only
	Stream/Canal Crossings	No impact	16	12	11	**10**	**10**	Not analyzed**	Qualitative analysis only
	Area Affected Within 100-Year Floodplain	No impact	**269 acres**	302 acres	317 acres	370 acres	372 acres	Not analyzed**	Qualitative analysis only
Geology – Soils, Seismic	Soils or Geology Affected; Seismic or Geologic Factors	No impact	No major potential impacts	No major potential impacts	No major potential impacts	No major potential impacts	No major potential impacts	Not analyzed**	Qualitative analysis only
Water Quality	Watersheds Traversed	No impact	5	5	5	**4**	**4**	Not analyzed**	Qualitative analysis only
Biology	Riparian Habitat	No impact	5.9 acres	12.3 acres	**4.8 acres**	**4.8 acres**	4.9 acres	Not analyzed**	Qualitative analysis only
	Potential Giant Garter Snake Habitat	No impact	340.8 acres	340.8 acres	340.8 acres	**268.2 acres**	**268.2 acres**	Not analyzed**	Qualitative analysis only
	Potential Swainson's Hawk/White-Tailed Kite Nesting Habitat	No impact	6.4 acres	7.9 acres	4.6 acres	**3.3 acres**	3.6 acres	Not analyzed**	Qualitative analysis only
	Potential Swainson's Hawk Foraging Habitat	No impact	1,024.0 acres	952.3 acres	989.0 acres	863.5 acres	**759.4 acres**	Not analyzed**	Qualitative analysis only
	Potential Valley Elderberry Longhorn Beetle Habitat	No impact	1.9 acres	1.3 acres	**1.2 acres**	**1.2 acres**	**1.2 acres**	Not analyzed**	Qualitative analysis only
	Wetlands	No impact	35.8 acres	30.9 acres	32 acres	28.3 acres	**28.0 acres**	Not analyzed**	Qualitative analysis only
	Vernal Pool Complexes	No impact	122.7 acres	124.1 acres	127.6 acres	**106.7 acres**	124.0 acres	Not analyzed**	Qualitative analysis only

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Table ES-1
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Potential Impact*		2004						2020	2040
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For Tier 1 analysis, direct impacts assume all resources within a corridor would be affected. This is an extremely conservative assumption, which is likely to overstate impacts.									
Growth Inducement		No impact	Would help facilitate planned and proposed developments in the region and is expected to influence the timing of development in the vicinity of its proposed interchanges, particularly those proposed near vacant land adjacent to rapidly developing areas or areas now proposed for urban development	Would help facilitate planned and proposed developments in the region and is expected to influence the timing of development in the vicinity of its proposed interchanges, particularly those proposed near vacant land adjacent to rapidly developing areas or areas now proposed for urban development	Would help facilitate planned and proposed developments in the region and is expected to influence the timing of development in the vicinity of its proposed interchanges, particularly those proposed near vacant land adjacent to rapidly developing areas or areas now proposed for urban development	Would help facilitate planned and proposed developments in the region and is expected to influence the timing of development in the vicinity of its proposed interchanges, particularly those proposed near vacant land adjacent to rapidly developing areas or areas now proposed for urban development	Would help facilitate planned and proposed developments in the region and is expected to influence the timing of development in the vicinity of its proposed interchanges, particularly those proposed near vacant land adjacent to rapidly developing areas or areas now proposed for urban development	Not analyzed**	Qualitative analysis only
Section 4(f) Analysis	4(f) Resources in the study area	No impact	RD 1000	RD 1000	RD 1000	RD 1000	RD 1000	Not analyzed**	Qualitative analysis only

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** A quantitative analysis for this resource category was performed for existing conditions only (2004) in order to determine potential environmental impacts under Existing Plus Project conditions.

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Appendices

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List of Acronyms

AADT	annual average daily traffic
AAQS	Ambient Air Quality Standards
ACM	asbestos-containing materials
ADL	aerially deposited lead
AFA	Analysis Focus Area
APCD	Air Pollution Control District
APE	Area of Potential Effects
APN	Assessor's Parcel Number
AQAP	Air Quality Attainment Plan
AQMD	Air Quality Management District
ASR	Archaeological Survey Report
BFE	Base Flood Elevation
BMP	Best Management Practice
CAA	Clean Air Act
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCCP	Curry Creek Community Plan
CDF	California Department of Forestry
CDFG	California Department of Fish and Game
CDMG	California Division of Mines and Geology
CDP	Census Designated Place
CEC	California Energy Commission
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFCs	chlorofluorocarbons
CFR	Code of Federal Regulations
CGS	California Geological Survey
CHP	California Highway Patrol
CIA	Community Impact Assessment
CIP	Capital Improvement Program
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
CPA	California Power Authority
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CSA	County Service Area
CSP	Creekview Specific Plan
CTR	California Toxics Rule
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
dB	decibel(s)
dBA	A-weighted decibel(s)
DEIR	Draft Environmental Impact Report
DLRP	Division of Land Resource Protection
DO	dissolved oxygen
DOC	Department of Conservation
DOF	California Department of Finance
DPM	diesel particulate matter

DTSC	California Department of Toxic Substances Control
DU	dwelling unit
EAP	Energy Action Plan
EC	electrical conductivity
EDR	Environmental Data Resources, Inc.
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
EMSA	Emergency Medical Services Authority
EMSA	Emergency Services Authority
ERP	Ecosystem Restoration Plan
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
FRAQMD	Feather River Air Quality Management District
FSZ	Farmland Security Zone
FTA	Federal Transit Administration
General Permit	NPDES General Permit for Stormwater Discharges Associated with Construction Activity
GHG	Greenhouse gases
GIS	Geographic Information System
GLO	General Land Office
HAPs	hazardous air pollutants
HCD	California Housing and Community Development Department
HCFCs	partially halogenated chlorofluorocarbons
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HFCs	halogenated fluorocarbons
HOV	High Occupancy Vehicle
HPSR	Historic Properties Survey Report
HRER	Historic Resources Evaluation Report
I-5	Interstate 5
I-80	Interstate 80
I-C Reserve	Industrial-Commercial Reserve
JPA	joint powers authority
LBP	lead-based paint
L_{dn}	Day-Night Noise Level
L_{eq}	Equivalent Noise Level
LESA	Land Evaluation and Site Assessment
LFG	landfill gas
LID	Low Impact Development
LOS	level of service
LRT	Light Rail Transit
m	Meters
Ma	million years ago
MCE	Maximum Credible Earthquake
MCL	Maximum Contaminant Level
mg/L	milligrams per liter
MOU	Memorandum of Understanding
mph	miles per hour
MPO	Metropolitan Planning Organization

MSATs	mobile sources air toxics
msl	mean sea level
MTP	Metropolitan Transportation Plan
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NAHC	Native American Heritage Commission
NASS	National Agricultural Statistics Service
NBHCP	Natomas Basin Habitat Conservation Plan
NCCP	Natural Communities Conservation Plan
NDIR	non-dispersive infrared photometry
NEMDC	Natomas East Main Drainage Canal
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NO_2	nitrogen dioxide
NO_X	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O_3	ozone
OES	Office of Emergency Services
PA	Programmatic Agreement
PAC	Placer Parkway Corridor Preservation Policy Advisory Committee
Pb	lead
PCAPCD	Placer County Air Pollution Control District
PCCP	Placer County Conservation Plan
PCEHD	Placer County Environmental Health Department
PCFCWCD	Placer County Flood Control and Water Conservation District
PCTPA	Placer County Transportation Planning Agency
PGWWTP	Pleasant Grove Wastewater Treatment Plant
PM_{10}	particulate matter less than or equal to 10 microns
$PM_{2.5}$	particulate matter less than or equal to 2.5 microns
POAQC	Project of Air Quality Concern
Porter-Cologne	Porter-Cologne Water Quality Control Act
ppm	parts per million
PRC	Public Resources Code
PRSP	Placer Ranch Specific Plan
PSR	Project Study Report
PVSP	Placer Vineyards Specific Plan
RAD	Regional Analysis District
RCRA	Resource Conservation and Recovery Act
RD 1000	Reclamation District No. 1000
REC	recognized environmental condition
REP	Roseville Energy Park
ROG	reactive organic gases
ROW	right-of-way
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RUSP	Regional University Specific Plan

RWQCB	Regional Water Quality Control Board
SAC	Study Advisory Committee
SACMET	Sacramento Metropolitan Travel Demand Model
SACOG	Sacramento Area Council of Governments
SAFCA	Sacramento Area Flood Control Agency
SAFETEA-LU	Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users
SHPO	State Historic Preservation Officer
SIAP	Sunset Industrial Area Plan
SIP	State Implementation Plan
SMA	Sacramento Metropolitan Area
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO_2	sulfur dioxide
SOI	Sphere of Influence
SO_X	oxides of sulfur
SPRTA	South Placer Regional Transportation Authority
SPSP	Sutter Pointe Specific Plan
sq. ft.	square feet
SR	State Route
SVAB	Sacramento Valley Air Basin
SVSP	Sierra Vista Specific Plan
SWDR	Stormwater Data Report
SWMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
SWQA	Stormwater Quality Assessment
SWRCB	State Water Resources Control Board
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
TCR	Transportation Concept Report
TCZ	Transmission corridor zone
TDS	total dissolved solids
TeNS	(Caltrans) Technical Noise Supplement
Tier 1 EIS/EIR	Tier 1 Environmental Impact Statement/Program Environmental Impact Report
TNM	Traffic Noise Model
TOC	total organic carbon
TSM	Transportation Systems Management
U.S. EPA	U.S. Environmental Protection Agency
UC	University of California
UPRR	Union Pacific Rail Road
URS	URS Corporation
USCOE	U.S. Army Corps of Engineers
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
VHD	Vehicle Hours of Delay
VHT	vehicle-hours of travel
VIAHP	Visual Impact Assessment for Highway Projects

VMT	vehicle miles traveled
VOC	volatile organic compounds
WDR	Waste Discharge Requirement
WPWMA	Western Placer Waste Management Authority
WRSL	Western Regional Sanitary Landfill
WRSP	West Roseville Specific Plan

1.0 INTRODUCTION AND PURPOSE OF AND NEED FOR PROJECT

1.1 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). Specifically, the action being considered and evaluated by FHWA, Caltrans and SPRTA 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. Placer Parkway is intended to reduce anticipated congestion on both the local and regional transportation system and to advance economic development goals in south Sutter County and southwestern Placer County.

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.

Each phase will be subject to its own environmental review, a process known as "tiered" environmental review under both state and federal law. The selection of a corridor is the subject of this Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Environmental Impact Report (hereinafter referred to as the Tier 1 EIS/EIR). As discussed below, to the degree feasible this Tier 1 EIS/EIR reviews the reasonably foreseeable environmental effects of the construction and operation of the Parkway. Selection of a more precise alignment within the corridor, and construction and operation of the Parkway, will be the subject of a later, Tier 2 environmental document.

"Tiering" is a streamlining tool for environmental review of large projects with several environmental review stages or phases. It is a way to focus environmental studies at an appropriate level of detail for each phase of the project. The Tier 1 document allows the agencies to focus on broad topics such as general location, mode choice, area-wide air quality and land use, and other environmental issues. The Tier 2 document involves more focused environmental analyses that address a narrower geographical area, a more focused set of issues, and a specific roadway alignment. The 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 proposed project.

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.

Given the existing and projected rapid growth in and around the study area, it is vital to select a corridor as early as feasible, so that the location of the future Placer Parkway can be considered in local jurisdictions' planning decisions. Also, it is important to select a corridor before new development reduces corridor options or increases right-of-way acquisition costs. A tiered approach to Parkway planning was selected in order to address these concerns and select a corridor for the Parkway before design and engineering are initiated. Although some designs for the Parkway have been developed during Tier 1, to the extent required for environmental analysis, such designs are entirely conceptual and are subject to further engineering and refinement during subsequent Tier 2 analysis. Construction-level engineering would not occur until a specific alignment for the Parkway is selected based on the Tier 2 environmental analysis.

Once the Tier 1 EIS/EIR is completed and a corridor is selected, local government agencies may take steps to preserve land within the selected corridor, using their own funds. 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.

National Environmental Policy Act

The National Environmental Policy Act of 1969 (NEPA) was signed into law in 1970. NEPA established a national environmental policy under which federal agencies would be required to consider the potential environmental consequences of their actions. The Council on Environmental Quality (CEQ) interprets and implements NEPA.

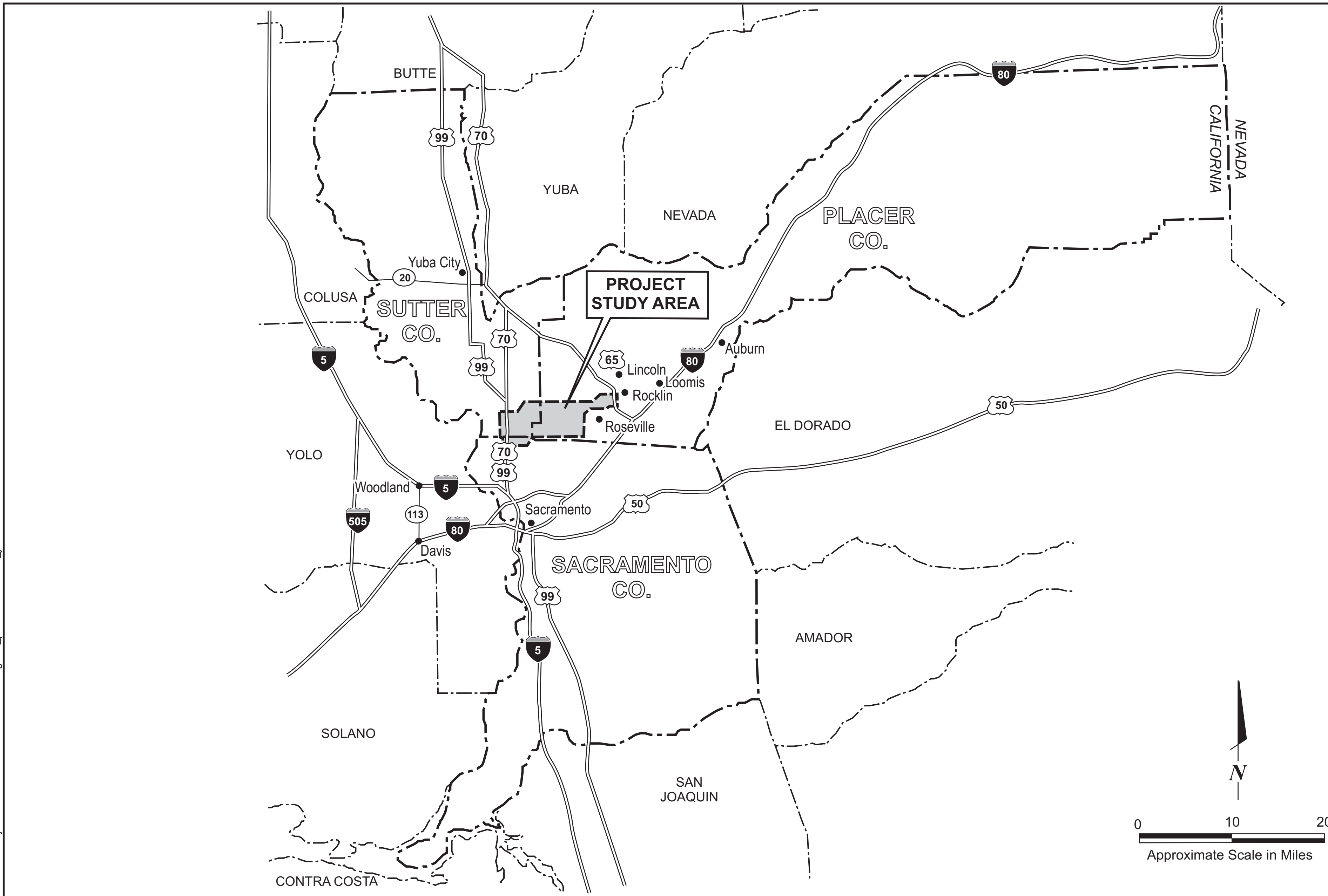
Title I of NEPA contains a Declaration of National Environmental Policy which requires the federal government to use all practicable means to create and maintain conditions under which humans and nature can exist in productive harmony. Section 102 requires all federal agencies to prepare detailed statements assessing the environmental impact of and alternatives to major federal actions significantly affecting the environment. These statements are commonly referred to as Environmental Impact Statements (EISs). Section 102 also requires federal agencies to lend appropriate support to initiatives and programs designed to anticipate and prevent a decline in the quality of mankind’s world environment. FHWA is the lead agency under NEPA for this project.

Title II of NEPA establishes the CEQ. While NEPA established the basic framework for integrating environmental considerations into federal decision-making, it did not provide the details of the process for which it would be accomplished. Federal implementation of NEPA was the charge of the CEQ, which interpreted the law and addressed NEPA’s action-forcing provisions in the form of regulations and guidance. In 1978, CEQ issued Regulations for Implementing the Procedural Provisions of NEPA (40 CFR §§ 1500-1508). In 1980, CEQ issued the guidance document Forty Questions and Answers on the CEQ Regulations. Since that time, CEQ has issued additional guidance and other information covering a variety of issues relevant to the NEPA process. The complete text of NEPA and this related information is available at CEQ NEPAnet.

California Environmental Quality Act

The California Environmental Quality Act of 1970 (CEQA) (*Public Resources Code §21000* et seq.) is one of California’s most important environmental laws. It requires state and local agencies to disclose and consider the environmental implications of their actions. It further requires agencies to avoid environmental impacts when such avoidance is feasible. In furtherance of these goals, six objectives are identified:

- disclose to decision makers and the public the significant environmental effects of proposed activities;



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PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Project Location Map

Figure 1-1

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- identify ways to avoid or reduce environmental damage;
- prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures;
- disclose to the public reasons for agency approvals of projects with significant environmental effects;
- foster interagency coordination; and
- enhance public participation.

The CEQA procedures are guided by the legislative intent to have public participation to the greatest extent possible. The legislature also intended that decision makers be able to make informed decisions based on substantial information regarding a "project" and that these decisions be based on a trail of reasoning accessible to the public.

The Environmental Impact Report (EIR) and its preparation is the method by which information is gathered and organized, impacts assessed, and mitigation measures developed under CEQA. The EIR is prepared by a lead agency circulated for public review and comment, and a final document with responses to public comments is prepared for consideration by advisory and legislative bodies, in this case the SPRTA Board of Directors. SPRTA is the lead agency under CEQA for this project.

In addition, the State Resources Agency has adopted regulations, known as the State CEQA Guidelines (*Guidelines §15000* et seq.), to guide agencies in implementing the law. The Guidelines provide detailed procedures that agencies must follow to implement CEQA, including the procedures for the preparation of a CEQA document (an EIR for projects that may have significant impacts requiring mitigation measures or a Negative Declaration for projects with no significant impacts).

CEQA is more than merely a "procedural" statute. Substantive provisions of CEQA include provisions requiring agencies to avoid or mitigate significant impacts disclosed in an EIR when feasible.

Significance Determination in NEPA and CEQA

An important distinction between the requirements of NEPA and CEQA is in the determination of significance. Under NEPA, significance is used to evaluate severity of potential environmental impacts, and is used to determine which level of environmental documentation is appropriate. NEPA does not require that impacts be categorized in terms of potential significance in the environmental document.

Under CEQA, potential significance of environmental impacts must be evaluated and disclosed in the environmental document. Some impacts that are determined to be significant under CEQA may not be considered of sufficient severity to be significant under NEPA.

Clean Water Act

As part of the planning process for the Placer Parkway Corridor Preservation Tier 1 EIS/EIR, FHWA, Caltrans, and the Placer County Transportation Planning Agency (PCTPA), acting on behalf of SPRTA, agreed to participate with the U.S. Army Corps of Engineers (USCOE) and the U.S. Environmental Protection Agency (U.S. EPA) in a modified NEPA/Clean Water Act Section 404 Integration Process (NEPA/404) process (FHWA et al., 1993). This process provided early feedback to FHWA and PCTPA so that Tier 1 decisions would reflect careful consideration of the Section 404(b)(1) Guidelines, and to accommodate future regulatory requirements. The modified process reflects the broad nature of Tier 1 environmental review while also anticipating the permit application requirements of Tier 2. This process is described in detail in Appendix A-4. As part of this process, all participants agreed on the Purpose and

Need Statement, dated February 16, 2005, which is reflected herein, and provided in its entirety in Appendix C.

FHWA issued a Notice of Intent and PCTPA issued a Notice of Preparation for the Tier 1 EIS/EIR in 2003 (Appendix B). The Purpose and Need Statement was developed through a series of meetings among participating agencies in 2004 and 2005. During this time, jurisdictions in western Placer County began to develop a common set of future planning assumptions on which environmental review of a number of major future proposed developments in the region could be based. Assumptions included the identification of 2025 as a reasonable future development year consistent with projections contained within the Sacramento region's long-range transportation improvement plan, the Metropolitan Transportation Plan (MTP), for transportation improvements in the six-county region. The Purpose and Need Statement also focused on 2025.

The Sacramento Area Council of Governments (SACOG) has the responsibility for development and adoption of the MTP. Early planning for the project considered the then-current MTP information, which provided projections through year 2025. Subsequently, a 2027 MTP has been adopted, and a 2035 MTP is in the planning stages. In preparing this Tier 1 EIS/EIR, it was ultimately determined that the projected opening year of Placer Parkway (2020) would be an appropriate year for which to analyze transportation impacts for this Tier 1 EIS/EIR. This Tier 1 also analyzes cumulative impacts in 2040, based on FHWA's requirement that analyses include conditions 20 years from the opening year. While the Purpose and Need Statement was developed using 2025 information, there was no benefit to including a 2025 analysis year in addition to 2020 and 2040, and 2025 data are not used in subsequent chapters of this Tier 1 EIS/EIR. Additional discussion of the analysis framework for this Tier 1 EIS/EIR is included in Chapter 3, Analysis Framework.

1.2 PROJECT NEED

The needs for the proposed project are discussed below. The order of the specific needs is not intended to imply a prioritization or order of importance.

1.2.1 NEED TO PRESERVE RIGHT-OF-WAY

The project vicinity includes some of the fastest growing communities in the Sacramento Metropolitan region—Roseville, Rocklin, Lincoln, and the Sunset Industrial Area. SACOG projects that the population in southwestern Placer County will nearly double between 2000 and 2025. Employment in the SR 65 high-technology corridor is expected to grow even faster than the population. The anticipated development to support this increased population and employment will dramatically increase travel demand over the next 20 years and beyond.

The study area is under intense development pressure. Cities and counties are processing development applications and approving entitlement of new land uses in the study area. This is an ongoing process and the future of proposed land uses in the study area is not yet certain. However, given the ongoing environmental review of existing applications (including the Placer Vineyards Specific Plan [PVSP], the Regional University Specific Plan [RUSP], the Placer Ranch Specific Plan [PRSP], the Lincoln Sphere of Influence [SOI] expansion, the Sierra Vista Specific Plan [SVSP], the Creekview Specific Plan [CSP], and the Sutter Pointe Specific Plan [SPSP]), the number of recent applications or pre-application submittals, and interest by the development community, it is apparent that it will become increasingly difficult and expensive to identify an appropriate corridor as a solution that meets the ultimate purpose of the proposed project. Failure to preserve a corridor as soon as feasible could result in potentially increased costs and greater environmental impacts because ongoing planning for development could result in approved projects that would foreclose opportunities for locating the roadway in areas that would minimize environmental impacts, leading to substantially higher mitigation costs.

1.2.2 TRAVEL DEMAND AND ANTICIPATED CONGESTION

1.2.2.1 Population Growth

Growth in population in south Sutter County, southwestern Placer County, and northern Sacramento County will influence travel demand in the project vicinity.

The anticipated population in the region will dramatically increase travel demands in south Sutter County and southwestern Placer County over the next 20 years and beyond. The jurisdictions in southwestern Placer County have developed Capital Improvement Programs (funded by a variety of sources, including development fees) that would maintain a high level of service on their local roadway systems. However, limited improvements are programmed for the regional roadway system, and travel speeds/travel times from Placer County to both Sacramento and Sutter counties are projected to deteriorate over the next 20 years, even with improvements to local roadways already identified in local general plans.

1.2.2.2 Job Growth and Goods Movement

The Interstate 80 (I-80) corridor is the major trans-Sierra roadway in northern California accommodating the movement of goods and services. Goods and services are moved to and through the study area at a growing rate using three primary modes of transportation: road, air, and rail. The combined increase of vehicles used for the movement of goods and services as well as passenger vehicles has led to increased congestion, which in turn decreases in travel times in the study area and competition for roadway capacity.

Data for 2004 indicates that trucks account for a significant portion of vehicles on the state highways in the pertinent Regional Analysis Districts (RADs) in the local project vicinity (see Figure 1-2), while truck volumes on I-80 are considered to be consistent with most major suburban interstate facilities.

- SR 65 north of I-80 – 12,680 trucks out of a total volume of 84,000 vehicles (15.1 percent)
- SR 70/99 north of Howsley Road – 2,520 trucks out of a total volume of 29,000 vehicles (8.7 percent)
- I-80 at Placer/Sacramento County line – 9,270 trucks out of a total volume of 179,000 vehicles (5.2 percent)

Congestion on the regional roadways connecting Placer County with Sutter and Sacramento counties will adversely impact access to jobs. The projected increase in travel times will affect the movement of goods and people, and will have an impact on the region’s economy. By 2025, SACOG estimates that total employment in southwestern Placer County (172,000 employees) will exceed total employment in downtown Sacramento (154,000 employees). The high-technology industry in the SR 65 corridor, plus development of Sutter County’s industrial/commercial reserve area, requires dependable access to airports to move high-value/time-critical freight. Thus, direct and convenient access and reliable travel times to both the Sacramento International Airport and the Lincoln Regional Airport are very important to this growing regional job center.

1.3 PROJECT PURPOSE

The goal of the Tier 1 phase of the proposed Placer Parkway project is to preserve a right-of-way for a proposed transportation facility that contributes to the ultimate project purpose:

> The ultimate purpose of the proposed Placer Parkway project is to reduce anticipated congestion on the local and regional transportation system and advance economic development goals in southwestern Placer County and south Sutter County.

The objectives of the Placer Parkway project are described below.

1.3.1 PRESERVING RIGHT-OF-WAY

The purpose of the proposed action is to preserve right-of-way for a new or upgraded east-west connector between SR 65 and SR 70/99 serving cities and unincorporated areas across southwestern Placer County and south Sutter County. Planned and proposed development in the project vicinity has been accelerating over the last few years, and opportunities for building a new or upgraded connector may be lost unless action is taken now to preserve right-of-way for project construction.

1.3.2 RESPONDING TO EXISTING AND ANTICIPATED TRAVEL DEMAND

The proposed Placer Parkway would be designed to reduce pressure on the existing transportation network and to address anticipated future congestion on the local roadway system in southwestern Placer County and south Sutter County. The proposed project would be designed to reduce total vehicle hours traveled during the morning and evening peak commute periods (i.e., 6 to 9 a.m. and 3 to 6 p.m.), reduce the amount and duration of travel that is spent in congested conditions in southwestern Placer County, and 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 Level of Service (LOS) C to D conditions.[1]

1.3.3 PROVIDING ACCESS TO THE REGIONAL TRANSPORTATION SYSTEM IN AREAS PLANNED OR PROJECTED FOR JOB GROWTH

Placer Parkway would be designed to improve regional accessibility for businesses and jobs in the project vicinity, including access to SR 70/99. The Parkway is proposed to serve major travel flows from SR 65 to (1) the south Sutter Industrial area, (2) Sacramento International Airport, (3) Sacramento County, and (4) the Interstate 5 (I-5) corridor. 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.

1.4 PROJECT BACKGROUND AND PROJECTED GROWTH

1.4.1 INTRODUCTION

The proposed Placer Parkway Corridor Preservation Project would preserve right-of-way for a proposed transportation facility to reduce anticipated congestion on the local and regional transportation system and advance economic development goals in southwestern Placer County and south Sutter County. The Parkway is listed as a priority project in the current MTP and in Placer County's 2027 Regional Transportation Plan (PCTPA, 2005). The project is not, however, the subject of a specific governmental mandate, nor is the project being proposed to address particular safety concerns or roadway deficiencies. Hence, detailed explanations for these topics are not given. However, the Placer Parkway project would assist with linking SR 70/99 with SR 65, serving cities and unincorporated areas across south Sutter County and southwestern Placer County, and would address anticipated population and employment growth as well as the resulting traffic increases.

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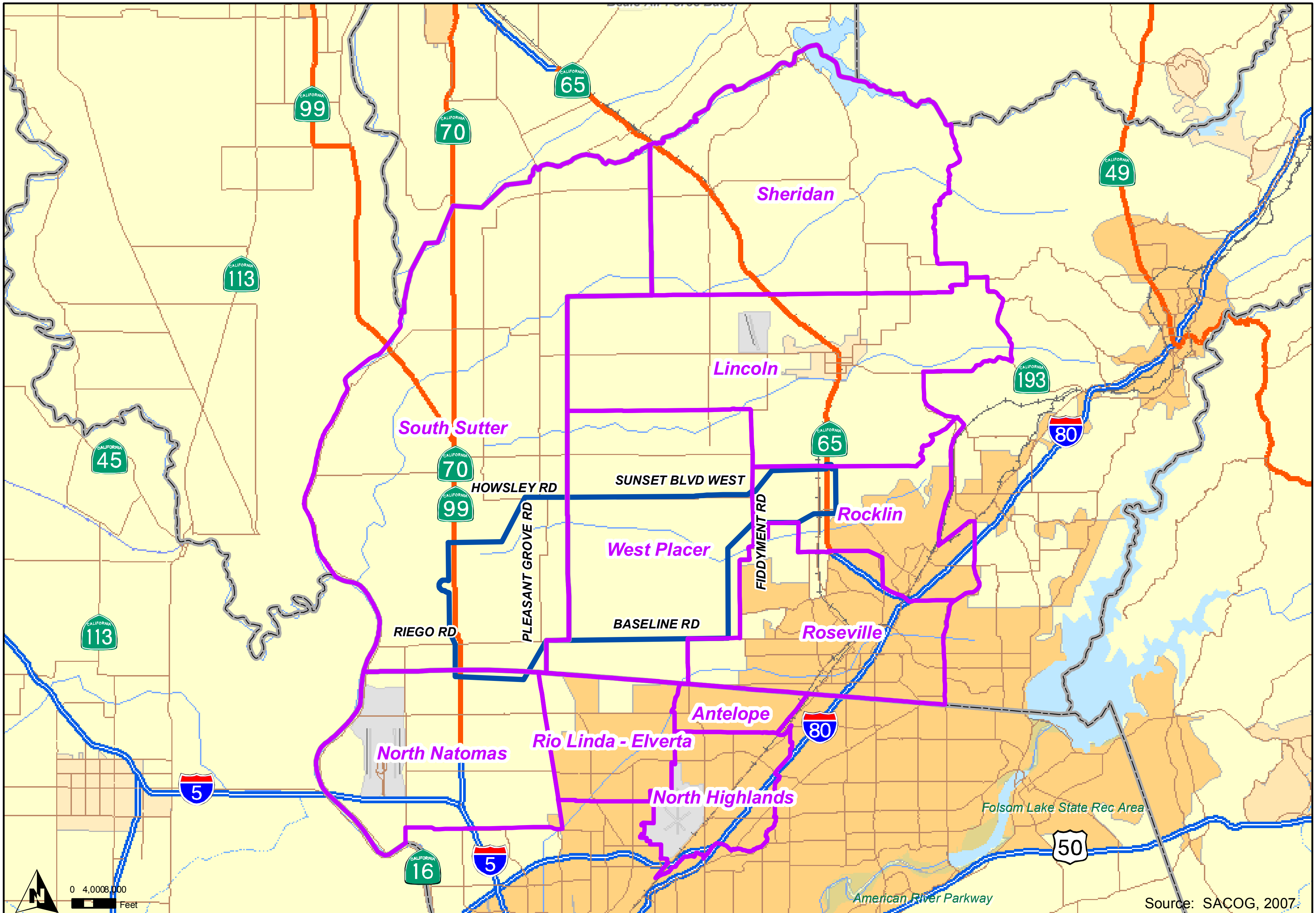
[1] LOS is a qualitative measure of the effect of a number of factors which include speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort/convenience, and operation costs. LOSs are designated A through F, from best to worst, covering the entire range of traffic operations that might occur. LOS E describes conditions approaching or at maximum capacity. Free flow speed and LOS C and D conditions on a freeway do not preclude an alternative based on expanding existing roads, a non-freeway facility, a Transportation System Management alternative, a shorter Parkway Alternative, or a combination of the aforementioned.



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Study Area Boundary

Regional Analysis District

* Local project vicinity comprises the area covered by RADS

Placer Parkway Corridor Preservation

Tier 1 EIS/EIR

Regional Analysis Districts Within the Local Project Vicinity*

Figure 1-2

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1.4.2 PROJECT HISTORY

Over the last 15 years a number of major transportation studies have been performed in Sacramento and Placer counties, and to a lesser extent Sutter County. Caltrans prepared the Initial Feasibility Study for Route 102 in 1991 (DKS, 1991). This study analyzed a new 35-mile corridor reliever facility to I-80 in terms of feasibility, scope, and priority. After analyzing the data from the local general plans, it was determined that I-80 would be severely congested by 2020 with LOS F conditions for about 3 hours every morning and afternoon. The study determined that a new transportation corridor between I-5 near the Sacramento International Airport and I-80 near Auburn was physically and operationally feasible, and could provide an uncongested bypass of the Sacramento area. The I-80/Route 102 Multimodal Transportation Study, which was started by Caltrans in the fall of 1992, was eventually canceled (DKS, 2000).

SACOG conducted the Metro Study in 1989 to assess regional transportation needs in the year 2010 based on adopted land use plans, and develop a list of priority transportation improvements to meet those needs. Recognizing that the Sacramento area was not meeting federal or state air quality standards, the study recommended that transit and nonmotorized transportation facilities and implementation of transportation control measures be given the highest priority. However, the study also recommended that a number of major roadway projects be pursued, including Route 102. It was recommended that all new facilities, like Route 102, be planned as multi-modal corridors (or projects). It stated that the debate over the timing of construction, the appropriate mix of travel modes, and design features in this corridor should continue, but in order to avoid precluding future options, the transportation corridor should be identified and protected (DKS, 2000).

SACOG, Caltrans, and PCTPA jointly sponsored the Interstate 80 Corridor Plan in 1996. This plan focused on a 63-mile stretch of I-80 from Davis on the west to Colfax on the east. The objective was to obtain a consensus on a recommended set of specific improvements for the corridor through the year 2010. A set of concepts and approaches for the study were developed by the Technical Advisory Committee and presented to the public in a series of open houses in September and October 1998. Results of that study identified the need for auxiliary and High Occupancy Vehicle lanes in the Roseville area to accommodate forecasted traffic. These improvements are currently only partially funded (DKS, 2000).

In October 1999, the Policy Advisory Committee for the Placer Parkway Interconnect Study/Conceptual Plan voted unanimously to recommend to the PCTPA and the SACOG boards that a Route Adoption Study be conducted to establish a precise alignment for Placer Parkway to provide a connection between SR 65 and the SR 70/99 and I-5 corridors. This proposed connection is cited in the Placer County General Plan (1994) and the Placer County Regional Transportation Plan 2027 (PCTPA, 2005) to accommodate rapid growth and development proposals in southwestern Placer County, south Sutter County, and northern Sacramento County as well as the combined need to improve goods movement in the region (DKS, 2000).

Lastly, SACOG and PCTPA jointly sponsored the Project Study Report (Project Development Support) for the Placer Parkway (PSR), which explored development of a new transportation facility that would connect SR 65 in the Lincoln/Roseville/Rocklin area to SR 70/99 in Sutter County and the Sacramento International Airport. The PSR focused on avoiding growth inducement in agriculturally designated areas, preservation of a roadway corridor for through travel, and providing a true “parkway” concept. Meetings were held in 1999 and 2000 with elected officials, key stakeholders (local jurisdictions, resource agencies, environmental and neighborhood groups, and business/industry groups), and various technical personnel to identify concepts for the proposed Placer Parkway and establish its goals. Also, the PSR preliminarily identified the Placer Parkway purpose and need, policy direction, a brief corridor concept analysis followed by a recommendation, and a cost estimate. A Preliminary Environmental Assessment Report was also prepared, which analyzed the general potential for environmental impacts (DKS, 2001).

This Tier 1 EIS/EIR is the next step in the planning process for Placer Parkway.

1.4.3 POPULATION AND EMPLOYMENT

1.4.3.1 Introduction

Calculating roadway operations and travel demand requires an evaluation of population and employment data. The population and employment data were obtained from four sources: the U.S. Census Bureau, California Department of Finance (DOF), SACOG, and DKS Associates. The U.S. Census Bureau maintains historical data, while DOF develops population estimates that are used for budgetary and economic forecasts, as well as determining the annual appropriations for all of California's jurisdictions. DOF projections are made for the state, counties, and cities for 50 years into the future, with ten-year interim outlooks. The approved forecasts begin in 2000 and extend to the year 2050, in ten-year increments.

One of SACOG's many tasks includes forecasting population and land use changes, which are critical assumptions used in modeling future transportation impacts. SACOG's approved forecasts begin in 2005 and extend to the year 2025, in five-year increments. SACOG has recently developed forecasts that extend to the year 2035 as a part of the MTP update effort, although they have not been formally adopted. As a part of the Tier 1 EIS/EIR, DKS Associates has produced regionally specific population and employment data for more detailed analysis over those that have been created by either DOF or SACOG.

SACOG does not use U.S. Census Bureau geographies below county limit lines to forecast population and land use changes due to the fact that those geographies tend to change each decennial census, especially on the fringes of the developed area. Similar to other Metropolitan Planning Organizations across the United States, SACOG developed subregions called RADs for forecasting purposes. While these subregions are loosely based on the U.S. Census Bureau geographies, they allow for greater forecasting accuracies over multi-year periods. The forecasts by RAD are consistent with regional targets for the given year, and linear projections relative to the shares of growth were applied for the region.

Based on the above information, two geographic areas were examined to determine the scope of previous and anticipated growth.

- The first area examined was the individual counties that would be most served by the proposed project: Sutter, Placer, and Sacramento counties (see Figure 1-1). (While the alternatives do not lie within Sacramento County, the project would serve destinations in the county, including the Sacramento International Airport and downtown Sacramento.)

- The second area was developed to determine the impact of the proposed project on the local vicinity, using SACOG's RAD data, as they provide the best source of information for areas within and adjacent to the proposed Parkway (see Figure 1-2).

The project vicinity includes some of the fastest growing communities in the Sacramento region (Roseville, Rocklin, and Lincoln).

U.S. Census Bureau and SACOG information was used for historical data at the county and RAD level, while DKS Associates–produced regionally specific information by SACOG RAD was used for projection-related data. The process used to prepare 2020 and 2040 development forecasts in the vicinity of the project is presented in Chapter 3, Analysis Framework. The population and employment trends indicate past rapid growth in both Placer and Sacramento counties, with a forecast of substantial continued growth in both counties. While Sutter County has not previously experienced such growth, forecasts are for substantial growth in south Sutter County.

The following presents population and employment data for these two geographic areas.

1.4.3.2 Sutter, Placer, and Sacramento Counties

Historic and Forecasted Population by County

Forecast data are available from more than one source, and information from the various sources tends to differ somewhat. For comparison, Table 1-1 shows U.S. Census data for 2000, DOF data from 2000 to 2050, SACOG data from 2000 to 2050, and data developed for use in this Tier 1 EIS/EIR from 2020 through 2040. The methodology used to develop 2040 forecasts was based on input from jurisdictions in the project vicinity, as described in Chapter 3, Analysis Framework. Since not all entities provide data for the same years, data are presented as available. The regional development forecasts used for the Placer Parkway analysis in areas outside Placer County and south Sutter County were based on SACOG forecasts through 2050, which show a lower population growth than those prepared by DOF, especially in Sacramento County. Within Placer County and south Sutter County, the annual population growth rate through 2040 used in the Placer Parkway analysis is between the growth rates projected by SACOG and DOF.

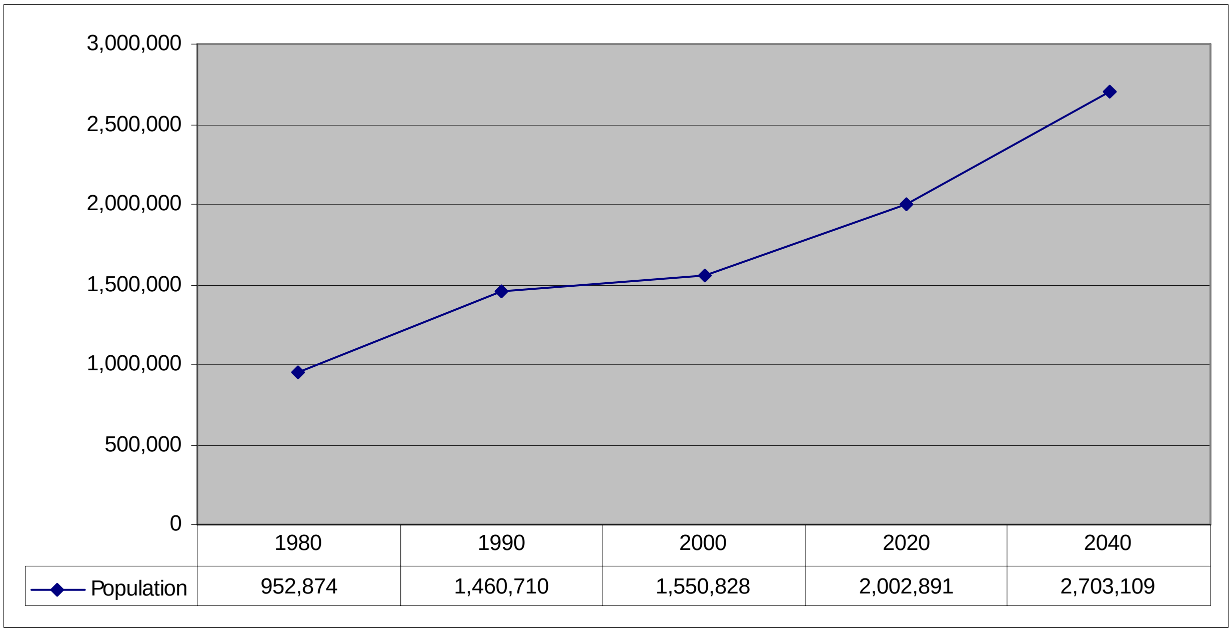
Historic and forecasted population data within Sutter, Placer, and Sacramento counties from 1980 through 2040 are shown on Figure 1-3 and in Table 1-2. These counties as a whole experienced significant population growth from 1980 through 2000, and are expected to grow even faster through 2040. On a percentage basis, Placer County experienced the most growth of the three counties between 1980 and 2000. In fact, Placer County experienced one the highest growth rates in California at 48 percent from

Table 1-1
Population Information from Various Sources:
Sutter, Placer, and Sacramento Counties

Year	California Department of Finance	Sacramento Area Council of Governments	U.S. Census	Placer Parkway Analysis[1]
2000	1,559,200	1,550,828	1,550,828	
2005		1,764,475		
2020	2,514,515			2,002,891
2035		2,343,196		
2040	3,323,162			2,703,109
2050	3,670,022	3,140,000		

Note:
[1] Data are from DKS Associates based on development projections as described in Chapter 3.

Figure 1-3: Historic and Forecasted Population Growth in Sutter, Placer, and Sacramento Counties



	1980	1990	2000	2020	2040
Population	952,874	1,460,710	1,550,828	2,002,891	2,703,109

Sources: U.S. Census Bureau, 1980, 1990, and 2000; DKS Associates, 2007
1980, 1990, and 2000 data are from U.S. Census Bureau
2020 and 2040 data are from DKS Associates based on development projections as described in Chapter 3.

Table 1-2
Historic and Forecasted Population and Employment Growth in Sutter, Placer, and Sacramento Counties

	Population								Employment							
Year	**Population**	**1980 to 1990 Growth**	**1990 to 2000 Growth**	**2000 to 2020 Growth**	**2020 to 2040 Growth**	**1980 to 2000 Population Gain**	**2000 to 2020 Population Gain**	**2020 to 2040 Population Gain**	**Number of Jobs**	**1980 to 1990 Growth**	**1990 to 2000 Growth**	**2000 to 2020 Growth**	**2020 to 2040 Growth**	**1980 to 2000 Employment Gain**	**2000 to 2020 Employment Gain**	**2020 to 2040 Employment Gain**
Sutter County																
1980	52,246								20,147							
1990	64,415	23.3%							26,359	30.8%						
2000	78,930		22.5%			26,684			30,980		17.5%			10,833		
2020	84,400			6.9%			5,470		35,420			14.3%			4,440	
2040	184,846				119.0%			100,446	84,639				139.0%			49,219
Placer County																
1980	117,247								40,049							
1990	172,796	47.4%							82,920	107.0%						
2000	248,399		43.8%			131,152			118,647		43.1%			78,598		
2020	433,540			74.5%			185,141		228,792			92.8%			110,145	
2040	603,819				39.3%			170,279	353,267				54.4%			124,475
Sacramento County																
1980	783,381								338,043							
1990	1,041,219	32.9%							485,063	43.5%						
2000	1,223,499		17.5%			440,118			545,925		12.5%			207,882		
2020	1,484,951			21.4%			261,452		829,191			51.9%			283,266	
2040	1,914,444				28.9%			429,493	1,111,520				34.0%			282,329

Sources: U.S. Census Bureau, 1980, 1990, and 2000; DKS Associates, 2007
1980, 1990, and 2000 data are from U.S. Census Bureau
2020 and 2040 data are from DKS Associates based on development projections as described in Chapter 3.

1980 to 1990, and continues to be one of the fastest growing counties in California today. For the 2000-to-2020 period, Placer County is again expected to experience significant population growth (nearly 75 percent). Percentage gains in Sacramento County and Sutter County from 2000 to 2020 are expected to reach nearly 21 percent and 7 percent, respectively. Growth during the 2020 to 2040 timeframe is expected to slow somewhat for Placer County, at nearly 39 percent. However, growth in Sutter County for that period is forecasted at nearly 119 percent, while Sacramento County is anticipated to grow by nearly 29 percent from 2020 to 2040.

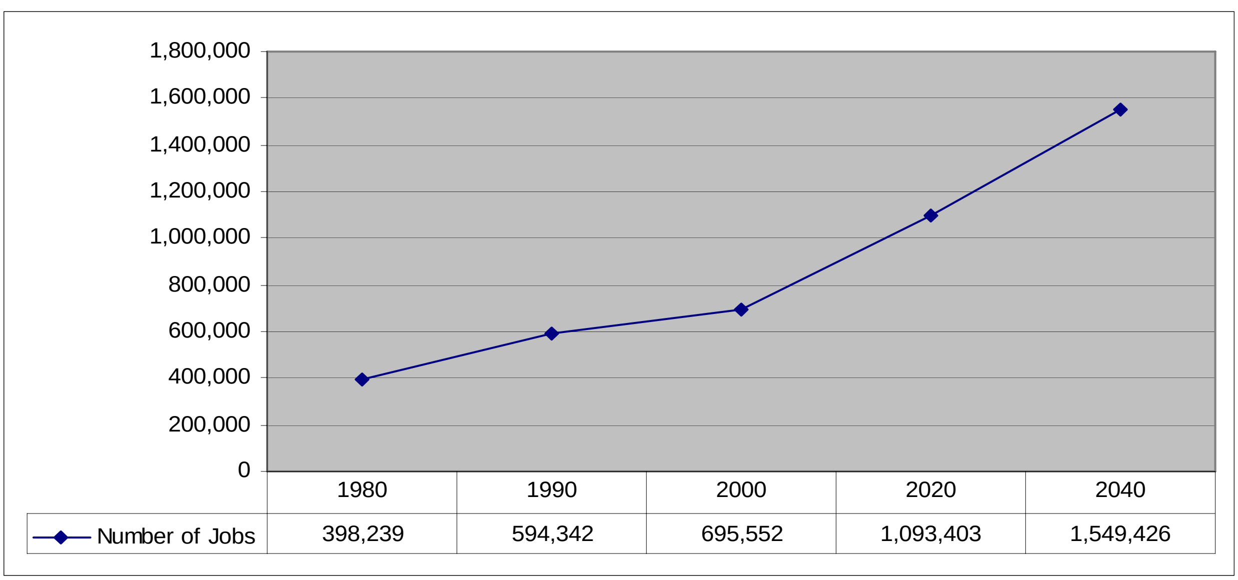
From 1980 to 2000, of the study area counties, Sacramento County experienced the largest gain in the actual number of residents, with an increase of nearly 440,118 people. Population gains in Sacramento County for the 2000-to-2020 and 2020-to-2040 time frames are anticipated to be nearly 261,452 and 429,493 people, respectively. The gain in the actual number of residents for Sutter and Placer counties is expected to be significantly lower than the number of residents for Sacramento County. Overall, the majority of this development is attributed to a net in-migration, as coastal Californians move toward the Sacramento region due to high housing costs versus growth as a result of natural increase (births exceeding deaths).

Data from SACOG indicate that the population of Placer County has increased by an average of 11,455 residents per year between 2000 and 2005. Between 2000 and 2040, the population in Placer County is projected to increase by an average of 8,885 residents per year.

Historic and Forecasted Employment by County

Historic and forecasted employment data from 1980 through 2040 for Sutter, Placer, and Sacramento counties are shown on Table 1-2 and on Figure 1-4. As expected, the majority of jobs are located in Sacramento County, which is primarily due to the concentration of state and county jobs in the City of Sacramento and all of the ancillary businesses that support/serve this sector of the economy. Similar to population growth, Sacramento County experienced a large gain in the number of jobs from 1980 to 2000, with an increase of approximately 207,882. A similar number of new jobs are expected in the 2000-to-2020 and 2020-to-2040 timeframes, with an increase of approximately 283,266 and 282,329 jobs, respectively.

Figure 1-4: Historic and Forecasted Employment in Sutter, Placer, and Sacramento Counties



	1980	1990	2000	2020	2040
Number of Jobs	398,239	594,342	695,552	1,093,403	1,549,426

Sources: U.S. Census Bureau, 1980, 1990, and 2000; DKS Associates, 2007
1980, 1990, and 2000 data are from U.S. Census Bureau
Note: 2020 and 2040 data are from DKS Associates based on development projections as described in Chapter 3.

The number of jobs in Placer County more than doubled from 1980 to 1990, with an increase of 107 percent. Both Sacramento and Sutter counties experienced significant growth over this same period at 44 percent and 30.8 percent, respectively. Growth from 1990 through 2000 did not occur at nearly the same pace, but Placer County again led the way with a 43 percent increase. In the 2000-to-2020 period, the number of Placer County employees is anticipated to greatly increase (by 93 percent). Strong percentage growth is also anticipated in Sacramento County, with a gain of 52 percent over the same 20-year period. Forecasted employment growth from 2020 to 2040 is anticipated to be strongest in Sutter County with a gain of 139 percent, followed by Placer County with an estimated employee increase of 55 percent.

1.4.3.3 Local Project Vicinity

Local project vicinity growth within and immediately adjacent to the proposed Parkway was also examined. This geographic area, shown on Figure 1-2, was selected based on the availability of existing demographic data in the vicinity of the project, which is available by RAD. RADs do not constitute a formal project "study area" for the project as defined in Chapter 3, but information by RAD provides a more localized context than county data alone.

Table 1-3 shows historical population and employment data from 1990 to 2000, and growth forecasts in population and employment between 2000 and 2020 and between 2020 and 2040. Year 1980 population and employment numbers are not available from SACOG. Data for the local project vicinity are presented by individual RAD to better define actual and projected population and job growth in the vicinity of the proposed project.

The population in the local project vicinity is expected to nearly double between 2000 and 2020. Even greater labor force gains are expected. Between 2020 and 2040, the population of this area was projected to increase by about 64 percent.

Historic and Forecasted Population in the Local Project Vicinity

As shown in Table 1-3, substantial population increases occurred in the Roseville, Rocklin, Lincoln, North Natomas, and Antelope RADs between 1990 and 2000. The largest percentage increase was experienced in the North Natomas RAD at nearly 3,078 percent, while the greatest gain in the actual number of residents occurred in the Roseville RAD with an increase of nearly 34,000 people. During the 2000-to-2020 timeframe, extraordinary growth is forecast for the West Placer and North Natomas RADs, at approximately 3,344 percent and 3,802 percent, respectively. The Lincoln and South Sutter RADs are also expected to experience notable growth by 2020, at nearly 272 percent and 271 percent, respectively. Moderate population increases are forecast for the remainder of the RADs. Overall, forecasted population growth from 2020 to 2040 is anticipated to be more moderate, with the South Sutter, West Placer, and Sheridan RADs leading the way at 500 percent, 317 percent, and 191 percent, respectively. Population increases of greater than 86 percent are expected in the Lincoln and North Natomas RADs over the same 20-year period. Population trends and forecasts from 1990 through 2040 are shown on Figure 1-5.

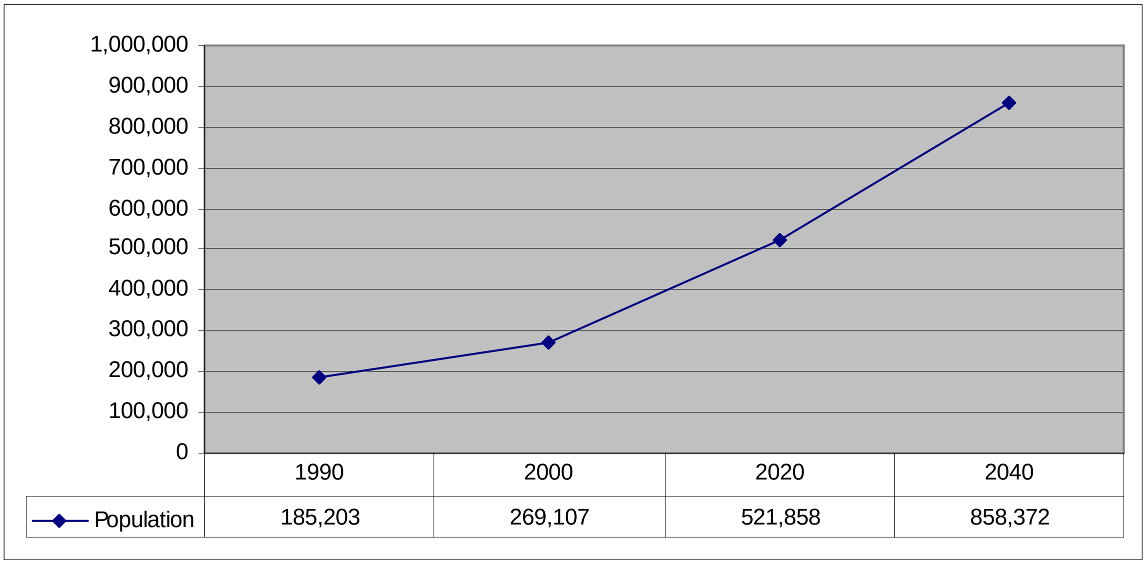
The extent of growth in the area is indicated by recent development proposals. The City of Roseville recently approved the West Roseville Specific Plan (WRSP), a mixed-use project which extends the City of Roseville city limits to the west; it includes about 8,400 dwelling units. It also approved annexation of additional lands that could accommodate another approximately 7,400 dwelling units. Placer County has been evaluating a development application for the proposed PVSP south of Baseline Road. This proposed mixed-use development would contain about 14,100 dwelling units and about 500 acres of commercial/industrial uses. A Blueprint Alternative (see the following paragraph for background) for PVSP would contain over 21,000 dwelling units but about the same amount of commercial/industrial uses. See Section 1.6, Regional Planning Context, for more information on future development.

Table 1-3
Historic and Forecasted Population and Employment in the Local Project Vicinity by Regional Analysis District

Location by Regional Analysis District	Population							Employment						
	1990	2000	2020	2040	1990 to 2000 Growth	2000 to 2020 Growth	2020 to 2040 Growth	1990	2000	2020	2040	1990 to 2000 Growth	2000 to 2020 Growth	2020 to 2040 Growth
Sutter County														
30 South Sutter	2,907	3,060	11,351	68,059	5.3%	270.9%	499.6%	433	597	6,189	25,599	37.9%	936.7%	313.6%
Placer County														
70 Roseville	46,580	80,729	131,539	132,112	73.3%	62.9%	0.4%	27,820	59,591	99,878	106,157	114.2%	67.6%	6.3%
71 Rocklin	18,508	37,601	67,104	70,396	103.2%	78.5%	4.9%	6,391	15,664	48,128	86,829	145.1%	207.3%	80.4%
72 Lincoln	10,018	16,154	60,064	111,555	61.2%	271.8%	85.7%	1,580	4,950	23,626	53,214	213.3%	377.3%	125.2%
73 West Placer	932	1,014	34,919	145,466	8.8%	3,343.7%	316.6%	22	51	5,489	49,511	131.8%	10,662.7%	802.0%
74 Sheridan	2,661	2,939	4,054	11,785	10.4%	37.9%	190.7%	108	206	230	3,093	90.7%	11.7%	1,244.8%
Subtotal	78,699	138,437	297,680	471,314	75.9%	115.0%	58.3%	35,921	80,462	177,351	298,804	124.0%	120.4%	68.5%
Sacramento County														
1 North Natomas	63	2,002	78,111	153,980	3,077.8%	3,801.6%	97.1%	2,165	3,153	35,934	87,855	45.6%	1,039.7%	144.5%
2 Rio Linda/Elverta	18,104	19,809	26,703	37,527	9.4%	34.8%	40.5%	1,913	2,314	6,056	10,009	21.0%	161.7%	65.3%
3 North Highlands	73,209	74,359	77,691	91,437	1.6%	4.5%	17.7%	33,955	26,395	37,844	60,532	-22.3%	43.4%	60.0%
25 Antelope	12,221	31,440	30,322	36,055	157.3%	-3.6%	18.9%	749	2,684	4,076	5,855	258.3%	51.9%	43.6%
Subtotal	103,597	127,610	212,827	318,999	23.2%	66.8%	49.9%	38,782	34,546	83,910	164,251	-10.9%	142.9%	95.7%
Total	**185,203**	**269,107**	**521,858**	**858,372**	**45.3%**	**93.9%**	**64.5%**	**75,136**	**115,605**	**267,450**	**488,654**	**53.9%**	**131.3%**	**82.7%**

Sources: SACOG, 3-28-01 and 1-22-02; DKS Associates, 2007
1990 and 2000 data are from SACOG
Note: 2020 and 2040 data are from DKS Associates based on development projections as described in Chapter 3.

Figure 1-5: Historic and Forecasted Population in the Local Project Vicinity by Regional Analysis District



Sources: SACOG, 2001, 2002; DKS Associates, 2007
1990 and 2000 data are from SACOG
Note: 2020 and 2040 data are from DKS Associates based on development projections as described in Chapter 3.

SACOG's development projections assumed that only a small portion of the ultimate population in these major development areas would exist by 2020. However, SACOG projections were adopted in April 2001, before some of these developments were proposed or approved. SACOG recently completed a transportation and land use planning effort with a 2050 horizon called "the Blueprint." That effort has convinced SACOG that their projected 2020 growth for Placer County was underestimated. SACOG anticipates that Placer County's population would exceed 600,000 by 2050 (up from 249,000 in 2000). In their ongoing planning efforts, SACOG has placed about 90 percent of that growth in southwestern Placer County within or adjacent to the RADs identified on Figure 1-2.

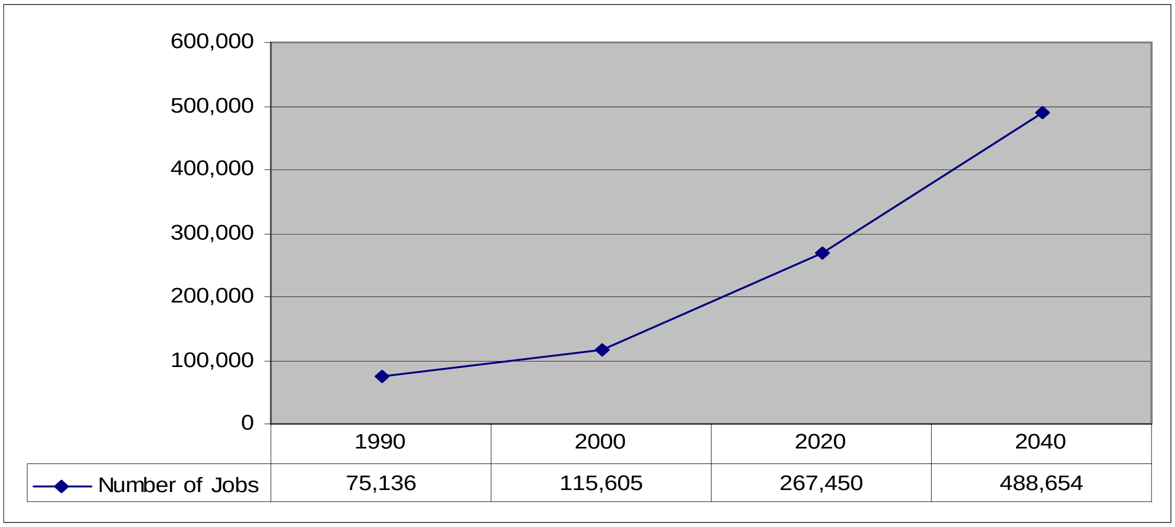
Historic and Forecasted Employment in the Local Project Vicinity

Table 1-3 also shows SACOG's past and forecasted job growth for RADs in the local project vicinity between 1990 and 2040. Robust job growth was experienced in Placer County and the Antelope RAD over the ten-year period from 1990 to 2000, with more moderate job growth occurring in North Natomas, Rio Linda/Elverta, and South Sutter RADs. A decline of 22.3 percent was experienced in the North Highlands RAD from 1990 to 2000.

Strong job growth is forecasted for both southwestern Placer and northern Sacramento RADs, with moderate job growth forecasted for the Sutter County RAD between 2000 and 2020. The largest employment gains are anticipated for the West Placer RAD at 10,663 percent, followed by the North Natomas and Lincoln RADs at 1,040 percent and 377 percent respectively. These percentages are high because there is currently little employment in these RADs. Employment in the SR 65 high-technology corridor is expected to grow even faster than population, with a long-term compound growth rate of 3.1 percent per year. Sutter County has designated 10,500 acres in southern Sutter County as industrial/ commercial reserve. Sutter County is currently processing an application for a mixed-use development in a 7,500-acre portion of this area that could include up to 17,500 dwelling units and a minimum of 3,600 acres of employment uses. Overall, forecasted employment growth from 2020 to 2040 is anticipated to be strong, with the West Placer and Sheridan RADs leading the way at 802 percent and 1,245 percent, respectively.

Strong employment growth is also forecasted for the Lincoln, North Natomas, and South Sutter RADs. Employment trends and forecasts by RAD from 1990 through 2040 are shown on Figure 1-6.

Figure 1-6: Historic and Forecasted Employment in the Local Project Vicinity by Regional Analysis District



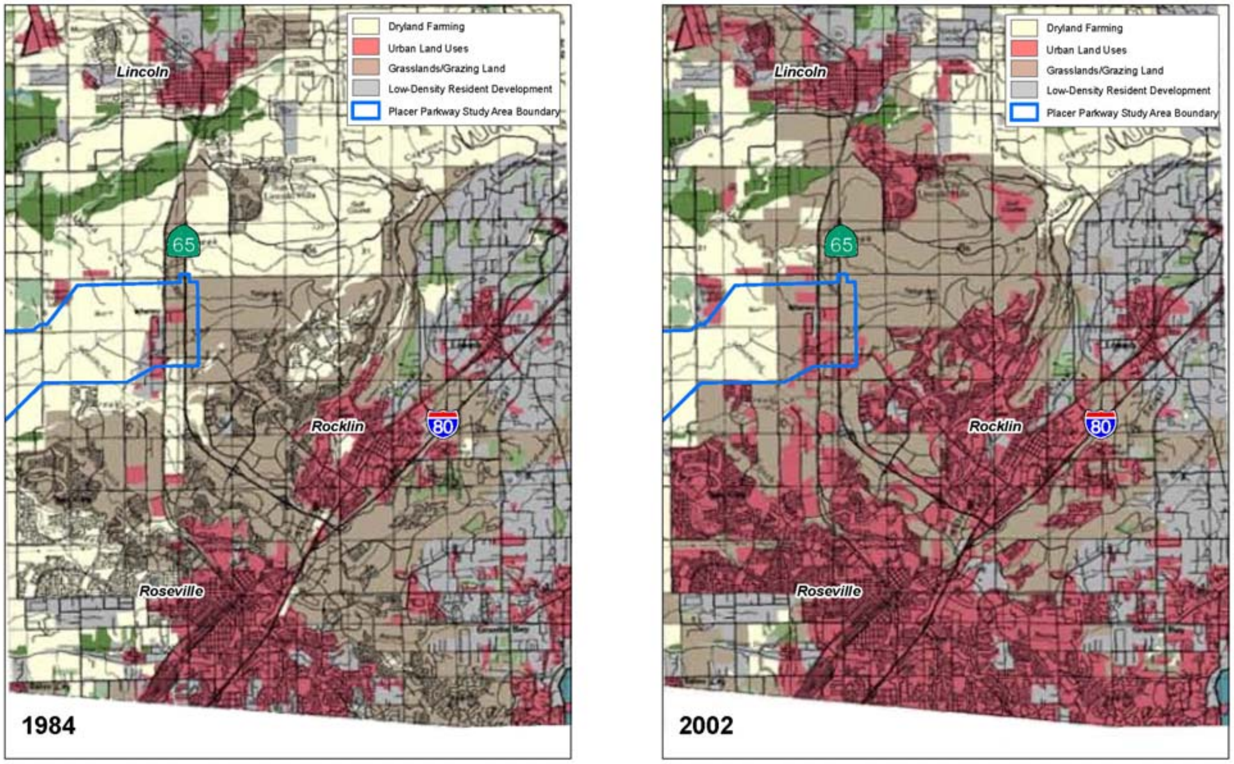
Sources: SACOG 2001 and 2002; DKS Associates, 2007
1990 and 2000 data are from SACOG
Note: 2020 and 2040 data are from DKS Associates based on development projections as described in Chapter 3.

1.4.4 LAND USE TRENDS

The Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California's agricultural resources. The information is gathered using air photos and site visits, and data extracted from FMMP's GIS database. The results of the population and employment growth, such as those described above can be seen on maps of urbanization or changes in land use over time. While FMMP has not created maps specific to the area where the Parkway is proposed, maps have been created to show the urbanization of the SR 65 corridor, from Roseville to Lincoln. Most of this area is still considered to be agricultural or open space land. Placer County has been among the "Top Ten Urbanizing Counties" as mapped by FMMP between 1994 and 2002. Growth in urban land has averaged over 2,500 acres per biennial map update since 1984 (FMMP, 2006a). The following two map series depict the land use changes in vicinity of the SR 65 corridor near the project. The area shown is approximately 9 miles across from east to west, and 14 miles from north to south.

FMMP classifies land as farmland (prime being the best of four types of farmland), grazing land, urban land, other land or water. The "other" category includes low-density "ranchettes," wetlands, and brush or timberlands unsuitable for grazing. Changes from 1984 through 2002 are predominantly the conversion from dryland farming (yellow) to grasslands/grazing land (brown) or urban land uses (red). Much of the grey area is low-density resident development on the grassy/oak-studded hills of southwestern Placer County (FMMP, 2006a). Figure 1-7 shows how rapidly the SR 65 corridor has developed since 1984. With Placer County expected to continue growing at an accelerated rate, even more of this corridor, as well as surrounding areas, would be urbanized by 2020.

Figure 1-7: Changes in Land Use Along SR 65 Corridor
1984 – 2002



Source: FMMP, 2006

More recently, FMMP also analyzed the impacts of the urbanization of the greater Sacramento region between 2000 and 2002. The greater Sacramento region is defined as the six counties under SACOG's jurisdiction (El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba counties). Specific to the Placer Parkway vicinity, FMMP found (FMMP, 2006b):

- Placer County gained 5,408 urban acres from 2000 to 2002, more than 90 percent of which had been farm or grazing land. This was a 40 percent increase in the urbanization rate compared to the 1998-to-2000 rate of urbanization.
- Sacramento County converted fewer acres to urban land from 2000 to 2002 (2,741 acres) than in the prior two-year cycle (6,430 acres). Conversions affected each of the incorporated cities. Farm and grazing decreased by 4,551 acres in the 2000-to-2002 cycle due to urbanization and improved mapping of rural residential areas.
- Sutter County urbanized 488 acres urbanized between 2000 and 2002, compared with 692 acres in the prior two-year cycle.

Land use changes have also recently occurred in the northwestern portion of Sacramento County. The Natomas Basin area has historically been used for agricultural purposes. However, the pressure to find suitable land for development at a reasonable cost has resulted in the conversion of this area to residential and commercial land uses. Data from SACOG indicates that the Natomas Basin area of Sacramento County has experienced significant recent growth and this trend is expected to continue.

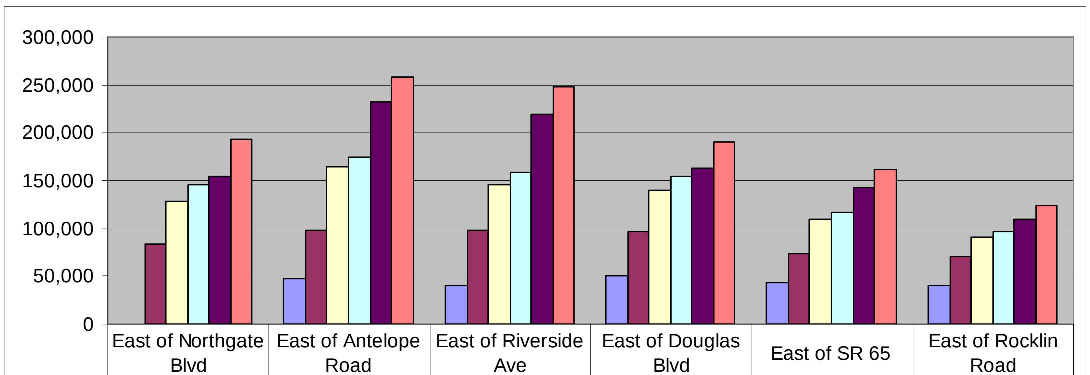
1.4.5 ROADWAY OPERATIONS AND TRAVEL DEMAND

Population and job growth affect travel demand and resultant roadway operations. The traffic information in this Tier 1 EIS/EIR was obtained from four sources: Caltrans, Placer County Department of Public Works, Sutter County Department of Public Works, and DKS Associates. Caltrans, Placer County, and Sutter County traffic data were used to describe the historical context of roadway operations, while DKS Associates prepared forecasts that estimate anticipated travel demand. The existing roadway network in the local project vicinity consists of federal/state highways, arterials, collectors, and local roads. Presented below are historical roadway operations and projected future travel demand for selected roadways in the local project vicinity. All data assume that a Placer Parkway is not constructed. See Figure 1-2 for the location of these roads.

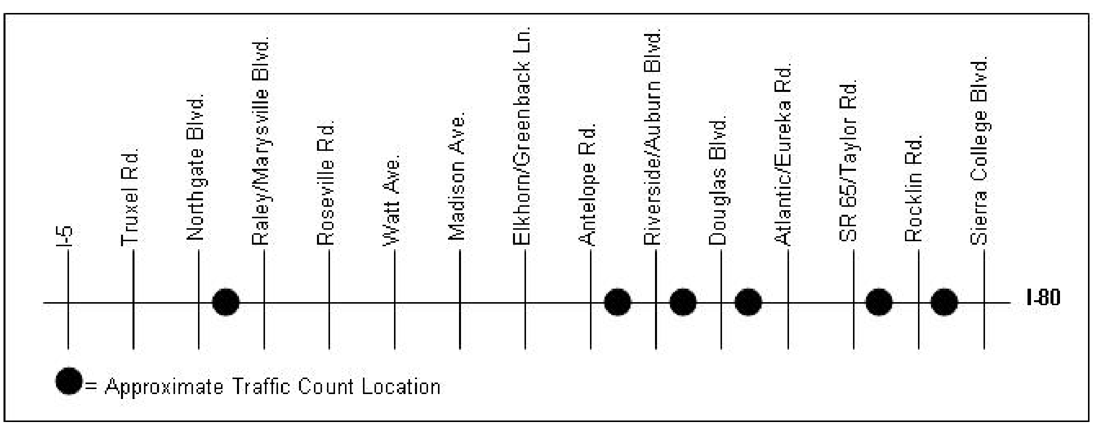
1.4.5.1 Interstate 80

Interstate 80. Historical roadway operations since 1980 and projected future travel demand for I-80 are shown on Figure 1-8. I-80 north of Sacramento was constructed in 1981/1982. It was implemented to

Figure 1-8: Historic and Projected Traffic Growth on Interstate 80 (average daily traffic)



	East of Northgate Blvd	East of Antelope Road	East of Riverside Ave	East of Douglas Blvd	East of SR 65	East of Rocklin Road
1980	0	47,000	40,500	50,000	43,000	40,500
1990	83,000	98,000	98,000	96,000	74,000	70,000
2000	128,000	164,000	145,000	140,000	109,000	91,000
2005	146,000	175,000	159,000	154,000	117,000	97,000
2020	154,800	232,700	219,100	163,700	142,200	109,600
2040	193,700	258,800	247,900	190,100	161,500	124,200



Source: Caltrans, 2005; DKS Associates, 2007
2020 and 2040 data are from DKS Associates based on development projections as described in Chapter 3.
Notes: 0 = Traffic Count Data Not Available

relieve congestion in the downtown Sacramento area. Traffic counts from 1980 are not available from Northgate Boulevard east to Greenback Lane, as this portion of I-80 did not exist then.

Traffic more than doubled on I-80 in the immediate Sacramento area from 1980 to 1990, with strong growth experienced in the Roseville and Rocklin communities. The greatest increase, 108 percent, was experienced east of the I-80/Riverside Avenue/Auburn Boulevard interchange. Significant growth was also experienced from 1990 to 2000 along I-80, with the greatest increase, 67.3 percent, occurring west of the I-80/Riverside Avenue/Auburn Boulevard interchange area. In the 2000-to-2005 period, moderate growth was experienced on most segments of I-80, with average increases of less than 14 percent.

I-80 from Northgate Boulevard to SR 65 does not currently meet the level of service standards established by Caltrans. This segment of I-80 operates at LOS F, while the LOS standard is LOS D or better. Between 2005 and 2020, demand on I-80 is expected to be the greatest between Sacramento and Roseville. The I-80/Riverside Avenue/Auburn Boulevard interchange area is expected to experience an increase of nearly 38.0 percent over the 15-year period, while the I-80/SR 65 interchange area is anticipated to experience an increase of nearly 22 percent. Forecasted growth from 2020 through 2040 along I-80 is greatest at the I-80/Northgate Boulevard interchange area, with more moderate growth anticipated between Sacramento and Roseville.

1.4.5.2 California Department of Transportation Facilities

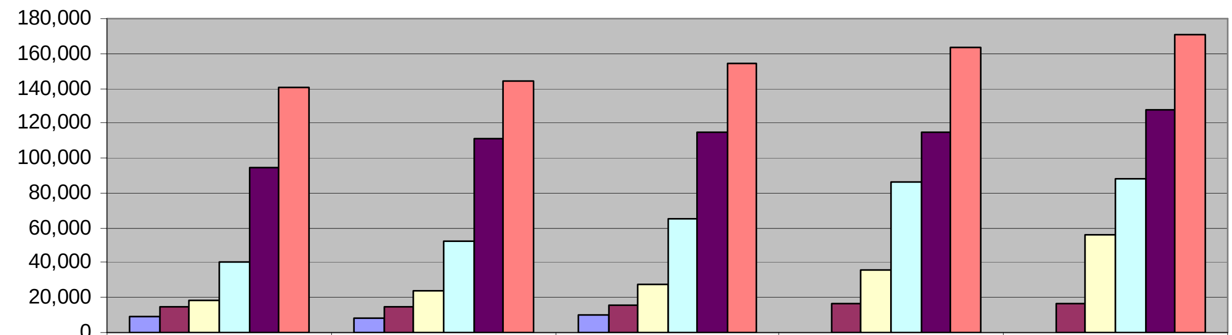
State Route 65. Historical roadway operations since 1980 and projected future travel demand for SR 65 are shown on Figure 1-9. SR 65 was a two-lane road through the City of Roseville prior to 1988, when the freeway facility that exists today was constructed to relieve congestion. Caltrans traffic count locations differ over the last 20 years as the road network has changed. The data presented below show approximate traffic count locations.

Traffic along SR 65 has nearly doubled each decennial year, primarily due to the rapid development of southwestern Placer County. The largest gain, from 1980 to 1990, was experienced north of the Sunset Boulevard interchange, with a 66.3 percent increase. The largest increase in traffic along SR 65 between 1990 and 2000, of nearly 241 percent, was experienced north of the I-80 interchange area. Strong growth of greater than 119 percent was seen north of the Stanford Ranch Road interchange, while an increase of 67 percent or greater was experienced north of the Sunset Boulevard interchange area and north of the Blue Oaks Boulevard interchange.

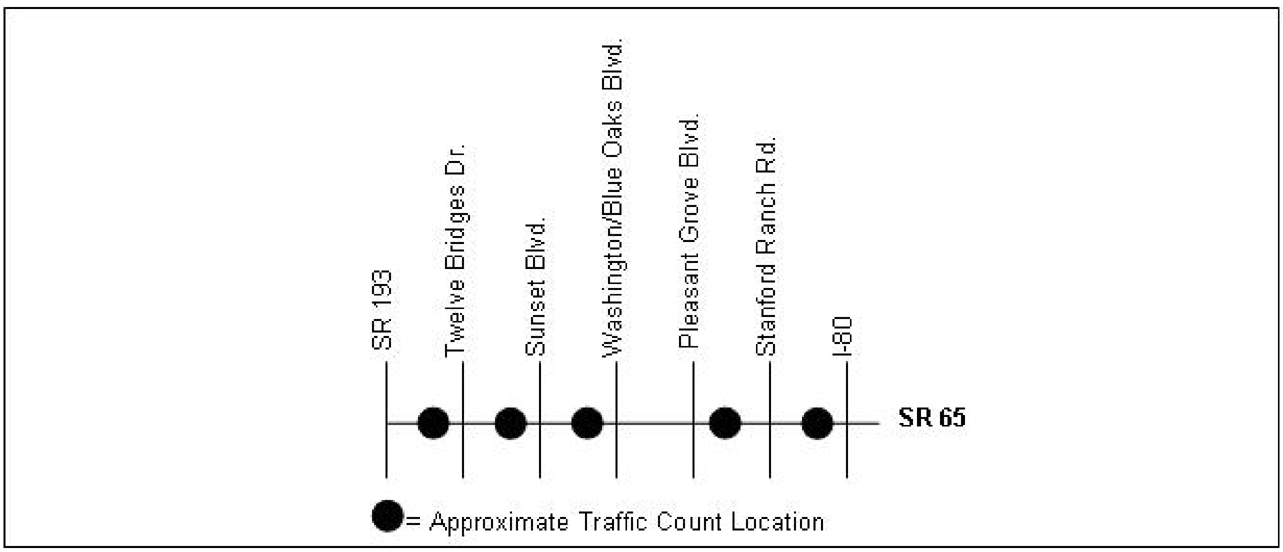
SR 65 from I-80 to Pleasant Grove Boulevard does not currently meet the level of service standards established by Caltrans. This segment of SR 65 operates at LOS F, while the Caltrans LOS standard is LOS D or better. Between 2005 and 2020, demand on SR 65 in the Sunset Industrial Area is expected to more than double as the area continues to develop. Anticipated traffic gains closer to I-80 are also expected to be substantial, with greater than 33 percent increases forecasted. Forecasted traffic growth from 2020 to 2040 is also expected to be strong, but not nearly as robust as the previous 15-year period. Increases greater than 40 percent are anticipated north of the Twelve Bridges Drive interchange and north of the Stanford Ranch Road interchange.

State Route 70/99. Historical roadway operations since 1980 and projected future travel demand for SR 70/99 are shown on Figure 1-10. Traffic more than doubled on all segments of SR 70/99 from I-5 to the SR 70/99 split from 1980 to 1990, with the greatest increase, 129.4 percent, experienced north of the SR 70/99/I-5 interchange. More moderate traffic increases were seen on SR 70/99 from 1990 through 2005. The largest gain was experienced north of the SR 70/99/I-5 interchange, with an increase of 48 percent from 1990 to 2000. Between 2005 and 2020, demand on SR 70/99 in the local project vicinity is expected increase as southern Sutter County develops. Gains of nearly 41 percent or greater are expected, with a 34.4 percent increase anticipated north of the SR 70/99/Howsley Road interchange. Forecasted traffic growth from 2020 to 2040 is expected to be strong, especially north of the I-5 interchange and north of the Elverta Road interchange, with expected increases greater than 106 percent.

Figure 1-9: Historic and Projected Traffic Growth on State Route 65 (average daily traffic)



	North of Twelve Bridges Drive	North of Sunset Blvd	North of Blue Oaks Blvd	North of Stanford Ranch Road	North of I-80
1980	9,200	8,600	9,700	0	0
1990	14,500	14,300	15,300	16,400	16,400
2000	18,700	24,000	27,500	36,000	56,000
2005	40,000	52,000	65,000	86,000	88,000
2020	94,600	111,400	114,400	115,100	127,800
2040	140,100	144,500	154,000	163,600	170,500

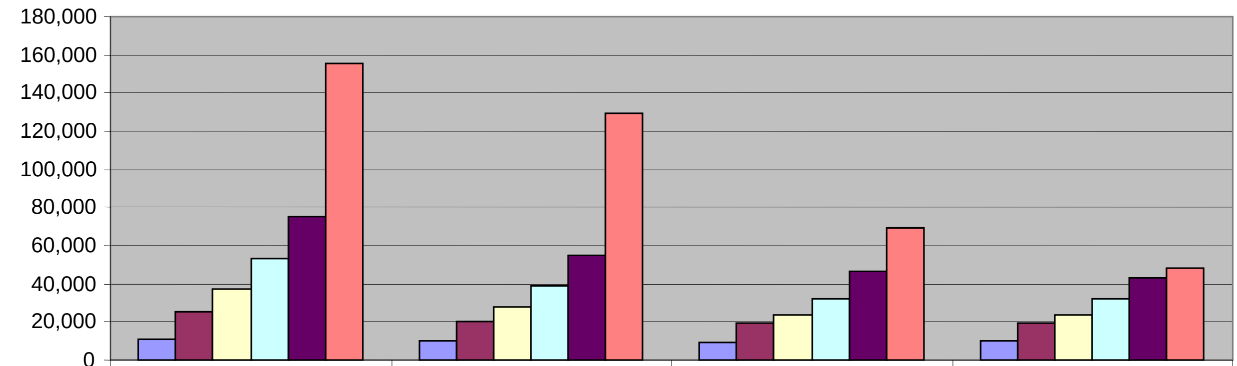


Source: Caltrans, 2005; DKS Associates, 2007

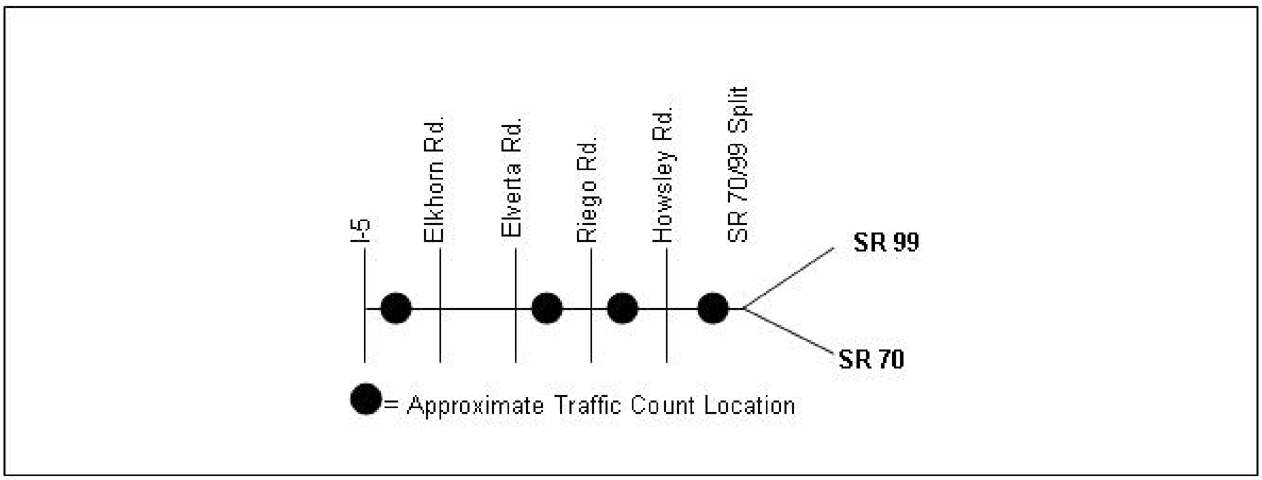
Notes: 0 = Traffic Count Data Not Available

2020 and 2040 data are from DKS Associates based on development projections as described in Chapter 3.

Figure 1-10: Historic and Projected Traffic Growth on State Route 70/99 (average daily traffic)



	North of I-5	North of Elverta Road	North of Riego Road	North of Howsley Road
1980	10,900	10,100	9,100	9,800
1990	25,000	20,500	19,800	19,800
2000	37,000	28,000	23,700	23,700
2005	53,000	38,500	32,000	32,000
2020	75,000	54,600	46,200	43,000
2040	155,100	129,700	68,900	48,100

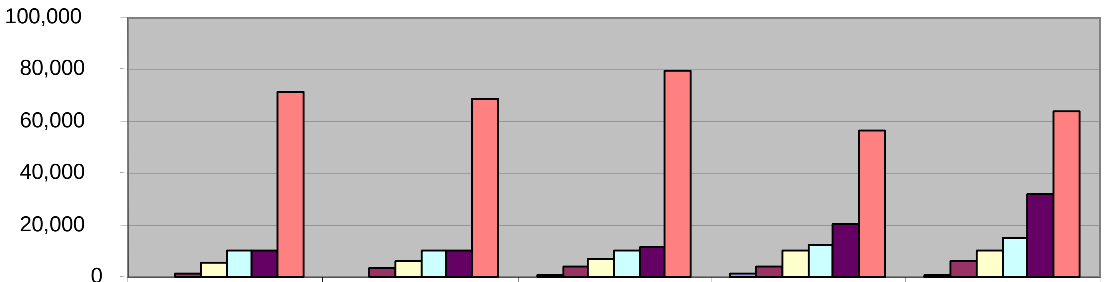


Source: Caltrans, 2005; DKS Associates, 2007
Note: 2020 and 2040 data are from DKS Associates based on development projections as described in Chapter 3.

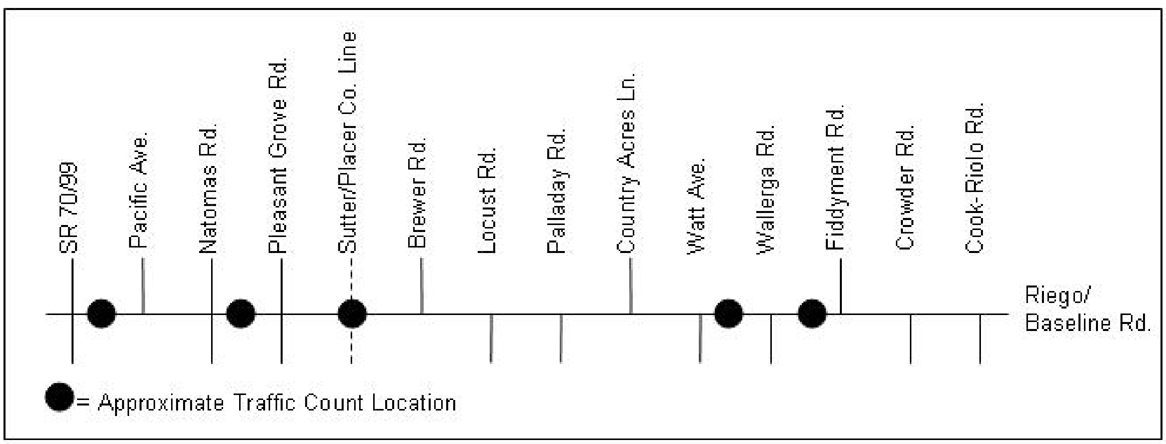
1.4.5.3 Local Facilities

Riego/Baseline Road. Historical roadway operations since 1979 and projected future travel demand for Riego/Baseline Road are shown on Figure 1-11. Significant traffic volumes on Riego/Baseline Road were not experienced until after 1990 when traffic flow between northern Sacramento County, southern Sutter County, and Roseville increased due primarily to new development in southwestern Placer County. From 1991 to 2000, strong traffic growth was experienced in the Watt Avenue area, which connects to Baseline Road in Placer County (an increase of 126 percent). Even greater growth for the same ten-year period on Riego/Baseline Road was experienced in the SR 70/99 area with an increase of 269 percent. Traffic along Riego/Baseline Road continued to increase during the 2000-to-2005 period as southwestern Placer County continued to develop. The largest gain was experienced near SR 70/99, with an increase of 66 percent.

Figure 1-11: Historic and Projected Traffic Growth on Riego/Baseline Road (average daily traffic)



	East of SR 70/99	West of Pleasant Grove Road	Sutter/Placer County Line	East of Watt Avenue	West of Fiddyment Road
1979	0	0	1,054	1,970	1,512
1991	1,613	3,833	4,314	4,442	6,136
2000	5,959	6,322	6,762	10,006	10,715
2005	9,900	9,900	9,950	12,600	15,100
2020	11,100	11,000	11,900	20,400	32,200
2040	71,200	69,100	79,600	56,500	64,200



Source: Placer County Department of Public Works, 2005; Sutter County Department of Public Works, 2006; DKS Associates, 2007
Notes: 1979 traffic data unavailable from Sutter County
1992 traffic data used for East of SR 70/99 and West of Pleasant Grove Road as no 1991 count data are available
1999 traffic data used for East of SR 70/99 and West of Pleasant Grove Road as no 2000 count data are available
0 = Traffic Count Data Not Available
2020 and 2040 data are from DKS Associates based on development projections as described in Chapter 3.

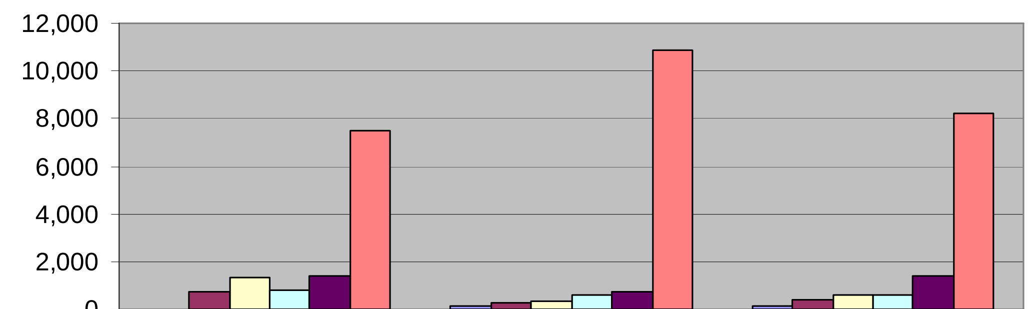
Baseline Road from the Sutter/Placer County line to Watt Avenue and from Walerga Road to Woodcreek Oaks Boulevard does not currently meet the level of service standards of LOS C or better established by Placer County and the City of Roseville, respectively. Between 2005 and 2020, demand on Riego/ Baseline Road is expected to continue growing as more development occurs. Planned improvements to Riego/Baseline Road would accommodate some of the traffic. However, near Fiddyment Road, traffic on Riego/Baseline Road is expected to increase 113 percent. Near Watt Avenue, traffic on Riego/Baseline Road is expected to increase by 62 percent.

Forecasted traffic growth from 2020 to 2040 is expected to be significant along Riego/Baseline Road. Gains of 528 percent or greater are anticipated to occur near SR 70/99, Pleasant Grove Road, and near the

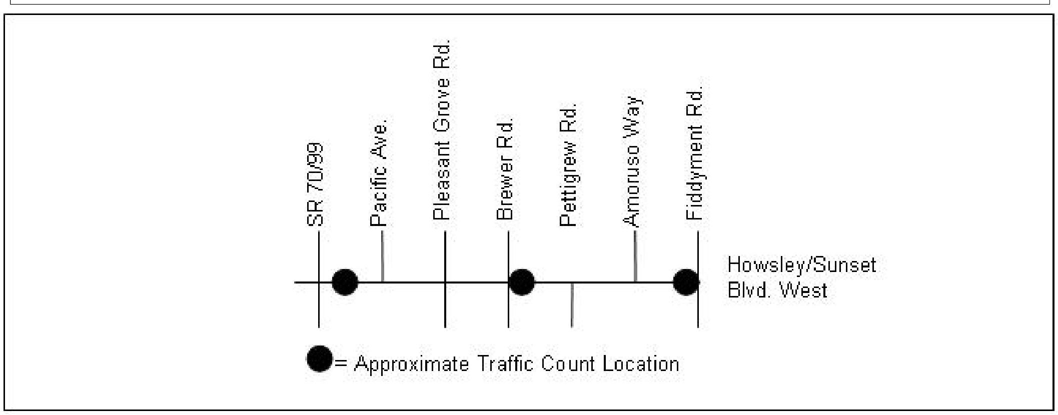
Sutter/Placer County line, while increases of 100 percent or greater are expected near the Watt Avenue area and Fiddyment Road area.

Howsley Road/Sunset Boulevard West. Historical roadway operations since 1971 and projected future travel demand for Howsley Road/Sunset Boulevard West are shown on Figure 1-12. Historically, traffic on Howsley Road/Sunset Boulevard West has been relatively low because of the rural nature of the area, and because it does not directly link to SR 65 or Placer County cities. Scattered development exists along the roadway, including Amoruso Acres west of Fiddyment Road. No urban land uses are designated by either the Placer or Sutter County General Plans in this area. However, two large specific plan areas (see Section 4.1.2.2 for additional details) are in planning or pre-planning stages (PRSP and an area to its west currently referred to as Brookfield). Moderate growth has been experienced to date, and demand in the future is anticipated to be low through the year 2020. Forecasted demand from 2020 to 2040 is anticipated to substantially increase along all segments of Howsley Road/Sunset Boulevard West.

Figure 1-12: Historic and Projected Traffic Growth on Howsley Road/Sunset Boulevard West (average daily traffic)



	East of SR 70/99	East of Brewer Road	West of Fiddyment Road
1971	0	119	145
1989	745	266	408
1998	1,324	330	576
2005	800	600	600
2020	1,400	700	1,400
2040	7,500	10,900	8,200



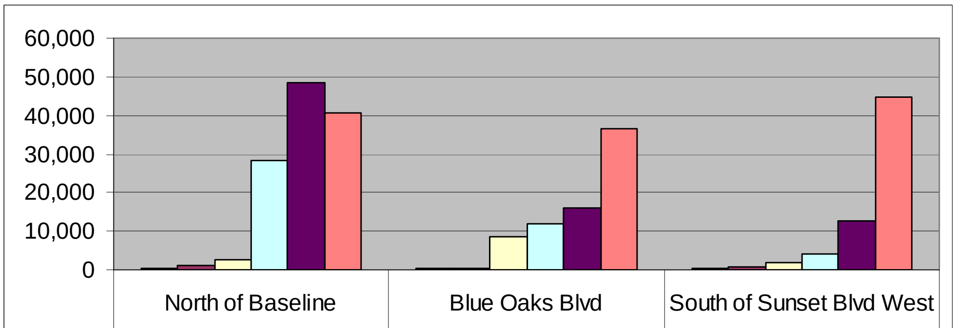
Source: Placer County Department of Public Works, 2005; Sutter County Department of Public Works, 2006; DKS Associates, 2007

Notes: 1971 traffic data unavailable from Sutter County
1992 traffic data used for East of SR 70/99 as no 1989 count data are available
1999 traffic data used for East of SR 70/99 as no 1998 count data are available
0 = Traffic Count Data Not Available
2020 and 2040 data are from DKS Associates based on development projections as described in Chapter 3.

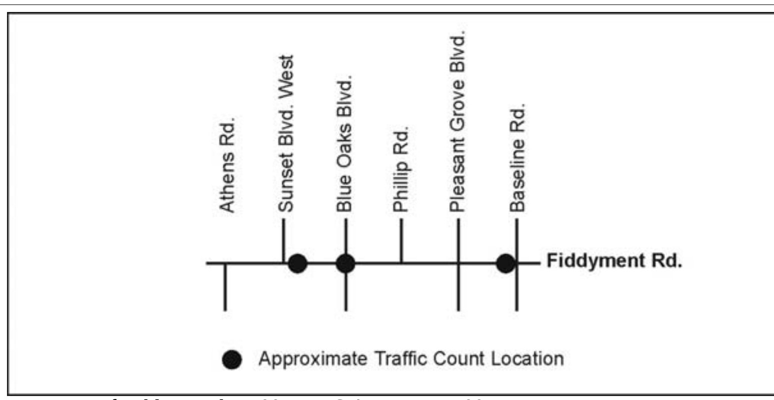
Fiddyment Road. Historical roadway operations since 1977 and projected future travel demand for Fiddyment Road are shown on Figure 1-13. Historically, traffic on Fiddyment Road has been relatively low due to the rural nature of the area. Scattered development existed along the roadway until recently. With development in the Sunset Industrial Plan Area as well as the Del Webb Sun City project, fronts on Fiddyment Road, traffic near the Blue Oaks Boulevard area increased 1,470.1 percent between 1991 and 2003. In the 2003-to-2005 period, significant traffic gains were experienced all along Fiddyment Road, especially near Baseline Road, which experienced a gain of 1,062 percent.

Fiddyment Road from Baseline Road to Pleasant Grove Boulevard does not currently meet the level of service standards of LOS C or better established by Placer County. Between 2005 and 2020, demand on Fiddyment Road is expected to substantially increase due to the development of the planned WRSP area and several other areas that are currently under review. The greatest increase—213 percent—is expected south of Sunset Boulevard West. Traffic growth of 258 percent from 2020 to 2040 is also expected south of Sunset Boulevard West. Development of the proposed SVSP portion of Roseville's SOI, assumed after 2020, would provide new roadways parallel to Fiddyment Road. These new roadways would result in less traffic on Fiddyment Road north of Baseline Road in 2040 than in 2020, despite projected increases in development in that area between 2020 and 2040. Planned improvements to Fiddyment Road would accommodate some of this projected traffic.

Figure 1-13: Traffic Growth on Fiddyment Road (average daily traffic)



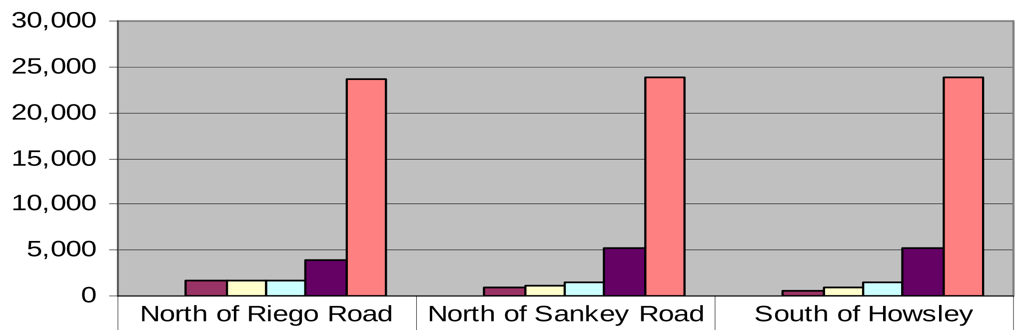
	North of Baseline	Blue Oaks Blvd	South of Sunset Blvd West
1977	359	348	209
1991	1,178	552	837
2003	2,444	8,667	2,044
2005	28,400	11,800	4,000
2020	48,600	15,900	12,500
2040	40,800	36,400	44,800



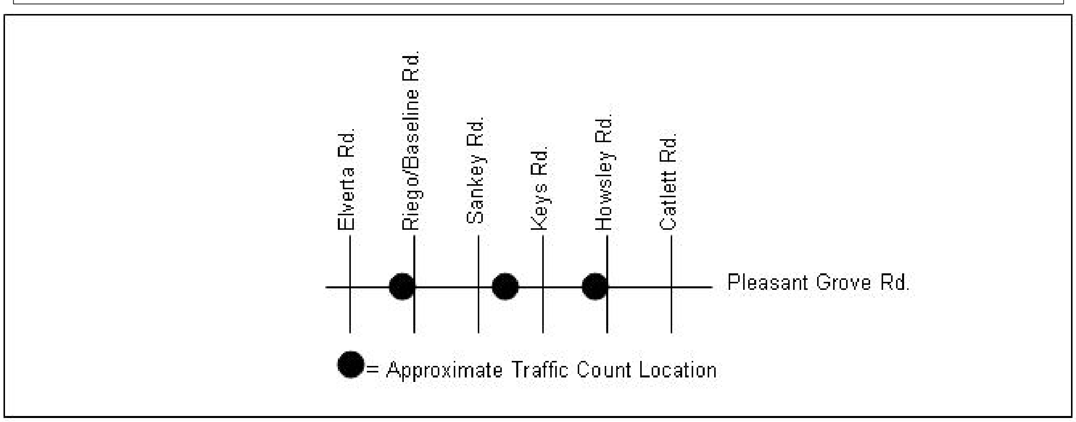
Source: Placer County Department of Public Works, 2005; DKS Associates, 2007
Notes: 1996 traffic data used for north of Baseline Road as no 2003 count data are available
2020 and 2040 data are from DKS Associates based on development projections as described in Chapter 3.

Pleasant Grove Road. Historical roadway operations since 1990 and projected future travel demand for Pleasant Grove Road are shown on Figure 1-14 (no Sutter County data were available for the period before 1990). Similar to Howsley Road/Sunset Boulevard West, traffic on Pleasant Grove Road has been relatively low historically due to the rural nature of the area. Scattered development exists along the roadway, and no major developments are currently planned or proposed. Moderate growth has been experienced to date, and demand is anticipated to be low through the year 2020. However, the proposed development of Sutter Pointe (see Section 4.1.2.2) (the Measure M area) in southern Sutter County is expected to affect traffic along Pleasant Grove Road by the year 2040. Increases of 350 percent or greater are forecasted.

Figure 1-14: Historic and Projected Traffic Growth on Pleasant Grove Road (average daily traffic)



	North of Riego Road	North of Sankey Road	South of Howsley
1980	0	0	0
1990	1,714	1,004	469
1999	1,614	1,194	885
2005	1,700	1,500	1,500
2020	3,900	5,300	5,300
2040	23,700	23,900	23,900



Source: Sutter County Department of Public Works, 2006; DKS Associates, 2007
Notes: 1980 traffic data unavailable from Sutter County
1995 traffic data used for North of Sankey Road as no 1999 count data are available
0 = Traffic Count Data Not Available
2020 and 2040 data are from DKS Associates based on development projections as described in Chapter 3.

1.5 REGIONAL PLANNING CONTEXT

1.5.1 POPULATION ALLOWANCES IN ADOPTED PLANS

1.5.1.1 Sutter County

The Sutter County *General Plan 2015 Housing Element Update,* which covers the period from 2002 to 2007 (adopted September 2004), includes countywide findings, goals, policies, and implementation programs to address housing development. The *Housing Element* is intended to promote safe, decent housing for Sutter County's current and future residents. The *Housing Element* determined the existing and future housing needs by evaluating the county's population. Sutter County used SACOG projection data for year 2015 in order to better assess how it is expected to grow. Between 2000 and 2015, Sutter County's population is expected to grow by 38.5 percent, or approximately 2.23 percent per year, to 109,280 persons (Sutter County, 2004).

County staff conducted a vacant sites inventory, and included only those parcels that are either devoid of structural improvements or minimally developed, and that are considered suitable for development within either the five- or ten-year planning period. An analysis of connections to public services, such as water, sewage treatment, storm drainage, and roads was also conducted. Based on this analysis, county staff determined that 8,589 housing units could be built on land suitable for development (Sutter County, 2004). A similar analysis was not conducted for commercial or industrial land use development in the *Land Use Element*. Ultimately, the actual land use development would be determined by availability of developable land, land use constraints (both environmental and zoning), available resources, and market pressures.

1.5.1.2 Placer County

The *Draft 2000 – 2007 Placer County Housing Element* (adopted April 2003) includes countywide goals, policies, implementation programs, and objectives to address housing development. The *Housing Element* is intended to encourage the provision of safe, decent housing for Placer County's current and future residents. A significant component of the *Housing Element* is the determination of existing and future housing needs through an analysis of demographics. Placer County used SACOG projection data for the years 2010 and 2020 to better assess how it is expected to grow. Between 2000 and 2010, Placer County's population is expected to grow by 35.6 percent to 336,815 persons, and by 2020 it is expected to grow another 17.8 percent to 396,786 persons (Crawford, 2003). The majority of this population growth is expected in southwestern Placer County near the communities of Roseville, Rocklin, and Lincoln.

County staff manually reviewed zoning and assessor parcel maps, and in some cases conducted windshield surveys to identify vacant sites suitable for development. Connections to public services, such as water, sewage treatment, storm drainage, and roads were also analyzed. The analysis showed that a maximum of 13,266 housing units could be built on vacant land in unincorporated Placer County that is suitable for residential development (Crawford, 2003). No commercial or industrial land use development was analyzed in the *Land Use Element*. Ultimately, the actual land use development would be determined by availability of developable land, land use constraints (both environmental and zoning), available resources, and market pressures.

Sunset Industrial Area Plan. The eastern portion of the study area interacts with the 1997 Sunset Industrial Area Plan (SIAP) area in unincorporated Placer County. Development within this area is guided by the Placer County General Plan and the SIAP. 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 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 PRSP (discussed in Section 1.6.2, Proposed and Anticipated Major Developments) lies partially within the SIAP and includes a variety of densities of residential and university land uses.

1.5.1.3 Sacramento County

The Sacramento County *General Plan Housing Element* (adopted November 1994, revised July 1996) includes countywide strategies, goals, policies, and programs to address housing development. The *Housing Element* is intended to address the long-term preservation, improvement, and development of housing for all economic classes. A significant component of the *Housing Element* is the determination of existing and future housing needs through an analysis of demographics. Due to the age of the *Housing Element*, projection data were only prepared for the year 2000. Therefore, for the purposes of this analysis SACOG projection data for years 2010 and 2020 were used to better assess how Sacramento County it is expected to grow. Between 2000 and 2010, Sacramento County's population is expected to grow by 19.3 percent to 1,459,968 persons, and by 2020, it is expected to grow another 12.7 percent to 1,646,056 persons. The majority of this population growth is expected east of the City of Sacramento in the communities of Citrus Heights, Orangevale, Folsom, Fair Oaks, and Rancho Cordova.

Due to the age of the *Housing Element* and the fact that holding capacity estimates of the Sacramento County *General Plan* for the 1990 to 2010 period were developed in August 1991, no meaningful data are available to be used in this part of the analysis. Additionally, no meaningful analysis of commercial or industrial land use development from the *Land Use Element* was able to be used in this part of the analysis. Of note, Sacramento County is in the process of updating its General Plan for the 2005-to-2030 period. Ultimately, the actual land use development would be determined by availability of developable land, land use constraints (both environmental and zoning), available resources, and market pressures.

1.5.1.4 City of Roseville

The City of Roseville *General Plan 2020 Housing Element*, which covers the period from 2002 to 2007 (adopted September 2002), includes citywide goals, objectives, and implementation measures/programs to address housing development. The *Housing Element* is intended promote safe, decent housing for its current and future residents. The *Housing Element* determined its existing and future housing needs by evaluating the city's population. The City of Roseville used DOF projection data for year 2020 to better assess how it is expected to grow. Between 2000 and 2005, Roseville's population was expected to grow by 14.7 percent to 95,200 persons, and by 2020 it is expected to grow another 10.3 to 15.5 percent to 105,000 or 110,000 persons (City of Roseville, 2002).

Due to the rapidly decreasing inventory of vacant land within the City of Roseville, it anticipated reaching residential buildout capacity by the 2007. The areas ripe for development have already been inventoried by city staff. Based on their analysis, it was determined that 8,420 housing units could be built on land suitable for development (City of Roseville, 2002). Based on this, Roseville anticipated receiving increased rezoning requests and/or annexing adjacent lands in the near future. The WRSP was such a project. It is located in the City of Roseville adjacent to the project study area. It was approved by the Roseville City Council in February 2004 and annexed into the city on August 18, 2004. The first phase is under construction.

Roseville projects that its residential land uses will be exhausted well before buildout of nonresidential land (e.g., commercial or industrial land uses) could be achieved. However, the *Land Use Element* contains citywide goals, objectives, and implementation measures/programs that try to promote a reasonable jobs/housing balance. Ultimately, the actual land use development would be determined by availability of developable land, land use constraints (both environmental and zoning), available resources, and market pressures.

1.5.1.5 City of Rocklin

The City of Rocklin *General Plan 2025 Housing Element* (adopted May 2004), which covers the period from 2002 to 2007, includes citywide goals and policies to address housing development. The *Housing Element* is intended to identify the nature and extent of existing and future housing needs in the city. The City of Rocklin used SACOG projection data for the year 2025 to better assess how it is expected to grow. Between 2000 and 2025, Rocklin's population is expected to grow by 98.1 percent to 70,490 persons (City of Rocklin, 2004).

As a part of the *City of Rocklin Draft 2005 General Plan*, city staff compiled an inventory of existing land uses, including an inventory of development status (vacant or developed) and development type (residential, mobile home, commercial, industrial, and other uses). The analysis showed that a maximum of approximately 13,700 housing units could be built on vacant land (Quad Knopf, 2005). The analysis for commercial, office, and industrial land use development was conducted in the *Land Use Element*. It showed that approximately 13,237,000 square feet could be developed by 2025 (Quad Knopf, 2005). Ultimately, the actual land use development would be determined by availability of developable land, land use constraints (both environmental and zoning), available resources, and market pressures.

1.5.1.6 City of Lincoln

The City of Lincoln *Housing Element*, which covers the period from 2002 to 2007 (adopted September 2002, amended November 2003), includes citywide goals, policies, and program actions to address housing development. The *Housing Element* is intended to facilitate the provision of housing to meet those needs at all income levels. The *Housing Element* determined its existing and future housing needs by evaluating the city's population. The City of Lincoln used SACOG projections for years 2010 and 2020 to better assess how it is expected to grow. Between 2000 and 2010, Lincoln's population is expected to grow by 242.3 percent to 38,350 persons, and by 2020 it is expected to grow another 47.5 percent to 56,575 persons (Parsons, 2002).

As a part of the *Housing Element*, city staff estimates that there are approximately 3,663 acres of undeveloped residentially zoned land available within the city that has the potential to accommodate 15,056 new units in various residential zoning ordinance and specific plan designations. There are no known significant environmental or infrastructure constraints on any of the undeveloped land (Parsons, 2005). Due to the age of the existing *1988 General Plan Land Use Element*, no meaningful analysis of commercial or industrial land use development was able to be used. Of note, the City of Lincoln is in the process of updating its General Plan for the 2005-to-2020 period. Ultimately, the actual land use development would be determined by availability of developable land, land use constraints (both environmental and zoning), available resources, and market pressures.

1.5.1.7 Local Government Land Use Decisions

According to the California Housing and Community Development Department 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. Developable land has not necessarily been approved for development by a governing body, although it can be, as in the case of the WRSP area. Thus, for the purposes of this Tier 1 EIS/EIR, developable land is considered to be all land that is neither constrained nor developed.

Agriculture has long been established as the predominant land use in southeastern Sutter and southwestern Placer counties within the study area. However, in recent years, the areas immediately to the northeast, east, south, and southwest 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 (DOF, 2006). As a result of the development and population growth that has occurred in and around the study area, development pressure on the land within the study area has intensified, as indicated by the number of recent proposed developments as described below.

1.5.2 PROPOSED AND ANTICIPATED MAJOR DEVELOPMENTS

Figure 1-15 identifies planned and proposed developments within or near the study area.

Sutter Pointe Specific Plan (Measure M). Measure M, a voter-approved advisory measure, directed the Sutter County Board of Supervisors to consider a 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. The proposed plan, called the SPSP, calls 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. This application is currently being processed by Sutter County.

Placer Vineyards Specific Plan. The proposed PVSP area is located in southwestern Placer County and is bounded on the north by Baseline Road, on the south by the Sacramento-Placer County line, on the west by the Sutter-Placer County line, and on the east by Dry Creek and Walerga Roads. 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. 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 over 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.

Regional University Specific Plan. The proposed 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 portion of the study area. 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.

Placer Ranch Specific Plan. The PRSP proposes the phased development of a mixture of industrial, commercial, office and professional, residential, and a branch campus of California State University Sacramento, on approximately 2,213 acres within the boundaries of the Sutter Industrial Area Plan. The PRSP has common boundaries with the City of Roseville to the south and is bounded on the north by Sunset Boulevard West. 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).

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.

Sierra Vista Specific Plan. The proposed SVSP area is located within Roseville's SOI in unincorporated Placer County. 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. 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 CSP project site is located within the City of Roseville's SOI north of the WRSP 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.

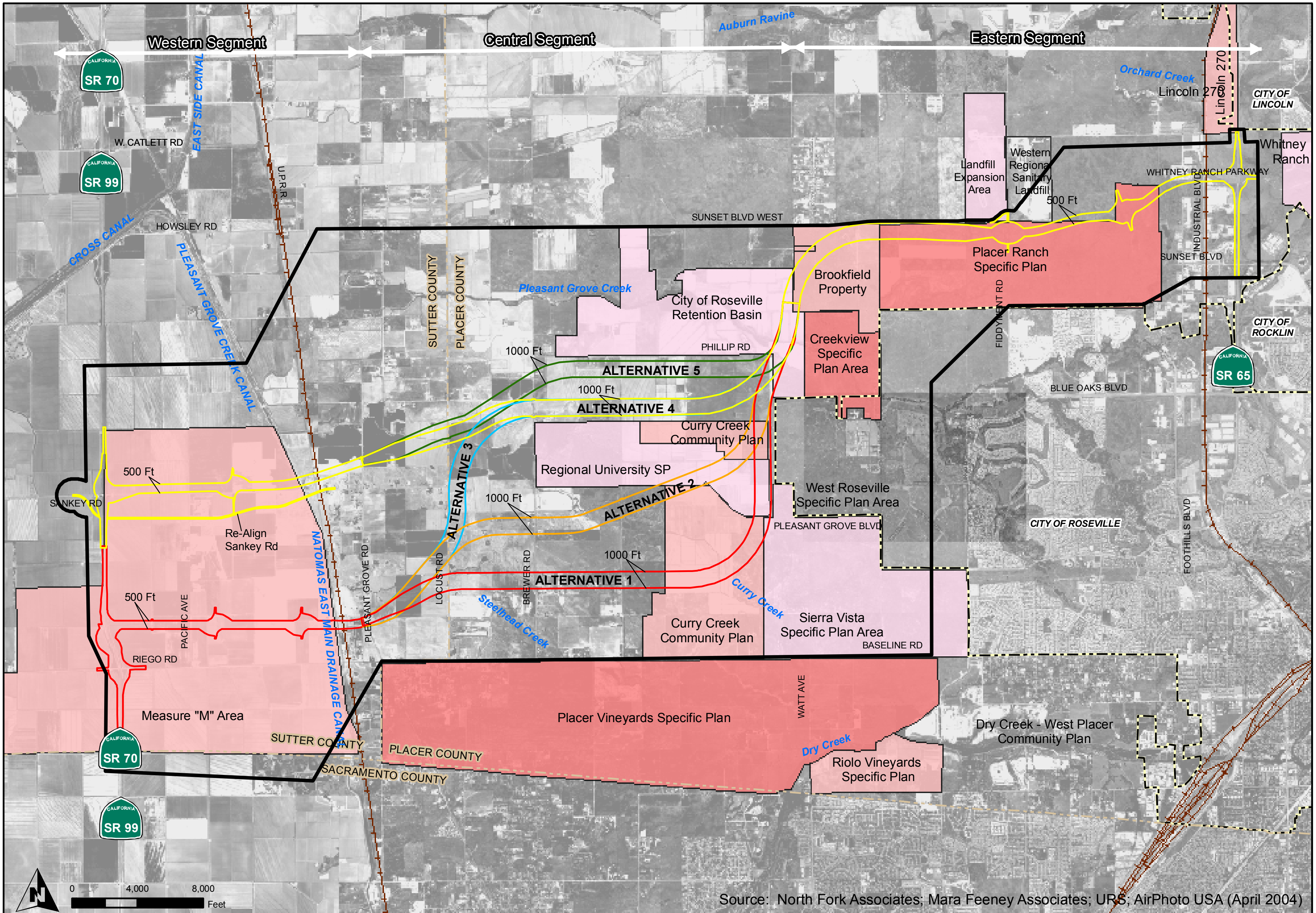
Curry Creek Community Plan. The Curry Creek Community Plan (CCCP) is in the preliminary stages of conceptual planning at this time, but may include a mix of residential and commercial land uses on a 5,200-acre area of unincorporated Placer County located north of the proposed PVSP area and south of the proposed RUSP area. The final boundaries, size, and number of residential units are currently undetermined.

1.5.3 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 SOI 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 portions of the study area (adjacent to and west of the Western Regional Sanitary Landfill). 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.



Study Area Boundary	Alternative 2	Planned/Proposed Development
City Boundary	Alternative 3	
County Boundary	Alternative 4	
Alternative 1	Alternative 5	

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Planned / Proposed Development

Figure 1-15

June 2007

2.0 PROJECT ALTERNATIVES

2.1 PROJECT DESCRIPTION

Five build alternatives and a No-Build Alternative are analyzed in this Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR). Throughout, the study area is divided into three segments, as shown on Figure 2-1, which depicts these segments and the build alternatives analyzed in this Tier 1 EIS/EIR:

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

2.2 COMMON DESIGN FEATURES OF THE BUILD ALTERNATIVES

Although the Parkway would be designed and construction-level impacts analyzed during Tier 2, several assumptions have been made about potential design and configuration concepts for the purpose of this Tier 1 EIS/EIR. 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 several key assumptions about the future roadway used to develop the environmental analysis in this Tier 1 EIS/EIR.

2.2.1 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. It 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 evaluation. It illustrates both a four-lane configuration (two lanes in both directions) and a six-lane configuration (three lanes in both directions) within the 500- to 1,000-foot-wide corridor. The roadway would include a central median approximately 100 to 134 feet wide, depending on local conditions and reflecting the safety guidance of the California Department of Transportation (Caltrans). The design criteria include a design speed of 70 miles per hour (mph) and a horizontal curve radius of 4,600 feet. 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 between Pleasant Grove Road and Fiddyment Road to avoid inducing urban growth in the agricultural areas not designated for development in existing general plans, and to maintain the rural character of south Sutter County and western Placer County. It is assumed within the project that there would be no interchanges between these roads.

2.2.2 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 1,600-foot-long multi-span 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 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.

2.2.3 Interchange Concepts

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

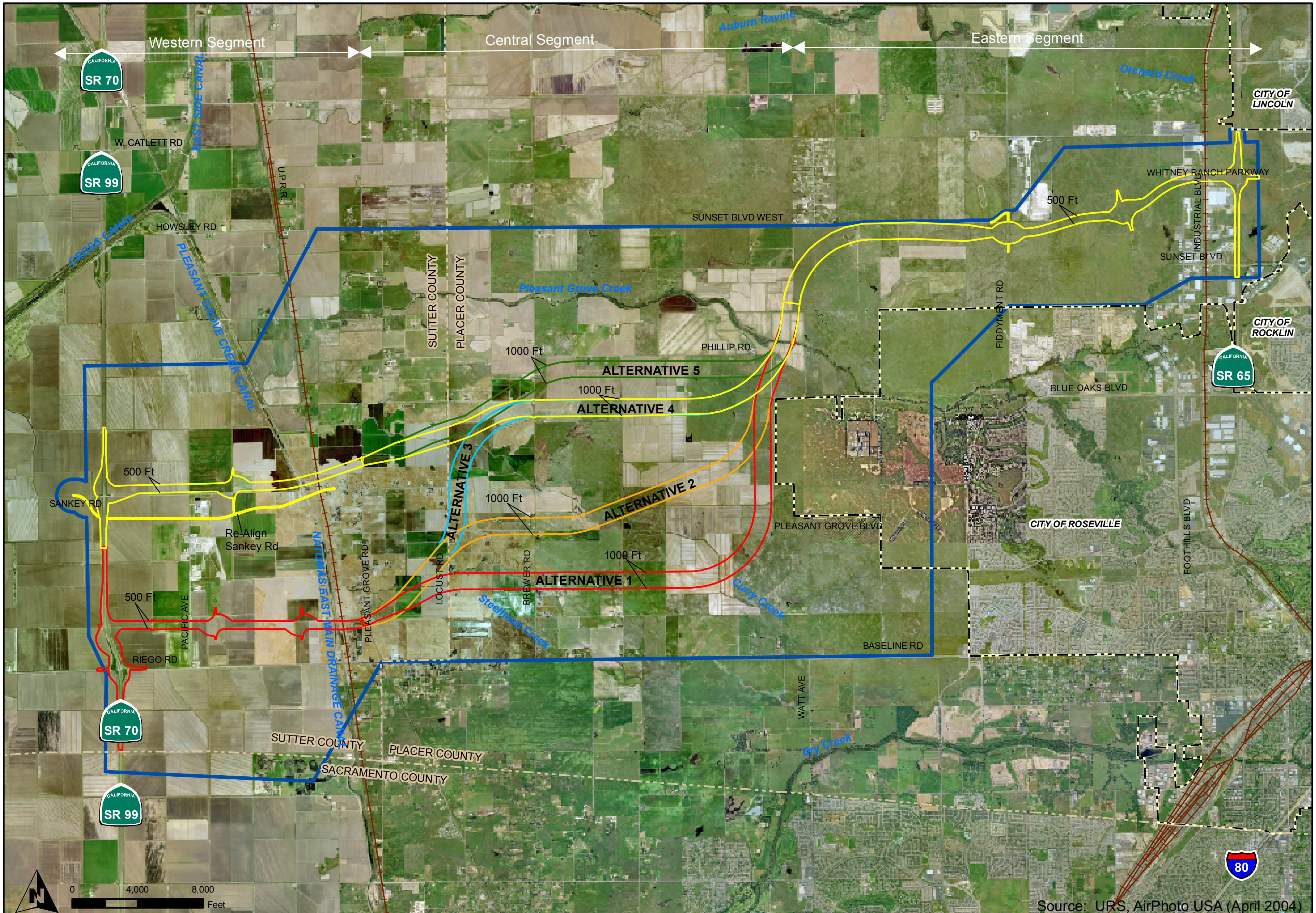
- SR 70/99 (at one-half mile north of Riego Road or at Sankey Road)
- One or two locations to be determined in southern Sutter County
- Fiddyment Road
- Foothills Boulevard
- SR 65 at Whitney Ranch Parkway

The following discussion outlines concepts for the six interchanges assumed.

2.2.3.1 Interchanges in the 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. Placer Parkway would terminate at SR 70/99.

Placer Parkway/SR 70/99 Interchange at North of Riego Road. This interchange concept is common to Alternatives 1, 2, and 3, described in Section 2.3. It would provide full high-speed freeway-to-freeway connections between Placer Parkway and SR 70/99. Placer Parkway would terminate at SR 70/99. Based on Caltrans' input regarding a safe facility, this alternative concept uses "braided" ramps to eliminate weaving problems or issues with the future SR 70/99/Riego Road interchange being developed by Sutter County and Caltrans. This interchange concept includes the following features and standards:



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

County Boundary
City Boundary

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Project Alternatives

Figure 2-1

June 2007

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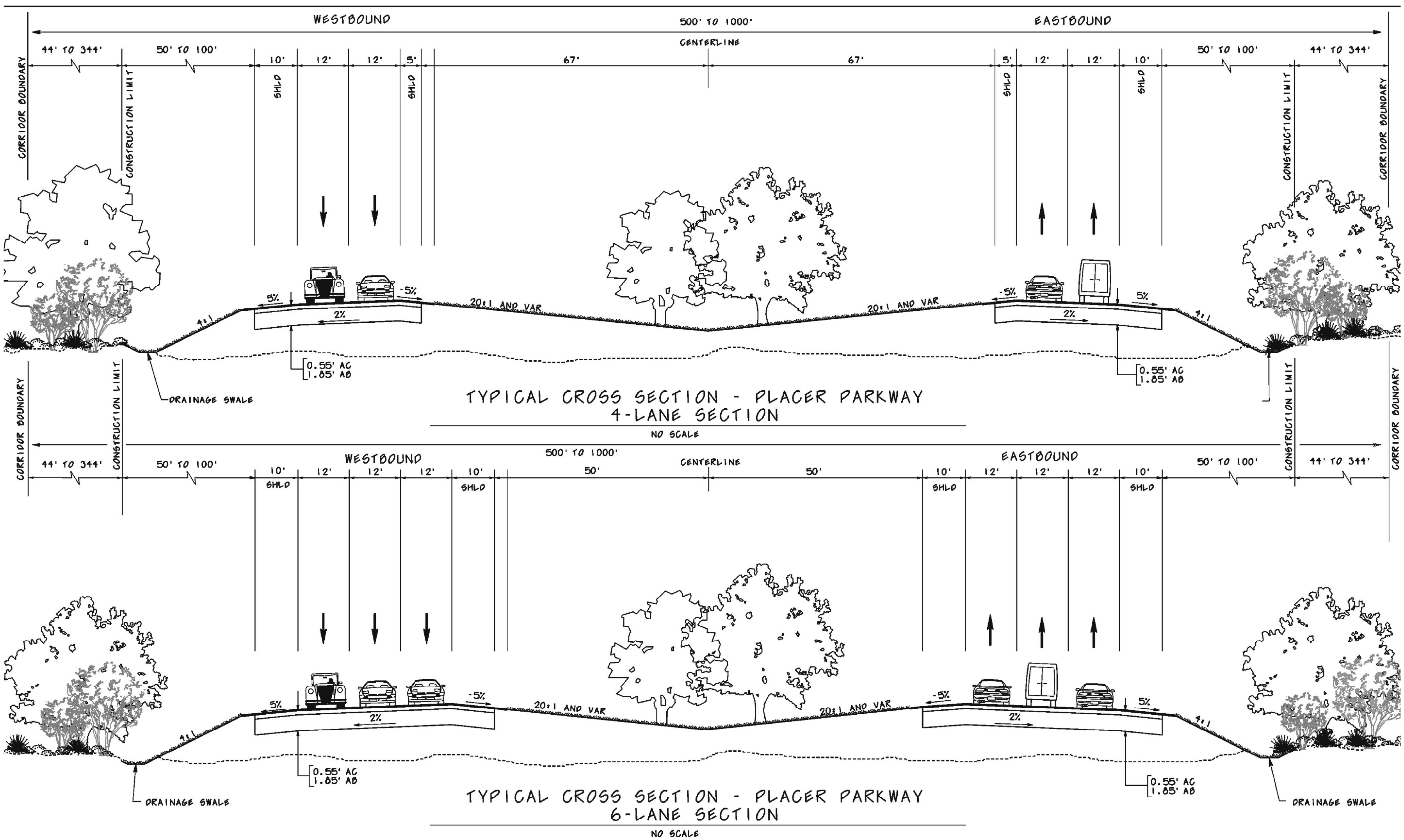


PLACER PARKWAY
CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Typical Cross-Section
(Conceptual)

Figure 2-2

June 2007

- It would provide complete high-speed freeway-to-freeway connector ramps for all traffic moves to and from Placer Parkway and SR 70/99, for safety of motorists transitioning from one roadway to the other. The design speeds and standards for these ramps would correspond to a 50-mph minimum.

- Access to and from Placer Parkway at Riego Road and the SR 70/99 interchange would not be allowed, to maintain minimum spacing between interchanges for safety reasons. Access to and from Placer Parkway and Riego Road would be via a local interchange on Placer Parkway east of SR 70/99.

- The southbound SR 70/99 to eastbound Placer Parkway “fly-over” would be a third level bridge structure.

- A standard “L-9” interchange configuration is assumed at Riego Road, except the Riego Road overcrossing structure would need to be longer than normal to provide for the Placer Parkway ramps. An L-9 interchange is a high-capacity local road interchange that uses loop on-ramps that are entered from the right side of the road and freeway exit ramps that exit at signalized “tee” intersections. The loop on-ramps allow traffic entering the freeway to circle 270 degrees around and under the local road rather than turning left across the road. The elimination of a signalized left-turn movement significantly improves the capacity of the interchange.

Placer Parkway/SR 70/99 Interchange at Sankey Road. This interchange concept is common to Alternatives 4 and 5, described in Section 2.3. It would provide a high-speed freeway-to-freeway connection between Placer Parkway and SR 70/99. Placer Parkway would terminate at the SR 70/99 interchange. 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 one-quarter mile west of SR 70/99 to approximately one-quarter mile east of the Union Pacific railroad tracks. There would be no direct access to SR 70/99 or the Placer Parkway from the realigned Sankey Road (see Figure 2-1). This interchange concept includes the following features and standards:

- It would provide a high-speed freeway-to-freeway connection for the following traffic moves: westbound Placer Parkway to southbound SR 70/99; westbound Placer Parkway to northbound SR 70/99; northbound SR 70/99 to eastbound Placer Parkway; and southbound SR 70/99 to eastbound Placer Parkway. The design speeds and standards for these ramps would correspond to a 50 mph minimum.

- The westbound Placer Parkway to southbound SR 70/99 ramp would cross over SR 70/99 and under the southbound SR 70/99 to eastbound Placer Parkway ramp.

- Southbound SR 70/99 to eastbound Placer Parkway would cross over the westbound Placer Parkway to the southbound SR 70/99 ramp and SR 70/99.

- Sankey Road would cross over SR 70/99 south of the Placer Parkway/SR 70/99 interchange.

Sutter County Interchanges East of SR 70/99. Depending on which final corridor alignment alternative is selected, one or two additional interchanges would also be located in south Sutter County. They would likely be standard L-9 interchanges. Conceptual locations are identified for purposes of this Tier 1 analysis (see Figure 2-1). The actual location of these interchanges would be developed in the Tier 2 phase.

2.2.3.2 Interchanges in the Central Segment

No access is proposed as part of the project in the 7-mile segment between Pleasant Grove Road and Fiddyment Road. This area encompasses the entire Central Segment of the Parkway, plus small portions of the Eastern and Western segments. (Please see Chapter 7 regarding a potential connection to a future extension of Watt Avenue.)

2.2.3.3 Interchanges in the Eastern Segment

Placer Parkway/SR 65 Interchange at Whitney Ranch Parkway. This interchange concept is common to all build alternatives. It provides a combination of high-speed freeway-to-freeway connections and local access from Whitney Ranch Parkway east of the Placer Parkway terminus. Placer Parkway terminates and becomes Whitney Ranch Parkway east of the SR 65 exit ramp intersection. Traffic signals would be provided at the exit ramp terminals. The proposed Whitney Ranch Parkway interchange would be approximately one mile north of a planned SR 65/Sunset Boulevard interchange and 1.2 miles south of the existing Twelve Bridges interchange. This interchange does not include a western leg (Placer Parkway), but would include an eastern leg (Whitney Ranch Parkway). The right-of-way within Rocklin for the initial SR 65/Placer Parkway interchange is identical to an interchange planned by the City of Rocklin.

Auxiliary lanes would be required on SR 65 in both directions on the north side of the future SR 65/Sunset Boulevard interchange to enhance traffic operations. An auxiliary lane for the northbound SR 65 direction would likely be provided by the planned SR 65/Whitney Ranch Parkway interchange on the east side of SR 65, a project under development by the City of Rocklin and Caltrans. An auxiliary lane would likely be required on the west side of SR 65 between the Twelve Bridges interchange and the Parkway. Two auxiliary lanes would likely be required for the southbound SR 65 direction. 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.

This interchange concept would be constructed in two phases, as traffic conditions warrant. Initially, there would be a loop on-ramp from the Parkway to SR 65 serving the northbound direction. When traffic volumes increase in the future, a third-level connection would be constructed to provide a direct connection from the Parkway to northbound SR 65. In its ultimate configuration, this interchange concept includes the following features and standards:

- It would provide full traffic movements from all the intersecting roadway facilities.
- It would provide moderate to high-speed freeway-to-freeway connections for the following traffic moves: eastbound Placer Parkway to southbound SR 65, and southbound SR 65 to westbound Placer Parkway. The design speeds and standards for these ramps would correspond to a 40 mph minimum.
- The eastbound Placer Parkway to northbound SR 65 fly-over concept is a third level bridge structure. A potential interim low-speed loop entrance may be considered instead of the fly-over for the near term time horizon.
- Northbound SR 65 to westbound Placer Parkway traffic would turn left at the signalized exit ramp terminal. This traffic movement would be a typical urban type interchange exit. It is not a direct, high-speed freeway-to-freeway connection.

- Westbound Whitney Ranch Parkway traffic would use the loop entrance ramp to access southbound SR 65.

Placer Parkway/Foothills Boulevard Interchange. A standard L-9 interchange is proposed to connect Placer Parkway with Foothills Boulevard.

Placer Parkway/Fiddyment Road Interchange. The future interchange of 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 (see Figure 2-1).

2.2.4 No-Development Buffer Concept

2.2.4.1 Purpose of the No-Development Buffer

Placer Parkway would include a corridor that is wider than what is needed for the proposed roadway, with lands on one or both sides of the facility called "no-development buffer zones," which would be intended to accomplish the following:

1. Further a "parkway" concept by:

   - maintaining a visual open space concept and encouraging linkages to other open spaces along the corridor;
   - preserving open space and agricultural uses adjacent to the Parkway;
   - providing opportunities to preserve biological resources along the corridor; and
   - limiting future development along the Parkway from encroaching to the facility's edge by maintaining it as a zone where development is either not permitted or is severely restricted.

2. Limit access to the Parkway, which would:

   a. Preserve a high-speed facility, through preventing unplanned Parkway interchanges from being constructed by controlling the land required for such interchanges (as described in Section 2.2.4.2); and

   b. Limit opportunities for growth inducement that might otherwise result from provision of access in areas not planned for growth.

It is intended that the no-development buffer zones would be owned and managed in the future to achieve these objectives. Since the value of the no-development buffer zones to maintain the parkway concept and limit access depends to some extent on the adjacent land uses, it may be appropriate to adjust the final size and shape of the buffer based on Tier 2 analysis of the Parkway. It is anticipated that such adjustments are most likely to occur in parts of the Parkway near agriculturally designated land undergoing urban development. 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.

2.2.4.2 Maximizing Protection of the No-Development Buffer

A key component of Placer Parkway is its continued viability as a high-speed, free-flowing facility that would facilitate access to jobs and accommodate growth under existing General Plans, including access to SR 70/99 and the Interstate 5 (I-5) corridor in northern Sacramento County. As local development proximate to the Parkway is approved and constructed, there may be increasing pressure to add additional local connections to the Parkway. Additional direct connections could reduce free-flowing conditions over the long term (beyond 20 years). With controlled access, a free-flowing route that would provide long-term reliable travel times for the movement of people and goods would be assured.

The proposed no-development buffer zones would serve as an effective land use control, because as a practical matter any additional Parkway access that may be proposed in the future must have physical access to the Parkway and the land immediately adjacent to it. If such land is protected and its use restricted, such additional connections could not be constructed.

A number of mechanisms may be used to control development and other activity within the buffer. These include the following:

- **Land use controls**, such as land leases, general plans, zoning/overlay zoning, covenants/deed restrictions, and urban growth boundaries.
- **Laws, policies and regulations**, which are often developed to protect specific resources and often focus on procedural approaches.
- **Real property interests** that are associated with land that can be owned, sold, occupied, or managed. Typical measures used for protection of real property interests include Fee Simple (Fee Title) Land, Undivided Interest, Conservation Easements, Transfer (Purchase) of Development Rights, Leases, Land Repackaging, and Options/First Rights of Refusal.
- **A combination of the above.**

Implementing the no-development buffer to protect lands will require funding for costs of acquisition, capital improvements, restoration and enhancement, operations and maintenance, easement stewardship, and administrative costs.

2.2.5 Landscaping Concept

Corridor alignment alternatives are located in areas of 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 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 six-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 nonnative plants that may require some irrigation. Wherever possible, plants will include native species in line with Caltrans policy. 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).

2.2.6 Preliminary Cost Estimate

Preliminary costs estimates for the Parkway range from $600 to $650 million (2005 dollars) (URS Corporation, 2005; MHM, 2006). This includes costs for right-of-way, design, construction and environmental mitigation for the four- to six-lane facility. Actual costs at the time of construction could escalate substantially based on future material and labor costs. The sources of funding have not been defined, but could include a county-wide sales tax, more developer contributions, and tolling facilities. This Tier 1 EIS/EIR does not make any assumptions about funding sources.

2.3 PROJECT ALTERNATIVES

The following subsections describe the project alternatives, which are depicted on Figure 2-1, and are numbered according to location from south to north in the study area. A preferred alternative has not been identified. All of the following alternatives are under consideration, and no decision on a preferred alternative will be made until receipt of comments on this Tier 1 EIS/EIR have been fully evaluated, including additional consultation with federal agencies through the project's modified National Environmental Policy Act (NEPA)/404 process (described in Section 2.4, and in Appendix A-4).

2.3.1 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.

Under the No-Build Alternative, conditions in the study area would not remain static. Although the impacts of the build alternatives would not occur, based on current trends and development pressures as described in Section 6.1, it is likely that growth and development related impacts would continue to create changed conditions for a number of resources. For example, under the No-Build Alternative, vehicle hours of delay in congested conditions would increase substantially, more than doubling in the Analysis Focus Area in 2020 (see Chapter 5, Section 5.19.1 for more details). Related to the increase in vehicle hours of delay in the future with a No-Build Alternative, the increase in travel in congested conditions would result in increased air pollution emissions and increased energy use. Even under the No-Build Alternative, cumulative impacts related to other projects would still occur, including changes in land use, loss of agricultural land and increased development. Increased development would continue to result in the cumulative loss of other resources such as biological habitat and changes in the visual conditions in the study area.

2.3.2 Alternative 1 – the Red Alternative

Alternative 1 would extend from SR 70/99 approximately one-half 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 (see Figure 2-3). 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 2.2.3.

2.3.3 Alternative 2 – the Orange Alternative

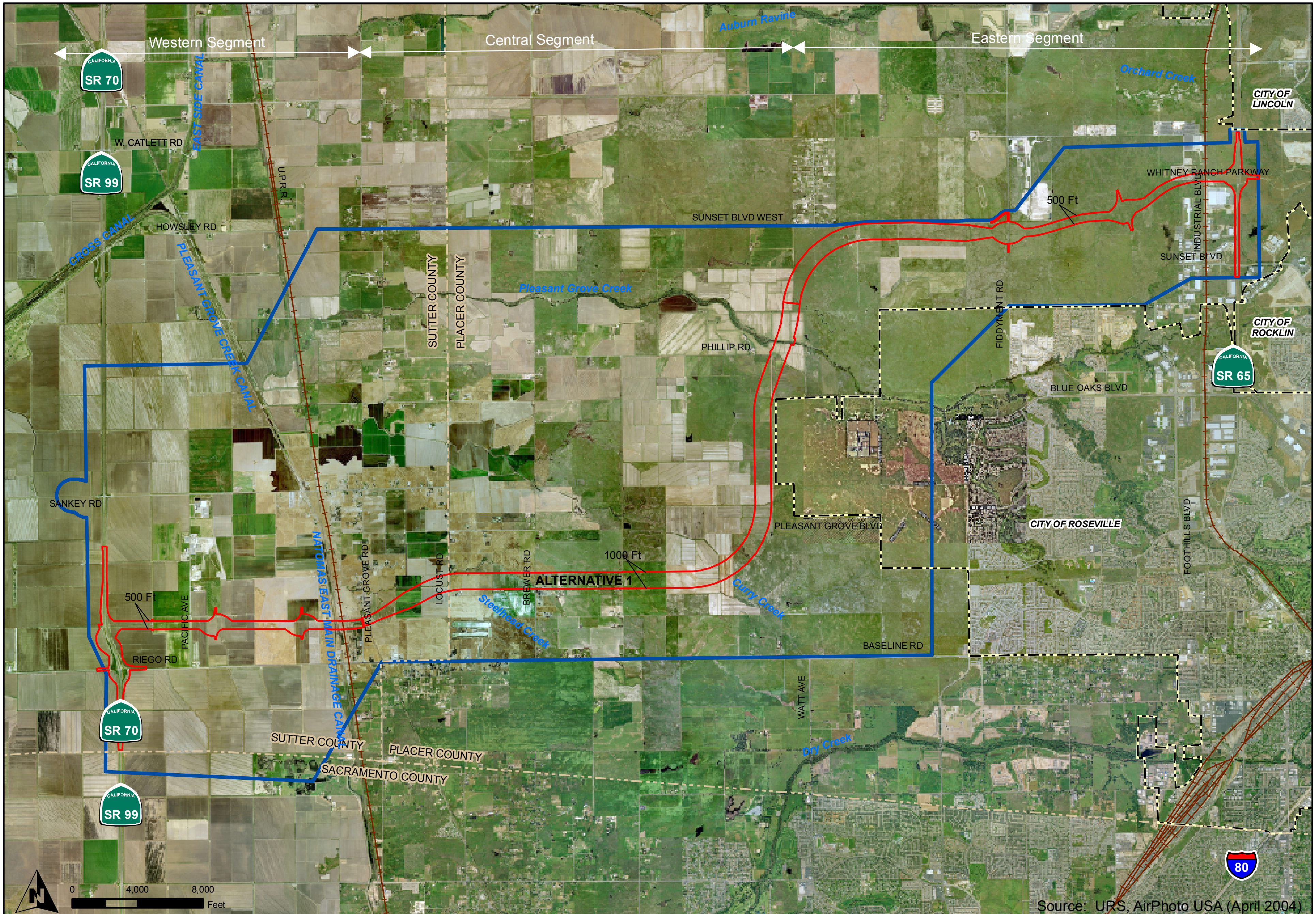
Alternative 2 would extend from SR 70/99 approximately one-half mile north of Riego Road to an area between Pleasant Grove Road and Locust Road, where it would proceed northeast, then in a northerly direction south of Pleasant Grove Creek, transitioning to an easterly direction before it reaches Sunset Boulevard West, connecting to SR 65 at Whitney Ranch Parkway (see Figure 2-4). From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 15.4 miles long. This alternative would include six interchanges, as described in Section 2.2.3.

2.3.4 Alternative 3 – the Blue Alternative

Alternative 3 would extend from SR 70/99 approximately one-half 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 (see Figure 2-5). From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 15.6 miles long. This alternative would include six interchanges, as described in Section 2.2.3.

2.3.5 Alternative 4 – the Yellow Alternative

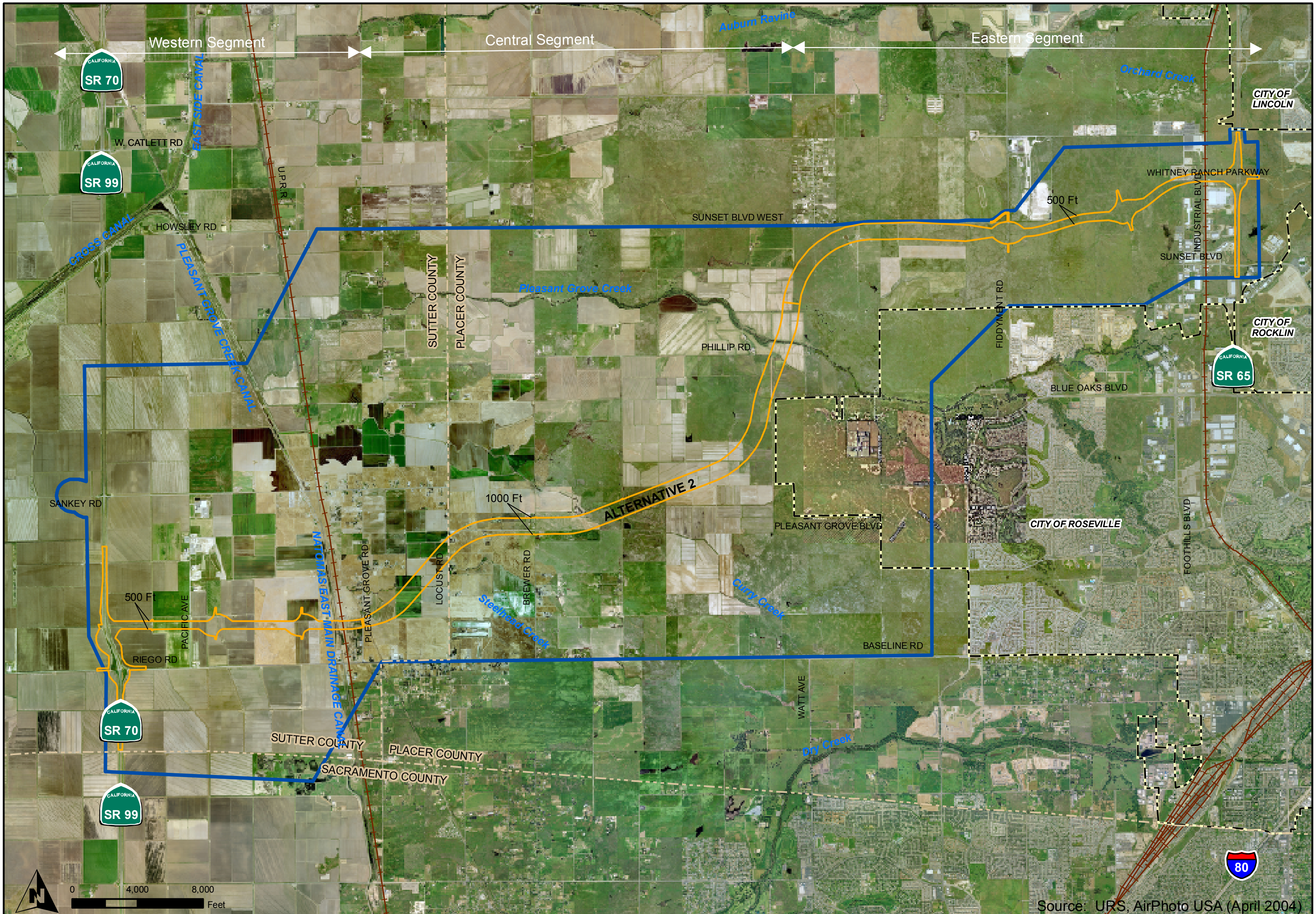
Alternative 4 would extend from SR 70/99 at the current Sankey Road/SR 70/99 intersection, proceeding east and northeast, transitioning to an easterly direction approximately 7,000 feet south of Pleasant Grove Creek, then north crossing Phillip Road and Pleasant Grove Creek, transitioning into an eastern direction before it reaches Sunset Boulevard West, then in an easterly direction, connecting to SR 65 at Whitney Ranch Parkway (see Figure 2-6). From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 14.3 miles long. This alternative would include five interchanges, as described in Section 2.2.3.



Alternative 1 / County Boundary / Study Area Boundary / City Boundary	PLACER PARKWAY CORRIDOR PRESERVATION	Tier 1 EIS/EIR	Alternative 1

Figure 2-3

June 2007



Alternative 2
Study Area Boundary
County Boundary
City Boundary

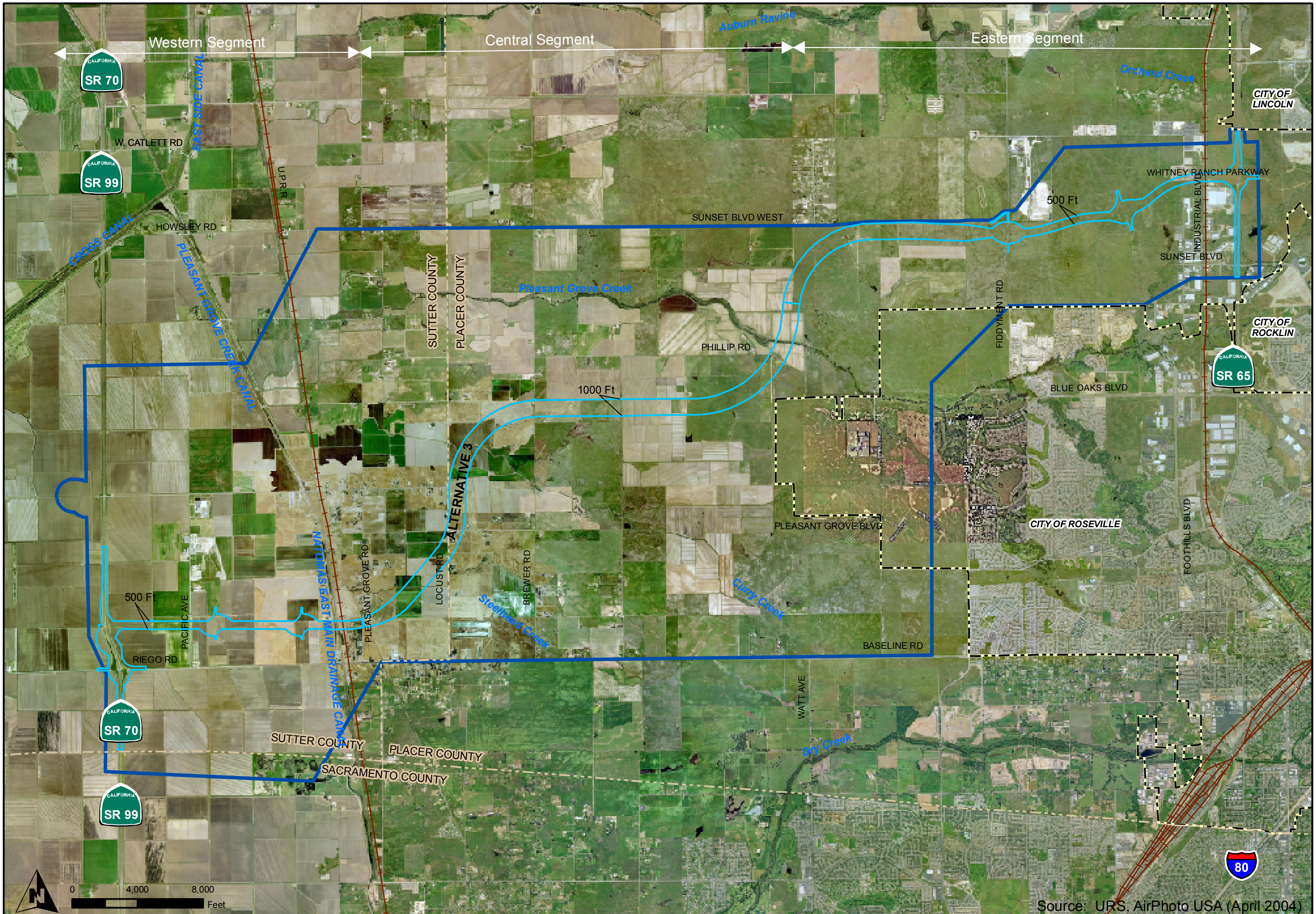
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Alternative 2

Figure 2-4

June 2007



Alternative 3
County Boundary
Study Area Boundary
City Boundary

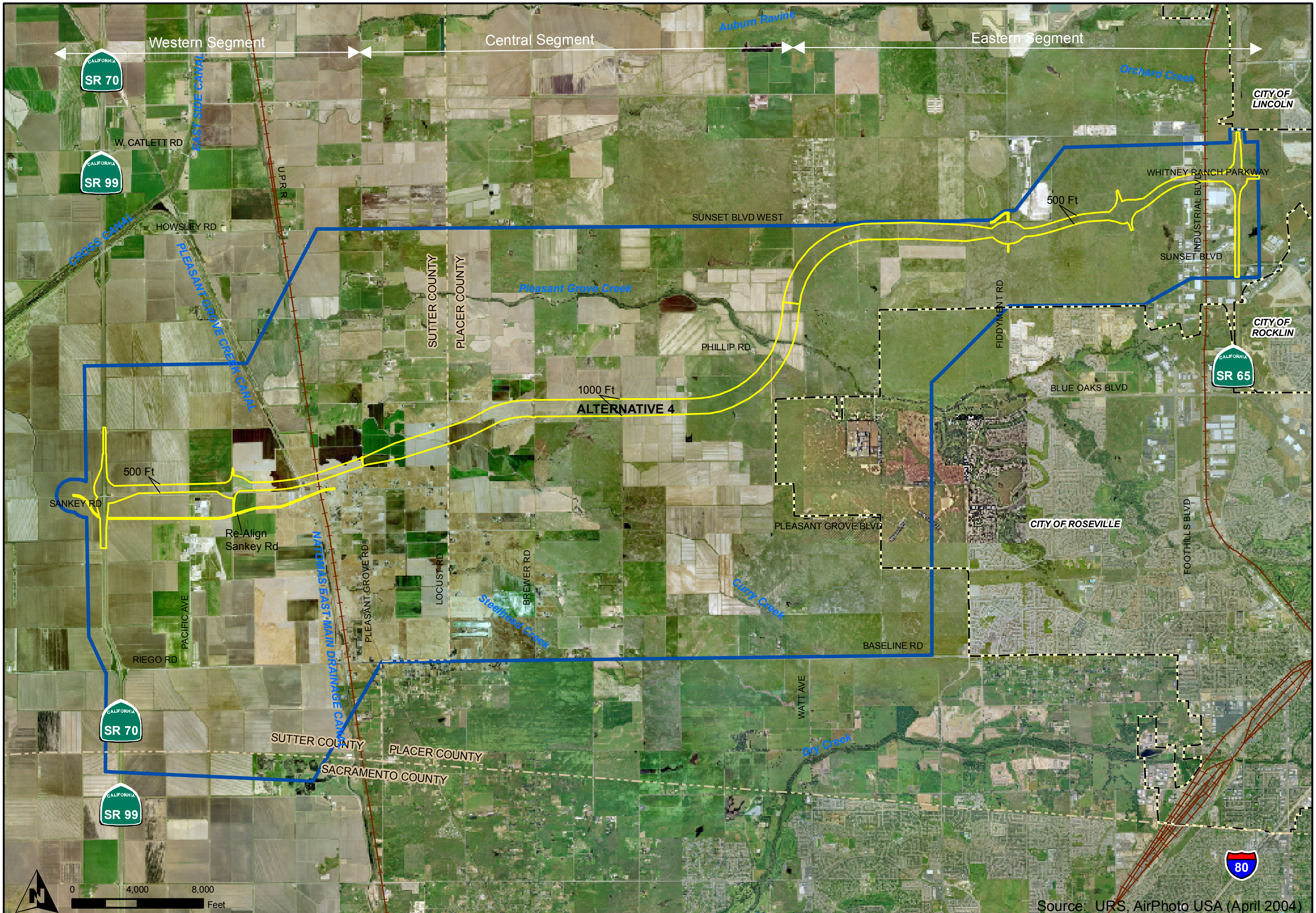
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Alternative 3

Figure 2-5

June 2007



Alternative 4
Study Area Boundary
County Boundary
City Boundary

PLACER PARKWAY

Tier 1 EIS/EIR

Alternative 4

Figure 2-6

June 2007

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2.3.6 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 (see Figure 2-7). From its interchange with SR 70/99 to its interchange with SR 65, this corridor alignment alternative is 14.2 miles long. This alternative would include five interchanges, as described in Section 2.2.3. This alternative assumes a 2,600-foot centerline radius. If the Placer Parkway roadway is located on the northerly side of the 1,000-foot corridor, the actual centerline radius would be approximately 2,300 feet, which is less than the desired design standard, and less than the Caltrans recommended minimum radius for urban freeways. This smaller radius curve would still meet the speed design criteria of 70 mph.

2.4 PLANNING HISTORY

The focus of the corridor alignment alternatives identification process has been to identify ways to avoid or reduce impacts to environmental resources and existing development that would result if the Parkway were constructed, while meeting the project's purpose and need, consistent with a safe facility. While no weighting or ranking was applied to mapped environmental resources, an added emphasis was to avoid or reduce impacts to aquatic resources.

The following entities provided input on the potential corridor alignment alternatives:

- the project's Technical, Study, and Policy Advisory Committees (which included representatives from the entities listed below)
- Federal Highway Administration (FHWA) staff
- Caltrans staff
- State and federal resources agencies, including the U.S. Army Corps of Engineers (USCOE), U.S. Environmental Protection Agency (U.S. EPA), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Game (CDFG)
- Sacramento Area Council of Governments (SACOG)
- the counties of Placer, Sutter, and Sacramento
- the cities of Lincoln, Rocklin, Roseville, and Sacramento, and the town of Loomis
- the public (at meetings held in Roseville and Pleasant Grove in October 2003 and August 2004)
- the Sutter County Board of Supervisors (at a November 2004 Study Session)
- the South Placer Regional Transportation Authority (SPRTA) Board

In addition, important input was received at numerous meetings with interested individuals, groups, and agencies over a number of years, as described in detail in Appendix A, Comments and Coordination.

The corridor alignment alternatives identification process involved several general steps:

- **1989.** The SACOG Metro Study recommended that a number of major roadway projects be pursued and transportation corridors identified and protected, including a proposed reliever facility to Interstate 80 (I-80) called Route 102, to augment implementation of transit and nonmotorized facilities and transportation control measures. The concept for Route 102 was a multi-modal transportation corridor between 1-5 near the Sacramento International Airport and I-80 near Auburn.

- **1991.** An Initial Feasibility Study for Route 102 prepared by Caltrans confirmed the physical and operational feasibility of Route 102 and recommended preparation of a Route Adoption Study (authorized by the California Transportation Commission).

- **1992.** Caltrans initiated the I-80/Route 102 Multimodal Transportation Study; it was subsequently cancelled.

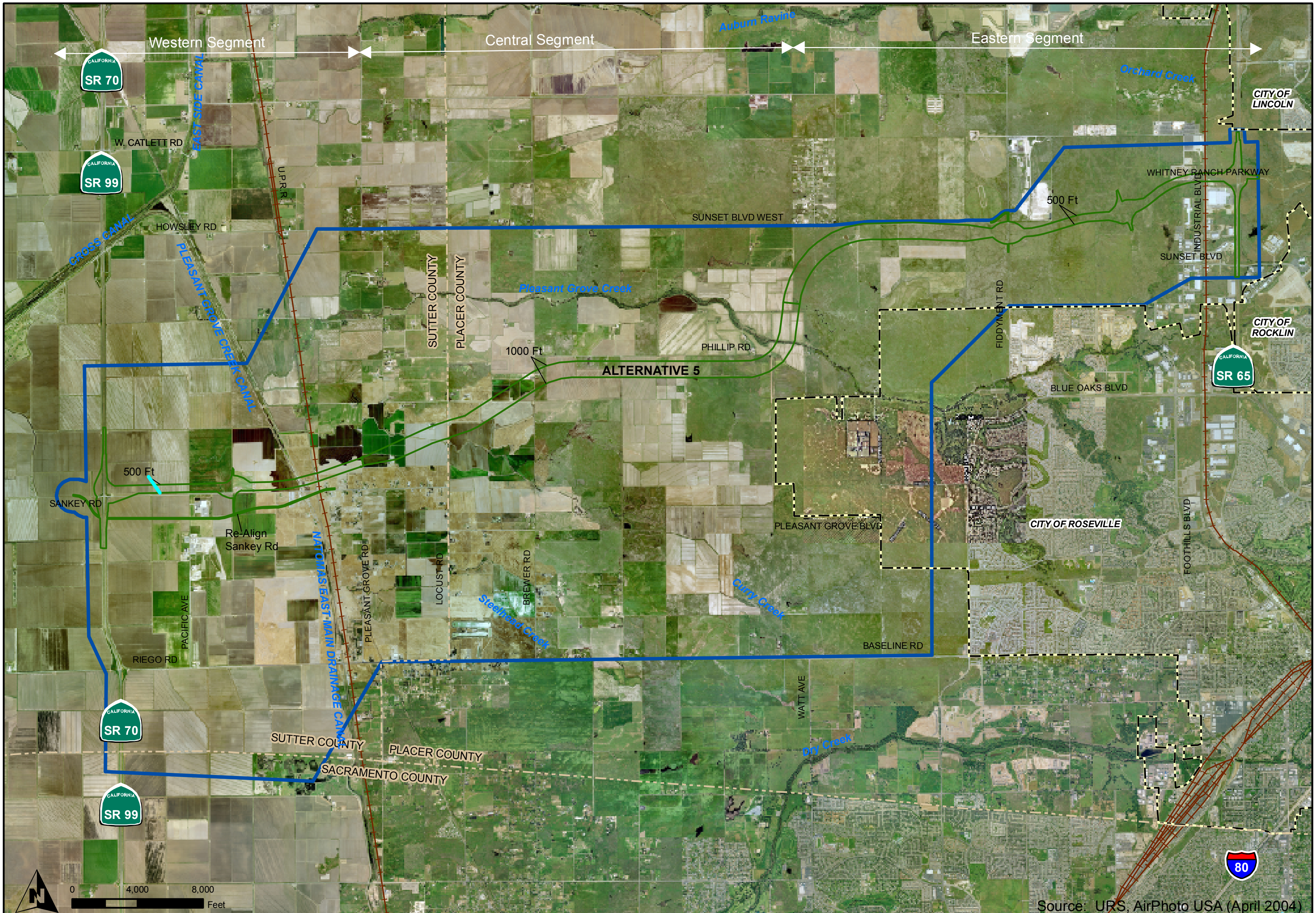
- **1994.** The conceptual alignment for a roadway extending from SR 70/99 to SR 65 was included in Placer County General Plan's Circulation Element, and a plan line is shown on the Circulation Diagram, for the purpose of preserving right-of-way and to plan for its ultimate implementation.

- **1999-2000.** The Conceptual Plan/Placer Parkway Interconnect Study (DKS Associates, 2000a) was prepared with input from advisory committees and community workshops; to help define scope of a Route Adoption Study, to help preserve options for a Placer Parkway in the interim, and to establish a funding/implementation strategy for the Placer Parkway concept. This study included a purpose and need statement, goals, policies, and potential implementation mechanisms, and recommended a study area for the Route Adoption Study.

- **2000-2001.** A Project Study Report (PSR) (Project Development Support) for Placer Parkway (DKS, 2001) was prepared which documents agreement on the scope, schedule and estimated costs of the environmental and engineering studies that would be necessary for adoption of a Placer Parkway route by the California Transportation Commission and local agencies.

- **2003.**
  - Public scoping meetings were held in Roseville (Placer County) and Pleasant Grove (Sutter County) to receive comments on the scope and content of the Tier 1 EIS/EIR.
  - Environmental screening criteria were developed for identification of corridor alignment alternatives to be evaluated in a Tier 1 EIS/EIR (URS and DKS, 2004).
  - Engineering criteria were developed to allow for the future design of a safe facility, including a divided, controlled access facility with full access control, a design speed of 70 mph and minimum horizontal curve radius of 4,600 feet (URS and DKS, 2004);

- **2003-2004.** Environmental and transportation screening of alternatives identified, using available Geographic Information Systems (GIS) databases and interpreted through an interactive GIS interface called Community Viz® that provides for spatial analyses of multiple resources. (URS and DKS, 2004);



Alternative 5 | County Boundary
Study Area Boundary | City Boundary

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Alternative 5

Figure 2-7

June 2007

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- **2004.**
  - A number of other corridor alignment alternatives were identified, evaluated, and refined via the screening process to avoid or reduce effects on natural and community resources or to better meet the transportation needs. These other alternatives were developed based on interdisciplinary workshops, advisory committee input, and coordination with local jurisdictions.
  - Public meetings were held in Roseville (Placer County) and Pleasant Grove (Sutter County) to receive feedback on four potential corridor alignment alternatives identified for study in the Tier 1 EIS/EIR.
- **2004-2005.** An iterative evaluation was conducted of other alignments proposed by private parties and resource agency staff, with further consultation and attempts to avoid or reduce potential impacts.
- **2005.** SPRTA approved five corridor alignment alternatives, plus the No-Build Alternative, for study in Tier 1 EIS/EIR.
- **2003-2006.** A federal coordination process was conducted, based on the NEPA/404 process set forth in the 1993 Memorandum of Understanding between federal agencies, (FHWA et al., 1993) and modified for Tier 1 to reflect decisions made at Tier 1, and to anticipate the permit application requirements at Tier 2. The goal of the modified NEPA/404 process for Tier 1 is 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. 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
  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 Tier 1 EIS/EIR. Formal requests for concurrence were made by FHWA (acting on its own behalf), Caltrans, and Placer County Transportation Planning Agency (PCTPA) (acting on behalf of SPRTA). Concurrence letters were received from the USCOE and U.S. EPA.

2.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER REVIEW

A number of alternatives in addition to those described in Section 2.3 were considered in early phases of project development. As described in Section 2.4, input from local citizens, three advisory groups, the USCOE and U.S. EPA, and other concerned agencies and groups considered and incorporated into alternatives development (see also Appendix A).

The development of alternatives considered for study in the Tier 1 EIS/EIR occurred within the context of the planning process described above. As identified below, alternatives were considered, evaluated, and rejected or modified:

1. **PSR Alternatives**: Early screening was initiated in the Conceptual Plan/Placer Parkway Interconnect Study and developed in more detail in the PSR, which resulted in the PSR Alternatives;

2. **Modification of the PSR Alternatives**: The PSR Alternatives were modified based on screening and preliminary evaluation that focused on avoidance of environmental resources, with special focus on aquatic resources, and including input from the advisory committees and the public;

3. **Alternatives Eliminated for Reasons Related to Purpose and Need, Safety, and/or Environmental Considerations**;

4. **Avoidance Alternatives – Modified NEPA/404 Process**: Evaluation of various alternatives that would avoid or reduce the need to construct a Parkway, through participation in a modified NEPA/404 process with federal agencies; and

5. **Landowner-Identified Alignments**: Evaluation of alignments identified by a landowner were conducted.

Based on public comments, environmental and engineering constraints, safety, or an inability to meet the purpose and need of the project, several alternatives were eliminated from further consideration. These alternatives are described below.

2.5.1 PSR Alternatives

Based on the 2001 Conceptual Plan/Placer Parkway Interconnect Study, the 2001 PSR for the Placer Parkway project identified three conceptual corridor alignments: a northern alignment, a central alignment, and a southern alignment. It identified two potential connections to SR 65: Whitney Ranch Parkway and Sunset Boulevard; and four potential connections to SR 70/99: one mile north of Sankey Road, at Sankey Road, one mile north of Riego Road, and one mile south of Riego Road. It also identified conceptual interchange locations along the Parkway route. This resulted in eleven combinations of conceptual corridor alignment alternatives:

Northern Alignment:	Whitney Ranch Parkway to north of Sankey Road
Central Alignments:	Whitney Ranch Parkway to Sankey Road Whitney Ranch Parkway to north of Riego Road Whitney Ranch Parkway to south of Riego Road Sunset Boulevard to Sankey Road Sunset Boulevard to north of Riego Road Sunset Boulevard to south of Riego Road
Southern Alignments:	Whitney Ranch Parkway to north of Riego Road Whitney Ranch Parkway to south of Riego Road Sunset Boulevard to north of Riego Road Sunset Boulevard to south of Riego Road

These alternatives were the starting point for the process of developing a reasonable range of corridor alignment alternatives for study in the Tier 1 EIS/EIR. The details regarding their development are documented in the Conceptual Plan/Placer Parkway Interconnect Study (DKS, 2000a) and PSR (DKS, 2001). Each was eliminated in the form presented in the PSR due to substantive conflicts with environmental resources, transportation or engineering constraints, or ongoing planning efforts related to interchanges on state routes or habitat preservation efforts. The Technical Memorandum Screening Evaluation of PSR Alternatives documents this screening process (URS and DKS Associates, 2004).

2.5.2 Modifications to PSR Alternatives

Modifications to the PSR Alternatives was an iterative process to identify feasible alternatives as described below.

1. For connections at Whitney Ranch Parkway, the central and southern alignments were rerouted to the north to avoid a large vernal pool complex that is located immediately northeast of the proposed West Roseville Specific Plan (WRSP) area.

2. The northern corridor alignment between SR 70/99 and approximately Amoruso Acres was eliminated; it was transitioned to connect to a central and/or southern route at this location.

3. The central corridor alignment was modified:
   a. by minimizing encroachment into a large wetland/vernal pool/conservation area at the confluence of two main branches of Curry Creek in the Central Segment. All central corridor alignments were modified to avoid this area and reduce habitat fragmentation and impacts to special-status species, wetlands, vernal pools, and a large conservation area; and
   b. by adjusting the alignment in the Western Segment to avoid the Pleasant Grove/ Sankey community and a designated conservation area.

4. The southern corridor alignment was modified:
   a. at the eastern end by extending it farther west before descending south, thereby avoiding the historic ranch complex, large vernal pool areas, and future public parks and other public recreational areas which may be subject to the provisions of Section 4(f) of the Department of Transportation Act of 1966 (see Appendix D); and
   b. along the southern edge of the study area to avoid large manmade waters of the United States and one rural residential community, by either:
      - moving the corridor several thousand feet to the north; or
      - moving the corridor approximately 1,000 feet to the south; and/or
      - along the southern edge of the study area, by moving the corridor closer to Baseline Road to provide a corridor alignment alternative that minimizes growth inducement.

An iterative process was used during 2004 to implement these modifications to the PSR alternatives and to develop feasible corridor alignment alternatives that would enhance the likelihood of meeting project goals, reduce engineering constraints and promote safety, and reduce or eliminate potential environmental impacts identified during the PSR screening process. This process is described in detail in the Technical Memorandum Screening Evaluation of PSR Alternatives (URS and DKS Associates, 2004), with maps identifying the major considerations involved in eliminating and/or modifying corridor alignment alternatives, which ultimately led to the identification of alternatives considered in this Tier 1 EIS/EIR.

2.5.3 Alternatives Eliminated for Reasons Related to Purpose and Need, Safety, and/or Environmental Considerations

This discussion focuses on the reasons why potential alternatives or elements of alternatives were eliminated from further consideration during the planning process. This process began with early concept studies (DKS Associates, 2000a) and continued through consideration of the PSR Alternatives as described in Sections 2.5.1 and 2.5.2. Consideration of avoidance alternatives examined through the NEPA/404 process and alignments identified by a landowner in late 2004 are discussed in Sections 2.5.4 and 2.5.5.

2.5.3.1 Elimination of Alternatives Related to Purpose and Need

Since a Placer Parkway connection to SR 65 could not be made at Twelve Bridges Drive due to impacts on vernal pools, any alignment running north of Sunset Boulevard West and Howsley Road would need to run out-of-direction with the major travel flows that the Parkway was proposed to serve—those flowing from SR 65 to: (1) the South Sutter industrial area, (2) Sacramento International Airport, (3) Sacramento County, and (4) the I-5 corridor. This out-of-direction travel would increase travel times for these movements and thereby substantially reduce both the projected amount of traffic using the Parkway and its benefits to the projected congestion on the local and regional roadway system. Therefore, alignments north of these roadways were eliminated from further consideration.

A northerly alignment along Sunset Boulevard West and Howsley Road would attract less than half the traffic volume to the Parkway than other, more southerly alignments and had marginal travel benefits. Therefore, this alignment was eliminated from further consideration.

Alignment alternatives located south of Baseline Road in Placer County would add out-of-direction distance to the Placer Parkway and thus increase travel times and costs, and would reduce the benefits of the Parkway. Therefore, alignments south of Baseline Road were eliminated from further consideration.

During the development of the Conceptual Plan, a Placer Parkway connection to SR 65 at Blue Oaks Boulevard was evaluated. The analysis found that achieving the capacity and operating speed needed for the Parkway would require restricting access to Blue Oaks Boulevard. To restrict access, parallel roadways would be required in some sections, and grade separation would be needed at some locations. Based on that analysis, a Blue Oaks Boulevard alignment was eliminated because restricting access to the existing street would be costly and inefficient, and the new roadways and grade separations required would have substantial community effects, including (1) construction through or adjacent to residential areas, including an age-restricted/retirement area, and (2) removal of homes and businesses.

2.5.3.2 Elimination or Modifications of Alternative Connections to State Routes Related to Safety

The location of feasible Parkway connections to SR 70/99 and SR 65 were evaluated. Connections to those freeways must occur at locations that satisfy Caltrans' requirements for minimum spacing between interchanges.

The PSR identified an interchange located one mile north of the Riego Road/SR 70/99 intersection and one mile south of the Sankey Road/SR 70/99 intersection. This interchange was eliminated based on recent accident data and Caltrans' direction that distances between interchanges on SR 70/99 must be at least one mile apart A southern connection to SR 70/99 was identified at a location approximately one and one-half miles south of Sankey Road and one-half mile north of Riego Road. The north of Riego location would eliminate a direct connection to Placer Parkway from the planned Riego Road/SR 70/99 future interchange for the reasons described above.

The PSR identified a connection to SR 65 at Whitney Ranch Boulevard (now called Whitney Ranch Parkway). This interchange is only one mile from the planned SR 65/Sunset Boulevard interchange. The conceptual design of the Placer Parkway interchange at Whitney Ranch Parkway was reconfigured and braided ramps added to aid in providing appropriate weaving distances for vehicles leaving Placer

Parkway traveling south on SR 65. With this change, Caltrans believes this interchange will meet their safety standards. This reconfiguration would eliminate a direct connection between Placer Parkway and Sunset Boulevard.

2.5.3.3 Elimination of Alternatives Related to Environmental Constraints

The following aspects of the PSR Alternatives were eliminated because of conflicts with existing environmental resources or planning processes:

- A northern alignment between SR 70/99 and Amoruso Acres, and a connection to SR 70/99 North of Sankey Road, were eliminated because of impacts to the Pleasant Grove community, growth inducement potential, agriculture impacts and reduced transportation benefits.

- A Sunset Boulevard connection at SR 65 was eliminated due to potential impacts on existing businesses and large vernal pool complexes.

- A Placer Parkway/SR 70/99 connection in Sacramento County was eliminated to minimize growth inducement in an area where the City of Sacramento and Sacramento County are planning to include a one-mile no-development buffer zone.

- A portion of a central corridor alignment that encroached into a large wetland/vernal pool/conservation area at the confluence of two main branches of Curry Creek was eliminated and the alignment moved northward. This also minimized disruption to the established community near Pleasant Grove and Sankey Road.

- Adjustments were made to southern corridor alignments to reflect different distances between it and Riego/Baseline Road. Input was received that the Parkway should lie directly adjacent to Riego/Baseline Road to minimize the potential for growth inducement and to reduce habitat fragmentation by placing the two roadways next to each other. Based on substantive vernal pool impacts, impacts to a residential community in the vicinity of County Acres, and input from jurisdictions that this was not perceived as good infrastructure planning by the Technical Advisory Committee (TAC), this alternative was eliminated.

- Potential more southerly alignments, whether connecting to SR 65 at Blue Oaks Boulevard or at other interchange locations, would pass through the City of Roseville and require the removal of substantial existing development. The resulting impacts and costs make such alternatives infeasible, and they were therefore eliminated from further consideration.

Other modifications were made to avoid or minimize impacts to a historic ranch complex, large vernal pool areas, wetlands, farmland, residences, the active portion of the City of Roseville Retention Basin and designated recreation areas in the WRSP, or to reduce the potential for growth inducement. In addition, several corridor alignment alternatives were developed in response to TAC direction, including a corridor alignment paralleling Baseline Road, a shorter diagonal route through the Central Segment, and a segment north of and parallel to the proposed Regional University Specific Plan area.

2.5.4 Avoidance Alternatives – Modified NEPA/404 Process

As described in Section 2.4 above, the project team worked together with the USCOE and the U.S. EPA under a modified NEPA/404 process. One of the objectives was to identify feasible avoidance alternatives that would meet the purpose and need of the project. These efforts are described below.

2.5.4.1 Transportation Systems Management Alternative

Transportation Systems Management (TSM) includes activities that maximize the efficiency of a roadway system. Possible techniques include transit, other nonmotorized facilities such as bike and pedestrian paths, park-and-ride lots, ridesharing, high-occupancy vehicle lanes, traffic signal timing optimizing, congestion pricing, etc. The purpose of evaluating a TSM alternative is to identify if a combination of TSM measures could be effective in meeting the purpose and need of a project without construction of a new transportation facility, thus reducing environmental impacts and costs. A TSM Alternative for Placer Parkway was developed and underwent preliminary analysis (URS and DKS Associates, 2004).

The benefits and impacts of a TSM Alternative were compared to conditions with the No-Build Alternative under the 2040 conditions. The TSM Alternative included a set of improvements that went beyond the No-Build Alternative, which are summarized in Table 2-1.

Table 2-1
Assumed Improvements in TSM Alternative (beyond those in the No-Build Alternative)

<table>
<tr><th></th><th>Facility</th><th>Potential Improvements</th></tr>
<tr><td rowspan="7">Local Roadways</td><td>Riego/Baseline Road</td><td>Expressway from Fiddyment to SR 70/99
(with grade separations at major intersection plus restrictions on other access)</td></tr>
<tr><td>Sunset Blvd West/ Howsley Road</td><td>Widen from two to four lanes (Fiddyment to SR 70/99)</td></tr>
<tr><td>Elverta Road</td><td>Widen from four to six lanes (Watt to SR 70/99)</td></tr>
<tr><td>Westside Drive</td><td>Widen from four to six lanes (Baseline to Blue Oaks)</td></tr>
<tr><td>Fiddyment</td><td>Widen from four to six lanes Pleasant Grove to Blue Oaks)</td></tr>
<tr><td>Blue Oaks Blvd</td><td>Widen to six lanes (west of Woodcreek Oaks)</td></tr>
<tr><td>Roseville Road</td><td>Widen to six lanes (Watt to City of Roseville)</td></tr>
<tr><td rowspan="2">State Highways</td><td>SR 65</td><td>Widen to six lanes (I-80 to Lincoln Bypass)</td></tr>
<tr><td>SR 70/99</td><td>Widen to six lanes (I-5 to Riego Road)</td></tr>
<tr><td rowspan="4">Transit</td><td>LRT</td><td>Antelope to Roseville (along UPRR)</td></tr>
<tr><td>BRT</td><td>I-80 to West Roseville (along Watt Avenue)</td></tr>
<tr><td rowspan="2">Commuter Bus</td><td>Additional service from Lincoln, Rocklin and Roseville to Sacramento (via I-80 HOV lanes)</td></tr>
<tr><td>Lincoln, Rocklin and Roseville to South Sutter, Natomas and Sacramento International Airport (via Riego/Baseline)</td></tr>
<tr><td colspan="3">BRT = Bus Rapid Transit
LRT = Light Rail Transit</td></tr>
</table>

Pertinent results of transportation analyses related to meeting the project's purpose and need are described below.

Change in traffic volumes. As shown in Table 2-2, the TSM Alternative would substantially increase volumes on the local roadways, including Riego/Baseline Road, Elverta Road, Roseville Road, and Fiddyment Road. The TSM Alternative would result in modest decreases in volumes on some other local roadways. It would result in modest decrease in volumes on I-80 and an increase in volume on SR 70/99 south of Elverta Road. The analysis showed that a generalized Placer Parkway Alternative would result in larger decreases in volumes on local roadways and on I-80 than under the TSM Alternative, and would increase the volume on SR 70/99 south of the Parkway and on Watt Avenue within Placer County.

Table 2-2
Increase in Daily Traffic Volumes Due to the TSM Alternative

Roadway	Increase in Daily Traffic Volume
Riego Road	3,000 to 4,000
Baseline Road	5,000 to 7,000
Elverta Road	7,000 to 13,000
Roseville Road	5,000 to 6,000
Fiddyment Road	3,000 to 5,000
Source: URS and DKS Associates, 2004	

Levels of Service. As shown in Table 2-3, compared to the No-Build Alternative, the TSM Alternative would improve the level of service on Riego/Baseline Road, but not as much as Placer Parkway. A generalized Placer Parkway Alternative would result in better levels of service on the arterial roadway system in Roseville and the Sunset Industrial area than the TSM Alternative.

Table 2-3
Change in Peak Period Level of Service Due to the TSM Alternative

	Peak Period Level of Service		
Roadway	No-Build Alternative	TSM Alternative	With Placer Parkway[1]
Riego Road	F1 to F3	E to F2	C to F1
Baseline Road	F1	F1	D to E

Source: URS and DKS Associates, 2004

Notes: F1 reflects one hour of LOS F conditions during peak period while F3 reflects three hours of LOS F conditions

[1] Reflects alignment from SR 65/Whitney to SR 70/99/North of Riego Road with Watt Avenue Interchange (See Chapter 7.0)

Changes in vehicle-hours of travel. The TSM Alternative would decrease vehicle-hours of travel (VHT) on freeways in the Transportation Analysis Study Area (TASA; see Section 4.8, Traffic and Transportation, for a definition of TASA) by about 2 percent but would increase VHT on local roadways in the TASA by about 1 percent. Placer Parkway would cause VHT to increase on freeways by about

7 percent and decrease VHT on local roadways by about 4 percent since it would draw travel away from local roadways to Placer Parkway, which was assumed to be a freeway in the analysis.

Changes in vehicle-hours of delay. On freeways, the TSM Alternative would reduce the amount of travel time vehicles would spend at Level of Service (LOS) F1 and F3 (congested conditions for 1 to 3 or more hours) by 14 to 18 percent. On local roadways, the TSM Alternative would increase the amount of travel time vehicles would spend on roadway segments that would operate at LOS F1 and F3 conditions by 3 to 6 percent. Placer Parkway would reduce the amount of travel time vehicles would spend on both freeways (10 to 20 percent reduction) and local roadway segments (14 to 15 percent reduction) that would operate at LOS F1 and F3 conditions.

Changes in peak period travel times. Peak period travel times were estimated for the following important origin/destination combinations that Placer Parkway is intended to serve: (1) from SR 65 at Whitney Ranch Parkway to the Sacramento International Airport, and (2) from SR 65 at Whitney Ranch Parkway to downtown Sacramento. For each of these trips, p.m. peak period travel times were estimated using three different routes: via Placer Parkway, via Riego/Baseline Road, and via I-80. Under the No-Build Alternative, use of Riego/Baseline Road would provide the fastest route from south Placer County to the Sacramento International Airport, while I-80 would provide the fastest route from south Placer County to downtown Sacramento. Compared to the No-Build Alternative, the TSM Alternative would somewhat reduce travel times for commute period travel times than routes using either Riego/Baseline Road or I-80. Compared to the No-Build Alternative, a generalized Placer Parkway Alternative would provide substantially faster commute period travel time than routes using either Riego/Baseline Road or I-80 (with time savings in the range of 4 to 13 minutes to downtown Sacramento, and greater than 10 minutes to the Sacramento International Airport).

Based on these results, a TSM Alternative would not meet the purpose and need for the project, because it would increase VHT on local roadways, and would increase the amount of travel time vehicles would spend on roadway segments that would operate at LOS F for 1 to 3 hours at a time. With respect to travel times from the growing industrial/employment areas in south Placer County to other parts of the Sacramento region, the TSM Alternative would result in substantially slower commute period travel times than Placer Parkway, for vehicles using either Riego/Baseline Road or I-80. Depending on the route, the time of day, and the direction, the TSM Alternative would take from 11 to 16 additional minutes to travel from SR 65 to the Sacramento International Airport, as compared to Placer Parkway. It was therefore eliminated from further consideration.

2.5.4.2 Shorter Parkway Alternative

A "shorter" version of the Placer Parkway was evaluated (URS and DKS Associates, 2004). This version would retain the eastern half of the Parkway, beginning at Whitney Ranch Parkway west through the Sunset Industrial Area. It then follows the north/south alignment of Alternative 1, but continues south, connecting to Baseline Road (instead of curving east about a mile north of Baseline Road). This partial avoidance alternative assumes the use of Riego/Baseline Road to complete the connection to SR 70/99. It was assumed that this potential alternative would be designed to freeway standards until it reaches Baseline Road.

The major issue with this alternative was the design of access control on Riego/Baseline Road. The general options were as follows:

- Thoroughfare – The Circulation Element of the Placer County General Plan defines "thoroughfares" as special arterial roadways with greater access control designed to carry high traffic volumes with limited delay. They have up to six travel lanes, a minimum distance between at-grade intersections of one-half mile and no driveways. Baseline

Road is designated as a thoroughfare in the Placer County General Plan. This type of six-lane facility was assumed for both Riego/Baseline Road under the No-Build Alternative.

- Expressway – An expressway also has a minimum distance between at-grade intersections of one-half mile and no driveways, but grade-separated interchanges are considered at high-volume cross streets.

- Freeway – This facility type has full access control with no at-grade intersections and grade-separated interchanges spaced a minimum of one mile apart. It is assumed that Placer Parkway will be designed to freeway standards.

With the Shorter Parkway Alternative, Riego/Baseline Road west of the Parkway would need to accommodate both long-distance trips (from east of Fiddyment Road to SR 70/99) and short to medium-distance trips, especially those to/from the proposed Placer Vineyards Specific Plan. If Riego/Baseline Road were upgraded to freeway standards, with one mile spacing between interchanges, a parallel frontage road would be needed to provide access to the Placer Vineyards development and accommodate short to medium-distance trips.

The intent of the Shorter Parkway Alternative is to limit the extent of impacts. To accomplish this, it was assumed that Riego/Baseline Road would be designed as an expressway, not a freeway. It was assumed that the thoroughfare design, assumed under the No-Build Alternative based on the General Plan designation for Baseline Road, would be upgraded by adding grade separations at a few high-volume cross streets. It was assumed that some low-volume cross streets would be eliminated but that there would be a number of low- to medium-volume cross streets that would have signalized intersections.

The analysis of the Shorter Parkway Alternative focused on the following performance measures:

Change in daily traffic volumes. Compared to the No-Build scenario, the Shorter Parkway Alternative would substantially increase traffic volumes on Riego/Baseline Road. The full Placer Parkway scenarios would decrease volumes on these roadways. The Shorter Parkway Alternative would result in modest decreases in traffic volumes on I-80 and SR 65 and a modest increase in volume on SR 70/99 south of Riego Road. The full Placer Parkway scenarios would result in larger decreases in traffic volumes on I-80 and SR 65 than under the Shorter Parkway Alternative. The full Placer Parkway scenarios would increase the traffic volume on SR 70/99 south of Riego Road more than the Shorter Parkway Alternative.

Change in peak hour levels of service. Compared to the No-Build scenario, the full Placer Parkway scenarios would reduce the peak-hour volumes on Riego/Baseline Road and thereby improve the level of service on these roadways. Under the Shorter Parkway Alternative, traffic signals would be used on Riego/Baseline Road at several cross streets with low to medium volumes. Thus the capacity available on portions of Riego/Baseline Road under the Shorter Parkway Alternative would be the same as the capacity under thoroughfare design assumed under the No-Build scenario and the full Placer Parkway scenarios. With a substantial increase in traffic volume on Riego/Baseline Road, the Shorter Parkway Alternative would result in LOS F conditions for 2 to 3 hours on portions of these roadways during both the a.m. and p.m. peak commute periods

Changes in vehicle-miles of travel on congested roadways. The amount of travel on congested roadways was summarized for two areas: (1) western Placer County, which was defined as a roadway system bounded by SR 65 on the east, the Sutter County line on the west, the Sacramento County line on the south and Catlett Road on the north, and (2) a larger "traffic analysis study area" bounded by Sierra College on the east, SR 70/99 and I-5 on the west, I-80 on the south, Nicholas Road on the north. The traffic analysis found that this area encompasses the roadways where substantial traffic changes would result from the full Placer Parkway scenarios.

In western Placer County, the Shorter Parkway Alternative would reduce the amount of vehicle miles traveled (VMT) on congested roadways compared to the No-Build scenario by about 39 percent but not as much as any of the full Placer Parkway scenarios, which would reduce VMT on congested roadways by about 47 to 52 percent.

Changes in peak period travel times. Peak-period travel times were estimated for the following important origin/destination combinations that Placer Parkway is intended to serve: (1) from SR 65 at Whitney Ranch Parkway to the Sacramento International Airport, and (2) from SR 65 at Whitney Ranch Parkway to downtown Sacramento. For each of these trips, p.m. peak-period travel times were estimated using three different routes: via several potential Placer Parkway scenarios, via Riego/Baseline Road, and via I-80. Under the No-Build Alternative, use of Riego/Baseline Road would provide the fastest route from south Placer County to the Sacramento International Airport, while I-80 would provide the fastest route from south Placer County to downtown Sacramento. Under the No-Build scenario, use of Riego/Baseline Road would provide the fastest route from south Placer County to the Sacramento International Airport, while I-80 would provide the fastest route from south Placer County to downtown Sacramento. Compared to the No-Build Alternative, the Shorter Parkway Alternative would reduce travel times for commute period travel times but not as much as the full Placer Parkway scenarios (by about 4 one-half minutes to downtown Sacramento, and 5 minutes to the Sacramento International Airport).

The Shorter Parkway Alternative, with the eastern portion of Placer Parkway diverting traffic around Roseville would provide benefits to the local roadway system in the western portion of Placer County. However, it would substantially increase traffic volumes on Riego/Baseline Road west of the terminus of the Parkway. The volume of projected traffic could not be handled by a six-lane expressway, and would result in LOS F along Riego Road for 4 to 6 hours per day. To provide (1) an acceptable level of service (LOS C/D) and travel time, (2) access to the Placer Vineyards development, and (3) to accommodate short to medium-distance trips, substantial new transportation capacity would need to be constructed. The extent of the necessary capacity increase would require a freeway facility plus a parallel frontage road. For these reasons, the Shorter Parkway Alternative was eliminated from further consideration.

2.5.4.3 Shorter Parkway Plus TSM Alternative

The TSM Alternative described in Section 2.5.4.1 and the Shorter Parkway Alternative described in Section 2.5.4.2 were evaluated in combination (DKS Associates, 2005).

The analysis showed that there would be substantial traffic congestion levels under the revised No-Build scenario, particularly along Riego/Baseline Road. This scenario was revised following the adoption of the Preferred Blueprint scenario by SACOG in 2004 (DKS Associates, 2005). The revised scenario included updated roadway and transit assumptions and a revised cumulative development scenario. The Shorter Parkway Plus TSM Alternative would still assume that Riego/Baseline Road would be upgraded to an expressway facility to accommodate both long-distance and local traffic west of the Parkway terminus on Baseline Road. As with the Shorter Parkway Alternative, the eastern freeway portion of the Shorter Parkway Plus TSM Alternative would divert traffic around the north and west sides of the City of Roseville and benefit Roseville's roadway system. However, it would substantially increase traffic volumes on Riego/Baseline Road west of the terminus of the Parkway. The volume of projected traffic in the section between Watt Avenue and SR 70/99 could not be handled by a six-lane expressway.

The following design features would be needed in the Riego/Baseline Road corridor under the Shorter Parkway Plus TSM Alternative, in order to (1) provide an acceptable level of service and travel time, (2) provide access to planned or proposed development along Riego/Baseline Road, and (3) accommodate short- to medium-distance trips:

- A six-lane freeway facility with eight lanes needed for a section near the Sutter/Placer County line;

- Parallel frontage roads on both sides of the freeway in the planned urbanized areas of Sutter and Placer counties between Watt Avenue and SR 70/99, with some portions of the frontage roads requiring four travel lanes;

- Three additional freeway interchanges between Fiddyment Road and Pleasant Grove Road beyond the one potential future interchange (Watt Avenue connection) identified in the Placer Parkway Conceptual Plan;

- Several additional grade separations to connect local roadways north and south of the freeway;

- Due to the very high demand on the ramps from the Riego/Baseline freeway to SR 70/99 south of Riego Road, additional lanes would be required on the ramps as well as on SR 70/99.

The intent of the Shorter Parkway Plus TSM Alternative would be to limit the amount of land impacted, and avoid building a full Parkway. Based on the requirements to meet the transportation need of the project, the design features identified above would require substantial land to be converted to freeways or frontage roads, and add new interchanges with increased access to the Shorter Parkway portion of this alternative. For these reasons, the Shorter Parkway Plus TSM Alternative was eliminated from further consideration.

2.5.5 Landowner-Identified Alignments

After the August 2004 public meetings which identified four potential corridor alignment alternatives recommended for study in the Tier 1 EIS/EIR, a landowner identified two additional potential corridor alignments for consideration. Each would have potential SR 70/99 connections at Sankey Road or north of Riego Road, for a total of four potential alternatives:

- Alignment 1 proposed retaining the northernmost PSR alignment, from just west of Brewer Road and running due east to approximately Fiddyment Road. This alignment would:

  – transition to the Placer Parkway connection to SR 70/99 at Sankey Road, by dropping south just west of Brewer Road for about one and one-half miles and then east to meet the currently proposed Alternative 4 (called Alignment 1N); or,

  – continue dropping south to meet with currently proposed Alternative 3, then transitioning to the Placer Parkway connection to SR 70/99 north of Riego Road (called Alignment 1S).

- Alignment 2 proposed a new alignment similar to currently proposed Alternative 4 but approximately 2,250 feet north of the Alternative 4 alignment (center to center), with its northern boundary about 375 feet south of the planned City of Roseville Retention Basin. This alignment would:

  – transition to the Placer Parkway connection to SR 70/99 at Sankey Road, by dropping south just west of Brewer Road for a short distance and then east to meet the currently proposed Alternative 4 (called Alignment 2N); or,

– Continue dropping south to meet with the currently proposed Alternative 3, then transitioning to the Placer Parkway connection to SR 70/99 north of Riego Road (called Alignment 2S).

In March 2005, the SPRTA Board directed the project team to screen these alignments for consideration as additional corridor alignment alternatives. The project team evaluated these alignments for data consistency. The alignments were then screened using a process similar to that used for currently proposed Alternatives 1 through 4.

Meaningful or substantive differences were identified, and potential benefits and drawbacks compared these proposed landowner alignments with the Placer Parkway alternative that it most closely resembled (currently proposed Alternatives 1, 2, 3, or 4). For example, Alignment 2N was compared to currently proposed Alternative 4. This information was reviewed with the landowner's representative, and presented to the project's three advisory committees.

Alignments 2N and 2S did not meet the project's engineering screening criteria, in that they did not provide a minimum 4,600-foot curve radius that would allow 70 mph design speed and superelevations ranging from 2 to 4 percent, regardless of where the roadway were located within the corridor. It was determined that achieving the desired curve radius would encroach on the City of Roseville Retention Basin. However, there were benefits to Alignment 2S, including less encroachment into upland habitat, special status-species habitat, farmlands, and the FEMA 500-year floodplain. It would also provide a more beneficial connection to a potential future Watt Avenue extension. For these reasons, and to reduce the constraint posed by the planned retention basin, it was agreed that these alignments be modified to achieve a minimum design speed of 70 mph; this modified the 4,600-foot curve radius for these alignments.

Alignments 1N, 2N, and 2S were eliminated from further consideration, in response to substantial federal and state resource agency concerns regarding alignments north of Pleasant Grove Creek, because of substantially more impacts to aquatic resources and because the advisory committees determined that another alternative with a connection to SR 70/99 north of Riego Road was not warranted. The northerly alignments also would experience reduced traffic benefits associated with their northerly location. Alignment 2N was modified as described above, and is included in this Tier 1 EIS/EIR as Alternative 5.

2.6 ANALYSIS OF A LAND USE AND POLICY SCENARIO

As discussed in Section 2.4, the modified NEPA/404 process included the concurrence on the range of alternatives for Placer Parkway. This concurrence contains a requirement that a "Land Use and Policy Scenario" analysis be included in the Tier 1 EIS/EIR. This theoretical scenario would reduce travel demand through an enhanced smart growth program using improved land use and transportation policies. The scenario is to:

> . . . include an analysis of how the future transportation demand could be met without building a new freeway, but rather by changing land use and policy assumptions. The goal of the evaluation is to disclose to decision makers and the public how land use, policy, and "smart-growth" tools could be used, in combination with increased transit and transportation system management tools, to lower VMT enough so that a new freeway would not be necessary. This analysis will not be an alternative for purposes of NEPA and CEQA analysis.
>
> The analysis will describe and incorporate all feasible tools to meet anticipated demand without a new freeway, even those that are outside the authority of the project sponsors or would require actions by municipalities or decision makers outside the Placer Parkway

study area. Some of these tools are used in the Sacramento Region Blueprint Transportation and Land Use Study (www.sacregionblueprint.org), and the "Modeling Long-Range Transportation and Land Use Scenarios for the Sacramento Region, Using Citizen Generate Policies" Report to the Mineta Foundation (Johnston et al., 2004). They include pricing mechanisms such as parking fees and congestion pricing, mode shifts from auto to transit/biking/walking, establishing strong urban growth boundaries, and increasing land use densities.

The definition and evaluation of the "Land Use and Policy Scenario" was documented in a technical memorandum (DKS Associates, 2007a) and involved the following:

1. An assumption that a robust transit system would be implemented throughout Placer County, especially in the urban areas west of Sierra College Boulevard.

2. An assumption that the Smart Growth principles of SACOG's 2050 Preferred Blueprint Scenario (www.sacregionblueprint.org) would be implemented on a regional basis in all the new growth areas, infill areas and redevelopment areas that SACOG identified as having Smart Growth potential in their evaluation of the Blueprint. This would limit growth in outlying rural areas in the six-county region, thereby acting as a proxy for a strong urban limit or growth boundary.

3. Use of SACOG's "4D" model post-processor, which attempts to fully capture the transportation benefits of Smart Growth.

4. Use of the same assumptions about future pricing mechanisms (i.e., parking pricing, etc.) as SACOG's Blueprint. The Blueprint assumes that the cost of parking in downtown Sacramento will increase at a rate faster than inflation and that it will spread to other areas of the city as well as some major employment centers outside of the Sacramento central city.

The Land Use and Policy Scenario assumes a shift in land use policy and makes assumptions which are too speculative to form the basis of a feasible alternative that would be implemented in the foreseeable future. These major smart growth assumptions and analysis tools are described below, followed by the conclusions of the analysis.

2.6.1 Assumed Robust Transit System

The Tier 1 EIS/EIR transportation analysis is based on a "Funded Constrained" scenario.[1] Development of a "robust" transit system for the Land Use and Policy Scenario was based on a transit scenario developed by PCTPA for the Placer County Long-Range Transit Study Update and includes the following services beyond those defined in the Funded Constrained Scenario:

- Increased frequency on the new Placer County Transit routes that were added as part of the Funded Constrained Scenario.

- A Bus Rapid Transit system with three routes:

[1] Developed for the Long Range Transit Plan Update by PCTPA with the assistance of local transit providers. It represents the most likely future transit system unless new sources for transit operating subsidies are established. This scenario assumes that operating funds would increase at the same rate as population in Placer County.

  - One linking the California State University Sacramento campus in the proposed Placer Ranch Specific Plan with the Watt Avenue/I-80 Sacramento Regional Transit light rail station. This route would connect new growth areas in western Placer County (Placer Vineyards, Sierra Vista, etc.) with other parts of Placer County and with Sacramento County along the Watt Avenue corridor.
  - A second linking the proposed California State University, Sacramento campus with Roseville Galleria and the Watt Avenue/I-80 Light Rail Transit (LRT) station via I-80 High Occupancy Vehicle (HOV) lanes.
  - A third connecting the Roseville Galleria to the Sunrise LRT station via Hazel Avenue.

- The following additional transit service in the proposed new specific plan and growth areas in western Placer County:
  - An internal route through Placer Vineyards.
  - An internal route through Placer Ranch.
  - A local route between Regional University, Curry Creek, Placer Ranch, and Sierra Vista.
  - A connection between the west Lincoln annexation area and Roseville via Fiddyment Road.
  - Two routes connecting Placer Ranch to Roseville via Fiddyment Road and via Woodcreek Oaks Boulevard.
- A local loop through Rocklin via West Stanford Ranch Road, Park Boulevard, Whitney Ranch Parkway, University Avenue (new planned street), to Atherton Road, Lone Tree Boulevard, and Fairway Drive.

This robust transit scenario would increase total bus-miles in Placer County by 320 percent over today's levels. By comparison, the Funded Constrained Scenario would increase bus-miles by 140 percent over today's levels.

2.6.2 SACOG's Blueprint

The SACOG Board adopted the Preferred Scenario developed through the Blueprint Transportation and Land Use Study. It establishes a long-range regional vision for how the six-county SACOG region will manage an anticipated doubling of population by 2050. The Blueprint is based on the following Smart Growth principles:

- Provide a variety of **transportation choices**
- Offer **housing choices** and opportunities
- Take advantage of **compact development**
- Use **existing assets**
- **Mixed land uses**
- Preserve open space, farmland, natural beauty, through **natural resources conservation**
- Encourage distinctive, attractive communities with **quality design**

The Land Use and Policy Scenario does not assume a strong urban growth boundary *per se*, but it assumes an "aggressive" implementation of the Blueprint's Smart Growth land use/design principles on a regional basis. The Preferred Blueprint Scenario, approved by the SACOG Board in December 2004, depicts a way for the six-county Sacramento Region to grow through the year 2050 in a manner generally consistent with the Blueprint growth principles, identifying where growth would and would not occur, ideally, if the Blueprint principles were implemented. The Blueprint represents a goal or model for how smart growth could be implemented in the region. It is not an adopted local land use plan that actually governs development activity.

The 2040 development scenario used in the Tier 1 EIS/EIR is generally consistent with the Preferred Blueprint Scenario and does not place urban development outside the urbanized areas in the Blueprint, including in southern Sutter and western Placer counties.

2.6.3 SACOG's 4D Model Post-Processor

Due to the lack of dependable data and limited empirical studies quantifying the relationships between Smart Growth principles and travel demand, evaluating the effects of Smart Growth principles on travel demand and on travel patterns is difficult, at best. Meanwhile, the need for the analyses and evaluations of Smart Growth principles is ever increasing as environmentally conscious controlled growth, urban in-fill, and pedestrian and transit friendly designs become regularly introduced components in commercial and residential planning efforts, transportation corridor and transit demand studies, and the like.

The need to quantify these interrelationships between land use patterns and travel behavior has led to the categorization of Smart Growth principles into clearly defined, observable and "measurable" design features or aspects focusing on those factors which most directly affect mobility and influence travel decisions and patterns. Density, design, diversity, and destination (or the "4Ds" as they are commonly called) are four such factors which are increasingly being used to evaluate the effects of Smart Growth on mobility and travel demand.

In response to the growing need to analyze the effects of Smart Growth on travel patterns and demand, SACOG conducted an analysis of the extent to which their Sacramento Metropolitan Travel Demand Model (SACMET) captures density, diversity, design, and destination factors.

The SACOG analysis showed that the SACMET travel demand model does in fact capture most of the differences in trip distribution and mode choice, depending on the "4D" factors that are caused by the density and mix of land uses. However, the observable correlations between density, diversity, design, and destination were not entirely captured by the SACMET model. To account for the portions of the observable correlations between density, diversity, design, and destination not entirely captured by the SACMET model, SACOG developed a set of model adjustment factors that are implemented in a 4D post-processor.[2]

2.6.4 Pricing Mechanisms

The Land Use and Policy scenario assumes the same future pricing mechanisms (i.e., parking charges, etc) as SACOG's Blueprint. Parking charges can have a significant effect on travel demand under certain conditions, but would not likely have a substantial effect on Parkway users. A relatively small percentage of Placer County residents currently work in downtown Sacramento, where pricing mechanisms may be effective. Assuming widespread parking charges on both public and private lots throughout the region is very speculative. Congestion pricing would not be feasible on the arterial roadways serving the TASA

[2] An overview of SACOG's 4D model post-processor is provided in the technical memorandum on the Land Use and Policy Scenario (DKS Associates, 2007b).

because they do not meet the criteria cited by SACOG. Interstate 80 has very high volume and high congestion and might be a candidate for congestion pricing. While congestion pricing on I-80 might achieve some shift from auto to transit modes in the I-80 corridor, it would not have a significant impact on travel demand on the arterials in Western Placer County and South Sutter County.

2.6.5 Forecasts for the Tier 1 EIS/EIR

The primary travel forecasting tool used in the Tier 1 EIS/EIR was the SACMET model. As discussed in the technical memorandum on the analysis of the Land Use and Policy Scenario (DKS Associates, 2007b), the 4D model postprocessor was not used in the analysis because it was felt that its assumptions and its estimation of changes in travel behavior may be speculative. While the 4D model postprocessor was not used for the Tier 1 EIS/EIR transportation analysis, it was selected for the analysis of a Land Use and Policy Scenario for the following reasons:

- The Tier 1 EIS/EIR analysis to date has indicated that travel demand on the major roadway system serving the TASA[3] for the Tier 1 EIS/EIR would not be reduced substantially by increasing transit service alone or by Smart Growth design features that are implemented only along the Riego/Baseline Road corridor. To have a substantial reduction in travel demand, Smart Growth would need to implemented on a regional basis and coupled with high-quality transit services. SACOG's 4D model processor assumes that Smart Growth would be implemented aggressively throughout the region. This assumption meets the intent of the concurrence requirement—to analyze a Land Use and Policy Scenario.

- It was developed locally by SACOG and used to evaluate the potential impact of Blueprint Smart Growth principles.

2.6.6 Analysis

The analysis involved using the SACMET model and the 4D post-processor to determine the potential decrease in vehicle demand that would occur under the No-Build Alternative in 2040 with an assumed "aggressive" implementation of the Blueprint's Smart Growth land use/design principles on a regional basis. This analysis involved the following steps:

- The SACMET model, with the Tier 1 EIS/EIR transportation analysis refinements[4] and the robust transit network assumptions was run to forecast the change in vehicle travel that would occur due to the assumed robust transit system.

- Then the 4D post-processor was run to determine additional change that may occur due to an aggressive implementation of Smart Growth design throughout the region.

- The SACMET model was rerun to determine the roadway volumes that might result from this Land Use and Policy Scenario.

The estimated 2040 traffic volumes from the No-Build Alternative with this robust Land Use and Policy Scenario were compared to volumes under the Tier 1 EIS/EIR's No-Build Alternative without this scenario. That comparison indicates the following:

[3] See Chapter 3 and Section 4.8, Traffic and Transportation, for a description of the TASA.

[4] Travel model refinements for the Tier 1 EIS/EIR are discussed in Section 4.8, Traffic and Transportation.

- With the Land Use and Policy Scenario, traffic volumes on the major east-west roadway in the Placer Parkway corridor, Riego/Baseline Road, would be about 2 to 6 percent lower than conditions without the scenario. The analysis in the Tier 1 EIS/EIR Draft Transportation Technical Report (DKS Associates, 2007) indicates that segments of this roadway would operate at LOS F conditions for 2 to 3 hours during both the a.m. and p.m. peak period in 2040 under the No-Build Alternative. The estimated traffic reduction from the scenario would not substantially reduce traffic congestion levels estimated for this roadway.

- An aggressive implementation of the Blueprint's Smart Growth land use/design principles would not substantially improve travel times between SR 65 and SR 70/99 compared to the Tier 1 EIS/EIR No-Build Alternative.

- The Land Use and Policy scenario would reduce VMT in western Placer County and southern Sutter County mostly on smaller roadways, not the regional arterial roadway system. The scenario would result in a 1 to 4 percent reduction on most of the regional roadway segments in the TASA.

While this analysis indicates that an aggressive land use policy applied on a regional basis could reduce traffic volumes and thereby reduce the impact of future development, the analysis indicates that volumes on arterial roadways that would operate at LOS F conditions in 2040 under the No-Build Alternative would not be reduced enough to allow LOS E or better conditions during peak hours of travel.

In the Purpose and Need statement for the Tier 1 EIS/EIR, a portion of the need (or problem) responds to existing and anticipated travel demand. Specifically,

> "The proposed Placer Parkway would be designed to reduce pressure on the existing transportation network and to address anticipated future congestion on the local roadway system in southwestern Placer County and south Sutter County. The proposed project would be designed to reduce total VHT during the morning and evening peak commute periods (i.e., 6 to 9 a.m. and 3 to 6 p.m.), reduce the amount (VMT) and duration of travel that is spent in congested conditions in Southwestern Placer County, and 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."

The analysis indicates that the scenario applied on a regional basis can help achieve these objectives, but would clearly not solve the problem by itself.

2.7 AGENCY PERMITS AND APPROVALS

As the Proposed Action is to identify and acquire a corridor, it does not require environmental permits. Applications for necessary permits, approvals, and agreements for construction of the Parkway will be prepared at the Tier 2 level of environmental review. As appropriate, information from this Tier 1 EIS/EIR may be used in the preparation of such applications.

3.0 ANALYSIS FRAMEWORK

3.1 INTRODUCTION

In order to conduct environmental analysis for a large, complex project like Placer Parkway, it is necessary to use a variety of projections, models and analysis areas crafted to address the various environmental impact topics and methods of analysis.

Each environmental analysis section in Chapter 4 of this Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR) discusses a particular resource and presents an evaluation of existing and future potential impacts associated with each Placer Parkway corridor alignment alternative. Each environmental analysis section also describes the methodology used to assess potential impacts to that particular resource; identifies the affected environment and existing conditions; assesses potential environmental impacts; and identifies mitigation strategies.

To assist the reader in understanding the methodology used, this chapter describes the framework of the environmental impact analysis used in this Tier 1 EIS/EIR. Presented below is a summary of the approach used in the technical analysis chapters.

3.2 ENVIRONMENTAL ANALYSES INCLUDED IN THE TIER 1 EIS/EIR

The following categories of impacts are addressed:

Direct Impacts: Direct impacts are effects of an action that are "caused by the action and occur at the same time and place" (Council on Environmental Quality). Such impacts occur as a direct result of the action and are generally closely linked to the project spatially or temporally. Direct impacts are usually predictable.

Secondary and Indirect Impacts: 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 (40 Code of Federal Regulations [CFR] 1508.8)." 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 (40 CFR 1508.8)." Secondary and indirect impacts may occur as a result of direct impacts associated with the Parkway

Secondary and indirect impacts may also occur as a result of "Anticipated Growth" related to the Parkway. Anticipated growth is an estimate of growth between 2020 and 2040 which the Parkway may affect by facilitating planned and proposed developments in the region and influencing the timing of development in the vicinity of the future Parkway's interchanges, particularly those proposed near vacant land adjacent to rapidly developing areas or areas now proposed for urban development. Anticipated growth is defined as the growth that is anticipated in the secondary and indirect study area as described in the relevant General Plans and adopted regional forecasts, such as the Sacramento Area Council of Governments (SACOG)'s Blueprint scenario (see Section 3.4.1), including additional growth that may occur as a result of major new development proposals that have not yet been formally approved. Anticipated growth may involve a change in timing or location of growth, compared with conditions without the Parkway, but would likely result in limited change in the estimated total growth levels described by the 2040 Cumulative Scenario, described below.

Secondary and indirect impacts associated with anticipated growth 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 of those projects. These impacts are evaluated in this Tier 1 EIS/EIR based on the guidance from the Mare Island Accord Interagency Working Group (Mare Island Accord, 2006) regarding analysis of potential impacts associated with growth. This group, with representatives from the Federal Highway Administration (FHWA), U.S. Environmental Protection Agency (U.S. EPA), and the California Department of Transportation (Caltrans) (Mare Island Accord, 2000), recommended a six-step approach for developing a growth related impact analysis. Additional details are provided in Section 6.1 of this Tier 1 EIS/EIR. Consistent with that guidance, the secondary and indirect impacts analysis in the EIS/EIR is an evaluation of the effects of growth on resources of concern.

Although it is not feasible to perform a detailed quantitative evaluation of these potential impacts as specific design details of other future projects are not known, potential impacts are evaluated qualitatively, based on typical reasonably foreseeable effects of the Parkway, and of impacts associated with anticipated growth. Further details on potential impacts associated with growth are provided in Section 6.1, Growth. For Placer Parkway, the anticipated growth overlaps substantially with the Cumulative Development Scenario.

Cumulative Impacts: The National Environmental Policy Act (NEPA) defines cumulative impacts as impacts on the environment which result from the incremental impact of the project when added to other past, present, and reasonably foreseeable future actions. Cumulative impacts can result from relatively minor but collectively significant actions taking place over a period of time (40 CFR 1508.7). It is the combination of these effects, and any resulting environmental degradation, that are the focus of cumulative impact analysis. The California Environmental Quality Act (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. Cumulative impacts are analyzed by discussing the effects of the Parkway in combination with the level of growth in the 2040 Cumulative Scenario (see Section 3.4.1).

Similar to the Secondary and Indirect Impacts, the cumulative impacts analysis addresses the impacts of future projects that are also part of the anticipated growth. But, there are differences between the two sections. The cumulative impacts analysis addresses a projected cumulative scenario for 2040, not only the Anticipated Growth. In addition, because the cumulative impacts are focused on the additive effects of the proposed project with all reasonably foreseeable future projects, the entire Cumulative Development Scenario is considered along with the proposed project.

A separate CEQA Evaluation, which draws on the information in Chapter 4, is included as Chapter 5.

3.3 TIER 1 AND TIER 2 ANALYSES

The planning for Placer Parkway involves two phases: (1) selection of a corridor, known as the Placer Parkway Corridor Preservation Project, and (2) later selection of a more precise alignment within the corridor, and a decision whether or not to build the Parkway.

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.

Each phase will be subjected to its own environmental review, a process known as "tiered" environmental review under both state and federal law. The selection of a corridor (Placer Parkway Corridor Preservation Project) will be the subject of the first tier (Tier 1) of environmental review, which is the purpose of this Tier 1 EIS/EIR. Selection of a more precise alignment within the corridor, and construction and operation of the Parkway will be the subject of a later, Tier 2 EIR.

As discussed in Chapter 1, this Tier 1 EIS/EIR is not limited to the direct effects of selecting the corridor. To the degree feasible, this Tier 1 EIS/EIR also reviews the reasonably foreseeable environmental effects of the construction and operation of the Parkway.

In Tier 1, avoidance and minimization measures were employed to reduce potential impacts of the build alternatives during the process of identifying the range of alternatives analyzed in this Tier 1 EIS/EIR, Also, certain analyses have been completed in Tier 1 which will not require revisiting in Tier 2, such as the project's impact on wastewater treatment or schools, and the project's potential to induce growth. In Tier 2, some studies performed for this Tier 1 analysis will be undertaken in greater detail, or will be revisited based on predicted availability of new, relevant information. For some topics, entirely new analyses will be performed in Tier 2, as no analysis was undertaken in Tier 1; examples of such topics include intersection Level of Service analyses or drainage analyses, as the information required to do so is not available at the Tier 1 level. Similarly, additional consultation and mitigation considerations will be developed in Tier 2 to enhance and provide more specificity to the mitigation commitments and strategies identified in this Tier 1 EIS/EIR. These topics are described in detail in each of the sections in Chapter 4, Environmental Analysis.

3.4 ANALYSIS YEARS AND COMPARISON OF ALTERNATIVES

3.4.1 Time of Analysis

Under both NEPA and CEQA, the environmental analysis typically evaluates the project in the context of both existing environmental conditions and projected future conditions. The selection of analysis years for this Tier 1 EIS/EIR reflects the relatively long timeframe for the expected planning, corridor acquisition, and construction of Placer Parkway.

Existing Conditions – 2004

Existing conditions are defined under CEQA as "*the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published*." Existing conditions usually constitute the baseline physical conditions by which the potential significance of impacts is evaluated under CEQA. For noise and visual impact analysis, federal regulatory guidance also requires the analysis to use existing conditions as the baseline for the analysis. Additional details of such guidance are provided in the technical analysis chapters of this Tier 1 EIS/EIR. Data collection commenced in 2003 using the best available data regarding conditions in the vicinity of the project. Where data were deficient, additional data was collected in the field in late 2003 and early 2004, and intermittently thereafter. In most of the Environmental Analysis chapters; therefore, direct impacts as well as secondary and indirect impacts are evaluated by comparing 2004 existing conditions with and without the project.

In the intervening years since the baseline year was identified, the existing conditions in the study area have experienced only a few changes other than continued agricultural activities which vary from season to season and year to year. These changes include grading and installation of infrastructure associated with the approved West Roseville Specific Plan area, completion of the Pleasant Grove Wastewater Treatment Plant, and current construction of the Roseville Energy Facility, all of which lie outside the footprint of any of the corridor alignment alternatives under consideration. None of the many development proposals under consideration have been approved and, consequently, none have affected 2003/2004 existing conditions.

Opening Year Scenario – 2020

The schedule for construction of the project is dependent on securing appropriate funding, and is not anticipated to begin for a number of years. The exact schedule is unknown. For planning purposes, the Placer County Transportation Planning Agency (PCTPA) has identified 2020 as the opening year of this facility. Therefore, for the transportation analysis, a second evaluation of impacts compares the projected conditions in the assumed opening year of Placer Parkway with and without the project. In the transportation analysis, where the transportation network is subject to reasonably foreseeable changes by 2020, this analysis is considered more meaningful than comparing existing conditions with and without the project, since the project clearly will not be superimposed on 2004 traffic conditions. For the several analyses that rely at least in part on traffic information—Air Quality, Noise, and Energy—this 2020 evaluation of impacts with and without the project is also presented.

Cumulative Development Scenario – 2040

FHWA's guidelines recommend evaluation of a project's potential impacts projected forward twenty years after opening to ensure that the project is evaluated in the context of reasonably foreseeable future development, when anticipated future development in the study area would have occurred and when any potential direct, indirect or and/or cumulative impacts associated with the project would be evident. The cumulative impact analysis therefore considers 2040 as the Cumulative Development scenario against which the Parkway is evaluated.

Development Projections (2020 to 2040)

After reviewing available demographic data and projections (see Chapter 1 for further discussion), the project's Project Development Team (described in Appendix A) concluded that the Opening Year and Cumulative Development scenarios would "bracket" regional development levels from a low (2020) level to a high (2040) level.

Most of the growth is projected to occur in Placer County. As shown on Table 3-1, the Opening Year scenario has the same average yearly growth rate in each land use category as the Cumulative Development scenario, and a somewhat higher yearly growth rate in residential units as SACOG's draft 2035 Metropolitan Transportation Plan (MTP) forecasts for Placer County.

Table 3-1 summarizes the development assumptions that were used for the 2020 Opening Year and Cumulative Development scenarios travel demand forecasts. The location of the assumed development areas in 2020 and 2040 are shown in Figures 4.8-2 and 4.8-3, respectively, in Section 4.8, Traffic and Transportation.

Detailed assumptions regarding these future development scenarios are described below.

Opening Year Scenario – 2020

The 2020 Opening Year scenario was based on discussions with the Placer Parkway Corridor Preservation Technical Advisory Committee (TAC) and confirmed by the Study Advisory Committee (SAC) and Placer Parkway Corridor Preservation Policy Advisory Committee (PAC). The 2020 Opening Year scenario reflects the following assumptions about development:

Table 3-1
Summary of Placer County Growth

Land Use	Forecast Year	Development	Estimate of Growth Rate	
			Period	Growth per Year
Residential (Dwelling Units)	2004	109,810 DU	—	—
	2020	181,437 DU	2004 to 2020	4,477 DU
	2035 (SACOG)[1]	217,838 DU	2004 to 2035	3,485 DU
	2040	261,980 DU	2004 to 2040	4,227 DU
Retail	2004	17,008,000 sq. ft.	—	—
	2020	28,575,000 sq. ft.	2004 to 2020	723,000 sq. ft.
	2040	43,015,000 sq. ft.	2004 to 2040	722,000 sq. ft.
Office	2004	9,904,000 sq. ft.	—	—
	2020	24,681,000 sq. ft.	2004 to 2020	924,000 sq. ft.
	2040	43,268,000 sq. ft.	2004 to 2040	927,000 sq. ft.
Industrial	2004	21,906,000 sq. ft.	—	—
	2020	34,640,000 sq. ft.	2004 to 2020	796,000 sq. ft.
	2040	50,565,000 sq. ft.	2004 to 2040	796,000 sq. ft.

Source: DKS Associates, 2007
Notes:
[1] Based on January 2007 draft development forecasts from SACOG
DU = dwelling unit
sq. ft. = square feet

- Residential buildout of current general plans within Placer County (see Figure 4.8-2 in Section 4.8).
- No development in the following major proposed projects that would require General Plan amendments (see Figure 1-15):
  - The Creekview and Sierra Vista Specific Plans (CSP and SVSP) in Roseville's Annexation Area;
  - The Sphere of Influence (SOI) expansion areas of Lincoln;
  - The Regional University and Placer Ranch Specific Plans (RUSP and PRSP) and Curry Creek Community Plan (CCCP) area in unincorporated Placer County; and
  - Sutter Pointe Specific Plan (SPSP) 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 (see Figure 1-15).

- 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 employees 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 employee 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 south Sutter County and Placer County.

Cumulative Development Scenario – 2040

The 2040 Cumulative 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, and confirmed by the TAC, the SAC, and the PAC. The Cumulative (2040) Development Scenario reflects the following assumptions about development:

- Full buildout 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 Figure 4.8-3 in Section 4.8):

  – The CSP and SVSP in Roseville’s SOI Annexation area;

  – The SOI expansion areas of Lincoln;

  – The Placer Vineyards Specific Plan, RUSP, and PRSP in unincorporated Placer County; and

  – The CCCP 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 buildout of the residential development in the proposed SPSP area along with a nonresidential development level that “balances” the residential development in that area.

- Estimated 2040 development in all other portions of SACOG’s six-county region based on a straight-line ratio for the development growth between 2005 levels and the 2050 Preferred Blueprint scenario for each of SACOG’s Traffic Analysis Zones.

The above list was the basis for the cumulative development analysis.

Table 3-2 presents a summary of development assumptions made under the 2020 and 2040 scenarios.

Table 3-2
Summary of Development Assumptions – 2020 and 2040 Scenarios

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 Co)	–	–	16,206	–	–	2,025	–	–	2,122	–	–	–
Regional University (Placer Co)	–	–	4,387	–	–	215	–	–	75	–	–	–
Lincoln SOI Expansion	–	–	33,720	–	–	5,659	–	–	5,748	–	–	2,700
Placer Ranch (Placer Co)	–	–	6,759	–	–	1,047	–	–	5,243	–	–	4,185
Placer Vineyards (Placer Co)	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, 2007
ksf = 1,000 square feet
DU = dwelling units

3.4.2 Analysis of Alternatives

No-Build Alternative

The environmental impact analysis approach for the Placer Parkway Tier 1 EIS/EIR necessitates a comparison between existing conditions with and without the project and future conditions with and without the project. For the purposes of this analysis, conditions without the project are described as the No-Build Alternative. This is true for each analysis year (2004, 2020 [for transportation, air quality, noise and energy], and 2040). For 2004, population, land use, employment, traffic and environmental conditions in the study are assumed to be as of 2004. For the 2020 and 2040 analyses years, the No-Build Alternative includes 2004 existing conditions, as well as other projects, actions or anticipated changes in the study area between 2004 and either 2020 or 2040, independent of Placer Parkway, as generally described in Section 3.4.1.

Build Alternatives

Five alternative alignments, or build alternatives, for Placer Parkway are evaluated in this Tier 1 EIS/EIR. The build alternatives represent the addition of the Placer Parkway to the environment defined by the No-Build Alternative. In each year analyzed, the incremental difference between the No-Build Alternative and each of the build alternatives is then considered to be the potential environmental impact of Placer Parkway.

3.5 STUDY AREAS

The Tier 1 EIS/EIR evaluates potential impacts within a defined study area. For most analyses, the study area is the main project study area described in Section 3.5.1, below. In some analyses, however, it is necessary to address a different area in order to meaningfully evaluate potential impacts. The paragraphs below briefly describe the various study areas used in the technical analysis chapters.

3.5.1 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 (Figure 1-1). The portion of the study area that is located 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 State Route (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 Riego/Baseline Road.

The study area is divided into three segments:

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

3.5.2 Regional Analysis Districts in the Local Project Vicinity

Regional Analysis Districts (RADs) are geographical areas where data is gathered and projected over time for purposes of preparing SACOG's traffic model and ultimately its MTPs. RAD data is a good, consistent source of land use and traffic information, and is used in this document to provide historic and forecasted data as background to the need for the Parkway. However, RADs are not structured in a way that allows effective analysis of transportation. For that purpose, other transportation analyses areas were developed as described below. The RADs in the local project vicinity (within and adjacent to the project study area) are shown on Figure 1-2 in Chapter 1.

3.5.3 Transportation Analysis Study Area

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 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 Interstate 80 on the south, and from Sierra College Boulevard on the east to west of SR 70/99. The TASA (shown in Figure 4.8-1 in Section 4.8, Traffic and Transportation) covers portions of eight jurisdictions: Placer County, Sutter County, Sacramento County, the cities of Roseville, Rocklin, Lincoln and Sacramento, and the town of Loomis. Additional details of the TASA are provided in Section 4.8, Traffic and Transportation.

3.5.4 Analysis Focus Area

For some system-wide transportation analysis measures, two study areas were used: (1) the TASA, as described above, and (2) an Analysis Focus Area (AFA), also shown in Figure 4.8-1 in Section 4.8). 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. Additional details of the AFA are provided in Section 4.8, Traffic and Transportation.

3.5.5 Air Quality Analysis Study Area

As air quality within the project study area is regulated by local government agencies, Placer County Air Pollution Control District, and Feather River Air Quality Management District, a study area was defined for the analysis of air quality. This study area is defined as Sutter County, Placer County, and northern Sacramento County. The study area is located in the Sacramento Valley Air Basin which is shown on Figure 4.9-1 in Section 4.9, Air Quality.

3.5.6 Area of Potential Effects

The Area of Potential Effects (APE) is the area where potential impacts on cultural resources are anticipated. For this Tier 1 EIS/EIR, one APE for archaeological resources and one APE for historic properties were developed in consultation with URS Corporation and Caltrans. Additional details of the APE are provided in Section 4.7, Cultural Resources. The APE is also depicted on Figure 4.7-1 in Section 4.7.

3.5.7 Secondary and Indirect Impact Analysis Study Area

Based on guidance from the Mare Island Accord Interagency Working Group (Mare Island Accord, 2006), a study area was developed for the analysis of secondary and indirect impacts, including anticipated growth (Figure 3-1). This area was based on the location of the corridor alignment alternatives in relationship to existing city boundaries and SOIs, 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 secondary and indirect impact analysis study area encompasses the entire TASA and expands it in several ways, including extending it westward to the Sacramento and Feather Rivers, which present natural barriers to development. The TASA was also expanded to the north to encompass all of the City of Lincoln's proposed SOI expansion area, as well as to the east to encompass all of the land within the city limits of Roseville and most of Rocklin as well as a portion of the town of Loomis.

3.6 TIME MARCHES ON

The dynamic existing planning environment in the study area, and the projected elapsed time until the Parkway would be constructed, if approved, is challenging in the context of preparing an environmental document that analyzes existing and future conditions.

3.6.1 Evolving Existing Conditions

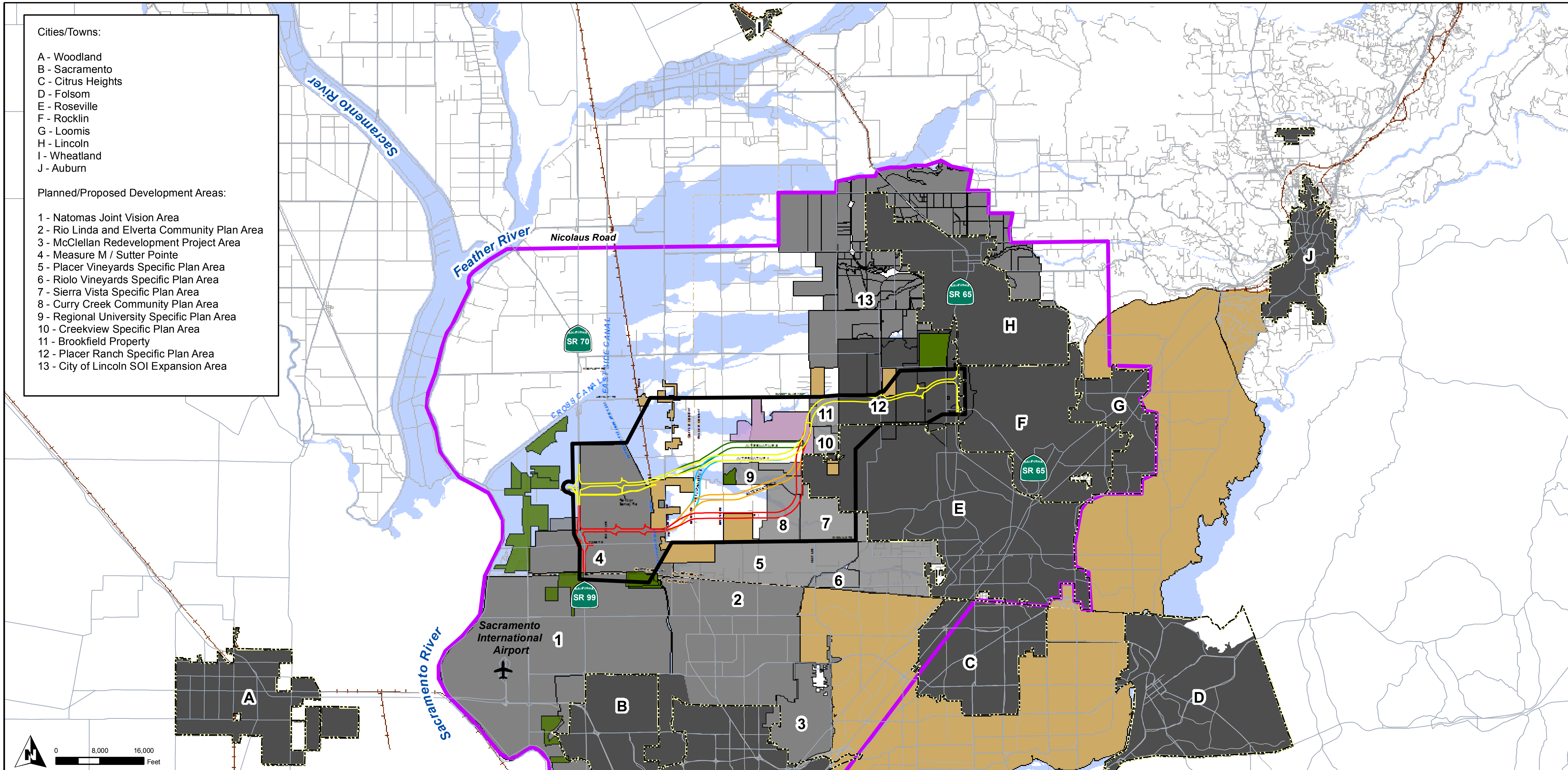
This Tier 1 EIS/EIR evaluates the effects of the Project compared to existing conditions in 2004. As with any large project planned over a long time, changes in conditions may occur during the preparation of the Tier 1 study, or between the draft and final versions of the Tier 1 EIS/EIR, as well as during the period between the Tier 1 and Tier 2 processes. The possibility of changes in the level of urban development is particularly high for Placer Parkway, due to the strong development pressure in the project vicinity. As discussed in Section 6.1, Growth, population and employment growth projections for California and the Sacramento Region in general, and for southwestern Placer County and south Sutter County in particular, indicate that development pressures in the project vicinity will remain relatively intense, irrespective of the Placer Parkway.

While the project study area is predominantly undeveloped at this time, parts of the study area are within local General Plan designations that allow urban growth. In addition, numerous proposals for major new development projects in and around the study area are currently in various stages of the approval and entitlement process (see Figure 1-15, Planned/Proposed Development, in Chapter 1). The ultimate level of development, including the growth represented by these current project proposals, is addressed by this Tier 1 EIS/EIR in the Cumulative Scenario (Year 2040). This accounts for the cumulative impact of the Parkway and other reasonably foreseeable developments, including those now in the planning process of the local jurisdictions.

The EIR assesses project impacts on baseline conditions, as discussed in Section 3.4.1. While CEQA does not require an assessment of project impacts on post-Notice of Preparation development, it is nevertheless worth noting that if new land uses/projects are approved by city or county jurisdictions prior to completion of this Tier 1 EIS/EIR process, such land uses could potentially lie within one or more of the alternatives analyzed in this Tier 1 EIS/EIR.

There are three such large projects under review. The PRSP and the RUSP are currently going through the planning and environmental review process in Placer County. Both projects, if approved in the form initially requested by the landowners, would locate urban development in one or more of the Parkway corridors evaluated in this Tier 1 EIS/EIR. The SPSP is currently undergoing a similar process in Sutter County. The South Placer Regional Transportation Authority is engaged in ongoing consultation with the counties and the landowners to avoid or minimize any such conflicts, in the event these projects do go forward. At a land use workshop in October 2003, the Placer County Board of Supervisors directed Placer County planning staff to process these Specific Plans concurrently with the PCTPA's processing of Placer Parkway Tier 1 EIS/EIR.

As a result of approval of such development projects, the Parkway could have some impacts that are not identified in this document, for the simple reason that the affected resources (i.e., approved urban developments) were not present when the environmental analysis for the Tier 1 EIS/EIR was conducted. Such additional impacts could include, but would not necessarily be limited to, impacts on planned or existing residential, commercial, or parkland uses; incompatibility with such uses; a change in the viewshed for approved projects that could result in visual impacts; or other impacts typical of such land use conflicts.



County Boundary | Alternative 1 | Alternative 4 | Existing and Approved Development | Existing Conservation Areas | Study Area for Secondary and Indirect Impacts

Railroads | Alternative 2 | Alternative 5 | Planned / Proposed Development (including future conservation areas) | Developed Unincorporated Areas | Project Study Area Boundary

Alternative 3 | Municipal Facilities | 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

Secondary and Indirect Impact Analysis Study Area

Figure 3-1

June 2007

Although effects related to possible new urban development approvals are identified in this Tier 1 EIS/EIR to the limited extent feasible, they will be fully addressed during the Tier 2 study of the Parkway, which will identify and respond to existing conditions at that time.

3.6.2 Future Availability of Fossil Fuels

Currently more than 95 percent of transportation energy comes from oil (Energy Bulletin, 2007). In recent years there has been a growing concern that oil availability will decline in the future, resulting in substantial increases in oil and gasoline prices. This could reduce the need for new roadway construction if the number of vehicle miles traveled decreases as a result of reduced car usage. The concept of future oil supply decline has been termed “Peak Oil.”

World oil demand is expected to grow 50 percent by 2025 (Hirsch, 2005). To meet that increased demand, oil production will have to be increased correspondingly. Oil is a finite, non-renewable resource and the rate of oil “production,” meaning extraction and refining has grown in most years over the last century to its current level of about 84 million barrels/day. The theory of “Peak Oil” suggests that once the halfway point of all reserves is reached, production becomes ever more likely to decline, hence use of the term peak. If, as generally expected, oil production peaks at some point in the next few decades, then world oil production will no longer satisfy demand. That point is referred to as Peak Oil.

Peak Oil refers to a global decline in oil availability at currently affordable prices. This could have social and economic consequences in situations where there is substantial reliance on oil-dependant transportation modes.

There is considerable debate as to when the peak of global oil production will be reached. The World Energy Council anticipates it will occur after 2010, while the Shell Oil Company predicts this will occur after 2025 (Hirsch, 2005). The U.S. Geological Survey position is that the global peak is still about three decades away (U.S. DOE, 2001). Cambridge Energy Research Associates, Inc., a leading advisor to international energy companies, governments, financial institutions, and technology providers on the energy markets, suggests that there is no evidence of a peak before 2030 (JTP Online, 2007). The most optimistic opinions still put the timing of the peak no later than 2040 (U.S. DOE, 2001).

The Hirsch Report (Hirsch, 2005), which presented an extensive study sponsored by the U.S. Department of Energy into the potential peaking of oil production, assumes that peaking will occur in or before 2025, after which time there would be dramatic increases in global oil prices. The report concludes that the key to mitigation of potential social and economic impacts of this increase would be development of and construction of a large number of substitute fuel production facilities, coupled to significant increases in transportation fuel efficiency.

Concern regarding this issue as it relates to construction of new roadways, which include organizations such as the Natural Resources Defense Council (2007), the Sierra Club (2007), Defenders of Wildlife (2007), Friends of the Earth (2007), Greenpeace (2007), and numerous other environmental, community groups and private individuals, suggest that planning for future construction of roadways is an inappropriate investment, as potential use of such facilities will inevitably decline in the future as oil prices rise.

Many of the world’s major oil companies, including Shell, ExxonMobil, Chevron, and British Petroleum accept the theory of peak oil but do not consider that it will substantially affect the use of road transportation or the need for or use of roadways planned for future construction for the following reasons:

- Viable alternatives to oil for vehicle transportation already exist, already are in widespread use, and are increasing in use. These include coal, hydrogen, renewable fuels, biomass sources such as ethanol, and other sources of alternative fuels;
- New technology will continue to develop alternatives to oil, such as renewables and other more sustainable fuel types. Major oil companies are already investing in alternative and renewable technologies that will eventually provide substitutes for oil;
- The decline in oil availability will occur gradually over many years, allowing for adjustment to use of alternative fuels; and
- Vehicle fuel efficiency is increasing and will continue to increase as manufacturers invest in fuel-efficiency technology to meet market demands. Increasing use of more fuel-efficient vehicles will help to offset the decline in oil availability.

Potential changes in oil availability and price have been assumed to be a part of future conditions in the study area which would not be affected by the Parkway. It is assumed that, irrespective of the extent or magnitude of changes in availability and price of oil and other fuels, the Parkway would still have future utility either as a roadway or as another modal route. It is considered speculative to predict how potential issues associated with peak oil may influence future transportation decisions.

In 2003 the California Energy Commission (CEC) and the California Air Resources Board agreed to a strategy to reduce demand for oil (petroleum) in California. This comprised a commitment to promoting improved energy efficiency and increasing the use of alternative fuels. The two agencies set a goal to achieve 20 percent use of transportation energy in the form of alternative fuels by 2020. The current percentage is 6 percent.

A recent independent paper (CEC, 2005), prepared by staff of the CEC based on recommendations of six alternative fuels work groups staffed by a range of private and public alternative fuel specialists, suggests that these targets are achievable. The prime replacements for petroleum are expected to be ethanol and natural gas (CEC, 2005), with petroleum displacement also occurring through use of biodiesel, electricity, hydrogen, liquefied petroleum gas and gas-to-liquid diesel fuel. The workgroups recommended a series of measures to support the successful growth of the alternative fuels markets to meet California targets, including adopting clear state policies committed to petroleum use reduction, funding incentives for use of alternative fuels and cooperation between agencies to resolve current regulatory barriers restricting alternative fuel market growth.

4.0 ENVIRONMENTAL ANALYSIS

This chapter presents the environmental analysis of the alternatives for the topics listed below.

4.1 Land Use
4.2 Socioeconomics and Community Impacts
4.3 Environmental Justice
4.4 Farmlands
4.5 Public Services and Utilities
4.6 Visual Resources
4.7 Cultural Resources
4.8 Traffic and Transportation
4.9 Air Quality
4.10 Noise
4.11 Hydrology and Floodplains
4.12 Water Quality
4.13 Soils, Geology, and Seismicity
4.14 Biological Resources
4.15 Hazardous Waste/Materials
4.16 Energy

4.1 LAND USE

Land use within the study area is the responsibility of several local jurisdictions. These jurisdictions include the cities of Rocklin and Roseville, as well as the counties of Sutter, Placer, and Sacramento. Approximately 35,454 acres of land are within the study area, and the average parcel size is slightly more than 125 acres. Agriculture is the predominant land use, although in recent years the areas to the northeast, east, south, and southwest of the study area have been undergoing rapid change to increasingly urban land uses. 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 (DOF, 2006b).

Land uses in the study area are guided by the general plans and zoning ordinances of the local jurisdictions within the counties.

This section presents a Tier 1/Program assessment of potential impacts related to land use associated with the Parkway. The land use analysis is based on a review of these existing jurisdictional plans, aerial photographs, Geographic Information System (GIS) data, feedback from stakeholders, and field visits.

Additional information on land use is provided in the Tier 1 Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) Community Impact Assessment (CIA) (Mara Feeney & Associates and North Fork Associates, 2007) prepared for this Tier 1 EIS/EIR, which is available at the locations identified in the Executive Summary, including the Placer County Transportation Planning Agency (PCTPA) website.

4.1.1 REGULATORY SETTING

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require consideration of impacts on land use. A general discussion of NEPA and CEQA requirements is provided in Chapter 1. In addition, other types of legislation influence land use. Relevant laws and guidelines are described below.

4.1.1.1 General Plans and Policies

The study area is situated within two incorporated cities and three counties; the corridor alignment alternatives traverse Sutter and Placer counties and the cities of Rocklin and Roseville. A small portion of the southwestern corner of the study area lies within Sacramento County (Figure 1-1, Project Location). 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 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 carry out the policies of its General Plan.

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. Unlike Placer County, Sutter County does not provide for preservation of right-of-way (ROW) for Placer Parkway in its General Plan. The General Plan contains the following policies that may apply to land use and potential transportation project impacts (see Section 4.4 for discussion of agricultural policies):

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.

Placer County General Plan

The Placer County General Plan currently provides for preservation of ROW 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.

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.

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 from transportation system facilities which is effective, aesthetically pleasing, and minimizes the amount of land lost to buffers.

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:

Community Form Policy 4. To the extent feasible, coordinate land use policies and public improvements with neighboring jurisdictions.

Growth Management Policy

Community Form 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.

Additional information on the Memorandum of Understanding is provided in the Placer Parkway Community Impact Assessment (Mara Feeney & Associates and North Fork Associates, 2007).

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-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-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.

4.1.1.2 Other Plans and Policies

The following plans and policies are related to the county and city general plans described in Section 4.1.1.1. The CIA prepared for this Tier 1 EIS/EIR contains detailed information on the plans and policies listed below.

Sunset Industrial Area Plan

The Sunset Industrial Area Plan (SIAP) in the Eastern Segment of the study area is a community plan that further refines the goals and policies of the Placer County General Plan for the plan area. The SIAP was established to improve opportunities for industrial development in the plan area to attract new industries, retain existing industries, and allow the existing industries to expand. In addition, the area was planned to provide facilities that would help all area businesses thrive.

West Roseville Specific Plan

The West Roseville Specific Plan (WRSP), approved in 2004, is located at the eastern edge of the study area. The WRSP supplemented its 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.

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 Sphere of Influence (SOI), including approximately 95 percent of the existing WRSP and three other proposed developments (the CIA for this Tier 1 EIS/EIR describes the developments). 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 (CSP) area and the proposed Sierra Vista Specific Plan (SVSP) area, both of which are 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 and 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 CSP and SVSP areas.

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 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 mountain range east of California's Central Valley.

The PCCP for western Placer County is currently under development. Although it is currently not known how the PCCP ultimately will affect land use within the study area, it is expected that some areas will be recommended for long-term conservation.

Natomas Basin Habitat Conservation Plan

Sutter County and the City of Sacramento adopted the Natomas Basin Habitat Conservation Plan (NBHCP) in November 1997 (and revised it in 2003). The Natomas Basin is 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 the regulatory programs administered by the U.S. Army Corps of Engineers (USCOE), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Game (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.

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).

Placer County Transportation Planning Agency—Regional Transportation Plan

PCTPA is the regional transportation planning agency for Placer County jurisdictions (except for the 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 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 Sacramento Area Council of Governments (SACOG) for incorporation into the Metropolitan Transportation Improvement Program.

Sacramento Area Council of Governments—Metropolitan Transportation Plan

SACOG is responsible for preparing the long-range transportation plan in the six-county area that includes 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 two proposed regional connectors listed in the MTP.

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 (see Section 2.6.2 for more details) 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. These 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.

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 Placer 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.

4.1.2 AFFECTED ENVIRONMENT

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), and other ranchland. Table 4.1-1 shows the distribution of current land uses within the study area (see also Figure 4.1-1 for the corresponding land use map).

Table 4.1-1
Acreage and Percentage of Land Use in the Study Area

Land Use	Acreage	Percentage of Study Area
Rice[1]	16,267.00	45.88
Pasture/Idle Farmland	11,784.87	33.23
Other Cultivated Agriculture	4,348.16	12.26
Rural Residential	1,166.56	3.29
Other[2]	791.62	2.23
Industrial	549.33	1.55
Wildlife Preserve	289.09	0.82
Municipal Facilities	257.27	0.73

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.

As described in Chapter 2, Project Alternatives, five corridor alternatives pass through the three study area segments—the Western, Central, and Eastern segments (see Figure 2-1). The paragraphs below describe the existing land use on a segment-by-segment basis (refer to Chapter 1, Purpose and Need, 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). State Route (SR) 70/99 runs north to south along the western edge of the segment; 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 south of the Sysco facility. As in the Eastern Segment, these industrial facilities are near a major highway, in this case SR 70/99, which is approximately 1 mile west. There are also areas of rural residential development 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 Sutter and Placer 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 Riego/Baseline 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 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 (WRSL)/Materials Recovery Facility, the Pleasant Grove Wastewater Treatment Plant (PGWWTP), the newly constructed Roseville Energy Park (REP), and Sacramento Municipal Utilities District/Western Area Power Authority power lines, as well as the 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 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 4.1-1).

4.1.2.1 Existing General Plan Designations

Figure 4.1-2 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.

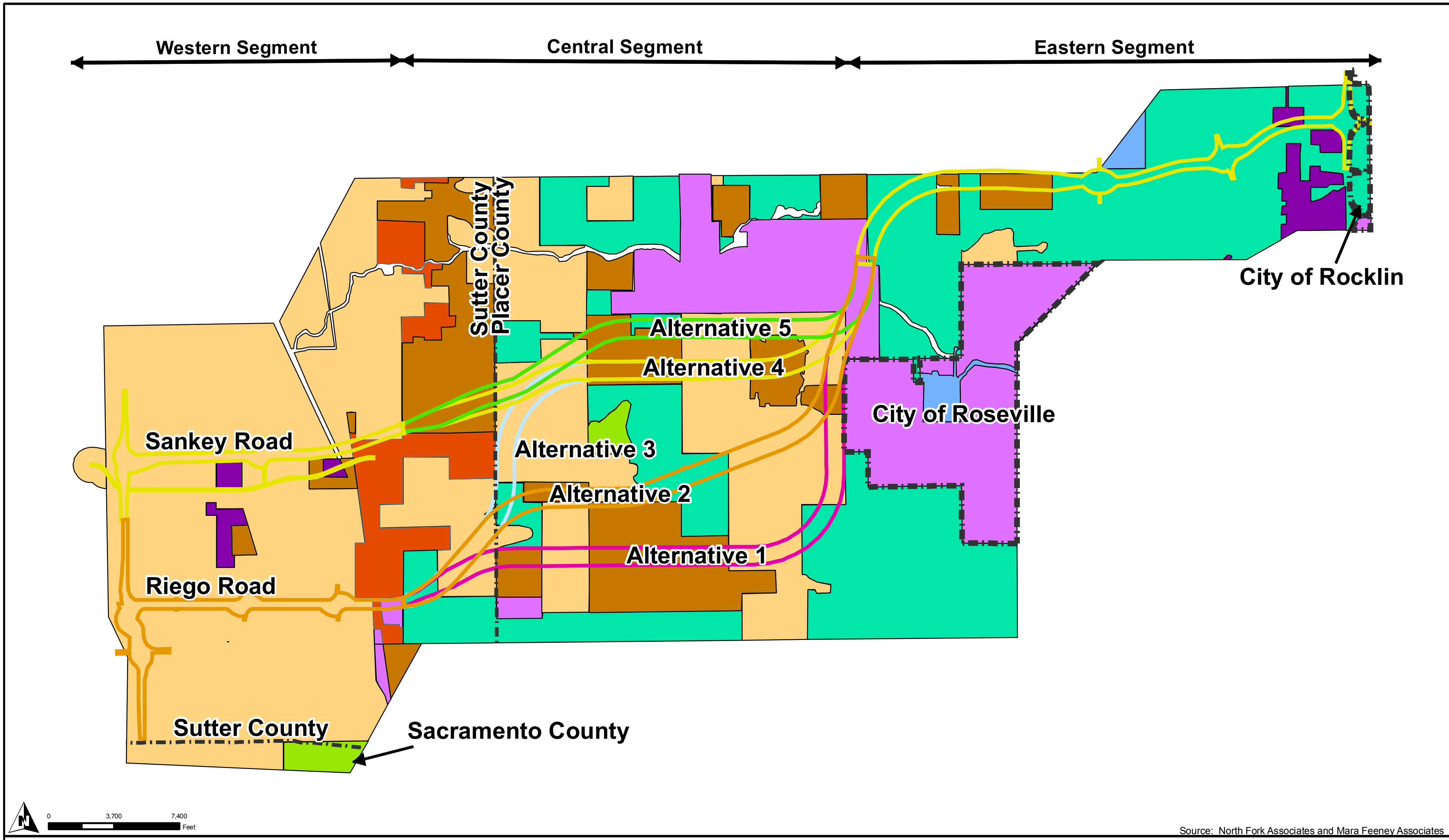
Existing Zoning

Figure 4.1-3 illustrates the existing zoning within the study area. Table 4.1-2 displays the acceptable uses within each zoning district as described in the applicable zoning ordinance by jurisdiction.

4.1.2.2 Developable Land

The purpose of this section is to assess the amount of land that is not already developed within the study area. The Federal Highway Administration (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 WRSP area. Thus, for the purposes of this chapter, 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* (HCD, 2001)**,** 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 predominantly 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). Depending on the corridor alignment alternative, between 1,600 to 1,900 acres of land 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 used for the Parkway, or between 4.5 and 5.4 percent of all land within the study area, depending on the build alternative.



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 CORRIDOR PRESERVATION

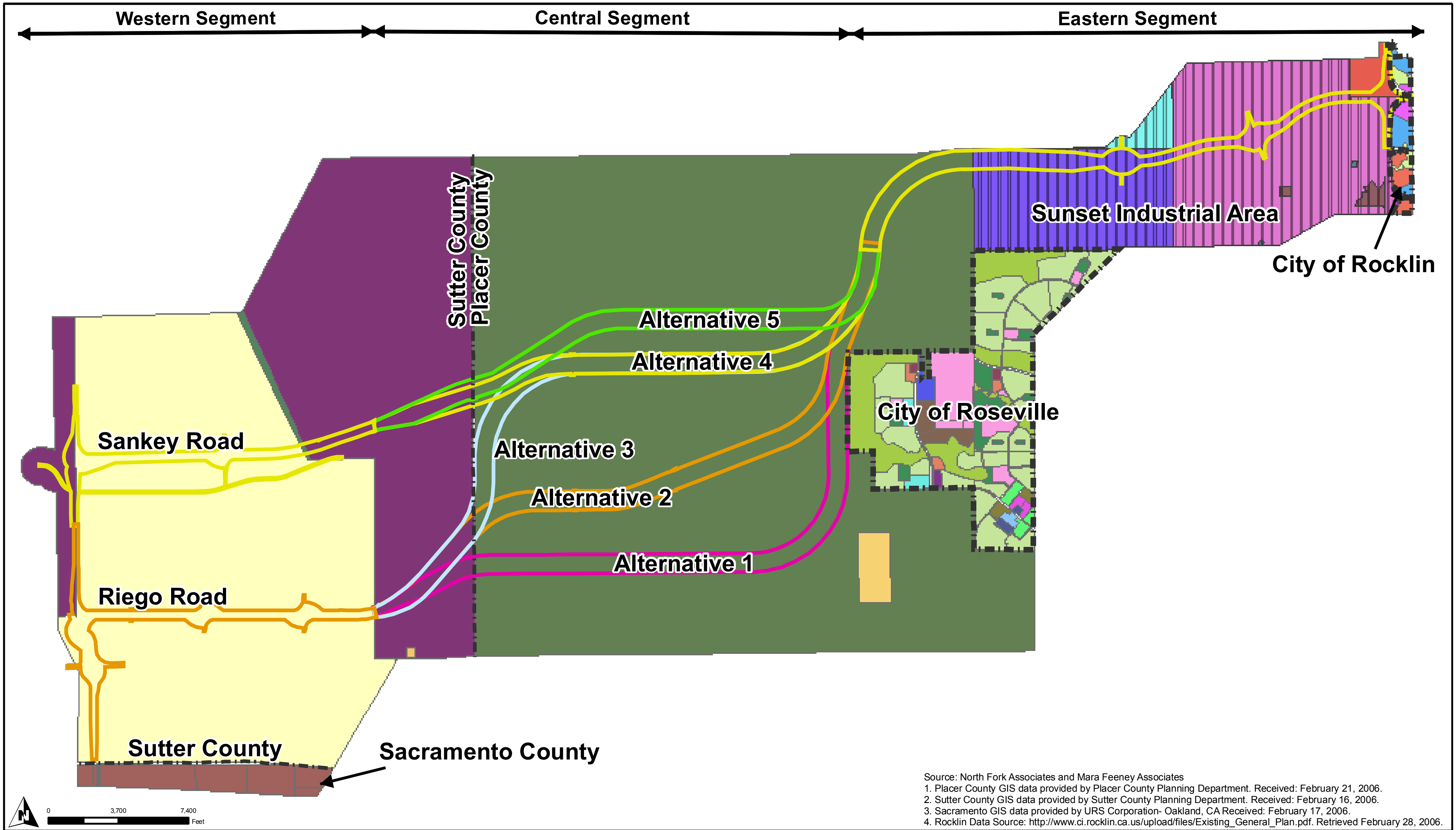
Tier 1 EIS/EIR

Existing Land Use

Figure 4.1-1

June 2007

URS Corporation L:\Projects\PlacerParkway\PlacerParkway2007_28066595\MXD\Current Working Documents\EIS\Chapter_4-1_Land_Use\Fig_4_1-1_Existing_Land_Use.mxd Date: 2/13/2007 6:40:56 PM Name: akkeele0



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

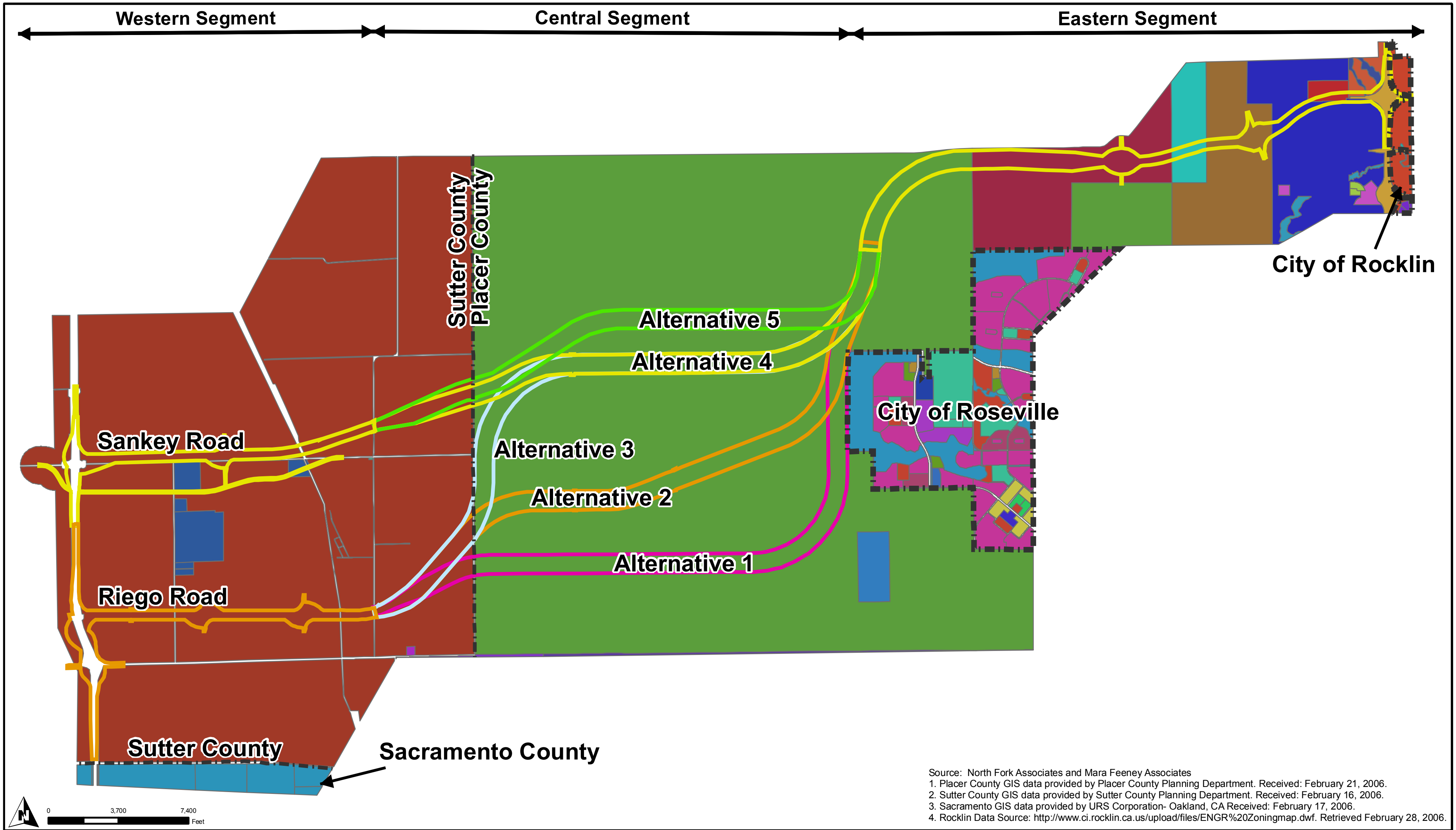
Tier 1 EIS/EIR

Existing Designated Land Use

Figure 4.1-2

June 2007

URS Corporation L:\Projects\PlacerParkway2007_28066595\MXD\Current Working Documents\EIS\Chapter_4-1_Land_Use\Fig_4_1-2_Existing_Designated_Land_Use.mxd Date: 2/13/2007 6:48:49 PM Name: akeele0



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/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

Existing Zoning

Figure 4.1-3

June 2007

URS Corporation L:\Projects\PlacerParkway2007_28066595\MXD\Current Working Documents\EIS\Chapter_4-1_Land_Use\Fig_4_1-3_Existing_Zoning.mxd Date: 2/13/2007 6:57:50 PM Name: akkeele0

Table 4.1-2
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 includes 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 and 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 theaters, 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)	The W district denotes where the 100-year floodplain, protected wetlands, or other waters of the United States 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 4.1-2
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 WRSP 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 gases, 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 P/QP, the SA overlaying district described above.

Table 4.1-2
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 on 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 4.1-2
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-B-DR-80 listed above with an 80-acre specific parcel size.
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 INP 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 INP 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 flood hazard 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 INP 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 INP 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 4.1-2
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.	

A network of rural roadways provides access to the potentially developable land within the study area. The roadway classifications are described in the CIA for this Tier 1 EIS/EIR.

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 consistently has been among the top growth counties in the state over the last decade (DOF, 2006b). As a result of the 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 1-15 displays planned and proposed developments within the study area.

It should be noted that proposed developments may change before their final adoption or approval. In addition, other factors cast uncertainty over how development ultimately will proceed in the study area. For example, the Federal Emergency Management Agency is considering a building moratorium in the Natomas Basin due to concern about flood hazards in the area, and Placer County's HCP could result in additional areas being earmarked for conservation in the study area.

Approved Major Developments

West Roseville Specific Plan. The 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 of the CIA for this Tier 1 EIS/EIR shows the 14 different land use categories within the WRSP area by acreage.

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 PGWWTP. 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 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. 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 uses six land use designations to guide development within the plan area. No residential land uses are allowed within the plan area; however, the proposed Placer Ranch Specific Plan (PRSP) (discussed below) lies partially within the SIAP and includes a variety of densities of residential land uses and university land uses. The SIAP identifies additions to the transportation/circulation network in the vicinity that are necessary to serve development within the plan area. Although it does not identify the proposed Placer Parkway, the plan identifies circulation improvements to improve access from the west. Table 3-5 of the CIA for this Tier 1 EIS/EIR identifies the land use designations by acreage in the SIAP.

Proposed Major Developments

Placer Ranch Specific Plan. The PRSP proposes the phased development of a mixture of industrial, commercial, office and professional, residential, and a branch campus of California State University, 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 on the north by Sunset Boulevard West. The WRSL is 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. 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 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 of the CIA for this Tier 1 EIS/EIR shows the land use designations by acreage in the PRSP.

Sierra Vista Specific Plan. The proposed SVSP area is within Roseville's 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 composed of 1,996 acres 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 CSP project site is within the City of Roseville's SOI north of the WRSP area, and in the Eastern Segment of the study area. The proposed Placer Parkway lies 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 composed 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 of the CIA for this Tier 1 EIS/EIR summarizes the proposed land uses for the site.

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 in southwestern Placer County and is bounded on the north by Baseline Road, on the south by the Sacramento-Placer County line, on the west by the Sutter-Placer County line, and on 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 after 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 of the CIA for this Tier 1 EIS/EIR 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 also may 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.

Sutter Pointe Specific Plan. The voter-approved advisory Measure M directed the Sutter County Board of Supervisors to consider mixed land use development for an approximately 7,500-acre area within south Sutter County, currently called the Sutter Pointe Specific Plan (SPSP). 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. SPSP 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 a minimum of 1,000 acres for educational, retail, parks, and community facilities. A General Plan Amendment covering 7,360 acres is currently being processed by Sutter County, and a Specific Plan application further refining land uses was submitted to the County in summer 2006. A Notice of Preparation of an Environmental Impact Report was circulated on March 29, 2002.

Curry Creek Community Plan. The Curry Creek Community Plan (CCCP) 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 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 manage properly the natural resources within and surrounding the project site.

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 SOI 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.

4.1.3 IMPACT ANALYSIS

4.1.3.1 Methodology for Impact Evaluation

Three categories of possible impacts were identified: (1) direct land use impacts related to conversion of study area acreage for ROW 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. Potential impacts were assessed against a set of evaluation criteria (see Section 4.1.3.2, below).

Direct physical impacts to land in the cities of Roseville and Rocklin, and the County of Sacramento are not anticipated and were not evaluated, as none of the corridor alignment alternatives are located within Roseville or Sacramento counties. The eastern interchange extends into Rocklin under all build alternatives, in an area where an interchange is planned by the California Department of Transportation (the Whitney Ranch Parkway at SR 65), 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.)

Commercial, Industrial, and Public Facilities. Additional information on the evaluation of direct impacts on existing businesses and municipal facilities within the study area is provided in Chapters 5 and 6 of the CIA prepared to support this Tier 1 EIS/EIR. Section 4.3, Socioeconomics and Community Impacts, and Section 4.5, Public Services and Utilities, of this Tier 1 EIS/EIR provide details of evaluation of potential impacts on businesses and municipal facilities.

Residential. Residential land uses (e.g., farmsteads) exist within the corridor alignment alternatives. However, the land is not residentially designated or zoned residential (e.g., land is zoned agriculture, industrial, etc.). As a result, no impacts on residential land use are discussed in this section. The CIA prepared to support this Tier 1 EIS/EIR and Section 4.2 of this Tier 1 EIS/EIR, Socioeconomics and Community Impacts, describe impacts on housing.

Agricultural. Numerous parcels are agriculturally designated/zoned in the study area, as shown on Figures 4.1-3 and 4.1-4, where the proposed action could create parcels that no longer meet minimum size requirements.

4.1.3.2 Evaluation Criteria

For the proposed project, potential impacts on land use have been evaluated on a preliminary basis, using the evaluation criteria listed below.

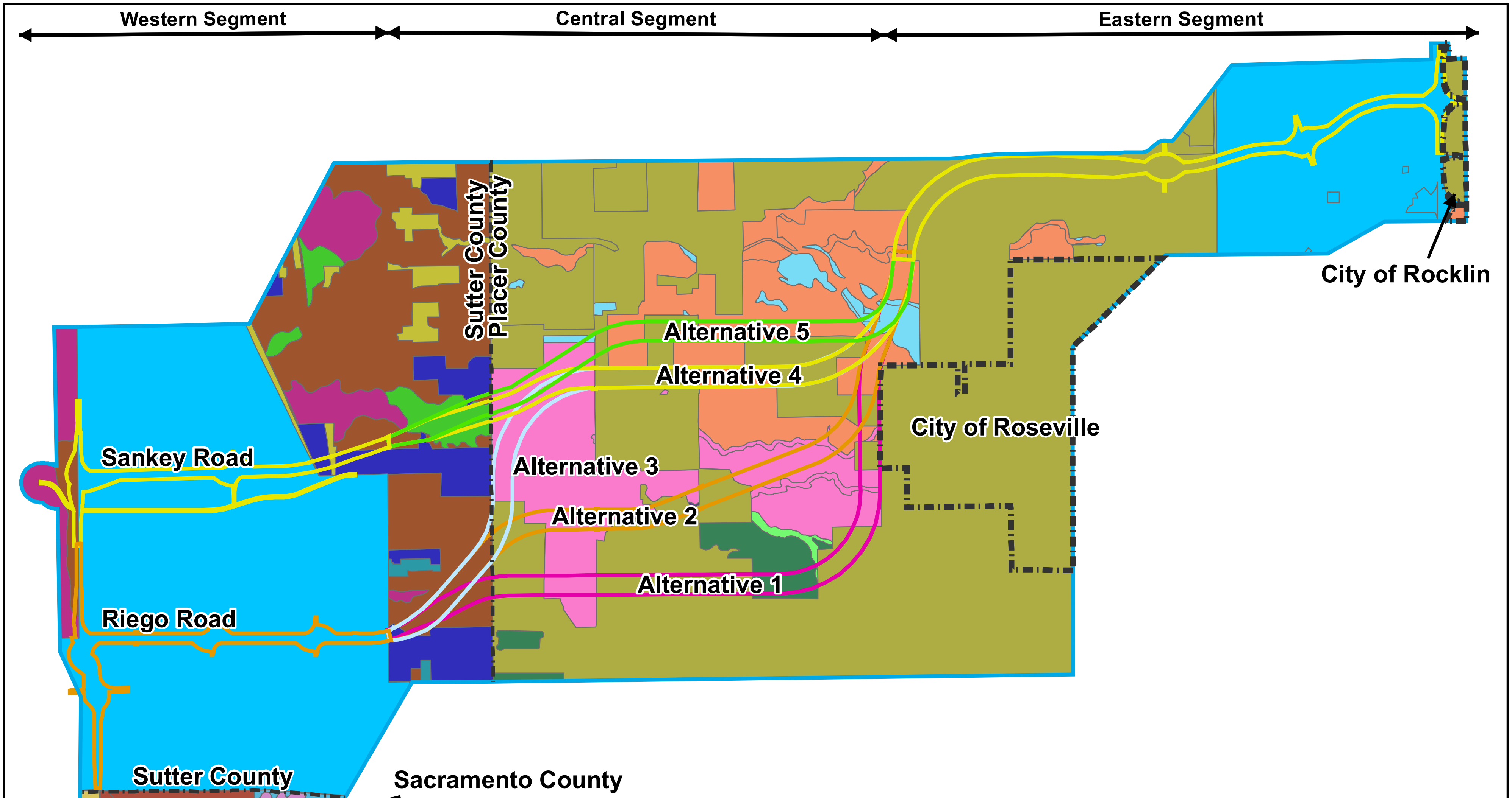
Criteria include the following:

- Land Use Conversion of Substantial Amounts of Agricultural Land
- Potentially Bisected Parcels – A bisected parcel is presumed to be adversely 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 in locations which span railroad alignments or large water features or floodplains. Establishing at grade crossings of the highway to provide access to parcel fragments would not consistently be feasible. The option of using under- or over-crossings probably would not consistently be an economically feasible way of providing 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 usable land on the bisected parcels. Consistent with worst-case analysis, the analysis of impacts on land usability considers the impact of the full corridor the roadway ROW and no-development zone.
- Compatibility with Adjacent Land Use
- Compatibility with Proposed Land Use
- Consistency with Zoning Acreage Requirements – 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, a potential impact would occur. 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 ROW, the remainder would no longer be consistent with the zoning ordinances.
- Consistency with Applicable General Plan Policies and Other Local Plans

4.1.3.3 Direct 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 impacts on land use. Section 2.3.1 provides additional details of the No-Build Alternative.



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.

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

Important Farmland in Relation to Designated Landuse

Figure 4.1-4

June 2007

URS Corporation L:\Projects\PlacerParkway2007_28066595\MXD\Current Working Documents\EIS\Chapter_4-1_Land_Use\Fig_4_1-4_Important_Farmland_Designated_Landuse.mxd Date: 2/14/2007 12:39:55 PM Name: akkeele0

Alternative 1 – the Red Alternative

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 4.1.2.2, 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.

As shown on Figures 4.1-1 and 4.1-2, the proposed corridor alignment would primarily convert land that is zoned for agricultural production, is capable of being used for agricultural production, or 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 Section 4.4, Farmlands.

Alternative 1 would convert 385.29 acres of land in the Western Segment, 902.09 acres in the Central Segment, and 630.28 acres in the Eastern Segment to transportation corridor use.

Conversion of land in all segments under this alternative would affect agriculturally designated parcels. In the Western Segment most of the area has been planned for industrial development; however, the industrial development that has occurred to date has been limited. The SPSP that is currently in development will designate this area for mixed use residential and commercial-industrial development. Land conversion in the Central Segment would affect the largest amount of land due to the 1,000-foot-wide corridor sought for ROW acquisition in this area. The conversion in the Central Segment would affect numerous agriculturally designated parcels, which are used for rice farming, grazing, or open space. Conversion of land in the Eastern Segment would directly affect an existing industrial property. Several other undeveloped parcels would be affected, though they currently do not have any active agricultural operations (Bryant, 2006).

Potentially Bisected Parcels

Figure 4.1-5 shows the alignment alternatives under study in comparison to the parcel boundaries in Placer and Sutter counties. Table 3-11 in the CIA prepared to support this Tier 1 EIS/EIR lists the specific parcels that potentially could be bisected as a result of the alternative by segment and by Assessor's Parcel Number (APN). ("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.) 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. Eleven properties in the Western Segment, eight properties in the Central Segment, and seven properties in the Eastern Segment would be bisected by Alternative 1.

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 ROW 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 Sutter County Industrial Reserve Area near SR 70/99 and the SIAP near SR 65 and Interstate 80 in the Roseville/Rocklin area.

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 is expected to 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 project study area. The Parkway could bring greater certainty to future land use planning efforts through the selection of a preferred corridor, so that ROW 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.

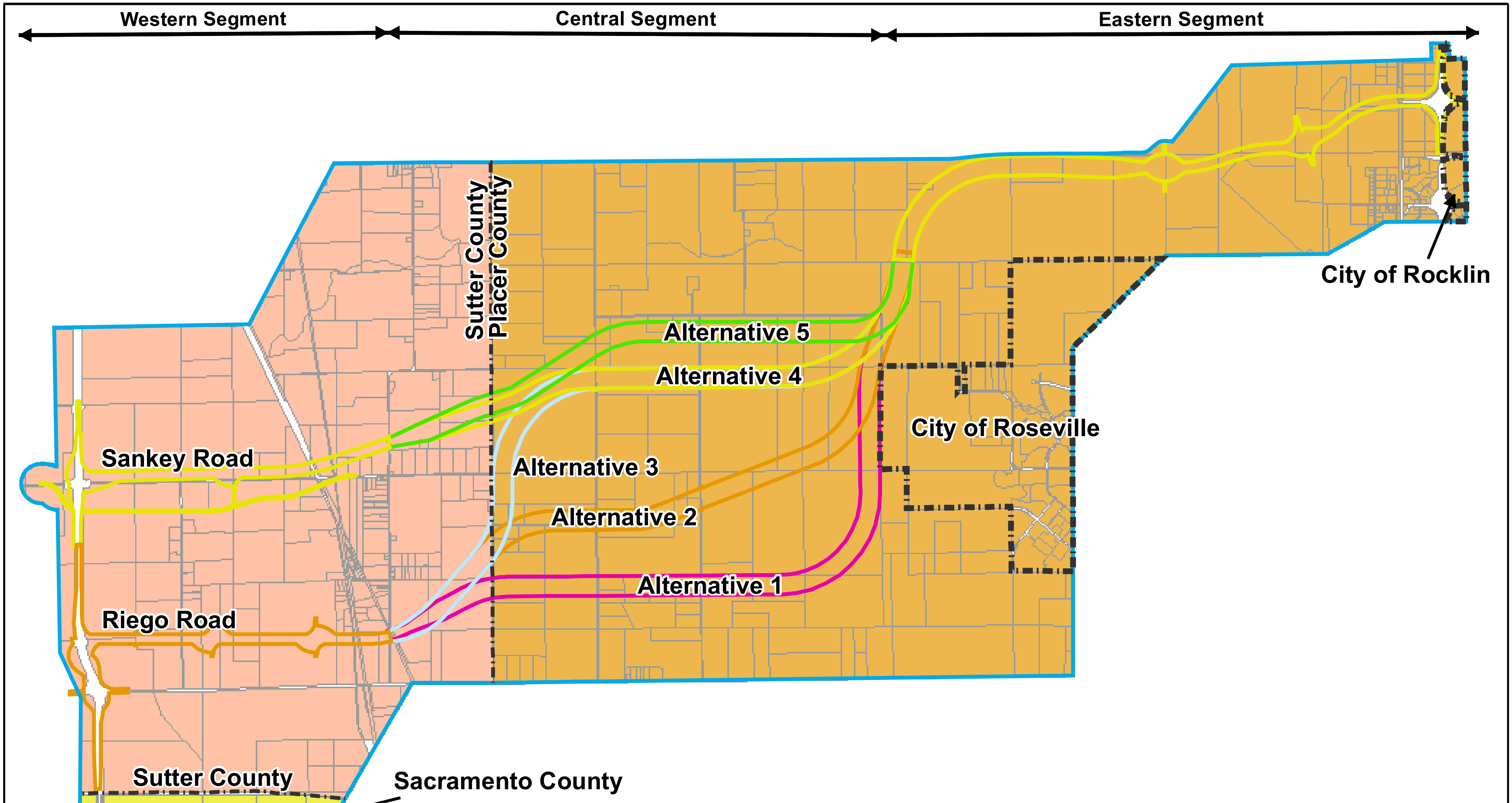
Compatibility with Proposed Land Uses

PCTPA is actively working with local lead agencies to avoid having an adverse effect on planned/proposed development within the study area. PCTPA is seeking to avoid impacts by evaluating potential corridor alignments and ultimately selecting a preferred alignment so that ROW can be acquired to secure a corridor in conjunction with the construction of planned projects and proposed land uses in the area (i.e., the potential developments described in Section 4.1.2.2). In addition, the project would preserve ROW 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, Purpose and Need. 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, the Parkway could have substantial impacts on proposed development. For example, the proposed SPSP area 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 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 SVSP area (currently proposed for low- and medium-density residential development, with commercial land uses, community parks, and open space). Build alternatives would affect proposed locations of the future Brookfield project area, the Master Plan for Reason Farms, and the PRSP, some of which are in progress. Further analysis will be performed during Tier 2 to determine whether there would be any land use compatibility impacts from the Parkway on these proposed uses as plans for them are developed further.

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 of the CIA for this Tier 1 EIS/EIR identifies the specific parcels of at least 80 acres in size that could be reduced to less



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	Parcel Boundaries	*Figure 4.1-5*
			June 2007

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. No similar impacts in the Eastern or Western segments would be 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 3-12 of the CIA for this Tier 1 EIS/EIR.

There are 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 that would be affected by Alternative 1. (Agricultural impacts are addressed in Section 4.4, Farmlands.)

There are other agriculturally designated/zoned parcels in the study area that potentially could be physically affected by the Parkway, but they would not be in conflict with minimum acreage requirements as a result of the project.

Consistency with Applicable General Plan Policies and Other Local Plans

See Section 4.1.3.4 for a discussion of project consistency with applicable plans and policies, which are the same for all project build alternatives.

Alternative 2 – the Orange Alternative

Land Use Conversion

The land that would be converted from existing uses or the potentially affected acreage within the Alternative 2 corridor alignment is approximately 1,835.31 acres: 385.29 acres in the Western Segment, 819.76 acres in the Central Segment and 630.26 acres in the Eastern Segment. Therefore, Alternative 2 would convert approximately 5.18 percent of land within the study area from its current uses to a transportation corridor use.

As under Alternative 1, the proposed alignment for Alternative 2 primarily would 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

Eleven parcels in the Western Segment, ten parcels in the Central Segment, and seven parcels in the Eastern Segment potentially could be bisected as a result of Alternative 2. Table 3-15 lists the parcels bisected by Alternative 2.

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 SVSP 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 March 15, 2006 draft RUSP Land Use Plan indicates that this area is proposed for high-density residential, commercial, park, and open space uses.

Consistency with Zoning Minimum Acreage Requirements

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 no longer would be consistent with the Placer County Zoning Ordinance as a result of this alternative. Table 3-16 of the CIA for this Tier 1 EIS/EIR identifies the parcels of at least 80 acres in size that could be reduced to less than 80 acres by Alternative 2.

There are 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 (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 of the CIA for this Tier 1 EIS/EIR lists the parcels less than 80 acres that would be affected by Alternative 2.

There are other agriculturally designated/zoned parcels in the study area that potentially could be physically affected by the Parkway, but they would not be in conflict with minimum acreage requirements as a result of the project.

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: 385.29 acres in the Western Segment, 848.01 acres in the Central Segment, and 630.26 acres in the Eastern Segment. Therefore, Alternative 3 would convert approximately 5.26 percent of land within the study area from its current uses to transportation corridor uses.

Like Alternative 1, the proposed corridor alignment for Alternative 3 primarily would 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.

Potentially Bisected Parcels

Several parcels would be bisected as a result of Alternative 3: eleven properties in the Western Segment, eight properties in the Central Segment, and seven properties in the Eastern Segment. Table 3-19 of the CIA for this Tier 1 EIS/EIR lists the specific parcels that would be bisected by Alternative 3.

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 SPSP area of south Sutter County, as well as Reason Farms, PRSP, and the Brookfield Property. It would avoid impacts to RUSP, CCCP, and the SVSP area.

Consistency with Zoning Minimum Acreage Requirements

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 no longer would be consistent with the Placer County Zoning Ordinance (of being at least 80 acres in size) as a result of this alternative. Table 3-20 of the CIA for this Tier 1 EIS/EIR identifies the parcels of at least 80 acres that would be reduced to less than 80 acres by Alternative 3.

Within the alignment of Alternative 3, there are 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 (see Figure 4.1-3). There are 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 3-21 of the CIA for this Tier 1 EIS/EIR lists the parcels less than 80 acres that would be affected by Alternative 3.

There are other agriculturally designated/zoned parcels in the study area that potentially could be physically affected by the Parkway, but they would not be in conflict with minimum acreage requirements as a result.

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: 320.73 acres in the Western Segment, 676.65 acres in the Central Segment, and 630.26 acres in the Eastern Segment. Therefore, Alternative 4 would convert approximately 4.59 percent of land within the study area from its current uses to transportation corridor uses.

Like Alternative 1, the proposed corridor alignment for Alternative 4 primarily would 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

Nineteen properties in the Western Segment, four properties in the Central Segment, and seven properties in the Eastern Segment would be bisected by Alternative 4. Table 3-23 of the CIA for this Tier 1 EIS/EIR lists the specific parcels that would be bisected as a result of Alternative 4, by segment and by APN.

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 SPSP 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 SPSP area, 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

There is one parcel in the Western Segment and two properties in the Central Segment that conform to the existing zoning and no longer would 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 3-24 of the CIA for this Tier 1 EIS/EIR identifies the parcels of at least 80 acres in size that would be reduced to less than 80 acres by Alternative 4.

Within the proposed alignment for Alternative 4, there are 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 of the CIA for this Tier 1 EIS/EIR lists parcels less than 80 acres that would be affected by Alternative 4.

There are other agriculturally designated/zoned parcels in the study area that potentially could be physically affected by the Parkway, but they would not be in conflict with minimum acreage requirements as a result of the project.

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: 320.73 acres in the Western Segment, 672.48 acres in the Central Segment, and 630.26 acres in the Eastern Segment. Therefore, Alternative 5 would convert approximately 4.58 percent of land, which is the smallest footprint of the five alternatives.

Like Alternative 1, the proposed alignment for Alternative 5 primarily would 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

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. Table 3-27 of the CIA for this Tier 1 EIS/EIR lists the parcels that would be bisected as a result of Alternative 5, by segment and by APN.

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

There would not be any impacts in the Western or Eastern segments to parcels of at least 80 acres in size. The only parcel impacted is in the Central Segment, and it no longer would be consistent with the Sutter County zoning ordinance as a result of this alternative. Table 3-28 of the CIA for this Tier 1 EIS/EIR identifies the parcels of at least 80 acres in size that could be reduced to less than 80 acres by Alternative 5.

There are 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 3-29 of the CIA for this Tier 1 EIS/EIR lists the parcels less than 80 acres that would be affected by Alternative 5.

There are other agriculturally designated/zoned parcels in the study area that potentially could be physically affected by the Parkway, but they would not be in conflict with minimum acreage requirements as a result of the project.

Comparison of Alternatives

Table 4.1-3 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.

The project's effects on commercial, industrial, and public facilities would not be expected to affect land use within the study area adversely because the Parkway potentially would benefit those land uses.

Physical Disruption or Conversion of Land

As Table 4.1-3 indicates, Alternative 1 (longest) would affect the greatest amount of total land acreage and Alternative 4 (shortest) would affect the least. All build alternatives would result in the conversion of substantial amounts of agricultural land. Alternative 5 potentially would bisect the most parcels in the study area, and 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, and Alternatives 1 and 2 would 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, and Alternative 5 would affect the most.

Table 4.1-3
Comparison of Build 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 in Table 4.1-3 because all alternatives would have similar compatibility issues with adjacent land uses. In addition, all the build alternatives would affect the planning process for Brookfield, the PRSP, and the Reason Farms Master Plan update, and Alternatives 1 and 2 also would affect the proposed RUSP and the conceptual CCCP, 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 planning process. Because there are no adopted plans for these areas at present, the actual effects are not known. Selection 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 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 4.1-4 were evaluated to assess the project's potential to conflict with adopted policies of the jurisdictions within the study area (see Section 4.4 for discussion of project consistency with agricultural protection policies). No inconsistencies with the relevant 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.)

4.1.3.4 Consistency with Other Local Plans and Policies

Sunset Industrial Area Plan. The Parkway would be consistent with the land use policies in the SIAP. Consistency with SIAP policies related to agriculture is discussed in Section 4.4.

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 the proposed alignment alternatives are adjacent to but not located in the WRSP area. Since none of the alignment alternatives directly affect the WRSP area, the Parkway is considered consistent with the policies contained in the WRSP.

Placer County/City of Roseville MOU. No conflict between the Parkway and this MOU was 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, it is considered consistent with the SACOG MTP, as well as the 2027 Placer County RTP on which the MTP is based. The proposed MTP 2035 (not yet adopted)

Table 4.1-4
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.)	Inconsistent. The Parkway could create remnant parcels that do not meet the minimum parcel size, depending on the alternative selected (to be determined in Tier 2).
	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 ROW 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 proposed 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 to approval of the local agencies involved. Plans for the project include the purchasing of ROW 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 corridor alignment alternatives may complement new development proposed for agricultural land in the study area.	See Section 6.1, Growth, 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 6.1

Table 4.1-4 (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 incorporate 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 proposed action would construct four or five local roadway interchanges along the approximately 17- to 18-mile-long route (depending on the 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 proposed 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 Parkway is considered a compatible use with the WRSL.	Consistent

Table 4.1-4 (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 ROW than is required to create a buffer between adjacent land uses and minimize the project's impacts on 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 WRSL 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 4.1-4 (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 on 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 that is effective, aesthetically pleasing, and minimizes the amount of land lost to buffers.	No conflict as proposed	The Parkway project includes acquisition of more ROW 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 4.1-4 (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, PCTPA, 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 chapter. See Sections 4.1, 4.2, and 4.3, 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
	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

Table 4.1-4 (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-24	To minimize the impact of road construction on the natural terrain and the character of existing neighborhoods.	No conflict as proposed	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 important highway.	Consistent
	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 Parkway.	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

reflects SACOG's Blueprint preferred land use scenario, so the Parkway would be consistent with the SACOG Blueprint.

Placer County Conservation Program: Natural Communities Conservation Plan and Habitat Conservation Plan. An NCCP/HCP currently is being prepared by Placer Legacy called the PCCP (as described in Section 4.1.1); 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 Parkway (if at all), and to which specific areas of Placer County the plan will be applicable. The South Placer Regional Transportation Authority and PCTPA are working to ensure that Placer Parkway and the PCCP can be implemented without conflict. USCOE/U.S. Environmental Protection Agency 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 4.1.1). None of these habitat/conservation preserve properties would be affected by any of the corridor alignment alternatives or proposed interchanges. There was an HCP property 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 zones could help preserve some of the agricultural land along the corridor 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 NBHCP.

4.1.3.5 Secondary and Indirect Impacts

No-Build Alternative

The No-Build Alternative would not have any secondary or indirect impacts on the existing land uses within the study area because the land within the proposed alignment alternatives would not be converted to transportation corridor uses. Section 2.3.1 provides additional details of the No-Build Alternative.

Alternatives 1 Through 5

Secondary and indirect effects of the Parkway on existing land use would be similar for all corridor alignment alternatives. Project implementation could affect indirectly 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 Section 4.4, Farmlands. Potential secondary and indirect land use impacts associated with growth are discussed in Section 6.1, Growth.

4.1.3.6 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, the There would not be any cumulative impacts on existing land uses under the No-Build Alternative.

Alternatives 1 Through 5

Cumulative land use impacts would be 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 Section 6.1, Growth. The creation of a no-development buffer zone in 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 the Parkway. The project would contribute to the cumulative effect of improving accessibility between the employment, manufacturing, and distribution centers in the region.

The 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 cumulative land use impacts in 2040 that will occur independently of the Parkway. (Refer to Chapter 6, Other Impact Considerations, for growth inducement discussion.)

4.1.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

4.1.4.1 Land Use Conversion/Potentially Bisected Parcels

Tier 1 – Avoidance/Minimization Strategies

- During the alternatives screening process, efforts were made to avoid land use conversion impacts. Examples of such efforts included modification and/or elimination of Project Study Report (PSR) conceptual corridor alignments (see Section 2.5).

- During the development of alternatives, in order to reduce environmental impacts, avoidance alternatives were also considered (see Section 2.5.4). These avoidance alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

- During development of the Tier 1 conceptual design of the Parkway, efforts were made to avoid land use conversion, including parcel bisection. These efforts included:

  - The restriction of access between Pleasant Grove Road and Fiddyment Road to avoid inducing urban growth in areas not designated for development in existing general plans and to maintain the rural character of western Placer County and south Sutter County.

  - The location of the Parkway within a no-development buffer zone (see Section 2.2.4) that would preserve open space and agricultural uses adjacent to the Parkway and limit future development in the buffer zone.

- During the Tier 1 environmental review process, PCTPA worked with local jurisdictions to avoid and/or minimize impacts on future planned development within the study area. The Parkway could bring greater certainty to future land use planning efforts by defining the location of important transportation infrastructure.

Tier 2 – Consultation/Coordination

- PCTPA will continue to work with local jurisdictions in Tier 2 to avoid or minimize impacts on planned and proposed development within the study area. Coordination will include development of specific project design details for the Parkway and other projects to minimize impacts, such as landscaping treatments, lighting details, etc. PCTPA will continue to provide these agencies with Parkway alignment information to assist in their processing of development applications relative to the selected corridor.

Tier 2 – Mitigation Commitments

- To maintain existing and future local roadway connectivity (for emergency access, farming operations and community access), which will contribute to avoidance of land use conversion, over-crossings will be constructed, as appropriate, to convey traffic over the Parkway. These over-crossings would not connect to the Parkway.

Tier 2 – Mitigation Considerations

- In consultation with local jurisdictions, strategies considered at Tier 2 will include efforts in the design of the Parkway to avoid or reduce impacts, such as:
  - Appropriate adjustments to the location of the actual roadway within the Parkway corridor alignment.
  - Provision of alternative access to remnant parcels.
  - Determination of the number, location and design of specific project features such as over-crossings.
- At Tier 2, the identification of bisected parcels would enable parcel-specific mitigation to be developed. 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 area of the buffer zone that would not be used for the Parkway, 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.

4.1.4.2 Land Use Compatibility

Tier 1 – Avoidance/Minimization Strategies

- During the alternatives screening process, efforts were made to avoid land use compatibility impacts. Examples of such efforts included modification and/or elimination of PSR alternatives (see Section 2.5) to avoid socioeconomic and community impacts, which also reduces potential impacts related to land use incompatibility.
- During the development of alternatives, avoidance alternatives were also considered to reduce environmental impacts (see Section 2.5.4). These alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

- During development of the Tier 1 conceptual design of the Parkway, efforts were made to avoid land use incompatibility. These efforts included:

  – The restriction of access between Pleasant Grove Road and Fiddyment Road to avoid inducing urban growth in areas not designated for development in existing general plans and to maintain the rural character of western Placer County and south Sutter County.

  – The location of the Parkway within a no-development buffer zone (see Section 2.2.4) that would preserve open space and agricultural uses adjacent to the Parkway and limit future development in the buffer zone.

Tier 2 – Consultation/Coordination

- PCPTA will continue to coordinate with local jurisdictions in Tier 2 to reduce the likelihood of land use incompatibility, similar to those described under land use conversion, above. Coordination will include development of specific project design details to minimize impacts.

Tier 2 – Mitigation Commitments

- To maintain existing and future local roadway connectivity (for emergency access, farming operations and community access), which will help to avoid/minimize future land use incompatibilities, over-crossings will be constructed, as appropriate, to convey traffic over the Parkway. These over-crossings will not connect to the Parkway.

Tier 2 – Mitigation Considerations

- In consultation with local jurisdictions, strategies considered at Tier 2 will include efforts in the design of the Parkway to avoid or reduce impacts, such as:

  – Appropriate adjustments to the location of the actual roadway within the Parkway corridor alignment.

  – 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.

- Suggested mechanisms to reduce land use compatibility impacts are land purchase/leases that would allow for continued use of the buffer for agricultural purposes.

4.1.4.3 Consistency with Adopted Plans, Policies, and Regulations

- Other than potential farmland impacts (see Section 4.1.3.4), 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.

4.1.5 TIER 1 AND TIER 2 STUDIES

4.1.5.1 Land Use Conversion/Bisected Parcels

- Analyses begun in Tier 1 which will be undertaken in greater detail in Tier 2
  - A land use conversion and bisected parcel analysis will be evaluated on a parcel-specific basis.

4.1.5.2 Compatibility with Adjacent/Proposed Development

- Analyses completed in Tier 1 which are expected to be revisited in Tier 2 based on predicted availability of new, relevant information
  - The evaluation of compatibility with adjacent/proposed development considered in Tier 1 is expected to be reevaluated in Tier 2, as new information on planned and proposed developments in the study area becomes available, and planning for the Sutter Pointe, CCCP, Brookfield, Reason Farms Environmental Preserve, PRSP, and the RUSP planning areas is developed further.

4.1.5.3 Consistency with Zoning Minimum Acreage Requirements

- Analyses begun in Tier 1 which will be undertaken in greater detail in Tier 2
  - A preliminary analysis of consistency with zoning minimum acreage requirements will be evaluated on a parcel-specific basis.

4.1.5.4 Compatibility with Applicable General Plan Policies and Other Local Plans

- Analyses completed in Tier 1
  - An evaluation of compatibility with applicable general and other local plans.

4.2 SOCIOECONOMICS AND COMMUNITY IMPACTS

This section presents a Tier 1/Program level assessment of potential socioeconomic impacts associated with the Parkway. Additional information on socioeconomics and community issues is provided in the Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR) Community Impact Assessment (CIA) (Mara Feeney & Associates and North Fork Associates, 2007), which is available at the locations identified in the Executive Summary, including the Placer County Transportation Planning Agency (PCTPA) website.

4.2.1 REGULATORY SETTING

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require consideration of socioeconomics and community impacts. In addition, other types of legislation influence community impact assessment, including the Uniform Relocation Assistance Act, which establishes requirements that must be met if a project displaces homes, farms, non-profit organizations, or businesses. A general discussion of NEPA and CEQA requirements is provided in Chapter 1 of this Tier 1 EIS/EIR. The relevant laws and guidelines are described below.

4.2.1.1 Federal Statutes and Regulations

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. The Uniform Act is implemented via government-wide regulations: 49 CFR Part 24. The Federal Highway Administration (FHWA) is the lead federal agency for implementation of the Uniform Act.

4.2.1.2 General Plans and Policies

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 of the CIA for this Tier 1 EIS/EIR. The voter-approved advisory Measure M directed the Sutter County Board of Supervisors to consider Sutter Pointe Specific Plan (SPSP), which 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 State Route (SR) 70/99 in the project study area.

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.

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.

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.

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.

Policy 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.

Policy 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.

The General Plan also contains relevant policies that pertain specifically to south Placer County:

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).

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.

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 toward 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).

SACOG Metropolitan Transportation Plan

The Sacramento Area Council of Governments (SACOG)'s Metropolitan Transportation Plan (MTP) 2027 contains the following goals:

Goal 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.
Goal 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.
Goal 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 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 do not adversely affect particular communities disproportionately.
Goal 8	Funding and Revenue. In order to adequately fund the MTP, develop appropriate, innovative, equitable, and stable funding sources (both short and long term) and identify cost-reduction measures.

4.2.2 AFFECTED ENVIRONMENT

4.2.2.1 Population Growth and Demographic Characteristics

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. Income and race information is provided in accordance with California Department of Transportation (Caltrans) guidance to characterize the affected community, compare it with surrounding population groups, identify any recent changes in demographic composition, and help identify any predominantly minority or low income populations that might be affected by the project. 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 4.2-1 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 6, Other Impact Considerations, for the growth inducement analysis.)

Table 4.2-1
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.

Study Area

Table 4.2-2 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 more than tripled in Placer County.

Table 4.2-2
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: U.S. Census Bureau, 1980, 1990, and 2000 (Summary Tape File 1).

Table 4.2-3 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—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 4.2-3
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	78,930	84,400	6.9	184,846	119.0	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	28.9	56.5

Data Sources: 2000 data are from the U.S. Census Bureau; 2020 and 2040 data are from DKS Associates based on development projections as described in Chapter 3.

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 Census Designated Place (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 (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 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 (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 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 (DOF, 2004).

The Placer Parkway study area encompasses predominantly 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 Sutter and Placer county portions of the study area is described below.

Farmsteads[1] are scattered throughout the study area in Sutter and Placer 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 4.2-1 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 4.2-1) is referred to as the Pleasant Grove community.

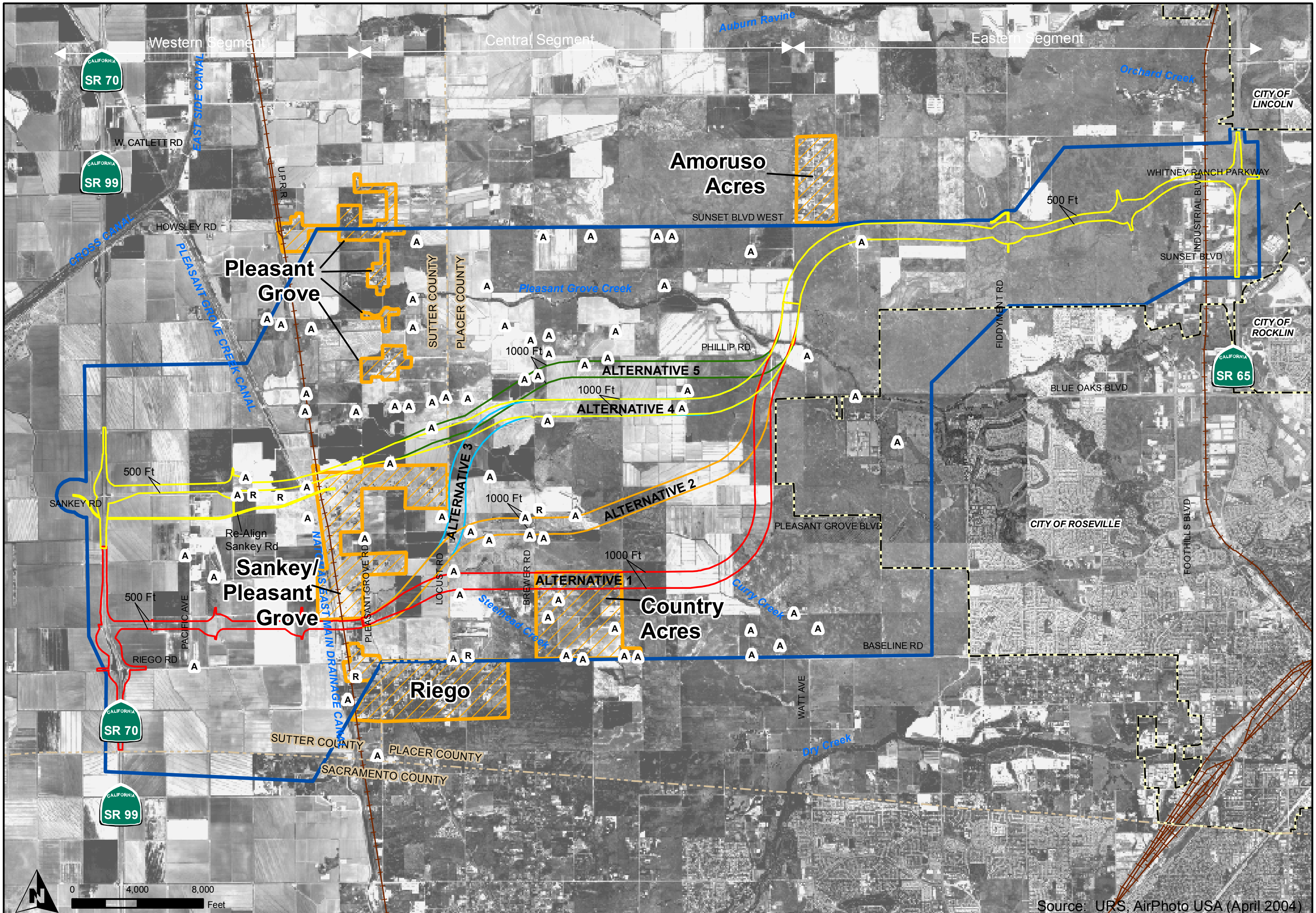
- **Sankey/Pleasant Grove.** Sankey/Pleasant Grove is a large, irregularly shaped concentration of rural residential homes in the vicinity of Sankey Road and Pleasant Grove Road. Some of these are homes on 5-acre parcels; others are on smaller lots that appear to have been subdivided in the past and "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.

- **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.

[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."



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

Potential Community	
A	Agricultural Bldgs
R	Residence

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Homes, Farmsteads and Potential Communities

Figure 4.2-1

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Outside of the areas of relatively dense residential development (the "potential communities") described above, approximately one hundred isolated homes, farmsteads, and businesses are 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.

4.2.2.2 Housing

As Table 4.2-4 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 Sutter and Placer counties. With proposed developments that include the approved West Roseville Specific Plan and the planned Placer Vineyards Specific Plan, as well as the SPSP proposed mixed use development in south Sutter County and several major new development proposals (such as Placer Ranch and Regional University), much of this construction is expected to occur in and around the study area.

Table 4.2-4
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. 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, 2005). 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).

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. Single-family homes dominate new construction in these communities.

Before 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 in Table 4.2-5, 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.

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). Although 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.

Table 4.2-5
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.						

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 4.2-6 compares the number of dwelling units in these communities in 2004 with the number of dwelling units approved under existing general plans.

Table 4.2-6
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 Sphere of Influence expansion	33,720 units
•	Sutter Pointe	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.

4.2.2.3 Economic Conditions

Employment

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).

Table 4.2-7 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 Interstate 80 (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 4.2-7
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, whereas 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 near SR 65 in the Eastern Segment and the South Sutter industrial/commercial reserve area south of Sankey Road in the Western Segment.

Placer County's Sunset Industrial Area includes a variety of industrial and warehousing uses 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 4.2-2, 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, 2006; 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 (PRSP) 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 SPSP area that 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, 2006):

- Curry Creek 12,303
- Regional University 1,309
- Placer Ranch 29,372
- Placer Vineyards 11,869
- Creekview 650
- Sierra Vista 4,929
- Lincoln Sphere of Influence expansion 37,405
- SPSP 15,022

Labor Force and Unemployment

Table 4.2-8 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 4.2-8
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: EDD, 2006a, Report 400c, Monthly Labor Force Data for Counties, 2005.						

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 4.2-9 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. Additional breakdowns of wage earnings by industry in study area counties is found in the CIA for this Tier 1 EIS/EIR.

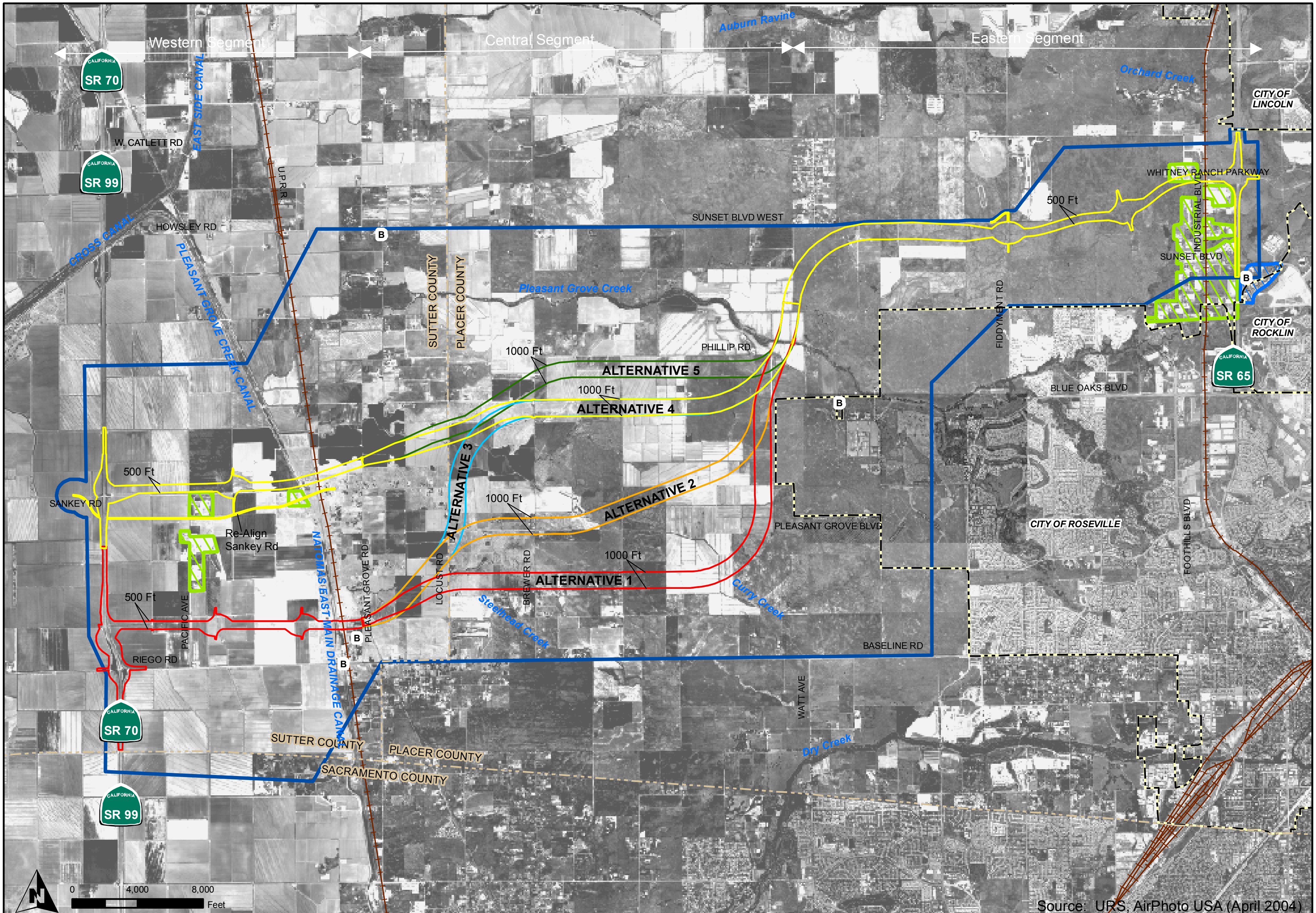
Table 4.2-9
Total Employment and Per Capita Income, California and Study Area Counties, 2000 and 2003

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				

4.2.3 IMPACT ANALYSIS

4.2.3.1 Methodology for Impact Evaluation

Direct impacts to population, housing, businesses, and communities in the study area were identified by comparing the footprint of corridor alignment alternatives to aerial photographs and Geographic



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

Employment Centers and Businesses

Figure 4.2-2

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Information System (GIS) data that included mapping of the locations of homes, farmsteads, communities, and businesses within the study area. For the purposes of this analysis (consistent with "worst-case analysis" principles), it was assumed that if a home or business 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 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.

Project-related employment and income benefits were estimated by using national multipliers developed through FHWA-funded research. Pertinent adopted goals and policies were reviewed to determine consistency or inconsistency with Parkway alternatives.

4.2.3.2 Evaluation Criteria

The project would be considered to have socioeconomic or community impacts if it would:

- disrupt or divide the physical arrangement of an established community or employment center;
- displace a large number of people;
- displace a large number of businesses or jobs;
- cause substantial loss of local government revenues; or
- be inconsistent with local adopted goals and policies pertaining to social or economic conditions.

4.2.3.3 Direct Impacts

No-Build Alternative

Under the No-Build Alternative, land for the Parkway would not be acquired and the Parkway would not be constructed. The No-Build Alternative would have no impact on existing communities, homes, farmsteads, businesses, or employment centers in the study area, nor would it result in loss of agricultural production in the study area. Section 2.3.1 provides additional details of the No-Build Alternative.

Alternative 1 – the Red Alternative

Alternative 1 would affect 120.6 acres of an existing rural residential community, and it would displace four additional isolated homes or farmsteads. These impacts are described by segment below.

Western Segment. In the Western Segment, Alternative 1 would not directly affect any existing residential communities and would not displace any isolated homes or farmsteads. Alternative 1 is 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 annually (2005 dollars).

Central Segment. In the Central Segment, Alternative 1 would take up to 120.6 acres of the 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 or farmsteads north of the Riego community.

No major employment centers are 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 annually.

Eastern Segment. Alternative 1 in the Eastern Segment would not affect any concentrated residential communities, but it would displace a single farmstead on the south side of Sunset Boulevard West, southeast of Amoruso Acres. 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 annually. A future interchange at Fiddyment Road could potentially encroach upon 5 to 6 acres of the area west of the existing sanitary landfill that is identified as a future landfill expansion area.

Alternative 2 – the Orange Alternative

Alternative 2 would not disrupt any existing rural residential communities, but it would displace four isolated homes or farmsteads, as described by segment below.

Western Segment. The Western Segment of Alternative 2 is the same as Alternative 1. Therefore, the potential socioeconomic and community impacts for this segment would be the same as described 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. No major employment centers are located in the Central Segment. Alternative 2 therefore would 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 annually.

Eastern Segment. The Eastern Segment of Alternative 2 is the same as Alternative 1. Therefore, the potential socioeconomic and community impacts of this segment would be the same as described for Alternative 1.

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 affect business centers and crop values 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. 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 annually.

Eastern Segment. The Eastern Segment of Alternative 3 is the same as Alternative 1. Therefore, the potential socioeconomic and community impacts of this segment are the same as discussed for Alternative 1.

Alternative 4 – the Yellow Alternative

Alternative 4 would directly affect 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. It also would affect three employment centers and affect the value of agricultural crop production. 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 affect several residences located east of the Union Pacific Rail Road (UPRR) tracks in this vicinity. The alignment would not split or divide this community, but it would affect 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.

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. Alternative 4 would displace two isolated homes or farmsteads in the 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 annually.

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. 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.

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 also would displace ten other isolated homes or farmsteads scattered along the alignment, and would impact three employment centers and affect crop production values. These impacts are described by segment below.

Western Segment. The Western Segment of Alternative 5 is the same as Alternative 4. Therefore, the potential socioeconomic and community 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. 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 annually.

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.

Comparison of Alternatives

None of the alignment alternatives would divide the physical arrangement of an established community, 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 no-development buffer). Alternative 1 would have the greatest impact, on 120.6 acres of Country Acres, the rural residential settlement 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 alignment alternatives would displace several isolated homes or farmsteads, ranging from three (Alternative 3) to ten (Alternative 5) (see Table 4.2-10).

Table 4.2-10
Summary of Direct Impacts to Community Resources
Associated with the Parkway Build Alternatives, by Segment

Alignment Alternative	Residential Communities (number)			Residential Communities (acres)			Homes and Farmsteads (number)		
Segment	W	C	E	W	C	E	W	C	E
1	0	1	0	0	120.6	0	0	3	1
2	0	0	0	0	0	0	0	3	1
3	0	0	0	0	0	0	0	2	1
4	1	0	0	14.7	0	0	4	2	1
5	1	0	0	14.7	0	0	4	5	1

Data Source: URS Corporation GIS file data, February 2006.
W = Western Segment
C = Central Segment
E = Eastern Segment

All of the build alternatives would directly impact the same employment center in the Eastern Segment and the Rio Bravo biomass power plant in the Sunset Industrial Area and would not affect any employment centers in the Central Segment (see Table 4.2-11). 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 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 annually (Alternative 1) to $991,000 annually (Alternative 2). The Placer Parkway project is included in the Regional Transportation Plan and MTP, and its Purpose and Need statement includes a goal of fostering economic growth.

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 and would not displace any isolated homes or farmsteads. 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.

Table 4.2-11
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.
W = Western Segment
C = Central Segment
E = Eastern 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 probably would not displace any businesses because of the small amount of land affected. The value of crops lost as a result of converting farmland to a roadway use is estimated at $356,000 annually under Alternatives 1, 2, and 3 and at $305,000 annually under Alternatives 4 and 5.

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 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).

As no major employment centers are located in the Central Segment, none of the alignment alternatives 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 annually (Alternative 4) to $606,000 annually (Alternative 2).

Eastern Segment. In the Eastern Segment, all build alternatives follow the same route, connecting with SR 65 at Whitney Ranch Parkway, so potential socioeconomic and community impacts would not vary by alignment alternative 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 (see Table 4.4-1), which states that the County shall encourage continued and increased agricultural activities on lands suited to agricultural uses.

4.2.3.4 Secondary and Indirect Impacts

No-Build Alternative

Under the No-Build Alternative, land for the Parkway would not be acquired and the Parkway would not be constructed. The No-Build Alternative would not have any secondary or indirect impacts on socioeconomics and communities within the study area. Section 2.3.1 provides additional details of the No-Build Alternative.

Alternatives 1 Through 5

Potential adverse secondary and indirect impacts include visual, noise, and air quality impacts to the area. Sections 4.6, 4.9, and 4.10 further discuss these impacts. However, the Parkway could also improve access, reduce travel times, and reduce traffic congestion on local roadways used by current and future residents. Potential secondary and indirect impacts associated with growth are discussed in Section 6.1, Growth.

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 proposed SPSP. The rural agricultural character of this area will be transformed by the new land uses proposed under the SPSP, with or without Placer Parkway, but the Parkway would contribute to this substantial change in the character of the community. Future residents of the SPSP area as well as long-time residents of the Riego and 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 new Parkway facility 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 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 new Parkway facility.

Secondary and indirect community impacts in the Eastern Segment of the Parkway 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 PRSP area.

Construction Employment and Income Benefits

Employment and income associated with future roadway construction 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. 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. 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 for a four-lane facility 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).

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 over the lifetime of the construction of the project. Of these, approximately 8,942 workers would be employed supplying highway construction materials and equipment, approximately 6,469 would work in businesses where construction dollars are spent, and approximately 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).

Fiscal Impacts

Placer Parkway would convert almost 2,000 acres of land in the study area to a transportation corridor. This would result in the permanent loss of current property tax revenues associated with that land that are received by local jurisdictions, as taxable land uses become converted to nontaxable highway right-of-way. In addition, farmland that is under Williamson Act contracts that would be converted to the roadway corridor 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.

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 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 South Placer Regional Transportation Authority indicated that constructing the Placer Parkway as a toll road could be a fiscally 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). Appendix B of the Transportation Technical Report (DKS Associates, 2007) provides additional discussion of the operation of the Parkway as a potential toll road.

4.2.3.5 Cumulative Impacts

No-Build Alternative

Under the No-Build Alternative, land for the Parkway (see Section 2.3-1) would not be acquired and the Parkway would not be constructed. There would not be any cumulative socioeconomic or community impacts under the No-Build Alternative.

Alternatives 1 Through 5

Because of its location with respect to the SPSP area of Sutter County, the PRSP area in Placer County, and other major proposed developments in the region, Build Alternatives 1 through 5 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 community changes in this portion of the study area.

The project, along with major development projects proposed for the study area 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 substantial adverse impact). The Parkway 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 SPSP area, the Sunset Industrial Area, and the proposed PRSP 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 levels of service on roadway segments.

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.

4.2.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION STRATEGIES

4.2.4.1 Tier 1 – Avoidance/Minimization Strategies

- During the development of alternatives, in order to reduce environmental impacts, avoidance alternatives were also considered (see Section 2.5.4). These alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

- During the alternatives screening process, efforts were made to avoid socioeconomic and community impacts. Examples of such efforts included modification and/or elimination of PSR conceptual corridor alignments (see Section 2.5) to avoid community impacts. These efforts include:

  – Elimination of a northern alignment between SR 70/99 and Amoruso Acres, and a connection to SR 70/99 North of Sankey Road, because of impacts to the Pleasant Grove community, growth inducement potential, agriculture impacts and reduced transportation benefits.

  – Elimination of a Parkway connection to SR 65 at Blue Oaks Boulevard partly on the basis of avoiding community effects, which would have included restriction of street access, construction through or adjacent to residential areas, and removal of homes and businesses.

  – Elimination of a portion of a central corridor alignment that encroached into a large wetland/vernal pool/conservation area at the confluence of two main branches of Curry Creek was eliminated and the alignment moved northward. This minimized disruption to the established community near Pleasant Grove and Sankey Road.

  – Adjustments were made to southern corridor alignments to reflect different distances between it and Riego/Baseline Road. Input was received that the Parkway should lie directly adjacent to Riego/Baseline Road to minimize the potential for growth inducement and to reduce habitat fragmentation by placing the two roadways next to each other. Based on a number of factors (see Section 2.5.3.3), including impacts to a residential community in the vicinity of County Acres, this alternative was eliminated.

  – Potential more southerly alignments, whether connecting to SR 65 at Blue Oaks Boulevard or at other interchange locations, would pass through the City of Roseville and require the removal of substantial existing development. The resulting socioeconomic and community impacts and costs make such alternatives infeasible, and they were therefore eliminated from further consideration.

- During development of the Tier 1 conceptual design of the Parkway, efforts were made to avoid socioeconomic and community impacts. These efforts included:

  - The restriction of access between Pleasant Grove Road and Fiddyment Road to avoid inducing urban growth in areas not designated for development in existing general plans and to maintain the rural character of western Placer County and south Sutter County.
  - The location of the Parkway within a no-development buffer zone (see Section 2.2.4) that would preserve open space and agricultural uses adjacent to the Parkway and limit future development in the buffer zone.
- During the Tier 1 environmental review process, PCTPA worked with local jurisdictions to plan for the Parkway and planned/proposed development in order to reduce the likelihood of environmental impacts, including socioeconomic and community impacts. Results of this coordination included modification and elimination of alternatives and refinement of corridor alignments.

4.2.4.2 Tier 2 – Consultation/Coordination

- PCPTA will continue to coordinate with local jurisdictions, residents, and businesses in the study area, in Tier 2 to reduce the likelihood of socioeconomic and community impacts. Coordination will include development of specific project design details to minimize impacts, including consideration of the location of the roadway footprint.

4.2.4.3 Tier 2 – Mitigation Commitments

- To maintain existing and future local roadway connectivity (for emergency access, farming operations and community access), over-crossings will be constructed, as appropriate, to convey traffic over the Parkway. These over-crossings will not connect to the Parkway.
- Any households or businesses displaced by the Parkway will 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 will be entitled to moving expenses and other benefits as provided by the act. All benefits and services will 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.

4.2.4.4 Tier 2 – Mitigation Considerations

- Alternatives 1, 4, and 5 could disrupt an existing rural residential community by displacing homes and converting a portion of the Sankey-Pleasant Grove 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 potential 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.
- In consultation with local jurisdictions, mitigation strategies considered at Tier 2 will include the development of design improvements to reduce impacts, such as:

- Appropriate adjustments to the location of the actual roadway within the Parkway corridor alignment;
- Provision of alternative access to remnant parcels; and
- Determination of the number, location and design of specific project features such as over-crossings.

4.2.5 TIER 1 AND TIER 2 STUDIES

- Analyses begun in Tier 1 which will be undertaken in greater detail in Tier 2
  - The analysis of specific homes and businesses that would be displaced by the Parkway, 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, will include preparation of a Relocation Impact Report that will identify the homes or businesses that would be displaced by the Parkway and evaluate comparable relocation resources in the vicinity. This report would identify any special needs that potentially displaced households may have (such as low-income status [see Section 4.3], language barriers, or presence of senior citizen citizens or persons with disabilities or other needs), as well as any special needs displaced businesses might have, and recommend any special measures to be taken to address those needs.
- Analyses that will begin in Tier 2
  - An analysis will be undertaken to estimate fiscal impacts on local jurisdictions based on revised information about parcels affected, current assessed values, Williamson Act contract status, and proposed funding mechanisms for the Parkway.

4.3 ENVIRONMENTAL JUSTICE

This section presents a Tier 1/Program level assessment of potential environmental justice impacts associated with the Parkway. Additional information on environmental justice is provided in the Tier 1 Environmental Impact Statement/Program Environmental Impact Report (EIS/EIR) Community Impact Assessment (Mara Feeney & Associates and North Fork Associates, 2007), which is available at the locations identified in the Executive Summary, including the Placer County Transportation Planning Agency website.

4.3.1 REGULATORY SETTING

4.3.1.1 Federal Regulations

Title VI of the Civil Rights Act of 1964 requires that recipients of federal aid, including highway funding, ensure nondiscrimination. Other laws, including National Environmental Policy Act (NEPA) and the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 and other U.S. Department of Transportation (USDOT) statutes and regulations, also prohibit discrimination on the basis of race, income, national origin, and other factors.

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," signed by President Clinton in 1994 requires that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations." In 1997, USDOT issued its Order to Address Environmental Justice in Minority Populations and Low-Income Populations in response to the requirements of Executive Order 12898. The USDOT Order encourages public involvement in transportation decisions and integration of environmental justice principles into transportation planning. In 1998, the Federal Highway Administration (FHWA) issued guidance entitled "FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" to facilitate compliance with Executive Order 12898 and related mandates.

4.3.1.2 Other Plans and Policies

Local jurisdictions may also adopt goals and policies that address environmental justice issues related to transportation systems. For example, Sacramento Area Council of Government's Metropolitan Transportation Plan 2027 contains the following goal that may pertain to environmental justice:

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 do not adversely affect particular communities disproportionately.

4.3.2 AFFECTED ENVIRONMENT

The existing population residing in the project study area lives predominately in three census block groups: Sutter County Census Tract 511, Block Group 4; Placer County Census Tract 213.01, Block Group 2; and Placer County Census Tract 213.03, Block Group 1. Table 4.3-1 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 predominantly minority nor predominantly low income.

Limited field reconnaissance conducted for the Placer Parkway project identified one residential area east of Pleasant Grove Road that could be predominantly minority or low income; however, this area did not lie within any of the project corridor alignment alternatives.

Table 4.3-1
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: U.S. Census Bureau, 2000				

4.3.3 IMPACT ANALYSIS

4.3.3.1 Methodology for Impact Evaluation

At the Tier 1 level of analysis, environmental justice impacts are determined on the basis of probable race or ethnicity and income level of any communities, households, or businesses that potentially would be directly impacted by the project, based on available census data and limited field reconnaissance. Pertinent definitions used in this analysis were those contained in the 1998 FHWA guidance:

> *Low-Income*: a household income at or below the Department of Health and Human Services poverty guidelines.
>
> *Minority*: includes Black, Hispanic, Asian American, or American Indian or Alaskan Native.
>
> *Low-Income Population*: any readily identifiable group of low-income persons who live in geographic proximity and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who would be similarly affected by a proposed FHWA program, policy, or activity.
>
> *Minority Population*: any readily identifiable groups of low-income persons who live in geographic proximity and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who would be similarly affected by a proposed FHWA program, policy, or activity.
>
> *Adverse Effects:* the totality of significant individual or cumulative human health or environmental effects, including interrelated social and economic effects, which may include, but are not limited to: bodily impairment, infirmity, illness, or death; air, noise, and water pollution and soil contamination; destruction or disruption of man-made or natural resources; destruction or diminution of aesthetic values; destruction or disruption of community cohesion or a community's economic vitality; destruction or disruption of the availability of public and private facilities and services; vibration; adverse employment effects; displacement of persons, businesses, farms, or nonprofit organizations; increased traffic congestion, isolation, exclusion, or separation of minority or low-income individuals within a given community or from the broader community; and the denial of, reduction in, or significant delay in the receipt of benefits of FHWA programs, policies, or activities.

Disproportionately High and Adverse Effect on Minority and Low-Income Populations: an adverse effect that: (1) is predominantly borne by a minority population and/or a low-income population; or (2) will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the nonminority population and/or nonlow-income population.

The approach to the analysis was to review demographic data, with limited field reconnaissance, to identify potential minority or low-income populations in the study area and, if any were found, to evaluate whether the proposed action would have a disproportionately high and adverse effect on such populations.

4.3.3.2 Evaluation Criteria

The project would be considered to cause environmental justice impacts if it were to cause disproportionately high and adverse impacts on an existing minority or low-income population.

4.3.3.3 Direct Impacts

Based on the census data presented in Table 4.3-1 and limited field reconnaissance described in Section 4.3-2, it was determined that the population potentially affected by the corridor alignment alternatives is neither predominantly minority nor predominantly 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.

4.3.3.4 Secondary and Indirect Impacts

Route adoption would not cause any secondary or indirect impacts on any minority or low-income population. When the project is ultimately constructed, it could result in secondary or indirect impacts (such as construction nuisance impacts or permanent increases in adverse visual impacts) on a collection of residences east of Pleasant Grove Road that might be considered a concentration of minority or low-income residents (further field research would be required to make this determination). Project-related impacts, however, would be borne by all residents of the study area living near the proposed future transportation facility and therefore would not disproportionately impact that subset of area residents. Thus, there would be no secondary or indirect environmental justice impacts.

4.3.3.5 Cumulative Impacts

Because the project would not cause any environmental justice impacts, it would not contribute to cumulative environmental justice impacts in the study region.

4.3.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

Because no environmental justice impacts are identified, no mitigation strategies have been recommended for Tier 1 or Tier 2.

4.3.5 TIER 1 AND TIER 2 STUDIES

- Analyses begun in Tier 1 which will be undertaken in greater detail in Tier 2
  - The analysis will identify individual households and businesses that would be displaced by the Parkway. Any unique characteristics of those households and businesses, such as race and income level and any special relocation needs, will also be identified.

4.4 FARMLANDS

This section presents a Tier 1/Program level assessment of potential impacts on farmland associated with the Parkway. Additional information on farmlands is provided in the Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR) Community Impact Assessment (CIA) (Mara Feeney & Associates and North Fork Associates, 2007), which is available at the locations identified in the Executive Summary, including the Placer County Transportation Planning Agency (PCTPA) website.

4.4.1 REGULATORY SETTING

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require consideration of impacts on farmlands. 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 influence farmlands. Relevant laws and guidelines are described below.

4.4.1.1 Federal Regulations

Farmland Protection Policy Act

The Farmland Protection Policy Act (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. 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).

Land Evaluation and Site Assessment

Soon after the Land Evaluation and Site Assessment (LESA) was designed in 1981 by the Natural Resources Conservation Service (NRCS), it 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. 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 in two counties. At this time, there are no federally or state-approved LESA models that calculate farmland impacts across multiple jurisdictions or that can accommodate data from multiple soil surveys. Therefore, no LESA was completed for this analysis. Additional discussion on LESA can be found in the CIA for this Tier 1 EIS/EIR.

4.4.1.2 State Regulations

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” (see Section 4.4.2.3), “other than prime farmland,” and “open space land” is eligible for coverage by a Williamson Act contract. Such contracts are administered by the Office of Land Conservation within the Department of Conservation (DOC). Land not defined as prime farmland or open space land can be placed under contract if the lands are 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. 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 on farming and open space uses as opposed to full market (or speculative) value. Forty-eight of the state's counties, including Sutter, Placer, 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 were 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 Tier 1 EIS/EIR to the DOC for review.

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, Senate Bill 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 further in this impact evaluation.

4.4.1.3 General Plans and Policies

The study area includes agriculturally designated lands under the jurisdiction of both Sutter and Placer counties. The General Plan policies identified in Table 4.4-1 below were considered to be relevant to the evaluation of agricultural resources with respect to Placer Parkway.

4.4.2 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

Table 4.4-1
Sutter and Placer Counties 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 nonagricultural uses by requiring buffers between proposed nonagricultural 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-case 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.
	6.A-7	Agriculturally designated parcels (not located in a rural community) that 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 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 nonagricultural 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 minimum or larger.
	7.A.3	The County shall encourage continued and, where possible, increased agricultural activities on lands suited to agricultural uses.

Table 4.4-1
Sutter and Placer Counties Agricultural Policies (Continued)

Jurisdiction	Policy Number	Policy
Placer County General Plan (Continued)	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 nonagricultural 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 minimum 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		

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 in that county. This section describes existing farming operations in southeastern Sutter County and southwestern Placer County through consideration of the acreages and 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 DOC FMMP, crop reports prepared by the Sutter County and Placer County Agricultural Commissions, and consultation with the U.S. Department of Agriculture–NRCS.

4.4.2.1 Existing Agricultural Activities

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 4.4-2 shows the gross value of the top five crops in 2004 for Sutter County. Table 4.4-3 displays the gross value of agricultural production for the five-year period between 2000 and 2004.

Table 4.4-2
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 4.4-3
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: Sutter County Agricultural Commissioner, 2004					

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 has 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.

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 4.4-4 shows the gross value of the top five crops in 2003 for Placer County. Table 4.4-5 displays the gross value of agricultural production for the five-year period between 1999 and 2003.

Table 4.4-4
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 4.4-5
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 the tables 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 actually has 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).

4.4.2.2 Trends in Agricultural Production and Farmland Conversion

Sutter County Trends in Agriculture

The agricultural outlook in Sutter County is quite different from 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. This 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 probably will 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 as 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.

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 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 in March 2006, discusses conflicting economic indicators. This report states that in 2004 agriculture constituted only 0.5 percent of the industry composition in Placer County. Yet between 1994 and 2004, agricultural employment grew by 133.3 percent, as local farmers sought more intensive ways to increase agricultural production. In addition, this report forecasts agricultural employment to continue to grow by approximately 2.9 percent from 2004 to 2009.

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 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 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 probably will 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.

Sutter County Farmland Conversion

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, 2002a).

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 Housing and Community Development Department (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 probably will lead to a decline in the size of farming operations and increase the subdivision of farm units for urban/suburban development.

The Sutter County Board of Supervisors set aside more than 10,500 acres of land near the southeastern border with Placer/Sacramento County (including portions of the project study area) 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 portion of the 10,500-acre reserve.

Placer County Farmland Conversion

As indicated by the DLRP, the pace of urbanization from 1998 to 2000 increased substantially in Placer County compared to the period between 1996 and 1998 (DOC, 2002a). The Farmland Mapping and Monitoring Program (FMMP), overseen by the DLRP, maps millions of acres of California's public and private land and produces a major study that evaluates farmland conversion in California counties, including Placer County.

In Placer County, 3,840 acres of undeveloped land were 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 in Placer County. This growth rate earned the county a top 10 ranking among counties statewide in terms of acreage of land developed since 1994. Much of this growth occurred in the Roseville-Lincoln-Rocklin area, and 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 in the near future.

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.

4.4.2.3 Farmland Classifications and Soil Patterns

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 Sutter and Placer counties and are shown in DOC's most recently published Important Farmlands Map (Figure 4.4-1).

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 that 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 that have a nonbearing period of less than 5 years and that normally will 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 that 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 that 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 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.)

Soils in Southern Sutter County

The NRCS has established a Geographic Information System (GIS) database that 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 its evaluation of the potential types of farmland in Sutter County.

Soils classifications for the study area, including southwestern Placer County, northwestern Sacramento County, and southeastern Sutter County, are shown on Figure 4.4-2. 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, soil types are shown on Figure 4.4-2 for information only and are used to assess the Parkway’s farmland impacts.

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 its evaluation of the potential for farmland in Placer County.

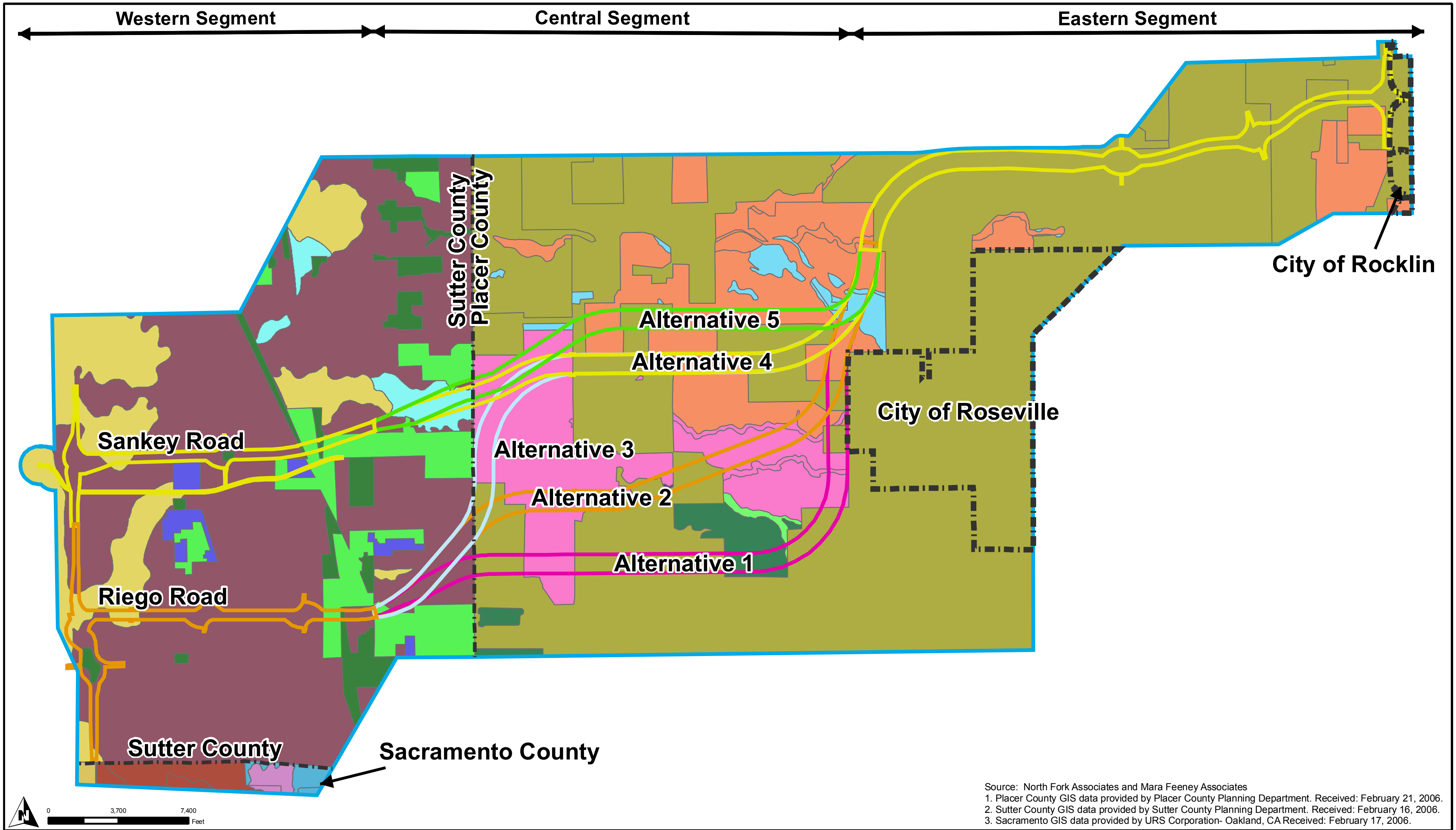
Soils classifications for the project area, including southwestern Placer County and southeastern Sutter County, are shown on Figure 4.4-2. The Soil Survey also provides some indication of the varieties of crops that can be grown on each soil type.

4.4.2.4 Williamson Act Lands

Williamson Act lands constitute a substantial 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.

Williamson Act Contracted Land in Sutter County

Sutter County only recently (in January 2001) began participating in the Williamson Act. Table 4.4-6 shows the amount of newly enrolled acreage in Sutter County during the first three years of participation in the program, as well as the county’s statewide ranking in newly enrolled acreage.



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.

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

URS Corporation L:\Projects\PlacerParkway2007_28066595\MXD\Current Working Documents\EIS\Chapter_4-4_Farmlands\Figure_4_4-1_Important_Farmland.mxd Date: 2/14/2007 3:35:23 PM Name: akkeele0

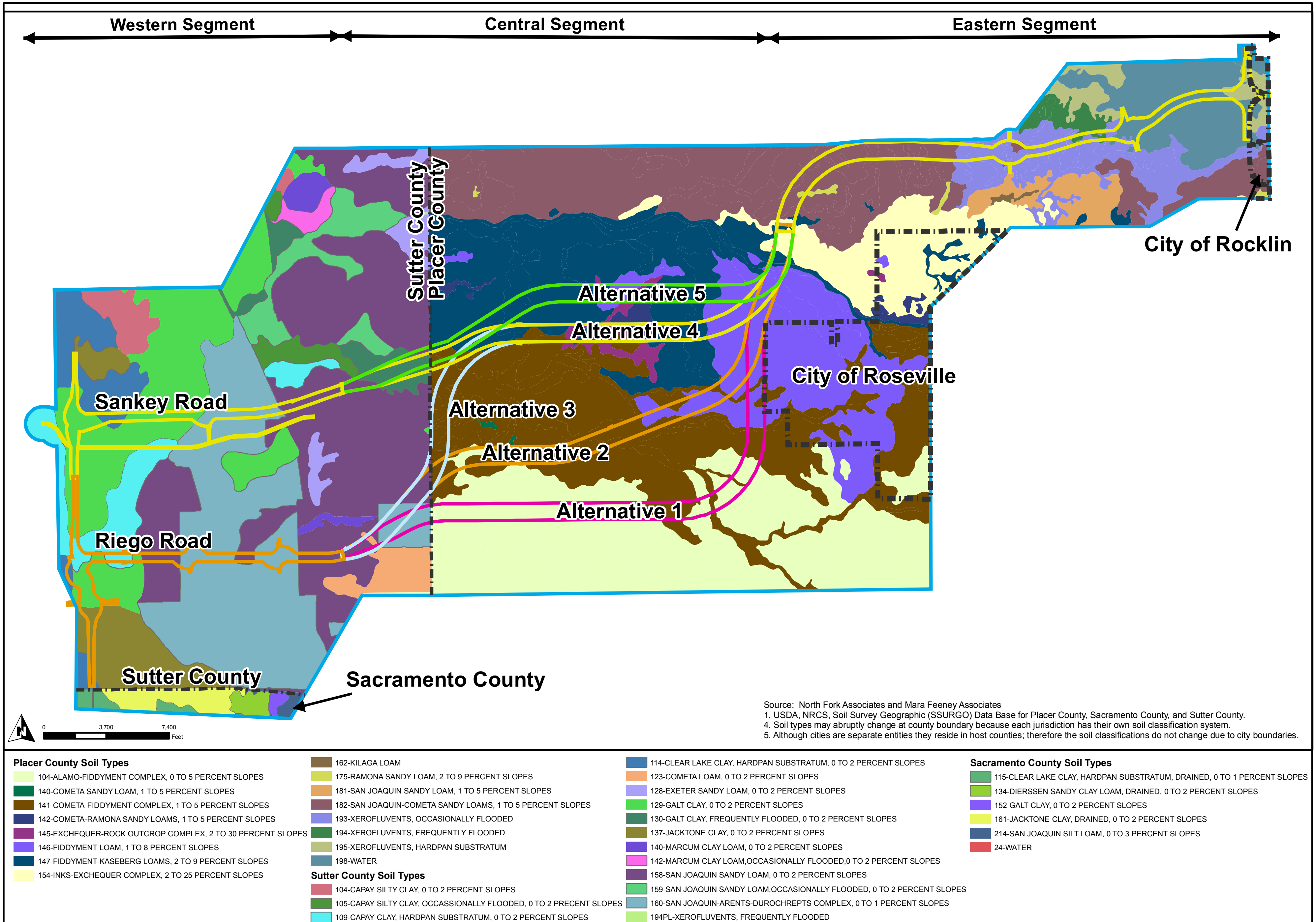
Placer Parkway Corridor Preservation

Tier 1 EIS/EIR

Important Farmland

Figure 4.4-1

June 2007



PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Soil Types in Sutter, Placer, and Sacramento Counties

Figure 4.4-2

June 2007

Table 4.4-6
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, 2002.		

In 2002, Sutter County quintupled the amount of land enrolled in the act, as shown in Table 4.4-6, followed by a sharp decline in 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 2001, when four new counties began participating in the program. To date there has only been one cancellation (for 1 acre of land) in Sutter County.

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 substantial decline by the end of the following decade (−17 percent) and a second, less substantial decline (−4 percent), during the 1990s (see Table 4.4-7).

Table 4.4-7
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 4.4-7 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 protection 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 substantial 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 substantial 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 DOC, over the past decade non-renewal of contracts has been the largest reason for the termination of Williamson Act contracted land. Statewide, an average of 67,813 acres of land 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 most 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, including suburbanization and fringe growth patterns, land speculation, infrastructure development, water availability, increasing age of farmers, and the economics of agricultural production.

4.4.3 IMPACT ANALYSIS

4.4.3.1 Methodology for Impact Evaluation

For the proposed action, potential substantial impacts to farmlands have been evaluated on a preliminary basis using the evaluation criteria listed below.

Impacts on agriculture and farmland within the study area were assessed by tabulating and comparing directly affected farmland associated with each of the project alternatives. 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 farmland.

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 or open space land, and conversion of contracted land to highway uses would require the premature termination of these contracts, resulting in early conversion of farmland to nonagricultural 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; however, this analysis does not include evaluation of parcel-specific impacts, since it is not known at this time where the roadway might ultimately be built within the conceptual corridor alignments.

4.4.3.2 Evaluation Criteria

The project could have an impact on agriculture if it would:

- Convert substantial amounts of farmland to nonagricultural uses;
- Convert more than 100 acres of Williamson Act contracted land to nonagricultural uses (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); or
- Conflict with adopted plans or policies pertaining to agriculture.

4.4.3.3 Direct Impacts

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 well as farmland that is under Williamson Act contracts.

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 impacts on farmland under the No-Build Alternative. Section 2.3-1 provides additional details of the No-Build Alternative.

Alternative 1 – the Red Alternative

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.

Alternative 1 has the potential to affect two properties that are currently under Williamson Act protection, although cancellation of these two contracts has been proposed as part of the Placer Ranch Specific Plan development process. As shown in Table 4.4-9, 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.

Alternative 2 – the Orange Alternative

Alternative 2 would potentially impact 990.06 acres of farmland, the most of any alternative. It would affect eight parcels and 243.7 acres of land currently under Williamson Act contract, all in Placer County. Farmland impacts in the Western and Eastern segments would be the same as described for Alternative 1. A total of 605.84 acres of all farmland categories would be impacted in the Central Segment. Alternative 2 would pass through six parcels in the Central Segment with 123.85 acres of contracted land,

Alternative 3 – the Blue Alternative

Alternative 3 would impact 965.10 acres of important farmlands within the study area. In addition, it would affect three parcels and 240.56 total acres of land currently under contract, all within Placer County. Alternative 3 farmland impacts in the Western and Eastern segments would be identical to those identified for Alternative 1. A total of 580.88 acres of all the farmland categories within the Central Segment would be affected, except for Farmland of Local Importance. The Alternative 3 alignment would pass through one parcel under contract in the Central Segment, affecting 120.71 acres of land.

Alternative 4 – the Yellow Alternative

Alternative 4 would impact the least amount of farmland (792.46 acres) 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. Farmland affected in the Eastern Segment of Alternative 4 would be the same as for Alternative 1.

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 potentially would impact 0.06 acre of contracted land in Sutter County. Impacts in the Central Segment would be the same as for Alternative 3, and impacts in the Eastern Segment would be the same as Alternative 1.

Alternative 5 – the Green Alternative

Alternative 5 would 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.

Alternative 5 would affect four parcels and 240.26 total acres of land currently under contract. The Western Segment impacts would be the same as for Alternative 4, and Eastern Segment impacts would be the same as Alternative 1. Alternative 5 passes through two parcels in the Central Segment, affecting 120.35 acres of contracted land.

Comparison of Alternatives

All of the build alternatives would affect more than 100 acres of Williamson Act contracted land; therefore, all are considered to have an impact on Williamson Act contracted land. The potential conversion of farmland associated with the alternatives (ranging from 792.46 to 990.06 acres) is considered "substantial."

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 acres. 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.

Table 4.4-8 shows the amount of important farmland that potentially would be converted by each corridor alignment alternative and segment. Table 4.4-9 shows the amount of Williamson Act contracted lands that would be affected by each corridor alignment alternative. These project-related impacts to farmland are discussed by alternative below.

Table 4.4-8
Important Farmland Potentially Affected by Alignment Alternatives

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: DOC FMMP-2002 data for Placer County and 2004 data for Sutter County; and California Spatial Information Library GIS database.						

Table 4.4-9
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: DOC Farmland Monitoring and Mapping Program GIS data; Placer County, 2002; Sutter County, 2004					

Consistency with Plans and Policies

The policies listed in Table 4.4-1 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, which is contained in the CIA for this Tier 1 EIS/EIR, concludes that the proposed action may conflict with numerous adopted local policies aimed at protecting agricultural activities in Sutter and Placer counties.

Specifically, the project would be inconsistent with Sutter County agricultural policies 6.A-1, 6.A-6 and 6.A-7. In addition, the proposed action 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, as well as protecting large parcel sizes and preventing parcel fragmentation to enhance the viability of agricultural uses. It should be noted, however, that some of the farmland in question is already proposed for urban development (e.g., land within the Sutter Pointe Specific Plan area of Sutter County and the Placer Ranch Specific Plan area of Placer County). Thus, potentially affected farmland in the study area would not be preserved even if the project is not built (see discussion of Cumulative Impacts below).

4.4.3.4 Secondary and Indirect Impacts

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), land for the Parkway would not be acquired and the Parkway would not be constructed. The No-Build Alternative would not have any secondary or indirect effects on existing farmland within the study area.

Build Alternatives 1 Through 5

Build Alternatives 1 through 5 could result in secondary and indirect impacts on farmland. These impacts would be similar for all build alternatives. Potential secondary and indirect impacts associated with growth are discussed in Section 6.1, Growth. The indirect impacts of the Parkway would 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, so it is not possible to analyze impacts on the viability of specific farm units. The conclusions reached in the *West Placer Agricultural Study* (summarized below under Section 4.4.4.1, Farmland Conversion), however, provide insight into the potential secondary and indirect 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).

The fragmentation of agricultural land within the study area could affect remaining farms through parcel size reduction, which consequently reduces the 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. 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.

Increased urbanization also introduces conflicts between commuting workers and agricultural machinery operators who may have to compete with residential and commercial traffic on local roadways. The differences in vehicle speeds and size can create potentially dangerous and frustrating situations for both suburban residents and agricultural equipment operators. Also, as more land in a region is converted from agricultural to urban uses, providers of agricultural support services can find their customer base and economic viability eroding. 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.

4.4.3.5 Cumulative Impacts

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), 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

Potential adverse impacts on farmlands associated with the Parkway could contribute to cumulative impacts associated with planned and proposed development in the study area. The combined effects of farmland conversion and Williamson Act contract cancellation or nonrenewal 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 generally 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.

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. As shown on Table 4.4-10, other anticipated urban development and roadway projects (excluding the Parkway) in the study area would convert an additional 5,203 acres of Farmland of Statewide Importance, 1,429 acres of Prime Farmland, 6,687 acres of Unique Farmland, and 250 acres of Grazing Land. The converted farmland would also include nearly 717 acres of Williamson Act contracted land within Sutter and Placer counties, as shown in Table 4.4-11.

4.4.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION STRATEGIES

4.4.4.1 Farmland Conversion

Tier 1 – Avoidance/Minimization Strategies

- During the development of alternatives, in order to reduce environmental impacts, avoidance alternatives were also considered (see Section 2.5.4). These alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

- During the alternatives screening process, efforts were made to avoid environmental impacts, including farmland impacts. Examples of such efforts included modification and/or elimination of Project Study Report (PSR) Conceptual corridor alignments (see Section 2.5). These efforts include:

  – Elimination of a northern alignment between State Route (SR) 70/99 and Amoruso Acres, and a connection to SR 70/99 north of Sankey Road, because of a number of impacts including effects on farmland.

  – Modifications to generally avoid or minimize impacts to farmland.

Table 4.4-10
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	45.35	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 4.4-11
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						

- During development of the Tier 1 conceptual design of the Parkway, efforts were made to avoid impacts on farmlands. These efforts included:
  - The restriction of access between Pleasant Grove Road and Fiddyment Road to avoid inducing urban growth in areas not designated for development in existing general plans and to maintain the rural character of western Placer County and south Sutter County.
  - The location of the Parkway within a no-development buffer zone (see Section 2.5) that will preserve open space and agricultural uses adjacent to the Parkway and limit future development in the buffer zone.
- During the Tier 1 environmental review process, PCTPA worked with local jurisdictions and agricultural property owners to plan for the Parkway and planned/proposed development to reduce the likelihood of environmental impacts, including farmland

impacts. Results of this coordination included modification and elimination of alternatives and refinement of corridor alignments.

Tier 2 – Consultation/Coordination

- PCTPA will continue to coordinate with local jurisdictions in Tier 2 to reduce the likelihood of farmland impacts. Coordination will include development of specific project design details for the Parkway and other proposed projects to minimize impacts, including locating the roadway footprint to minimize bisecting farm units, identifying local access requirements, and retaining farming within corridor buffers where feasible.

Tier 2 – Mitigation Commitments

- To maintain existing and future local roadway connectivity (for emergency access, farming operations and community access), which will help to avoid/minimize future farmland impacts, over-crossings will be constructed, as appropriate, to convey traffic over the Parkway. These over-crossings will not connect to the Parkway.

Tier 2 – Mitigation Considerations

- Based on consultation with local jurisdictions, Tier 2 mitigation strategies will include the development of design improvements to reduce farmland impacts, such as:
    - Appropriate adjustments to the location of the actual roadway within the Parkway corridor alignment;
    - 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; and
    - Determination of the number, location and design of specific project features such as over-crossings.
- Farmland impacts could be reduced via land purchase/leases that would allow for continued use of the no-development buffer zone for agricultural purposes.
- Conversion of farmland to nonfarmland 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 one-to-one (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. 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.
- Agricultural easements administered by land trusts (examples include Placer Land Trust, Ducks Unlimited, The Nature Conservancy, American Farmland Trust) or other nonprofit 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. The Agricultural Land Stewardship Program established by the California Farmland Conservancy, administered by the DLRP under the DOC, which is a grant program that aids in purchasing and/or partially funding agricultural easements, could also be applicable, as could agricultural easements administered by Placer County.

- The Placer County Conservation Plan (PCCP) (described in Section 4.14.1.3) may be finalized and approved prior to corridor acquisition for the Parkway. The PCCP is being developed to guide and streamline permitting for large-scale development in Western Placer County over the next 50 years while establishing a network and conservation areas to protect and conserve sensitive species and natural communities. If and when approved, the PCCP is expected to 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. 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.

4.4.4.2 Disruption to Agricultural Activities

Tier 1 – Avoidance/Minimization Strategies

- During the development of alternatives, in order to reduce environmental impacts, avoidance alternatives were also considered (see Section 2.5.4). These avoidance alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

- During the alternatives screening process, efforts were made to avoid farmland impacts, as described under Farmland Conversion, above, which would also help to minimize disruption to agricultural activities. In addition, identification of working farm units, as well as agriculturally designated parcels, was undertaken to better understand the effect of the Parkway on farms. At the suggestion of local farmers, this included an examination of existing and planned power lines in the vicinity of Parkway corridor alternatives to identify if the combination of the two on smaller or bisected parcels would render them unusable for continued farming.

- During development of the Tier 1 conceptual design of the Parkway, efforts were made to avoid disruption of agricultural activities. These efforts included:

  – The restriction of access between Pleasant Grove Road and Fiddyment Road to avoid inducing urban growth in areas not designated for development in existing general plans and to maintain the rural character of western Placer County and south Sutter County.

  – The location of the Parkway within a no-development buffer zone (see Section 2.5) that would preserve open space and agricultural uses adjacent to the Parkway and limit future development in the buffer zone.

Tier 2 – Consultation/Coordination

- PCTPA will continue to coordinate with local jurisdictions in Tier 2 to reduce the likelihood of disruption of farmland activities. Coordination will include development of specific project design details for the Parkway and other projects to minimize impacts, as described above and in Mitigation Considerations, below.

Tier 2 – Mitigation Commitments

- To maintain existing and future local roadway connectivity (for emergency access, farming operations and community access), which will help to avoid/minimize disruption to agricultural activities, over-crossings will be constructed, as appropriate, to convey traffic over the Parkway. These over-crossings will not connect to the Parkway.

Tier 2 – Mitigation Considerations

- Based on consultation with local jurisdictions, Tier 2 mitigation strategies will include the development of design improvements to reduce disruption to agricultural activities, such as:
  - Provision of alternative access to remnant parcels.
  - Determination of the number, location and design of specific project features such as over-crossings.
  - Appropriate adjustments to the location of the actual roadway within the Parkway corridor alignment.
  - 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.
- Farmland impacts could be reduced via land purchase/leases that would allow for continued use of the no-development buffer zone for agricultural purposes. This could include short-term leasing agreements to farm portions of the future right-of-way 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 during the initial phases of the construction of the Parkway (see Section 2.2.1 regarding possible phasing).

4.4.4.3 Williamson Act Conflicts

- Even though in some instances Williamson Act properties affected by the Parkway may stay enrolled in the Williamson Act program, there are no feasible avoidance, minimization, mitigation, or design strategies that could be implemented to diminish potential impacts on Williamson Act enrolled lands.

4.4.4.4 Consistency with Plans and Policies

Tier 1 – Avoidance/Minimization Strategies

- During the alternatives screening process, efforts were made to avoid farmland impacts and disruption of agricultural activities, which would be the primary cause of inconsistency with plans and policies in the study area. Examples of such efforts included modification and/or elimination of PSR conceptual corridor alignments (see Section 2.5) and Tier 1 conceptual design modifications to maintain access to and viability of agricultural land. In order to reduce environmental impacts, avoidance alternatives were also considered (see Section 2.5.4). See also the discussion above. These alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

Tier 2 – Mitigation Considerations

- The Parkway 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 the following mitigation strategies could be considered:
  - General Plan Amendments or Zoning Ordinance Amendments for the affected properties could be enacted to ensure consistency with ordinance requirements.
  - Sutter and Placer counties could enact a potential zoning overlay district for parcels reduced in size by Placer Parkway that would recognize the special nonconforming nature of these properties.
  - Parkway proponents could purchase remainder parcels in their entirety so that there would not be a zoning consistency issue.

4.4.5 TIER 1 AND TIER 2 STUDIES

- Analyses begun in Tier 1 which will be undertaken in greater detail in Tier 2
  - The evaluation of farmland impacts will examine individual farms affected by the Parkway to determine how impacts can be reduced by such means as 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 nonviable remnant parcels and rezoning them for alternative uses.

4.5 PUBLIC SERVICES AND UTILITIES

This section presents a Tier 1/Program level assessment of potential impacts on public services and utilities associated with the Parkway. Additional information on public services and utilities is provided in the Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR) Community Impact Assessment (CIA) (Mara Feeney & Associates and North Fork Associates, 2007), which is available at the locations identified in the Executive Summary, including the Placer County Transportation Planning Agency (PCTPA) website.

The public services and utilities are organized in the following order:

Public Services:

- Protective and emergency services – fire and police protection, and hospitals;
- Schools – elementary, middle, and high schools (public, charter, and private);
- Libraries – public libraries and bookmobiles; and
- Parks and recreation – public parks, recreational facilities, and bikeways

Utilities/Municipal Facilities:

- Utilities include electricity, natural gas, water, and sewer/wastewater;
- Municipal facilities handle solid waste, stormwater, and wastewater.

The study area is served by a number of public service agencies and utility providers. These agencies and providers are described in Sections 4.5.2.1 and 4.5.2.2.

4.5.1 REGULATORY SETTING

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require consideration of impacts to public services and utilities. 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 influence public services and utilities. Relevant laws and guidelines are described below.

4.5.1.1 General Plans and Policies

City of Roseville

The City of Roseville's General Plan 2020 (City of Roseville, 2004a) contains goals and policies that address public services and utilities, including the following:

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 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.

City of Lincoln

The City of Lincoln is in the process of updating its General Plan. The City of Lincoln Goals and Policies Report (City of Lincoln, 2005) contains the following:

Policy PFS-4.8: Discharge of Urban Pollutants. The City shall require appropriate runoff control measures as part of future development proposals to minimize discharge of urban pollutants (such as oil and grease) into area drainages.

Policy PFS-5.8: Provision of Buffers for Regional Landfill. The City will promote the provision of adequate buffers for the Western Regional Landfill, in order to prevent the encroachment of incompatible land uses, which may compromise its long-term operations.

Policy PFS-6.2: Undergrounding of Utility Lines. The City shall require undergrounding of utility lines in new development, except where it is not feasible due to the electrical transmission load or other operational issues as confirmed by the utility provider.

Policy PFS-8.6: Emergency Access. The City shall require all new developments to provide adequate emergency access features, including secondary access points.

City of Rocklin

The City of Rocklin has a Draft General Plan that contains a Public Services and Utilities Element (City of Rocklin, 2005) with the following goals and policies:

PF-1: To provide for adequate lead time in the planning of needed expansions of public services and facilities.

PF-3: To require that any development that generates the need for public services and facilities, including equipment, pay its proportional share of providing those services and facilities. Participation may include, but is not limited to, the formation of assessment districts, special taxes, payment of fees, payment of the City's Construction Tax, purchase of equipment, and/or the construction and dedication of facilities.

PF-11: To ensure that new development will not create a significant negative impact on the existing level of police and fire protection services.

PF-13: To analyze the cost of fire protection, police services, and emergency medical response for annexations and major project developments and require a funding mechanism to offset any shortfall.

PF-14: To require that projects be designed with at least two points of access for emergency vehicles in order to meet emergency service needs, or for general circulation, where such access is necessary to assure adequate ingress and egress.

PF-33: To require the undergrounding of utility lines in new development, except where infeasible for financial and/or operational reasons.

PF-39: To inform utility companies when major new developments and new street projects will occur so that planning for utility extensions can be coordinated.

PF-43: To require that new development proposals include Drainage Master Plans unless waived by the City Engineer.

PF-45: To request Placer County to require any development in the Rocklin Sphere of Influence to be compatible with City public service and facility standards.

The City of Rocklin General Plan also has specific goals for open space.

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. The applicable SIAP policies are listed below:

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.

4.5.2 AFFECTED ENVIRONMENT

Figure 4.5-1 shows the location of existing public services and utilities within the study area. Most of the public services and utilities currently provided in the study area are associated with the Pleasant Grove community, in the Western Segment (see Figure 4.2-1). The paragraphs below describe other public services and utilities provided in and around the study area.

4.5.2.1 Public Services

Protective and Emergency Services

Regional Providers. The California Department of Forestry (CDF) operates 21 units and 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 region, including the study area. 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 nonuniformed 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 (CHP, 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 EMSA, 2006).

Sutter County. Sutter County has six fire districts, three of which 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 CSA D, which includes the Pleasant Grove Fire Department, headquartered at 3100 Howsley Road in the community of Pleasant Grove (Sutter County, 2006). This Fire Department has an additional fire station near Pleasant Grove and Sankey roads (shown on Figure 4.5-1 just south of the northern alignment).

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 Avenue, close to the northeastern portion of the study area.

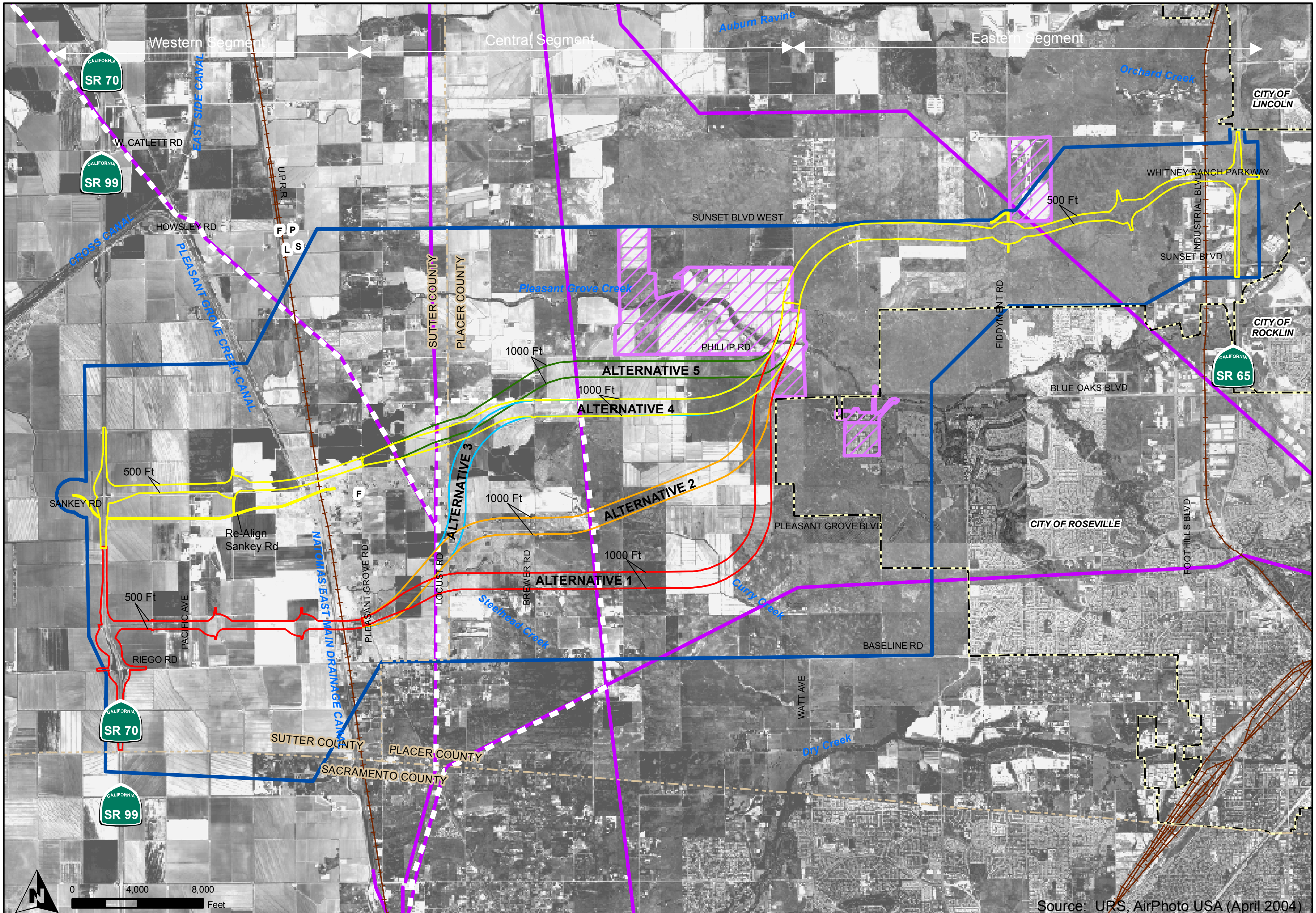
The cities of Roseville, Rocklin, and Lincoln have independent police and fire departments that provide services within city limits and can also coordinate with other emergency service providers in the region on a mutual aid basis. The Roseville Fire Department has seven fire stations located throughout the city, and a new fire station is proposed at a location near Pleasant Grove Boulevard and State Route (SR) 65. All fire stations have paramedic staff and equipment (City of Roseville, 2006a).

Sacramento County. Fire protection services for the small 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 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 includes detectives, patrol deputies, crime analysts, and arson investigators. The Northwest Service Center includes a community resources supervisor and specialist, four problem oriented policing officers, a school resource officer, four code enforcement officers, and a CHP officer (Sacramento County Sheriff's Department, 2006).

Schools

Existing Schools. The Pleasant Grove Elementary School, located at 3075 Howsley Road in Pleasant Grove (shown on Figure 4.5-1 just south of the northern alignment), is the only school facility within the study area. The school is operated by the Pleasant Grove Joint Union Elementary School District, which



Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary
Existing Powerlines
Proposed Powerlines
Municipal Facility
F Fire Station
L Library
P Post Office
S School

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Community Services and Municipal Facilities

Figure 4.5-1

June 2007

URS Corporation L:\Projects\PlacerParkway2007_28066595\MXD\Current Working Documents\EIS\Chapter_4_5_Public_Service_Utilities\Figure_4_5-1_Community_Services.mxd Date: 2/14/2007 4:21:00 PM Name: akleele0 currently provides kindergarten to Grade 8 educational services for 176 students (Public Schools, 2006). Most of the students reside locally, but some are bused or driven from neighboring districts to the Pleasant Grove School through an interdistrict program.

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 and university facilities associated with the development areas shown on Figure 1-15 include those described below.

The West Roseville Specific Plan (WRSP) 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 (RUSP) 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 (PRSP) 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 (PVSP) 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).

Libraries

There are no libraries within the Placer Parkway study area. The closest one is Sutter County's Pleasant Grove Branch Library at 3093 Howsley Road, immediately to the west of the study area.

Parks and Recreational Facilities

No existing public parks or recreation facilities were identified within the corridor alignment alternatives. Within the study area, the closest park or recreation facility is in the City of Roseville, approximately 1,800 feet from the corridor alignment alternatives (see Figure 4.1-2).

Planned or Proposed Facilities

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. (The City of Roseville has not yet finalized its master plan for this multiuse facility but reflects the Placer Parkway concept in its conceptual master plan diagram). Similarly, preliminary land use concepts for RUSP, the Sierra Vista Specific Plan, and the Sutter Pointe Specific Plan area 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 the CIA (Mara Feeney & Associates and North Fork Associates, 2007).

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. Although 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).

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:

- WRSP (approved)
- PVSP (proposed)
- PRSP (proposed)
- RUSP (proposed)

Further information is provided in the CIA.

4.5.2.2 Utilities and Municipal Facilities

Utilities

Utility providers for electricity, natural gas, water, and sewer/wastewater in the study area (by county and city) are described below.

Regional. The Natomas Central Mutual Water Company has a system of canals providing irrigation water to farms in the western portion of the study area (in both Sutter and Sacramento counties), and Reclamation District No. 1000 (RD 1000) maintains the primary drainage and flood control facilities in this vicinity. RD 1000 is the area that functions as the reclamation and flood control for the Sacramento River Basin and is considered a historic district (see Section 4.7, Cultural Resources).

Sutter County. Electricity and natural gas is provided by Pacific Gas & Electric Company. Wastewater is treated by the Sutter County Wastewater District. Generally, dispersed homes in the study area, including those in the community of Pleasant Grove, have private well and septic systems.

Placer County. Electricity and natural gas is provided by Pacific Gas & Electric Company. Water service is provided by the Placer County Water Agency and California American Water Company (Cal Am). Typically, dispersed homes in the study area have private well and septic systems.

The City of Roseville and the San Juan Water District provides water service for City of Roseville residents. Placer County Flood Control and Water Conservation District, 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. Sewer and wastewater treatment services in Roseville and Rocklin are provided by the South Placer Municipal Utility District.

Sacramento County. Electricity is provided by Pacific Gas & Electric Company. Natural gas is provided by the Sacramento Municipal Utility District. Water service in the study area is provided by the Natomas Central Mutual Water Company. Dispersed homes in the study area have private well and septic systems. Sewer service is provided by Sacramento Regional County Sanitation District.

Further research and analysis will be undertaken in Tier 2 to determine the locations of the electricity and natural gas lines in the study area, as well as locations of water and sewer outfalls/pipelines. Existing and proposed transmission lines are shown on Figure 4.5-1.

Municipal Facilities

Municipal public service facilities handle solid waste, stormwater, and wastewater. Further discussion of potential environmental impacts associated with stormwater is found in Section 4.11, Hydrology and Floodplains, and Section 4.12, Water Quality. Municipal facilities within or near the study area include the following:

- Western Placer Waste Management Authority (WPWMA) Landfill, located east of Fiddyment Road, between Athens and Sunset Boulevard;
- City of Roseville's Regional Pleasant Grove Wastewater Treatment Plant (PGWWTP), located on Phillip Road;
- Roseville Energy Park, located immediately north of the Wastewater Treatment Plant; and
- Planned City of Roseville's Reason Farms Retention Basin.

These municipal facilities are described in more detail below.

The WPWMA 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 City of Roseville's Regional PGWWTP is operated under a Joint Powers Agreement and provides wastewater treatment services, as well as recycled water for nonpotable 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 SIAP, 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 WRSP 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.

4.5.3 IMPACT ANALYSIS

4.5.3.1 Methodology for Impact Evaluation

Potential impacts to public services and utilities in the study area were identified by comparing the footprint of the corridor alignment alternatives to aerial photographs and GIS data that mapped the locations of public services and utilities within the study area. For the purposes of this analysis (consistent with "worst-case analysis" principles), it was assumed that if a public service or utility 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 is identified within the selected corridor. Impacts to recreation resources and other resources protected under Section 4(f) of the Department of Transportation Act are addressed in Appendix D, Section 4(f).

4.5.3.2 Evaluation Criteria

Potential environmental impacts to public services and utilities include, but are not limited to, the following:

- Removal or relocation of an existing public utility or service);
- Temporary disruption of service (e.g., electricity or gas);
- New demand on public services and utilities from the Parkway, resulting in exceedance of capabilities, or a requirement for new facilities or permanently or temporarily disrupting access to such facilities; and
- Substantial deterioration of parks and/or recreational facilities, resulting in substantial deterioration of these facilities through increased use or other direct adverse impacts such as removing all or part of such a facility and temporarily or permanently disrupting access.
- Senate Bill 1059 designation of high voltage transmission corridor zones (TCZs) and ground rules for CEQA review of projects encroaching in TCZs.

4.5.3.3 Direct Impacts

No-Build Alternative

Under the No-Build Alternative (Section 2.3-1), land for Placer Parkway would not be acquired and the Parkway would not be constructed. The No-Build Alternative would not have any impacts on public services or utilities in the study area.

Alternative 1 – the Red Alternative

Alternative 1 could result in temporary and/or permanent relocation of utilities in the study area. Alternative 1 would encroach upon 108.5 acres of an existing municipal facility (the City of Roseville's Reason Farms Retention Basin property).

The development of the Parkway would require the construction of new storm water drainage facilities within the selected corridor to manage storm water runoff from the new roadway. Design of these new facilities would be incorporated into project plans, and at this time no expansion of existing facilities is expected to be required.

The Parkway would generate some solid waste during construction. The project would comply with federal, state and local requirements for the disposal of construction-related solid waste. Any hazardous materials that would be used during construction would be stored, used, and disposed of in accordance with applicable regulations for transport and disposal.

The Parkway would require nominal amounts of water during construction and irrigation water for landscaping. This demand would be quantified when the landscaping plans are completed during final design. Since landscaping concepts for the project envision low-maintenance plantings, demand is not expected to be substantial.

No wastewater would be generated by the Parkway and there would not be any impacts on wastewater treatment facilities or any requirement for expansion of existing facilities.

Impacts are described by segment below.

Western Segment. In the Western Segment, Alternative 1 would not directly affect any existing public services or utilities.

Central Segment. In the Central Segment, the Alternative 1 alignment would affect the City of Roseville's Reason Farms Retention Basin property, encroaching on 95.6 acres of this municipal facility.

Eastern Segment. Alternative 1 in the Eastern Segment would also encroach on approximately 13 acres of the City of Roseville's Reason Farms facility, which straddles the border between the Central and Eastern segments.

A Placer Parkway/Fiddyment Road interchange could potentially encroach upon the area immediately west of the existing sanitary landfill that is owned by the WPWMA 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, as part of this interchange, 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.

Alternative 2 – the Orange Alternative

Alternative 2 would encroach on 108.9 acres of a municipal facility (the City of Roseville's Reason Farms Retention Basin property), as described by segment below. New demand on public services and utilities would be the same as Alternative 1.

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 encroach on 95.6 acres of the City of Roseville's Reason Farms Retention Basin property.

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.

Alternative 3 – the Blue Alternative

New demand on public services or utilities would be the same as discussed for Alternative 1. Alternative 3 would encroach upon approximately 100 acres of a municipal facility (the City of Roseville's Reason Farms Retention Basin property), 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 encroach on 87.2 acres of the City of Roseville's Reason Farms Retention Basin property.

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.

Alternative 4 – the Yellow Alternative

Alternative 4 could result in temporary and/or permanent relocation of utilities in the study area. New demand on public services or utilities would be the same as discussed for Alternative 1. Alternative 4 would encroach on approximately 100 acres of an existing municipal facility (the Reason Farms Retention Basin property). These impacts are described by segment below.

Western Segment. In the Western Segment, Alternative 4 would not affect any public services or utilities.

Central Segment. Alternative 4 would encroach upon 87.1 acres of the City of Roseville's Reason Farms Retention Basin property.

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.

Alternative 5 – the Green Alternative

Alternative 5 could result in temporary and/or permanent relocation of utilities in the study area. New demand on public services or utilities would be the same as discussed for Alternative 1. Alternative 5 would encroach on approximately 96 acres of an existing municipal facility (the Reason Farms Retention Basin property). The 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 would encroach upon 82.7 acres of the City of Roseville's Reason Farms Retention Basin property.

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.

Comparison of Alternatives

None of the build alternatives would disrupt access to public services and utilities, although temporary and/or permanent relocation of utilities could be required as a result of any of the build alternatives. None of the alternatives would result in new demand on public services and utilities, nor would they result in exceedance of demand. None of the alternatives would conflict with established recreational or educational uses of the area, cause substantial deterioration of local park or recreation facilities through increased use, substantially affect provision of public services or utilities, or conflict with local adopted goals and policies.

All build alternatives would affect the Reason Farms Retention Basin property, with impacts ranging from 96.0 acres (Alternative 5) to 108.9 acres (Alternative 2) (see Table 4.5-1). This is not expected to result in any impacts to the functioning of the basin because the City of Roseville is planning for and accommodating the Parkway alignments in its planning process (as discussed in Section 4.1, Land Use).

It is anticipated that any additional stormwater runoff from the proposed Parkway would be accommodated by the planned City of Roseville's Reason Farms Retention Basin, which includes additional capacity for stormwater runoff storage that may be available as mitigation credits. The City of Roseville has not yet finalized its master plan for this multiuse facility but reflects the Placer Parkway concept in its conceptual master plan diagram. Section 4.12, Water Quality, provides further detail and analysis on stormwater runoff. No other public services or utilities, such as emergency and protective services, schools, libraries, municipal facilities, or parks and recreation, would be directly impacted by any of the alignment alternatives.

Table 4.5-1
Summary of Impacts on Public Services and Utilities

Potential Effect on Public Services and Utilities	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Total number of acres of municipal facilities impacted	108.5	109	100	100	96

Western Segment. In the Western Segment, all corridor 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 affect any public services or utilities. Alternatives 4 and 5, which terminate at Sankey Road, would not affect any public services or utilities.

Central Segment. All five build alternatives would affect 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 impacts would not vary by corridor alignment alternative in this segment.

4.5.3.4 Secondary and Indirect Impacts

The 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 and indirect impacts from the Parkway under the No-Build Alternative.

Alternatives 1 Through 5

Placer Parkway would cause both beneficial and adverse impacts to the public services and utilities in the study area. Placer Parkway could improve access, reduce travel times, and reduce traffic congestion on local roadways used by current and future residents. In addition, response times for protective and emergency services could improve due to the reduction in travel times and congestion.

The Parkway could result in increased congestion on some roadway segments (see Section 4.8, Traffic and Transportation), which could adversely affect travel in these areas. Potential secondary and indirect impacts associated with growth are discussed in Section 6.1, Growth.

4.5.3.5 Cumulative Impacts

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 and indirect impacts from the Parkway under the No-Build Alternative.

During construction, the ability of emergency service providers to meet response time goals could be affected temporarily by traffic delays on arterials that feed into the Parkway. PCTPA would ensure coordination with emergency services prior to and during construction and by providing adequate access for emergency services during both construction and operation. Final design will include features to allow emergency turnaround routes along the Parkway for emergency providers, and maintenance of local access will ensure that emergency providers still will be able to cross over the Parkway in localized areas.

Alternatives 1 Through 5

As none of the Parkway build alternatives would directly affect any existing public services or utilities such as protective and emergency services, schools, libraries, municipal facilities, and parks and recreational facilities, the Parkway would not make a substantial contribution to potential cumulative impacts on these facilities.

It is possible that the Parkway could temporarily or permanently disrupt public services and/or utilities in the study area during construction and operation. As such, public services and/or utilities would be relocated or reconstructed in accordance with development existing in the vicinity at the time; it is not anticipated that the Parkway would make a substantial contribution to cumulative impacts on such public services and utilities.

The Parkway would potentially affect the City of Roseville Reason Farms Retention Basin, but it does not interfere with its detention capabilities. The city is accommodating the Parkway in its current Master Plan process by reserving a 1,000-foot-wide area for the future Parkway corridor alignment.

4.5.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION STRATEGIES

4.5.4.1 Tier 1 – Avoidance/Minimization Strategies

- During the development of alternatives, in order to reduce environmental impacts, avoidance alternatives were also considered (see Section 2.5.4). These alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

- The selection of a corridor for the Parkway during the Tier 1 process will contribute to the avoidance and/or minimization of impacts on public services and utilities. The confirmation of the general alignment of the Parkway will inform other developments and plans in the general vicinity, which should then be able to avoid locating recreational or other public services and utilities resources where they might conflict with the Parkway.

- During the Tier 1 environmental review process, PCTPA worked with local jurisdictions to plan for the Parkway and proposed development in order to reduce the likelihood of environmental impacts, including land use incompatibilities. Results of this coordination included modification and elimination of alternatives and refinement of corridor alignments. PCTPA also coordinated 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 coordinated planning efforts with the City of Roseville to ensure that the project's conceptual design is compatible with recreation and other facilities being planned for the Reason Farms Retention Basin.

4.5.4.2 Tier 2 – Consultation/Coordination

- PCPTA will continue to coordinate with local jurisdictions in Tier 2 to reduce the likelihood of impacts on public service and utilities. Coordination will include development of specific project design details for the Parkway and other projects to minimize impacts, such as the location of the roadway footprint within the adopted corridor, and cooperation between PCTPA and local jurisdictions to ensure other planned facilities are located outside of the Parkway corridor and/or no-development buffer zone, where impacts to such facilities may be minimized.

4.5.4.3 Tier 2 – Mitigation Commitments

- To maintain existing and future local roadway connectivity (for emergency access, farming operations and community access), which will contribute to avoidance of public service impacts, over-crossings will be constructed, as appropriate, to convey traffic over the Parkway. These over-crossings will not connect to the Parkway.

4.5.4.4 Tier 2 – Mitigation Considerations

- 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 time period available for planning minimization strategies, impacts to the facility are likely to be minor.

4.5.5 TIER 1 AND TIER 2 STUDIES

- Analyses completed in Tier 1
  - Parks and recreational facilities.
  - Water supply and wastewater treatment.
  - Solid waste.
  - Schools and libraries.
  - Protective and emergency services.
- Analyses begun in Tier 1 which will be undertaken in greater detail in Tier 2
  - Coordination of project planning with maintenance operations and protective and emergency service providers will be focused on addressing service provider concerns and minimizing any potential to adversely affect safety or response times. PCTPA will continue to work with providers during future Parkway design phases, taking such measures as incorporating median crossings for use by emergency vehicles only, if necessary, to protect or enhance service response times.

- Coordination of planning efforts with the City of Roseville to ensure that the Parkway design is compatible with recreation and other facilities being planned for the Reason Farms Retention Basin.

- Additional analysis of the potential effects of the Parkway on the WPWMA Landfill.

- The analysis of utilities and municipal facilities will include identification of the location of utilities such as power lines, water lines, sewer pipes and canals, or drainage ditches that could be affected by the Parkway (e.g., require temporary disruption or permanent relocation). (If such work is required during construction, it would be coordinated with the agencies responsible for managing the affected utilities or services.)

4.6 VISUAL/AESTHETICS

This section presents a Tier 1/Program level assessment of potential visual and aesthetic impacts associated with the Parkway. Additional information on visual and aesthetics resources are provided in the Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR) Visual Impact Assessment (URS, 2007h), which is available at the locations identified in the Executive Summary, including the Placer County Transportation Planning Agency (PCTPA) website.

4.6.1 REGULATORY SETTING

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require consideration of impacts to visual and aesthetic resources. A general discussion of NEPA and CEQA requirements is provided in Chapter 1 of this Tier 1 EIS/EIR. In additions, other types of legislation influence visual and aesthetic resources. Relevant laws and guidelines are described below.

FHWA Visual Impact Assessment for Highway Projects

NEPA requires "... the use [of] all practical means ... to assure ... esthetically ... pleasing surroundings." The Federal Highway Administration (FHWA) added Title 23 of the U.S. Code to reflect NEPA's directives. In order to regulate aesthetic adherence to Title 23, FHWA developed the Visual Impact Assessment for Highway Projects (VIAHP) manual (1981). The Visual Impact Assessment for this Tier 1 EIS/EIR (URS, 2007h) was prepared on the basis of the methodology set out in this manual.

4.6.1.1 General Plans and Policies

General Plans for Sutter County, Placer County, Sacramento County, the City of Roseville, the City of Rocklin, and the City of Lincoln include guidelines relevant to visual resources. Table 4.6-1 summarizes relevant visual resource guidelines contained within these plans.

4.6.2 AFFECTED ENVIRONMENT

The study area largely consists of flat agricultural lands, 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. 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 & Associates and North Fork Associates, 2007). Some industrial development has occurred 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 study area.

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 that forms a spatially enclosed unit at ground level; it may include more than one landscape type. There are three landscape units in the study area, each having its own distinct landscape character. These are the Western, Central, and Eastern Segment Landscape Units (Figure 2-1, Project Alternatives), which approximately correspond to the three segments of the study area. These are described further in Section 4.6.2.2.

4.6.2.1 Existing Typical Viewsheds

For the purposes of this report, the viewshed includes views to and from the corridor alignment alternatives, discussed by landscape unit. The project viewshed consists of a wide variety of foreground,

Table 4.6-1
Summary of General Plan Policies and Goals (P&Gs)

Document	P&Gs	Requirements
Sutter County General Plan	Land Use Visual & Scenic Routes *Goal 1.H*	To preserve and protect the visual and scenic resources of the area.
	Land Use Visual & 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 *Goal 1.K*	To protect the visual and scenic resources of Placer County as important quality-of-life amenities for County residents and a principal asset in the promotion of recreation and tourism.
	Land Use Visual and Scenic Resources *Policy 1.K.1*	The County shall require that new development in scenic areas (e.g., river canyons, lake watersheds, scenic highway corridors, ridgelines, and steep slopes) is planned and designed in a manner which employs design, construction, and maintenance techniques that: a. Avoid locating structures along ridgelines and steep slopes; b. Incorporate design and screening measures to minimize the visibility of structures and graded areas; c. Maintain the character and visual quality of the area.
	Land Use Visual and Scenic Resources *Policy 1.K.2*	The County shall require that new development in scenic areas be designed to utilize natural landforms and vegetation for screening structures, access roads, building foundations, and cut and fill slopes.
	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.
	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.

Table 4.6-1
Summary of General Plan Policies and Goals (P&Gs) (Continued)

Document	P&Gs	Requirements
Placer County General Plan (continued)	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, underground 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.
	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 that would remain in agricultural or related and compatible open space use for the plan period. The location and extent of this category are determined by the presence of scenic, aesthetic, wildlife, or other resources that require special protection and that 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 that 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.

Table 4.6-1
Summary of General Plan Policies and Goals (P&Gs) (Continued)

Document	P&Gs	Requirements
County of Sacramento General Plan (continued)	Land Use Element Visual Quality *LU-24*	Require overhead light fixtures to be shaded and directed away from adjacent residential areas.
	Land Use Element Visual Quality *LU-25*	Require exterior lighting to be low-intensity and used only 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 and 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.
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.

Table 4.6-1
Summary of General Plan Policies and Goals (P&Gs) (Continued)

Document	P&Gs	Requirements
City of Lincoln General Plan (continued)	Land Use Open Space Views *Policy LU-12.3*	To enhance views of hillsides, open space, and other distinctive views within the community, proposed 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 toward 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.

middleground, and background views. Foreground and middleground viewsheds generally follow the study area boundary. Sunset Boulevard West/Howsley Road delineates the majority of the north study area boundary. Background views of the surrounding landscapes (including, but not limited to, the snowy peaks of the Sierra Nevada Mountains, the Sutter Buttes, and the Inner Coastal Range) are found throughout all viewshed landscape units.

Based on assessment of viewer sensitivity and viewer exposure and the extent of the viewshed, 22 viewsheds were identified in the study area (Figure 4.6-1). 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, and the *duration* of the view. Duration of view is influenced by the location of the viewer. A viewer traveling in a vehicle experiences a limited duration of a particular view, whereas a resident may have a view that is constant. Viewer exposure also is affected by features such as topography and 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 to avoid or minimize adverse visual impacts. Viewer sensitivity is defined as viewer *activity*, *awareness*, local *values*, and cultural *significance* of the visual resource. Understanding viewers' concern for scenic quality and viewers' response to change of the visual resources that make up the view helps 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. The sensitivities of different types of viewers within the foreground, middleground, and background of the study area vary depending on viewer activity and awareness of and familiarity with the surrounding environment.

Additional details of the comparative sensitivity and exposure of the various types of viewers in the study area listed below are provided in the Visual Impact Assessment for this Tier 1 EIS/EIR. 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). The flat topography of the area lends itself to broad, expansive views that include all three distance zones.

Additional details of these 22 representative Landscape Unit Viewshed Locations, along with photographs and existing visual quality ratings for each view, are provided in the Visual Impact Assessment for the Tier 1 EIS/EIR (URS, 2007h).

4.6.2.2 Visual Character

FHWA methodology defines visual resources in terms of visual character and visual quality. Visual character is descriptive and nonevaluative. 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.

Visual Quality is described in Section 4.6.2.3.

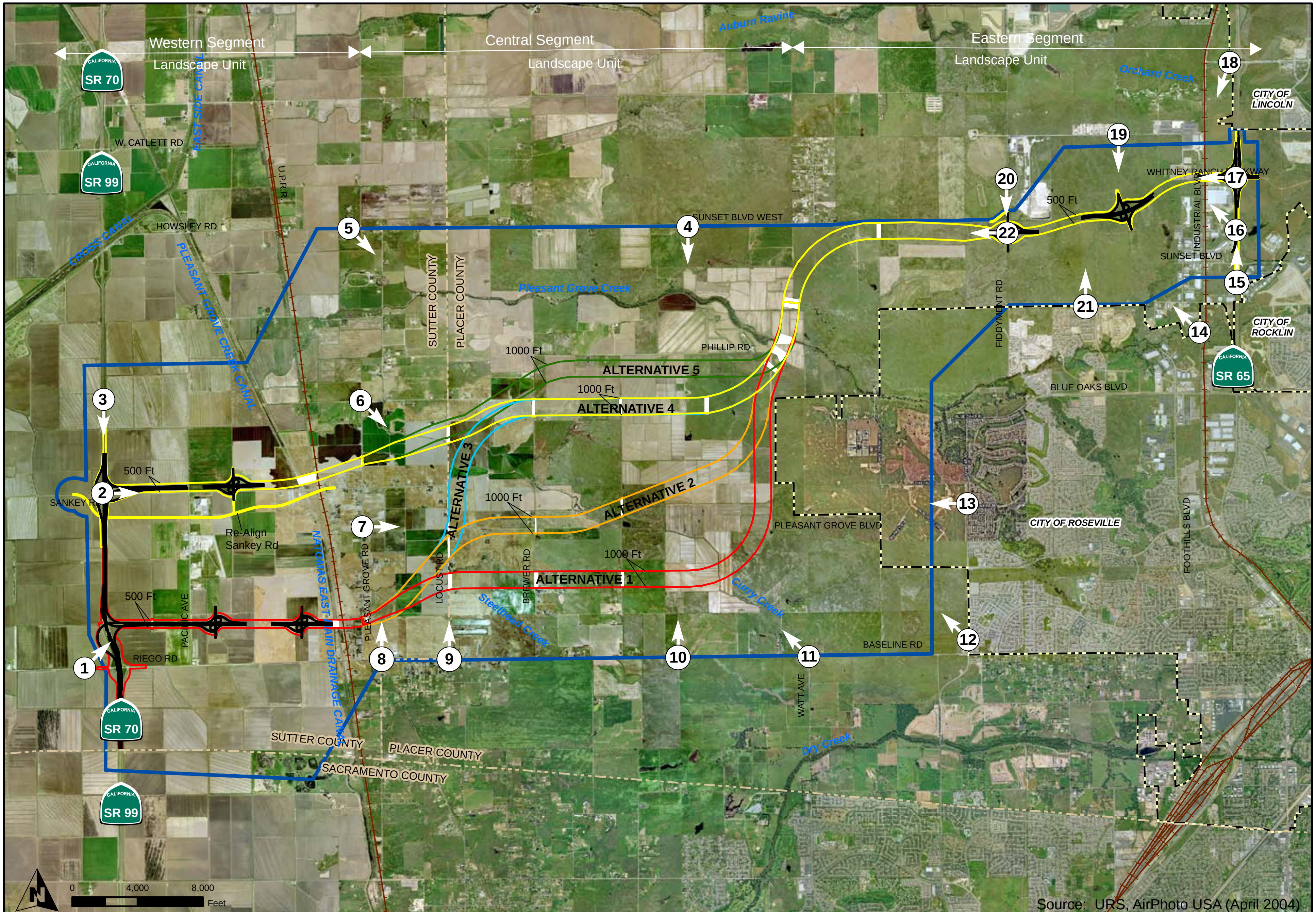
Western Segment Landscape Unit

The visual character for the Western Segment Landscape Unit generally is described as agricultural in nature, with minimal influence from development (Figure 4.6-2). 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). State Route (SR) 70/99 runs north to south along the western edge of the segment, while major east-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-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.

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 Mountains 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 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.

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 (Figure 4.6-3). The Central Segment Landscape Unit encompasses parts of unincorporated Sutter and Placer 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 Riego/Baseline Road, Sankey Road, and Pleasant Grove Road, which 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



Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary
ID Viewshed Location With View Direction
Interchanges
Overcrossing

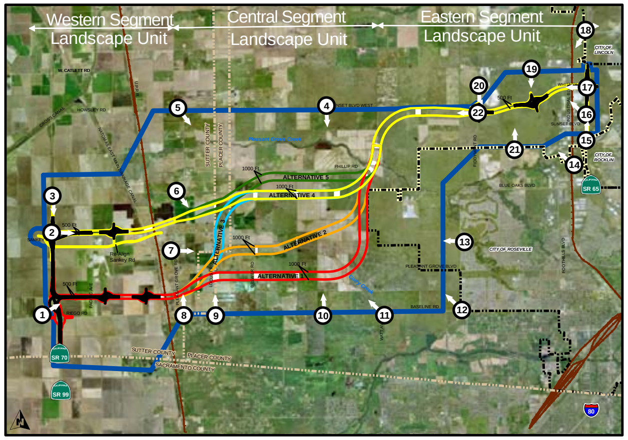
PLACER PARKWAY

Tier 1 EIS/EIR

Viewshed Locations For Western, Central and Eastern Segment Landscape Units

Figure 4.6-1

June 2007



Western Segment Landscape Unit - Northbound traveler views on SR-70/99 @ Sankey Rd. looking east toward project.
County of Sutter, CA (See 2 on map inset)

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

Western Segment Landscape Unit

Figure 4.6-2

June 2007

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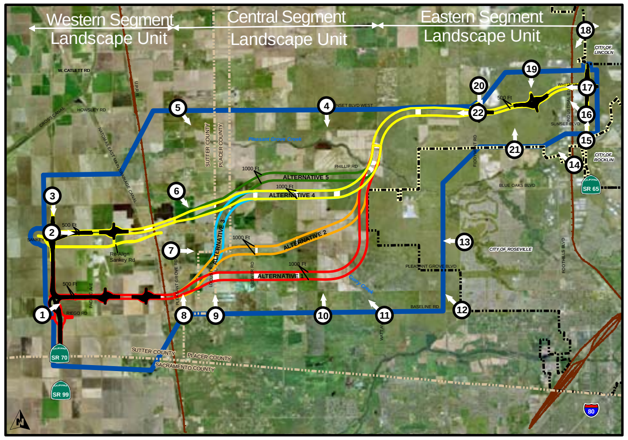

Central Segment Landscape Unit - Eastbound traveler on Sunset Blvd. West between Pettigrew Rd. and Dinky Ln. looking south toward proposed project. County of Placer, CA (See 4 on map inset)

Source: URS, Google Earth (April 2006)

Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Study Area Boundary
County Boundary
City Boundary
ID Viewshed With View Direction
Interchanges
Overcrossing

PLACER PARKWAY

Tier 1 EIS/EIR

Central Segment Landscape Unit

Figure 4.6-3

June 2007

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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 are similar to those from the Western Segment. 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 near the rural residential homes close to the intersection of Baseline and Pleasant Grove Roads.

Eastern Segment Landscape Unit

The Eastern Segment Landscape Unit is characterized as a varied landscape that includes agricultural land, areas of dense residential development, and areas developed as major roadways (Figure 4.6-4). 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 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, and Sacramento Municipal Utilities District/Western Area Power Authority 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 are similar to those from the Western Segment. 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.

4.6.2.3 Visual Quality

In addition to inventorying visual character for each of the landscape units, existing visual quality was rated. The FHWA VIAHP 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. Additional details of these criteria are provided in the Visual Impact Assessment for this Tier 1 EIS/EIR (URS, 2007h). As the evaluation of visual character and quality is highly subjective, FHWA Landscape Unit Checklist/Visual Inventory and Analysis worksheets are used as an assessment tool. Completed worksheets used for the visual impact analysis are included in the Visual Impact Assessment for this Tier 1 EIS/EIR (URS, 2007h). Table 4.6-2 indicates ratings for the three landscape units in relation to the FHWA's three criteria.

Table 4.6-2
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 existing areas of High visual quality in the study area.

Table 4.6-3 identifies existing visual character/quality and viewer sensitivity/exposure by landscape unit in the study area. Additional details of viewer sensitivity and exposure are provided in Section 4.6.2.1.

Table 4.6-3
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

4.6.2.4 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 proposed project lighting is not available; therefore, analysis of impacts from proposed lighting is not included in this assessment.

4.6.3 IMPACT ANALYSIS

4.6.3.1 Methodology for Impact Evaluation

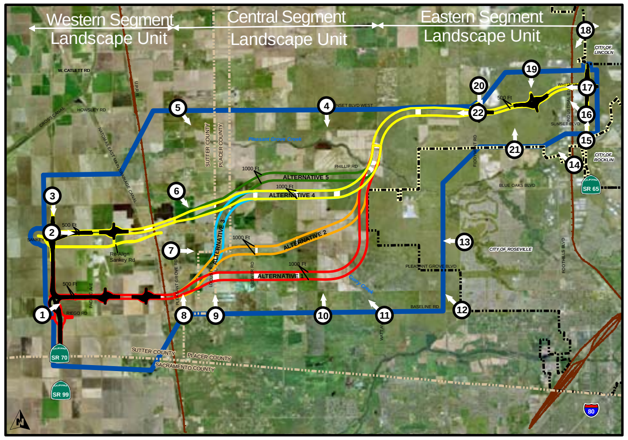
The analysis of visual impacts for this Tier 1 EIS/EIR was based on the methodology set out in the VIAHP Manual. This follows four principal steps:

1. Define the affected environment, including project setting and viewshed (see Section 4.6.2);
2. Identify key views for visual assessment (see Section 4.6.2 and Visual Impact Assessment);
3. Assess the visual impacts of project, including resource change and viewer response; and
4. Propose methods to mitigate adverse visual impacts.

4.6.3.2 Evaluation Criteria

VIAHP guidelines define "visual impact" as follows: resource change + viewer response = visual impact. To evaluate *resource change*, the presence, character, and quality of visual resources in the study area must be determined. 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 affected by a project. Therefore, a Visual Impact Assessment analyzes impacts of a future project on existing viewers. Additional details of the VIAHP methodology are provided in the Visual Impact Assessment for this Tier 1 EIS/EIR (URS, 2007h).

FHWA has defined the following measures of visual impact levels:



Eastern Segment Landscape Unit - Westbound traveler on Whitney Ranch Parkway & SR-65 looking west toward proposed project.
County of Placer, CA (See 17 on map inset)

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	Eastern Segment Landscape Unit	*Figure 4.6-4*
		June 2007

- **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 five 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 five 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.

4.6.3.3 Direct Impacts

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), 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.

Alternative 1 – the Red Alternative

Western Segment 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 increase the visual diversity of the study area; a process already began with the implementation of the West Roseville Specific Plan (WRSP), which has introduced grading and other preconstruction improvements to the area. Landscaping and other mitigation strategies are identified to help soften the change in character and are discussed further in Section 4.6.4.

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 a freeway-to-freeway interchange, bridges, and local street over crossings. 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 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 4.6-4).

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 4.6-4).

Table 4.6-4
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

Viewer Sensitivity. Under Alternative 1, viewer sensitivity to the Western Segment Landscape Unit has been classified as Moderate/High because 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 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 used 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 4.6-3) to Moderate/High Sensitivity (Table 4.6-4).

Viewer Exposure. 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 with views of the alternative is characterized as Low for the Western Segment Landscape Unit. However, the frequency of exposure for these residences would be High. Although overcrossings 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 4.6-3) to Moderate/High (Table 4.6-4).

Central Segment Landscape Unit

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 preconstruction 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 Section 4.6.4). Even with the inclusion of the Parkway, the Central Segment Landscape Unit would remain agricultural in nature, but the additional urban pattern elements would 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 used for the Parkway. Changes to the visual character with the Project include the introduction of new highly visible structures, including a bridge over Pleasant Grove Creek and local street overcrossings. 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 would create changes in the form, line, color, and textures introduced by the Parkway that would create changes in scale, continuity, diversity, and dominance. However, under Alternative 1, the character of the Central Segment Landscape Unit would remain agricultural with an 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 not change. 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) already has 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. Manmade 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 manmade, 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.

Viewer Sensitivity. Under Alternative 1, viewer sensitivity to the Central Segment Landscape Unit has been classified as Moderate/High because the viewer's concern for scenic quality and change to existing visual resources is anticipated to be High. Currently most viewers within the study area are commuters using existing roadways; therefore, existing viewer sensitivity to Alternative 1 would be Low. Viewer sensitivity may change with the introduction of proposed structures associated with the alternative, such as the overcrossings within this landscape unit. Although viewer focus probably would be on the alternative itself, new structures would create visual interest and heighten traveler viewer sensitivity of the Parkway. 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 (Table 4.6-3) to Moderate/High (Table 4.6-4).

Viewer Exposure. 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 experience relatively high exposure to these views. Overcrossings and interchanges would be visible to a variety of nearby viewers and travelers, and existing flat topography would allow direct views of the roadway for viewsheds in 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.

Eastern Segment Landscape Unit

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 Rocklin, Roseville, and Lincoln within Placer County. 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, thus 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 Section 4.6.4).

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 1 corridor. Currently there are few aboveground structures, overcrossings, 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 that would create 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 not change. The addition of this alternative would contribute further to the lack of integrity of the landscape, thereby 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.

Viewer Sensitivity. 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 overcrossings. Although viewer focus probably would 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 would view this 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. 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 with views of Alternative 1 is 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 overcrossings 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.

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 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 4.6-4 presents the summary of potential visual impacts by Segment Landscape Unit with Alternative 1 in place using FHWA visual impact methodology.

Based on a Tier 1 analysis, Alternative 1 is consistent with local General Plan policies and goals. This alternative would provide a buffer between the roadway that eventually would be constructed and adjacent uses, include context-appropriate landscaping concepts, and be compatible with planned trail systems. Roadway design details have not been developed for this Tier 1 EIS/EIR.

Alternative 2 – the Orange Alternative

Western Segment Landscape Unit

The resource changes and viewer responses in the Western Segment Landscape Unit of Alternative 2 would be the same as with Alternative 1; therefore, the potential impacts for this segment landscape unit are the same as discussed for Alternative 1.

Central Segment Landscape Unit

The potential impacts for Alternative 2 through the Central Segment are virtually the same as described for Alternative 1. The following paragraphs focus on impacts that differ between these two alternatives.

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, would cross 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 would be farther with Alternative 2 than with Alternative 1; hence, urban influences with this alternative would 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 would continue to be characterized as agricultural with an urban influence.

Visual Quality. The Visual Quality within the Central Segment Landscape Unit of Alternative 2 would be similar to that for Alternative 1; therefore, the potential impacts for this segment landscape unit are the same as discussed for Alternative 1. The main difference between these two alternatives is that the additional creek crossings associated with Alternative 2 probably would degrade the existing scenic quality more than under Alternative 1. Although the visual quality for both alternatives would remain unchanged (both being classified as having Moderate to Low scenic visual quality), Alternative 2 would likely have a lower visual quality rating than Alternative 1.

Viewer Sensitivity. The Viewer Sensitivity for Alternative 2 would be similar to that for Alternative 1 in the Central Segment Landscape Unit. The key difference is that Alternative 2 would be 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 2 within the Central Segment Landscape Unit than for 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 Sensitivity and Exposure for Alternative 2 would be similar to that for Alternative 1 in the Central Segment Landscape Unit. The key difference is that Alternative 2 would be 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. Viewer exposure for the Central Segment Landscape Unit with Alternative 1 would remain similar to existing conditions, categorized as Moderate/High.

Eastern Segment Landscape Unit

The resource changes and viewer responses in the Eastern Segment Landscape Unit of Alternative 2 would be the same as for Alternative 1; therefore, the potential impacts for this segment landscape unit are the same as discussed for Alternative 1.

Summary of Potential Visual Impacts

Potential visual impacts with Alternative 2 would be Moderate/High, as defined by FHWA criteria. This conclusion was 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 4.6-5 presents the summary of potential visual impacts, by landscape unit, with Alternative 2 using FHWA visual impact methodology.

Table 4.6-5
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

With respect to consistency with local General Plan policies and goals, Alternative 2 is similar to Alternative 1.

Alternative 3 – the Blue Alternative

Western Segment Landscape Unit

The resource changes and viewer responses in the Western Segment Landscape Unit of Alternative 3 would be the same as described for Alternative 1; therefore, the potential impacts for this segment landscape unit are the same as discussed for Alternative 1.

Central Segment Landscape Unit

Although Alternative 3 would vary from Alternative 1 within the Central Segment Landscape Unit, the potential impacts for both are similar. Therefore, refer to the discussions for Alternative 1 wherever it is cited. The following paragraphs cover only the ways in which the impacts of Alternative 3 would differ from those of Alternative 1.

Viewer Sensitivity. The Viewer Sensitivity for Alternative 3 would be similar to that of Alternatives 1 and 2 in the Central Segment Landscape Unit. The key difference is that Alternative 3 would be 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 Alternatives 1 or 2 within the Central Segment Landscape Unit. Overall, viewer sensitivity for the Central Segment Landscape Unit with Alternative 3 would shift from Low/Moderate to Moderate.

Viewer Exposure. The Viewer Exposure for Alternative 3 would be similar to that for Alternatives 1 and 2 in the Central Segment Landscape Unit. The key difference is that Alternative 3 would be 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 Alternatives 1 or 2. Viewer exposure in the Central Segment Landscape Unit with Alternative 3 would shift from Low/Moderate to Moderate.

Eastern Segment Landscape Unit

The resource changes and viewer responses in the Eastern Segment Landscape Unit of Alternative 3 would be the same as for Alternative 1; therefore, the potential impacts for this segment landscape unit are the same as discussed for Alternative 1.

Summary of Potential Visual Impacts

Potential visual impacts from Alternative 3 would be Moderate/High, as defined by FHWA criteria. This conclusion was 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 4.6-6 illustrates the summary of potential visual impacts of Alternative 3 by landscape unit, using FHWA visual impact methodology.

With respect to consistency with local General Plan policies and goals, Alternative 3 would be similar to Alternative 1.

Table 4.6-6
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

Alternative 4 – the Yellow Alternative

Western Segment Landscape Unit

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 visual character (see Section 4.6.4). 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.

There are currently no aboveground roadway structures, overcrossings, or interchanges within the Western Segment Landscape Unit. Alternative 4 would change this existing visual character with the addition of the roadway and associated features (most predominantly the freeway-to-freeway interchange at Sankey Road). This would include the 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 environment would allow for vast unimpeded panoramic views of the area. The visual 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 that would create changes in scale, continuity, diversity, and dominance, the character of the Western Segment Landscape Unit would shift from Agricultural Dominant to Agricultural/Urban 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 not change. 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.

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; 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 heighten traveler viewer sensitivity of the Parkway. Heightened viewer sensitivity would also occur as agricultural lands are used 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. After Sankey Road is converted and realigned, the exposure to nearby viewers would change dramatically. Alternative 4 would add vehicular capacity to the study area, thereby adding viewers from and to Alternative 4. In addition, Alternative 4 potentially would 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 would be relatively high. The number of residences with views of the Alternative 4 alignment would be low for the Western Segment Landscape Unit. Although overcrossings and interchanges would be visible from a variety of nearby residential viewers and travelers, the existing flat topography would minimize 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.

Central Segment Landscape Unit

Although Alternative 4 would vary from Alternative 1 within the Central Segment Landscape Unit, the potential impacts for both are similar. Therefore, refer to the discussions for Alternative 1 wherever it is cited. The following discussions cover only the ways in which the impacts for Alternative 4 would differ from those for Alternative 1.

Visual Character. The Visual Character within the Central Segment Landscape Unit of Alternative 4 would be 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 then, 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 would be 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 then, potential impacts for Alternative 4 within the Central Segment Landscape Unit are considered the same as discussed for Alternative 1.

Viewer Sensitivity. The Viewer Sensitivity for Alternative 4 would be similar to that for Alternative 1 in the Central Segment Landscape Unit. The key difference is that Alternative 4 would be 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 would shift from Low/Moderate to Moderate.

Viewer Exposure. The Viewer Exposure for Alternative 4 would be similar to that for Alternative 1 in the Central Segment Landscape Unit. The key difference is that Alternative 4 would be 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 would remain similar to existing conditions, which are categorized at Moderate/High.

Eastern Segment Landscape Unit

The resource changes and viewer responses in the Eastern Segment Landscape Unit of Alternative 4 would be the same as that for Alternative 1; therefore, the potential impacts for this landscape unit are the same as discussed for Alternative 1.

Summary of Potential Visual Impacts

Potential visual impacts of Alternative 4 would be Moderate, as defined by FHWA criteria. This conclusion was reached 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 4.6-7 presents the summary of potential visual impacts by Landscape Unit with Alternative 4, using FHWA visual impact methodology.

Potential impacts of Alternative 4 are similar to Alternative 1. With respect to consistency with local General Plan policies and goals, Alternative 4 would be similar to Alternative 1.

Table 4.6-7
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

Alternative 5 – the Green Alternative

Alternative 5 – Western Segment Landscape Unit

The resource changes and viewer responses in the Western Segment Landscape Unit of Alternative 5 would be the same as for Alternative 4; therefore, the potential impacts for this segment landscape unit are the same as discussed for Alternative 4.

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 would be the same for both alternatives; therefore, the potential impacts from Alternative 5 within the Central Segment Landscape Unit are the same as discussed for Alternative 4.

Alternative 5 – Eastern Segment Landscape Unit

The resource changes and viewer responses in the Eastern Segment Landscape Unit of Alternative 4 would be the same as for Alternative 1; therefore, the potential impacts for this segment landscape unit are the same as discussed for Alternative 1.

Summary of Potential Visual Impacts

Potential visual impacts with Alternative 5 would be Moderate, as defined by FHWA criteria. This conclusion was reached 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 4.6-8 presents the summary of potential visual impacts by landscape unit with Alternative 5, using FHWA visual impact methodology.

The potential impacts of Alternative 5 are similar to those of Alternative 1. With respect to consistency with local General Plan policies and goals, Alternative 5 would be similar to Alternative 1.

Table 4.6-8
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

Comparison of Alternatives

Potential impacts of the five build alternatives by segment landscape unit are summarized in Table 4.6-9.

Table 4.6-9
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	Low/ Moderate	Moderate/High	Moderate/High
	Central	Agricultural with Urban Influence	Moderate	Moderate/High	Moderate
	Eastern	Agricultural/Urban Co-Dominant	Low/ Moderate	Moderate/High	Moderate/High
Alternative 2	Western	Agricultural/Urban Co-Dominant	Low/ Moderate	Moderate/High	Moderate/High
	Central	Agricultural with Urban Influence	Moderate	Moderate	Moderate
	Eastern	Agricultural/Urban Co-Dominant	Low/ Moderate	Moderate/High	Moderate/High
Alternative 3	Western	Agricultural/Urban Co-Dominant	Low/ Moderate	Moderate/High	Moderate/High
	Central	Agricultural with Urban Influence	Moderate	Moderate	Moderate
	Eastern	Agricultural/Urban Co-Dominant	Low/ Moderate	Moderate/High	Moderate/High

Table 4.6-9
Comparison of Aesthetic Impacts with Alternatives in Place (continued)

Alternative	Segment Landscape Unit	Visual Character	Visual Quality	Viewer Sensitivity	Viewer Exposure
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	Low/ Moderate	Moderate/High	Moderate/High
Alternative 5	Western	Agricultural/Urban Co-Dominant	Low/ Moderate	Moderate	Moderate/High
	Central	Agricultural with Urban Influence	Moderate	Moderate	Moderate
	Eastern	Agricultural/Urban Co-Dominant	Low/ Moderate	Moderate/High	Moderate/High

Table 4.6-10 presents a summary and ranking of the five build alternatives. The No-Build Alternative is not shown on Table 4.6-10 because no impacts would be associated with this alternative. A ranking of 1 indicates the least potential for aesthetic impacts among the five build alternatives, as rated by FHWA criteria.

Table 4.6-10
Summary and Ranking of Alternatives by Aesthetic Impact Rating

Alternative	Visual Character[a]	Visual Quality[a]	Viewer Sensitivity[a]	Viewer Exposure[a]	Potential Level of Impact from Build Alternative	Impact Ranking (lowest to highest)
Alternative 4	Moderate/ High	Low/ Moderate	Moderate/ High	Moderate	**Moderate**	1
Alternative 5	Moderate/ High	Low/ Moderate	Moderate/ High	Moderate	**Moderate**	1
Alternative 3	Moderate	Low/ Moderate	Moderate/ High	Moderate	**Moderate/ High**	3
Alternative 2	Moderate	Low/Moderate	High	Moderate	**Moderate/ High**	5
Alternative 1	Moderate	Low/Moderate	High	Moderate	**Moderate/ High**	5

Notes:

1 = least potential impacts and 5 = greatest potential impacts
[a] With build alternative in place

Alternatives 4 and 5 would have potentially Moderate impacts, based on FHWA visual impact criteria. Alternative 3 would have more impacts than Alternatives 4 and 5 and would be considered Moderate/High using FHWA visual impact criteria. Alternatives 1 and 2 would have the most visual impacts of all alternatives, with potentially Moderate/High impacts using FHWA visual impact criteria.

4.6.3.4 Secondary and Indirect Impacts

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), land for the Parkway would not be acquired and the Parkway would not be constructed. There would be no secondary or indirect impacts on visual resources under the No-Build Alternative.

Build Alternatives

Direct visual impacts associated with the Parkway build alternatives could result in secondary and indirect impacts on visual resources in the study area. Potential secondary and indirect impacts associated with growth are discussed in Section 6.1, Growth.

Placer Parkway would lead to 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 change 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 consist 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, manmade/urban structures to the area. This would increase the urban influences in the area, consequently replacing natural features and elements with increased areas of pavement, buildings, and other urban elements. In addition, the positioning of Alternatives 1 and 2 would be closer 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.

4.6.3.5 Cumulative Impacts

For this cumulative analysis, future planned and proposed development (see Figure 4.1-4) is considered to take into account the level at which viewers would be exposed to and potentially affected by the Parkway in combination with projects planned for the study area in subsequent years.

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), land for the Parkway would not be acquired and the Parkway would not be constructed. There would not be any cumulative impacts on visual resources under the No-Build Alternative.

Alternative 1 – the Red Alternative

Western Segment Landscape Unit – Planned/Proposed Development

With the addition of the Sutter Pointe Specific Plan (SPSP) (in full build-out), there would be an increase in potential viewers of Alternative 1 in the Western Segment Landscape Unit. 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 the SPSP also would obscure/screen views (of and from the proposed Alternative 1) of many potential viewers. Although Placer Parkway would change the visual character of the region, it may, when combined with the visual effect of the SPSP have a reduced cumulative impact compared to direct impacts because 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 effect of the SPSP, there would be a cumulative impact to the existing visual resources. Placer Parkway would contribute to this cumulative impact.

Central Segment Landscape Unit – Planned/Proposed Development

Planned/proposed development in the Central Segment Landscape Unit 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 cumulative visual impact.

Alternative 1 would be located within the proposed Curry Creek Community Plan area, which is on land owned by AKT Development, as well as within the proposed Regional University Specific Plan (RUSP) area, and the City of Roseville Retention Basin. This alternative would be located adjacent to the western boundary of the Sierra Vista Specific Plan (SVSP) area (Figure 1-15). Visual impacts would be High (as defined by FHWA criteria) for Alternative 1 within the Central Segment Landscape Unit. For this 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 reached based on analyzing the changes to the resource area (reviewing potential changes to visual character and visual quality) and 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 Alternative 1 is diminished yet still substantial due to the increase in number of potential viewers. Under current 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 prominent because it would be more similar to the surrounding environment. Alternative 1 would contribute to this cumulative impact.

Eastern Segment Landscape Unit – Planned/Proposed Development

Like the Central Segment Landscape Unit, the Eastern Segment would see substantial growth if the multiple planned/proposed projects identified for this area occur. The following proposed development projects (Brookfield, SVSP, Creekview Specific Plan, Placer Ranch Specific Plan) fall within the Eastern 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 expand the boundaries of Roseville westward.

Within the Eastern Segment Landscape Unit, visual impacts from Alternative 1 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 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. Alternative 1 would contribute to this cumulative impact.

Alternative 2 – the Orange Alternative

Western Segment Landscape Unit – Planned/Proposed Development

The resource changes and viewer responses in the Western Segment Landscape Unit of Alternative 2 would be the same as for Alternative 1; therefore, the potential cumulative impacts for this segment landscape unit would be the same as discussed for Alternative 1.

Central Segment Landscape Unit – Planned/Proposed Development

Although Alternative 1 would vary from Alternative 2 within the Central Segment Landscape Unit, the potential cumulative impacts for both are similar because they would travel through the same planned/proposed development areas. Because Alternative 2 would bisect the proposed RUSP, its contribution to cumulative visual impacts would be greater than under Alternative 1.

Eastern Segment Landscape Unit – Planned/Proposed Development

The resource changes and viewer responses in the Eastern Segment Landscape Unit of Alternative 2 would be the same as for Alternative 1; therefore, the potential cumulative impacts for this segment landscape unit are the same as discussed for Alternative 1.

Alternative 3 – the Blue Alternative

Western Segment Landscape Unit – Planned/Proposed Development

The resource changes and viewer responses in the Western Segment Landscape Unit of Alternative 3 would be the same as for Alternative 1. Therefore, the potential cumulative impacts for this segment landscape unit would be the same as discussed for Alternative 1.

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 substantial visual impacts. Within the Central Segment Landscape Unit, visual impacts of Alternative 3 would be Moderate, as defined by FHWA criteria. For the Central Segment, 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. This conclusion was 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). Alternative 3 would contribute to this cumulative impact.

Eastern Segment Landscape Unit – Planned/Proposed Development

The resource changes and viewer responses in the Eastern Segment Landscape Unit of Alternative 3 would be the same as for Alternative 1; therefore, the potential cumulative impacts for this segment landscape unit are the same as discussed for Alternative 1.

Alternative 4 – the Yellow Alternative

Western Segment Landscape Unit – Planned/Proposed Development

Within the Western Segment Landscape Unit, visual impacts under Alternative 4 would 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. This conclusion was 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 with Alternatives 1, 2, and 3, whose cumulative impacts are described above, the addition of the SPSP (in full build-out) would increase 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 the 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 less of an impact compared to direct impacts because it would more readily blend with the changing nature of the landscape that would be shifting from rural/agricultural to more urban/commercial. Alternative 4 would contribute to this cumulative impact.

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 RUSP development area would be just south of Alternative 4 and shift the aesthetic for much of the central area to more urban/residential. Within the Central Segment Landscape Unit, cumulative visual impacts with Alternative 4 would be substantial. 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. This conclusion was 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). Alternative 4 would contribute to this cumulative impact.

Eastern Segment Landscape Unit – Planned/Proposed Development

The resource changes and viewer responses in the Eastern Segment Landscape Unit of Alternative 4 would be 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.

Alternative 5 – the Green Alternative

Western Segment Landscape Unit – Planned/Proposed Development

The resource changes and viewer responses in the Western Segment Landscape Unit of Alternative 5 would be the same as those for Alternative 4; therefore, the potential cumulative impacts for this segment landscape unit are the same as discussed for Alternative 4.

Central Segment Landscape Unit – Planned/Proposed Development

The Central Segment Landscape Unit of Alternative 5 would be 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 generally are 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 to be preserved as an undeveloped area suitable for informal recreation.

Eastern Segment Landscape Unit – Planned/Proposed Development

The resource changes and viewer responses in the Eastern Segment Landscape Unit of Alternative 5 would be 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.

Summary of Cumulative Impacts on Visual Resources

Figure 1-15 shows 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. The extensive development, while bringing more potential viewers to the area, may actually diminish the visual impact of the Parkway because the Parkway would blend more readily 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.

All build alternatives in combination with the planned and proposed development in and near the study area would 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 the existing farming environment, with many more structures/roads versus open space. Essentially, the area will shift from rural to urban/suburban, which will result in a cumulative visual impact.

4.6.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

4.6.4.1 Tier 1 – Avoidance/Minimization Strategies

- During the alternatives screening process, efforts were made to avoid land use conversion impacts, which would also minimize visual impacts in the study area. Examples of such efforts included modification and/or elimination of PSR corridor alignment alternatives (see Section 2.5). Landscape concepts were identified in a collaborative effort, including biologists, landscape architects, and visual analysis experts to minimize visual effects of the Parkway.

- In order to reduce environmental impacts, including visual impacts, avoidance alternatives were also considered (see Section 2.5.4). These alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

- During development of the Tier 1 conceptual design of the Parkway, efforts were made to avoid visual impacts. These efforts included:

  – The restriction of access between Pleasant Grove Road and Fiddyment Road to avoid inducing urban growth in areas not designated for development in existing general plans and to maintain the rural character of western Placer County and south Sutter County.

  – The location of the Parkway within a no-development buffer zone (see Section 2.5) that would preserve open space and agricultural uses adjacent to the Parkway and limit future development in the buffer zone. The buffer zone would further the "parkway" concept by maintaining a visual open space concept and encouraging linkages to other open spaces along the corridor.

4.6.4.2 Tier 2 – Consultation/Coordination

- PCTPA will continue to coordinate with local jurisdictions in Tier 2 to reduce the likelihood of impacts on visual resources. Coordination will include development of specific project design details for the Parkway and other projects as described below, to minimize impacts and cooperation between PCTPA and local jurisdictions with respect to potential impacts on other planned facilities.

4.6.4.3 Tier 2 – Mitigation Commitments

- All visual mitigation strategies will be designed and implemented with the concurrence of the Caltrans District Landscape Architect, or as defined by FHWA.

- Parkway features and treatments will be designed to help complement the existing agricultural landscape within south Sutter and southwestern Placer counties where agricultural activities are projected to continue. In accordance with the FHWA and Caltrans requirements, the Caltrans District Landscape Architect will review all project features and treatments before project design completion.

- Landscaping concepts for Placer Parkway will respect the topography and vistas in the study area and complement the varying character of land adjacent to the Parkway corridor. Where wetlands adjoin the Parkway, designs shall use 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 Parkway, to be reviewed by the Caltrans District Landscape Architect (see the Visual Impact Assessment for this Tier 1 EIS/EIR for further details). Lighting elements will be approved for safety by Caltrans.

4.6.4.4 Tier 2 – Mitigation Considerations

- In order to ensure compatibility with future planning efforts, it is assumed that local jurisdictions would also review the Visual Impact Assessment (URS, 2007h) for this Tier 1 EIS/EIR.

- Design of lighting elements would 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).

4.6.5 TIER 1 AND TIER 2 STUDIES

- Analyses begun in Tier 1 which will be undertaken in greater detail in Tier 2

  – A Visual Impact Analysis including a project-specific evaluation of major design features.

  – The 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 use appropriate wetland species. This plan would use 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 proposed project, it is recommended that existing viewer conditions (e.g., existing population and travel counts) be updated, where appropriate, 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, and cultural significance of the area).

- Analyses that will begin in Tier 2

  – A project-specific evaluation of potential impacts associated with proposed Parkway lighting.

4.7 CULTURAL RESOURCES

This chapter presents the results of studies to identify and evaluate cultural resources within a defined Area of Potential Effects (APE) for Tier 1 of the proposed Placer Parkway, including archaeological (prehistoric and historic), historic (built environment), and paleontological resources. It is based on two technical reports, an Archaeological Survey Report (ASR) and a Historic Resources Evaluation Report (HRER), the results of which are summarized in a Historic Properties Survey Report (HPSR) (URS, 2007c).

4.7.1 REGULATORY SETTING

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require consideration of impacts to cultural resources. A general discussion of NEPA and CEQA requirements is provided in Chapter 1 of this Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR). In addition, other types of legislation influence cultural resources. Relevant laws and guidelines are described below.

4.7.1.1 Archaeological and Historic Resources

The Parkway could be constructed using federal funding and therefore may be subject to review under the January 2004 *Programmatic Agreement (PA) 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 (NHPA), as It Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 PA). The Section 106 PA governs the implementation of the Federal-aid highway program with regard to historic properties in California (36 CFR §800.14). A copy of the Section 106 PA is included as Appendix E of this EIS/EIR.

Federal Regulations

For built environment resources within the APE for the project, which includes resources that could be potentially affected by the project, the evaluation provides a limited inventory and evaluation of buildings, structures, and objects that appear to warrant further investigation as to their eligibility for the National Register of Historic Places (NRHP) under Criterion C or 3.[1] This methodology was agreed on by Caltrans, Office of Historic Preservation, and the South Placer Regional Transportation Authority in a project-specific PA (Placer Parkway PA). Under the terms of the PA, the built environment APE was subject to a field reconnaissance to identify buildings, structures, or objects that had the potential for eligibility under Criterion C of the NRHP; based on a visual examination of existing resources the field crews also identified those resources that might be considered under Criterion A and will require further evaluation during Tier 2. 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, as construction of the project is not expected to begin until 2020 or later, the 50-year age requirement for eligibility for the NRHP was conservatively extended to include any buildings, structures, or objects within the architectural APE that were constructed in or prior to 1975.

A property must have both significance and integrity to be considered eligible for listing on the NRHP. 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

[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; or represent a significant and distinguishable entity whose components may lack individual distinction.

considered ineligible. Integrity played a key factor in determining potential eligibility under Criterion C for this project.

The four evaluation criteria used to determine a resource's eligibility for the NRHP, in accordance with the regulations outlined in 36 CFR 800, are identified at 36 CFR 60.4. These evaluation criteria, listed below, are used to help determine what properties should be considered for protection from destruction or impairment resulting from project-related activities (36 CFR 60.2). The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- Resources that are associated with events that have made a significant contribution to the broad patterns of our history.
- Resources that are associated with the lives of persons significant in our past.
- Resources that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.
- Resources that have yielded, or may be likely to yield, information important in prehistory or history.

As the project is a proposed federal undertaking, Section 4(f) of the National Transportation Act, which deals with potential effects on historic properties as well as on a range of other resources, is applicable (see Appendix D). The evaluation of cultural resources also was prepared to assist the Federal Highway Administration (FHWA) in determining which alternative(s) might trigger the need for compliance with this Act.

State Regulations

In considering impact significance under CEQA, the significance of the resource itself must first be determined. At the state level, consideration of significance as "a unique archaeological resource" is measured by cultural resource provisions considered under Public Resources Code (PRC) Section 21083.2, CEQA Guidelines Sections 15064.5 and 15126.4, and the criteria regarding resource eligibility to the California Register of Historic Resources (CRHR). Generally under CEQA, a historical resource (these include built-environment historic and prehistoric archaeological resources) is considered significant if it meets the criteria for listing on the CRHR. A property that is eligible for the NRHP is also eligible for the CRHR.

The criteria for eligibility for the CRHR are very similar to those that qualify a property for the NRHP, which is the significance assessment tool used under the NHPA. The criteria for listing on the CRHR include resources that are associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; are associated with lives of persons important in our past; embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or have yielded, or may be likely to yield, information important in prehistory or history. If an archaeological site does not meet the criteria for inclusion on the CRHR but does meet the definition of a unique archaeological resource as outlined in the above-referenced PRC, it is entitled to special protection or attention under CEQA. The field reconnaissance team applied CRHR Criterion 3 in the same fashion as it applied NRHP Criterion A, per the Placer Parkway PA.

4.7.1.2 Paleontological Resources

Paleontological resources are classified as nonrenewable scientific resources and are protected by several federal and state statutes, most notably by the 1906 Federal Antiquities Act (PL 59-209; 16 United States Code 431 et seq.; 34 Stat. 225), which calls for protection of historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest on federal lands. Consideration of paleontological resources is required by CEQA, although under federal law it is not required on non-federal lands.

4.7.2 AFFECTED ENVIRONMENT

The affected environment for cultural resources is composed of archaeological resources, historic architectural resources, and paleontological resources. Each type of resource is described below.

4.7.2.1 Archaeological Resources

Records Search

An archaeological records search was conducted for the project 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. The record searches at the North Central Information Center and Northeast Information Center included searches of archaeological site and historic property files, the NRHP and CRHR, the Historic Property Data File for their respective counties, California Historic Landmarks, California Points of Historic Interest, and Caltrans Local Bridge Survey. Historic General Land Office (GLO) maps, which provide details of previous land surveys and divisions and depict historic features that may be represented in the archaeological record, also were consulted. 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 the ASR (URS, 2007b).

A search of the Sacred Lands File also was performed by staff of the Native American Heritage Commission (NAHC). This search did not indicate the presence of Native American cultural resources in the study area. On three occasions (June 16, 2003; October 13, 2003; and March 2, 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. Details of these contacts are included in the ASR.

Development of the Area of Potential Effects for Archaeological Resources

The APE for archaeological resources was developed in consultation with FHWA and the California Department of Transportation (Caltrans). Because the current undertaking consists only of the preservation of a transportation right-of-way, the archaeological APE for this Tier 1 investigation consists of the area within the boundaries of the corridor alignment alternatives. Furthermore, because the Parkway has yet to be designed, the APE is currently limited to the ground surface; no vertical APE has been identified. The vertical APE is the depth of project-related subsurface activities that could potentially disturb archaeological resources. A vertical APE encompassing areas that potentially would be disturbed by construction activity, as well as areas that potentially would be used for construction excavation, is not relevant to this Tier 1 undertaking.

The archaeological APE for the Project is depicted on Figure 4.7-1.

The Common Alignment

In accordance with Stipulations II.B.a and 2.a of the Placer Parkway PA, only the alignment common to all build alternatives (Figure 4.7-2) was subject to archaeological pedestrian reconnaissance for this Tier 1 evaluation. The common alignment occurs primarily in the Eastern Segment of the Parkway, 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 (the Amoruso Property [ECORP, 2006], the Placer Ranch Specific Plan [Hale, 2004], Reason Farms Retention Basin [URS, 2002], and the State Route (SR) 65 Widening Project [Norton, 1998]). Much of the common alignment is located within 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. None of these efforts identified archaeological resources within any of the corridor alignment alternatives. Given the recent dates of completion of these surveys, in agreement with Caltrans, the common corridor alignment alternative through these parcels was not reinventoried for archaeological resources.

Archaeological issues outside the common alignment were addressed through the use of a predictive model to evaluate environmental factors, including length of stream corridor, area above floodplain, and area of farm land, to rank the archaeological sensitivity of the project alternatives. Further details are provided below.

Field Surveys

The survey corridor, which consists 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.

The Predictive Model

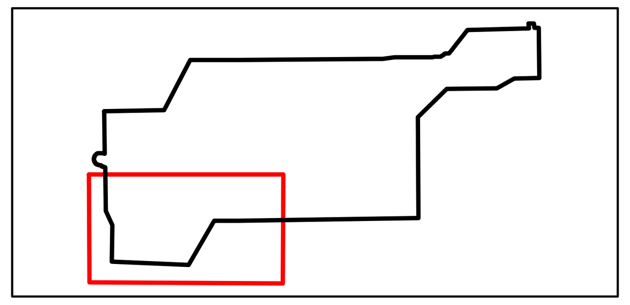
A predictive model was used to assess the corridor alignment alternatives for potential unknown archaeological sites by evaluating relative archaeological sensitivity. These data have been used to assess potential impacts to archaeological resources. The predictive model is a geographic information system-based application that assesses the relative sensitivity of each alternative 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 the ASR.

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 are listed below:

- Proximity to stream courses
- Total length in mile of stream course
- Acreage of land at or above 33 feet above sea level and in proximity to an actual or historic floodplain
- Total acreage of farmland

Additional information on these factors is provided in the ASR (URS, 2001b). As the corridor alignment alternatives are located relatively close to each other, the environmental setting does not differ

Alternative
Study Area Boundary
County Boundary
City Boundary
Recorded Linear Historic Resource
Recorded Architectural Resource
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.)



PLACER PARKWAY

Tier 1 EIS/EIR	Area of Potential Effect	Figure 4.7-1 - Sheet 1 June 2007

Tier 1 EIS/EIR

Area of Potential Effect

Figure 4.7-1 - Sheet 2

June 2007

Alternative	Recorded Linear Historic Resource	Archaeology APE (The archaeological APE includes private and publicly owned property and reflects the outer limits of the alternative alignment corridors.)
Study Area Boundary	Recorded Architectural Resource	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.)
County Boundary	Identified Bridge from Caltrans Bridge Inventory	
City Boundary		

Placer Parkway

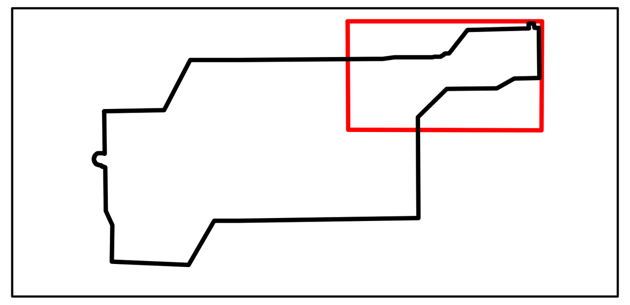
Tier 1 EIS/EIR

Area of Potential Effect

Figure 4.7-1 - Sheet 3

June 2007

Alternative	Recorded Linear Historic Resource	Archaeology APE (The archaeological APE includes private and publicly owned property and reflects the outer limits of the alternative alignment corridors.)
Study Area Boundary	Recorded Architectural Resource	
County Boundary	Identified Bridge from Caltrans Bridge Inventory	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.)
City Boundary		



PLACER PARKWAY

Tier 1 EIS/EIR

Area of Potential Effect

Figure 4.7-1 - 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.)

Planned/Proposed Development

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 CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Common Alignment

Figure 4.7-2

June 2007

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 altered significantly 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 Tier 1 EIS/EIR was based on available data. It also should be noted that environmental factors were not ranked and calculations were not adjusted based on the corridor alignment alternatives lengths.

Survey and Research Findings

There are no known archaeological sites within any of the proposed corridor alternative alignments.

Several historic roadways are located within the study area, as described in the ASR. One other potential historic archaeological resource was identified from the GLO maps, labeled as a "house" on the GLO plat map for Township T11N/R4E along Sankey Road (see ASR for additional details). 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 probably would represent an important cultural resource. As this section of the study area previously has not been subjected to an intensive archaeological pedestrian reconnaissance, it is unknown whether remnants of this structure occur within the current APE. The potential presence of remnants of this structure elevates the archaeological sensitivity in this area.

Table 4.7-1 presents the findings of the predictive model used to compare the potential archaeological sensitivity of the build alternatives.

Table 4.7-1
Predictive Model for Assessment of Archaeological Sensitivity of Build 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			

As can be seen in Table 4.7-1, 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 for 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, also can provide insight into 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 alignment to contain buried archaeological resources, and Alternative 5 is the least likely. 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, the presence of this resource does not alter these predictions

As stated previously, the general archaeological sensitivity of the current archaeological APE for both prehistoric and historic archaeological resources is low based on findings from the predictive model, as well as previous archaeology surveys and those conducted for this study. This is based on the fact that although resources have been identified, relatively few archaeological sites have been identified given the total acreage of land subjected to archaeological survey. Based on information provided by evaluation of GLO plat maps (see ASR for additional details), no one corridor alternative alignment is more or less archaeologically sensitive than another, as there was no substantial difference between length of potential historic roadways affected by any of the build alternatives.

Furthermore, given that the corridor alignment alternatives were located to 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.

Before the initiation of field efforts, letters requesting access were sent to relevant landowners. Figure 4.7-2 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 Assessor's Parcel Number (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 inventoried with negative results (Derr, 1997; McGowan Seldner, 1985). Furthermore, based on past surveys within the immediate vicinity of these parcels, the overall archaeological sensitivity of these parcels is low. This supposition is based on the fact that intensive archaeological surveys for the most part have proved negative.

4.7.2.2 Historic Built Environment Resources

Records Search

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 NRHP, CRHR, the Historic Property Data File for their respective counties, California Historic Landmarks, California Points of Historic Interest, Caltrans Local Bridge Survey, and historic GLO and U.S. Geological Survey (USGS) maps.

In order to identify potential historic, built environment 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.

Development of the Area of Potential Effect for Historic Built Environment Resources

The APE for historic built environment resources was developed in consultation with FHWA and Caltrans. Consistent with Caltrans policies and general cultural resource practices to include the area directly affected by construction, the built environment APE generally runs either with or one parcel beyond the proposed archaeological APE. Where the proposed project bisects a parcel, the boundary generally is drawn to include the whole parcel; however, where the architectural APE intersects large, vacant agricultural parcels where there is little potential for effects, the proposed built environment APE generally is aligned with the right-of-way. Only those resources located within the built environment APE line were included in the survey. The built environment APE is shown on Figure 4.7-1.

Survey and Research Findings

The survey undertaken for this project was established under Stipulation II.B.1.b. of the Placer Parkway PA, which called for conducting a “limited inventory of built environment properties within the entire Tier 1 APE” and within areas unique to specific alternative corridors. In both instances it specified,

> Built environment properties that have the potential to meet NRHP Criterion C will be identified and evaluated in accordance with Stipulations VIII.B and C of the PA, and documented on appropriate DPR523 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 …

The vast majority of the resources identified for this study that were constructed in or before 1975 are Ranch-, Minimal Traditional-, or Contemporary-style residential structures predominantly built during the 1960s and 1970s. Of the handful of properties that were built in the first half of the twentieth century, most have been altered substantially 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.

Only one National Register-eligible property was identified in this study: Reclamation District No. 1000 Rural Historic District (RD 1000) (Figure 4.7-3). In a letter dated September 21, 1994, the California SHPO concurred that RD 1000 is significant within the context of reclamation and flood control in the Sacramento Valley during the early twentieth century. RD 1000 is eligible for listing in the NRHP at the state level of significance under Criterion A and is also a historical resource under CEQA.

Additionally, three other properties were 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 proposed action. Site-specific research conducted on these properties may produce information that may support eligibility under Criteria A or B. Those resources (APNs 35-260-011, 35-260-014, and 017-130-036) are identified on Figures 4.7-4A and 4.7-4B.

The built environment APE also included two county-owned bridges along South Brewer and Lotus roads in Placer County and two railroads. Caltrans previously identified the bridges (19C0104 and 19C0124) as Category 5 structures (not eligible for listing in the NRHP) in the California Historic Bridge Inventory (1986 and updates). The Western Pacific Railroad and Sacramento Northern Railroad segments within the study area have been previously found to be ineligible for inclusion in the NRHP or CRHR and therefore required no further study for this project (JRP Historical Consulting et al., 1994; JRP Historical Consulting, 1995).

4.7.2.3 Paleontological Resources

A Paleontological Sensitivity analysis of the corridor alignment alternatives was performed using available published scientific literature and unpublished archival records and data (Lawler, 2007).

Records Search

A standard Class I technical literature and records review was conducted to assess the paleontological resource potential within the corridor alignment alternatives. Published geologic maps served as the primary geologic data source for the paleontological evaluation. These are included in the confidential Paleontological Resources Report (Lawler, 2007). Specific technical paleontological and detailed lithologic data were derived from local geoscientists at California colleges and universities and the designated northern California museum repository (University of California Museum of Paleontology).

Assessment of Paleontological Potential

Paleontological potential was assessed using three rating categories: High, Moderate, and Low. Rating categories are considered to be interpretive and are subject to change as new information is obtained. Significant paleontological resources are defined in this Tier 1 EIS/EIR to include the interpretation outlined by the Society of Vertebrate Paleontology (1994), wherein vertebrate fossils are considered significant.

High Potential Rating

Rock units with a High potential for significant paleontological resources are known to have yielded vertebrate fossils within the study area or region. This does not necessarily imply that vertebrate fossils will always be recovered from High-potential-rated rock units, but only that there are recorded occurrences within the unit. Additional factors that are considered pertain to inferred depositional environment and lithology.

Moderate Potential Rating

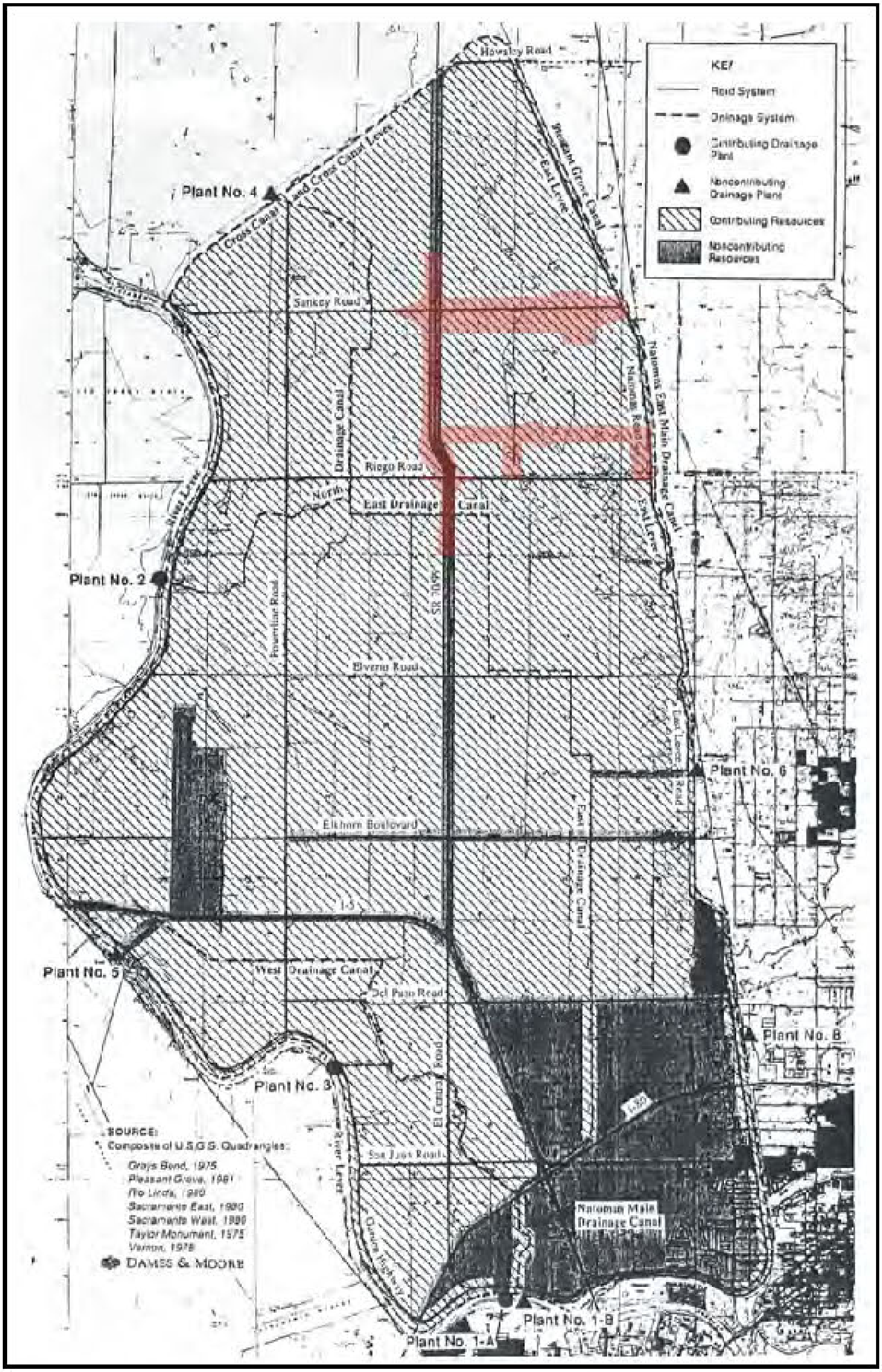
Rock units possessing some degree of potential, such as favorable depositional environment for resource preservation or lithologically similar rock units in the region, have yielded vertebrate fossils. All Moderate-potential-rated rock units are recommended for field survey and construction monitoring.

Low Potential Rating

Rock units containing lithologies that commonly do not preserve significant fossil resources (i.e., coarse conglomerates, welded or ignimbrite volcanic ash deposits). Igneous plutonic rocks, such as granite or gabbro, are precluded from preservation of paleontological resources because of their genesis within a magmatic environment. In addition, sediments of sub-Holocene or Recent age are usually considered too young in geologic time to preserve fossils.

Research and Survey Findings

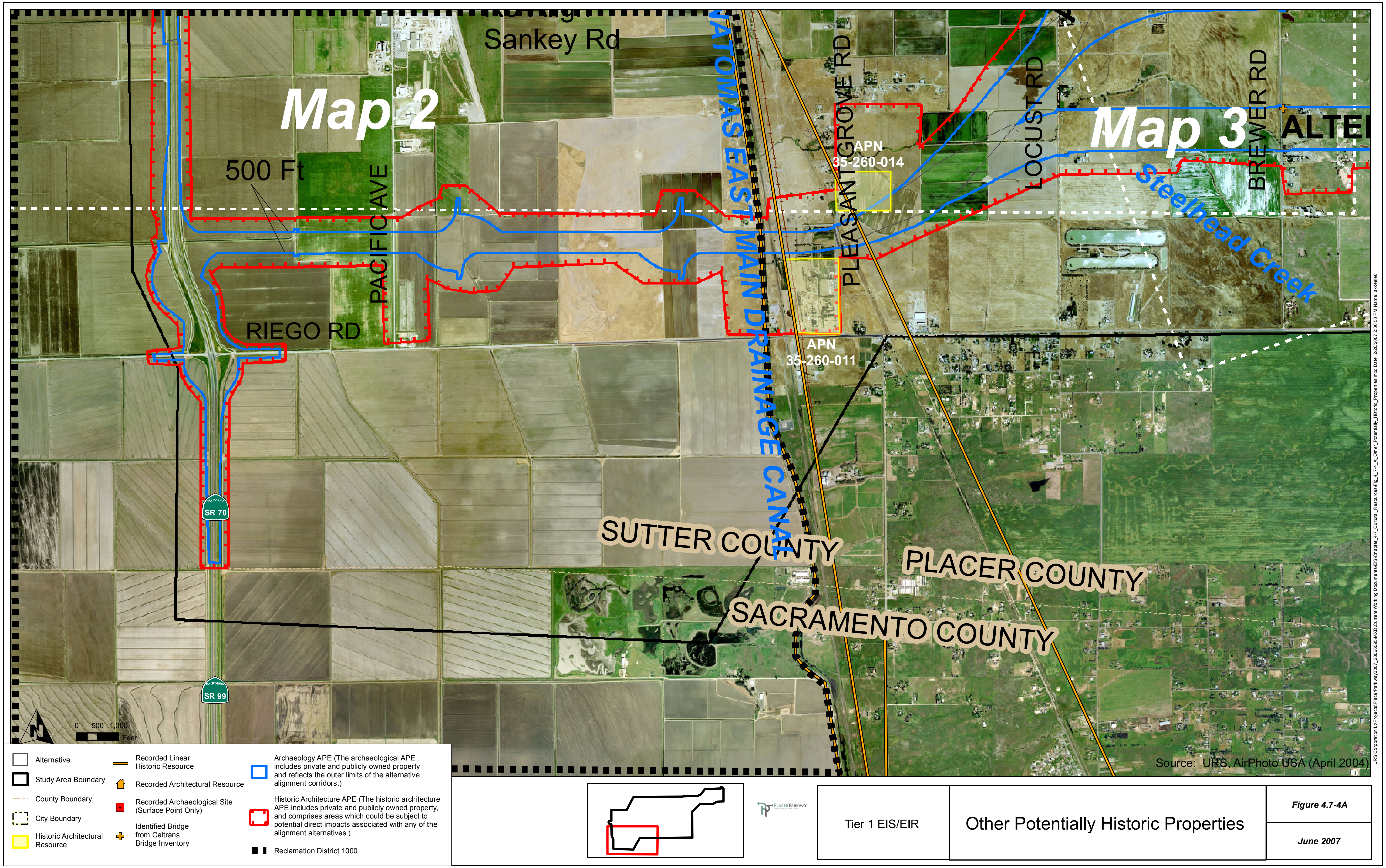
The southern Sacramento Valley Foothill Region (Figure 4.13-1) contains a diverse record of geologic and biologic history dating from the Upper Cretaceous period. Much of the paleontological interest within the study area stems from well-known discoveries of Pleistocene-age fossil vertebrate faunas derived from Quaternary age units in other parts of the Sacramento Valley and San Francisco Bay Region. Identification and scientific description of both of these diverse fossil vertebrate assemblages provides one of the best known records of Pleistocene fauna in California.



Note:
The project's architectural APE shown in red.

Source: JRP Historical Consulting

PLACER PARKWAY CORRIDOR PRESERVATION	Tier 1 EIS/EIR	RD 1000 Historic District and Project APE	*Figure 4.7-3* *June 2007*



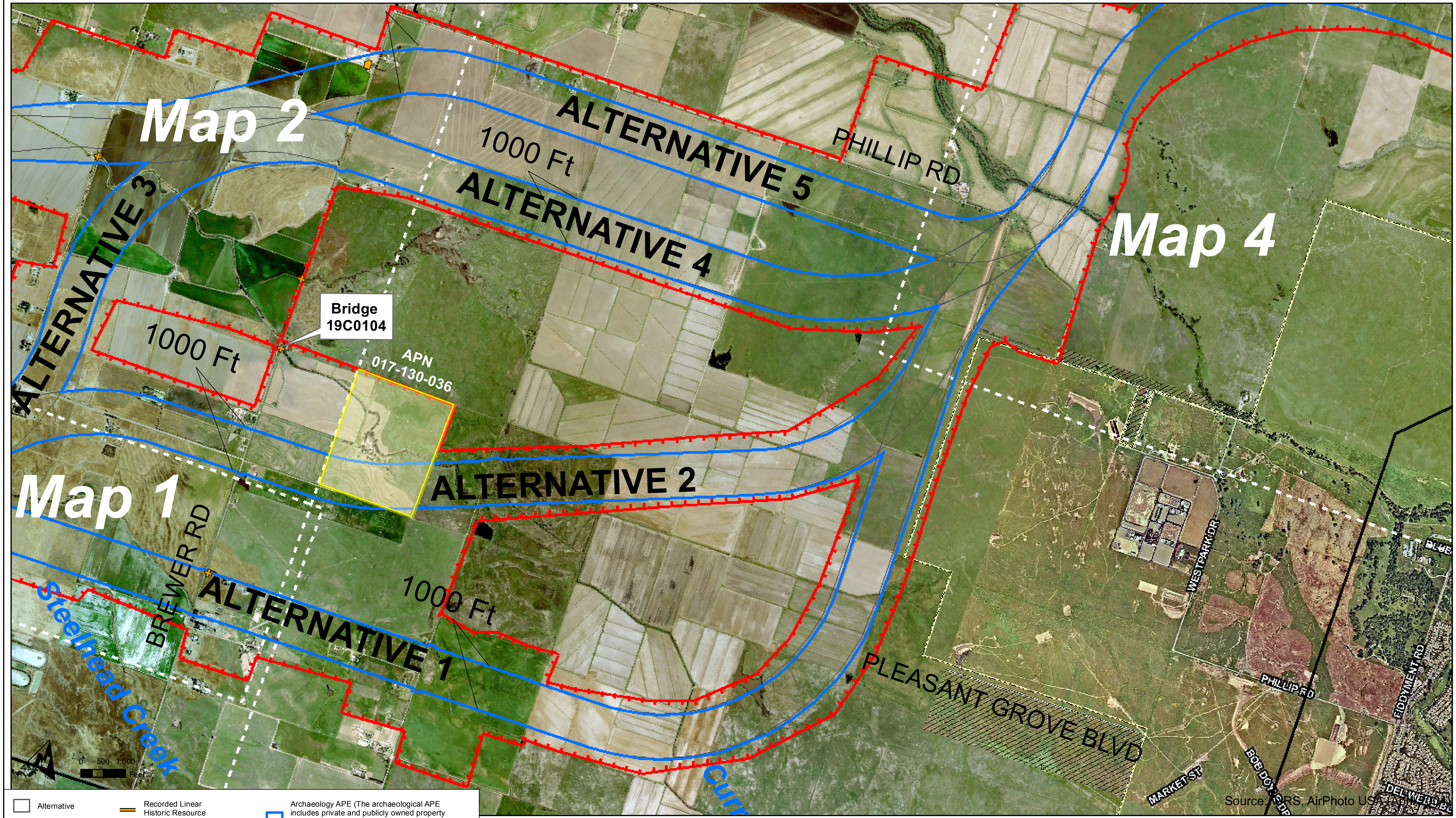
Tier 1 EIS/EIR

Other Potentially Historic Properties

Figure 4.7-4A

June 2007

Note: Properties highlighted in yellow do not appear to be potentially eligible under Criterion C, but in white may require additional research for potential eligibility under Criterion A and B at a later date.



- Alternative
- Study Area Boundary
- County Boundary
- City Boundary
- Historic 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.)

PLACER PARKWAY

Tier 1 EIS/EIR

Other Potentially Historic Properties

Figure 4.7-4B

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Note: Properties highlighted in yellow do not appear to be potentially eligible under Criterion C, but in white may require additional research for potential eligibility under Criterion A and B at a later date.

Local geological units of paleontological significance are described in the confidential Paleontological Resources Report (Lawler, 2007). Although no fossil sites have been recorded within the study area, vertebrate fossils have been found regionally in age-equivalent sediments located outside the study area but within the southern Sacramento Valley region. These contain scientifically important vertebrate fossils of proboscidian (elephant), camel, sloth, bison (buffalo), and rodent terrestrial mammalian taxa. Additional details are provided in the Paleontological Resources Report. Based on the occurrence of such fossils in the vicinity, the study area has been assigned a High sensitivity rating, as it contains areas of undisturbed Lower (Qrl), and Upper (Qru) Riverbank Formation Sediments, areas of Lower Modesto Formation (Qml), basin deposits (Qb), and also areas of undisturbed Turlock Lake Formation (Qtl) Sediments.

4.7.3 IMPACT ANALYSIS

4.7.3.1 Methodology for Impact Evaluation

For the proposed action, potential significant impacts to known cultural resources as well as inadvertent discoveries have been evaluated on a preliminary basis using the criteria listed below.

4.7.3.2 Evaluation Criteria

The corridor alignment alternatives were evaluated for their potential to cause:

- A substantial adverse change in the significance of a historical resource that is listed or eligible for listing on the NRHP, the CRHR, or a local register of historic resources;
- A substantial adverse change in the significance of a unique archaeological resource;
- Disturbance or destruction of unique paleontological resource or site or unique geological feature; or
- Disturbance of any human remains, including those interred outside of formal cemeteries.

4.7.3.3 Direct Impacts

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), Placer Parkway would not be constructed or operational. No impacts on archaeological, historic, built environment, or paleontological resources would occur as a result of the No-Build Alternative.

Alternative 1 – the Red Alternative

Alternative 1 is the most archaeologically sensitive corridor alignment alternative of the five build alternatives.

Western Segment. Based on archaeological resources evaluated to date, the Western Segment of Alternative 1 would not have adverse impacts on any known archaeological resources, because none exist within the segment. It is possible that there are undetected buried archaeological materials or human remains within the portion of Alternative 1 that lies within this segment. The predictive model (Table 4.7-1) indicates that as Alternative 1 contains the greatest length of stream course, the most acreage above floodplain, and the most acreage of farmland.

RD 1000 lies within the Western Segment and would be bisected be Alternative 1. This could constitute an effect under the NHPA. No other historic properties would be affected by this alternative in the Western Segment.

Geologic units underlying the Alternative 1 corridor alignment are known to be of high paleontological sensitivity. Excavations in this segment have the potential to penetrate into undisturbed Lower Riverbank (Qrl), Upper Riverbank (Qru), and Lower Modesto (Qml) Formations, which could contain important paleontological remains. Each of these units is assigned a High rating for potential paleontological sensitivity. Excavations could result in impacts on previously undetected paleontological resources. No known fossil localities were identified within this segment.

Within the vicinity of the SR 70/99 interchange, basin deposits (Qb) would be disturbed. Due to their relatively recent age, these sediments have a Low sensitivity rating.

Central Segment. In terms of archaeological sensitivity, the Central Segment of Alternative 1 is the same as for the Western Segment. Therefore, the potential archaeological impacts for this segment are the same as discussed for the Western Segment.

Three built environment properties (APN 35-260-011, APN 35-260-014, and APN 017-130-036) in the Central Segment were identified that, while they do not appear to be eligible under Criterion C of the NHPA, do appear to retain sufficient integrity to warrant formal evaluation during the Tier 2 phase of the project, under Criteria A or B. These resources are identified on Figures 4.7-4A and 4.7-4B.

Geological units in the Central Segment of Alternative 1 include Lower Riverbank (Qrl), Upper Riverbank (Qru), a small area of Alluvium (Qa), and a small area of Turlock Lake (Qtl) formations. Within the exception of Alluvium (Qa), each of these formations is known to be of high paleontological sensitivity, and excavations in this segment have the potential to penetrate into formations that could contain important paleontological resources. While no known fossil localities were identified within this segment and no sites have been recorded within the study area, vertebrate fossils have been found regionally in age-equivalent sediments.

Eastern Segment. The archaeological sensitivity of the Eastern Segment of Alternative 1 is the same as for the Western Segment. Therefore, the potential impacts for this segment are the same as discussed for the Western Segment.

There are no historic, built environment resources in the Eastern Segment of Alternative 1; therefore, the project would not impact historic, built environment resources in this area.

Geological units in the Eastern Segment of Alternative 1 are primarily Turlock Lake (Qtl) Formation. This geologic unit is known to be of High paleontological sensitivity, and excavations in this segment have the potential to penetrate into formations that could contain important paleontological resources. Although no known fossil localities were identified within this segment and no sites have been recorded within the study area, vertebrate fossils have been found regionally in age-equivalent sediments.

Alternative 2 – the Orange Alternative

Alternative 2 is the third most archaeologically sensitive alignment alternative of the five build alternatives.

Western Segment. Based on archaeological resources evaluated to date, the Western Segment of Alternative 2 would not impact any known archaeological resources, as none exist within this segment. It is possible that buried archaeological materials or human remains lie undetected within the area of

Alternative 2 that lies within this segment. The predictive model (Table 4.7-1) indicates that Alternative 2 ranks second of all the build alternatives for total length of stream course and third for both total land above floodplain and total acreage of farmland.

The historic, built environment resources for the Western Segment of Alternative 2 are the same as those described for the Western Segment of Alternative 1.

Geological units in the Western Segment of Alternative 2 are identical to those in the Western Segment of Alternative 1. Therefore, the potential paleontological impacts for this segment are the same as discussed for the Western Segment of Alternative 1.

Central Segment. In terms of archaeological sensitivity, the Central Segment of Alternative 2 is the same as for the Western Segment. Therefore, the potential impacts for this segment are the same as discussed for the Western Segment.

The historic built environment resources for the Central Segment of Alternative 2 in are the same as those described for the Central Segment of Alternative 1.

Geological units in the Central Segment of Alternative 2 are identical to those in the Central Segment of Alternative 1. Therefore, the potential paleontological impacts for this segment are the same as discussed for the Central Segment of Alternative 1.

Eastern Segment. In terms of archaeological sensitivity, the Eastern Segment of Alternative 2 is the same as for the Western Segment. Therefore, potential archaeological impacts for this segment are the same as discussed for the Western Segment.

There are no historic, built environment resources in the Eastern Segment of Alternative 2. Therefore, the project would not impact historic, built environment resources.

Geological units in the Eastern Segment of Alternative 2 are similar to those in the Eastern Segment of Alternative 1. Therefore, the potential paleontological impacts for this segment are the same as discussed for the Central Segment of Alternative 1.

Alternative 3 – the Blue Alternative

Alternative 3 is the second most archaeologically sensitive alignment alternative of the five build alternatives.

Western Segment. Based on archaeological resources evaluated to date, the Western Segment of Alternative 3 would not impact any known archaeological resources, as none exist within the segment. It is possible that buried archaeological materials or human remains lie undetected within the area of Alternative 3 that lies within this segment. The predictive model (Table 4.7-1) indicates that Alternative 3 ranks third out of all the build alternatives for total length of stream course and second for both total land above floodplain and total acreage of farmland.

The historic, built environment resources in the Western Segment of Alternative 3 are identical to those described for the Western Segment of Alternative 1.

Geological units in the Western Segment of Alternative 3 are identical to those in the Western Segment of Alternative 1. Therefore, the potential paleontological impacts for this segment are the same as discussed for the Western Segment of Alternative 1.

Central Segment. In terms of archaeological sensitivity, the Central Segment of Alternative 3 is the same as for the Western Segment. Therefore, the potential impacts for this segment are the same as discussed for the Western Segment.

The historic, built environment resources for Alternative 3 in the Central Segment are the same as those described for the Central Segment of Alternative 1.

Geological units in the Central Segment of Alternative 3 consist of Upper Riverbank (Qru), Lower Riverbank (Qrl), and a small area of Alluvium (Qa). These formations are known to be of High paleontological sensitivity, and excavations in this segment have the potential to penetrate into formations that could contain important paleontological resources. While no known fossil localities were identified within this segment and no sites have been recorded within the study area, vertebrate fossils have been found regionally in age-equivalent sediments.

Eastern Segment. In terms of archaeological sensitivity, the Eastern Segment of Alternative 3 is the same as for the Eastern Segment of Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for the Eastern Segment of Alternative 1.

There are no historic, built environment resources in the Central Segment of Alternative 3. Therefore, the project would not impact historic, built environment resources in this area.

Geological units in the Eastern Segment of Alternative 3 are identical to those in the Eastern Segment of Alternative 1. Therefore, the potential paleontological impacts for this segment are the same as discussed for the Eastern Segment of Alternative 1.

Alternative 4 – the Yellow Alternative

Alternative 4 is the fourth most archaeologically sensitive alignment alternative of the five build alternatives.

Western Segment. Based on archaeological resources evaluated to date, the Western Segment of Alternative 4 would not impact any known archaeological resources, as none exist within the segment. The potential presence of intact remnants of the “house” that existed from at least 1868 at Sankey Road elevates the archaeological sensitivity of Alternative 4. It is possible that buried archaeological materials or human remains remain undetected within the area of Alternative 4 that lies within this segment. The predictive model (Table 4.7-1) indicates that Alternative 4 ranks fourth out of all the build alternatives for total length of stream course, total land above floodplain, and total acreage of farmland.

The historic, built environment resources for the Western Segment of Alternative 4 are the same as those described for the Western Segment of Alternative 1.

Geologic units underlying Alternative 4 in the Western Segment are known to be of high paleontological sensitivity. Excavations in this segment have the potential to penetrate into undisturbed Lower Riverbank (Qrl) and Lower Modesto (Qml) Formation sediments, which could contain important paleontological remains. All of these units are assigned a High rating for potential paleontological sensitivity. Excavations could result in impacts on previously undetected paleontological resources. No known fossil localities were identified within this segment. A small area at the western end of Alternative 4 would encounter basin deposits (Qb), which, due to their youth are considered inconsequential in terms of their paleontologic rating.

Central Segment. In terms of archaeological sensitivity, the Central Segment of Alternative 4 is the same as for the Western Segment. Therefore, the potential impacts for this segment are the same as discussed for the Western Segment.

There are no historic, built environment resources in the Central Segment of Alternative 4. Therefore, the project would not impact historic, built environment resources in this area.

Geological units in the Central Segment of Alternative 4 are similar to those in the Central Segment of Alternative 1. Therefore, the potential paleontological impacts for this segment are the same as discussed for the Central Segment of Alternative 1.

Eastern Segment. With respect to archaeological resources, the Eastern Segment of Alternative 4 is the same as for the Western Segment. Therefore, the potential impacts for this segment are the same as discussed for the Western Segment.

There are no historic, built environment resources in the Eastern Segment of Alternative 3. Therefore, the project would not impact historic, built environment resources in this area.

Geological units in the Eastern Segment of Alternative 4 are identical to those in the Eastern Segment of Alternative 1. Therefore, the potential paleontological impacts for this segment are the same as discussed for the Eastern Segment of Alternative 1.

Alternative 5 – the Green Alternative

Alternative 5 is the fifth most archaeologically sensitive alignment alternative of the five build alternatives

Western Segment. Based on archaeological resources evaluated to date, the Western Segment of Alternative 5 would not impact any known archaeological resources, as none exist within the segment. The potential presence of intact remnants of the “house” that existed from at least 1868 at Sankey Road elevates the archaeological sensitivity of Alternative 5. It is possible that buried archaeological materials or human remains remain undetected within the area of Alternative 5 that lies within this segment. The predictive model (Table 4.7-1) indicates that Alternative 5 ranks fifth out of all the build alternatives for total length of stream course, total land above floodplain, and total acreage of farmland.

The historic, built environment resources for Alternative 5 in the Western Segment are identical to those described for the Western Segment of Alternative 1. Therefore, the potential historic resource impacts for this segment are the same as discussed for the Western Segment of Alternative 1.

Geological units in the Western Segment of Alternative 5 are identical to those in the Western Segment of Alternative 4. Therefore, the potential paleontological impacts for this segment are the same as discussed for the Western Segment of Alternative 4.

Central Segment. In terms of archaeological sensitivity, the Central Segment of Alternative 5 is the same as for the Western Segment. Therefore, the potential impacts for this segment are the same as discussed for the Western Segment.

There are no historic, built environment resources in the Central Segment of Alternative 5. Therefore, the project would not impact historic, built environment resources in this area.

Geological units in the Central Segment of Alternative 5 are similar to those in the Central Segment of Alternative 1. Therefore, the potential paleontological impacts for this segment are the same as discussed for the Central Segment of Alternative 1.

Eastern Segment. With respect to archaeological sensitivity, the Eastern Segment of Alternative 5 is the same as for the Western Segment. Therefore, the potential impacts for this segment are the same as discussed for the Western Segment.

There are no historic, built environment resources in the Eastern Segment of Alternative 5. Therefore, the project would not impact historic, built environment resources in this area.

Geological units in the Eastern Segment of Alternative 5 are identical to those in the Eastern Segment of Alternative 1. Therefore, the potential paleontological impacts for this segment are the same as discussed for the Eastern Segment of Alternative 1.

4.7.3.4 Secondary and Indirect Impacts

Potential secondary and indirect impacts on cultural resources are discussed below. Secondary and indirect impacts associated with growth are discussed in Section 6.1, Growth.

Archaeological Resources

Secondary and indirect impacts on archaeological resources are not anticipated as a result of the construction and operation of Placer Parkway. As a result of initial avoidance efforts, the potential for impacts on known archaeological resources is extremely low, and the presence of previously unknown archaeological resources in the study area is not considered likely. Should any such resources be identified, impact avoidance, minimization, and mitigation measures will be employed to reduce impacts, and therefore secondary and indirect impacts would not occur.

Historic Built Environment

Secondary and indirect impacts on historic, built environment resources are not anticipated as a result of the construction and operation of Placer Parkway. As a result of initial avoidance efforts, the potential for impacts on known historic, built environment resources is extremely low, and there is little potential for the identification of previously unknown historic, built environment resources in the study area.

Paleontological Resources

Secondary and indirect impacts on paleontological resources are not anticipated as a result of the construction and operation of Placer Parkway.

4.7.3.5 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 impacts to archaeological, historic, built environment, or paleontological resources.

Archaeological Resources

No impacts to known archaeological resources that are eligible for the NRHP or CRHR or considered unique resources under CEQA have been identified within the corridor alignment alternatives, based on information developed for this project. The project therefore would not contribute to cumulative impacts on known archaeological resources. Cumulative impacts on unknown archaeological resources could be expected, given the substantial amount of planned and anticipated development that could occur within the study area.

Historic Built Environment Resources

Cumulative impacts on historic, built environment resources could be expected, given the substantial amount of planned and anticipated development that could occur within the study area. The proposed Sutter Point development lies within the boundaries of the RD 1000 Historic District, which would affect this resource. Potential cumulative impacts on historic built environment resources could occur as a result of acquisition of land and construction of any of the Parkway build alternatives in conjunction with other planned and proposed development within RD 1000. The Parkway would contribute to this cumulative impact.

Paleontological Resources

Cumulative impacts to paleontological resources could be expected, given the high paleontological sensitivity of the study area and the substantial planned and anticipated development that could occur. No impacts on known paleontological resources would occur as a result of any of the Parkway build alternatives. Should previously unknown paleontological resources be identified during construction, it is considered likely that avoidance, minimization, and mitigation measures could be employed to minimize the level of impact to such resources. The Parkway would therefore not likely contribute to cumulative impacts to paleontological resources.

4.7.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION STRATEGIES

4.7.4.1 Tier 1 – Avoidance/Minimization Strategies

Archaeological Resources

- During the development of alternatives, in order to reduce environmental impacts, avoidance alternatives were considered (see Section 2.5.4). These alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

- Efforts to avoid potential impacts on archaeological resources were incorporated into the preliminary corridor alignment alternative selection process for Placer Parkway, as initial screening of archaeological records was used to develop corridor alignment alternatives routed to avoid and/or minimize potential impacts to various resources, including historic and prehistoric archaeological sites.

Historic Built Environment Resources

- During the development of alternatives, in order to reduce environmental impacts, avoidance alternatives were considered (see Section 2.5.4). These alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

- During the alternatives screening process, efforts were made to avoid impacts on historic, built environment resources. Initial screening of known locations of historic properties was used to develop corridor alignment alternatives routed to avoid and/or minimize potential impacts to various resources including historic sites. Examples of such efforts included modification and/or elimination of PSR corridor alignment alternatives (see Section 2.5), including modification of the proposed southern corridor alignment to avoid a historic ranch complex.

Paleontological Resources

- During the development of alternatives, in order to reduce environmental impacts, avoidance alternatives were considered (see Section 2.5.4). These alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

4.7.4.2 Tier 2 – Consultation/Coordination

Archaeological Resources

- Where archaeological resources are identified that can not be avoided, consultation will be initiated with SHPO to agree on the most appropriate approach for mitigation.

Historic Built Environment Resources

- Where historic, built environment resources are identified that can not be avoided, consultation will be initiated with SHPO to identify potential strategies to avoid, minimize, or mitigate such impacts.

4.7.4.3 Tier 2 – Mitigation Commitments

Archaeological Resources

- If previously undetected archaeological resources are encountered during construction of the Parkway following the Tier 2 analysis, consistent with Caltrans policy, ground-disturbing activities within the vicinity would be halted until a qualified archaeologist can evaluate the nature and significance of the find. If the discovery includes human remains, the Placer and/or Sutter County Coroners and Department of Museums would also be consulted.

Historic Built Environment Resources

- Three properties in the study area (APN 35-260-011, APN 35-260-014, and APN 017-130-0 require further evaluation for NRHP and CRHR eligibility. Following the Tier 2 analysis, if the Parkway is expected to result in adverse impacts on NRHP and CRHR properties, then efforts will be made to develop a roadway design within the chosen corridor that avoids or minimize impacts on these resources as far as possible. If impacts cannot be avoided by such measures, consultation will be initiated with SHPO to identify potential measures to mitigate such impacts.

Paleontological Resources

- If paleontological resources are identified that cannot be avoided, the following mitigation strategies will be employed:
  - Pre-construction meetings should be held with key construction personnel to provide brief discussions pertaining to paleontological resource significance, visual identification, and discovery notification procedures.
  - Proposed construction areas will be monitored by a professional paleontologist during construction, to ensure that subsurface paleontological resources are adequately protected. Monitoring will include provisions for intermittent checking of excavation spoils for significant paleontological materials during site grading and excavation and measures for salvaging fossils, as necessary.
  - If unique paleontological resources are discovered, then all significant fossil material will be collected, prepared, identified, and curated into a state-designated scientific repository. Salvage operations will be conducted in accordance with professional paleontological standards (e.g., Society of Vertebrate Paleontology standards)

4.7.4.4 Tier 2 – Mitigation Considerations

Archaeological Resources

- If more extensive investigations carried out for the Tier 2 analysis identify previously unknown archaeological resources in the selected corridor alignment, then efforts can be made to align the roadway within the chosen corridor, and to develop a roadway design that avoids or minimizes impacts on these resources as far as possible.

Historic Built Environment Resources

- Mitigation for impacts on historic, built environment resources could include relocation of historic resource, recordation and documentation according to the National Park Service's Historic American Building Survey/Historic American Engineering Record standards, development of interpretive or educational exhibits, or development of an oral history project.

Paleontological Resources

- If more extensive investigations carried out for the Tier 2 analysis identify previously unknown paleontological resources in the selected corridor alignment, then efforts can be made to develop a roadway design within the chosen corridor that avoids or minimize impacts on these resources as far as possible.

4.7.5 TIER 1 AND TIER 2 STUDIES

Archaeological Resources

- Analyses that will begin in Tier 2

- A determination of Finding of Effect on potential unknown archaeological resources that may be present in the study area will be made. As stipulated in the Placer Parkway PA (Appendix E), this determination will be made in the Tier 2 document, based on more intensive investigations to determine which, if any, resources may be affected by the Parkway, and if such effects should be considered adverse under the NHPA.

Historic Resources

- Analyses begun in Tier 1 which will be undertaken in greater detail in Tier 2
  - Additional research will be conducted to identify whether acquisition of land within RD 1000 includes land that contains resources that are contributing elements to the historical integrity of RD 1000, and if acquisition of such resources constitutes an adverse effect under the NHPA. Determination of such effect will be made at the Tier 2 level of environmental analysis for the proposed project. At that time, Caltrans will request SHPO's concurrence with Caltrans findings of Effect and will submit a Tier 2 HPSR to SHPO for compliance with PRC §5024.
  - Property-specific research will be conducted during Tier 2 to determine the NRHP and/or CRHR eligibility of the three properties in the study area (APN 35-260-011, APN 35-260-014, and APN 017-130-036) that appear to retain sufficient integrity to require evaluation under Criteria A/1 or B/2 of the NHPA.
- Analyses that will begin in Tier 2
  - A determination of Finding of Effect on the known historic resources present in the study area will be made. As stipulated in the Placer Parkway PA, this determination will be made in the Tier 2 document, based more intensive investigations to determine which, if any, resources may be affected by the Parkway, and if such effects should be considered adverse under the NHPA.
  - Pursuant to the terms of the Placer Parkway PA, additional research will be conducted during Tier 2 to identify and evaluate any previously unknown archaeological and built environment resources for NRHP or CRHR eligibility.

Paleontological Resources

- Analyses begun in Tier 1 which will be undertaken in greater detail in Tier 2
  - Evaluation of potential impacts on unknown paleontological resources will include intensive investigations will be undertaken to determine which, if any, resources may be affected by the Parkway. This will include field surveys of High potential and Moderate potential geologic units in the study area.

4.8 TRAFFIC AND TRANSPORTATION

This section presents a Tier 1/Program level assessment of potential impacts on traffic and transportation associated with the Parkway. Additional information on traffic and transportation is provided in the Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR) Transportation Technical Report (DKS Associates, 2007), which is available at the locations identified in the Executive Summary, including the Placer County Transportation Planning Agency (PCTPA) website.

4.8.1 REGULATORY SETTING

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require consideration of impacts to traffic and transportation. A detailed discussion of NEPA and CEQA requirements is provided in Chapter 1 of this Tier 1 EIS/EIR. In addition, other types of legislation influence traffic and transportation. Relevant laws and guidelines are described below.

4.8.1.1 General Plans and Policies

The study area is located within two incorporated cities and three counties; the corridor alignment alternatives traverse Sutter and Placer counties and the cities of Rocklin and Roseville. A small portion of the southwestern corner of the study area lies within Sacramento County (Figure 1-1, Project Location). 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 the conservation of natural resources. The legislative body of each city (the City Council) and each county (the Board of Supervisors) adopts Level of Service (LOS) policies for its roadway system and other ordinances to carry out the policies of its general plan.

General Plans for Sutter, Placer, and Sacramento counties and the cities of Roseville and Rocklin all contain policies relevant to transportation projects. The following policies are of particular relevance.

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. Although the Sutter County General Plan does not provide for preservation of right-of-way for Placer Parkway, it does contain the following policies that may apply to potential transportation project impacts:

2. A-4 The County shall strive to develop and manage its roadway system to maintain a minimum Level of Service D (LOS D).

2. A-5 The County’s Level of Service standards for the state highway system shall be those standards adopted in the Bi-County Congestion Management Plan.

2. A-6 The County shall require all new development projects to analyze their contribution to increased traffic and to implement improvements necessary to address the increase.

2. A-8 The cities and the County shall attempt to coordinate the establishment of future road alignments within the cities’ sphere of influence which would reserve the maximum right-of-way, General Roadway Standards by Functional Class or as determined jointly by the cities and County. Future road alignments and extensions should consider build out of the sphere of influence, logical east-west and north-south roadway extensions and ultimate desired circulation patterns.

Placer County General Plan

The Placer County General Plan currently provides for preservation of right-of-way for Placer Parkway. The General 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.

The General Plan also contains the following policies that may apply to potential transportation project impacts:

3. A3. The County shall require that roadway rights-of way be wide enough to accommodate the travel lanes needed to carry long-range forecasted traffic volumes (beyond 2010), as well as any planned bikeways and required drainage, utilities, landscaping, and suitable separations. Minimum right-of-way criteria for each class of roadway in the County are specified in Part I of this Policy Document.

3. A4. On arterial roadways and thoroughfares, intersection spacing should be maximized. Driveway encroachments along collector and arterial roadways shall be minimized. Access control restrictions for each class of roadway in the County are specified in Part I of this Policy Document.

3. A7. The County shall develop and manage its roadway system to maintain the following minimum Levels of Service.

- LOS "C" on rural roadways, except within one-half mile of state highways where the standard shall be LOS "D."
- LOS "C" on urban/suburban roadways except within one-half mile of state highways where the standard shall be LOS "D."
- The County may allow exceptions to these Level of Service standards where it finds that the improvements or other measures required to achieve the LOS standards are unacceptable based on established criteria. In allowing any exception to the standards, the County shall consider the following factors:
  - The number of hours per day that the intersection or roadway segment would operate at conditions worse than the standard.
  - The ability of the required improvement to significantly reduce peak hour delay and improve traffic operations.
  - The right-of-way needs and the physical impacts on surrounding properties.
  - The visual aesthetics of the required improvement and its impact on community identity and character.
  - Environmental impacts including air quality and noise impacts.
  - Construction and right-of-way acquisition costs.
  - The impacts on general safety.
  - The impacts of the required construction phasing and traffic maintenance.
  - The impacts on quality of life as perceived by residents.
  - Consideration of other environmental, social, or economic factors on which the County may base findings to allow an exceedance of the standards.

Exceptions to the standards will be allowed only after all feasible measures and options are explored, including alternative forms of transportation.

3. A8. The County's Level of Service standards for the State highway system shall be no worse than those adopted in the Placer County Congestion Management Program (CMP).

3. A9. The County shall work with neighboring jurisdictions to provide acceptable and compatible Levels of Service and joint funding on the roadways that may occur on the circulation network in the Cities and the unincorporated area.

3. A.12. The County shall require an analysis of the effects of traffic from all land development projects. Each such project shall construct or fund improvements necessary to mitigate the effects of traffic from the project. Such improvements may include a fair share of improvements that provide benefits to others.

Sacramento County General Plan

The Sacramento County General Plan contains the following policies that may apply to potential transportation project impacts:

CI-1. Policy: Sacramento County shall conduct planning for road, parking, clean alternative fuel and low emission vehicles, transit, clean intercity rail, bikeway, and pedestrian facilities in a manner that is consistent with achieving air quality goals.

CI-2. Policy: Sacramento County shall conduct land use and transportation planning with a regional perspective.

CI-16. Policy: Sacramento County shall implement a program to buffer land uses from each other and transportation system facilities which is effective and aesthetically pleasing and minimizes the amount of land lost to buffers.

CI-22. Policy: Sacramento County shall apply the following Level of Service standards for planning roads in the unincorporated area:

1. Rural collectors: LOS D
2. Urban area roads: LOS E

and may proceed with additional capacity projects within the scope of the adopted Transportation Plan when the Board of Supervisors has determined that the implementation of all feasible measures that will reduce travel demand in the affected corridor will not provide the target Level of Service.

CI-23. Policy: New development that results in Levels of Service that are worse than those standards in CI-22 or the 1993 LOS, whichever is worse, shall not be approved unless traffic impacts are mitigated. Such mitigation may be in the form of capacity improvements to either the roadway system, the transit system, or both, or demand reduction measures included in the project design, or operation, or both.

City of Roseville General Plan

The City of Roseville General Plan also contains several policies that may apply to potential traffic and transportation project impacts. Policies most relevant to the Parkway traffic and transportation analysis are listed below.

Policies: Level of Service

1. Maintain a Level of Service “C” standard at 70 percent of all signalized intersections and roadway segments in the City during the p.m. peak hours. Exceptions to the LOS “C” standard may be considered for intersections where the City finds that the required improvements are unacceptable based on established criteria identified in the implementation measures. In addition, Pedestrian Districts may be exempted from the LOS standard.

2. Strive to meet the Level of Service standards through a balanced transportation system that provides alternatives to the automobile.

3. Work with neighboring jurisdictions to provide acceptable and compatible Levels of Service on the roadways that cross the City’s boundaries.

City of Rocklin General Plan

The City of Rocklin General Plan also contains several policies that may apply to potential transportation project impacts. The policies most relevant to the Parkway traffic and transportation analysis are described below.

13. To maintain a minimum traffic Level of Service “C” for all streets and intersections except for intersections within ½ mile from direct access to an interstate freeway where a Level of Service “D” will be acceptable. Exceptions may be made for peak hour traffic where not all movements exceed the acceptable Level of Service.

16. To coordinate with adjacent jurisdictions on the completion and improvement of roads that extend into other communities.

4.8.1.2 Other Plans and Policies

The following plans and policies are related to the county and city general plans described in Section 4.1.1.3. The Community Impact Assessment (Mara Feeney & Associates and North Fork Associates, 2007) contains detailed information on the plans and policies listed below.

Placer County Transportation Planning Agency – Regional Transportation Plan

PCTPA is the regional transportation planning agency 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 Sacramento Area Council of Governments (SACOG) for incorporation into the Metropolitan Transportation Improvement Program.

Sacramento Area Council of Governments – Metropolitan Transportation Plan

SACOG is responsible for preparing the long-range transportation plan in the six-county area that includes 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 2035 to reflect the adopted SACOG Blueprint pattern of growth and choices for transportation.

4.8.2 AFFECTED ENVIRONMENT

The initial task of defining transportation impacts for the Parkway alternatives was to evaluate the existing operating characteristics of the circulation system in the vicinity of the proposed action. The following sections discuss existing roadway functions, traffic volumes, and traffic LOSs, as well as transit services and bicycle facilities.

4.8.2.1 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 Interstate 80 (I-80) on the south and from Sierra College Boulevard on the east to west of State Route (SR) 70/99. The TASA (shown in Figure 4.8-1) 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 4.8-1. 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 (Figure 4.8-1). Existing roads that are either in the vicinity of the proposed action or that may have a measurable change in traffic volume due to Placer Parkway are described in more detail in the Transportation Technical Memorandum for this Tier 1 EIS/EIR (DKS Associates, 2007).

4.8.2.2 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 LOS. LOS is a qualitative measure of the effect of a number of factors, including 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 cover the entire range of traffic operations that might occur. LOS E describes conditions approaching or at maximum capacity.

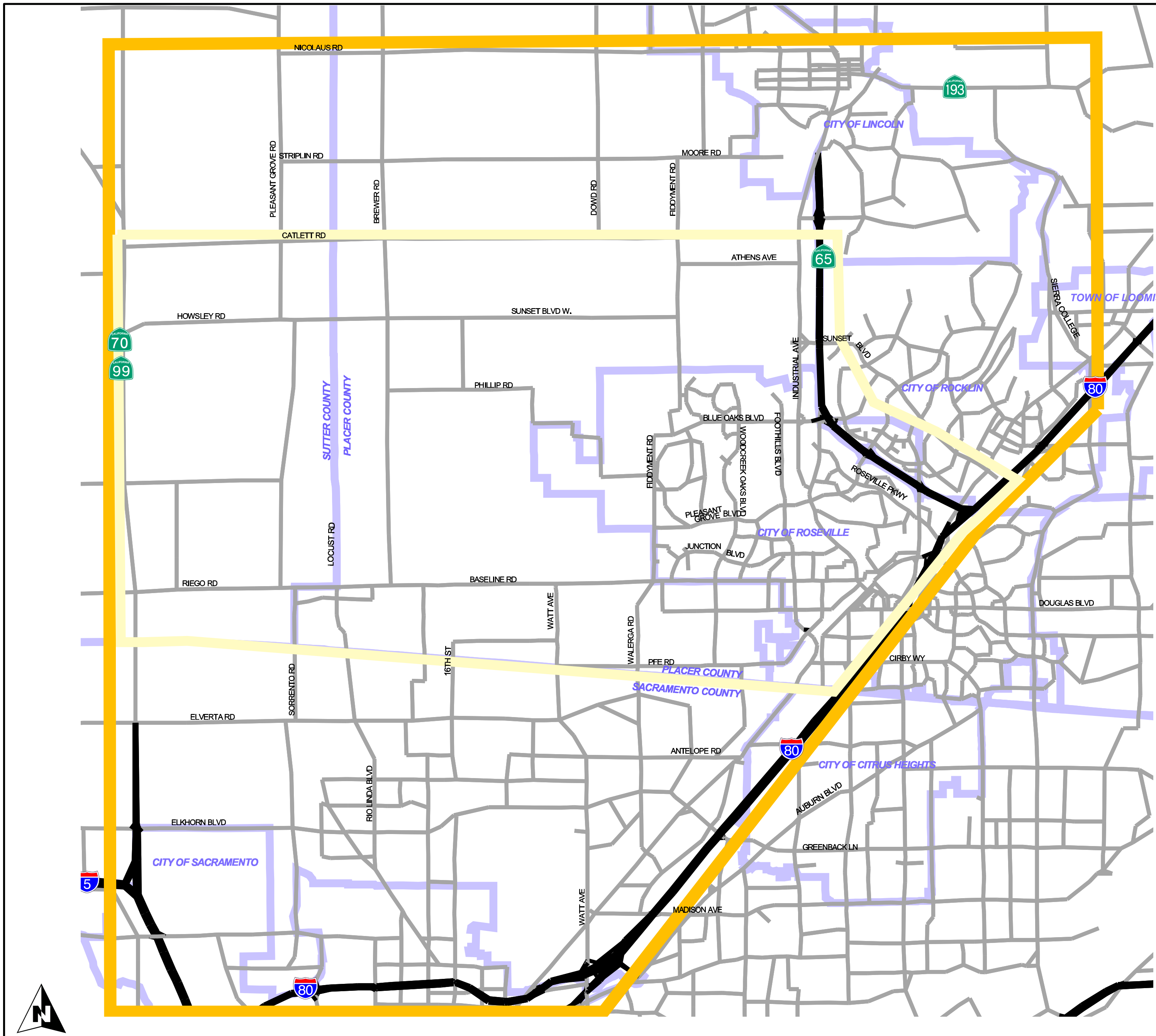
As shown in Table 4.8-1, the LOS standards and the analysis methodologies for calculating LOS differ for the jurisdictions and agencies in the study area. Most jurisdictions use both a roadway segment analysis (based on daily capacities by roadway type) and an intersection analysis (based on critical 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 the Transportation Concept Reports (TCRs) for each route by the California Department of Transportation (Caltrans). 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.

Table 4.8-1
Summary of Level of Service Standards and Methodologies for Local Jurisdictions

Jurisdiction/ Agency	LOS 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 TCR for each facility	HCM based on peak hour volumes	HCM

Notes:
HCM = Highway Capacity Manual
NA = not applicable
TCR = Transportation Concept Report
Sources: General Plans and traffic impact guidelines for local jurisdictions and agencies

For this 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 4.8-2 summarizes the LOS criteria used for this analysis.



Source: DKS Associates, 2007

PLACER PARKWAY
CORRIDOR PRESERVATION

Transportation Analysis Study Area

Analysis Focus Area

Tier 1 EIS/EIR

Existing Roadway Network and Transportation Analysis Study Area (TASA)

Figure 4.8-1

June 2007

Table 4.8-2
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					

The daily segment-based analysis criteria in Table 4.8-2 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 4.8-3 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 Associates for this Tier 1 EIS/EIR.

Table 4.8-3 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 4.8-3 indicates that Riego Road and Baseline Road operate at LOS D conditions, whereas observations indicate that portions of these roadways currently operate at LOS F conditions. The LOS for Riego Road and Baseline Road in Table 4.8-3 are based on capacities for an urban arterial, which typically would 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.

Table 4.8-3
Existing Daily Traffic Volumes and Roadway Segment Levels of Service in the Transportation Analysis Study Area

Roadway		Segment	2005 Conditions		
			Travel Lanes[1]	Daily Traffic Volume[2]	Segment LOS
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
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

Table 4.8-3 (Continued)
Existing Daily Traffic Volumes and Roadway Segment Levels of Service in the Transportation Analysis Study Area

Roadway		Segment	2005 Conditions		
			Travel Lanes[1]	Daily Traffic Volume[2]	Segment LOS
36	Cirby Way	East of Foothills Boulevard	4	38,900	F
37	E Catlett Road	East of Brewer Road	2	200	A
38	E 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

Table 4.8-3 (Continued)
Existing Daily Traffic Volumes and Roadway Segment Levels of Service in the Transportation Analysis Study Area

Roadway		Segment	2005 Conditions		
			Travel Lanes[1]	Daily Traffic Volume[2]	Segment LOS
65	Phillip Road	East of Brewer Road	2	100	A
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

Table 4.8-3 (Continued)
Existing Daily Traffic Volumes and Roadway Segment Levels of Service in the Transportation Analysis Study Area

			2005 Conditions		
Roadway		Segment	Travel Lanes[1]	Daily Traffic Volume[2]	Segment LOS
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
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 in 2005

Source: DKS Associates, 2007

The analysis of I-80 in this Tier 1 EIS/EIR covers segments between Rocklin Road and Antelope Road and 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.

4.8.2.3 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 Regional Transit operates fixed-route bus and light-rail services.

The existing transit services in the TASA are summarized in Table 4.8-4. Although 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 Roseville. As discussed in Section 4.5, Public Services and Utilities, local transit operators intend to extend transit services into western Placer County as it urbanizes.

Table 4.8-4
Existing Transit Routes in the Transportation Analysis Study Area

		Existing Service		
			Approximate Frequency	
Operator	**Line**	**Route Description**	**Peak Period**	**Off-peak**
Auburn Transit	Blue	Local Blue	two runs	hourly
	Red	Local Red	two runs	hourly
Lincoln Transit	102	Local	one run a.m.	
	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	one run a.m./p.m.	
	5	Taylor Road Shuttle	two/hour	two/hour
	PCX	Commuter Express Colfax to Sac	two runs a.m./p.m.	
Roseville Transit	1	Commuter 1	one run a.m./p.m.	
	2	Commuter 2		
	3	Commuter 3		
	4	Commuter 4		
	5	Commuter 5		
	6	Commuter 6		
	7	Commuter 7		
	A	Local A	hourly	hourly
	B	Local B		
	C	Local C		
	D	Local D		
	E	Local E		
	F	Local F		

Table 4.8-4 (Continued)
Existing Transit Routes in the Transportation Analysis Study Area

Operator	Line	Existing Service		
		Route Description	Approximate Frequency	
			Peak Period	Off-peak
Roseville Transit (continued)	G	Local G	hourly	hourly
	H	Local H		
	I	Local I		
	J	Local J		
	K	Local K		
	M	Local M		
	R	Local R	one run a.m./p.m.	
Yuba-Sutter Transit	SR 99	Sacramento Commuter Express	six runs a.m./p.m.	
	SR 99	Sacramento Midday Express		Three 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)	two runs 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 the rural areas around the build alternatives are not. 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 corridor alignment alternatives. Dial-a-ride services would be extended into western Placer County as it urbanizes.

4.8.2.4 Existing Bicycle Facilities

Bicycle facilities in Placer County and Sutter County are classified as follows:

- **Class I:** Off-street bicycle trails or paths that are physically separated from streets or roads used by motorized vehicles.
- **Class II:** On-street bicycle lanes with signs, striped lane markings, and pavement legends.
- **Class III:** On-street bicycle routes marked by signs and shared with motor vehicles and pedestrians. Optional four-inch edge lines painted on the pavement.

There is a very limited bikeway system in the vicinity of the Parkway corridor alignment alternatives.

Placer County adopted a Regional Bikeway Plan in 2002, which covered much of Placer County but not areas west of Watt Avenue. Sacramento County and the cities of Roseville and Lincoln also have developed Bikeway Master Plans. Sutter County has also established bikeways in urban areas. There are no existing bikeways in the rural portion of Sutter County near the build alternatives.

4.8.3 IMPACT ANALYSIS

4.8.3.1 Methodology for Impact Evaluation

A total of 24 scenarios (combinations of corridor alternatives, potential Watt Avenue interchange options, and 2020 and 2040 development conditions) were defined and evaluated in the Transportation Technical Memorandum for this Tier 1 EIS/EIR (DKS Associates, 2007). Comparing traffic conditions based on this range of conditions and scenarios provides a comprehensive basis for determining the traffic impacts of the proposed Parkway corridor alignment alternatives.

Sacramento Metropolitan Travel Demand Model

The primary travel forecasting tool used for the Parkway Tier 1 EIS/EIR is the Sacramento Metropolitan Travel Demand Model (SACMET) model. This model was used for development of SACOG's 2006 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, 2002). Documentation of the Tier 1 EIS/EIR travel model refinements and validation is provided in the Transportation Technical Memorandum for this Tier 1 EIS/EIR (DKS Associates, 2007).

The future Placer 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 subregional area. To evaluate the impact of the Parkway on that roadway system adequately, modifications to SACMET were needed. Modifying a regional model to provide additional detail in the model's transportation system for a corridor or subregional transportation analysis is a common practice.

Through discussions with the Placer Parkway Corridor Preservation Technical Advisory Committee and SACOG, the following enhancements were made to the SACMET model for the purposes of preparing travel forecasts for the Parkway 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

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 affect people's route choice but also potentially affect 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 this 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 Placer Parkway Corridor Preservation Tier 1 EIS/EIR. This model feature ensures that the model adequately predicts how the proposed action would change trip distribution and mode choice (and resulting traffic volumes and VMT) compared to the No-Build Alternative.

Development Projections

Details of development projections for the study area in 2020 and 2040 are presented in Section 3.3.2 and are shown on Figure 4.8-2 and 4.8-3.

Future Transportation System

The 2020 No-Build roadway system (shown in Figure 4.8-2) 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 4.8-3) includes the following elements:

- The roadway improvements in SACOG's 2027 MTP that includes the funded 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; and

  – The new and widened roadways identified as part of the proposed Lincoln Sphere of Influence (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.

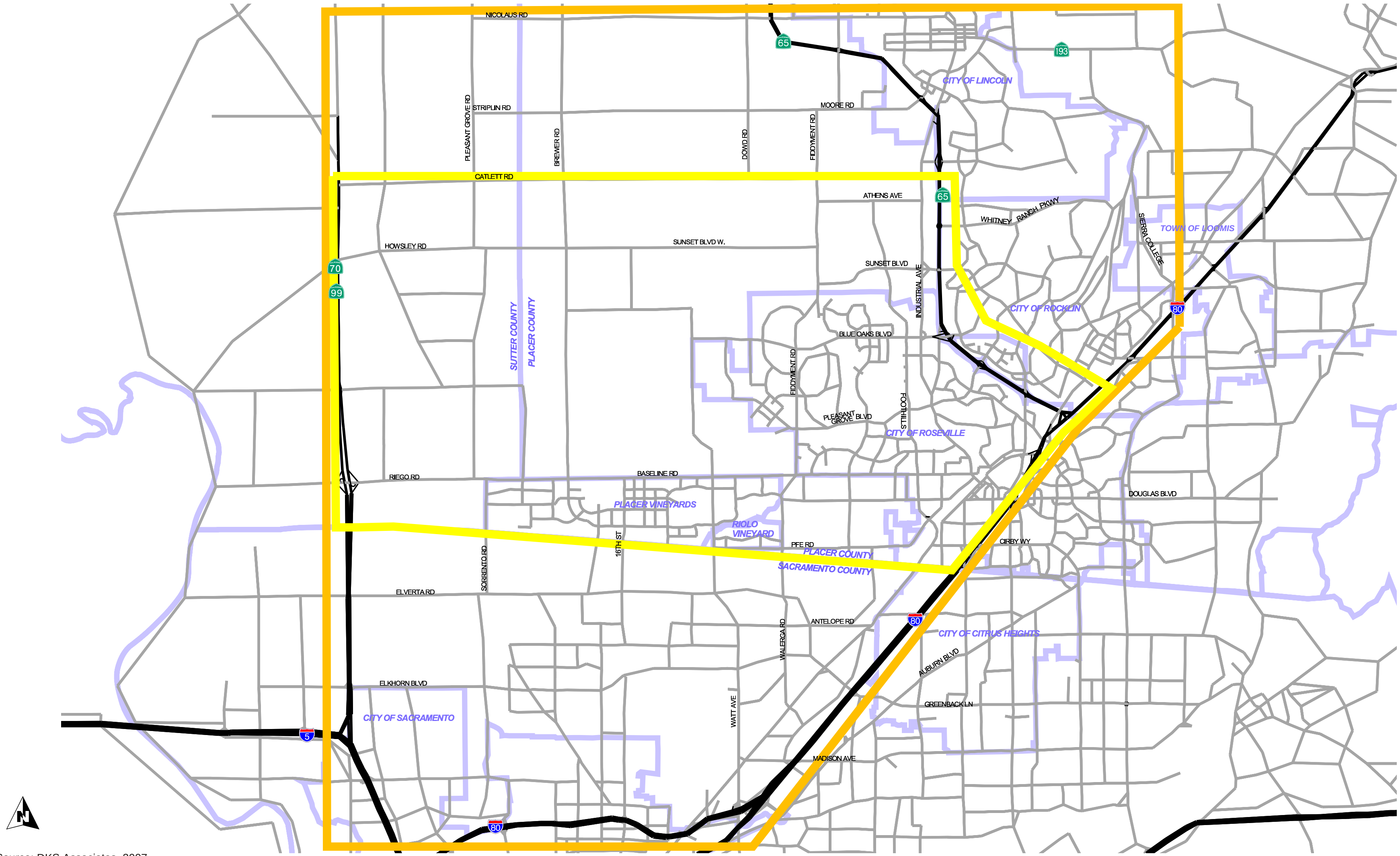
The transit system assumptions for the No-Build Alternative were based on the Funded Constrained Alternative that was recently developed by PCTPA with the assistance of local transit providers as part of the Placer County Long-Range Transit Plan update. This represents the most likely future transit system unless new sources for transit operating subsidies are established.

The Funded Constrained Alternative assumed that operating funds 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 4.8-5 and was defined by the following:

1. The 2005 to 2012 bus service improvements in the Short-Range Transit Plans for each of the transit providers in Placer County were assumed.

2. Other "potential future services" that were discussed in each of Short-Range Transit Plans were assumed.

3. Additional bus service was added to new growth areas that would develop after the 2012 horizon year of the Short-Range Transit Plans.



Source: DKS Associates, 2007

PLACER PARKWAY

Transportation Analysis Study Area	Analysis Focus Area	Cities and Specific Plan Areas

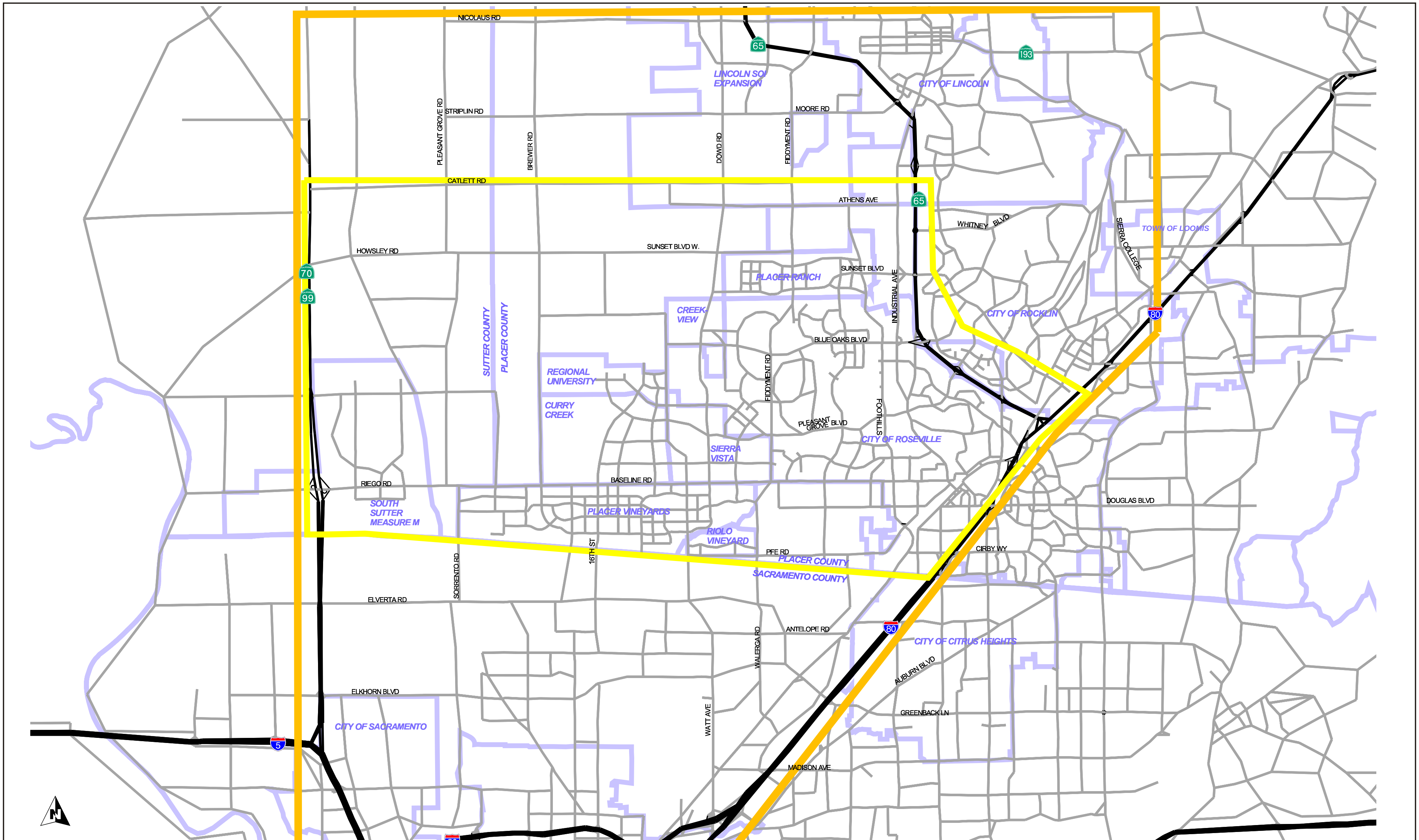
Tier 1 EIS/EIR

Assumed Development Areas and Roadway Network in 2020

Figure 4.8-2

June 2007

6/19/07 ..vsa/hkT\Placer Parkway 2007\EIS-EIR 2007\June 2007\fig4.8-2_final.ai



Source: DKS Associates, 2007

PLACER PARKWAY
CORRIDOR PRESERVATION

Transportation Analysis Study Area

Analysis Focus Area

Cities and Specific Plan Areas

Tier 1 EIS/EIR

Assumed Development Areas and Roadway Network in 2040

Figure 4.8-3

June 2007

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Table 4.8-5
Assumed Transit Service Changes for 2040 Funded Constrained Scenario

Transit 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
BRT2	Placer Ranch to Watt (BRT "light")				Extend BRT on Watt to Placer Ranch via Placer Vineyard and West Roseville.	hourly	hourly
AUBBL	Auburn Local, Blue	Two runs	hourly		Increase peak period frequencies and extend south	hourly	hourly
AUBR	Auburn Local, Red	Two runs	hourly		Increase peak period frequencies	hourly	hourly
LIN102	Lincoln local (One a.m. run)	one a.m. Run			Extend to west side	one run a.m.	
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, and 6 and retail/employment in SUD A, B, and 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 – N Auburn	hourly	hourly		Double frequency	30 min	30 min
PCT4	Placer: Colfax-Alta	One 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 Vineyards	hourly	hourly
PCT 105					Curry Creek to Galleria	hourly	hourly
PCT106					Regional University to Galleria	hourly	hourly
PCT108					Casino, Placer Ranch, So Placer Justice Center, and Galleria	hourly	hourly
PCT110					Auburn to Loomis (via Taylor Road) to Sierra College and 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 W Placer growth areas and Justice Center		
PCTBR	Auburn to Lincoln				Service to Bickford Ranch		
PCTWR	W Vineyards, W Roseville				Add service W, SW of Roseville		

Table 4.8-5 (Continued)
Assumed Transit Service Changes for 2040 Funded Constrained Scenario

Transit 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
PCX	Placer Commuter Express Colfax to Sac	Two a.m./p.m.				hourly	
RSVC1	Roseville Commuter 1						
RSVC2	Roseville Commuter 2						
RSVC3	Roseville Commuter 3						
RSVC4	Roseville Commuter 4	one a.m. and one p.m.			Extend to Placer Ranch	one run a.m./p.m.	
RSVC5	Roseville Commuter 5						
RSVC6	Roseville Commuter 6						
RSVC7	Roseville Commuter 7						
RSVC8	New Roseville Commuter 8			Cirby/Foothill to Downtown Sac		hourly	
RSVC9	New Roseville Commuter 9			West Roseville/Placer Vineyards to Downtown Sac via Baseline/SR 70/99		hourly	
RSVC10	New Roseville Commuter 10			Roseville Parkway/Sierra College to I-80 and Downtown Sac		hourly	
RSVC11	New Roseville Commuter 11			Olympus/Stoneridge to I-80 and Downtown Sac		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			Double frequency		30 min	30 min
RSVLB	Roseville Local B			Double frequency		30 min	30 min
RSVLC	Roseville Local C						
RSVLD	Roseville Local D			Extend west			
RSVLE	Roseville Local E						
RSVLF	Roseville Local F						
RSVLG	Roseville Local G	hourly	hourly				
RSVLH	Roseville Local H				Extend to Placer Ranch	hourly	hourly
RSVLI	Roseville Local I			Extend west			
RSVLJ	Roseville Local J			Shorten			
RSVLK	Roseville Local K						
RSVLM	Roseville Local M			Extend for West Roseville Specific Plan service			
RSVLN	Roseville Local			Stoneridge			
RSVLO	Roseville Local			Highland Reserve			
RSVLR	Roseville Local R	one a.m./p.m.				one run a.m./p.m.	

Source: DKS Associates, 2007

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.

4.8.3.2 Evaluation Criteria

Transportation impacts were evaluated in the TASA (shown in Figure 4.8-1) that covers portions of Placer County, Sutter County, Sacramento County, and the cities of Roseville and Rocklin and the Town of Loomis. Potential transportation impacts have been evaluated using the following specific criteria:

- In Lincoln, the Parkway 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 Parkway would cause roadway operations to deteriorate by one grade or its volume/capacity ratio1 to increase by at least 0.05.

- In unincorporated Placer County, the Parkway 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 Parkway 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 Parkway would cause roadway operations to deteriorate by one grade or cause the volume/capacity ratio to increase by at least 0.05.

- In unincorporated Sutter County the Parkway 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 Parkway would cause roadway operations to deteriorate by one grade or cause the volume/capacity ratio to increase by at least 0.05.

- In Roseville, the Parkway would cause 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 Parkway would cause roadway operations to deteriorate by one grade.

- In Rocklin, the Parkway 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 Parkway 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 Parkway would cause roadway operations to deteriorate by one grade or cause the volume/capacity ratio to increase by at least 0.05.

[1] Volume-to-capacity (volume/capacity) ratio equals the roadway volume divided by its capacity. A volume/capacity ratio of 0.50 means that vehicles use only one-half of the road or intersection capacity and traffic moves freely. A volume/capacity ratio of 1.0 indicates that the volume of vehicles has completely used all of the road's capacity and the roadway is congested.

- The Parkway would cause operations on a state highway to deteriorate to levels below the "concept LOS" identified in the Caltrans TCR. The TCRs for I-80, SR 65, and SR 70/99 indicate that these state highways have a concept LOS E.

- The corridor alignment would not allow ideal design standards for a subsequent design of Placer Parkway. This would include providing at least the minimum radius of horizontal or vertical curves that meet Caltrans' recommended standards for an urban freeway.

- The Parkway 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 Parkway 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 Parkway on these policies, the following system-wide criteria were defined:

- The Parkway would increase the percentage of VMT on congested roadways in the TASA.

- The Parkway would increase total vehicle delay in the TASA.

4.8.3.3 Direct Impacts

Existing Plus Project Conditions

A qualitative evaluation of Existing Plus Project conditions was conducted for the Tier 1 EIS/EIR, rather than a full modeling exercise, for the following reasons:

- The Parkway is not needed to accommodate existing traffic demand. It is intended to reduce expected future traffic congestion levels on the local roadway system in southwestern Placer County and south Sutter 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.

The analysis of 2020 Conditions and analysis of 2040 Conditions sections provide a quantitative evaluation of the build alternatives under 2020 (Opening Year) and 2040 (cumulative) conditions. As shown in these sections, the future Placer 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 Parkway 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 proposed 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

Analysis of 2020 conditions

Changes in Traffic Volumes

Table 4.8-6 summarizes the projected 2020 daily traffic volumes on segments of the Parkway under each alternative. Table 4.8-7 shows the 2020 projected daily volumes on each of the assumed on- and off-ramps to Placer Parkway under each alternative.

Table 4.8-8 compares estimated 2020 daily traffic volumes on study area roadways under each corridor alignment alternative to each other and to 2004 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 4.8-9. The locations of the volumes provided in Tables 4.8-8 and 4.8-9 are shown on Figure 4.8-4.

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 corridor alternative when compared to the No-Build Alternative. Figures 4.8-5 through 4.8-9 show these differences 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

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 4.8-10 shows the estimated 2020 LOS on segments of the future Placer Parkway based on four travel lanes. 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 4.8-11 shows the estimated volume/capacity ratio in 2020 on key roadway segments under each corridor alignment alternative. Table 4.8-12 provides the resulting LOS on these roadway segments.

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 below.

State Route 70/99

Under all of the corridor alternatives, 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 (Caltrans, 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 was 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 build alternatives, auxiliary lanes were assumed to be added to SR 70/99 south of the on-ramps and off-ramps to Placer Parkway.

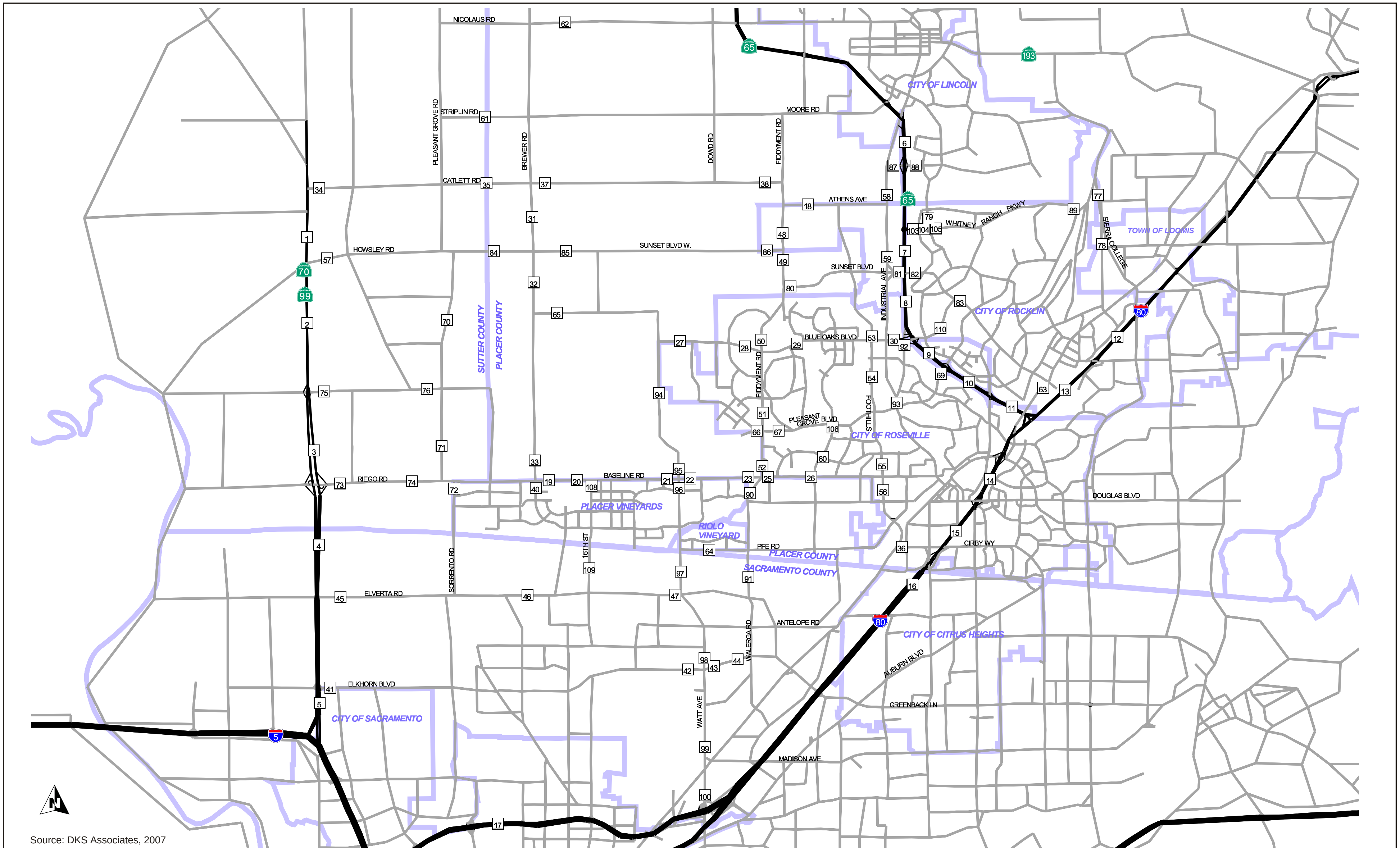
SR 70/99 would operate at LOS F conditions in 2020 between I-5 and Elkhorn Boulevard under the No-Build Alternative. All of the alternatives would add traffic to SR 70/99 from I-5 to the Elkhorn Boulevard and thereby lengthen the period of time during the peak period where SR 70/99 would operate at LOS F conditions.

State Route 65

Under all of the corridor alternatives, Placer Parkway would add traffic to SR 65 between the 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 (Caltrans, 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.



PLACER PARKWAY CORRIDOR PRESERVATION

Cities and Specific Plan Areas

Tier 1 EIS/EIR

Location of Roadway Segments for 2020 Traffic Analysis

Figure 4.8-4

June 2007

6/19/07 ..vsa/hk1\Placer Parkway 2007\EIS-EIR 2007\June 2007\fig4.8-4_final.ai

Table 4.8-6
Projected 2020 Daily Traffic Volumes on Placer Parkway Mainline

Segment		Lanes	Average Daily Volume				
			Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
1	East of SR 70/99	6	12,200	15,800	16,400	16,700	16,200
2	East of Pacific Street	6	11,900	15,800	16,500	16,100	15,600
3	East of So Sutter Road	6	11,900	15,800	16,500	16,100	15,600
4	East of Watt Avenue	6	11,900	15,800	16,500	16,100	15,600
5	East of Fiddyment Road	6	20,700	23,400	23,900	23,700	23,400
6	West of SR 65	6	21,500	23,100	23,400	23,000	22,800

Source: DKS Associates, 2007

Table 4.8-7
Projected 2020 Daily Traffic Volumes on Placer Parkway Ramps

Ramp		Lanes	Average Daily Volume				
			Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
1	NB SR 70/99 On Ramp to EB Placer Parkway	2	5,900	7,700	8,100	8,200	8,000
2	SB SR 70/99 On Ramp to EB Placer Parkway	1	400	400	400	600	500
3	WB Placer Parkway Off Ramp to NB SR 70/99	2	300	300	300	500	500
4	WB Placer Parkway Off Ramp to SB SR 70/99	1	5,500	7,300	7,500	7,400	7,200
5	EB On Ramp from NB Pacific Avenue	1	300	400	400	400	400
6	WB On Ramp from NB Pacific Avenue	1	300	200	200	200	200
7	EB On Ramp from SB Pacific Avenue	1	0	0	0	0	0
8	WB On Ramp from SB Pacific Avenue	1	100	100	100	0	0
9	EB Off Ramp to Pacific Avenue	1	400	400	400	1,000	1,000
10	WB Off Ramp to Pacific Avenue	1	300	400	400	200	200
23	EB On Ramp from NB Fiddyment Road	1	5,100	5,000	5,000	5,000	5,000
24	WB On Ramp from NB Fiddyment Road	1	400	600	600	600	600
25	EB On Ramp from SB Fiddyment Road	1	400	400	400	400	400
26	WB On Ramp from SB Fiddyment Road	1	800	1,100	1,100	1,100	1,100
27	EB Off Ramp to Fiddyment Road	1	1,400	1,800	1,900	1,800	1,800
28	WB Off Ramp to Fiddyment Road	1	5,800	5,700	5,700	5,700	5,700
29	EB On Ramp from NB Foothills	1	2,300	2,300	2,300	2,300	2,300
30	WB On Ramp from NB Foothills	1	1,200	1,600	1,700	1,900	1,800
31	EB On Ramp from SB Foothills	1	500	500	500	500	500
32	WB On Ramp from SB Foothills	1	800	900	900	800	800

Table 4.8-7 (Continued)
Projected 2020 Daily Traffic Volumes on Placer Parkway Ramps

Ramp		Lanes	Average Daily Volume				
			Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
33	EB Off Ramp to Foothills	1	2,500	3,100	3,300	3,200	3,100
34	WB Off Ramp to Foothills	1	2,600	2,500	2,500	2,500	2,500
35	NB SR 65 Off Ramp to Sunset Boulevard	1	4,200	4,100	4,100	4,100	4,100
36	SB SR 65 Off Ramp to Sunset Boulevard	1	4,900	4,900	4,900	4,900	4,900
37	SB SR 65 On Ramp to WB Placer Parkway	1	4,800	5,200	5,200	5,200	5,100
38	EB Placer Parkway Off Ramp to NB SR 65	1	3,600	3,900	4,000	3,800	3,800
39	EB Placer Parkway Off Ramp to SB SR 65	1	2,800	2,900	2,800	2,800	2,900
40	Sunset On Ramp to NB SR 65	1	5,200	5,100	5,100	5,200	5,100
41	Sunset On Ramp to SB SR 65	1	1,100	1,100	1,000	1,100	1,000

Notes:

EB = eastbound
NB = northbound
SB = southbound
WB = westbound

Source: DKS Associates, 2007

Table 4.8-10
Projected 2020 Level of Service on Placer Parkway with Four Travel Lanes

		Level of Service				
	Segment	**Alternative 1**	**Alternative 2**	**Alternative 3**	**Alternative 4**	**Alternative 5**
1	East of SR 70/99	A	A	A	A	A
2	East of Pacific Street	A	A	A	A	A
3	East of So Sutter Road	A	A	A	A	A
4	East of Watt Avenue	A	A	A	A	A
5	East of Fiddyment Road	B	B	B	B	B
6	West of SR 65	B	B	B	B	B
Source: DKS Associates, 2007						

Table 4.8-8
Estimated Daily Traffic Volumes for Build Alternatives under 2020 Conditions

	Roadway	Segment	Travel Lanes[1]		200[2] Daily Traffic Volume	Estimated 2020 Daily Traffic Volumes					
			2005	2020		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
1	SR 70/99	North of Howsley Road	4	4	29,000	43,000	42,500	42,200	42,500	42,600	42,600
2	SR 70/99	North of Sankey Road	4	4	29,000	44,200	43,300	43,100	43,200	43,600	43,600
3	SR 70/99	North of Riego Road	4	4	29,000	46,200	43,700	43,500	43,500	58,300	58,000
4	SR 70/99	North of Elverta Road	4	4	32,000	54,600	62,600	65,500	66,100	64,800	64,600
5	SR 70/99	North of I-5	4	4	47,500	75,000	78,600	80,300	80,800	80,100	79,800
6	SR 65	North of Twelve Bridge	4	4	40,000	94,600	96,400	96,400	96,400	96,400	96,400
7	SR 65	North of Sunset Boulevard	4	4	47,500	111,400	99,700	99,100	98,900	99,100	99,100
8	SR 65	North of Blue Oaks Boulevard	4	4	43,000	114,400	108,500	108,000	107,900	108,000	108,100
9	SR 65	North of Pleasant Grove Boulevard	4	4	76,000	115,100	112,700	112,400	112,400	112,600	112,600
10	SR 65	North of Stanford Ranch Road	4	4	82,000	124,700	123,400	123,000	123,000	123,100	123,000
11	SR 65	North of I-80	4	4	84,000	127,800	126,600	126,000	126,000	126,100	126,200
12	I-80	East of Rocklin Road	6	6	96,000	109,600	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	142,300	142,300	142,200	142,300
14	I-80	East of Douglas Boulevard	6	6	156,000	163,700	162,400	162,200	162,500	161,800	161,300
15	I-80	East of Riverside Avenue	6	6	163,000	219,100	216,600	215,700	215,500	215,800	216,200
16	I-80	West of Riverside Avenue	8+2	8+2	179,000	232,700	230,200	229,400	229,300	229,400	229,800
17	I-80	East of Northgate Boulevard	6	6	143,000	154,800	153,100	151,800	152,100	151,900	152,200
18	Athens Avenue	East of Fiddyment Road	2	2	3,700	8,900	3,600	3,700	3,600	3,300	3,300
19	Baseline Road	East of Pleasant Grove Road	2	4	9,950	11,900	9,700	9,200	9,100	9,100	9,200
20	Baseline Road	East of Brewer Road	2	4	10,400	12,400	10,400	9,900	9,800	9,800	9,900
21	Baseline Road	West of 16th Street	2	4	10,400	12,400	10,400	9,900	9,800	9,800	9,900
22	Baseline Road	West of Watt Avenue	2	6	10,400	24,200	22,900	22,600	22,600	22,500	22,600
23	Baseline Road	East of Watt Avenue	2	6	12,600	20,400	18,800	18,400	18,400	18,300	18,400
24	Baseline Road	West of Walerga Road	2	6	12,600	34,200	32,300	31,800	31,800	31,700	31,800
25	Baseline Road	East of Walerga Road	3	6	15,100	32,200	31,300	31,100	31,000	31,000	31,000
26	Baseline Road	West of Woodcreek Oaks Boulevard	3	4	15,100	29,600	29,000	28,800	28,700	28,600	28,800
27	Blue Oaks Boulevard	East of Watt Avenue	NA	6	NA	3,500	3,300	3,200	3,200	3,400	3,400
28	Blue Oaks Boulevard	West of Fiddyment Road	NA	6	NA	14,000	14,200	14,200	14,200	14,100	14,100
29	Blue Oaks Boulevard	East of Fiddyment Road	2	6	8,200	27,300	26,400	26,400	26,400	26,300	26,400
30	Blue Oaks Boulevard	West of SR 65	4	6	38,700	49,800	48,200	48,500	48,500	48,400	48,500
31	Brewer Road	North of Sunset Boulevard West	2	2	200	500	200	200	200	200	200

Table 4.8-8 (Continued)
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					
			2005	2020		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
32	Brewer Road	South of Sunset Boulevard West	2	2	200	400	500	500	500	500	500
33	Brewer Road	North of Baseline Road	2	2	700	300	300	300	300	300	300
34	Catlett Road	East of SR 70/99	2	2	200	2,700	2,200	2,100	2,300	1,600	1,700
35	Catlett Road	East of Pleasant Grove Road	2	2	100	500	600	600	600	200	200
36	Cirby Way	East of Foothills Boulevard	4	6	38,900	61,000	60,800	60,600	60,700	60,700	60,600
37	E Catlett Road	East of Brewer Road	2	2	200	900	700	700	700	300	300
38	E Catlett Road	West of Fiddyment Road	2	2	200	700	800	800	800	400	400
39	Dowd Road	North of Sunset Boulevard West	NA	NA	NA	0	0	0	0	0	0
40	Dryer Road West	South of Baseline Road	NA	4	NA	2,800	2,800	2,800	2,800	2,800	2,800
41	Elkhorn Boulevard	East of SR 70/99	2	6	16,300	30,900	30,700	30,600	30,800	30,800	30,800
42	Elkhorn Boulevard	West of Watt Avenue	4	4	26,800	28,700	28,100	28,000	28,100	28,000	28,300
43	Elkhorn Boulevard	East of Watt Avenue	4	6	23,020	35,500	35,000	35,100	35,100	35,000	35,000
44	Elkhorn Boulevard	West of Walerga Road	4	6	25,700	35,600	35,100	35,200	35,200	35,100	35,200
45	Elverta Road	East of SR 70/99	2	4	7,200	22,200	21,600	21,500	21,500	21,600	21,600
46	Elverta Road	East of Rio Linda Boulevard	2	4	8,000	32,900	32,400	32,200	32,100	32,100	32,100
47	Elverta Road	West of Watt Avenue	2	4	20,700	52,500	52,100	52,100	52,100	52,000	52,100
48	Fiddyment Road	North of Sunset Boulevard West	2	2	2,800	12,500	7,800	8,200	8,300	8,200	8,200
49	Fiddyment Road	South of Sunset Boulevard	2	2	4,000	12,500	8,600	9,000	9,000	8,900	8,900
50	Fiddyment Road	North of Blue Oaks Boulevard	2	4	4,000	21,600	23,400	23,100	23,100	23,100	23,100
51	Fiddyment Road	North of Pleasant Grove Boulevard	2	4	11,800	26,600	27,400	27,100	27,100	27,100	27,100
52	Fiddyment Road	North of Baseline Road	2	6	19,600	46,400	45,100	44,600	44,700	44,700	44,700
53	Foothills Boulevard	North of Blue Oaks Boulevard	4	4	3,400	15,900	18,400	18,500	18,500	18,600	18,600
54	Foothills Boulevard	South of Roseville Parkway	4	6	12,200	31,000	30,600	30,500	30,500	30,500	30,400
55	Foothills Boulevard	North of Baseline Road	4	6	28,400	48,600	48,100	48,000	48,000	48,000	48,000
56	Foothills Boulevard	South of Baseline Road	4	6	30,900	57,800	57,500	57,400	57,400	57,300	57,400
57	Howsley Road	East of SR 70/99	2	2	800	1,400	1,000	1,100	1,000	1,200	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
59	Industrial	North of Roseville Parkway	2	2	2,800	22,100	22,500	22,400	22,500	22,500	22,500
60	Junction Boulevard	East of Woodcreek Oaks Boulevard	4	4	6,100	4,400	4,400	4,300	4,300	4,300	4,300
61	Moore Road	West of Brewer Road	2	2	400	200	200	200	200	200	200
62	Nicolaus Road	East of Brewer Road	2	2	900	1,700	700	700	700	600	700

Table 4.8-8 (Continued)
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					
			2005	2020		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
63	Pacific Street	West of Sunset Boulevard	4	6	10,600	30,000	29,800	29,800	29,700	29,700	29,700
64	PFE Road	East of Watt Avenue	2	4	4,700	3,500	3,500	3,500	3,500	3,500	3,500
65	Phillip Road	East of Brewer Road	2	2	100	400	400	400	400	400	400
66	Pleasant Grove Boulevard	West of Fiddyment Road	NA	4	NA	23,200	23,200	23,200	23,200	23,100	23,100
67	Pleasant Grove Boulevard	East of Fiddyment Road	4	4	3,700	19,400	17,700	17,500	17,800	17,800	17,800
68	Pleasant Grove Boulevard	East of Woodcreek Oaks Boulevard	4	6	16,300	47,300	45,100	44,900	44,900	44,800	44,900
69	Pleasant Grove Boulevard	West of SR 65	6	6	41,300	49,600	48,700	48,800	48,700	48,700	48,800
70	Pleasant Grove Road	North of Sankey Road	2	4	1,500	5,300	4,300	4,200	4,200	4,200	4,100
71	Pleasant Grove Road	North of Riego Road	2	4	1,700	3,900	3,700	3,700	3,700	4,500	4,400
72	Pleasant Grove Road	South of Baseline Road	2	2	1,500	2,400	1,900	1,900	1,900	2,100	2,000
73	Riego Road	East of SR 70/99	2	4	9,900	11,100	9,100	8,700	8,700	8,700	8,800
74	Riego Road	West of Pleasant Grove Road	2	4	9,900	11,000	9,500	9,300	9,300	8,400	8,500
75	Sankey Road	East of SR 70/99	2	4	400	1,800	1,000	900	900	0	0
76	Sankey Road	West of Pleasant Grove Road	2	4	200	1,800	1,000	900	900	1,600	1,600
77	Sierra College Boulevard	South of English Colony Way	2	4	11,000	33,100	33,100	33,100	33,000	33,000	33,000
78	Sierra College Boulevard	North of King Road	2	4	11,000	32,400	32,300	32,300	32,200	32,300	32,300
79	Wildcat Boulevard	North of Whitney Ranch Parkway	4	4	3,700	25,900	26,800	27,000	26,800	26,900	26,900
80	Sunset Boulevard	East of Fiddyment Boulevard	NA	6	NA	4,000	2,100	2,100	2,100	2,100	2,100
81	Sunset Boulevard	West of SR 65	2	4	8,000	36,400	32,700	32,800	32,800	32,900	32,800
82	Sunset Boulevard	East of SR 65	4	6	7,100	20,700	21,500	21,600	21,600	21,600	21,600
83	Sunset Boulevard	East of Blue Oaks Boulevard	6	2	9,800	38,100	37,800	37,600	37,500	37,500	37,600
84	Sunset Boulevard West	West of Brewer Road	2	2	600	1,400	700	600	600	500	600
85	Sunset Boulevard West	East of Brewer Road	2	2	600	700	200	200	200	100	100
86	Sunset Boulevard West	West of Fiddyment Road	2	2	600	1,400	900	900	900	900	900
87	Twelve Bridges Drive	West of SR 65	2	4	6,000	21,200	18,400	18,400	18,300	18,300	18,400
88	Twelve Bridges Drive	East of SR 65	4	6	5,100	37,700	37,700	37,600	37,800	37,700	37,600

Table 4.8-8 (Continued)
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					
			2005	2020		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
89	Valley View Parkway	West of Park Drive	NA	4	NA	10,300	10,800	10,900	10,900	10,900	10,800
90	Walerga Road	South of Baseline Road	2	4	14,900	31,800	31,600	31,500	31,500	31,600	31,500
91	Walerga Road	North of Elverta Road	4	4	22,700	41,400	41,200	41,100	41,100	41,200	41,100
92	Washington Boulevard	South of Blue Oaks Boulevard	2	4	4,800	24,700	23,000	23,000	23,000	22,900	23,000
93	Washington Boulevard	North of Pleasant Grove Boulevard	2	4	6,205	34,000	31,400	31,300	31,300	31,300	31,300
94	Watt Avenue	North of Pleasant Grove Boulevard	NA	6	NA	3,200	3,000	2,900	2,800	3,100	3,100
95	Watt Avenue	North of Baseline Road	NA	6	NA	3,200	3,000	2,900	2,800	3,100	3,100
96	Watt Avenue	South of Baseline Road	2	6	7,100	4,900	4,700	4,600	4,500	4,600	4,600
97	Watt Avenue	North of Elverta Road	4	4	19,400	34,600	34,400	34,300	34,200	34,300	34,200
98	Watt Avenue	North of Elkhorn Boulevard	4	6	38,700	38,000	38,300	38,100	38,000	38,100	37,800
99	Watt Avenue	North of Airbase Drive	6	6	47,100	62,600	62,600	62,500	62,600	62,500	62,600
100	Watt Avenue	North of I-80	6	6	62,600	72,400	71,900	72,600	72,500	72,300	72,300
101	West Side Drive	North of Blue Oaks Boulevard	NA	NA	NA	0	0	0	0	0	0
102	West Side Drive	North of Baseline Road	NA	NA	NA	0	0	0	0	0	0
103	Whitney Ranch Parkway	East of SR 65	NA	6	NA	29,800	31,300	32,100	32,100	32,000	32,000
104	Whitney Ranch Parkway	East of University Avenue	NA	6	NA	18,200	20,400	21,100	21,000	21,000	20,800
105	Whitney Ranch Parkway	East of Wildcat Boulevard	NA	4	NA	9,800	10,900	11,100	11,100	11,100	11,100
106	Woodcreek Oak Boulevard	South of Pleasant Grove Boulevard	2	4	11,900	24,200	23,400	23,300	23,100	23,100	23,100
107	16th Street	North of Baseline Road	NA	NA	NA	0	0	0	0	0	0
108	16th Street	South of Baseline Road	NA	4	NA	3,300	3,400	3,400	3,400	3,400	3,400
109	16th Street	North of Elverta Road	2	2	400	13,600	13,500	13,500	13,500	13,500	13,500
110	Blue Oaks Boulevard	East of Lonetree Boulevard	4	4	9,500	19,500	18,900	18,900	18,900	18,900	18,900

Notes:

[1] +2 = Plus two HOV lanes
[2] Traffic volumes on state highways are 2004. Counts on some local roadways were taken in 2005

Source: DKS Associates, 2007

Table 4.8-9
Estimated Change in Daily Traffic Volumes for Build Alternatives under 2020 Conditions

	Roadway	Segment	Travel Lanes[1] 2005	Travel Lanes[1] 2020	2005[2] Daily Traffic Volume	No-Build 2020 Daily Traffic Volume	Estimated Change in 2020 Daily Traffic Volumes Compared to No-Build Alternative: Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
1	SR 70/99	North of Howsley Road	4	4	29,000	43,000	-500	-800	-500	-400	-400
2	SR 70/99	North of Sankey Road	4	4	29,000	44,200	-900	-1,100	-1,000	-600	-600
3	SR 70/99	North of Riego Road	4	4	29,000	46,200	-2,500	-2,700	-2,700	12,100	11,800
4	SR 70/99	North of Elverta Road	4	4	32,000	54,600	8,000	10,900	11,500	10,200	10,000
5	SR 70/99	North of I-5	4	4	47,500	75,000	3,600	5,300	5,800	5,100	4,800
6	SR 65	North of Twelve Bridge	4	4	40,000	94,600	1,800	1,800	1,800	1,800	1,800
7	SR 65	North of Sunset Boulevard	4	4	47,500	111,400	-11,700	-12,300	-12,500	-12,300	-12,300
8	SR 65	North of Blue Oaks Boulevard	4	4	43,000	114,400	-5,900	-6,400	-6,500	-6,400	-6,300
9	SR 65	North of Pleasant Grove Boulevard	4	4	76,000	115,100	-2,400	-2,700	-2,700	-2,500	-2,500
10	SR 65	North of Stanford Ranch Road	4	4	82,000	124,700	-1,300	-1,700	-1,700	-1,600	-1,700
11	SR 65	North of I-80	4	4	84,000	127,800	-1,200	-1,800	-1,800	-1,700	-1,600
12	I-80	East of Rocklin Road	6	6	96,000	109,600	-200	-200	-200	-200	-200
13	I-80	East of SR 65	6	6	116,000	142,200	0	100	100	0	100
14	I-80	East of Douglas Boulevard	6	6	156,000	163,700	-1,300	-1,500	-1,200	-1,900	-2,400
15	I-80	East of Riverside Avenue	6	6	163,000	219,100	-2,500	-3,400	-3,600	-3,300	-2,900
16	I-80	West of Riverside Avenue	8+2	8+2	179,000	232,700	-2,500	-3,300	-3,400	-3,300	-2,900
17	I-80	East of Northgate Boulevard	6	6	143,000	154,800	-1,700	-3,000	-2,700	-2,900	-2,600
18	Athens Avenue	East of Fiddyment Road	2	2	3,700	8,900	-5,300	-5,200	-5,300	-5,600	-5,600
19	Baseline Road	East of Pleasant Grove Road	2	4	9,950	11,900	-2,200	-2,700	-2,800	-2,800	-2,700
20	Baseline Road	East of Brewer Road	2	4	10,400	12,400	-2,000	-2,500	-2,600	-2,600	-2,500
21	Baseline Road	West of 16th Street	2	4	10,400	12,400	-2,000	-2,500	-2,600	-2,600	-2,500
22	Baseline Road	West of Watt Avenue	2	6	10,400	24,200	-1,300	-1,600	-1,600	-1,700	-1,600
23	Baseline Road	East of Watt Avenue	2	6	12,600	20,400	-1,600	-2,000	-2,000	-2,100	-2,000
24	Baseline Road	West of Walerga Road	2	6	12,600	34,200	-1,900	-2,400	-2,400	-2,500	-2,400
25	Baseline Road	East of Walerga Road	3	6	15,100	32,200	-900	-1,100	-1,200	-1,200	-1,200
26	Baseline Road	West of Woodcreek Oaks Boulevard	3	4	15,100	29,600	-600	-800	-900	-1,000	-800
27	Blue Oaks Boulevard	East of Watt Avenue	NA	6	NA	3,500	-200	-300	-300	-100	-100
28	Blue Oaks Boulevard	West of Fiddyment Road	NA	6	NA	14,000	200	200	200	100	100
29	Blue Oaks Boulevard	East of Fiddyment Road	2	6	8,200	27,300	-900	-900	-900	-1,000	-900
30	Blue Oaks Boulevard	West of SR 65	4	6	38,700	49,800	-1,600	-1,300	-1,300	-1,400	-1,300
31	Brewer Road	North of Sunset Boulevard West	2	2	200	500	-300	-300	-300	-300	-300

Table 4.8-9 (Continued)
Estimated Change in Daily Traffic Volumes for Build Alternatives under 2020 Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	No-Build 2020 Daily Traffic Volume	Estimated Change in 2020 Daily Traffic Volumes Compared to No-Build Alternative				
			2005	2020			Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
32	Brewer Road	South of Sunset Boulevard West	2	2	200	400	100	100	100	100	100
33	Brewer Road	North of Baseline Road	2	2	700	300	0	0	0	0	0
34	Catlett Road	East of SR 70/99	2	2	200	2,700	-500	-600	-400	-1,100	-1,000
35	Catlett Road	East of Pleasant Grove Road	2	2	100	500	100	100	100	-300	-300
36	Cirby Way	East of Foothills Boulevard	4	6	38,900	61,000	-200	-400	-300	-300	-400
37	E Catlett Road	East of Brewer Road	2	2	200	900	-200	-200	-200	-600	-600
38	E Catlett Road	West of Fiddyment Road	2	2	200	700	100	100	100	-300	-300
39	Dowd Road	North of Sunset Boulevard West	NA	NA	NA	0	0	0	0	0	0
40	Dryer Road West	South of Baseline Road	NA	4	NA	2,800	0	0	0	0	0
41	Elkhorn Boulevard	East of SR 70/99	2	6	16,300	30,900	-200	-300	-100	-100	-100
42	Elkhorn Boulevard	West of Watt Avenue	4	4	26,800	28,700	-600	-700	-600	-700	-400
43	Elkhorn Boulevard	East of Watt Avenue	4	6	23,020	35,500	-500	-400	-400	-500	-500
44	Elkhorn Boulevard	West of Walerga Road	4	6	25,700	35,600	-500	-400	-400	-500	-400
45	Elverta Road	East of SR 70/99	2	4	7,200	22,200	-600	-700	-700	-600	-600
46	Elverta Road	East of Rio Linda Boulevard	2	4	8,000	32,900	-500	-700	-800	-800	-800
47	Elverta Road	West of Watt Avenue	2	4	20,700	52,500	-400	-400	-400	-500	-400
48	Fiddyment Road	North of Sunset Boulevard West	2	2	2,800	12,500	-4,700	-4,300	-4,200	-4,300	-4,300
49	Fiddyment Road	South of Sunset Boulevard	2	2	4,000	12,500	-3,900	-3,500	-3,500	-3,600	-3,600
50	Fiddyment Road	North of Blue Oaks Boulevard	2	4	4,000	21,600	1,800	1,500	1,500	1,500	1,500
51	Fiddyment Road	North of Pleasant Grove Boulevard	2	4	11,800	26,600	800	500	500	500	500
52	Fiddyment Road	North of Baseline Road	2	6	19,600	46,400	-1,300	-1,800	-1,700	-1,700	-1,700
53	Foothills Boulevard	North of Blue Oaks Boulevard	4	4	3,400	15,900	2,500	2,600	2,600	2,700	2,700
54	Foothills Boulevard	South of Roseville Parkway	4	6	12,200	31,000	-400	-500	-500	-500	-600
55	Foothills Boulevard	North of Baseline Road	4	6	28,400	48,600	-500	-600	-600	-600	-600
56	Foothills Boulevard	South of Baseline Road	4	6	30,900	57,800	-300	-400	-400	-500	-400
57	Howsley Road	East of SR 70/99	2	2	800	1,400	-400	-300	-400	-200	-300
58	Industrial Avenue	North of Athens Avenue	2	4	4,600	23,100	-3,800	-3,800	-3,800	-3,800	-3,800
59	Industrial	North of Roseville Parkway	2	2	2,800	22,100	400	300	400	400	400
60	Junction Boulevard	East of Woodcreek Oaks Boulevard	4	4	6,100	4,400	0	-100	-100	-100	-100
61	Moore Road	West of Brewer Road	2	2	400	200	0	0	0	0	0
62	Nicolaus Road	East of Brewer Road	2	2	900	1,700	-1,000	-1,000	-1,000	-1,100	-1,000

Table 4.8-9 (Continued)
Estimated Change in Daily Traffic Volumes for Build Alternatives under 2020 Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	No-Build 2020 Daily Traffic Volume	Estimated Change in 2020 Daily Traffic Volumes Compared to No-Build Alternative				
			2005	2020			Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
63	Pacific Street	West of Sunset Boulevard	4	6	10,600	30,000	-200	-200	-300	-300	-300
64	PFE Road	East of Watt Avenue	2	4	4,700	3,500	0	0	0	0	0
65	Phillip Road	East of Brewer Road	2	2	100	400	0	0	0	0	0
66	Pleasant Grove Boulevard	West of Fiddyment Road	NA	4	NA	23,200	0	0	0	-100	-100
67	Pleasant Grove Boulevard	East of Fiddyment Road	4	4	3,700	19,400	-1,700	-1,900	-1,600	-1,600	-1,600
68	Pleasant Grove Boulevard	East of Woodcreek Oaks Boulevard	4	6	16,300	47,300	-2,200	-2,400	-2,400	-2,500	-2,400
69	Pleasant Grove Boulevard	West of SR 65	6	6	41,300	49,600	-900	-800	-900	-900	-800
70	Pleasant Grove Road	North of Sankey Road	2	4	1,500	5,300	-1,000	-1,100	-1,100	-1,100	-1,200
71	Pleasant Grove Road	North of Riego Road	2	4	1,700	3,900	-200	-200	-200	600	500
72	Pleasant Grove Road	South of Baseline Road	2	2	1,500	2,400	-500	-500	-500	-300	-400
73	Riego Road	East of SR 70/99	2	4	9,900	11,100	-2,000	-2,400	-2,400	-2,400	-2,300
74	Riego Road	West of Pleasant Grove Road	2	4	9,900	11,000	-1,500	-1,700	-1,700	-2,600	-2,500
75	Sankey Road	East of SR 70/99	2	4	400	1,800	-800	-900	-900	-1,800	-1,800
76	Sankey Road	West of Pleasant Grove Road	2	4	200	1,800	-800	-900	-900	-200	-200
77	Sierra College Boulevard	South of English Colony Way	2	4	11,000	33,100	0	0	-100	-100	-100
78	Sierra College Boulevard	North of King Road	2	4	11,000	32,400	-100	-100	-200	-100	-100
79	Wildcat Boulevard	North of Whitney Ranch Parkway	4	4	3,700	25,900	900	1,100	900	1,000	1,000
80	Sunset Boulevard	East of Fiddyment Boulevard	NA	6	NA	4,000	-1,900	-1,900	-1,900	-1,900	-1,900
81	Sunset Boulevard	West of SR 65	2	4	8,000	36,400	-3,700	-3,600	-3,600	-3,500	-3,600
82	Sunset Boulevard	East of SR 65	4	6	7,100	20,700	800	900	900	900	900
83	Sunset Boulevard	East of Blue Oaks Boulevard	6	2	9,800	38,100	-300	-500	-600	-600	-500
84	Sunset Boulevard West	West of Brewer Road	2	2	600	1,400	-700	-800	-800	-900	-800
85	Sunset Boulevard West	East of Brewer Road	2	2	600	700	-500	-500	-500	-600	-600
86	Sunset Boulevard West	West of Fiddyment Road	2	2	600	1,400	-500	-500	-500	-500	-500
87	Twelve Bridges Drive	West of SR 65	2	4	6,000	21,200	-2,800	-2,800	-2,900	-2,900	-2,800

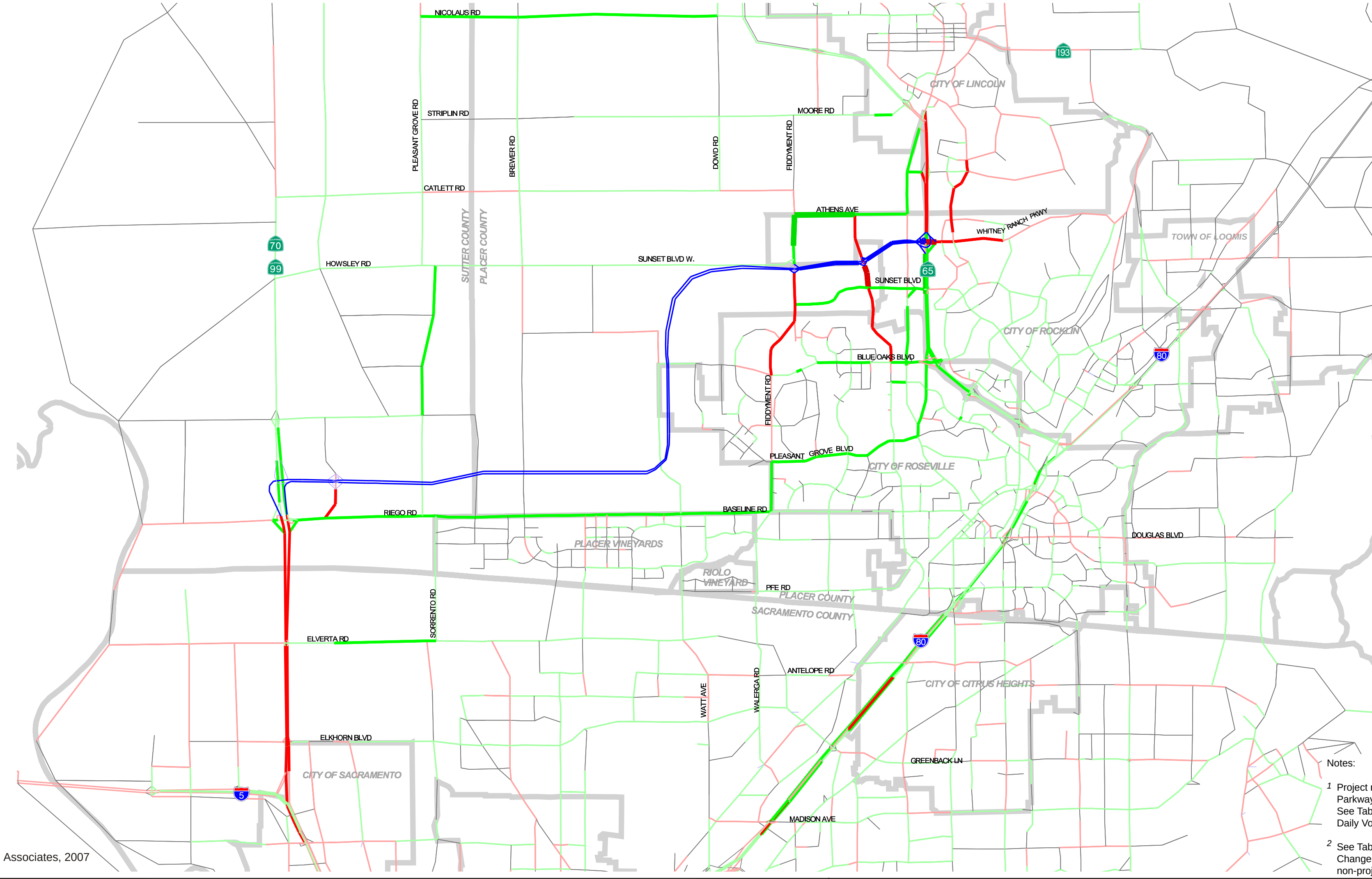
Table 4.8-9 (Continued)
Estimated Change in Daily Traffic Volumes for Build Alternatives under 2020 Conditions

Roadway		Segment	Travel Lanes[1]		2005[2] Daily Traffic Volume	No-Build 2020 Daily Traffic Volume	Estimated Change in 2020 Daily Traffic Volumes Compared to No-Build Alternative				
			2005	2020			Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
88	Twelve Bridges Drive	East of SR 65	4	6	5,100	37,700	0	-100	100	0	-100
89	Valley View Parkway	West of Park Drive	NA	4	NA	10,300	500	600	600	600	500
90	Walerga Road	South of Baseline Road	2	4	14,900	31,800	-200	-300	-300	-200	-300
91	Walerga Road	North of Elverta Road	4	4	22,700	41,400	-200	-300	-300	-200	-300
92	Washington Boulevard	South of Blue Oaks Boulevard	2	4	4,800	24,700	-1,700	-1,700	-1,700	-1,800	-1,700
93	Washington Boulevard	North of Pleasant Grove Boulevard	2	4	6,205	34,000	-2,600	-2,700	-2,700	-2,700	-2,700
94	Watt Avenue	North of Pleasant Grove Boulevard	NA	6	NA	3,200	-200	-300	-400	-100	-100
95	Watt Avenue	North of Baseline Road	NA	6	NA	3,200	-200	-300	-400	-100	-100
96	Watt Avenue	South of Baseline Road	2	6	7,100	4,900	-200	-300	-400	-300	-300
97	Watt Avenue	North of Elverta Road	4	4	19,400	34,600	-200	-300	-400	-300	-400
98	Watt Avenue	North of Elkhorn Boulevard	4	6	38,700	38,000	300	100	0	100	-200
99	Watt Avenue	North of Airbase Drive	6	6	47,100	62,600	0	-100	0	-100	0
100	Watt Avenue	North of I-80	6	6	62,600	72,400	-500	200	100	-100	-100
101	West Side Drive	North of Blue Oaks Boulevard	NA	NA	NA	0	0	0	0	0	0
102	West Side Drive	North of Baseline Road	NA	NA	NA	0	0	0	0	0	0
103	Whitney Ranch Parkway	East of SR 65	NA	6	NA	29,800	1,500	2,300	2,300	2,200	2,200
104	Whitney Ranch Parkway	East of University Avenue	NA	6	NA	18,200	2,200	2,900	2,800	2,800	2,600
105	Whitney Ranch Parkway	East of Wildcat Boulevard	NA	4	NA	9,800	1,100	1,300	1,300	1,300	1,300
106	Woodcreek Oak Boulevard	South of Pleasant Grove Boulevard	2	4	11,900	24,200	-800	-900	-1,100	-1,100	-1,100
107	16th Street	North of Baseline Road	NA	NA	NA	0	0	0	0	0	0
108	16th Street	South of Baseline Road	NA	4	NA	3,300	100	100	100	100	100
109	16th Street	North of Elverta Road	2	2	400	13,600	-100	-100	-100	-100	-100
110	Blue Oaks Boulevard	East of Lonetree Boulevard	4	4	9,500	19,500	-600	-600	-600	-600	-600

Notes:

[1] +2 = Plus two HOV lanes
[2] Traffic volumes on state highways are 2004. Counts on some local roadways were taken in 2005

Source: DKS Associates, 2007



Source: DKS Associates, 2007

Notes:

1 Project roadways are Placer Parkway and its interchanges. See Tables 4.8-6 and 4.8-7 for Daily Volumes on Placer Parkway.

2 See Table 4.8-9 for Changes in Daily Volumes for non-project roadways.

PLACER PARKWAY CORRIDOR PRESERVATION

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

Tier 1 EIS/EIR

Changes in 2020 Daily Traffic Volumes
Alternative 1
Compared to No-Build Alternative

Figure 4.8-5

June 2007

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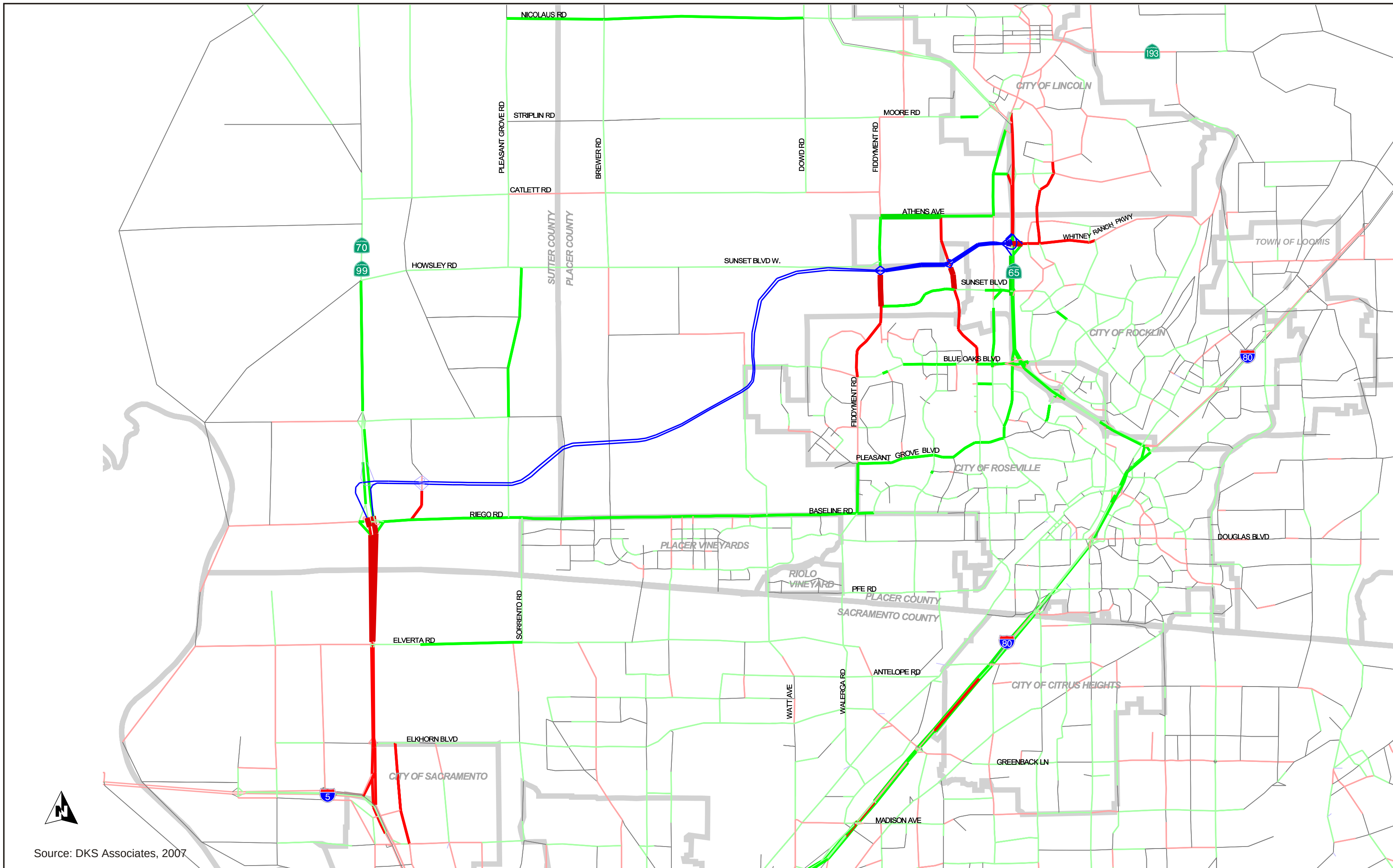

Notes:

1 Project roadways are Placer Parkway and its interchanges. See Tables 4.8-6 and 4.8-7 for Daily Volumes on Placer Parkway.

2 See Table 4.8-9 for Changes in Daily Volumes for non-project roadways.

PLACER PARKWAY
CORRIDOR PRESERVATION

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

Tier 1 EIS/EIR

Changes in 2020 Daily Traffic Volumes
Alternative 2
Compared to No-Build Alternative

Figure 4.8-6

June 2007

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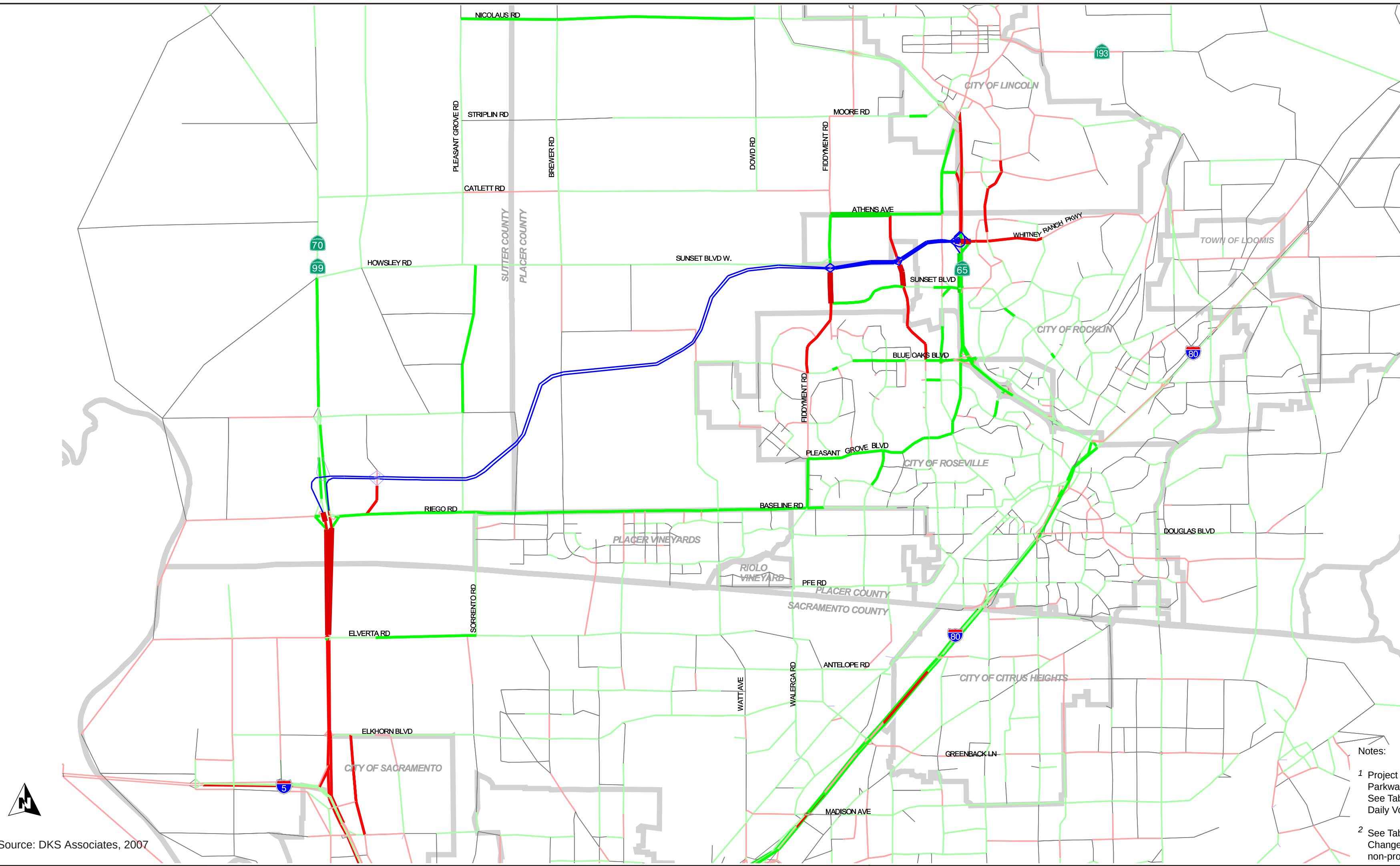

Source: DKS Associates, 2007

Notes:

1 Project roadways are Placer Parkway and its interchanges. See Tables 4.8-6 and 4.8-7 for Daily Volumes on Placer Parkway.

2 See Table 4.8-9 for Changes in Daily Volumes for non-project roadways.

PLACER PARKWAY
CORRIDOR PRESERVATION

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

Tier 1 EIS/EIR

Changes in 2020 Daily Traffic Volumes
Alternative 3
Compared to No-Build Alternative

Figure 4.8-7

June 2007

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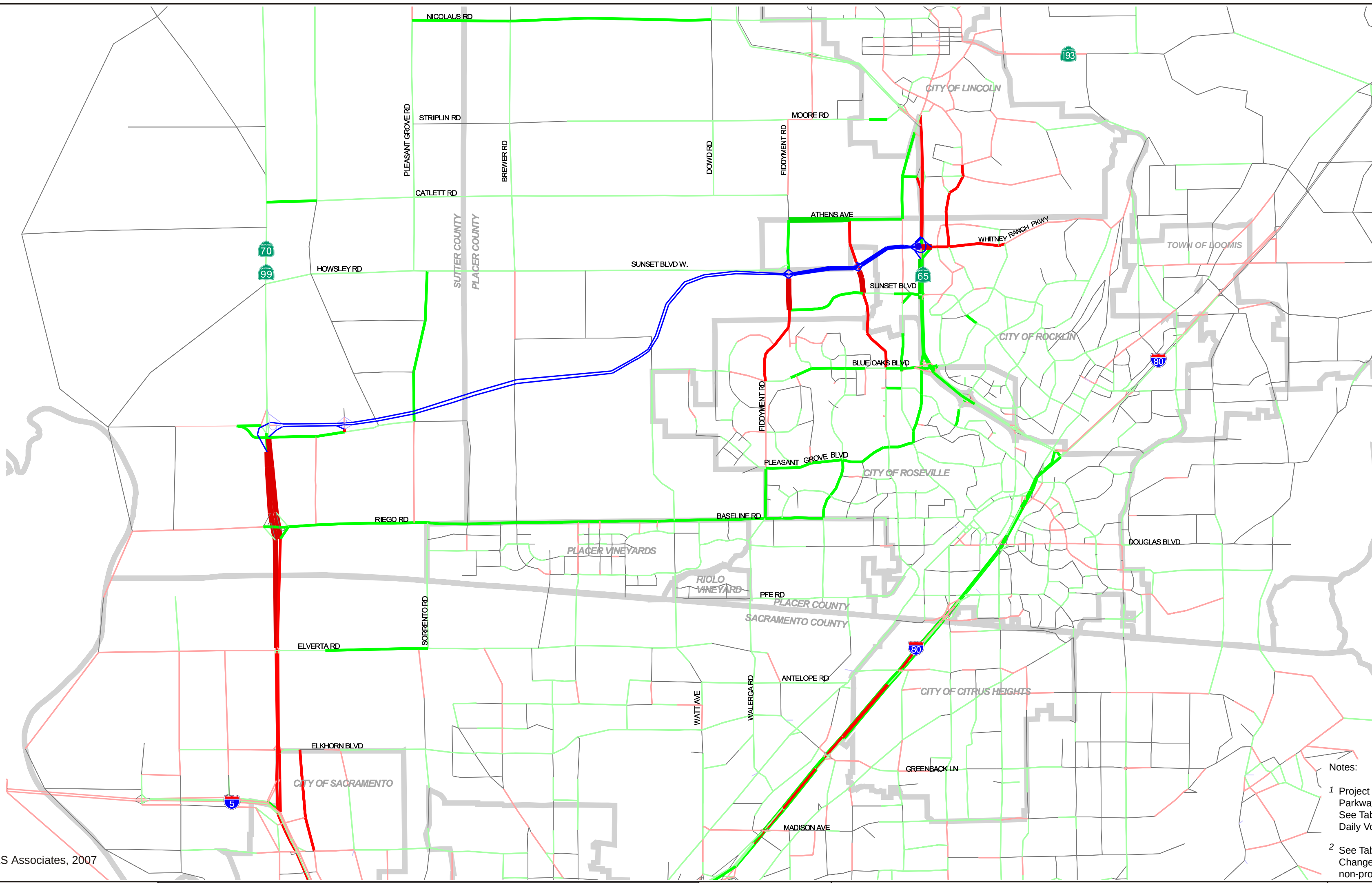

Source: DKS Associates, 2007

Notes:

1 Project roadways are Placer Parkway and its interchanges. See Tables 4.8-6 and 4.8-7 for Daily Volumes on Placer Parkway.

2 See Table 4.8-9 for Changes in Daily Volumes for non-project roadways.

PLACER PARKWAY CORRIDOR PRESERVATION

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

Tier 1 EIS/EIR

Changes in 2020 Daily Traffic Volumes
Alternative 4
Compared to No-Build Alternative

Figure 4.8-8

June 2007

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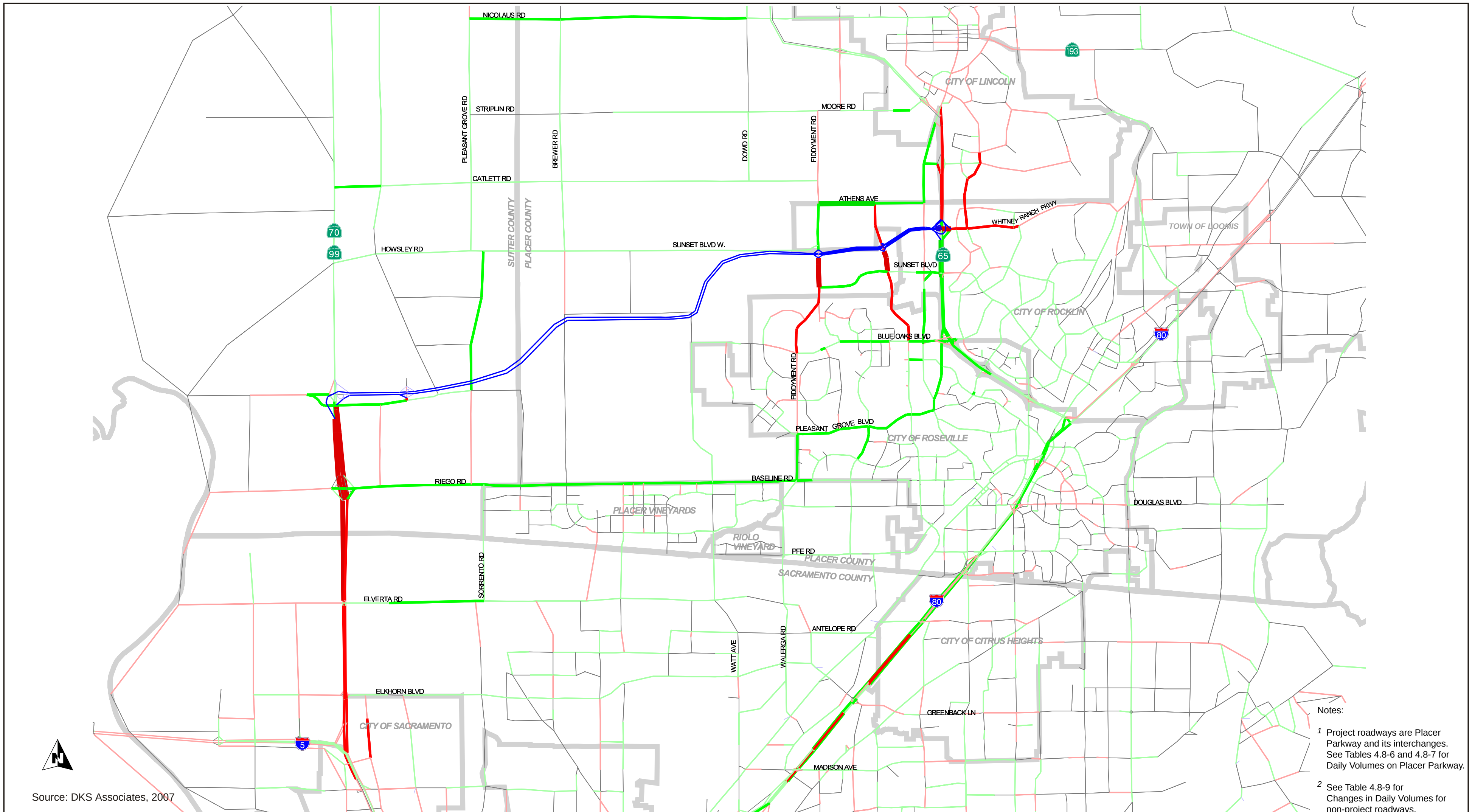

Source: DKS Associates, 2007

Notes:

[1] Project roadways are Placer Parkway and its interchanges. See Tables 4.8-6 and 4.8-7 for Daily Volumes on Placer Parkway.

[2] See Table 4.8-9 for Changes in Daily Volumes for non-project roadways.

PLACER PARKWAY
CORRIDOR PRESERVATION

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

Tier 1 EIS/EIR

Changes in 2020 Daily Traffic Volumes
Alternative 5
Compared to No-Build Alternative

Figure 4.8-9

June 2007

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Table 4.8-11
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					
			2005	2020		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
1	SR 70/99	North of Howsley Road	4	4	0.54	0.80	0.79	0.78	0.79	0.79	0.79
2	SR 70/99	North of Sankey Road	4	4	0.54	0.82	0.80	0.80	0.80	0.81	0.81
3	SR 70/99	North of Riego Road	4	4	0.54	0.64	0.61	0.60	0.60	0.81	0.81
4	SR 70/99	North of Elverta Road	4	4	0.59	0.76	0.87	0.91	0.92	0.90	0.90
5	SR 70/99	North of I-5	4	4	0.66	1.04	**1.09**	**1.12**	**1.12**	**1.11**	**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**
7	SR 65	North of Sunset Boulevard	4	4	0.66	1.55	1.38	1.38	1.37	1.38	1.38
8	SR 65	North of Blue Oaks Boulevard	4	4	0.60	1.59	1.51	1.50	1.50	1.50	1.50
9	SR 65	North of Pleasant Grove Boulevard	4	4	1.06	1.60	1.57	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
11	SR 65	North of I-80	4	4	1.17	1.78	1.76	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
13	I-80	East of SR 65	6	6	1.07	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	1.29	1.29	1.29	1.28	1.28
15	I-80	East of Riverside Avenue	6	6	1.51	1.74	1.72	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	1.27	1.27	1.27	1.28
17	I-80	East of Northgate Boulevard	6	6	1.32	1.08	1.06	1.05	1.06	1.05	1.06
18	Athens Avenue	East of Fiddyment Road	2	2	0.15	0.36	0.14	0.15	0.14	0.13	0.13
19	Baseline Road	East of Pleasant Grove Road	2	4	0.40	0.30	0.24	0.23	0.23	0.23	0.23
20	Baseline Road	East of Brewer Road	2	4	0.42	0.31	0.26	0.25	0.25	0.25	0.25
21	Baseline Road	West of 16th Street	2	4	0.42	0.31	0.26	0.25	0.25	0.25	0.25
22	Baseline Road	West of Watt Avenue	2	6	0.42	0.40	0.38	0.38	0.38	0.38	0.38
23	Baseline Road	East of Watt Avenue	2	6	0.70	0.38	0.35	0.34	0.34	0.34	0.34
24	Baseline Road	West of Walerga Road	2	6	0.70	0.63	0.60	0.59	0.59	0.59	0.59
25	Baseline Road	East of Walerga Road	3	6	0.84	0.60	0.58	0.58	0.57	0.57	0.57
26	Baseline Road	West of Woodcreek Oaks Boulevard	3	4	0.84	0.82	0.81	0.80	0.80	0.79	0.80
27	Blue Oaks Boulevard	East of Watt Avenue	NA	6	NA	0.06	0.06	0.06	0.06	0.06	0.06
28	Blue Oaks Boulevard	West of Fiddyment Road	NA	6	NA	0.26	0.26	0.26	0.26	0.26	0.26
29	Blue Oaks Boulevard	East of Fiddyment Road	2	6	0.46	0.51	0.49	0.49	0.49	0.49	0.49

Table 4.8-11 (Continued)
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					
			2005	2020		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
30	Blue Oaks Boulevard	West of SR 65	4	6	0.97	0.83	0.80	0.81	0.81	0.81	0.81
31	Brewer Road	North of Sunset Boulevard West	2	2	0.01	0.02	0.01	0.01	0.01	0.01	0.01
32	Brewer Road	South of Sunset Boulevard West	2	2	0.01	0.02	0.02	0.02	0.02	0.02	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
34	Catlett Road	East of SR 70/99	2	2	0.01	0.11	0.09	0.08	0.09	0.06	0.07
35	Catlett Road	East of Pleasant Grove Road	2	2	0.00	0.02	0.02	0.02	0.02	0.01	0.01
36	Cirby Way	East of Foothills Boulevard	4	6	1.08	1.13	1.13	1.12	1.12	1.12	1.12
37	E Catlett Road	East of Brewer Road	2	2	0.01	0.04	0.03	0.03	0.03	0.01	0.01
38	E Catlett Road	West of Fiddyment Road	2	2	0.01	0.03	0.03	0.03	0.03	0.02	0.02
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
41	Elkhorn Boulevard	East of SR 70/99	2	6	0.56	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	0.79
43	Elkhorn Boulevard	East of Watt Avenue	4	6	0.64	0.66	0.65	0.65	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
45	Elverta Road	East of SR 70/99	2	4	0.28	0.62	0.60	0.60	0.60	0.60	0.60
46	Elverta Road	East of Rio Linda Boulevard	2	4	0.44	0.91	0.90	0.89	0.89	0.89	0.89
47	Elverta Road	West of Watt Avenue	2	4	1.15	1.46	1.45	1.45	1.45	1.44	1.45
48	Fiddyment Road	North of Sunset Boulevard West	2	2	0.16	0.50	0.31	0.33	0.33	0.33	0.33
49	Fiddyment Road	South of Sunset Boulevard	2	2	0.22	0.50	0.34	0.36	0.36	0.36	0.36
50	Fiddyment Road	North of Blue Oaks Boulevard	2	4	0.22	0.60	0.65	0.64	0.64	0.64	0.64
51	Fiddyment Road	North of Pleasant Grove Boulevard	2	4	0.66	0.74	0.76	0.75	0.75	0.75	0.75
52	Fiddyment Road	North of Baseline Road	2	6	1.09	0.86	0.84	0.83	0.83	0.83	0.83
53	Foothills Boulevard	North of Blue Oaks Boulevard	4	4	0.09	0.44	0.51	0.51	0.51	0.52	0.52
54	Foothills Boulevard	South of Roseville Parkway	4	6	0.34	0.57	0.57	0.56	0.56	0.56	0.56
55	Foothills Boulevard	North of Baseline Road	4	6	0.79	0.90	0.89	0.89	0.89	0.89	0.89
56	Foothills Boulevard	South of Baseline Road	4	6	0.86	1.07	1.06	1.06	1.06	1.06	1.06
57	Howsley Road	East of SR 70/99	2	2	0.03	0.06	0.04	0.04	0.04	0.05	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

Table 4.8-11 (Continued)
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					
			2005	2020		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
59	Industrial	North of Roseville Parkway	2	2	0.16	1.23	1.25	1.24	1.25	1.25	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
61	Moore Road	West of Brewer Road	2	2	0.02	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	0.02	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
64	PFE Road	East of Watt Avenue	2	4	0.26	0.10	0.10	0.10	0.10	0.10	0.10
65	Phillip Road	East of Brewer Road	2	2	0.00	0.02	0.02	0.02	0.02	0.02	0.02
66	Pleasant Grove Boulevard	West of Fiddyment Road	NA	4	NA	0.64	0.64	0.64	0.64	0.64	0.64
67	Pleasant Grove Boulevard	East of Fiddyment Road	4	4	0.10	0.54	0.49	0.49	0.49	0.49	0.49
68	Pleasant Grove Boulevard	East of Woodcreek Oaks Boulevard	4	6	0.45	0.88	0.84	0.83	0.83	0.83	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
70	Pleasant Grove Road	North of Sankey Road	2	4	0.08	0.15	0.12	0.12	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	0.13	0.12
72	Pleasant Grove Road	South of Baseline Road	2	2	0.08	0.10	0.08	0.08	0.08	0.08	0.08
73	Riego Road	East of SR 70/99	2	4	0.55	0.31	0.25	0.24	0.24	0.24	0.24
74	Riego Road	West of Pleasant Grove Road	2	4	0.50	0.28	0.24	0.23	0.23	0.21	0.21
75	Sankey Road	East of SR 70/99	2	4	0.02	0.05	0.03	0.03	0.03	0.00	0.00
76	Sankey Road	West of Pleasant Grove Road	2	4	0.01	0.05	0.03	0.03	0.03	0.04	0.04
77	Sierra College Boulevard	South of English Colony Way	2	4	0.61	0.92	0.92	0.92	0.92	0.92	0.92
78	Sierra College Boulevard	North of King Road	2	4	0.61	0.90	0.90	0.90	0.89	0.90	0.90
79	Wildcat Boulevard	North of Whitney Ranch Parkway	4	4	0.10	0.72	0.74	0.75	0.74	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
81	Sunset Boulevard	West of SR 65	2	4	0.44	1.01	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
83	Sunset Boulevard	East of Blue Oaks Boulevard	6	2	0.18	0.71	0.70	0.70	0.69	0.69	0.70
84	Sunset Boulevard West	West of Brewer Road	2	2	0.02	0.06	0.03	0.02	0.02	0.02	0.02
85	Sunset Boulevard West	East of Brewer Road	2	2	0.02	0.03	0.01	0.01	0.01	0.00	0.00

Table 4.8-11 (Continued)
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					
			2005	2020		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
86	Sunset Boulevard West	West of Fiddyment Road	2	2	0.02	0.06	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
88	Twelve Bridges Drive	East of SR 65	4	6	0.09	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
90	Walerga Road	South of Baseline Road	2	4	0.83	0.88	0.88	0.88	0.88	0.88	0.88
91	Walerga Road	North of Elverta Road	4	4	1.37	1.15	1.14	1.14	1.14	1.14	1.14
92	Washington Boulevard	South of Blue Oaks Boulevard	2	4	0.27	0.69	0.64	0.64	0.64	0.64	0.64
93	Washington Boulevard	North of Pleasant Grove Boulevard	2	4	0.34	0.94	0.87	0.87	0.87	0.87	0.87
94	Watt Avenue	North of Pleasant Grove Boulevard	NA	6	NA	0.06	0.06	0.05	0.05	0.06	0.06
95	Watt Avenue	North of Baseline Road	NA	6	NA	0.06	0.06	0.05	0.05	0.06	0.06
96	Watt Avenue	South of Baseline Road	2	6	0.39	0.09	0.09	0.09	0.08	0.09	0.09
97	Watt Avenue	North of Elverta Road	4	4	0.54	0.96	0.96	0.95	0.95	0.95	0.95
98	Watt Avenue	North of Elkhorn Boulevard	4	6	1.08	0.70	0.71	0.71	0.70	0.71	0.70
99	Watt Avenue	North of Airbase Drive	6	6	0.87	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	1.33	1.34	1.34	1.34	1.34
101	West Side Drive	North of Blue Oaks Boulevard	NA	NA	NA	NA	NA	NA	NA	NA	NA
102	West Side Drive	North of Baseline Road	NA	NA	NA	NA	NA	NA	NA	NA	NA
103	Whitney Ranch Parkway	East of SR 65	NA	6	NA	0.55	0.58	0.59	0.59	0.59	0.59
104	Whitney Ranch Parkway	East of University Avenue	NA	6	NA	0.34	0.38	0.39	0.39	0.39	0.39
105	Whitney Ranch Parkway	East of Wildcat Boulevard	NA	4	NA	0.27	0.30	0.31	0.31	0.31	0.31
106	Woodcreek Oak Boulevard	South of Pleasant Grove Boulevard	2	4	0.33	0.67	0.65	0.65	0.64	0.64	0.64
107	16th Street	North of Baseline Road	NA	NA	NA						
108	16th Street	South of Baseline Road	NA	4	NA	0.09	0.09	0.09	0.09	0.09	0.09
109	16th Street	North of Elverta Road	2	2	0.02	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	0.53	0.53	0.53	0.53	0.53

Notes:

Shaded cells represent potential LOS impacts based on policies of jurisdictions and agencies in the study area.
[1] +2 = Plus two HOV lanes
[2] LOSs on state highways are from 2004.

Source: DKS Associates, 2007

Table 4.8-12
Estimated Level of Service on Roadway Segments for Build Alternatives under 2020 Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Level of Service	Estimated 2020 Level of Service on Roadway Segment					
			2005	2020		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
1	SR 70/99	North of Howsley Road	4	4	A	C	C	C	C	C	C
2	SR 70/99	North of Sankey Road	4	4	A	D	D	C	D	D	D
3	SR 70/99	North of Riego Road	4	4	A	B	B	B	B	D	D
4	SR 70/99	North of Elverta Road	4	4	A	C	D	E	E	E	D
5	SR 70/99	North of I-5	4	4	B	F	F	F	F	F	F
6	SR 65	North of Twelve Bridge	4	4	A	F	F	F	F	F	F
7	SR 65	North of Sunset Boulevard	4	4	B	F	F	F	F	F	F
8	SR 65	North of Blue Oaks Boulevard	4	4	A	F	F	F	F	F	F
9	SR 65	North of Pleasant Grove Boulevard	4	4	F	F	F	F	F	F	F
10	SR 65	North of Stanford Ranch Road	4	4	F	F	F	F	F	F	F
11	SR 65	North of I-80	4	4	F	F	F	F	F	F	F
12	I-80	East of Rocklin Road	6	6	D	F	F	F	F	F	F
13	I-80	East of SR 65	6	6	F	F	F	F	F	F	F
14	I-80	East of Douglas Boulevard	6	6	F	F	F	F	F	F	F
15	I-80	East of Riverside Avenue	6	6	F	F	F	F	F	F	F
16	I-80	West of Riverside Avenue	8+2	8+2	F	F	F	F	F	F	F
17	I-80	East of Northgate Boulevard	6	6	F	F	F	F	F	F	F
18	Athens Avenue	East of Fiddyment Road	2	2	B	A	A	A	A	A	A
19	Baseline Road	East of Pleasant Grove Road	2	4	D	A	A	A	A	A	A
20	Baseline Road	East of Brewer Road	2	4	D	A	A	A	A	A	A
21	Baseline Road	West of 16th Street	2	4	D	A	A	A	A	A	A
22	Baseline Road	West of Watt Avenue	2	6	D	A	A	A	A	A	A
23	Baseline Road	East of Watt Avenue	2	6	C	A	A	A	A	A	A
24	Baseline Road	West of Walerga Road	2	6	C	B	A	A	A	A	A
25	Baseline Road	East of Walerga Road	3	6	D	A	A	A	A	A	A
26	Baseline Road	West of Woodcreek Oaks Boulevard	3	4	D	D	D	D	C	C	D
27	Blue Oaks Boulevard	East of Watt Avenue	NA	6	NA	A	A	A	A	A	A
28	Blue Oaks Boulevard	West of Fiddyment Road	NA	6	NA	A	A	A	A	A	A
29	Blue Oaks Boulevard	East of Fiddyment Road	2	6	A	A	A	A	A	A	A

Table 4.8-12 (Continued)
Estimated Level of Service on Roadway Segments for Build Alternatives under 2020 Conditions

	Roadway	Segment	Travel Lanes[1]		2005[2] Level of Service	Estimated 2020 Level of Service on Roadway Segment					
			2005	2020		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
30	Blue Oaks Boulevard	West of SR 65	4	6	E	D	D	D	D	D	D
31	Brewer Road	North of Sunset Boulevard West	2	2	A	A	A	A	A	A	A
32	Brewer Road	South of Sunset Boulevard West	2	2	A	A	A	A	A	A	A
33	Brewer Road	North of Baseline Road	2	2	A	A	A	A	A	A	A
34	Catlett Road	East of SR 70/99	2	2	A	A	A	A	A	A	A
35	Catlett Road	East of Pleasant Grove Road	2	2	A	A	A	A	A	A	A
36	Cirby Way	East of Foothills Boulevard	4	6	F	F	F	F	F	F	F
37	E Catlett Road	East of Brewer Road	2	2	A	A	A	A	A	A	A
38	E Catlett Road	West of Fiddyment Road	2	2	A	A	A	A	A	A	A
39	Dowd Road	North of Sunset Boulevard West	NA	NA	NA						
40	Dryer Road West	South of Baseline Road	NA	4	NA	A	A	A	A	A	A
41	Elkhorn Boulevard	East of SR 70/99	2	6	E	A	A	A	A	A	A
42	Elkhorn Boulevard	West of Watt Avenue	4	4	C	C	C	C	C	C	C
43	Elkhorn Boulevard	East of Watt Avenue	4	6	B	B	B	B	B	B	B
44	Elkhorn Boulevard	West of Walerga Road	4	6	C	B	B	B	B	B	B
45	Elverta Road	East of SR 70/99	2	4	A	B	B	A	A	B	B
46	Elverta Road	East of Rio Linda Boulevard	2	4	A	E	E	D	D	D	D
47	Elverta Road	West of Watt Avenue	2	4	F	F	F	F	F	F	F
48	Fiddyment Road	North of Sunset Boulevard West	2	2	A	A	A	A	A	A	A
49	Fiddyment Road	South of Sunset Boulevard	2	2	B	A	A	A	A	A	A
50	Fiddyment Road	North of Blue Oaks Boulevard	2	4	A	B	B	B	B	B	B
51	Fiddyment Road	North of Pleasant Grove Boulevard	2	4	B	C	C	C	C	C	C
52	Fiddyment Road	North of Baseline Road	2	6	F	D	D	D	D	D	D
53	Foothills Boulevard	North of Blue Oaks Boulevard	4	4	A	A	A	A	A	A	A
54	Foothills Boulevard	South of Roseville Parkway	4	6	A	A	A	A	A	A	A
55	Foothills Boulevard	North of Baseline Road	4	6	C	E	D	D	D	D	D
56	Foothills Boulevard	South of Baseline Road	4	6	D	F	F	F	F	F	F
57	Howsley Road	East of SR 70/99	2	2	A	A	A	A	A	A	A
58	Industrial Avenue	North of Athens Avenue	2	4	A	B	A	A	A	A	A

Table 4.8-12 (Continued)
Estimated Level of Service on Roadway Segments for Build Alternatives under 2020 Conditions

Roadway		Segment	Travel Lanes[1]		2005[2] Level of Service	Estimated 2020 Level of Service on Roadway Segment					
			2005	2020		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
59	Industrial	North of Roseville Parkway	2	2	A	F	F	F	F	F	F
60	Junction Boulevard	East of Woodcreek Oaks Boulevard	4	4	A	A	A	A	A	A	A
61	Moore Road	West of Brewer Road	2	2	A	A	A	A	A	A	A
62	Nicolaus Road	East of Brewer Road	2	2	A	A	A	A	A	A	A
63	Pacific Street	West of Sunset Boulevard	4	6	A	A	A	A	A	A	A
64	PFE Road	East of Watt Avenue	2	4	A	A	A	A	A	A	A
65	Phillip Road	East of Brewer Road	2	2	A	A	A	A	A	A	A
66	Pleasant Grove Boulevard	West of Fiddyment Road	NA	4	NA	B	B	B	B	B	B
67	Pleasant Grove Boulevard	East of Fiddyment Road	4	4	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
69	Pleasant Grove Boulevard	West of SR 65	6	6	C	E	E	E	E	E	E
70	Pleasant Grove Road	North of Sankey Road	2	4	A	A	A	A	A	A	A
71	Pleasant Grove Road	North of Riego Road	2	4	A	A	A	A	A	A	A
72	Pleasant Grove Road	South of Baseline Road	2	2	A	A	A	A	A	A	A
73	Riego Road	East of SR 70/99	2	4	A	A	A	A	A	A	A
74	Riego Road	West of Pleasant Grove Road	2	4	A	A	A	A	A	A	A
75	Sankey Road	East of SR 70/99	2	4	A	A	A	A	A	A	A
76	Sankey Road	West of Pleasant Grove Road	2	4	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
78	Sierra College Boulevard	North of King Road	2	4	B	E	D	D	D	D	D
79	Wildcat Boulevard	North of Whitney Ranch Parkway	4	4	A	C	C	C	C	C	C
80	Sunset Boulevard	East of Fiddyment Boulevard	NA	6	NA	A	A	A	A	A	A
81	Sunset Boulevard	West of SR 65	2	4	A	F	E	E	E	E	E
82	Sunset Boulevard	East of SR 65	4	6	A	A	A	A	A	A	A
83	Sunset Boulevard	East of Blue Oaks Boulevard	6	2	A	C	C	B	B	B	B
84	Sunset Boulevard West	West of Brewer Road	2	2	A	A	A	A	A	A	A
85	Sunset Boulevard West	East of Brewer Road	2	2	A	A	A	A	A	A	A

Table 4.8-12 (Continued)
Estimated Level of Service on Roadway Segments for Build Alternatives under 2020 Conditions

Roadway		Segment	Travel Lanes[1]		2005[2] Level of Service	Estimated 2020 Level of Service on Roadway Segment					
			2005	2020		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
86	Sunset Boulevard West	West of Fiddyment Road	2	2	A	A	A	A	A	A	A
87	Twelve Bridges Drive	West of SR 65	2	4	A	A	A	A	A	A	A
88	Twelve Bridges Drive	East of SR 65	4	6	A	B	B	B	C	B	B
89	Valley View Parkway	West of Park Drive	NA	4	NA	A	A	A	A	A	A
90	Walerga Road	South of Baseline Road	2	4	D	D	D	D	D	D	D
91	Walerga Road	North of Elverta Road	4	4	F	F	F	F	F	F	F
92	Washington Boulevard	South of Blue Oaks Boulevard	2	4	A	B	B	B	B	B	B
93	Washington Boulevard	North of Pleasant Grove Boulevard	2	4	A	E	D	D	D	D	D
94	Watt Avenue	North of Pleasant Grove Boulevard	NA	6	NA	A	A	A	A	A	A
95	Watt Avenue	North of Baseline Road	NA	6	NA	A	A	A	A	A	A
96	Watt Avenue	South of Baseline Road	2	6	A	A	A	A	A	A	A
97	Watt Avenue	North of Elverta Road	4	4	A	E	E	E	E	E	E
98	Watt Avenue	North of Elkhorn Boulevard	4	6	F	C	C	C	C	C	C
99	Watt Avenue	North of Airbase Drive	6	6	D	F	F	F	F	F	F
100	Watt Avenue	North of I-80	6	6	F	F	F	F	F	F	F
101	West Side Drive	North of Blue Oaks Boulevard	NA	NA	NA	NA	NA	NA	NA	NA	NA
102	West Side Drive	North of Baseline Road	NA	NA	NA	NA	NA	NA	NA	NA	NA
103	Whitney Ranch Parkway	East of SR 65	NA	6	NA	A	A	A	A	A	A
104	Whitney Ranch Parkway	East of University Avenue	NA	6	NA	A	A	A	A	A	A
105	Whitney Ranch Parkway	East of Wildcat Boulevard	NA	4	NA	A	A	A	A	A	A
106	Woodcreek Oak Boulevard	South of Pleasant Grove Boulevard	2	4	A	B	B	B	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
109	16th Street	North of Elverta Road	2	2	A	A	A	A	A	A	A
110	Blue Oaks Boulevard	East of Lonetree Boulevard	4	4	A	A	A	A	A	A	A

Notes:

NA = not applicable
Shaded cells represent potential LOS impacts based on policies of jurisdictions and agencies in the study area.
[1] +2 = Plus two HOV lanes
[2] LOS on state highways are from 2004.

Source: DKS Associates, 2007

The 2020 No-Build Alternative assumed a four lane freeway for SR 65 from I-80 to Lincoln, including construction of the SR 65 Lincoln Bypass. With the construction of any of the 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 would add traffic to SR 65 from the Parkway and the SR 65 Lincoln Bypass and thereby lengthen the period of time during the peak period where SR 65 would operate at LOS F conditions.

Changes in Systemwide Congestion and Delay

The Parkway would have an impact on travel patterns in a fairly wide area. Although 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 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:

- VMT on congested roadways
- Vehicle delay

These two systemwide measures were estimated using the travel demand model for the following two areas:

- **The Transportation Analysis Study Area (TASA),** shown with the assumed 2020 roadway network in Figure 4.8-2, 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.

- **Analysis Focus Area (AFA),** also shown in Figure 4.8-2, 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 4.8-13 and 4.8-14 show the projected VMT on congested roadways during commute periods under the 2020 conditions for the full TASA (shown in Figure 4.8-2). Tables 4.8-15 and 4.8-16 show this same information but as percentages of the total VMT in the full TASA.

Tables 4.8-17 and 4.8-18 show the projected VMT on congested roadways during commute periods under the 2020 conditions for the AFA (also shown in Figure 4.8-2). Tables 4.8-19 and 4.8-20 show this same information but as percentages of the total VMT in the AFA.

Table 4.8-13
Estimated 2020 VMT by Level of Service Category – Transportation Analysis Study Area

LOS	Facility Type	Estimated 2020 VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within TASA[1]					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
A-C	Freeways	783,404	926,863	951,203	945,733	924,452	924,832
	Arterials	3,168,878	3,165,458	3,179,646	3,174,364	3,166,313	3,163,456
	Subtotal	3,952,282	4,092,321	4,130,849	4,120,097	4,090,765	4,088,288
D	Freeways	372,023	464,020	453,093	462,941	456,021	454,936
	Arterials	590,948	574,268	550,541	572,296	557,134	560,818
	Subtotal	962,971	1,038,288	1,003,634	1,035,237	1,013,155	1,015,754
E	Freeways	600,076	529,607	565,692	556,874	591,716	572,261
	Arterials	501,279	473,730	476,592	477,583	488,811	479,859
	Subtotal	1,101,355	1,003,337	1,042,284	1,034,457	1,080,527	1,052,120
F1[2]	Freeways	540,138	595,271	532,855	540,849	599,708	582,817
	Arterials	490,627	505,970	514,422	493,396	489,659	503,802
	Subtotal	1,030,765	1,101,241	1,047,277	1,034,245	1,089,367	1,086,619
F2[2]	Freeways	222,847	216,267	225,114	239,016	172,892	199,253
	Arterials	159,325	139,063	137,276	135,269	144,414	143,375
	Subtotal	382,172	355,330	362,390	374,285	317,306	342,628
F3[2]	Freeways	370,650	295,067	315,973	303,518	303,700	312,399
	Arterials	406,685	397,510	394,704	401,116	399,524	397,002
	Subtotal	777,335	692,577	710,677	704,634	703,224	709,401
All	Freeways	2,889,138	3,027,095	3,043,930	3,048,931	3,048,489	3,046,498
	Arterials	5,317,742	5,255,999	5,253,181	5,254,024	5,245,855	5,248,312
	Total	8,206,880	8,283,094	8,297,111	8,302,955	8,294,344	8,294,810

Notes:

[1] See Figure 4.8-1 for TASA
[2] F1 = 1 hour of LOS F conditions during the peak hour; F2 = 2 hours of LOS F conditions during the peak period; F3 = 3 hours of LOS F conditions during the peak period.
VMT = vehicle miles of travel

Source: DKS Associates, 2007

Table 4.8-14
Summary of 2020 VMT by Level of Service Category – Transportation Analysis Study Area

LOS	Facility Type	Estimated 2020 VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within TASA[1]					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
A-E	Freeways	1,755,503	1,920,490	1,969,988	1,965,548	1,972,189	1,952,029
	Arterials	4,261,105	4,213,456	4,206,779	4,224,243	4,212,258	4,204,133
	Subtotal	6,016,608	6,133,946	6,176,767	6,189,791	6,184,447	6,156,162
F	Freeways	1,133,635	1,106,605	1,073,942	1,083,383	1,076,300	1,094,469
	Arterials	1,056,637	1,042,543	1,046,402	1,029,781	1,033,597	1,044,179
	Subtotal	2,190,272	2,149,148	2,120,344	2,113,164	2,109,897	2,138,648
Total	Freeways	2,889,138	3,027,095	3,043,930	3,048,931	3,048,489	3,046,498
	Arterials	5,317,742	5,255,999	5,253,181	5,254,024	5,245,855	5,248,312
	Subtotal	8,206,880	8,283,094	8,297,111	8,302,955	8,294,344	8,294,810

Notes:

[1]See Figure 4.8-1 for TASA
VMT = vehicle miles of travel

Source: DKS Associates, 2007

Table 4.8-15
Estimated Percentage of 2020 VMT by Level of Service Category – Transportation Analysis Study Area

LOS	Facility Type	Estimated 2020 VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within TASA[1]					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
A-C	Freeways	27.1%	30.6%	31.2%	31.0%	30.3%	30.4%
	Arterials	59.6%	60.2%	60.5%	60.4%	60.4%	60.3%
	Subtotal	48.2%	49.4%	49.8%	49.6%	49.3%	49.3%
D	Freeways	12.9%	15.3%	14.9%	15.2%	15.0%	14.9%
	Arterials	11.1%	10.9%	10.5%	10.9%	10.6%	10.7%
	Subtotal	11.7%	12.5%	12.1%	12.5%	12.2%	12.2%
E	Freeways	20.8%	17.5%	18.6%	18.3%	19.4%	18.8%
	Arterials	9.4%	9.0%	9.1%	9.1%	9.3%	9.1%
	Subtotal	13.4%	12.1%	12.6%	12.5%	13.0%	12.7%
F1[2]	Freeways	18.7%	19.7%	17.5%	17.7%	19.7%	19.1%
	Arterials	9.2%	9.6%	9.8%	9.4%	9.3%	9.6%
	Subtotal	12.6%	13.3%	12.6%	12.5%	13.1%	13.1%
F2[2]	Freeways	7.7%	7.1%	7.4%	7.8%	5.7%	6.5%
	Arterials	3.0%	2.6%	2.6%	2.6%	2.8%	2.7%
	Subtotal	4.7%	4.3%	4.4%	4.5%	3.8%	4.1%
F3[2]	Freeways	12.8%	9.7%	10.4%	10.0%	10.0%	10.3%
	Arterials	7.6%	7.6%	7.5%	7.6%	7.6%	7.6%
	Subtotal	9.5%	8.4%	8.6%	8.5%	8.5%	8.6%
All	Freeways	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%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes:

[1] See Figure 4.8-1 for TASA
[2] F1 = 1 hour of LOS F conditions during the peak hour; F2 = 2 hours of LOS F conditions during the peak period; F3 = 3 hours of LOS F conditions during the peak period.
VMT = vehicle miles of travel

Source: DKS Associates, 2007

Table 4.8-16
Summary of the Percentage of 2020 VMT by Level of Service Category – Transportation Analysis Study Area

LOS	Facility Type	Estimated 2020 VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within TASA[1]					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
A-E	Freeways	60.8%	63.4%	64.7%	64.5%	64.7%	64.1%
	Arterials	80.1%	80.2%	80.1%	80.4%	80.3%	80.1%
	Subtotal	73.3%	74.1%	74.4%	74.5%	74.6%	74.2%
F	Freeways	39.2%	36.6%	35.3%	35.5%	35.3%	35.9%
	Arterials	19.9%	19.8%	19.9%	19.6%	19.7%	19.9%
	Subtotal	26.7%	25.9%	25.6%	25.5%	25.4%	25.8%
Total	Freeways	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%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes:

[1]See Figure 4.8-1 for TASA
VMT = vehicle miles of travel

Source: DKS Associates, 2007

Table 4.8-17
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 AFA[1]					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
A-C	Freeways	72,856	230,604	248,956	252,232	224,279	222,086
	Arterials	879,948	904,948	910,490	914,844	902,442	900,981
	Subtotal	952,804	1,135,552	1,159,446	1,167,076	1,126,721	1,123,067
D	Freeways	24,409	23,765	20,594	20,574	20,597	22,193
	Arterials	152,538	136,274	128,808	124,477	132,921	133,650
	Subtotal	176,947	160,039	149,402	145,051	153,518	155,843
E	Freeways	89,491	58,005	62,810	61,403	93,818	90,310
	Arterials	113,037	85,852	84,263	80,748	91,316	87,462
	Subtotal	202,528	143,857	147,073	142,151	185,134	177,772
F1[2]	Freeways	27,624	80,963	80,085	81,665	82,117	79,534
	Arterials	117,756	108,912	110,064	112,347	102,004	108,927
	Subtotal	145,380	189,875	190,149	194,012	184,121	188,461
F2[2]	Freeways	53,615	51,690	52,442	26,359	47,802	52,232
	Arterials	12,254	15,699	13,287	13,909	16,348	15,085
	Subtotal	65,869	67,389	65,729	40,268	64,150	67,317
F3[2]	Freeways	42,170	26,472	26,427	52,703	26,484	26,478
	Arterials	31,740	29,764	31,624	31,779	30,196	29,757
	Subtotal	73,910	56,236	58,051	84,482	56,680	56,235
All	Freeways	310,165	471,499	491,314	494,936	495,097	492,833
	Arterials	1,307,273	1,281,449	1,278,536	1,278,104	1,275,227	1,275,862
	Total	1,617,438	1,752,948	1,769,850	1,773,040	1,770,324	1,768,695

Notes:
[1] See Figure 4.8-1 for AFA
[2] F1 = 1 hour of LOS F conditions during the peak hour; F2 = 2 hours of LOS F conditions during the peak period; F3 = 3 hours of LOS F conditions during the peak period.
VMT = vehicle miles of travel
Source: DKS Associates, 2007

Table 4.8-18
Summary of 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 AFA[1]					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
A-E	Freeways	186,756	312,374	332,360	334,209	338,694	334,589
	Arterials	1,145,523	1,127,074	1,123,561	1,120,069	1,126,679	1,122,093
	Subtotal	1,332,279	1,439,448	1,455,921	1,454,278	1,465,373	1,456,682
F	Freeways	123,409	159,125	158,954	160,727	156,403	158,244
	Arterials	161,750	154,375	154,975	158,035	148,548	153,769
	Subtotal	285,159	313,500	313,929	318,762	304,951	312,013
Total	Freeways	310,165	471,499	491,314	494,936	495,097	492,833
	Arterials	1,307,273	1,281,449	1,278,536	1,278,104	1,275,227	1,275,862
	Total	1,617,438	1,752,948	1,769,850	1,773,040	1,770,324	1,768,695

Notes:

[1]See Figure 4.8-1 for AFA
VMT = vehicle miles of travel

Source: DKS Associates, 2007

Table 4.8-19
Estimated Percentage of 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 AFA[1]					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
A-C	Freeways	23.5%	48.9%	50.7%	51.0%	45.3%	45.1%
	Arterials	67.3%	70.6%	71.2%	71.6%	70.8%	70.6%
	Subtotal	58.9%	64.8%	65.5%	65.8%	63.6%	63.5%
D	Freeways	7.9%	5.0%	4.2%	4.2%	4.2%	4.5%
	Arterials	11.7%	10.6%	10.1%	9.7%	10.4%	10.5%
	Subtotal	10.9%	9.1%	8.4%	8.2%	8.7%	8.8%
E	Freeways	28.9%	12.3%	12.8%	12.4%	18.9%	18.3%
	Arterials	8.6%	6.7%	6.6%	6.3%	7.2%	6.9%
	Subtotal	12.5%	8.2%	8.3%	8.0%	10.5%	10.1%
F1[2]	Freeways	8.9%	17.2%	16.3%	16.5%	16.6%	16.1%
	Arterials	9.0%	8.5%	8.6%	8.8%	8.0%	8.5%
	Subtotal	9.0%	10.8%	10.7%	10.9%	10.4%	10.7%
F2[2]	Freeways	17.3%	11.0%	10.7%	5.3%	9.7%	10.6%
	Arterials	0.9%	1.2%	1.0%	1.1%	1.3%	1.2%
	Subtotal	4.1%	3.8%	3.7%	2.3%	3.6%	3.8%
F3[2]	Freeways	13.6%	5.6%	5.4%	10.6%	5.3%	5.4%
	Arterials	2.4%	2.3%	2.5%	2.5%	2.4%	2.3%
	Subtotal	4.6%	3.2%	3.3%	4.8%	3.2%	3.2%
All	Freeways	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%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes:
[1] See Figure 4.8-1 for AFA
[2] F1 = 1 hour of LOS F conditions during the peak hour; F2 = 2 hours of LOS F conditions during the peak period; F3 = 3 hours of LOS F conditions during the peak period.
VMT = vehicle miles of travel
Source: DKS Associates, 2007

Table 4.8-20
Summary of the Percentage of 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 AFA[1]					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
A-E	Freeways	60.2%	66.3%	67.6%	67.5%	68.4%	67.9%
	Arterials	87.6%	88.0%	87.9%	87.6%	88.4%	87.9%
	Subtotal	82.4%	82.1%	82.3%	82.0%	82.8%	82.4%
F	Freeways	39.8%	33.7%	32.4%	32.5%	31.6%	32.1%
	Arterials	12.4%	12.0%	12.1%	12.4%	11.6%	12.1%
	Subtotal	17.6%	17.9%	17.7%	18.0%	17.2%	17.6%
Total	Freeways	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%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes:

[1]See Figure 4.8-1 for AFA

VMT = vehicle miles of travel

Source: DKS Associates, 2007

On Tables 4.8-13, 4.8-15, 4.8-17, and 4.8-19, the VMT is summarized for roadways that would operate LOS A through C, LOS D, and LOS E conditions, as well as those operating at LOS F for 1 hour, 2 hours, and for 3 or more hours. Tables 4.8-14, 4.8-16, 4.8-18, and 4.8-20 provide the same information using only two categories: LOS A through E and LOS F. 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 AFA.

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 systemwide 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 4.8-21 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 4.8-2). Table 4.8-22 shows this same information for the AFA (also shown in Figure 4.8-2). These tables indicate that Placer Parkway would significantly reduce vehicle hours of delay, especially in the AFA.

Table 4.8-21
Estimated Vehicle Hours of Delay within the Transportation Analysis Study Area[1]

LOS	Facility Type	Estimated 2020 Vehicle Hours of Delay (3-Hour a.m. and 3-Hour p.m. Commute Periods)					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
>D[2]	Freeways	11,551	10,709	10,727	10,750	10,743	10,755
	Arterials	24,143	23,497	23,545	23,659	23,758	23,627
	Total	35,694	34,206	34,272	34,409	34,501	34,382
>E[3]	Freeways	7,250	6,433	6,460	6,476	6,448	6,463
	Arterials	17,827	17,350	17,420	17,516	17,629	17,488
	Total	25,077	23,783	23,880	23,992	24,077	23,951
>F2[4]	Freeways	3,720	3,094	3,125	3,131	3,122	3,134
	Arterials	12,727	12,354	12,405	12,486	12,617	12,454
	Total	16,447	15,448	15,530	15,617	15,739	15,588

Notes:

[1] See Figure 4.8-1 for TASA
[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

Source: DKS Associates, 2007

Table 4.8-22
Estimated Vehicle Hours of Delay within the Analysis Focus Area[1]

LOS	Facility Type	Estimated 2020 Vehicle Hours of Delay 3-Hour a.m. and 3-Hour p.m. Commute Periods)					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
>D[2]	Freeways	1,465	1,182	1,212	1,221	1,234	1,235
	Arterials	2,531	2,348	2,338	2,352	2,355	2,357
	Total	3,996	3,530	3,550	3,573	3,589	3,592
>E[3]	Freeways	987	670	688	693	688	691
	Arterials	1,423	1,338	1,338	1,347	1,350	1,348
	Total	2,410	2,008	2,026	2,040	2,038	2,039
>F2[4]	Freeways	519	258	251	250	259	261
	Arterials	708	674	681	682	681	676
	Total	1,227	932	932	932	940	937

Notes:

[1] See Figure 4.8-1 for AFA
[2] > LOS D is the added travel time for vehicles faced with LOS E and F conditions in the AFA 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 AFA 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 AFA during the 3-hour a.m. and p.m. commute periods

Source: DKS Associates, 2007

Impacts on Design Standards

Placer Parkway would be designed and constructed to Caltrans standards for an urban freeway. The 500- to 1,000-foot-wide corridor is wider than the ultimate cross-section for the Parkway to provide for buffer areas. The future design of Placer Parkway would determine where within that corridor the freeway would be located. In those segments where a corridor alignment curves, if the Parkway is ultimately located along the "inside" of the corridor alignment's curve, it would have a smaller radius than if it is located along the "outside" of the curve.

When the corridor alignment alternatives were defined, attempts were made to provide the desired design criteria, including curve radius, no matter where the Parkway was ultimately located within the corridor. Alternatives 1 through 4 would provide a desired curve radius even if the Parkway was ultimately located along the inside of the curve. Alternative 5, however, would result in a less than desirable radius in one location (near the intersection of the planned extensions of Watt Avenue and Blue Oaks Boulevard) if the ultimate design places Placer Parkway along the northerly side (or inside) of the corridor alignment's curve.

Alternative 5 assumes a 2,600-foot centerline radius at that location. If the Parkway is located on the northerly side of the 1,000-foot-wide corridor, the actual centerline radius of the Parkway would be approximately 2,300 feet, which is 1,000 feet less than the desired design standard and 700 feet less than the Caltrans' recommended minimum radius for urban freeways. If the Parkway is located along the inside of the corridor alignment's curve, it would have a significant impact on the project's design standards.

Impacts on Transit

Although there are a number of existing transit routes and services within the urbanized portion of the broad TASA shown in Figure 4.8-1, 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 Roseville.

The transit operators in Placer County intend to expand services to new growth areas near the build alternatives when sufficient development occurs in those areas. However, the timing and level of future transit services, as well as actual routes for expanded services, are not known and will depend on funding. As discussed in Section 4.8.3.1, 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 TASA.

Impacts on Bicycle Travel

Placer Parkway would have a significant impact on bicycle travel 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.

4.8.3.4 Secondary and Indirect 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 secondary or indirect impacts under the No-Build Alternative.

Alternatives 1 Through 5

The Parkway would have an impact on travel patterns in a fairly wide area. A new or widened regional transportation facility could "induce" travel and increase VMT in the corridor by allowing people to travel further in the same amount of time, thereby causing secondary and indirect effects. As discussed in Section 4.8.3.1, this so-called induced travel is accounted for in SACOG's regional travel demand model that is being used in the forecasting for this Tier 1 EIS/EIR. The "feedback loops" in the SACMET model ensure that the model adequately predicts how the Parkway would change trip distribution and mode choice compared to the No-Build Alternative. Thus the 2020 and cumulative (2040) forecasts of traffic volumes and VMT reflect the secondary and indirect impacts of the new facility.

Secondary and indirect effects of the Parkway action on transportation would be similar for all corridor alignment alternatives. All of the corridor alignment alternatives would reduce systemwide congestion and delay. Although some roadway segments near the east and west ends of Placer Parkway and near its interchanges would have increases in traffic volumes due to Placer Parkway, traffic volumes would decrease at a larger number of roadway segments. Those systemwide benefits are captured in the transportation analysis.

The indirect impacts of this project could include potential growth inducement by increasing transportation access into currently undeveloped rural areas of Sutter and Placer counties, as discussed in Section 6.1, Growth. The changes in VMT due to the corridor alignment alternatives could cause indirect impacts on air quality, as discussed in Section 4.9, Air Quality.

4.8.3.5 Cumulative Impacts

FHWA and Caltrans have requested that cumulative conditions for the transportation analysis of build alternatives be based on 2040 conditions, 20 years beyond the projected opening of the Placer Parkway facility.

Analysis of Cumulative (2040) Conditions

Changes in Traffic Volumes

Table 4.8-23 summarizes the projected 2040 daily traffic volumes on segments of the Parkway under each alternative. Table 4.8-24 shows the 2040 projected daily volumes on each of the assumed on- and off-ramps to Placer Parkway under each alternative.

Table 4.8-25 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 also is shown in Table 4.8-26. The locations of the roadway segments with volume changes presented in Tables 4.8-25 and 4.8-26 are shown on Figure 4.8-10.

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 compared with the No-Build Alternative. Figures 4.8-11 through 4.8-15 show these differences for each alternative, with red colors on roadways that would receive increases in volumes (compared with 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 with 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 western Placer County, and unincorporated portions of south Sutter County. Although all of the build alternatives would decrease traffic volumes on many roadway segments, they would cause increases in traffic volumes on the following:

- 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

Table 4.8-23
Projected 2040 Daily Traffic Volumes on Placer Parkway Mainline

Segment		Lanes	Average Daily Volume				
			Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
1	East of SR 70/99	6	6	40,300	44,500	45,300	52,200
2	East of Pacific Avenue	6	6	42,800	49,200	50,600	57,600
3	East of So Sutter Road [1]	6	6	45,100	55,800	57,800	57,600
4	East of Watt Avenue	6	6	45,100	55,800	57,800	57,600
5	East of Fiddyment Road	6	6	60,200	64,200	65,200	65,200
6	West of SR 65	6	6	68,500	71,000	71,700	71,500

Note:

[1] Unnamed future road assumed east of Pacific Avenue in South Sutter County

Source: DKS Associates, 2007

Table 4.8-24
Projected 2040 Daily Traffic Volumes on Placer Parkway Ramps

Ramp		Lanes	Average Daily Volume				
			Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
1	NB SR 70/99 On Ramp to EB Placer Parkway	2	18,000	20,000	20,400	23,000	22,700
2	SB SR 70/99 On Ramp to EB Placer Parkway	1	3,100	3,200	3,200	2,700	2,700
3	WB Placer Parkway Off Ramp to NB SR 70/99	2	3,200	3,400	3,400	2,200	2,200
4	WB Placer Parkway Off Ramp to SB SR 70/99	1	16,000	18,000	18,300	18,300	18,400
5	EB On Ramp from NB Pacific Avenue	1	4,000	4,700	4,800	12,100	11,900
6	WB On Ramp from NB Pacific Avenue	1	1,300	1,300	1,100	7,800	7,800
7	EB On Ramp from SB Pacific Avenue	1	1,400	1,800	1,800	400	400
8	WB On Ramp from SB Pacific Avenue	1	2,000	2,000	1,900	2,100	2,100
9	EB Off Ramp to Pacific Avenue	1	4,900	4,800	4,700	12,100	11,900
10	WB Off Ramp to Pacific Avenue	1	5,300	6,200	6,400	11,400	11,100
11	EB On Ramp from NB So Sutter Road [1]	1	5,800	7,200	7,400	0	0
12	WB On Ramp from NB So Sutter Road [1]	1	3,400	3,100	3,100	0	0
13	EB On Ramp from SB So Sutter Road [1]	1	500	900	1,000	0	0
14	WB On Ramp from SB So Sutter Road [1]	1	1,900	1,900	1,900	0	0
15	EB Off Ramp to So Sutter Road [1]	1	4,500	4,200	4,200	0	0
16	WB Off Ramp to So Sutter Road [1]	1	5,800	7,700	8,000	0	0
23	EB On Ramp from NB Fiddyment	1	15,500	15,300	15,200	15,300	15,300
24	WB On Ramp from NB Fiddyment	1	4,400	5,500	5,700	5,800	5,600
25	EB On Ramp from SB Fiddyment	1	3,300	3,100	3,100	2,800	2,900
26	WB On Ramp from SB Fiddyment	1	5,100	6,800	7,100	6,900	6,700

Table 4.8-24 (Continued)
Projected 2040 Daily Traffic Volumes on Placer Parkway Ramps

Ramp		Lanes	Average Daily Volume				
			Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
27	EB Off Ramp to Fiddyment	1	10,400	13,100	13,600	13,400	13,100
28	WB Off Ramp to Fiddyment	1	16,000	15,500	15,500	15,400	15,500
29	EB On Ramp from NB Foothills	1	8,400	8,300	8,300	8,300	8,300
30	WB On Ramp from NB Foothills	1	4,900	5,400	5,600	5,800	5,600
31	EB On Ramp from SB Foothills	1	2,500	2,600	2,600	2,600	2,600
32	WB On Ramp from SB Foothills	1	2,000	2,400	2,400	2,300	2,400
33	EB Off Ramp to Foothills	1	7,000	7,700	7,900	7,800	7,700
34	WB Off Ramp to Foothills	1	11,300	11,300	11,400	11,400	11,400
35	NB SR 65 Off Ramp to Sunset Boulevard	1	8,200	8,400	8,500	8,600	8,600
36	SB SR 65 Off Ramp to Sunset Boulevard	1	7,300	7,200	7,200	7,200	7,200
37	SB SR 65 On Ramp to WB Placer Parkway	1	14,000	14,400	14,400	14,400	14,400
38	EB Placer Parkway Off Ramp to NB SR 65	1	10,900	11,200	11,100	11,100	11,000
39	EB Placer Parkway Off Ramp to SB SR 65	1	11,000	11,600	11,800	11,800	11,700
40	Sunset On Ramp to NB SR 65	1	9,200	9,200	9,300	9,300	9,300
41	Sunset On Ramp to SB SR 65	1	1,600	1,600	1,600	1,600	1,600

Notes:

[1] Unnamed future road assumed east of Pacific Avenue in South Sutter County
EB = eastbound
NB = northbound
SB = southbound
WB = westbound

Source: DKS Associates, 2007

Table 4.8-25
Estimated Daily Traffic Volumes for Build Alternatives under 2040 Conditions

	Roadway	Segment	Travel Lanes[1]		2004[2] Daily Traffic Volume	Estimated 2040 Daily Traffic Volumes					
			2004	2040		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
1	SR 70/99	North of Howsley Road	4	4	29,000	48,100	46,400	46,100	45,900	45,600	45,600
2	SR 70/99	North of Sankey Road	4	4	29,000	51,600	47,800	47,200	47,100	46,600	46,600
3	SR 70/99	North of Riego Road	4	4	29,000	68,900	56,200	55,800	55,600	91,900	91,500
4	SR 70/99	North of Elverta Road	4	6	32,000	129,700	144,200	146,900	147,300	145,400	145,000
5	SR 70/99	North of I-5	4	6	47,500	155,100	160,800	162,200	162,300	161,400	161,000
6	SR 65	North of Twelve Bridge	4	6	40,000	140,100	148,300	148,000	148,000	147,700	147,800
7	SR 65	North of Sunset Boulevard	4	6	47,500	144,500	132,800	132,800	133,000	132,900	132,900
8	SR 65	North of Blue Oaks Boulevard	4	6	43,000	154,000	153,100	152,900	153,000	153,100	153,100
9	SR 65	North of Pleasant Grove Boulevard	4	6	76,000	163,600	162,000	161,900	161,800	161,900	161,800
10	SR 65	North of Stanford Ranch Road	4	6	82,000	175,700	174,600	174,300	174,300	174,300	174,400
11	SR 65	North of I-80	4	6	84,000	170,500	167,800	167,900	167,500	167,700	167,700
12	I-80	East of Rocklin Road	6	6	96,000	124,200	123,100	123,100	123,200	123,100	123,100
13	I-80	East of SR 65	6	6	116,000	161,500	160,800	160,900	161,000	160,800	160,900
14	I-80	East of Douglas Boulevard	6	6+2	156,000	190,100	188,400	188,100	186,900	187,300	187,200
15	I-80	East of Riverside Avenue	6	6+2	163,000	247,900	244,400	243,300	243,700	243,300	243,200
16	I-80	West of Riverside Avenue	8+2	8+2	179,000	258,800	254,500	253,700	253,800	253,400	253,600
17	I-80	East of Northgate Boulevard	6	6+2	143,000	193,700	190,500	190,000	189,800	189,900	189,400
18	Athens Avenue	East of Fiddyment Road	2	4	3,700	34,400	26,500	26,500	26,500	26,200	26,300
19	Baseline Road	East of Pleasant Grove Road	2	6	9,950	79,600	78,700	78,200	78,200	76,800	76,800
20	Baseline Road	East of Brewer Road	2	6	10,400	59,800	56,300	55,100	55,000	55,300	55,500
21	Baseline Road	West of 16th Street	2	6	10,400	63,900	60,500	59,600	59,300	59,600	59,700
22	Baseline Road	West of Watt Avenue	2	6	10,400	60,100	54,400	57,600	57,300	57,800	58,000
23	Baseline Road	East of Watt Avenue	2	6	12,600	56,500	53,100	52,500	52,400	52,700	52,900
24	Baseline Road	West of Walerga Road	2	6	12,600	47,900	45,700	44,700	44,700	45,000	45,300
25	Baseline Road	East of Walerga Road	3	6	15,100	64,200	60,600	60,200	60,000	60,300	60,300
26	Baseline Road	West of Woodcreek Oaks Boulevard	3	4	15,100	47,100	46,000	45,300	45,800	45,800	46,100
27	Blue Oaks Boulevard	East of Watt Avenue	NA	6	NA	39,300	36,700	36,400	36,400	36,800	36,900
28	Blue Oaks Boulevard	West of Fiddyment Road	NA	6	NA	30,900	30,300	30,100	30,100	30,200	30,200

Table 4.8-25 (Continued)
Estimated Daily Traffic Volumes for Build Alternatives under 2040 Conditions

	Roadway	Segment	Travel Lanes[1] 2004	Travel Lanes[1] 2040	2004[2] Daily Traffic Volume	Estimated 2040 Daily Traffic Volumes: No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
29	Blue Oaks Boulevard	East of Fiddyment Road	2	6	8,200	43,500	41,100	40,900	40,900	41,100	41,100
30	Blue Oaks Boulevard	West of SR 65	4	6	38,700	65,200	59,300	59,000	59,000	58,800	58,900
31	Brewer Road	North of Sunset Boulevard West	2	2	200	2,900	1,600	1,200	1,100	1,400	1,400
32	Brewer Road	South of Sunset Boulevard West	2	2	200	3,500	2,500	2,500	2,400	2,400	2,400
33	Brewer Road	North of Baseline Road	2	2	700	500	300	300	300	300	300
34	Catlett Road	East of SR 70/99	2	2	200	7,000	3,600	3,300	3,200	3,100	3,100
35	Catlett Road	East of Pleasant Grove Road	2	2	100	4,400	2,200	1,700	1,600	1,500	1,500
36	Cirby Way	East of Foothills Boulevard	4	6	38,900	69,900	68,900	68,900	68,900	68,800	68,900
37	E Catlett Road	East of Brewer Road	2	2	200	4,100	2,900	2,400	2,300	2,000	2,100
38	E Catlett Road	West of Fiddyment Road	2	2	200	11,300	11,500	11,600	11,500	11,500	11,500
39	Dowd Road	North of Sunset Boulevard West	NA	6	NA	43,300	37,700	37,200	37,100	37,400	37,400
40	Dryer Road West	South of Baseline Road	NA	4	NA	20,200	22,200	22,500	22,300	22,200	22,200
41	Elkhorn Boulevard	East of SR 70/99	2	6	16,300	60,500	60,400	60,600	60,500	60,500	60,200
42	Elkhorn Boulevard	West of Watt Avenue	4	4	26,800	39,000	38,500	38,700	38,400	38,300	38,400
43	Elkhorn Boulevard	East of Watt Avenue	4	6	23,020	44,500	44,000	44,100	43,800	43,800	43,800
44	Elkhorn Boulevard	West of Walerga Road	4	6	25,700	45,100	44,600	44,700	44,500	44,500	44,400
45	Elverta Road	East of SR 70/99	2	4	7,200	53,200	53,200	53,300	53,400	53,800	53,700
46	Elverta Road	East of Rio Linda Boulevard	2	4	8,000	49,500	48,300	47,900	48,000	48,400	48,200
47	Elverta Road	West of Watt Avenue	2	4	20,700	62,200	61,700	61,600	61,600	61,600	61,700
48	Fiddyment Road	North of Sunset Boulevard West	2	6	2,800	37,900	39,400	41,800	42,200	41,600	41,400
49	Fiddyment Road	South of Sunset Boulevard	2	6	4,000	44,800	47,200	49,200	49,600	48,600	48,400
50	Fiddyment Road	North of Blue Oaks Boulevard	2	4	4,000	36,400	38,500	38,200	38,200	38,200	38,400
51	Fiddyment Road	North of Pleasant Grove Boulevard	2	4	11,800	36,400	36,800	36,400	36,400	36,400	36,600
52	Fiddyment Road	North of Baseline Road	2	6	19,600	40,800	40,100	39,100	39,300	39,600	39,500
53	Foothills Boulevard	North of Blue Oaks Boulevard	4	4	3,400	37,300	34,700	34,800	34,900	34,900	34,800
54	Foothills Boulevard	South of Roseville Parkway	4	6	12,200	39,400	38,600	38,700	38,400	38,600	38,600
55	Foothills Boulevard	North of Baseline Road	4	6	28,400	51,000	50,300	50,100	50,100	50,100	50,200
56	Foothills Boulevard	South of Baseline Road	4	6	30,900	69,300	68,800	68,600	68,800	68,600	68,900
57	Howsley Road	East of SR 70/99	2	2	800	7,500	4,700	4,500	4,400	4,300	4,300

Table 4.8-25 (Continued)
Estimated Daily Traffic Volumes for Build Alternatives under 2040 Conditions

	Roadway	Segment	Travel Lanes[1]		2004[2] Daily Traffic Volume	Estimated 2040 Daily Traffic Volumes					
			2004	2040		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
58	Industrial Avenue	North of Athens Avenue	2	4	4,600	33,900	25,100	25,100	25,100	25,100	25,100
59	Industrial	North of Roseville Parkway	2	2	2,800	30,900	31,400	31,600	31,600	31,500	31,600
60	Junction Boulevard	East of Woodcreek Oaks Boulevard	4	4	6,100	10,800	9,800	9,700	9,500	9,600	9,600
61	Moore Road	West of Brewer Road	2	2	400	2,400	400	300	300	300	300
62	Nicolaus Road	East of Brewer Road	2	2	900	8,800	5,900	5,400	5,400	5,200	5,200
63	Pacific Street	West of Sunset Boulevard	4	6	10,600	31,200	31,100	31,100	31,100	31,100	31,100
64	PFE Road	East of Watt Avenue	2	4	4,700	16,200	15,800	16,100	15,800	16,000	16,000
65	Phillip Road	East of Brewer Road	2	2	100	3,300	2,500	2,400	2,400	2,400	2,400
66	Pleasant Grove Boulevard	West of Fiddyment Road	NA	4	NA	55,600	54,500	54,800	54,400	54,600	54,500
67	Pleasant Grove Boulevard	East of Fiddyment Road	4	4	3,700	42,800	40,700	40,500	40,500	40,700	40,700
68	Pleasant Grove Boulevard	East of Woodcreek Oaks Boulevard	4	4	16,300	67,700	63,200	62,900	62,700	63,000	63,100
69	Pleasant Grove Boulevard	West of SR 65	6	6	41,300	58,400	57,200	57,300	57,200	57,200	57,200
70	Pleasant Grove Road	North of Sankey Road	2	4	1,500	23,900	16,300	15,100	15,000	15,400	15,500
71	Pleasant Grove Road	North of Riego Road	2	4	1,700	27,300	26,500	26,300	26,200	27,400	27,500
72	Pleasant Grove Road	South of Baseline Road	2	2	1,500	22,900	22,800	22,900	22,800	22,600	22,600
73	Riego Road	East of SR 70/99	2	6	9,900	71,200	63,900	63,600	63,500	67,500	67,500
74	Riego Road	West of Pleasant Grove Road	2	6	9,900	69,100	69,900	70,000	69,800	64,700	64,700
75	Sankey Road	East of SR 70/99	2	4	400	26,100	19,100	19,300	19,300	6,700	6,600
76	Sankey Road	West of Pleasant Grove Road	2	4	200	28,700	22,300	22,500	22,500	26,900	26,700
77	Sierra College Boulevard	South of English Colony Way	2	4	11,000	31,700	33,200	33,300	33,300	33,300	33,300
78	Sierra College Boulevard	North of King Road	2	4	11,000	30,900	31,800	31,900	31,900	31,900	31,900
79	Wildcat Boulevard	North of Whitney Ranch Parkway	4	4	3,700	23,600	27,500	27,500	27,700	27,600	27,600
80	Sunset Boulevard	East of Fiddyment Boulevard	NA	6	NA	28,700	22,600	22,500	22,600	22,500	22,600
81	Sunset Boulevard	West of SR 65	2	6	8,000	83,600	67,700	67,800	67,800	67,800	67,900

Table 4.8-25 (Continued)
Estimated Daily Traffic Volumes for Build Alternatives under 2040 Conditions

	Roadway	Segment	Travel Lanes[1]		2004[2] Daily Traffic Volume	Estimated 2040 Daily Traffic Volumes					
			2004	2040		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
82	Sunset Boulevard	East of SR 65	4	6	7,100	38,800	38,200	38,400	38,500	38,400	38,400
83	Sunset Boulevard	East of Blue Oaks Boulevard	6	6	9,800	43,400	44,000	44,100	44,100	44,100	44,100
84	Sunset Boulevard West	West of Brewer Road	2	2	600	13,200	8,300	7,600	7,500	6,700	6,800
85	Sunset Boulevard West	East of Brewer Road	2	2	600	10,900	5,500	4,800	4,700	4,000	4,100
86	Sunset Boulevard West	West of Fiddyment Road	2	2	600	8,200	8,800	8,600	8,600	8,100	8,100
87	Twelve Bridges Drive	West of SR 65	2	4	6,000	26,900	22,400	22,400	22,400	22,400	22,400
88	Twelve Bridges Drive	East of SR 65	4	6	5,100	41,600	39,900	39,900	39,900	39,900	39,900
89	Valley View Parkway	West of Park Drive	NA	2	NA	12,700	15,400	15,500	15,500	15,500	15,500
90	Walerga Road	South of Baseline Road	2	4	14,900	34,000	32,600	32,400	32,600	32,600	32,400
91	Walerga Road	North of Elverta Road	4	4	22,700	56,400	55,200	55,600	55,600	55,700	55,600
92	Washington Boulevard	South of Blue Oaks Boulevard	2	4	4,800	30,400	27,600	27,200	27,500	27,300	27,500
93	Washington Boulevard	North of Pleasant Grove Boulevard	2	4	6,205	41,500	38,000	37,800	37,900	37,900	37,900
94	Watt Avenue	North of Pleasant Grove Boulevard	NA	6	NA	19,900	19,000	18,900	18,900	19,100	19,100
95	Watt Avenue	North of Baseline Road	NA	6	NA	36,400	38,100	35,800	35,700	35,700	35,800
96	Watt Avenue	South of Baseline Road	2	6	7,100	41,200	41,500	41,800	41,500	41,800	41,700
97	Watt Avenue	North of Elverta Road	4	6	19,400	58,900	58,700	58,200	58,300	58,700	58,700
98	Watt Avenue	North of Elkhorn Boulevard	4	6	38,700	51,500	51,700	51,200	51,500	51,700	51,400
99	Watt Avenue	North of Airbase Drive	6	6	47,100	73,700	73,500	73,500	73,500	73,600	73,500
100	Watt Avenue	North of I-80	6	6	62,600	85,800	85,600	85,500	85,700	86,300	85,600
101	West Side Drive	North of Blue Oaks Boulevard	NA	6	NA	57,200	55,600	55,200	55,200	55,700	55,700
102	West Side Drive	North of Baseline Road	NA	6	NA	36,900	36,400	35,600	35,700	35,600	35,700
103	Whitney Ranch Parkway	East of SR 65	NA	6	NA	47,500	59,500	60,100	60,300	60,100	60,100
104	Whitney Ranch Parkway	East of University Avenue	NA	6	NA	26,200	36,900	37,300	37,500	37,400	37,400
105	Whitney Ranch Parkway	East of Wildcat Boulevard	NA	4	NA	14,900	19,200	19,300	19,400	19,400	19,400

Table 4.8-25 (Continued)
Estimated Daily Traffic Volumes for Build Alternatives under 2040 Conditions

	Roadway	Segment	Travel Lanes[1]		2004[2] Daily Traffic Volume	Estimated 2040 Daily Traffic Volumes					
			2004	2040		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
106	Woodcreek Oak Boulevard	South of Pleasant Grove Boulevard	2	4	11,900	31,600	29,200	28,900	28,800	29,000	29,100
107	16th Street	North of Baseline Road	NA	4	NA	43,300	42,100	42,300	42,200	42,400	42,300
108	16th Street	South of Baseline Road	NA	4	NA	28,300	27,700	27,700	27,600	28,000	28,000
109	16th Street	North of Elverta Road	2	2	400	25,100	24,300	24,800	24,600	24,700	24,600
110	Blue Oaks Boulevard	East of Lonetree Boulevard	4	4	9,500	21,500	20,500	20,500	20,500	20,500	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
NA = not applicable

Source: DKS Associates, 2007

Table 4.8-26
Estimated Change in Daily Traffic Volumes Compared to No-Build Alternative under 2040 Conditions

Roadway		Segment	Travel Lanes[1]		2004[2] Daily Traffic Volume	No-Build 2040 Daily Traffic Volume	Estimated Change in 2040 Daily Traffic Volumes Compared to No-Build Alternative				
			2004	2040			Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
1	SR 70/99	North of Howsley Road	4	4	29,000	48,100	−1,700	−2,000	−2,200	−2,500	−2,500
2	SR 70/99	North of Sankey Road	4	4	29,000	51,600	−3,800	−4,400	−4,500	−5,000	−5,000
3	SR 70/99	North of Riego Road	4	4	29,000	68,900	−12,700	−13,100	−13,300	23,000	22,600
4	SR 70/99	North of Elverta Road	4	6	32,000	129,700	14,500	17,200	17,600	15,700	15,300
5	SR 70/99	North of I-5	4	6	47,500	155,100	5,700	7,100	7,200	6,300	5,900
6	SR 65	North of Twelve Bridge	4	6	40,000	140,100	8,200	7,900	7,900	7,600	7,700
7	SR 65	North of Sunset Boulevard	4	6	47,500	144,500	−11,700	−11,700	−11,500	−11,600	−11,600
8	SR 65	North of Blue Oaks Boulevard	4	6	43,000	154,000	−900	−1,100	−1,000	−900	−900
9	SR 65	North of Pleasant Grove Boulevard	4	6	76,000	163,600	−1,600	−1,700	−1,800	−1,700	−1,800
10	SR 65	North of Stanford Ranch Road	4	6	82,000	175,700	−1,100	−1,400	−1,400	−1,400	−1,300
11	SR 65	North of I-80	4	6	84,000	170,500	−2,700	−2,600	−3,000	−2,800	−2,800
12	I-80	East of Rocklin Road	6	6	96,000	124,200	−1,100	−1,100	−1,000	−1,100	−1,100
13	I-80	East of SR 65	6	6	116,000	161,500	−700	−600	−500	−700	−600
14	I-80	East of Douglas Boulevard	6	6+2	156,000	190,100	−1,700	−2,000	−3,200	−2,800	−2,900
15	I-80	East of Riverside Avenue	6	6+2	163,000	247,900	−3,500	−4,600	−4,200	−4,600	−4,700
16	I-80	West of Riverside Avenue	8+2	8+2	179,000	258,800	−4,300	−5,100	−5,000	−5,400	−5,200
17	I-80	East of Northgate Boulevard	6	6+2	143,000	193,700	−3,200	−3,700	−3,900	−3,800	−4,300
18	Athens Avenue	East of Fiddyment Road	2	4	3,700	34,400	−7,900	−7,900	−7,900	−8,200	−8,100
19	Baseline Road	East of Pleasant Grove Road	2	6	9,950	79,600	−900	−1,400	−1,400	−2,800	−2,800
20	Baseline Road	East of Brewer Road	2	6	10,400	59,800	−3,500	−4,700	−4,800	−4,500	−4,300
21	Baseline Road	West of 16th Street	2	6	10,400	63,900	−3,400	−4,300	−4,600	−4,300	−4,200
22	Baseline Road	West of Watt Avenue	2	6	10,400	60,100	−5,700	−2,500	−2,800	−2,300	−2,100
23	Baseline Road	East of Watt Avenue	2	6	12,600	56,500	−3,400	−4,000	−4,100	−3,800	−3,600
24	Baseline Road	West of Walerga Road	2	6	12,600	47,900	−2,200	−3,200	−3,200	−2,900	−2,600
25	Baseline Road	East of Walerga Road	3	6	15,100	64,200	−3,600	−4,000	−4,200	−3,900	−3,900
26	Baseline Road	West of Woodcreek Oaks Boulevard	3	4	15,100	47,100	−1,100	−1,800	−1,300	−1,300	−1,000
27	Blue Oaks Boulevard	East of Watt Avenue	NA	6	NA	39,300	−2,600	−2,900	−2,900	−2,500	−2,400
28	Blue Oaks Boulevard	West of Fiddyment Road	NA	6	NA	30,900	−600	−800	−800	−700	−700

Table 4.8-26 (Continued)
Estimated Change in Daily Traffic Volumes Compared to No-Build Alternative under 2040 Conditions

	Roadway	Segment	Travel Lanes[1]		2004[2] Daily Traffic Volume	No-Build 2040 Daily Traffic Volume	Estimated Change in 2040 Daily Traffic Volumes Compared to No-Build Alternative				
			2004	2040			Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
29	Blue Oaks Boulevard	East of Fiddyment Road	2	6	8,200	43,500	−2,400	−2,600	−2,600	−2,400	−2,400
30	Blue Oaks Boulevard	West of SR 65	4	6	38,700	65,200	−5,900	−6,200	−6,200	−6,400	−6,300
31	Brewer Road	North of Sunset Boulevard West	2	2	200	2,900	−1,300	−1,700	−1,800	−1,500	−1,500
32	Brewer Road	South of Sunset Boulevard West	2	2	200	3,500	−1,000	−1,000	−1,100	−1,100	−1,100
33	Brewer Road	North of Baseline Road	2	2	700	500	−200	−200	−200	−200	−200
34	Catlett Road	East of SR 70/99	2	2	200	7,000	−3,400	−3,700	−3,800	−3,900	−3,900
35	Catlett Road	East of Pleasant Grove Road	2	2	100	4,400	−2,200	−2,700	−2,800	−2,900	−2,900
36	Cirby Way	East of Foothills Boulevard	4	6	38,900	69,900	−1,000	−1,000	−1,000	−1,100	−1,000
37	E Catlett Road	East of Brewer Road	2	2	200	4,100	−1,200	−1,700	−1,800	−2,100	−2,000
38	E Catlett Road	West of Fiddyment Road	2	2	200	11,300	200	300	200	200	200
39	Dowd Road	North of Sunset Boulevard West	NA	6	NA	43,300	−5,600	−6,100	−6,200	−5,900	−5,900
40	Dryer Road West	South of Baseline Road	NA	4	NA	20,200	2,000	2,300	2,100	2,000	2,000
41	Elkhorn Boulevard	East of SR 70/99	2	6	16,300	60,500	−100	100	0	0	−300
42	Elkhorn Boulevard	West of Watt Avenue	4	4	26,800	39,000	−500	−300	−600	−700	−600
43	Elkhorn Boulevard	East of Watt Avenue	4	6	23,020	44,500	−500	−400	−700	−700	−700
44	Elkhorn Boulevard	West of Walerga Road	4	6	25,700	45,100	−500	−400	−600	−600	−700
45	Elverta Road	East of SR 70/99	2	4	7,200	53,200	0	100	200	600	500
46	Elverta Road	East of Rio Linda Boulevard	2	4	8,000	49,500	−1,200	−1,600	−1,500	−1,100	−1,300
47	Elverta Road	West of Watt Avenue	2	4	20,700	62,200	−500	−600	−600	−600	−500
48	Fiddyment Road	North of Sunset Boulevard West	2	6	2,800	37,900	1,500	3,900	4,300	3,700	3,500
49	Fiddyment Road	South of Sunset Boulevard	2	6	4,000	44,800	2,400	4,400	4,800	3,800	3,600
50	Fiddyment Road	North of Blue Oaks Boulevard	2	4	4,000	36,400	2,100	1,800	1,800	1,800	2,000
51	Fiddyment Road	North of Pleasant Grove Boulevard	2	4	11,800	36,400	400	0	0	0	200
52	Fiddyment Road	North of Baseline Road	2	6	19,600	40,800	−700	−1,700	−1,500	−1,200	−1,300
53	Foothills Boulevard	North of Blue Oaks Boulevard	4	4	3,400	37,300	−2,600	−2,500	−2,400	−2,400	−2,500
54	Foothills Boulevard	South of Roseville Parkway	4	6	12,200	39,400	−800	−700	−1,000	−800	−800

Table 4.8-26 (Continued)
Estimated Change in Daily Traffic Volumes Compared to No-Build Alternative under 2040 Conditions

	Roadway	Segment	Travel Lanes[1]		2004[2] Daily Traffic Volume	No-Build 2040 Daily Traffic Volume	Estimated Change in 2040 Daily Traffic Volumes Compared to No-Build Alternative				
			2004	2040			Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
55	Foothills Boulevard	North of Baseline Road	4	6	28,400	51,000	−700	−900	−900	−900	−800
56	Foothills Boulevard	South of Baseline Road	4	6	30,900	69,300	−500	−700	−500	−700	−400
57	Howsley Road	East of SR 70/99	2	2	800	7,500	−2,800	−3,000	−3,100	−3,200	−3,200
58	Industrial Avenue	North of Athens Avenue	2	4	4,600	33,900	−8,800	−8,800	−8,800	−8,800	−8,800
59	Industrial	North of Roseville Parkway	2	2	2,800	30,900	500	700	700	600	700
60	Junction Boulevard	East of Woodcreek Oaks Boulevard	4	4	6,100	10,800	−1,000	−1,100	−1,300	−1,200	−1,200
61	Moore Road	West of Brewer Road	2	2	400	2,400	−2,000	−2,100	−2,100	−2,100	−2,100
62	Nicolaus Road	East of Brewer Road	2	2	900	8,800	−2,900	−3,400	−3,400	−3,600	−3,600
63	Pacific Street	West of Sunset Boulevard	4	6	10,600	31,200	−100	−100	−100	−100	−100
64	PFE Road	East of Watt Avenue	2	4	4,700	16,200	−400	−100	−400	−200	−200
65	Phillip Road	East of Brewer Road	2	2	100	3,300	−800	−900	−900	−900	−900
66	Pleasant Grove Boulevard	West of Fiddyment Road	NA	4	NA	55,600	−1,100	−800	−1,200	−1,000	−1,100
67	Pleasant Grove Boulevard	East of Fiddyment Road	4	4	3,700	42,800	−2,100	−2,300	−2,300	−2,100	−2,100
68	Pleasant Grove Boulevard	East of Woodcreek Oaks Boulevard	4	4	16,300	67,700	−4,500	−4,800	−5,000	−4,700	−4,600
69	Pleasant Grove Boulevard	West of SR 65	6	6	41,300	58,400	−1,200	−1,100	−1,200	−1,200	−1,200
70	Pleasant Grove Road	North of Sankey Road	2	4	1,500	23,900	−7,600	−8,800	−8,900	−8,500	−8,400
71	Pleasant Grove Road	North of Riego Road	2	4	1,700	27,300	−800	−1,000	−1,100	100	200
72	Pleasant Grove Road	South of Baseline Road	2	2	1,500	22,900	−100	0	−100	−300	−300
73	Riego Road	East of SR 70/99	2	6	9,900	71,200	−7,300	−7,600	−7,700	−3,700	−3,700
74	Riego Road	West of Pleasant Grove Road	2	6	9,900	69,100	800	900	700	−4,400	−4,400
75	Sankey Road	East of SR 70/99	2	4	400	26,100	−7,000	−6,800	−6,800	−19,400	−19,500
76	Sankey Road	West of Pleasant Grove Road	2	4	200	28,700	−6,400	−6,200	−6,200	−1,800	−2,000
77	Sierra College Boulevard	South of English Colony Way	2	4	11,000	31,700	1,500	1,600	1,600	1,600	1,600
78	Sierra College Boulevard	North of King Road	2	4	11,000	30,900	900	1,000	1,000	1,000	1,000
79	Wildcat Boulevard	North of Whitney Ranch Parkway	4	4	3,700	23,600	3,900	3,900	4,100	4,000	4,000

Table 4.8-26 (Continued)
Estimated Change in Daily Traffic Volumes Compared to No-Build Alternative under 2040 Conditions

	Roadway	Segment	Travel Lanes[1] 2004	Travel Lanes[1] 2040	2004[2] Daily Traffic Volume	No-Build 2040 Daily Traffic Volume	Estimated Change in 2040 Daily Traffic Volumes Compared to No-Build Alternative: Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
80	Sunset Boulevard	East of Fiddyment Boulevard	NA	6	NA	28,700	−6,100	−6,200	−6,100	−6,200	−6,100
81	Sunset Boulevard	West of SR 65	2	6	8,000	83,600	−15,900	−15,800	−15,800	−15,800	−15,700
82	Sunset Boulevard	East of SR 65	4	6	7,100	38,800	−600	−400	−300	−400	−400
83	Sunset Boulevard	East of Blue Oaks Boulevard	6	6	9,800	43,400	600	700	700	700	700
84	Sunset Boulevard West	West of Brewer Road	2	2	600	13,200	−4,900	−5,600	−5,700	−6,500	−6,400
85	Sunset Boulevard West	East of Brewer Road	2	2	600	10,900	−5,400	−6,100	−6,200	−6,900	−6,800
86	Sunset Boulevard West	West of Fiddyment Road	2	2	600	8,200	600	400	400	−100	−100
87	Twelve Bridges Drive	West of SR 65	2	4	6,000	26,900	−4,500	−4,500	−4,500	−4,500	−4,500
88	Twelve Bridges Drive	East of SR 65	4	6	5,100	41,600	−1,700	−1,700	−1,700	−1,700	−1,700
89	Valley View Parkway	West of Park Drive	NA	2	NA	12,700	2,700	2,800	2,800	2,800	2,800
90	Walerga Road	South of Baseline Road	2	4	14,900	34,000	−1,400	−1,600	−1,400	−1,400	−1,600
91	Walerga Road	North of Elverta Road	4	4	22,700	56,400	−1,200	−800	−800	−700	−800
92	Washington Boulevard	South of Blue Oaks Boulevard	2	4	4,800	30,400	−2,800	−3,200	−2,900	−3,100	−2,900
93	Washington Boulevard	North of Pleasant Grove Boulevard	2	4	6,205	41,500	−3,500	−3,700	−3,600	−3,600	−3,600
94	Watt Avenue	North of Pleasant Grove Boulevard	NA	6	NA	19,900	−900	−1,000	−1,000	−800	−800
95	Watt Avenue	North of Baseline Road	NA	6	NA	36,400	1,700	−600	−700	−700	−600
96	Watt Avenue	South of Baseline Road	2	6	7,100	41,200	300	600	300	600	500
97	Watt Avenue	North of Elverta Road	4	6	19,400	58,900	−200	−700	−600	−200	−200
98	Watt Avenue	North of Elkhorn Boulevard	4	6	38,700	51,500	200	−300	0	200	−100
99	Watt Avenue	North of Airbase Drive	6	6	47,100	73,700	−200	−200	−200	−100	−200
100	Watt Avenue	North of I-80	6	6	62,600	85,800	−200	−300	−100	500	−200
101	West Side Drive	North of Blue Oaks Boulevard	NA	6	NA	57,200	−1,600	−2,000	−2,000	−1,500	−1,500
102	West Side Drive	North of Baseline Road	NA	6	NA	36,900	−500	−1,300	−1,200	−1,300	−1,200
103	Whitney Ranch Parkway	East of SR 65	NA	6	NA	47,500	12,000	12,600	12,800	12,600	12,600

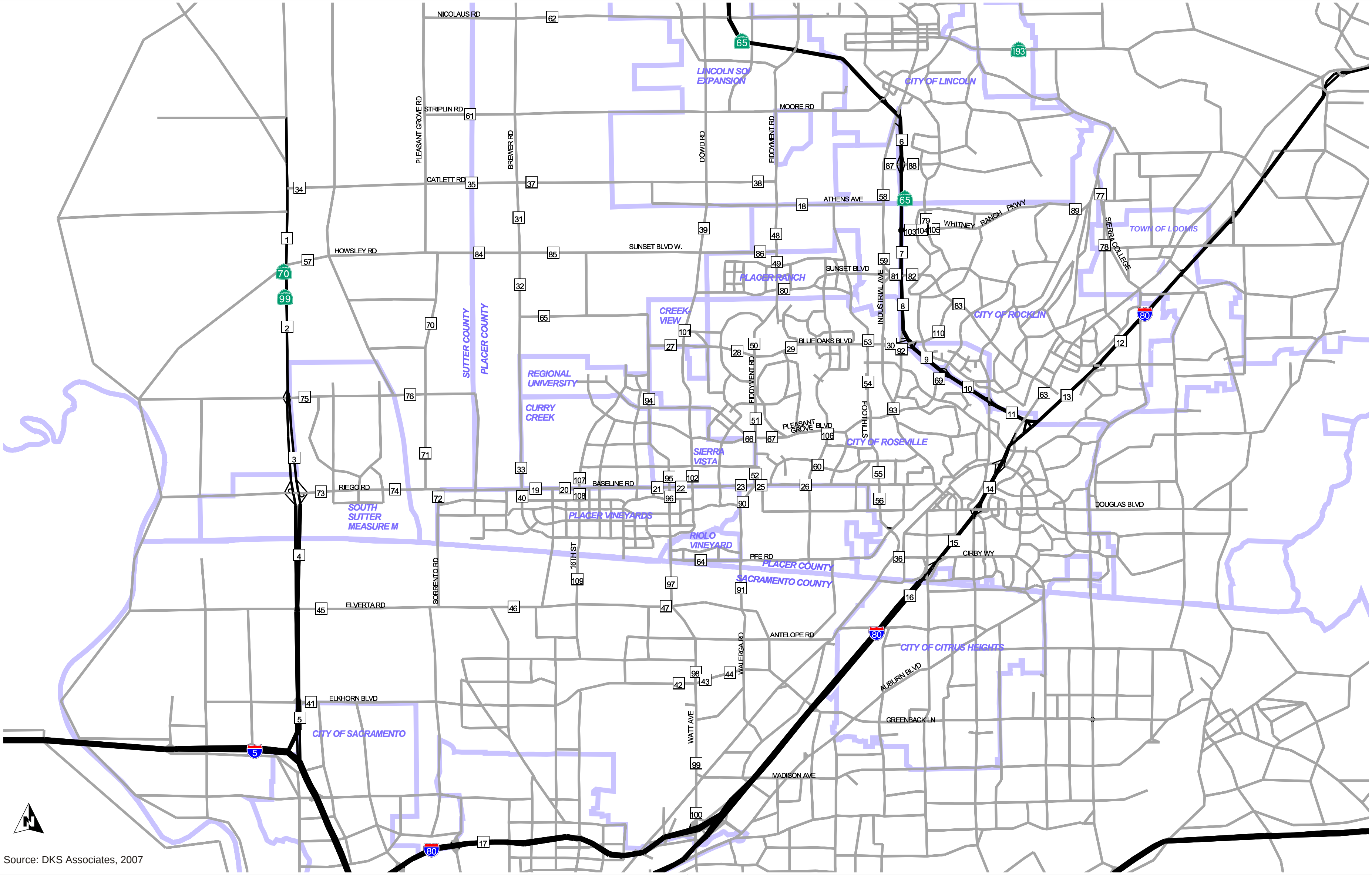
Table 4.8-26 (Continued)
Estimated Change in Daily Traffic Volumes Compared to No-Build Alternative under 2040 Conditions

Roadway		Segment	Travel Lanes[1]		2004[2] Daily Traffic Volume	No-Build 2040 Daily Traffic Volume	Estimated Change in 2040 Daily Traffic Volumes Compared to No-Build Alternative				
			2004	2040			Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
104	Whitney Ranch Parkway	East of University Avenue	NA	6	NA	26,200	10,700	11,100	11,300	11,200	11,200
105	Whitney Ranch Parkway	East of Wildcat Boulevard	NA	4	NA	14,900	4,300	4,400	4,500	4,500	4,500
106	Woodcreek Oak Boulevard	South of Pleasant Grove Boulevard	2	4	11,900	31,600	−2,400	−2,700	−2,800	−2,600	−2,500
107	16th Street	North of Baseline Road	NA	4	NA	43,300	−1,200	−1,000	−1,100	−900	−1,000
108	16th Street	South of Baseline Road	NA	4	NA	28,300	−600	−600	−700	−300	−300
109	16th Street	North of Elverta Road	2	2	400	25,100	−800	−300	−500	−400	−500
110	Blue Oaks Boulevard	East of Lonetree Boulevard	4	4	9,500	21,500	−1,000	−1,000	−1,000	−1,000	−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 in 2005
NA = not applicable

Source: DKS Associates, 2007



Source: DKS Associates, 2007

PLACER PARKWAY CORRIDOR PRESERVATION

Cities and Specific Plan Areas

Tier 1 EIS/EIR

Location of Roadway Segments for 2040 Traffic Analysis

Figure 4.8-10

June 2007

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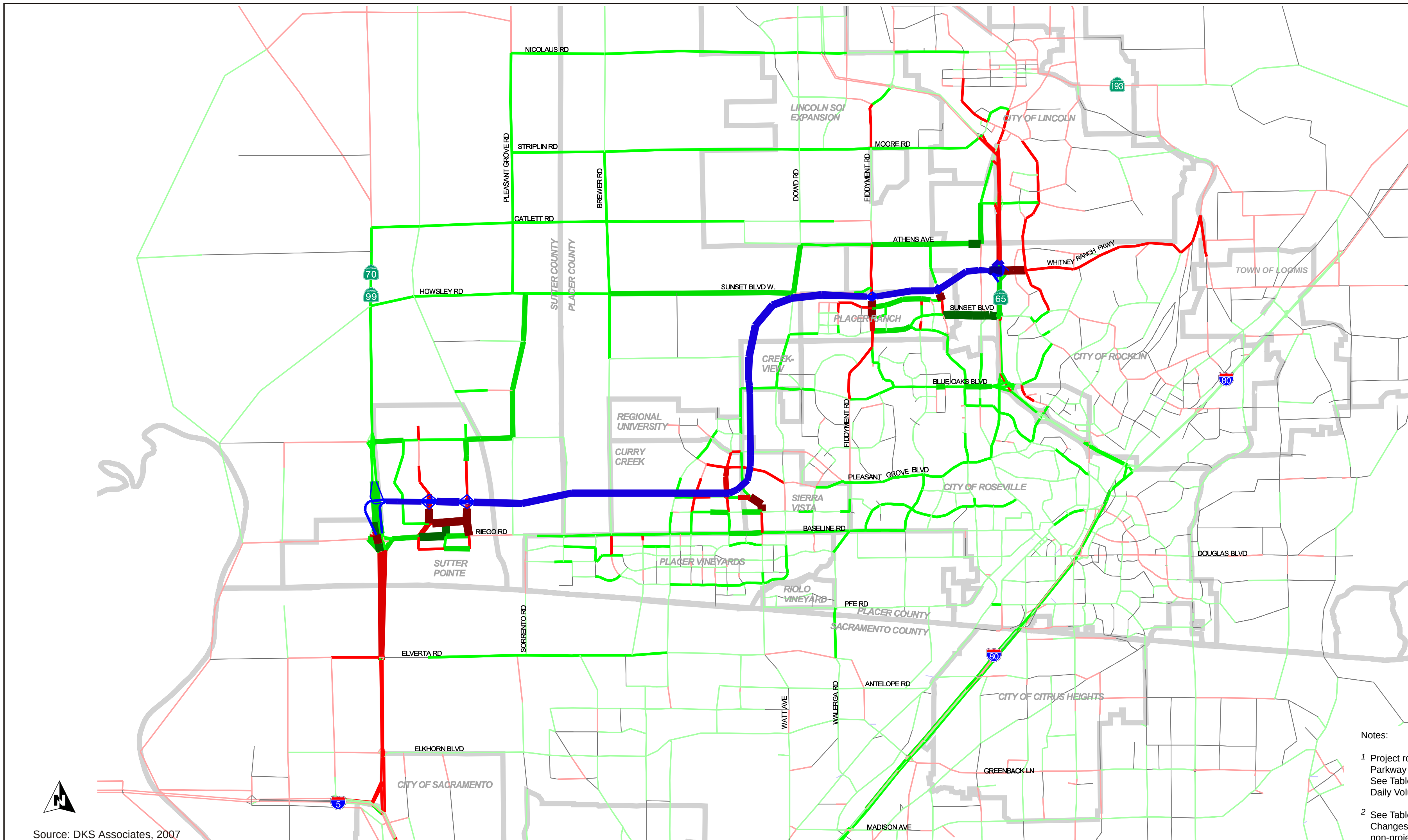

Source: DKS Associates, 2007

Notes:

1 Project roadways are Placer Parkway and its interchanges. See Tables 4.8-23 and 4.8-24 for Daily Volumes on Placer Parkway.

2 See Table 4.8-26 for Changes in Daily Volumes for non-project roadways.

PLACER PARKWAY CORRIDOR PRESERVATION

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

Tier 1 EIS/EIR

Changes in 2040 Daily Traffic Volumes
Alternative 1
Compared to No-Build Alternative

Figure 4.8-11

June 2007

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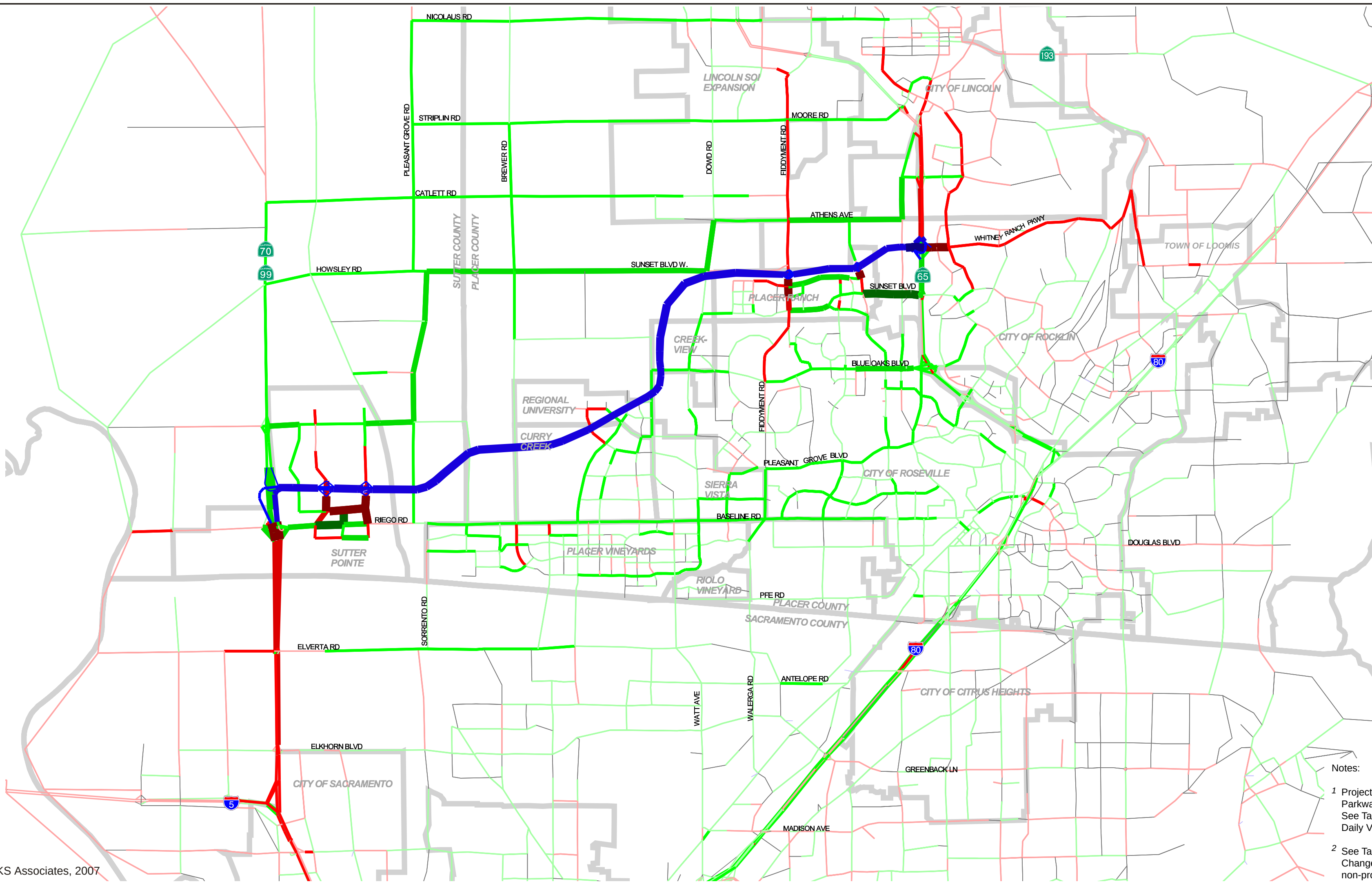

Source: DKS Associates, 2007

Notes:

1 Project roadways are Placer Parkway and its interchanges. See Tables 4.8-23 and 4.8-24 for Daily Volumes on Placer Parkway.

2 See Table 4.8-26 for Changes in Daily Volumes for non-project roadways.

PLACER PARKWAY CORRIDOR PRESERVATION

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

Tier 1 EIS/EIR

Changes in 2040 Daily Traffic Volumes
Alternative 2
Compared to No-Build Alternative

Figure 4.8-12

June 2007

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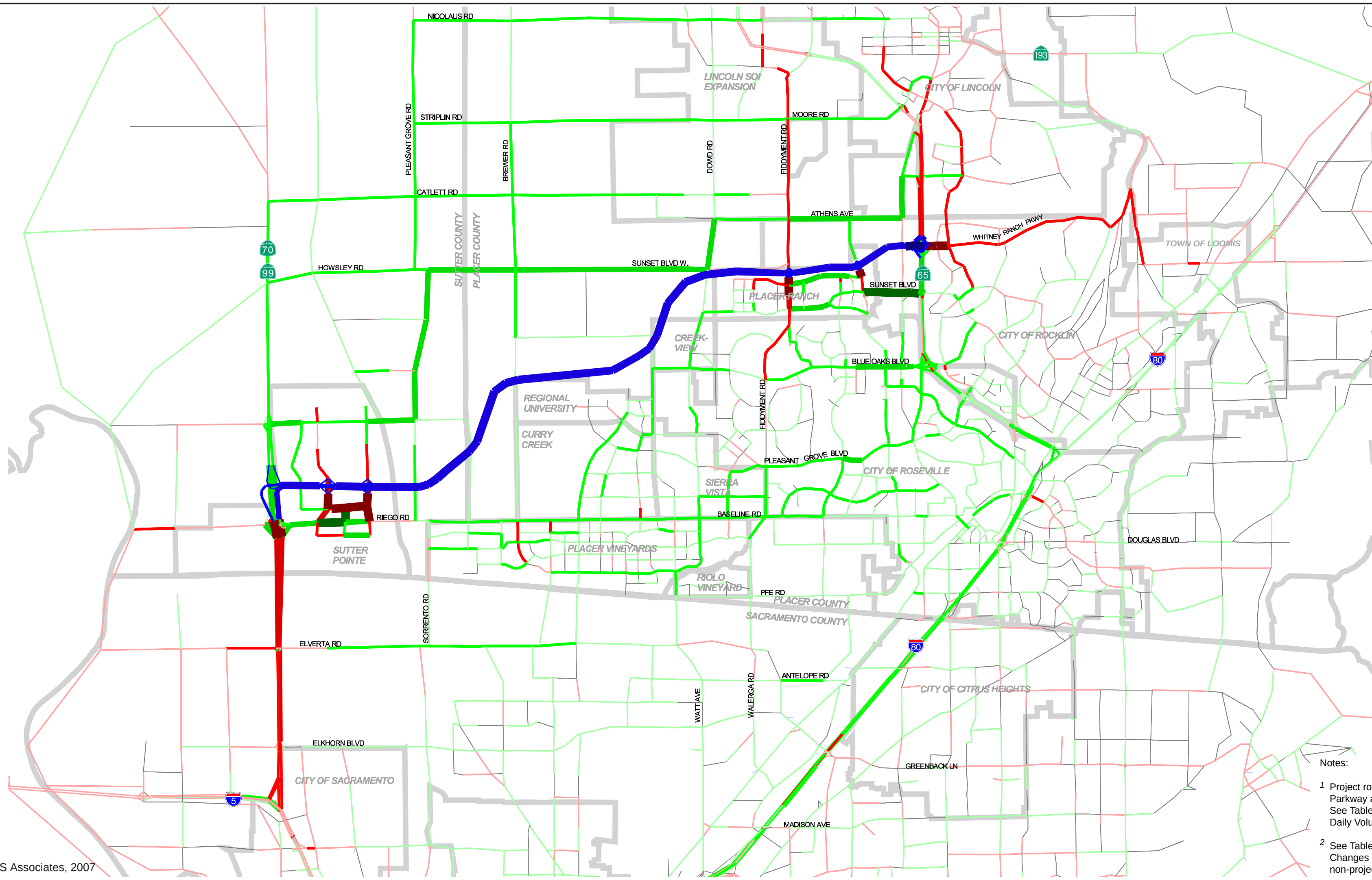

Source: DKS Associates, 2007

Notes:

1 Project roadways are Placer Parkway and its interchanges. See Tables 4.8-23 and 4.8-24 for Daily Volumes on Placer Parkway.

2 See Table 4.8-26 for Changes in Daily Volumes for non-project roadways.

PLACER PARKWAY
CORRIDOR PRESERVATION

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

Tier 1 EIS/EIR

Changes in 2040 Daily Traffic Volumes
Alternative 3
Compared to No-Build Alternative

Figure 4.8-13

June 2007

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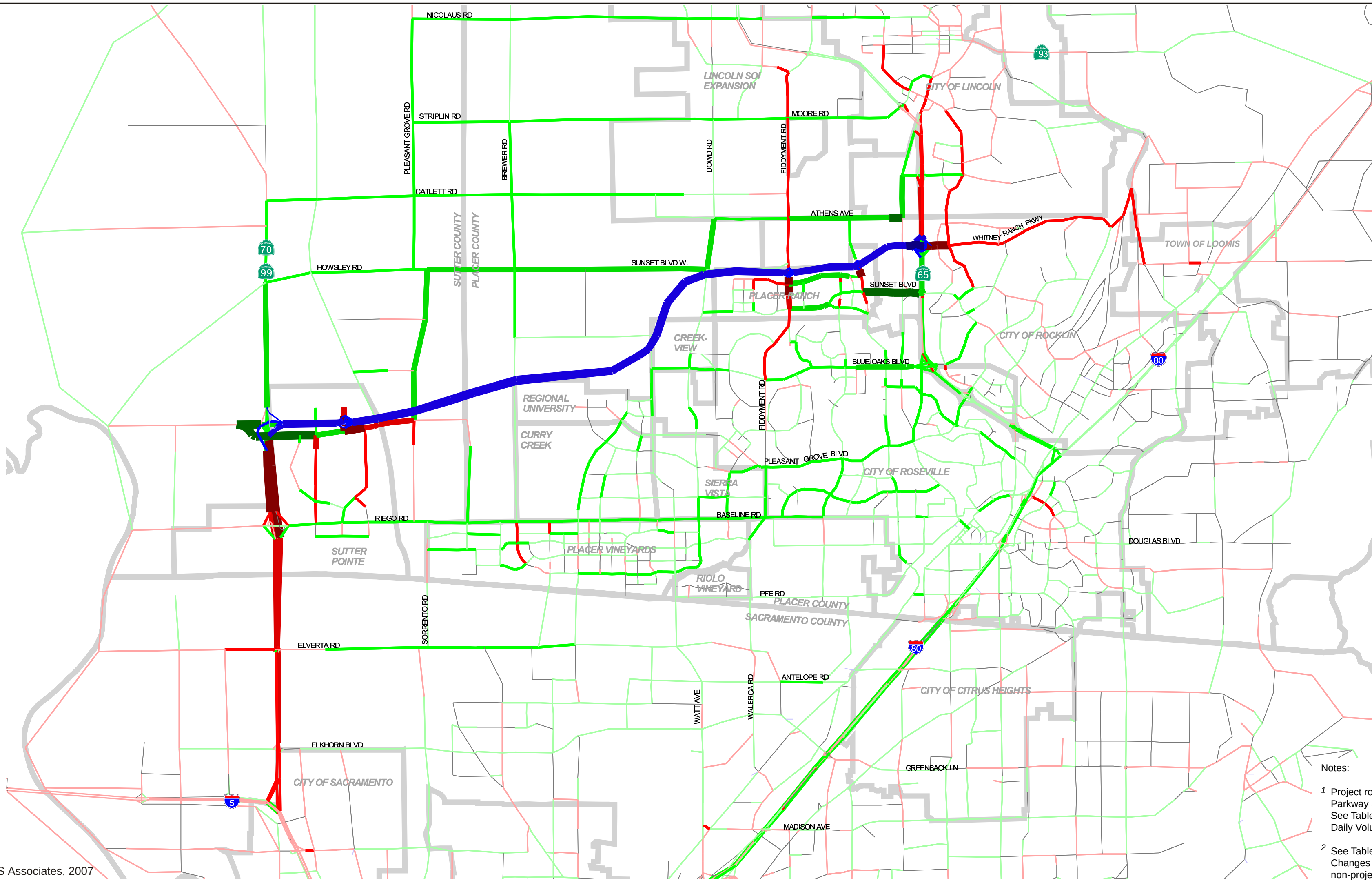

Source: DKS Associates, 2007

Notes:

1 Project roadways are Placer Parkway and its interchanges. See Tables 4.8-23 and 4.8-24 for Daily Volumes on Placer Parkway.

2 See Table 4.8-26 for Changes in Daily Volumes for non-project roadways.

Placer Parkway Corridor Preservation

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

Tier 1 EIS/EIR

Changes in 2040 Daily Traffic Volumes
Alternative 4
Compared to No-Build Alternative

Figure 4.8-14

June 2007

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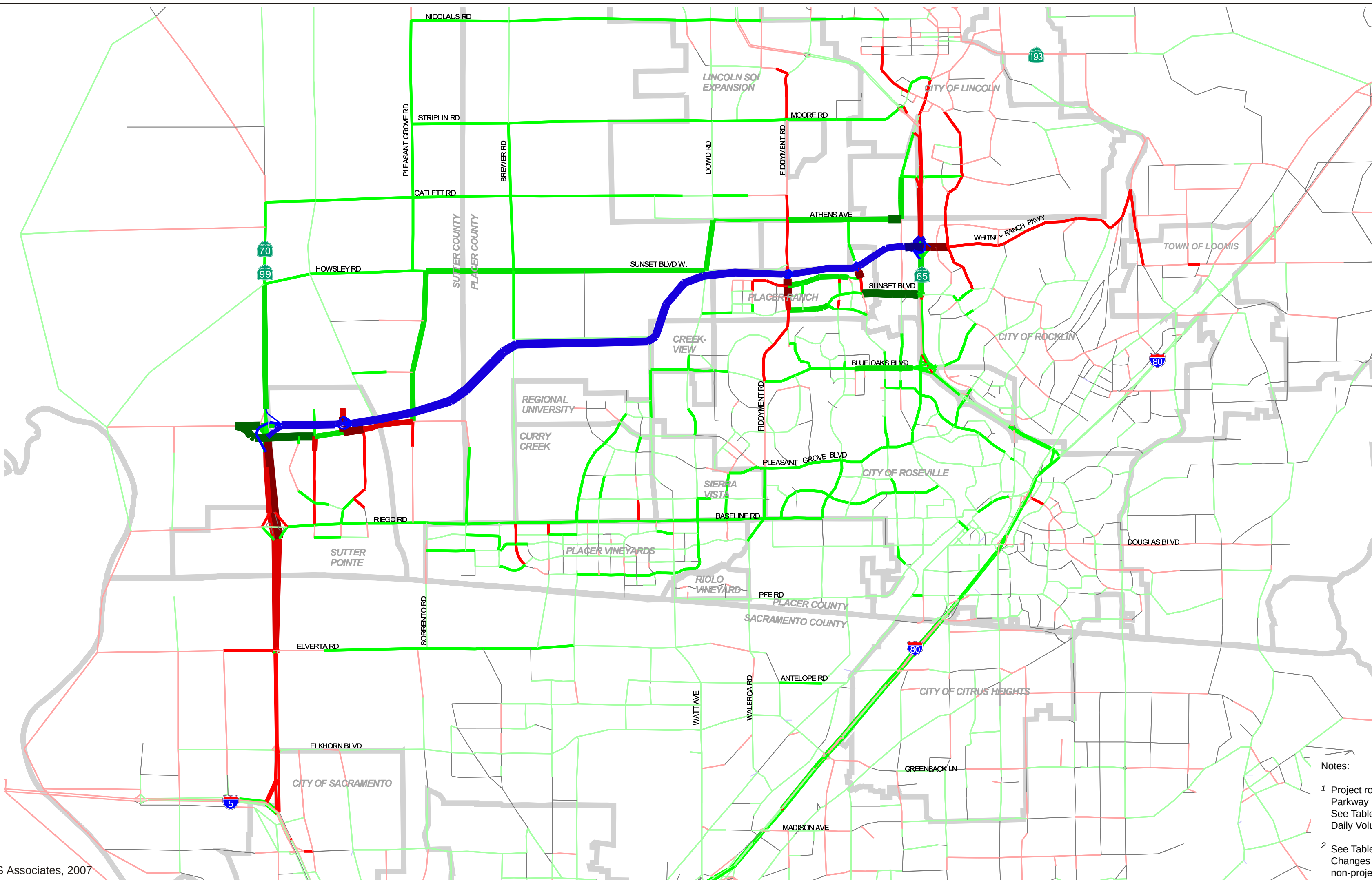

Source: DKS Associates, 2007

Notes:

[1] Project roadways are Placer Parkway and its interchanges. See Tables 4.8-23 and 4.8-24 for Daily Volumes on Placer Parkway.

[2] See Table 4.8-26 for Changes in Daily Volumes for non-project roadways.

PLACER PARKWAY CORRIDOR PRESERVATION

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

Tier 1 EIS/EIR

Changes in 2040 Daily Traffic Volumes
Alternative 5
Compared to No-Build Alternative

Figure 4.8-15

June 2007

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- Rocklin's Whitney Ranch Parkway and the future Valley View Parkway
- Some roadways near future Placer Parkway interchanges

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 4.8-27 shows the estimated 2040 LOS on segments of Placer Parkway based on four- or six-lane configurations. 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 4.8-28 shows the estimated volume/capacity ratio in 2040 on key roadway segments under each build alternative. Table 4.8-29 provides the resulting LOS on these roadway segments.

The comparison between the No-Build Alternative and the build alternatives under 2040 conditions indicates that there would be significant LOS impacts on some roadway segments. These impacts are discussed below.

State Route 70/99

Under all the build alternatives, 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 (Caltrans, 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 was 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 build 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 TASA. Development is also anticipated in the Natomas Visioning Area, an area of north Sacramento County just south of the TASA that was not assumed to have development in SACOG's previous 2025 forecasts for the MTP.

Table 4.8-27
Projected 2040 Level of Service on Placer Parkway with Four or Six Travel Lanes (without Potential Watt Interchange)

		Level of Service									
		Alternative 1		Alternative 2		Alternative 3		Alternative 4		Alternative 5	
	Segment	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	B	B	C	B	C	B	C	B	C	B
2	East of Pacific Street	C	B	C	B	C	B	D	B	D	B
3	East of So Sutter Road	C	B	D	B	D	B	D	B	D	B
4	East of Watt Avenue	C	B	D	B	D	B	D	B	D	B
5	East of Fiddyment Road	D	B	D	C	D	C	D	C	D	C
6	West of SR 65	E	C	E	C	E	C	E	C	E	C

Note:

Shaded cells represent segments that would operate at LOS E or F conditions.

Source: DKS Associates, 2007

Table 4.8-28
Estimated Volume/Capacity Ratios on Roadway Segments for Build Alternatives under 2040 Conditions

	Roadway	Segment	Travel Lanes[1]		2004[2] Volume/ Capacity Ratio	Estimated 2040 Volume/Capacity Ratios on Roadway Segment					
			2004	2040		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
1	SR 70/99	North of Howsley Road	4	4	0.54	0.89	0.86	0.85	0.85	0.84	0.84
2	SR 70/99	North of Sankey Road	4	4	0.54	0.96	0.89	0.87	0.87	0.86	0.86
3	SR 70/99	North of Riego Road	4	4	0.54	0.96	0.78	0.78	0.77	1.28	1.27
4	SR 70/99	North of Elverta Road	4	6	0.59	1.20	1.34	1.36	1.36	1.35	1.34
5	SR 70/99	North of I-5	4	6	0.66	1.44	**1.49**	**1.50**	**1.50**	**1.49**	**1.49**
6	SR 65	North of Twelve Bridge	4	6	0.56	1.30	**1.37**	**1.37**	**1.37**	**1.37**	**1.37**
7	SR 65	North of Sunset Boulevard	4	6	0.66	1.34	1.23	1.23	1.23	1.23	1.23
8	SR 65	North of Blue Oaks Boulevard	4	6	0.60	1.43	1.42	1.42	1.42	1.42	1.42
9	SR 65	North of Pleasant Grove Boulevard	4	6	1.06	1.51	1.50	1.50	1.50	1.50	1.50
10	SR 65	North of Stanford Ranch Road	4	6	1.14	1.63	1.62	1.61	1.61	1.61	1.61
11	SR 65	North of I-80	4	6	1.17	1.58	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
13	I-80	East of SR 65	6	6	1.07	1.50	1.49	1.49	1.49	1.49	1.49
14	I-80	East of Douglas Boulevard	6	6+2	1.44	1.17	1.16	1.16	1.15	1.16	1.16
15	I-80	East of Riverside Avenue	6	6+2	1.51	1.53	1.51	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
17	I-80	East of Northgate Boulevard	6	6+2	1.32	1.35	1.32	1.32	1.32	1.32	1.32
18	Athens Avenue	East of Fiddyment Road	2	4	0.15	0.96	0.74	0.74	0.74	0.73	0.73
19	Baseline Road	East of Pleasant Grove Road	2	6	0.40	1.33	1.31	1.30	1.30	1.28	1.28
20	Baseline Road	East of Brewer Road	2	6	0.42	1.00	0.94	0.92	0.92	0.92	0.93
21	Baseline Road	West of 16th Street	2	6	0.42	1.07	1.01	0.99	0.99	0.99	1.00
22	Baseline Road	West of Watt Avenue	2	6	0.42	1.11	1.01	1.07	1.06	1.07	1.07
23	Baseline Road	East of Watt Avenue	2	6	0.70	1.05	0.98	0.97	0.97	0.98	0.98
24	Baseline Road	West of Walerga Road	2	6	0.70	0.89	0.85	0.83	0.83	0.83	0.84
25	Baseline Road	East of Walerga Road	3	6	0.84	1.19	1.12	1.11	1.11	1.12	1.12
26	Baseline Road	West of Woodcreek Oaks Boulevard	3	4	0.84	1.31	1.28	1.26	1.27	1.27	1.28
27	Blue Oaks Boulevard	East of Watt Avenue	NA	6	NA	0.73	0.68	0.67	0.67	0.68	0.68
28	Blue Oaks Boulevard	West of Fiddyment Road	NA	6	NA	0.57	0.56	0.56	0.56	0.56	0.56
29	Blue Oaks Boulevard	East of Fiddyment Road	2	6	0.46	0.81	0.76	0.76	0.76	0.76	0.76

Table 4.8-28 (Continued)
Estimated Volume/Capacity Ratios on Roadway Segments for Build Alternatives under 2040 Conditions

Roadway		Segment	Travel Lanes[1]		2004[2] Volume/ Capacity Ratio	Estimated 2040 Volume/Capacity Ratios on Roadway Segment					
			2004	2040		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
30	Blue Oaks Boulevard	West of SR 65	4	6	0.97	1.09	0.99	0.98	0.98	0.98	0.98
31	Brewer Road	North of Sunset Boulevard West	2	2	0.01	0.12	0.06	0.05	0.04	0.06	0.06
32	Brewer Road	South of Sunset Boulevard West	2	2	0.01	0.14	0.10	0.10	0.10	0.10	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
34	Catlett Road	East of SR 70/99	2	2	0.01	0.28	0.14	0.13	0.13	0.12	0.12
35	Catlett Road	East of Pleasant Grove Road	2	2	0.00	0.18	0.09	0.07	0.06	0.06	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
37	E Catlett Road	East of Brewer Road	2	2	0.01	0.16	0.12	0.10	0.09	0.08	0.08
38	E Catlett Road	West of Fiddyment Road	2	2	0.01	0.45	0.46	0.46	0.46	0.46	0.46
39	Dowd Road	North of Sunset Boulevard West	NA	6	NA	0.72	0.63	0.62	0.62	0.62	0.62
40	Dryer Road West	South of Baseline Road	NA	4	NA	0.56	0.62	0.63	0.62	0.62	0.62
41	Elkhorn Boulevard	East of SR 70/99	2	6	0.91	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	1.07	1.08	1.07	1.06	1.07
43	Elkhorn Boulevard	East of Watt Avenue	4	6	0.64	0.82	0.81	0.82	0.81	0.81	0.81
44	Elkhorn Boulevard	West of Walerga Road	4	6	0.71	0.84	0.83	0.83	0.82	0.82	0.82
45	Elverta Road	East of SR 70/99	2	4	0.40	1.48	1.48	1.48	1.48	1.49	1.49
46	Elverta Road	East of Rio Linda Boulevard	2	4	0.44	1.38	1.34	1.33	1.33	1.34	1.34
47	Elverta Road	West of Watt Avenue	2	4	1.15	1.73	1.71	1.71	1.71	1.71	1.71
48	Fiddyment Road	North of Sunset Boulevard West	2	6	0.11	0.70	0.73	0.77	0.78	0.77	0.77
49	Fiddyment Road	South of Sunset Boulevard	2	6	0.16	0.83	0.87	0.91	0.92	0.90	0.90
50	Fiddyment Road	North of Blue Oaks Boulevard	2	4	0.22	1.01	1.07	1.06	1.06	**1.06**	1.07
51	Fiddyment Road	North of Pleasant Grove Boulevard	2	4	0.66	1.01	1.02	1.01	1.01	1.01	1.02
52	Fiddyment Road	North of Baseline Road	2	6	1.09	0.76	0.74	0.72	0.73	0.73	0.73
53	Foothills Boulevard	North of Blue Oaks Boulevard	4	4	0.09	1.04	0.96	0.97	0.97	0.97	0.97
54	Foothills Boulevard	South of Roseville Parkway	4	6	0.34	0.73	0.71	0.72	0.71	0.71	0.71
55	Foothills Boulevard	North of Baseline Road	4	6	0.79	0.94	0.93	0.93	0.93	0.93	0.93
56	Foothills Boulevard	South of Baseline Road	4	6	0.86	1.28	1.27	1.27	1.27	1.27	1.28
57	Howsley Road	East of SR 70/99	2	2	0.03	0.30	0.19	0.18	0.18	0.17	0.17
58	Industrial Avenue	North of Athens Avenue	2	4	0.26	0.94	0.70	0.70	0.70	0.70	0.70

Table 4.8-28 (Continued)
Estimated Volume/Capacity Ratios on Roadway Segments for Build Alternatives under 2040 Conditions

	Roadway	Segment	Travel Lanes[1]		2004[2] Volume/ Capacity Ratio	Estimated 2040 Volume/Capacity Ratios on Roadway Segment					
			2004	2040		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
59	Industrial	North of Roseville Parkway	2	2	0.16	1.72	1.74	1.76	1.76	1.75	1.76
60	Junction Boulevard	East of Woodcreek Oaks Boulevard	4	4	0.17	0.30	0.27	0.27	0.26	0.27	0.27
61	Moore Road	West of Brewer Road	2	2	0.02	0.10	0.02	0.01	0.01	0.01	0.01
62	Nicolaus Road	East of Brewer Road	2	2	0.04	0.35	0.24	0.22	0.22	0.21	0.21
63	Pacific Street	West of Sunset Boulevard	4	6	0.29	0.58	0.58	0.58	0.58	0.58	0.58
64	PFE Road	East of Watt Avenue	2	4	0.26	0.45	0.44	0.45	0.44	0.44	0.44
65	Phillip Road	East of Brewer Road	2	2	0.00	0.13	0.10	0.10	0.10	0.10	0.10
66	Pleasant Grove Boulevard	West of Fiddyment Road	NA	4	NA	1.54	1.51	1.52	1.51	1.52	1.51
67	Pleasant Grove Boulevard	East of Fiddyment Road	4	4	0.10	1.19	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	1.76	1.75	1.74	1.75	1.75
69	Pleasant Grove Boulevard	West of SR 65	6	6	0.76	1.08	1.06	1.06	1.06	1.06	1.06
70	Pleasant Grove Road	North of Sankey Road	2	4	0.08	0.66	0.45	0.42	0.42	0.43	0.43
71	Pleasant Grove Road	North of Riego Road	2	4	0.09	0.76	0.74	0.73	0.73	0.76	0.76
72	Pleasant Grove Road	South of Baseline Road	2	2	0.06	0.92	0.91	0.92	0.91	0.90	0.90
73	Riego Road	East of SR 70/99	2	6	0.55	1.32	1.18	1.18	1.18	1.25	1.25
74	Riego Road	West of Pleasant Grove Road	2	6	0.50	1.15	1.17	1.17	1.16	1.08	1.08
75	Sankey Road	East of SR 70/99	2	4	0.02	0.73	0.53	0.54	0.54	0.19	0.18
76	Sankey Road	West of Pleasant Grove Road	2	4	0.01	0.80	0.62	0.63	0.63	0.75	0.74
77	Sierra College Boulevard	South of English Colony Way	2	4	0.61	0.88	0.92	0.93	0.93	0.93	0.93
78	Sierra College Boulevard	North of King Road	2	4	0.61	0.86	0.88	0.89	0.89	0.89	0.89
79	Wildcat Boulevard	North of Whitney Ranch Parkway	4	4	0.10	0.66	0.76	0.76	0.77	0.77	0.77
80	Sunset Boulevard	East of Fiddyment Boulevard	NA	6	NA	0.53	0.42	0.42	0.42	0.42	0.42
81	Sunset Boulevard	West of SR 65	2	6	0.44	1.55	1.25	1.26	1.26	1.26	1.26
82	Sunset Boulevard	East of SR 65	4	6	0.20	0.72	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	0.82	0.82	0.82	0.82
84	Sunset Boulevard West	West of Brewer Road	2	2	0.02	0.53	0.33	0.30	0.30	0.27	0.27
85	Sunset Boulevard West	East of Brewer Road	2	2	0.02	0.44	0.22	0.19	0.19	0.16	0.16

Table 4.8-28 (Continued)
Estimated Volume/Capacity Ratios on Roadway Segments for Build Alternatives under 2040 Conditions

Roadway		Segment	Travel Lanes[1]		2004[2] Volume/ Capacity Ratio	Estimated 2040 Volume/Capacity Ratios on Roadway Segment					
			2004	2040		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
86	Sunset Boulevard West	West of Fiddyment Road	2	2	0.02	0.33	0.35	0.34	0.34	0.32	0.32
87	Twelve Bridges Drive	West of SR 65	2	4	0.33	0.75	0.62	0.62	0.62	0.62	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
89	Valley View Parkway	West of Park Drive	NA	2	NA	0.71	0.86	0.86	0.86	0.86	0.86
90	Walerga Road	South of Baseline Road	2	4	0.83	0.94	0.91	0.90	0.91	0.91	0.90
91	Walerga Road	North of Elverta Road	4	4	1.26	1.57	1.53	1.54	1.54	1.55	1.54
92	Washington Boulevard	South of Blue Oaks Boulevard	2	4	0.27	0.84	0.77	0.76	0.76	0.76	0.76
93	Washington Boulevard	North of Pleasant Grove Boulevard	2	4	0.34	1.15	1.06	1.05	1.05	1.05	1.05
94	Watt Avenue	North of Pleasant Grove Boulevard	NA	6	NA	0.37	0.35	0.35	0.35	0.35	0.35
95	Watt Avenue	North of Baseline Road	NA	6	NA	0.67	0.71	0.66	0.66	0.66	0.66
96	Watt Avenue	South of Baseline Road	2	6	0.39	0.76	0.77	0.77	0.77	0.77	0.77
97	Watt Avenue	North of Elverta Road	4	6	0.54	1.09	1.09	1.08	1.08	1.09	1.09
98	Watt Avenue	North of Elkhorn Boulevard	4	6	1.08	0.95	0.96	0.95	0.95	0.96	0.95
99	Watt Avenue	North of Airbase Drive	6	6	0.87	1.36	1.36	1.36	1.36	1.36	1.36
100	Watt Avenue	North of I-80	6	6	1.16	1.59	1.59	1.58	1.59	1.60	1.59
101	West Side Drive	North of Blue Oaks Boulevard	NA	6	NA	1.06	1.03	1.02	1.02	1.03	1.03
102	West Side Drive	North of Baseline Road	NA	6	NA	0.68	0.67	0.66	0.66	0.66	0.66
103	Whitney Ranch Parkway	East of SR 65	NA	6	NA	0.88	1.10	1.11	1.12	1.11	1.11
104	Whitney Ranch Parkway	East of University Avenue	NA	6	NA	0.49	0.68	0.69	0.69	0.69	0.69
105	Whitney Ranch Parkway	East of Wildcat Boulevard	NA	4	NA	0.41	0.53	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	0.80	0.80	0.81	0.81
107	16th Street	North of Baseline Road	NA	4	NA	1.20	1.17	1.18	1.17	1.18	1.18
108	16th Street	South of Baseline Road	NA	4	NA	0.79	0.77	0.77	0.77	0.78	0.78
109	16th Street	North of Elverta Road	2	2	0.02	1.00	0.97	0.99	0.98	0.99	0.98
110	Blue Oaks Boulevard	East of Lonetree Boulevard	4	4	0.26	0.60	0.57	0.57	0.57	0.57	0.57

Notes:

Shaded cells represent potential LOS impacts based on policies of jurisdictions and agencies in the study area.
[1] +2 = Plus two HOV lanes
[2] LOS on state highways are from 2004.
NA = not applicable

Source: DKS Associates, 2007

Table 4.8-29
Estimated Level of Service on Roadway Segments for Build Alternatives under 2040 Conditions

	Roadway	Segment	Travel Lanes[1]		2004[2] Level of Service	Estimated 2040 Level of Service on Roadway Segment					
			2004	2040		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
1	SR 70/99	North of Howsley Road	4	4	A	D	D	D	D	D	D
2	SR 70/99	North of Sankey Road	4	4	A	E	D	D	D	D	D
3	SR 70/99	North of Riego Road	4	4	A	E	D	D	D	F	F
4	SR 70/99	North of Elverta Road	4	6	A	F	F	F	F	F	F
5	SR 70/99	North of I-5	4	6	B	F	F	F	F	F	F
6	SR 65	North of Twelve Bridge	4	6	A	F	F	F	F	F	F
7	SR 65	North of Sunset Boulevard	4	6	B	F	F	F	F	F	F
8	SR 65	North of Blue Oaks Boulevard	4	6	A	F	F	F	F	F	F
9	SR 65	North of Pleasant Grove Boulevard	4	6	F	F	F	F	F	F	F
10	SR 65	North of Stanford Ranch Road	4	6	F	F	F	F	F	F	F
11	SR 65	North of I-80	4	6	F	F	F	F	F	F	F
12	I-80	East of Rocklin Road	6	6	D	F	F	F	F	F	F
13	I-80	East of SR 65	6	6	F	F	F	F	F	F	F
14	I-80	East of Douglas Boulevard	6	6+2	F	F	F	F	F	F	F
15	I-80	East of Riverside Avenue	6	6+2	F	F	F	F	F	F	F
16	I-80	West of Riverside Avenue	8+2	8+2	F	F	F	F	F	F	F
17	I-80	East of Northgate Boulevard	6	6+2	F	F	F	F	F	F	F
18	Athens Avenue	East of Fiddyment Road	2	4	B	E	C	C	C	C	C
19	Baseline Road	East of Pleasant Grove Road	2	6	D	F	F	F	F	F	F
20	Baseline Road	East of Brewer Road	2	6	D	E	E	E	E	E	E
21	Baseline Road	West of 16th Street	2	6	D	F	F	E	E	E	E
22	Baseline Road	West of Watt Avenue	2	6	D	F	F	F	F	F	F
23	Baseline Road	East of Watt Avenue	2	6	C	F	E	E	E	E	E
24	Baseline Road	West of Walerga Road	2	6	C	D	D	D	D	D	D
25	Baseline Road	East of Walerga Road	3	6	D	F	F	F	F	F	F
26	Baseline Road	West of Woodcreek Oaks Boulevard	3	4	D	F	F	F	F	F	F
27	Blue Oaks Boulevard	East of Watt Avenue	NA	6	NA	C	B	B	B	B	B
28	Blue Oaks Boulevard	West of Fiddyment Road	NA	6	NA	A	A	A	A	A	A
29	Blue Oaks Boulevard	East of Fiddyment Road	2	6	A	D	C	C	C	C	C

Table 4.8-29 (Continued)
Estimated Level of Service on Roadway Segments for Build Alternatives under 2040 Conditions

	Roadway	Segment	Travel Lanes[1]		2004[2] Level of Service	Estimated 2040 Level of Service on Roadway Segment					
			2004	2040		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
30	Blue Oaks Boulevard	West of SR 65	4	6	E	F	E	E	E	E	E
31	Brewer Road	North of Sunset Boulevard West	2	2	A	A	A	A	A	A	A
32	Brewer Road	South of Sunset Boulevard West	2	2	A	B	A	A	A	A	A
33	Brewer Road	North of Baseline Road	2	2	A	A	A	A	A	A	A
34	Catlett Road	East of SR 70/99	2	2	A	C	B	B	B	B	B
35	Catlett Road	East of Pleasant Grove Road	2	2	A	B	A	A	A	A	A
36	Cirby Way	East of Foothills Boulevard	4	6	F	F	F	F	F	F	F
37	E Catlett Road	East of Brewer Road	2	2	A	B	A	A	A	A	A
38	E Catlett Road	West of Fiddyment Road	2	2	A	D	D	D	D	D	D
39	Dowd Road	North of Sunset Boulevard West	NA	6	NA	C	B	B	B	B	B
40	Dryer Road West	South of Baseline Road	NA	4	NA	A	B	B	B	B	B
41	Elkhorn Boulevard	East of SR 70/99	2	6	E	F	F	F	F	F	F
42	Elkhorn Boulevard	West of Watt Avenue	4	4	C	F	F	F	F	F	F
43	Elkhorn Boulevard	East of Watt Avenue	4	6	B	D	D	D	D	D	D
44	Elkhorn Boulevard	West of Walerga Road	4	6	C	D	D	D	D	D	D
45	Elverta Road	East of SR 70/99	2	4	A	F	F	F	F	F	F
46	Elverta Road	East of Rio Linda Boulevard	2	4	A	F	F	F	F	F	F
47	Elverta Road	West of Watt Avenue	2	4	F	F	F	F	F	F	F
48	Fiddyment Road	North of Sunset Boulevard West	2	6	A	C	C	C	C	C	C
49	Fiddyment Road	South of Sunset Boulevard	2	6	B	D	D	E	E	E	D
50	Fiddyment Road	North of Blue Oaks Boulevard	2	4	A	F	F	F	F	F	F
51	Fiddyment Road	North of Pleasant Grove Boulevard	2	4	B	F	F	F	F	F	F
52	Fiddyment Road	North of Baseline Road	2	6	F	C	C	C	C	C	C
53	Foothills Boulevard	North of Blue Oaks Boulevard	4	4	A	F	E	E	E	E	E
54	Foothills Boulevard	South of Roseville Parkway	4	6	A	C	C	C	C	C	C
55	Foothills Boulevard	North of Baseline Road	4	6	C	E	E	E	E	E	E
56	Foothills Boulevard	South of Baseline Road	4	6	D	F	F	F	F	F	F
57	Howsley Road	East of SR 70/99	2	2	A	C	B	B	B	B	B
58	Industrial Avenue	North of Athens Avenue	2	4	A	E	B	B	B	B	B

Table 4.8-29 (Continued)
Estimated Level of Service on Roadway Segments for Build Alternatives under 2040 Conditions

Roadway		Segment	Travel Lanes[1]		2004[2] Level of Service	Estimated 2040 Level of Service on Roadway Segment					
			2004	2040		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
59	Industrial	North of Roseville Parkway	2	2	A	F	F	F	F	F	F
60	Junction Boulevard	East of Woodcreek Oaks Boulevard	4	4	A	A	A	A	A	A	A
61	Moore Road	West of Brewer Road	2	2	A	A	A	A	A	A	A
62	Nicolaus Road	East of Brewer Road	2	2	A	C	C	B	B	B	B
63	Pacific Street	West of Sunset Boulevard	4	6	A	A	A	A	A	A	A
64	PFE Road	East of Watt Avenue	2	4	A	A	A	A	A	A	A
65	Phillip Road	East of Brewer Road	2	2	A	B	A	A	A	A	A
66	Pleasant Grove Boulevard	West of Fiddyment Road	NA	4	NA	F	F	F	F	F	F
67	Pleasant Grove Boulevard	East of Fiddyment Road	4	4	A	F	F	F	F	F	F
68	Pleasant Grove Boulevard	East of Woodcreek Oaks Boulevard	4	4	A	F	F	F	F	F	F
69	Pleasant Grove Boulevard	West of SR 65	6	6	C	F	F	F	F	F	F
70	Pleasant Grove Road	North of Sankey Road	2	4	A	B	A	A	A	A	A
71	Pleasant Grove Road	North of Riego Road	2	4	A	C	C	C	C	C	C
72	Pleasant Grove Road	South of Baseline Road	2	2	A	E	E	E	E	E	E
73	Riego Road	East of SR 70/99	2	6	A	F	F	F	F	F	F
74	Riego Road	West of Pleasant Grove Road	2	6	A	F	F	F	F	F	F
75	Sankey Road	East of SR 70/99	2	4	A	C	A	A	A	A	A
76	Sankey Road	West of Pleasant Grove Road	2	4	A	C	B	B	B	C	C
77	Sierra College Boulevard	South of English Colony Way	2	4	B	D	E	E	E	E	E
78	Sierra College Boulevard	North of King Road	2	4	B	D	D	D	D	D	D
79	Wildcat Boulevard	North of Whitney Ranch Parkway	4	4	A	B	C	C	C	C	C
80	Sunset Boulevard	East of Fiddyment Boulevard	NA	6	NA	A	A	A	A	A	A
81	Sunset Boulevard	West of SR 65	2	6	A	F	F	F	F	F	F
82	Sunset Boulevard	East of SR 65	4	6	A	C	C	C	C	C	C
83	Sunset Boulevard	East of Blue Oaks Boulevard	6	6	A	D	D	D	D	D	D
84	Sunset Boulevard West	West of Brewer Road	2	2	A	D	C	C	C	C	C
85	Sunset Boulevard West	East of Brewer Road	2	2	A	D	B	B	B	B	B

Table 4.8-29 (Continued)
Estimated Level of Service on Roadway Segments for Build Alternatives under 2040 Conditions

Roadway		Segment	Travel Lanes[1]		2004[2] Level of Service	Estimated 2040 Level of Service on Roadway Segment					
			2004	2040		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
86	Sunset Boulevard West	West of Fiddyment Road	2	2	A	C	C	C	C	C	C
87	Twelve Bridges Drive	West of SR 65	2	4	A	C	B	B	B	B	B
88	Twelve Bridges Drive	East of SR 65	4	6	A	C	C	C	C	C	C
89	Valley View Parkway	West of Park Drive	NA	2	NA	C	D	D	D	D	D
90	Walerga Road	South of Baseline Road	2	4	D	E	E	E	E	E	E
91	Walerga Road	North of Elverta Road	4	4	F	F	F	F	F	F	F
92	Washington Boulevard	South of Blue Oaks Boulevard	2	4	A	D	C	C	C	C	C
93	Washington Boulevard	North of Pleasant Grove Boulevard	2	4	A	F	F	F	F	F	F
94	Watt Avenue	North of Pleasant Grove Boulevard	NA	6	NA	A	A	A	A	A	A
95	Watt Avenue	North of Baseline Road	NA	6	NA	B	C	B	B	B	B
96	Watt Avenue	South of Baseline Road	2	6	A	C	C	C	C	C	C
97	Watt Avenue	North of Elverta Road	4	6	A	F	F	F	F	F	F
98	Watt Avenue	North of Elkhorn Boulevard	4	6	F	E	E	E	E	E	E
99	Watt Avenue	North of Airbase Drive	6	6	D	F	F	F	F	F	F
100	Watt Avenue	North of I-80	6	6	F	F	F	F	F	F	F
101	West Side Drive	North of Blue Oaks Boulevard	NA	6	NA	F	F	F	F	F	F
102	West Side Drive	North of Baseline Road	NA	6	NA	B	B	B	B	B	B
103	Whitney Ranch Parkway	East of SR 65	NA	6	NA	D	F	F	F	F	F
104	Whitney Ranch Parkway	East of University Avenue	NA	6	NA	A	B	B	B	B	B
105	Whitney Ranch Parkway	East of Wildcat Boulevard	NA	4	NA	A	A	A	A	A	A
106	Woodcreek Oak Boulevard	South of Pleasant Grove Boulevard	2	4	A	D	D	D	D	D	D
107	16th Street	North of Baseline Road	NA	4	NA	F	F	F	F	F	F
108	16th Street	South of Baseline Road	NA	4	NA	C	C	C	C	C	C
109	16th Street	North of Elverta Road	2	2	A	F	E	E	E	E	E
110	Blue Oaks Boulevard	East of Lonetree Boulevard	4	4	A	B	A	A	A	A	A

Notes:

Shaded cells represent potential LOS impacts based on policies of jurisdictions and agencies in the study area.
[1] +2 = Plus two HOV lanes
[2] LOS on state highways are 2004.
NA = not applicable

Source: DKS Associates, 2007

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 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 farther north than under Alternatives 1, 2, and 3; therefore, a longer stretch of SR 70/99 would be affected under those two alternatives.

State Route 65

Under all of the corridor alternatives, 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 (Caltrans, 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 2040 No-Build Alternative assumed a six-lane freeway for SR 65 from I-80 to 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 2040 include substantial development along the SR 65 Corridor in Placer County. Substantial development also is 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 2040 between I-80 and the SR 65 Lincoln Bypass under the No-Build Alternative. All the build alternatives 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 where SR 65 would operate at LOS F conditions.

Fiddyment Road

The 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 the build alternatives.

Sierra College Boulevard

Under all build alternatives, Placer Parkway would add traffic to Sierra College Boulevard between the future Valley View Parkway (in the proposed Clover Valley area 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 the build alternatives.

Valley View Parkway

Under all the build alternatives, Placer Parkway would add traffic to Valley View Parkway and cause a significant impact on the LOS of this roadway segment.

Valley View Parkway (in the proposed Clover Valley area 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 the build alternatives.

Whitney Ranch Parkway

Under all of the build alternatives, Placer Parkway would add traffic to Whitney Ranch Parkway between SR 65 and University Avenue and 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 Rocklin under the No-Build Alternative. This segment would operate at LOS F conditions under all the build alternatives.

Changes in Systemwide 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 Placer Parkway, traffic volumes on a larger number of roadway segments would have decreases. 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:

- VMT on congested roadways
- Vehicle delay

These two systemwide 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 4.8-3, 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 4.8-3, is the area close to the build alternatives and represents the area where most of transportation benefits of constructing Placer Parkway would occur.

Tables 4.8-30 and 4.8-31 show the projected VMT on congested roadways during commute periods under the 2040 conditions for the TASA (shown in Figure 4.8-3). Tables 4.8-32 and 4.8-33 show this same information but as percentages of the total VMT in the TASA.

Tables 4.8-34 and 4.8-35 show the projected VMT on congested roadways during commute periods under the 2040 conditions for the AFA (also shown in Figure 4.8-3). Tables 4.8-36 and 4.8-37 show this same information but as percentages of the total VMT in the AFA.

On Tables 4.8-30, 4.8-32, 4.8-34, and 4.8-36 the VMT is summarized for roadways that would operate LOS A through C, LOS D, and LOS E conditions, as well as those operating at LOS F for 1 hour, 2 hours, and 3 or more hours. Tables 4.8-31, 4.8-33, 4.8-35, and 4.8-37 provide the same information using only two categories: LOS A through E and LOS F. Key conclusions are:

- Compared to the No-Build Alternative, the build alternatives would increase the total VMT in the TASA.

- Compared to the No-Build Alternative, the build alternatives would reduce the amount of VMT on congested roadways, especially in the AFA.

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 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 4.8-38 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 4.8-3). Table 4.8-39 shows this same information for the AFA (also shown in Figure 4.8-3). These tables indicate that Placer Parkway would substantially reduce vehicle hours of delay, especially in the AFA.

4.8.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

4.8.4.1 Tier 1 – Avoidance/Minimization Strategies

- During the development of alternatives, in order to reduce environmental impacts, avoidance alternatives were also considered (see Section 2.5.4). These alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

- During the alternatives screening process, efforts were made to eliminate alternatives that did not achieve the project Purpose and Need (see Chapter 1) and/or safety requirements. Examples of such efforts included modification and/or elimination of PSR corridor alignment alternatives (see Section 2.5). These efforts included elimination and/or modification of alternatives and/or project components that resulted in increased travel times that substantially reduced the Parkways benefits, those which would not attract sufficient traffic to generate substantial congestion reduction, and those which did not meet Caltrans safety standards.

Table 4.8-30
Estimated 2040 VMT by Level of Service Category – Transportation Analysis Study Area

LOS	Facility Type	Estimated 2040 VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within TASA[1]					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
A-C	Freeways	829,955	1,188,354	1,242,900	1,240,058	1,216,600	1,237,994
	Arterials	4,042,124	4,167,627	4,158,448	4,152,311	4,147,769	4,162,094
	Subtotal	4,872,079	5,355,981	5,401,348	5,392,369	5,364,369	5,400,088
D	Freeways	305,699	333,796	324,335	323,353	326,997	307,455
	Arterials	926,242	890,341	880,087	876,812	887,789	864,501
	Subtotal	1,231,941	1,224,137	1,204,422	1,200,165	1,214,786	1,171,956
E	Freeways	356,838	498,666	498,256	507,786	518,880	521,935
	Arterials	856,620	836,926	829,034	836,733	834,073	833,812
	Subtotal	1,213,458	1,335,592	1,327,290	1,344,519	1,352,953	1,355,747
F1[2]	Freeways	825,378	753,559	763,620	776,692	793,326	779,338
	Arterials	942,283	809,422	850,655	830,899	821,683	838,520
	Subtotal	1,767,661	1,562,981	1,614,275	1,607,591	1,615,009	1,617,858
F2[2]	Freeways	344,473	378,052	359,648	348,398	350,775	358,398
	Arterials	316,309	350,380	346,203	358,969	346,464	328,409
	Subtotal	660,782	728,432	705,851	707,367	697,239	686,807
F3[2]	Freeways	1,026,117	950,470	952,727	948,129	936,772	930,072
	Arterials	1,262,369	1,117,157	1,091,133	1,101,328	1,120,946	1,130,622
	Subtotal	2,288,486	2,067,627	2,043,860	2,049,457	2,057,718	2,060,694
All	Freeways	3,688,460	4,102,897	4,141,486	4,144,416	4,143,350	4,135,192
	Arterials	8,345,947	8,171,853	8,155,560	8,157,052	8,158,724	8,157,958
	Total	12,034,407	12,274,750	12,297,046	12,301,468	12,302,074	12,293,150

Notes:
[1] See Figure 4.8-3 for TASA
[2] F1 = 1 hour of LOS F conditions during the peak hour; F2 = 2 hours of LOS F conditions during the peak period; F3 = 3 hours of LOS F conditions during the peak period.
Source: DKS Associates, 2007

Table 4.8-31
Summary of 2040 VMT by Level of Service Category – Transportation Analysis Study Area

LOS	Facility Type	Estimated 2040 VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within TASA[1]					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
A-E	Freeways	1,492,492	2,020,816	2,065,491	2,071,197	2,062,477	2,067,384
	Arterials	5,824,986	5,894,894	5,867,569	5,865,856	5,869,631	5,860,407
	Subtotal	7,317,478	7,915,710	7,933,060	7,937,053	7,932,108	7,927,791
F	Freeways	2,195,968	2,082,081	2,075,995	2,073,219	2,080,873	2,067,808
	Arterials	2,520,961	2,276,959	2,287,991	2,291,196	2,289,093	2,297,551
	Subtotal	4,716,929	4,359,040	4,363,986	4,364,415	4,369,966	4,365,359
Total	Freeways	3,688,460	4,102,897	4,141,486	4,144,416	4,143,350	4,135,192
	Arterials	8,345,947	8,171,853	8,155,560	8,157,052	8,158,724	8,157,958
	Total	12,034,407	12,274,750	12,297,046	12,301,468	12,302,074	12,293,150

Note:

[1]See Figure 4.8-3 for TASA

Source: DKS Associates, 2007

Table 4.8-32
Estimated Percentage of 2040 VMT by Level of Service Category – Transportation Analysis Study Area

LOS	Facility Type	Estimated 2040 VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within TASA[1]					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
A-C	Freeways	22.5%	29.0%	30.0%	29.9%	29.4%	29.9%
	Arterials	48.4%	51.0%	51.0%	50.9%	50.8%	51.0%
	Subtotal	40.5%	43.6%	43.9%	43.8%	43.6%	43.9%
D	Freeways	8.3%	8.1%	7.8%	7.8%	7.9%	7.4%
	Arterials	11.1%	10.9%	10.8%	10.7%	10.9%	10.6%
	Subtotal	10.2%	10.0%	9.8%	9.8%	9.9%	9.5%
E	Freeways	9.7%	12.2%	12.0%	12.3%	12.5%	12.6%
	Arterials	10.3%	10.2%	10.2%	10.3%	10.2%	10.2%
	Subtotal	10.1%	10.9%	10.8%	10.9%	11.0%	11.0%
F1[2]	Freeways	22.4%	18.4%	18.4%	18.7%	19.1%	18.8%
	Arterials	11.3%	9.9%	10.4%	10.2%	10.1%	10.3%
	Subtotal	14.7%	12.7%	13.1%	13.1%	13.1%	13.2%
F2[2]	Freeways	9.3%	9.2%	8.7%	8.4%	8.5%	8.7%
	Arterials	3.8%	4.3%	4.2%	4.4%	4.2%	4.0%
	Subtotal	5.5%	5.9%	5.7%	5.8%	5.7%	5.6%
F3[2]	Freeways	27.8%	23.2%	23.0%	22.9%	22.6%	22.5%
	Arterials	15.1%	13.7%	13.4%	13.5%	13.7%	13.9%
	Subtotal	19.0%	16.8%	16.6%	16.7%	16.7%	16.8%
All	Freeways	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%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes:
[1] See Figure 4.8-3 for TASA
[2] F1 = 1 hour of LOS F conditions during the peak hour; F2 = 2 hours of LOS F conditions during the peak period; F3 = 3 hours of LOS F conditions during the peak period.
Source: DKS Associates, 2007

Table 4.8-33
Summary of the Percentage of 2040 VMT by Level of Service Category – Transportation Analysis Study Area

LOS	Facility Type	Estimated 2040 VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within TASA[1]					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
A-E	Freeways	40.5%	49.3%	49.9%	50.0%	49.8%	50.0%
	Arterials	69.8%	72.1%	71.9%	71.9%	71.9%	71.8%
	Subtotal	60.8%	64.5%	64.5%	64.5%	64.5%	64.5%
F	Freeways	59.5%	50.7%	50.1%	50.0%	50.2%	50.0%
	Arterials	30.2%	27.9%	28.1%	28.1%	28.1%	28.2%
	Subtotal	39.2%	35.5%	35.5%	35.5%	35.5%	35.5%
Total	Freeways	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%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note:

[1]See Figure 4.8-3 for TASA

Source: DKS Associates, 2007

Table 4.8-34
Estimated 2040 VMT by Level of Service Category – Analysis Focus Area

LOS	Facility Type	Estimated 2040 VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within AFA[1]					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
A-C	Freeways	72,932	491,067	522,427	528,277	506,630	503,631
	Arterials	1,399,909	1,498,043	1,511,530	1,503,171	1,504,859	1,508,849
	Subtotal	1,472,841	1,989,110	2,033,957	2,031,448	2,011,489	2,012,480
D	Freeways	84,086	49,550	48,124	49,627	61,312	61,191
	Arterials	351,236	362,944	329,411	339,213	337,256	325,976
	Subtotal	435,322	412,494	377,535	388,840	398,568	387,167
E	Freeways	74,137	106,695	109,474	108,243	120,566	123,951
	Arterials	351,069	321,276	331,115	330,665	324,367	328,826
	Subtotal	425,206	427,971	440,589	438,908	444,933	452,777
F1[2]	Freeways	129,239	126,409	126,711	126,879	130,522	126,683
	Arterials	369,020	256,037	260,168	255,056	266,020	265,401
	Subtotal	498,259	382,446	386,879	381,935	396,542	392,084
F2[2]	Freeways	64,236	37,549	37,671	37,628	37,607	37,571
	Arterials	100,864	116,956	115,838	118,605	103,024	103,291
	Subtotal	165,100	154,505	153,509	156,233	140,631	140,862
F3[2]	Freeways	77,739	125,428	126,076	126,240	121,261	121,086
	Arterials	341,847	240,346	236,909	236,732	245,092	248,444
	Subtotal	419,586	365,774	362,985	362,972	366,353	369,530
All	Freeways	502,369	936,698	970,483	976,894	977,898	974,113
	Arterials	2,913,945	2,795,602	2,784,971	2,783,442	2,780,618	2,780,787
	Total	3,416,314	3,732,300	3,755,454	3,760,336	3,758,516	3,754,900

Notes:
[1] See Figure 4.8-3 for AFA
[2] F1 = 1 hour of LOS F conditions during the peak hour; F2 = 2 hours of LOS F conditions during the peak period; F3 = 3 hours of LOS F conditions during the peak period.
Source: DKS Associates, 2007

Table 4.8-35
Summary of 2040 VMT by Level of Service Category – Analysis Focus Area

LOS	Facility Type	Estimated 2040 VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within AFA[1]					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
A-E	Freeways	231,155	647,312	680,025	686,147	688,508	688,773
	Arterials	2,102,214	2,182,263	2,172,056	2,173,049	2,166,482	2,163,651
	Subtotal	2,333,369	2,829,575	2,852,081	2,859,196	2,854,990	2,852,424
F	Freeways	271,214	289,386	290,458	290,747	289,390	285,340
	Arterials	811,731	613,339	612,915	610,393	614,136	617,136
	Subtotal	1,082,945	902,725	903,373	901,140	903,526	902,476
Total	Freeways	502,369	936,698	970,483	976,894	977,898	974,113
	Arterials	2,913,945	2,795,602	2,784,971	2,783,442	2,780,618	2,780,787
	Total	3,416,314	3,732,300	3,755,454	3,760,336	3,758,516	3,754,900

Note:

[1] See Figure 4.8-3 for AFA

Source: DKS Associates, 2007

Table 4.8-36
Estimated Percentage of 2040 VMT by Level of Service Category – Analysis Focus Area

LOS	Facility Type	Estimated 2040 VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within AFA[1]					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
A-C	Freeways	14.5%	52.4%	53.8%	54.1%	51.8%	51.7%
	Arterials	48.0%	53.6%	54.3%	54.0%	54.1%	54.3%
	Subtotal	43.1%	53.3%	54.2%	54.0%	53.5%	53.6%
D	Freeways	16.7%	5.3%	5.0%	5.1%	6.3%	6.3%
	Arterials	12.1%	13.0%	11.8%	12.2%	12.1%	11.7%
	Subtotal	12.7%	11.1%	10.1%	10.3%	10.6%	10.3%
E	Freeways	14.8%	11.4%	11.3%	11.1%	12.3%	12.7%
	Arterials	12.0%	11.5%	11.9%	11.9%	11.7%	11.8%
	Subtotal	12.4%	11.5%	11.7%	11.7%	11.8%	12.1%
F1[2]	Freeways	25.7%	13.5%	13.1%	13.0%	13.3%	13.0%
	Arterials	12.7%	9.2%	9.3%	9.2%	9.6%	9.5%
	Subtotal	14.6%	10.2%	10.3%	10.2%	10.6%	10.4%
F2[2]	Freeways	12.8%	4.0%	3.9%	3.9%	3.8%	3.9%
	Arterials	3.5%	4.2%	4.2%	4.3%	3.7%	3.7%
	Subtotal	4.8%	4.1%	4.1%	4.2%	3.7%	3.8%
F3[2]	Freeways	15.5%	13.4%	13.0%	12.9%	12.4%	12.4%
	Arterials	11.7%	8.6%	8.5%	8.5%	8.8%	8.9%
	Subtotal	12.3%	9.8%	9.7%	9.7%	9.7%	9.8%
All	Freeways	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%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes:
[1] See Figure 4.8-3 for AFA
[2] F1 = 1 hour of LOS F conditions during the peak hour; F2 = 2 hours of LOS F conditions during the peak period; F3 = 3 hours of LOS F conditions during the peak period.
Source: DKS Associates, 2007

Table 4.8-37
Summary of the Percentage of 2040 VMT by Level of Service Category – Analysis Focus Area

LOS	Facility Type	Estimated 2040 VMT (3-Hour a.m. and 3-Hour p.m. Commute Periods) within AFA[1]					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
A-E	Freeways	46.0%	69.1%	70.1%	70.2%	70.4%	70.7%
	Arterials	72.1%	78.1%	78.0%	78.1%	77.9%	77.8%
	Subtotal	68.3%	75.8%	75.9%	76.0%	76.0%	76.0%
F	Freeways	54.0%	30.9%	29.9%	29.8%	29.6%	29.3%
	Arterials	27.9%	21.9%	22.0%	21.9%	22.1%	22.2%
	Subtotal	31.7%	24.2%	24.1%	24.0%	24.0%	24.0%
Total	Freeways	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%
	Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note:

[1]See Figure 4.8-3 for AFA

Source: DKS Associates, 2007

Table 4.8-38
Estimated Vehicle Hours of Delay within the Transportation Analysis Study Area[1]

LOS	Facility Type	Estimated 2040 Vehicle Hours of Delay (3-Hour a.m. and 3-Hour p.m. Commute Periods)					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
>D[2]	Freeways	25,426	25,240	25,708	25,460	25,223	24,850
	Arterials	75,349	69,379	69,369	69,640	70,270	70,079
	Total	100,775	94,619	95,077	95,100	95,493	94,929
>E[3]	Freeways	18,939	18,822	19,263	19,031	18,792	18,438
	Arterials	62,261	57,181	57,187	57,448	58,093	57,897
	Total	81,200	76,003	76,450	76,479	76,885	76,335
>F2[4]	Freeways	12,485	12,396	12,795	12,572	12,374	12,039
	Arterials	49,842	45,578	45,668	45,901	46,511	46,312
	Total	62,327	57,974	58,463	58,473	58,885	58,351

Notes:

v1 See Figure 4.8-3 for TASA

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

Source: DKS Associates, 2007

Table 4.8-39
Estimated Vehicle Hours of Delay within the Analysis Focus Area[1]

LOS	Facility Type	Estimated 2040 Vehicle Hours of Delay (3-Hour a.m. and 3-Hour p.m. Commute Periods)					
		No-Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
>D[2]	Freeways	2,770	3,563	3,719	3,753	3,573	3,525
	Arterials	17,317	13,056	13,090	12,995	13,377	13,345
	Total	20,087	16,619	16,809	16,748	16,950	16,870
>E[3]	Freeways	1,805	2,624	2,766	2,797	2,614	2,571
	Arterials	12,952	9,415	9,462	9,374	9,755	9,718
	Total	14,757	12,039	12,228	12,171	12,369	12,289
>F2[4]	Freeways	1,029	1,722	1,840	1,865	1,704	1,666
	Arterials	9,308	6,478	6,541	6,465	6,823	6,771
	Total	10,337	8,200	8,381	8,330	8,527	8,437

Notes:

[1] See Figure 4.8-3 for AFA
[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

Source: DKS Associates, 2007

- During development of the Tier 1 conceptual design of the Parkway, efforts have been made to avoid impacts on traffic. These efforts include:
  - The restriction of access between Pleasant Grove Road and Fiddyment Road to provide a high-speed, free-flowing facility, avoid inducing urban growth and associated traffic in areas not designated for development in existing general plans and maintain the rural character of western Placer County and south Sutter County.
  - The provision of access at the western and eastern ends of the Parkway, where existing areas of dense development are already located or planned and future congestion is anticipated.
  - The location of the Parkway within a no-development buffer zone (see Section 2.2.4) that would preserve open space and agricultural uses adjacent to the Parkway and limit future development in the buffer zone, including the provision of additional future interchanges which would affect the long-term reliable travel time reductions provided by the Parkway.
- During the Tier 1 environmental review process, PCTPA worked with local jurisdictions to plan for the Parkway and other proposed development in order to reduce the likelihood of impacts on the local and regional roadway system. Results of this coordination

included modification and elimination of alternatives and refinement of corridor alignments.

4.8.4.2 Tier 2 – Mitigation Commitments

- To maintain existing and future local roadway connectivity (for emergency access, farming operations and community access), which will contribute to mitigation of traffic impacts, over-crossings will be constructed, as appropriate, to convey traffic over the Parkway. These over-crossings will not connect to the Parkway.

4.8.4.3 Tier 2 – Mitigation Considerations

State Route 70/99

- Under both 2020 and 2040 conditions, all of the corridor alignment alternatives for 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. The following strategies (individually or in combinations) could reduce the Parkway's impacts on SR 70/99 by decreasing the length of time spent in LOS F conditions during the morning and evening peak periods:

  – Add HOV lanes to SR 70/99 between Placer Parkway and I-5.

  – 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 southern Sutter County and northern Sacramento County that would otherwise use SR 70/99.

  – 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 southwest Placer counties to the Natomas area and downtown Sacramento.

  – 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 multijurisdictional 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.

State Route 65

- Under both 2020 and 2040 conditions, all of the corridor alignment alternatives for 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. Several strategies were identified that by themselves or in combination could mitigate the LOS impacts on this segment of SR 65. These are as follows:

– Widen SR 65 to six lanes between Placer Parkway and the SR 65 Lincoln Bypass by 2020.

– Provide additional north-south capacity on local roadways parallel to SR 65.

– Provide substantial transit services in the SR 65 Corridor.

– 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.

Fiddyment Road

- Under 2040 conditions, all alternatives for Placer Parkway would add traffic to Fiddyment Road north of the future Blue Oaks Boulevard and cause a significant impact on the LOS of this roadway segment. The following strategies were identified to mitigate the LOS impacts on this segment of Fiddyment Road:

– Provide adequate lanes at the Fiddyment Road/Blue Oaks Boulevard and Fiddyment Road/North Hayden Parkway intersections.

– Widen Fiddyment Road to six lanes between Blue Oaks Boulevard and the Roseville City limits.

– Construct an interchange on Placer Parkway at Watt Avenue.

– 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 multijurisdictional 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.

Whitney Ranch Parkway

- Under 2040 conditions, all of the corridor alignment alternatives for 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. The following strategies were identified to mitigate the LOS impacts on this segment of Whitney Ranch Parkway:

  – Widen Whitney Ranch Parkway to eight lanes west of University Avenue.

  – 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.

Valley View Parkway

- Under 2040 conditions, all of the corridor alignment alternatives for Placer Parkway would add traffic to Valley View Parkway and would cause a significant impact on the LOS of this roadway segment. The following strategies were identified to mitigate the LOS impacts on this segment of Valley View Parkway:

  – Provide adequate turn lanes at the Valley View Parkway/Sierra College Boulevard and Valley View Parkway/Park Drive intersections.

  – Widen Valley View Parkway to four lanes.

  – 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 a widening of 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.

Sierra College Boulevard

- Under 2040 conditions, all corridor alignment alternatives for Placer Parkway would add traffic to Sierra College Boulevard between the future Valley View Parkway (in the proposed Clover Valley area of Rocklin) and English Colony Way and would cause a significant impact on the LOS of this roadway segment. The following strategies were identified to mitigate the LOS impacts on this segment of Sierra College Boulevard:

  – Provide adequate turn lanes at the Sierra College Boulevard/Valley View Parkway and Sierra College Boulevard/English Colony Way intersections.

  – Widen Sierra College Boulevard to six lanes between Valley View Parkway and English Colony Way.

  – 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.

- As discussed in Section 4.8.3, Alternative 5 would result in a less than desirable radius in one location (near the intersection of the planned extensions of Watt Avenue and Blue Oaks Boulevard) if the ultimate design places Placer Parkway along the northerly side (or inside) of the corridor alignment's curve. If the Parkway is located on the northerly side of the 1,000-foot-wide corridor, the actual centerline radius of the Parkway would be approximately 1,000 feet less than the desired design standard and 700 feet less than the Caltrans' recommended minimum radius for urban freeways. To avoid an impact on the project's design standards, the Parkway should be located along the southerly side (outside) of the corridor alignment's curve in this location.

4.8.5 TIER 1 AND TIER 2 STUDIES

- Analyses completed in Tier 1
  - Roadway segment traffic analysis.
  - System-wide VMT, VHD and LOS traffic analysis.
  - Bicycle and transit analysis.
- Analyses begun in Tier 1 which will be undertaken in greater detail in Tier 2
  - The evaluation of Existing Plus Project conditions will include a quantitative analysis.
- Analyses that will begin in Tier 2
  - Peak-hour operations at all major intersections along roadways.
  - Peak hour operations along SR 65 and SR 70/99, including an evaluation of mainline, merge, diverge and weave operations using Highway Capacity Manual (HCM) Methodologies.
  - Construction traffic impacts.

4.9 AIR QUALITY

4.9.1 REGULATORY SETTING

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require consideration of impacts on air quality. A general discussion of NEPA and CEQA requirements is provided in Chapter 1 of this Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR). In addition, other types of legislation influence air quality. Relevant laws and guidelines are described below.

4.9.1.1 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). Allowable ambient concentrations are set for the following criteria pollutants: ozone (O3), respirable particulate matter (PM10), fine particulate matter (PM2.5), carbon monoxide (CO), nitrogen dioxide (NO2), lead (Pb), and sulfur dioxide (SO2). Table 4.9-1 summarizes the NAAQS for these pollutants. The 8-hour O3 and PM2.5 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 O3 standards on April 15, 2004, and final designations for the new federal PM2.5 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 those 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 (FHWA, 2007). Revisions in 1990 require that transportation plans, programs, and projects must conform to the purpose of the SIP. This was accomplished by the

Table 4.9-1
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 $\mu g/m^3$)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8 hours	0.070 ppm (137 $\mu g/m^3$)		0.08 ppm (157 $\mu g/m^3$)[8]		
Respirable Particulate Matter (PM_{10})	24 hour	50 $\mu g/m^3$	Gravimetric or Beta Attenuation	150 $\mu g/m^3$	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 $\mu g/m^3$		50 $\mu g/m^3$ (see footnote #9)		
Fine Particulate Matter ($PM_{2.5}$)	24 hours	No Separate State Standard		65 $\mu g/m^3$	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 $\mu g/m^3$	Gravimetric or Beta Attenuation	15 $\mu g/m^3$		
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 $\mu g/m^3$)	Gas Phase Chemilumi-nescence	0.053 ppm (100 $\mu g/m^3$)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 hour	0.18 ppm (338 $\mu g/m^3$)		–		
Lead[10]	30-day Average	1.5 $\mu g/m^3$	Atomic Absorption	–	–	–
	Calendar Quarter	–		1.5 $\mu g/m^3$	Same as Primary Standard	High Volume Sampler and Atomic Absorption
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	–	Ultraviolet Fluorescence	0.030 ppm (80 $\mu g/m^3$)	–	Spectro-photometry (Pararosaniline Method)
	24 hours	0.04 ppm (105 $\mu g/m^3$)		0.14 ppm (365 $\mu g/m^3$)	–	
	3 hours	–		–	0.5 ppm (1,300 $\mu g/m^3$)	
	1 hour	0.25 ppm (655 $\mu g/m^3$)		–	–	–

Table 4.9-1 (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 Chromatography			
Vinyl Chloride[10]	24 hours	0.01 ppm (26 μg/m^3)	Gas Chromatography			
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.

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 Federal Highway Administration (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.

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 4.9-1. 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; these 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). The 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 regulated. TACs are compounds that are known or suspected to cause short-term (acute) and/or long-term (chronic non-carcinogenic or carcinogenic) adverse health effects, although exceedance thresholds have not been adopted for them yet. Sources of TACs include 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. The results of the health risk assessment 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 and chronic noncancer health effects. Stationary sources emitting HAPs and TACs are not a part of the project and no stationary source emissions are expected from 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 source (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. Reduction of MSATs is a cooperative effort between federal, state, and local agencies. Details of regulations and new engine emissions standards relevant to MSATs are provided in the Air Quality Technical Memorandum (URS, 2007a). These standards include recent U.S. EPA regulations that pertain to the use of Ultra Low Sulfur Diesel Fuel, which is a cleaner-burning diesel fuel with reduced sulfur levels and almost negligible levels of particulate matter.

As previously mentioned, Placer Parkway is geographically located within Sutter and Placer counties and therefore is not subjected to any other air district's rules and regulations. However, because the Feather River Air Quality Management District (FRAQMD) and Placer County Air Pollution Control District (PCAPCD) (see Section 4.9.2.3) are relatively small air districts, they sometimes rely on other air districts' guidelines to supplement their needs. This is a common and accepted practice among air districts within the State of California. Because MSAT and analysis techniques are an emerging science, guidance manuals and protocols to assess air quality impacts are currently in the development stage by various regulatory agencies (i.e., Sacramento Metropolitan Air Quality Management District [SMAQMD], FHWA, CARB).

For instance, SMAQMD recently developed a 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. Although it was endorsed, it should be recognized that this is a draft document and subjected to modifications during its final phases. This document is used to determine whether there is a potential for detrimental health effects from living near a major roadway. 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 [urban]; more than 50,000 annual average daily trips [rural]). This screening tool was not used in this Tier 1 assessment because the "preferred" alignment has not been chosen; therefore, project-specific data are not available. In addition, because Placer Parkway includes a 500- to 1,000-foot no-development buffer zone, residential or other sensitive uses will not be sited within the 500-foot guidance limit established by some agencies.

In addition, 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* (2006c). The Interim Guidance describes FHWAs tiered approach for analyzing MSATS in NEPA documents, which involves three levels of analysis, depending on the potential for MSATs (based primarily on project characteristics and vehicle miles traveled). Furthermore, a California Environmental Protection Agency (Cal-EPA)/CARB document, *Air Quality and Land Use Handbook: A Community Health Perspective* (2005), 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., a roadway with more than 100,000 daily vehicle trips).

4.9.1.2 Federal Regulations

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was passed in 2005. SAFETEA-LU addresses issues such as safety to reduce highway fatalities, reduce traffic congestion, improve efficiency in freight movement, increase intermodal connectivity, and protect the environment. Additional details of SAFETEA-LU are provided in the Air

Quality Technical Memorandum. Details of transportation conformity regulations with the CAA are provided above in Section 4.9.1.1.

4.9.1.3 Regional Regulations

The Transportation Conformity Rule requires a regional emissions analysis to be performed by the MPO for projects within its jurisdiction, unless they are exempt. The regional emissions analysis includes all projects listed in the Regional Transportation Plan (RTP) and the Regional Transportation Improvement Program (RTIP). 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 the Sacramento Area Council of Governments (SACOG)'s Metropolitan Transportation Plan (MTP) and would therefore conform to the SIP. The Parkway is included in the current RTP, MTP, and RTIP. Additional details of the RTP and MTP are provided in the Air Quality Analysis Technical Memorandum.

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 normally would 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.

The study area is primarily in Sutter and Placer counties, where air quality is regulated by the local regulatory agencies, FRAQMD and PCAPCD, respectively. FRAQMD also has jurisdiction over Yuba County. Although the study area overlaps into Sacramento County, where air quality is regulated by SMAQMD, none of the corridor alignment alternatives would be located within Sacramento County. Therefore, SMAQMD's rules and regulations are not applicable or enforceable in the study area. As such, only general air quality data for Sacramento County is discussed in this document. The analysis recognizes that air pollutants will inevitably transport back and forth across county and basin boundaries. The amount and types of pollutants transported are 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.

The FRAQMD and PCAPCD implement and enforce air quality regulations within their jurisdiction to reduce air pollutants in order to meet the federal and state ambient air quality standards (AAQS). Projects with the potential to generate emissions exceeding the thresholds are considered to have an adverse impact on air quality. If the project's emissions exceed any of the significance thresholds, feasible mitigation measures must be implemented. Tables 4.9-2 and 4.9-3 present these thresholds for criteria pollutants emitted from proposed projects 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 types of gases.

Table 4.9-2
FRAQMD Significance Thresholds,
Sutter and Yuba Counties

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

Table 4.9-3
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.		

Additional details of these thresholds are presented in Section 4.9.2.1.

4.9.2 AFFECTED ENVIRONMENT

This section 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; CARB, 2006c).

The boundaries of the study area were defined as part of the Transportation Technical Report (DKS Associates, 2007) and reflect the area that potentially would be affected by the operation of Placer Parkway (see Section 4.9.2.1 for further details). The study area is located in the Sacramento Valley Air Basin (SVAB) (Figure 4.9-1), within southern Sutter County, the southwestern portion of Placer County, and northern Sacramento County. In the SVAB, air quality is affected by air pollutants transported from the San Francisco Bay Area Air Basin, in addition to emissions from within the Sacramento Valley and Mountain Counties Air Basins. Similarly, air pollutants from the SVAB contribute to air quality 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 on downwind areas.

4.9.2.1 Compliance with Air Quality Standards in the Study Area

The Sacramento Metropolitan Area (SMA), consisting 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 4.9.1.3 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 4.9-4, 4.9-5, and 4.9-6, with the locations illustrated in Figure 4.9-2. In addition, the federal and state air quality designations for Sutter and Placer counties are presented in the Air Quality Technical Memorandum.

Table 4.9-4
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

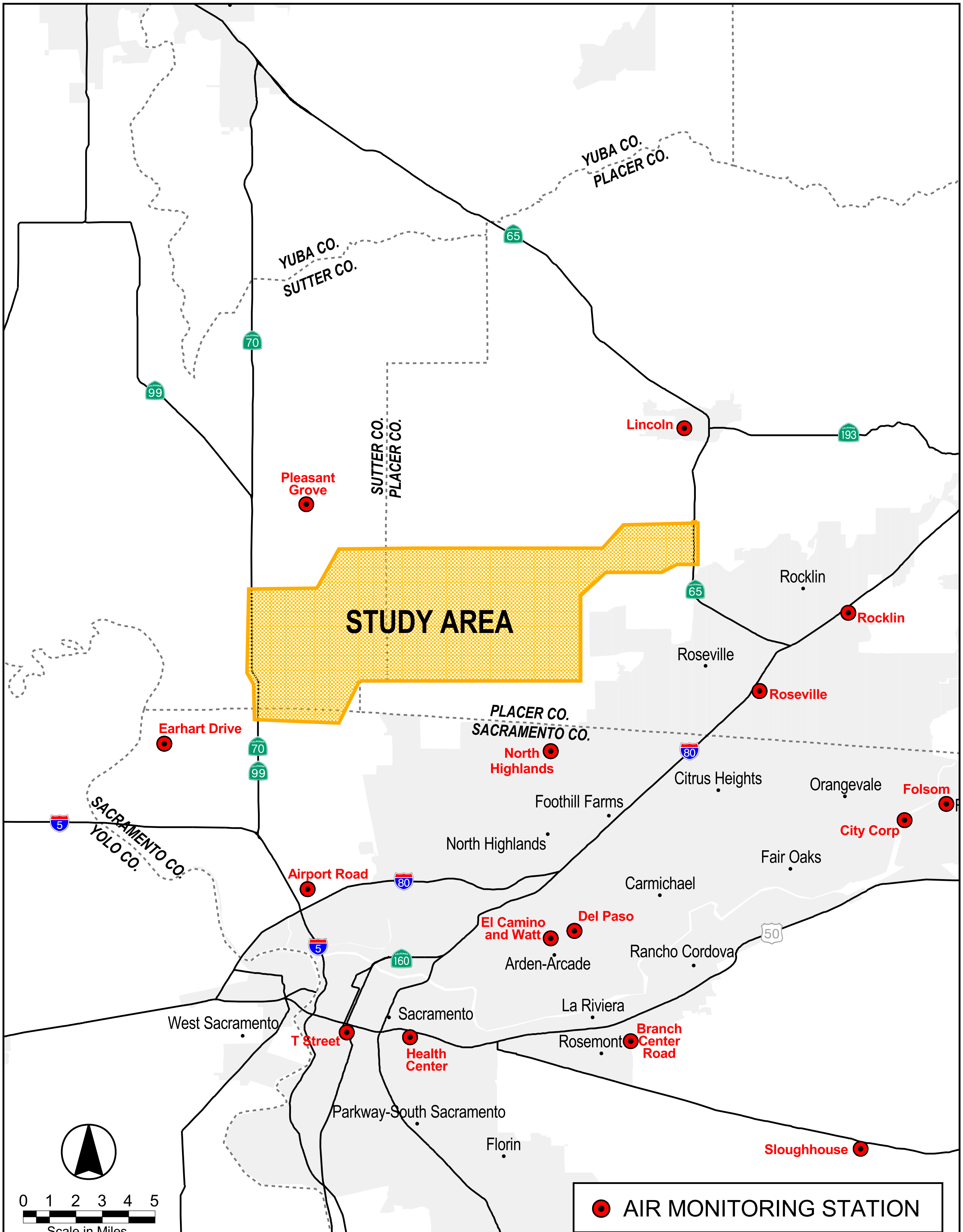
Source: Monitoring station located at 7310 Pacific Avenue, Pleasant Grove, California

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.

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

SVAB Boundary	Placer Parkway Corridor Preservation Tier 1 EIS/EIR	Sacramento Valley Air Basin	*Figure 4.9-1* *June 2007*



PLACER PARKWAY	Tier 1 EIS/EIR	Air Quality Monitoring Stations	*Figure 4.9-2*
			June 2007

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 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/VOC. 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 portions of Sutter, Placer (western Placer County), El Dorado, and Yuba counties, and all of Sacramento and Yolo counties.

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. Sources and health effects of $PM_{2.5}$ are provided in the Air Quality Technical Memorandum.

Table 4.9-5
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	μg/m³	150	50	58.0[2]	43.0	55.0[2]
	Annual Average	μg/m³	50	20	21.0[2]	22.0[2]	19.0
$PM_{2.5}$	24 hours	μg/m³	65	None	30.0	32.0	51.0
	Annual Average	μg/m³	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.

Measured concentrations 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 $PM_{2.5}$.

Carbon Monoxide

CO is an odorless, colorless gas that tends to dissipate rapidly into the atmosphere and consequently is generally a concern at the local level, particularly at major road intersections. Sources and health effects of CO are provided in the Air Quality Technical Memorandum.

Table 4.9-6
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	μg/m³	150	50	62.0[2]	44.0	110.0[2]
	Annual Average	μg/m³	50	20	21.0[2]	24.0[2]	27.0
$PM_{2.5}$	24 hours	μg/m³	65	None	NA	NA	NA
	Annual Average	μg/m³	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.

CO concentrations at the Roseville and North Highlands monitoring stations 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.

Nitrogen Dioxide

NO_2 is a brownish, highly reactive gas that is a key precursor to O_3. Sources and health effects of NO_2 are provided in the Air Quality Technical Memorandum.

Tables 4.9-4 through 4.9-6 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.

Sulfur Dioxide

SO_2 is a colorless acidic gas with a strong odor. Sources and health effects of SO_2 are provided in the Air Quality Technical Memorandum. Table 4.9-6 shows that measured concentrations of SO_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 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.

4.9.2.2 Existing Emissions Sources

Pollutants that affect air quality are generated from both manmade and natural sources. Manmade 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 4.9-7 and 4.9-8 present a summary of the estimated 2005 pollutant emission data for Sutter County and the Sacramento Valley portion of Placer County, respectively. Similar data for Sacramento County are presented in Table 4.9-9. Mobile sources are the largest contributors to the ROG, CO, NO_X, and SO_X emissions inventories, but are minor contributors to the PM_{10} and $PM_{2.5}$ emissions inventories.

Table 4.9-7
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 4.9-8
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 4.9-9
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.

4.9.3 IMPACT ANALYSIS

4.9.3.1 Methodology for Impact Evaluation

Emissions associated with the long-term future operation of Placer Parkway have been estimated using CARB's EMFAC2002 mobile emissions model using input parameters including vehicle miles traveled (VMT) and vehicle hours of delay (VHD) as projected on the five build alternatives for 2020 and 2040 by the Transportation Technical Report (DKS Associates, 2007). Additional details of the methodology are provided in the Air Quality Analysis Technical Memorandum (URS, 2007a).

Air quality impacts are evaluated 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.

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. Site-specific data are not available to calculate construction emissions; therefore, potential air quality impacts from construction activities associated with Placer Parkway can be evaluated only broadly. This is done by estimating the maximum area expected to be affected by grading and construction activities and then using a model—the Road Construction Emissions Model, Version 5.2, created by the Sacramento Metropolitan Air Quality Management District—to determine the number of pieces of construction equipment that could be used and the maximum area that could be disturbed without resulting in emissions exceeding the PCAPCD thresholds. Additional details of this methodology are provided in the Air Quality Technical Memorandum.

Operational Impact Evaluation Methodology

The Transportation Technical Report (DKS Associates, 2007) provides peak-hour VMT data for the No-Build Alternative and build alternatives 1 through 5. In addition, daily VMT data categorized into 5-mile increments and by hour-of-day also were provided by DKS for the study area. The transportation analysis included two distinct study areas, as described below:

- Transportation Analysis Study Area (TASA). The area where the travel model shows substantial changes in traffic volumes, although the percentage of roadways that would be affected by the Placer Parkway decreases on the TASA's fringes (see Figure 4.8-1, Section 4.8, Traffic and Transportation).

- 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.

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.

VMT data for the No-Build Alternative and build alternatives were used as input into the EMFAC2002 mobile emissions model to estimate daily emissions. Emissions from the build alternatives were compared with the No-Build Alternative to determine the net increase in daily emissions. The amount of net increase is compared with FRAQMD and PCAPCD significance thresholds to determine whether the build alternatives would create substantial air quality impacts.

4.9.3.2 Evaluation Criteria

For the proposed project, potential impacts to air quality have been evaluated on a preliminary basis using the evaluation criteria listed below. The project would be considered to have adverse air quality impacts if:

- There is an exceedance of FRAQMD and PCAPCD pollutant thresholds (see Tables 4.9-2 and 4.9-3). 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.

- The Parkway traffic volumes will exceed 50,000 vehicles (Annual Average Daily Traffic (AADT)) and there are sensitive receptors, such as residences, schools, daycare centers, playgrounds, and medical facilities within 500 feet of the Parkway edge.

4.9.3.3 Existing Conditions Analysis (2004)

SMAQMD's Rate-of-Progress Plan EIR provides VMT data and vehicle emissions data for the Sutter County and the Sacramento Valley portion of Placer County for 2004 (see Figure 4.9-1 and Table 4.9-10). These data are consistent with the on-road vehicle emissions inventory data presented earlier. These data were not developed specifically from a traffic analysis in the Placer Parkway TASA or AFA.

Table 4.9-10
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 2004 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 2004 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 southern Sutter County and southwestern Placer County. These decreases probably would 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 are expected to be potentially less than under 2020 conditions.

4.9.3.4 Future Analysis (2020) Conditions

Construction Impacts

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. Site-specific data are not available to calculate construction emissions; therefore, potential air quality impacts from construction activities associated with Placer Parkway can be evaluated only broadly at the Tier 1 level. The area that is estimated to be utilized 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 corridor width of 500 to 1,000 feet]). Depending on the construction timeline, a substantial amount of pollutants could be generated from the construction of Placer Parkway.

The modeled daily pollutant emission estimates are shown in Table 4.9-11.

Table 4.9-11
Estimated Amount of Pollutants Emitted During Site Grading Activities (lbs/day)

Description	ROG (lbs/day)	CO (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/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

The model indicates there would be exceedences of FRAQMD and PCAPCD thresholds for ROG, NO_X and PM_{10}. This would be a short-term air quality impact.

Construction emissions would result from construction equipment exhaust and fugitive dust generated from grading activities. These emissions probably would 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.

Operational Impacts

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

- State Route (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
- Substantially reduce VHD within the TASA and especially in the AFA.

The following discussion presents the analysis of potential operational air quality impacts based on the traffic analysis, summarized above.

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 on air quality due to Placer Parkway would occur as a result of the No-Build Alternative. For the purposes of the analysis for 2020, which compares conditions with and without the project, the following discussion presents future conditions under the 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 a Placer Parkway, using SR 65, Interstate 80 (I-80), Interstate 5 (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 4.9-12.

Table 4.9-12
VMT and Criteria Pollutant Emissions for 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

Notes:

1. VMT data are from the Placer Parkway 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.

Alternative 1 – the Red Alternative

Total emissions under these scenarios in 2020 are presented in Table 4.9-13. The percentage difference in emissions between this Alternative 1 scenario and the No-Build Alternative is presented in Table 4.9-14.

Table 4.9-13
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

Notes:
1. VMT data are from the Placer Parkway 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 4.9-14
Percentage Change in VMT and Criteria Pollutant Emissions Between Alternative 1 and the No-Build Alternative in 2020

Description	VMT Increase (%)	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

Notes:
1. VMT data are from the Placer Parkway 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.

Alternative 2 – the Orange Alternative

Total emissions for Alternative 2 as compared to the No-Build Alternative are presented in Table 4.9-15. The percentage difference in emissions between this Alternative and the No-Build Alternative is presented in Table 4.9-16.

Table 4.9-15
VMT and Criteria Pollutant Emissions for Alternative 2 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 2	17,875,272	8,960	68,740	9,960	1,460	180

Notes:
1. VMT data are from the Placer Parkway 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 4.9-16
Percentage Change in VMT and Criteria Pollutant Emissions Between Alternative 2 and the No-Build Alternative in 2020

Description	VMT Increase (%)	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

Notes:
1. VMT data are from the Placer Parkway 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.

Alternative 3 – the Blue Alternative

The emissions estimated for Alternative 3 are presented in Table 4.9-17 with the percentage increase in emissions between this Alternative and the No-Build Alternative presented in Table 4.9-18.

Table 4.9-17
VMT and Criteria Pollutant Emissions for Alternative 3 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 3	17,888,226	8,980	68,780	9,960	1,460	180

Notes:
1. VMT data are from the Placer Parkway 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 4.9-18
Percentage Change in VMT and Criteria Pollutant Emissions Between Alternative 3 and the No-Build Alternative in 2020

Description	VMT Increase (%)	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	12.5

Notes:
1. VMT data are from the Placer Parkway 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.

Alternative 4 – the Yellow Alternative

Alternative 4 emissions are presented in Table 4.9-19. The increase in emissions between Alternative 4 and the No-Build Alternative is presented in Table 4.9-20.

Table 4.9-19
VMT and Criteria Pollutant Emissions for Alternative 4 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 4	17,871,573	8,960	68,720	9,960	1,460	180

Notes:
1. VMT data are from the Placer Parkway 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 4.9-20
Percentage Change in VMT and Criteria Pollutant Emissions Between Alternative 4 and the No-Build Alternative in 2020

Description	VMT Increase (%)	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

Notes:
1. VMT data are from the Placer Parkway 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.

Alternative 5 – the Green Alternative

Emissions associated with Alternative 5 are presented in Table 4.9-21. The percentage increase in emissions between these scenarios and the No-Build Alternative is presented in Table 4.9-22.

Table 4.9-21
VMT and Criteria Pollutant Emissions for Alternative 5 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	60
Alternative 5	17,874,270	8,960	68,720	9,940	1,460	180

Notes:
1. VMT data are from the Placer Parkway 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 4.9-22
Percentage Change in VMT and Criteria Pollutant Emissions Between Alternative 5 and the No-Build Alternative in 2020

Description	VMT Increase (%)	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

Notes:
1. VMT data are from the Placer Parkway 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.

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 also could occur during operation through generation of mobile-source pollutants from vehicles. The future Placer Parkway would generate an increase in VMTs, which typically is associated with an increase in vehicle exhaust pollution. The comparison of VMT and operational emissions for all alternatives is shown in Table 4.9-23.

Table 4.9-23
Comparison of VMT and Operational Emissions for Build Alternatives in 2020

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. None of the build alternatives exceed the PCAPCD significance thresholds for any pollutants. As shown in Table 4.9-23, Alternative 1 and Alternative 3 would generate the least and most amount of pollutants, respectively. Hence, the implementation of Alternative 1 can be considered to have fewer air quality impacts compared with the other four build alternatives. Conversely, implementation of Alternative 3 would 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 0.9 percent for ROG, 0.7 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, vehicle technology, and transit systems improve over the next decade, vehicle emissions increases can be expected to be lower than the projections presented in this analysis; as this is already accounted for in the analysis model, these impacts probably are overstated.

The transportation analysis shows that the operation of the 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 traveling at less than 65 mph show that lower travel speed (5 to 15 mph) 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. Although improved travel speed and reduced travel time are expected to reduce emissions, these reductions were not quantified because available data are insufficient 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 probably would reduce the emissions associated with the increase of VMTs.

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 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. 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).

Mobile Source Air Toxics

Although a comprehensive analysis of MSATs will be conducted at the Tier 2 level if warranted (see Section 4.9.5), the discussion below presents a preliminary discussion of potential MSAT impacts associated with the Parkway.

Using annual average daily traffic (AADT) on Placer Parkway identified in the transportation analysis, it is estimated that approximately 4,100 diesel trucks will be traversing Placer Parkway on a daily basis. Additional details of this calculation are provided in the Air Quality Technical Memorandum (URS, 2007a). Diesel particulate matter (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* (Cal-EPA/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 (estimated 2040 Parkway daily volumes are between 40,300 and 71,700 vehicles (DKS Associates, 2007). 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 the 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. Placer Parkway includes a 500- to 1,000-foot no-development buffer zone. This buffer will provide the minimum 500-foot separation of the roadway identified in some guidance documents.

Even with the project's 500- to 1,000-foot 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 (2006C), some general statements can be made. Based on the projected AADT 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 Alternative, vary from 0.68 percent to 0.92 percent, and are all less than a 1 percent increase over the No-Build Alternative, 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 chose, 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, 2006c). 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.

4.9.3.5 Year 2027 – Conformity Year

The Transportation Conformity Rule (see Section 4.9.1.3) 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 RTP and the RTIP. The Placer County RTP is assessed for conformity along with the MTP by SACOG and submitted to the FHWA and 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. 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 State Implementation Plan, 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). Additional details are provided in the Air Quality Technical Memorandum (URS, 2007a).

4.9.3.6 Secondary and Indirect Impacts

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. Potential impacts on air quality associated with anticipated growth are described in Section 6.1, Growth.

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 air quality under the No-Build Alternative.

Build Alternatives

Construction and operation of the Parkway could result in secondary and indirect impacts on air quality. The potential adverse impacts could include:

- 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. This is discussed in greater detail below.

However, beneficial impacts would include reduced traffic congestion, less travel time, and increased travel speed, which could potentially offset the increase in criteria pollutants.

4.9.3.7 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, CO_2, methane (CH_4), nitrous oxide (N_2O), and 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 the burning of fossil fuels such as petroleum, coal, and natural gas, and vehicular exhaust emissions being major contributors.

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, 2007).

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. Provisions within AB32 provide CARB with the authority and responsibility to develop and enforce a GHG reduction program.

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. Currently, there is no approved methodology to correlate an individual project's impacts or reductions on this global phenomenon, although the Association of Environmental Professionals has recently circulated a Revised Draft White Paper detailing possible approaches to the analysis of GHG emissions in CEQA documents (AEP, 2007).

AB 32 does not directly amend CEQA. Instead, it provides for creation of a greenhouse gas emissions program. 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.

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.

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 are 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.

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, level of service (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 of alternative corridors, and not a specific roadway alignment, not all data are 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 Alternative and build alternatives were used as input parameters into the EMFAC2002 model. Currently, an accurate method to quantify the magnitude of CO_2 emissions 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 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 emissions were quantified using the EMFAC2002 model with VMT for the No-Build Alternative 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 the 2020 and 2.02 percent in 2040. This increase does not account for emissions 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 Alternative 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 is 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. But, 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 Alternative and build alternatives.

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 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.

Other strategies to reduce GHG could consist of landscaping with an abundance of trees along the Parkway as described in the Landscaping Concept, using energy-efficient light bulbs for lighting systems, and additional design features that would reduce overall energy use.

4.9.3.8 Cumulative Impacts

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 Sutter County, southwest Placer 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 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 the proposed project and other projects would be cumulatively considerable.

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 unincorporated portions of south Sutter County, western Roseville, and unincorporated portions of west Placer County. Although all the build alternatives would decrease traffic volumes on many roadway segments, they would 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 1 hour, 2 hours and for 3 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.

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.

No-Build Alternative

Under the No-Build Alternative there would not be any cumulative impacts associated with the Parkway. 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 TASA. VMT and associated emissions for 2040 are presented in Table 4.9-24. 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 4.9-24
VMT and Criteria Pollutant Emissions for the 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 Parkway 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.

Alternative 1 – the Red Alternative

Total estimated emissions for all Alternative 1 scenarios are presented in Table 4.9-25.

Table 4.9-25
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

Notes:
1. VMT data are from the Placer Parkway 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

Alternative 2 – the Orange Alternative

Table 4.9-26 presents estimated pollutant emission information for Alternative 2.

Table 4.9-26
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
Alternative 2	26,477,729	6,180	44,740	5,060	2,120	260

Notes:
1. VMT data are from the Placer Parkway 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

Alternative 3 – the Blue Alternative

Table 4.9-27 presents estimated pollutant emission information for Alternative 3.

Table 4.9-27
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
Alternative 3	26,488,169	6,180	44,760	5,060	2,120	260

Notes:
1. VMT data are from the Placer Parkway 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 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

Alternative 4 – the Yellow Alternative

Table 4.9-28 presents estimated pollutant emission information for Alternative 4.

Table 4.9-28
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

Notes:
1. VMT data are from the Placer Parkway 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

Alternative 5 – the Green Alternative

Table 4.9-29 presents estimated pollutant emission information for Alternative 5. Interchanges would be similar to Alternative 4.

Table 4.9-29
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

Notes:
1. VMT data are from the Placer Parkway 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

Summary of Cumulative Impacts

Potential impacts on 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 also could occur through the generation of pollutants from vehicles using Placer Parkway. The new Parkway would generate an increase in VMTs, which typically is associated with an increase of vehicle exhaust pollution. The comparison of VMT and estimated operational emissions for all alternatives under the cumulative impact scenario is shown in Table 4.9-30.

Table 4.9-30
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.

As shown in Table 4.9-30, 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 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 4.9-31. The FRAQMD and PCAPCD significance thresholds also are presented in this table to determine whether the operation of the alternatives would create substantial air quality impacts.

Table 4.9-31
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	25,931,131	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**
Note: 1. The net increase in emissions is calculated based on the comparison with 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 and NO_X except for Alternative 1.

As fuel and vehicle technology improve over the next decade, vehicle emissions can be expected to be lower than those presented in Table 4.9-31. In addition, emissions associated with the reduction of VHD were not quantified because of lack of detailed data and were not included in Table 4.9-31. Therefore, the reduction of emissions associated with the reduced VHD potentially could result in lower emissions than the levels reported.

All Placer Parkway build alternatives would increase the total vehicle miles traveled in the TASA and would reduce vehicle hours of delay compared to the 2040 No-Build scenario. The air quality analysis shows that Placer Parkway would contribute an additional increment to pollutant emissions, which would cumulatively contribute to air quality impacts in 2040. On an overall basis, the Parkway's incremental contribution to cumulative air quality impacts would be considerable.

4.9.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION STRATEGIES

4.9.4.1 Tier 1 – Avoidance/Minimization Strategies

- During the development of alternatives, avoidance alternatives were considered to reduce environmental impacts (see Section 2.5.4). These alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

- During the alternatives screening process, efforts were made to eliminate alternatives that did not achieve the project Purpose and Need (see Chapter 1, Introduction). Examples of such efforts included modification and/or elimination of PSR conceptual corridor alignments and/or project components that resulted in increased travel times that substantially reduced the Parkways' benefits, and those which would not attract sufficient traffic to the Parkway to generate substantial congestion reduction in the system-wide traffic network. Additional details of alternatives and alternative components are provided in Section 2.5.

- During early conceptual planning and development of the Tier 1 conceptual design of the Parkway, efforts were made to avoid adverse impacts on traffic patterns, which would also contribute to reduction of potential air quality impacts. These efforts included:

  - The restriction of access between Pleasant Grove Road and Fiddyment Road to provide a high-speed, free-flowing facility, avoid inducing urban growth and associated traffic in areas not designated for development in existing general plans and maintain the rural character of western Placer County and south Sutter County.

  - The provision of access at the western and eastern ends of the Parkway, where existing areas of dense development are already located or planned and future congestion is anticipated.

  - The location of the Parkway within a no-development buffer zone (see Section 2.2.4) that would preserve open space and agricultural uses adjacent to the Parkway and limit future development in the buffer zone, including the provision of additional future interchanges which would affect the long-term reliable travel time reductions provided by the Parkway.

4.9.4.2 Tier 2 – Consultation

- PCPTA will continue to coordinate with local jurisdictions in Tier 2 to reduce the likelihood of air quality impacts. Coordination will include development of a construction air quality plan to minimize construction impacts as described below, and consultation regarding the design and location of other planned and proposed development in the study area.

- During Tier 2, PCTPA will consult with FRAQMD and PCAPCD regarding the need for preparation of a screening level or detailed health risk assessment.

4.9.4.3 Tier 2 – Mitigation Commitments

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

- If it is not possible to maintain a distance of 500 feet or more between the edge of the Parkway and any sensitive air receptors (see Section 4.9.3.4), then a health risk assessment will be conducted. If risks exceed the accepted standards, mitigation will be implemented as appropriate to reduce risks to an acceptable level, and will include consideration of relocations if necessary.

- Environmental reports prepared for proposed development projects, such as specific and community plans, that are in close proximity to the Parkway (i.e., 500 feet or less) will be reviewed. As appropriate, PCTPA will request, via comments on such documents, that potential detrimental health risks posed to individuals living near the corridor are considered, and that local jurisdictions add policies to their development review process or general plans that require assessment of air toxics for projects within 500 feet of the Parkway. PCPTA will also request that, before a city, county, special district or school district approves 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 strategies are needed as part of the proposed use, or if the location is not appropriate for such a use. This supplemental analysis would provide information regarding the potential health risks to exposed individuals. Since Placer Parkway includes a 500- to 1,000-foot no-development buffer, any development projects would likely be at least 500 feet from the roadway and it is possible that no additional assessment would be required.

- A dust control plan will be prepared and implemented, and will address the minimum Administrative Requirements found in Regulation 3.16, *Fugitive Dust Emissions* (FRAQMD, 2006d) and Section 400 of *District Rule 228, Fugitive Dust* (PCAPCD, 2006b). Additional details of dust control strategies are provided in the Placer Parkway Air Quality Technical Memorandum. Dust control strategies will include using appropriate measures to prevent dust and dirt from contaminating offsite areas and controlling dust to prevent air quality and water contamination from inactive construction areas.

- Prior to construction, the contractor will be required to provide FRAQMD and PCAPCD with a comprehensive inventory of construction equipment and anticipated construction timeline.

- Construction equipment and vehicles will be maintained so that 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.

- Idling time for diesel-power equipment will be minimized to 5 minutes or less for all diesel-power equipment.

4.9.4.4 Tier 2 – Mitigation Considerations

- During Tier 2 design, consideration will be given to aligning the Parkway within the selected corridor to maximize the distance between the roadway's edge and any sensitive air receptors (see Section 4.9.3.4).

- Where possible, alternative power sources (e.g., power poles) and fuel will be used to operate equipment instead of using diesel-powered equipment. If existing sources are not available, low sulfur fuel will be used for diesel power generators.

- Where possible, alternative fuel such as aqueous or emulsified diesel fuel will be used for all equipment to reduce NO_X and diesel exhaust emissions.

- Within Tier 2 design, consideration will be given to the strategic placement of trees near roadways (in accordance with FHWA and Caltrans guidance) to enhance pollutant dispersal and provide shading to reduce diurnal hydrocarbon emissions.

- Construction will comply with all relevant California Air Pollution Control District rules and policies, and all grading codes and construction air quality policies designed to limit idling and construction equipment emissions, including ozone precursor emission controls, preparation of diesel emission reduction plans, requirements for use of CARB-certified equipment for post combustion controls, and compliance with state construction vehicle emission standards, etc.

4.9.5 TIER 1 AND TIER 2 STUDIES

- Analyses completed in Tier 1
  - Air quality criteria pollutant emissions (ROG, CO, NO_X, SO_X and PM_{10}).

- Analyses begun in Tier 1 which will be undertaken in greater detail in Tier 2
  - Using guidance provided in *Interim Guidance on Air Toxic Analysis in NEPA Documents* (FHWA, 2006c), the air quality analysis will identify which category the Placer Parkway falls under (i.e., No Analysis, Qualitative Analysis, or Quantitative Analysis) as specified in the guidance. In addition, SMAQMD's protocol, *Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways* (2007a), shall be evaluated and recommendations provided for potential siting of sensitive land uses located in close proximity to the Parkway (i.e., less than 500 feet).

- Analyses that will begin in Tier 2
  - CO hot spot. This analysis will be performed to determine whether the Parkway would create a CO hot spot. This analysis will adhere to the procedures for preparing a screening analysis as provided in Appendix A of *The Transportation Project-Level Carbon Monoxide Protocol* (University of California, Davis, 1997). If necessary, detailed modeling shall be conducted using the CALIN4 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. If this status changes, then the Tier 2 analysis will include hot-spots analyses based on guidance provided in, *Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas* (U.S. EPA and FHWA, 2006). As part of the hot-spot analyses, a project-level conformity determination will include a finding of whether the Parkway is a "Project Of Air Quality Concern" (POAQC).

- An Airborne Asbestos analysis will include determining whether the Parkway would be located in a Naturally Occurring Asbestos area and evaluation of potential asbestos exposure from structures proposed for demolition or renovation.

- Construction traffic impacts analysis, including quantification of construction emissions and comparison to FRAQMD and PCAPCD significance thresholds.

- A health risk assessment to assess cancer risks and noncarcinogenic hazards for sensitive receptors (e.g., existing residences) located near the Parkway, if required.

- A more detailed analysis of greenhouse gases, if required.

4.10 NOISE

This section presents a Tier 1/Program level assessment of traffic noise for Placer Parkway. It is based on analysis of potential noise impacts associated with traffic as evaluated in the Transportation Technical Report (DKS Associates, 2007). Additional information on noise is provided in the Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR) Traffic Noise Analysis Technical Memorandum (URS, 2007g), which is available at the locations identified in the Executive Summary, including the Placer County Transportation Planning Agency (PCTPA) website.

4.10.1 REGULATORY SETTING

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require consideration of impacts to noise. 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 influence noise. Relevant laws and guidelines are described below.

4.10.1.1 Federal Regulations

Title 23, Part 772 of the Code of Federal Regulations

The criteria for evaluating traffic noise effects in this Tier 1 EIS/EIR report are contained in Title 23 of the Code of Federal Regulations (CFR) Part 772 (23 CFR 772), "Procedures for Abatement of Highway Traffic Noise and Construction Noise," and the California Department of Transportation's (Caltrans') "Traffic Noise Analysis Protocol," dated October 1998. Additional details of the criteria used in this code are provided in Section 4.10.3.2.

4.10.1.2 State Regulations

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, multipurpose 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} (A-weighted decibel equivalent noise level), Caltrans shall undertake a noise abatement program. Additional details of the criteria used in this code are provided in Section 4.10.3.2.

Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects

The Traffic Noise Analysis Protocol (Caltrans, 1998a) specifies the policies, procedures, and practices to be used by agencies that sponsor new construction or reconstruction projects. Additional details of the criteria used in this Protocol are provided in Section 4.10.3.2.

Technical Noise Supplement

The Caltrans Technical Noise Supplement (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.

4.10.1.3 General Plans and Policies

Sutter County General Plan

Policy 8.A-5 of the Sutter County Noise Element of the General Plan pertains to transportation noise, stating that "noise created by new transportation noise sources, including roadway improvement projects, should be mitigated…." so as not to exceed the levels specified in Table 4.10-1. Additional details of the criteria used in this policy are provided in Section 4.10.3.2.

Table 4.10-1
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.

dB = decibel

dBA = A-weighted decibels

L_{dn} = Day-Night Level. 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.

CNEL = Community Noise Equivalent Level. 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.

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 4.10-2. 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. Additional details of the criteria used in this Ordinance are provided in Section 4.10.3.2.

Table 4.10-2
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.

dB = decibel

dBA = A-weighted decibels

L_{dn} = Day-Night Level. 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.

CNEL = Community Noise Equivalent Level. 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.

4.10.2 AFFECTED ENVIRONMENT

This section describes the existing conditions in the study area (see Figure 4.10-1 for the study area boundary). Existing noise measurements were taken at a variety of locations throughout the study area (Figure 4.10-1). Additional details of these measurements, including descriptions of locations and surrounding land use, are provided in the Traffic Noise Analysis Technical Memorandum for this Tier 1 EIS/EIR (URS, 2007g). 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 4.10-3. The list below characterizes existing land use, the measurement period and perceived contributions to the aural environment. Existing daytime noise levels range from a low of 36.9 dBA to a high of 63.1 dBA, with the majority of measured locations experiencing levels between 44 and 55 dBA, representative of a relatively rural environment.

Table 4.10-3
Short-Term Sound Level Measurement Summary

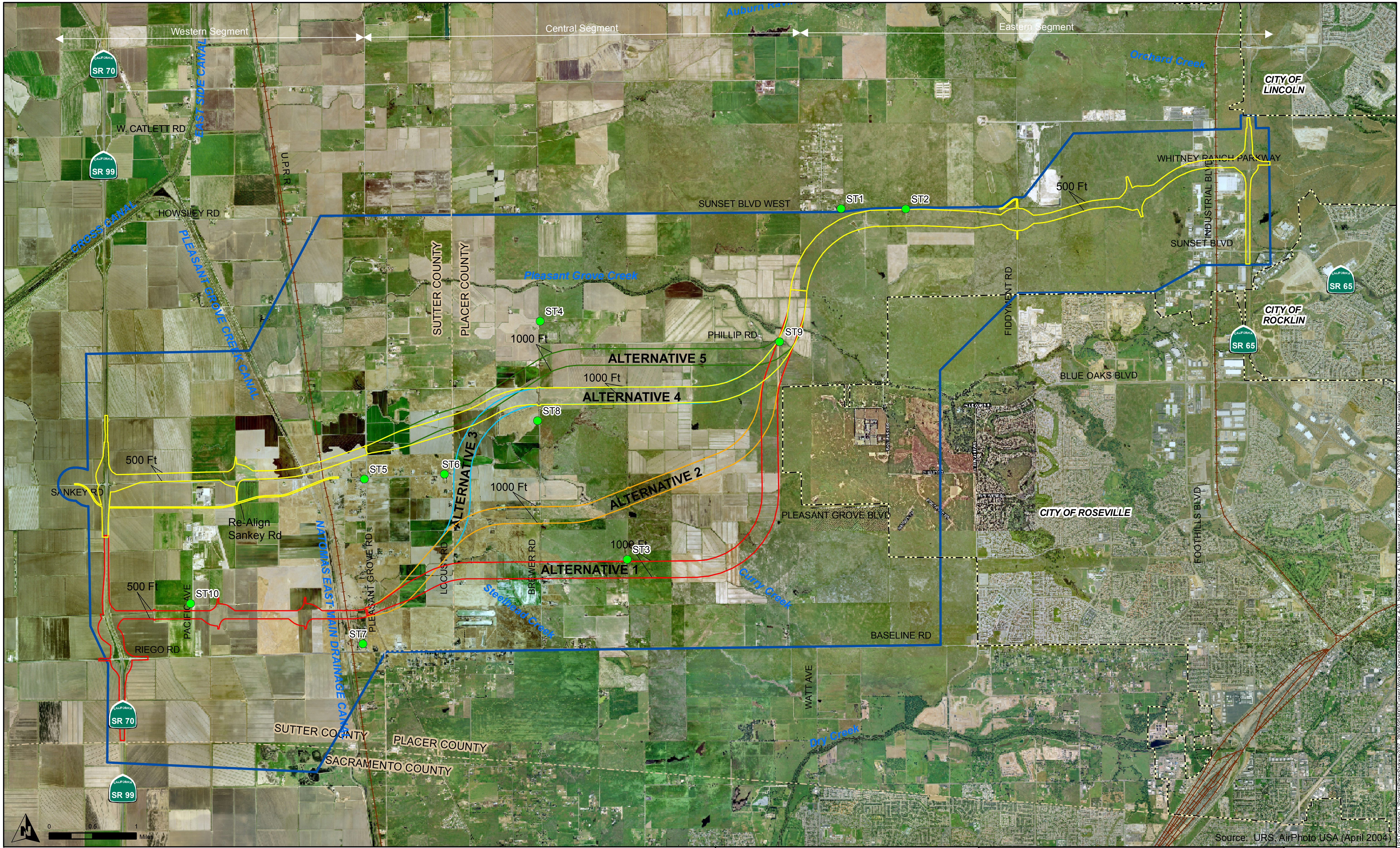
Location Tag on Figure 4.10-1	Location Description	Level, dBA-L_{eq}
ST1	5550 West Sunset Boulevard	48.6
ST2	Approximately 1.25 miles west of Industrial Boulevard on Sunset Boulevard West	58.7
ST3	6990 Country Acres Lane	38.3
ST4	4315 Brewer Road	45.7
ST5	The southwestern corner of Sankey and Pleasant 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

4.10.3 IMPACT ANALYSIS

4.10.3.1 Methodology for Impact Evaluation

Both Federal Highway Administration (FHWA) and Caltrans require noise analysis to compare potential future impacts against ***existing*** rather than future noise conditions (FHWA, 1995; Caltrans, 1998).

The Parkway noise analysis evaluates two different types of potential noise impacts: “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, and “relative” noise impacts, where noise levels are expected to increase more than a threshold amount (12 dBA or more) relative to existing noise conditions in each of the analysis years (i.e., 2004, 2020, and 2040).



Alternative 1	Alternative 4	County Boundary
Alternative 2	Alternative 5	City Boundary
Alternative 3	Study Area Boundary	Noise Measurement Location

PLACER PARKWAY

Tier 1 EIS/EIR

Measurement Locations

Figure 4.10-1

June 2007

The study area contains existing noise-sensitive receptors that may be directly affected by the construction and subsequent use of Placer Parkway. Identification of these receptors involves projecting future noise levels from projected traffic volumes on the new Parkway. Additional details of evaluation methodology and the model used to project future noise levels in the study area are provided in the Parkway Traffic Noise Analysis Memorandum for this Tier 1 EIS/EIR (URS, 2007g).

Model output was used to calculate both the 60 dBA 1-hour L_{eq} and the 66 dBA peak-hour L_{eq} distances from the conceptual median centerline and used to develop graphical contour maps depicting the potential extent of noise impacts. The analysis allowed for flexibility in the ultimate location of the roadway outer boundaries with respect to the right-of-way (ROW) boundaries in that it considers impacts as if the roadway were on either edge of the corridor, by alternative. This analysis therefore presents a worst-case analysis. These 66 dBA contours, which were superimposed on the study area, provided the following:

1. Counts of existing (2004) single-family residences that could experience 66 dBA or greater highway traffic noise (an "absolute" impact, which does not consider the contribution of the existing ambient background sound environment).

2. Identification of "overlap" areas where existing and planned and/or proposed residential developments will have some portion of their acreage experiencing 66 dBA or higher traffic noise from the Parkway (a "relative" impact, which does consider the contribution of the existing ambient background sound environment).

4.10.3.2 Evaluation Criteria

The criteria for evaluating traffic noise effects in this Tier 1 EIS/EIR are based on the following sources:

Title 23 of the Code of Federal Regulations uses two categories of evaluation criteria applicable to the project: Category B 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 decibels (dBA) L_{eq}.[1] Category C includes other developed land with uses such as commercial or industrial uses 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 4.10-4 shows the FHWA noise criteria used for determining effects to specific land uses (for example, residential and commercial).

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. Noise levels would be considered to be impacts if they exceed *existing* noise levels by 12 L_{eq} hourly (dBA) in the vicinity of sensitive receptors.

[1] Equivalent Sound Level (L_{eq}): The level of a sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time-varying sound

The Caltrans Traffic Noise Analysis Protocol (Caltrans, 1998a) uses similar criterion categories as Title 23 of the Code of Federal Regulations. This protocol specifies the policies, procedures, and practices to be used by agencies that sponsor new construction or reconstruction projects. Noise abatement criteria specified in this protocol are the same as those specified in 23 CFR 772 (Table 4.10-4). These criteria define a noise increase as substantial when the predicted noise levels with project implementation exceed existing noise levels by 12 dBA-L_{eq} (hourly [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.

Table 4.10-4
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.

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, multipurpose 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, multipurpose 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.

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 4.10-1.

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. The maximum allowable noise exposure limits for transportation noise sources are summarized in Table 4.10-2.

4.10.3.3 Direct Impacts

2004 Existing Plus Project Conditions

The Caltrans Traffic Noise Analysis Protocol (Caltrans, 2006a) 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 Parkway traffic analysis (DKS Associates, 2007) concluded that under existing plus project conditions, the project alternatives would result in similar changes in travel patterns in the Transportation Analysis Study Area (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 Parkway were added to existing conditions. With respect to noise impacts, therefore, the corridor alignment alternatives would:

- Increase noise levels for some roadway segments near proposed interchanges along the proposed project. These increases would affect the same segments predicted to experience increases in 2020 but probably would be less than those under 2020 conditions.

- Result in decreases in noise levels near a larger number of local roadway segments in southwestern Placer County and south Sutter County. These decreases would affect the same segments predicted to experience increases in 2020 but probably would be less than those under 2020 conditions.

2020 Impact Analysis

Potential absolute impacts in 2020 for the Parkway build alternatives are shown on Figures 4.10–2 through 4.10-6 (66 dBA contour maps), while Table 4.10-5 shows the existing and projected future roadway segments in the TASA that are anticipated to experience relative impacts of 3 dB or more.

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), land for the future construction of Placer Parkway would not be acquired and Placer Parkway would not be constructed. Changes in noise levels in the study area that would be expected to occur are presented below. All roadways referred to existed in 2004. Traffic patterns and additional development assumed to be present in the study area in 2020 are described in the Transportation Technical Report (DKS Associates, 2007).

Number of Roadways Experiencing Relative Noise Increases

Western Segment. Roadways in the Western Segment of the study area that, by 2020, would experience a 3 dB or greater increase in noise relative to existing (2004) levels attributable to higher traffic volume are as follows: 34, 45, 70, 71, 75, and 76 (see Table 4.10-5). None of these roadways are expected to experience a relative noise increase equal to or greater than 12 dB.

Table 4.10-5
Relative Impacts for Existing/Future Roadways (2020)

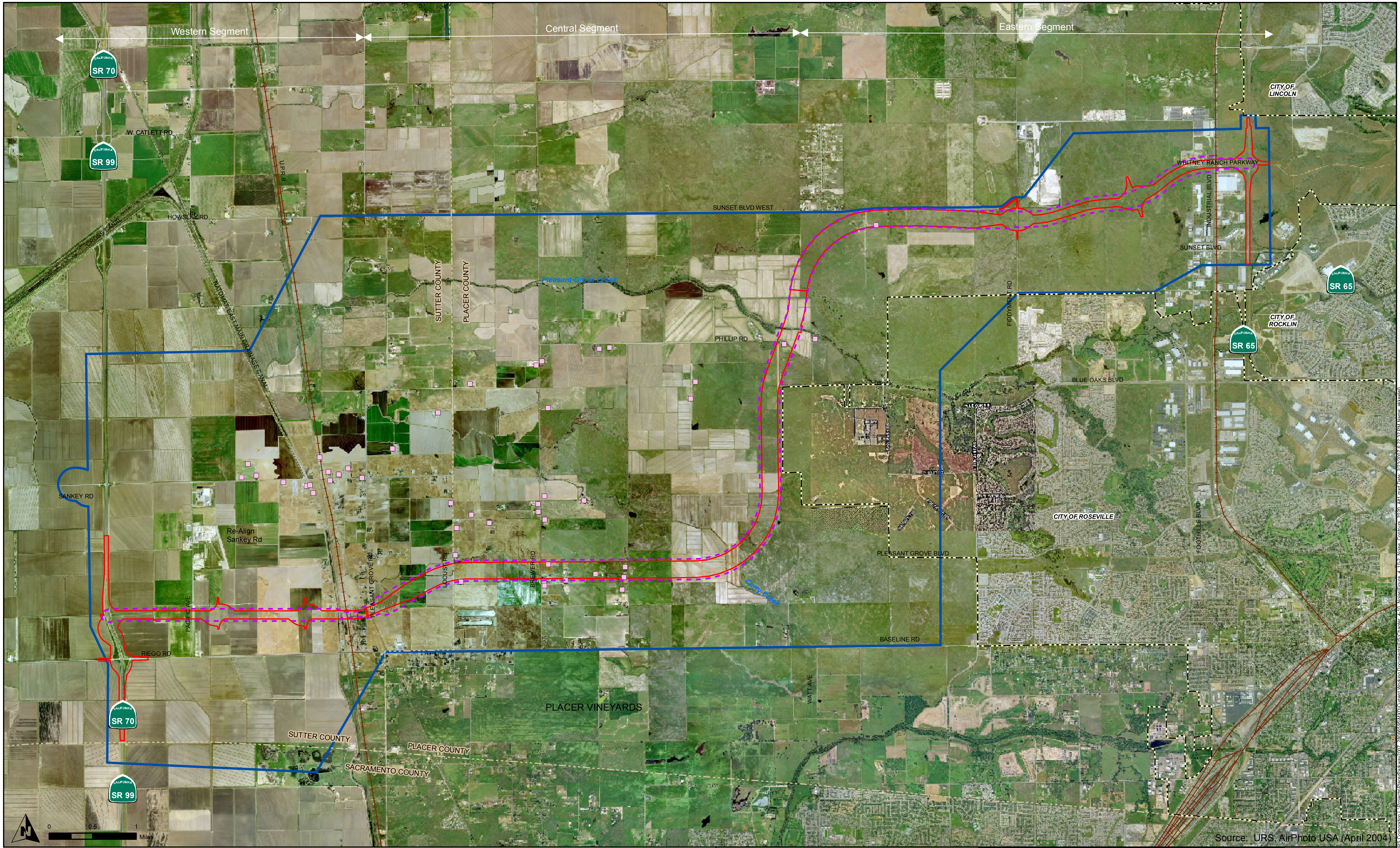
DKS Tag	Roadway	Segment	2005 Daily Traffic Vol.	Estimated 2020 Daily Traffic Volumes						Projected Relative Decibel (dBA) Increases in Traffic Noise from 2004 to 2020					
				No Build	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	No Build	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
3	99/70	North of Riego Rd.	29000	46200	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

Central Segment. Roadways in the Central Segment of the study area that, by 2020, would experience a 3 dB or greater increase in noise relative to existing (2004) levels attributable to higher traffic volume are as follows: 22, 31, 35, 46 through 52, 65, 84, 86, 90, and 107 (see Table 4.10-5). Of these, #107 (18th Street, north of Elverta Road) is expected to experience a relative noise increase greater than 12 dBA.

Eastern Segment. Roadways in the Eastern Segment of the study area that, by 2020, would experience a 3 dB or greater increase in noise relative to existing (2004) levels attributable 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 (see Table 4.10-5). None of these roadways are expected to experience a relative noise increase equal to or greater than 12 dB.

Alternative 1 – the Red Alternative

Figure 4.10-2 presents the projected 66 dBA noise contour under Alternative 1 in 2020. The contour width (see Appendix B of the Traffic Noise Analysis Technical Memorandum) would range from a minimum of 188 feet in the Western Segment (close to the Natomas East Main Drainage Canal) to a maximum of 810 feet in the Eastern Segment at the SR 65 Interchange. The contour would be 592 feet wide at the majority of points along its length.



Alternative 1
Study Area Boundary
County Boundary
City Boundary
Noise Contour (66 dBA)
Noise Receptors

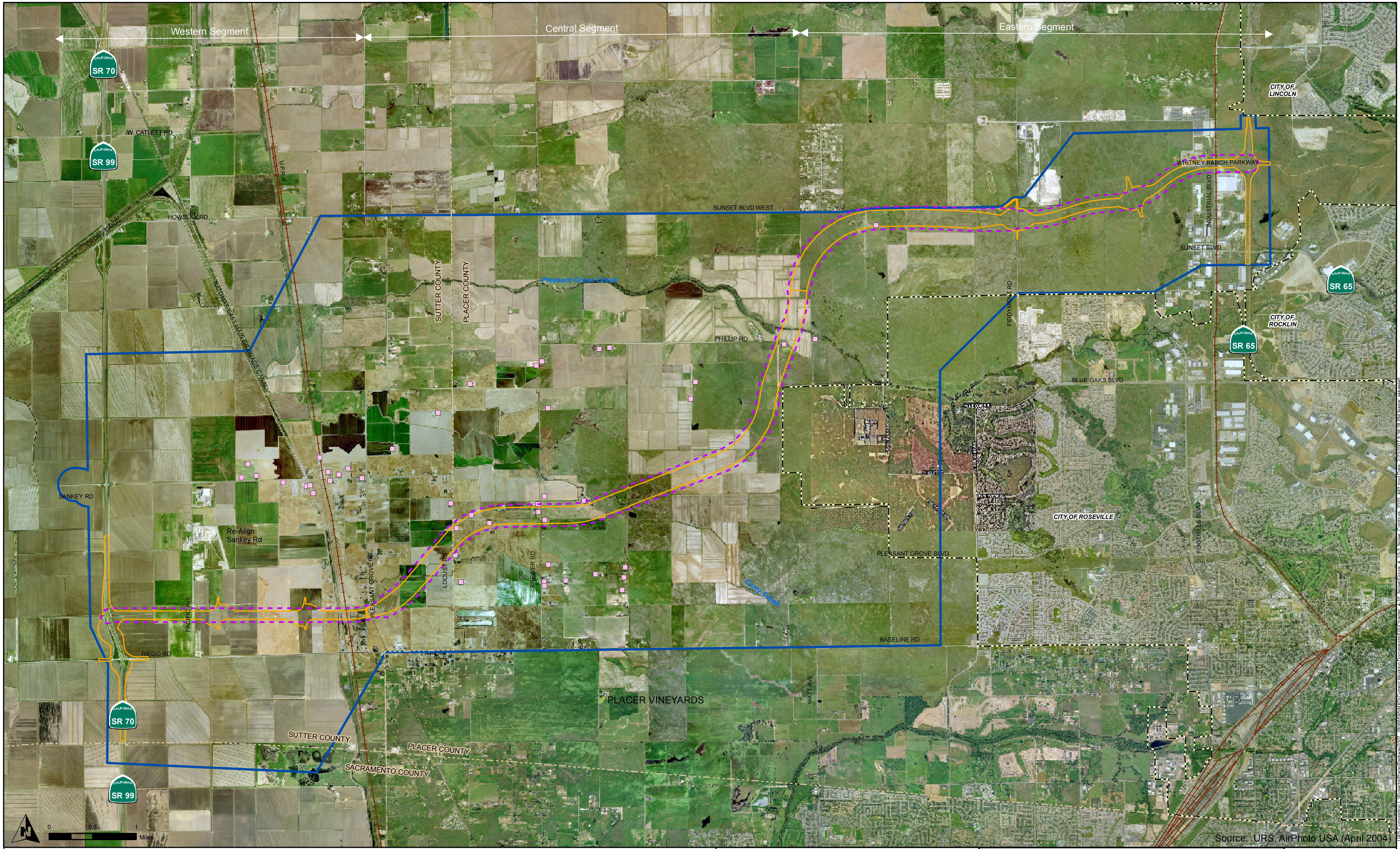
PLACER PARKWAY

Tier 1 EIS/EIR

Noise Contours - 2020 - Alternative 1

Figure 4.10-2

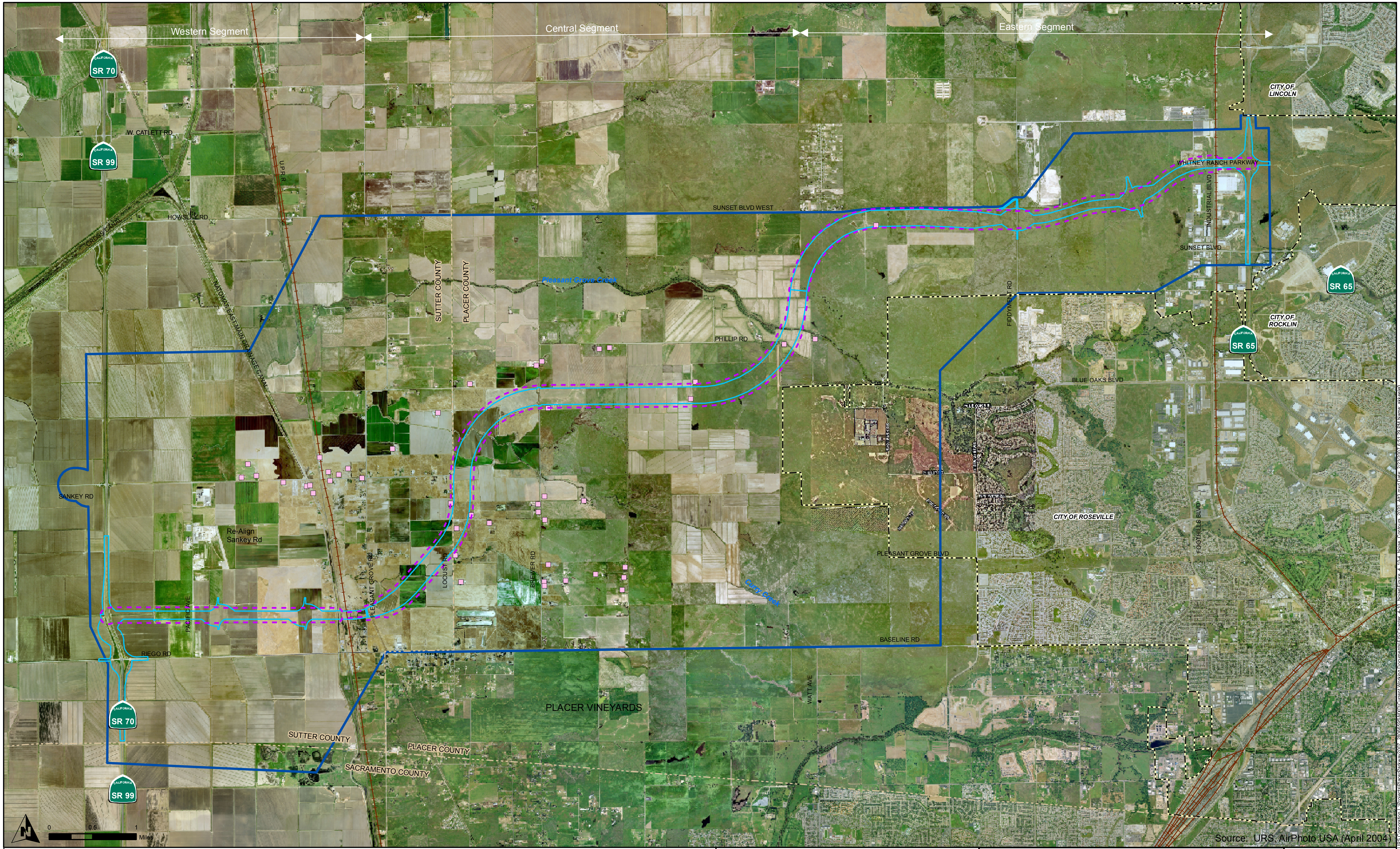
June 2007



Alternative 2
Study Area Boundary
County Boundary
City Boundary
Noise Contour (66 dBA)
Noise Receptors

PLACER PARKWAY

Tier 1 EIS/EIR	Noise Contours - 2020 - Alternative 2	*Figure 4.10-3*
		June 2007



Alternative 3
County Boundary
Noise Contour (66 dBA)
Study Area Boundary
City Boundary
Noise Receptors

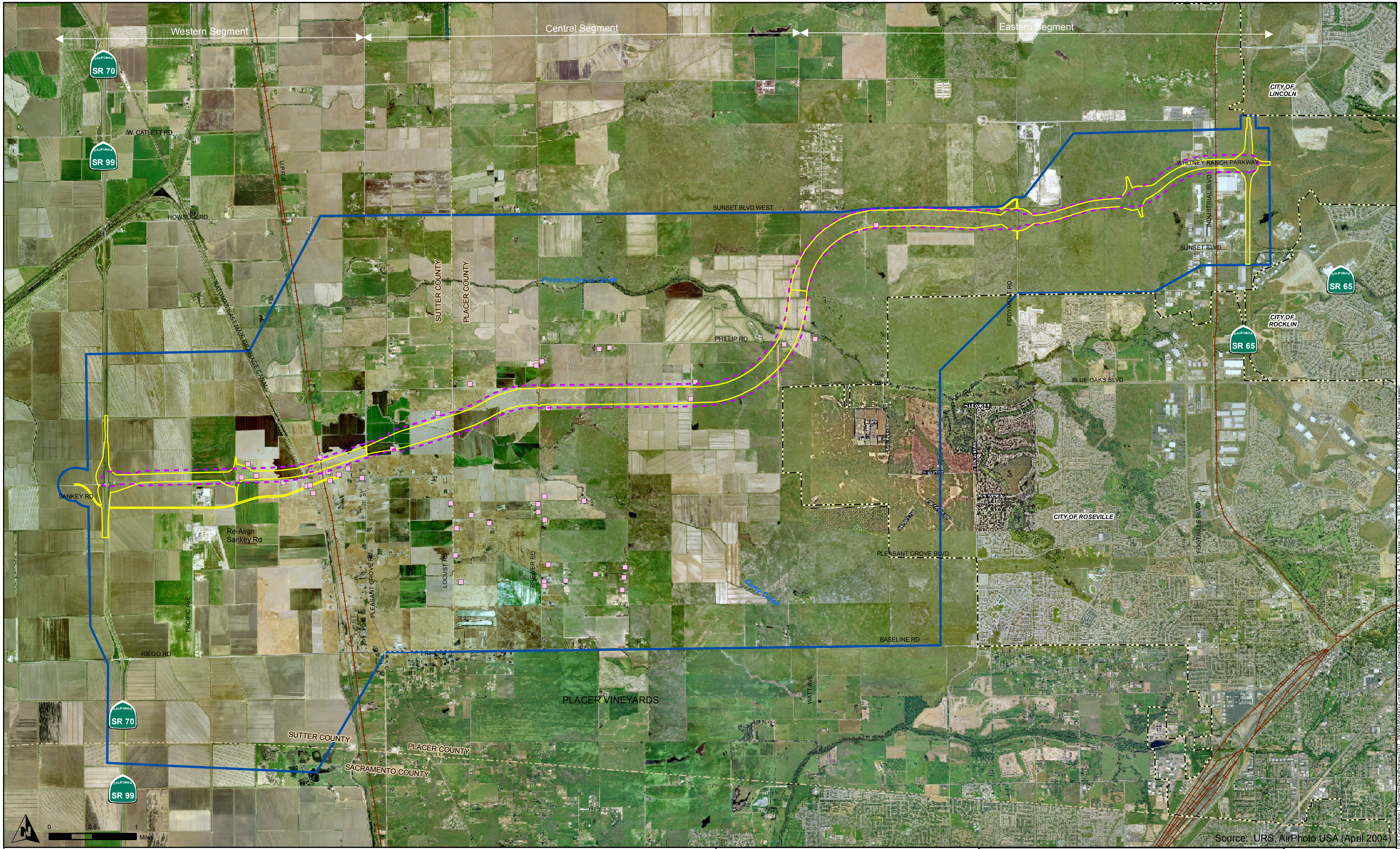
PLACER PARKWAY

Tier 1 EIS/EIR

Noise Contours - 2020 - Alternative 3

Figure 4.10-4

June 2007



Alternative 4
Study Area Boundary
County Boundary
City Boundary
Noise Contour (66 dBA)
Noise Receptors

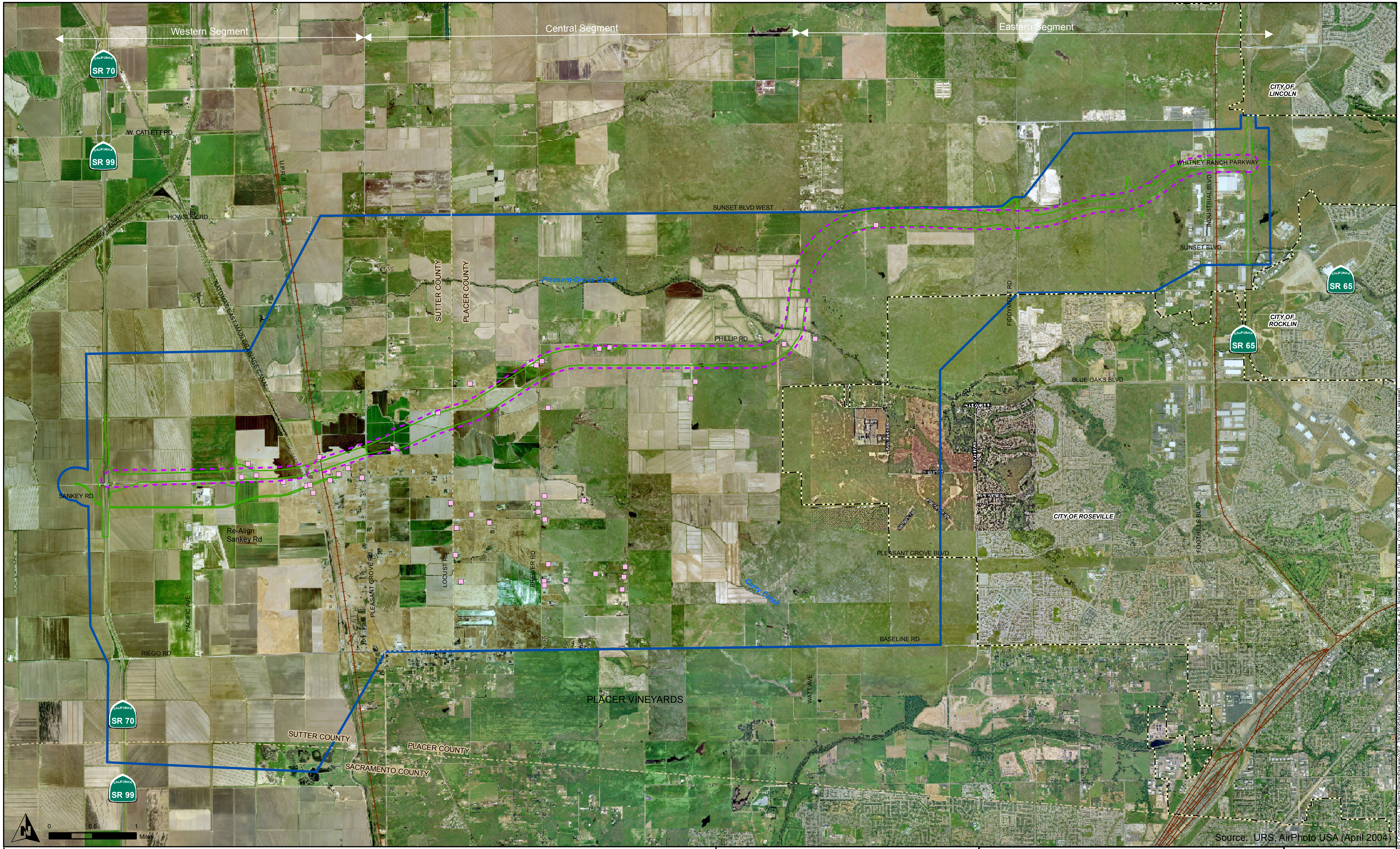
PLACER PARKWAY

Tier 1 EIS/EIR

Noise Contours - 2020 - Alternative 4

Figure 4.10-5

June 2007



Alternative 5
Study Area Boundary
County Boundary
City Boundary
Noise Contour (66 dBA)
Noise Receptors

PLACER PARKWAY

Tier 1 EIS/EIR

Noise Contours - 2020 - Alternative 5

Figure 4.10-6

June 2007

Table 4.10-6
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.

ROW = right of way.

Western 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 4.10-6). If new sensitive receptors are constructed within the 66 dBA contour lines identified on Figure 4.10-2, 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 (2004) levels attributed to higher traffic volume are as follows: 4, 34, 45, 70, 71, 75, and 76 (see Table 4.10-6). None of these roadways are expected to experience a relative noise increase equal to or greater than 12 dB.

Central 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 4.10-6). If new sensitive receptors are constructed within the 66 dBA contour lines identified on Figure 4.10-2, they would be affected by the Parkway under Alternative 1.

Number of Existing Roadways Experiencing Relative Noise Increases. Roadways in 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, 32, 35, 37, 38, 46 through 52, 65, 90, and 107 (see Table 4.10-5). Of these, 107 (18th Street, north of Elverta Road) is expected to experience a relative noise increase greater than 12 dB.

Eastern 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 4.10-6). If new sensitive receptors are constructed within the 66 dBA contour lines identified on Figure 4.10-2, they would be affected by the Parkway under Alternative 1.

Number of Existing Roadways Experiencing Relative Noise Increases. Roadways in the Eastern 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: 6 through 8, 25, 29, 53, 54, 58, 59, 63, 67, 77 through 79, 81 through 83, 92, and 93 (see Table 4.10-5). None of these are expected to experience a relative noise increase equal to or greater than 12 dB.

Alternative 2 – the Orange Alternative

Figure 4.10-3 presents the projected 66 dBA noise contour under Alternative 2 in 2020. The contour width (see Appendix B of the Traffic Noise Analysis Technical Memorandum) would range from a minimum of 200 feet in the Western Segment close to the Natomas East Main Drainage Canal to a maximum of 890 feet close to the proposed Fiddyment Road Interchange. The contour would be approximately 710 feet wide in the majority of other locations along its length.

Western Segment

The Western Segment of Alternative 2 would be the same as that for Alternative 1; therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

Central 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 4.10-6). If new sensitive receptors are constructed within the 66 dBA contour lines identified on Figure 4.10-3, they would be affected by the Parkway under Alternative 2.

Number of Existing Roadways Experiencing Relative Noise Increases. Roadways in 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, 32, 35, 37, 38, 46 through 52, 65, 90, and 107 (see Table 4.10-5). Of these, 107 (18th Street, north of Elverta Road) is expected to experience a relative noise increase greater than 12 dB.

Eastern Segment

The Eastern Segment of Alternative 2 would be the same as that for Alternative 1; therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

Alternative 3 – the Blue Alternative

Figure 4.10-4 presents the projected 66 dBA noise contour under Alternative 3 in 2020. The contour width (see Appendix B of the Traffic Noise Analysis Technical Memorandum) would range from a minimum of 200 feet in the Western Segment close to the Natomas East Main Drainage Canal to a maximum of 876 feet close to the proposed Fiddyment Road Interchange. The contour would be approximately 730 feet wide in the majority of other locations along its length.

Western Segment

The Western Segment of Alternative 3 would be the same as that for Alternative 1; therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

Central 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 4.10-6). If new sensitive receptors are constructed within the 66 dBA contour lines identified on Figure 4.10-4, they would be affected by the Parkway under Alternative 3.

Number of Existing Roadways Experiencing Relative Noise Increases. Roadways in 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, 32, 35, 37, 38, 46 through 52, 65, 90, and 107 (see Table 4.10-5). Of these, 107 (18th Street, north of Elverta Road) is expected to experience a relative noise increase greater than 12 dB.

Eastern Segment

The Eastern Segment of Alternative 3 would be the same as that for Alternative 1; therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

Alternative 4 – the Yellow Alternative

Figure 4.10-5 presents the projected 66 dBA noise contour under Alternative 4 in 2020. The contour width (see Appendix B of the Traffic Noise Analysis Technical Memorandum) would range from a minimum of 200 feet in the Western Segment close to the Natomas East Main Drainage Canal to a maximum of 900 feet close to the proposed Fiddyment Road Interchange. The contour would be approximately 720 feet wide in the majority of other locations along its length.

Western 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 4.10-6). If new sensitive receptors are constructed within the 66 dBA contour lines identified on Figure 4.10-5, they would be affected by the Parkway under Alternative 4.

Number of Existing Roadways Experiencing Relative Noise Increases Roadways in 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: 4, 34, 45, 70, 71, and 76 (see Table 4.10-5). None of these are expected to experience a relative noise increase equal to or greater than 12 dB.

Central 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 4.10-6). If new sensitive receptors are constructed within the 66 dBA contour lines identified on Figure 4.10-5, they would be affected by the Parkway under Alternative 4.

Number of Existing Roadways Experiencing Relative Noise Increases Roadways in 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, 32, 35, 38, 46 through 52, 65, 90, and 107 (see Table 4.10-5). Of these, 107 (18th Street, north of Elverta Road) is expected to experience a relative noise increase greater than 12 dB.

Eastern Segment

The Eastern Segment of Alternative 4 would be the same as that for Alternative 1; therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

Alternative 5 – the Green Alternative

Figure 4.10-6 presents the projected 66 dBA noise contour under Alternative 5 in 2020. The contour width (see Appendix B of the Traffic Noise Analysis Technical Memorandum) would range from a minimum of 200 feet in the Western Segment close to the Natomas East Main Drainage Canal to a maximum of 890 feet close to the proposed Fiddyment Road Interchange. The contour would be approximately 700 feet wide in the majority of other locations along its length.

Western Segment

The Western Segment of Alternative 5 would be the same as that for Alternative 4; therefore, the potential impacts for this segment are the same as discussed for Alternative 4.

Central 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 4.10-6). If new sensitive receptors are constructed within the 66 dBA contour lines identified on Figure 4.10-6, they would be affected by the Parkway under Alternative 5.

Number of Existing Roadways Experiencing Relative Noise Increases. Roadways in 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, 32, 35, 38, 46 through 52, 65, 90, and 107 (see Table 4.10-5). Of these, 107 (18th Street, north of Elverta Road) is expected to experience a relative noise increase greater than 12 dB.

Eastern Segment

The Eastern Segment of Alternative 5 would be the same as that for Alternative 1; therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

Comparison of Alternatives

Absolute impacts for the five build alternatives are summarized in Table 4.10-6. The No-Build Alternative is not shown in Table 4.10-6 because no absolute impacts would be associated with this alternative. Relative impacts related to the existing roadways in the project area are summarized in Table 4.10-5. In this case, the No-Build Alternative is shown for comparison purposes.

Table 4.10-7 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 4.10-7
Noise Impact Ranking by Alternative (2020)

Alternative	Absolute Impacts[1]	Relative Impacts[2]	Ranking[3]
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:

[1] Number of residences.
[2] Number of roadways with projected increases in traffic noise > 12 dBA.
[3] A ranking of 1 indicates that an alternative has the fewest projected combined impacts; a ranking of 5 indicates the most.

4.10.3.4 Secondary and Indirect Impacts

No-Build Alternative

Under the 2020 No-Build Alternative (see Section 2.3-1), land for the future construction of Placer Parkway would not be acquired and the Parkway would not be constructed. There would not be any secondary and indirect impacts associated with noise under the No-Build Alternative.

Build Alternatives

Direct noise impacts associated with the Parkway could result in secondary and indirect impacts in the study area. Potential secondary and indirect impacts associated with growth are discussed in Section 6.1, Growth. Generally, FHWA does not evaluate noise as a secondary and/or indirect impact. Impacts discussed here comprise potential secondary and indirect impacts that may be caused by noise associated with the Parkway.

Secondary and indirect impacts associated with any of the Parkway build alternatives were evaluated in the context of the traffic model, which takes into account induced travel demand as a result of the Parkway, accounting for changes in trip generation and distribution, as well as changes in mode choice or route choice, within the six-county Sacramento Metropolitan Travel Demand Model (SACMET) area. Such impacts could include the following:

- Increased risk of reduced quality of life and associated adverse health effects on residences, business, and facilities 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

4.10.3.5 Cumulative Impact Evaluation

2040 Noise-Sensitive Receptors

The predicted 66 dBA noise contours in 2040 for Alternatives 1 through 5 are shown on Figures 4.10-7 through 4.10-11, 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 4.10-8 summarizes absolute impacts on residential units existing as of 2004 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 future 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.

Table 4.10-8
Cumulative Absolute Noise Impact Summary (2040)

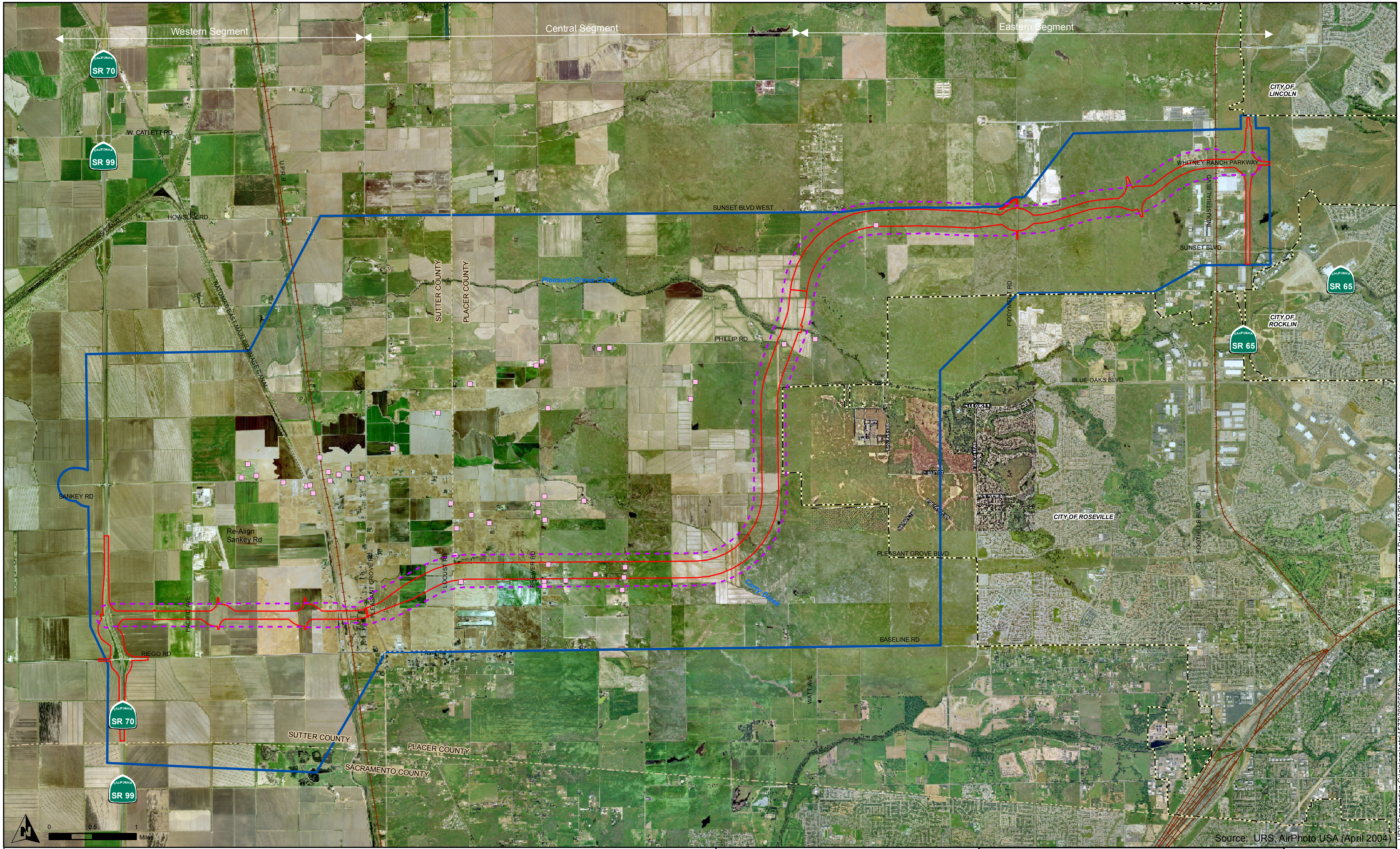
Alternative	Homes Within Proposed ROW[1]				Impacted Residential Units by Segment (2040)			
	Western	Central	Eastern	Total	Western	Central	Eastern	Total
1	0	5	1	6	0	4	0	4
2	0	5	1	6	0	4	0	4
3	0	3	1	4	0	5	0	5
4	2	3	1	6	5	3	0	8
5	2	5	1	8	5	2	0	7

Note:
[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 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.

Future Residential Developments

Figures 4.10-7 through 4.10-11 illustrate the overlaps of 66 dBA contours for all build alternatives with respect to planned developments within the Transportation Analysis Study Area expected to be partially or fully built out by 2040. These 66 dBA noise contours based on a Traffic Noise Model (TNM) model of future traffic volumes create geographical zones for each alternative that overlap acreage planned for development. Although a review of Figures 4.10-7 through 4.10-11 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. 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 (SPSP) 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 (CCCP) as yet. The Sierra Vista and Creekview Specific Plans (SVSP, CSP) have not finalized their roadway network or their land use plans. The Regional University Specific Plan (RUSP) 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 (WRSP) area,



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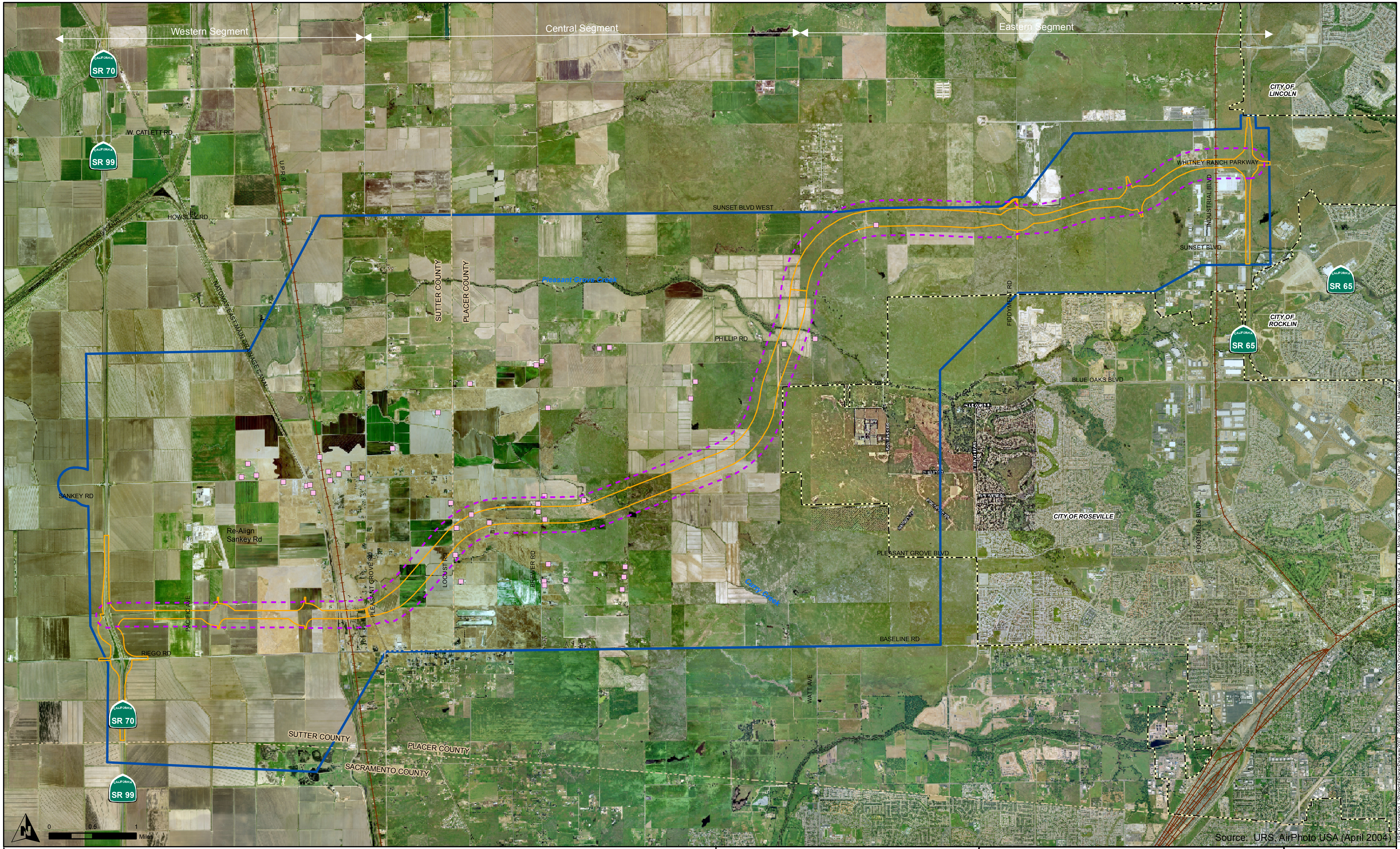
Alternative 1
County Boundary
Noise Contour (66 dBA)
Study Area Boundary
City Boundary
Noise Receptors

Tier 1 EIS/EIR

Noise Contours - 2040 - Alternative 1

Figure 4.10-7

June 2007



Alternative 2
Study Area Boundary
County Boundary
City Boundary
Noise Contour (66 dBA)
Noise Receptors

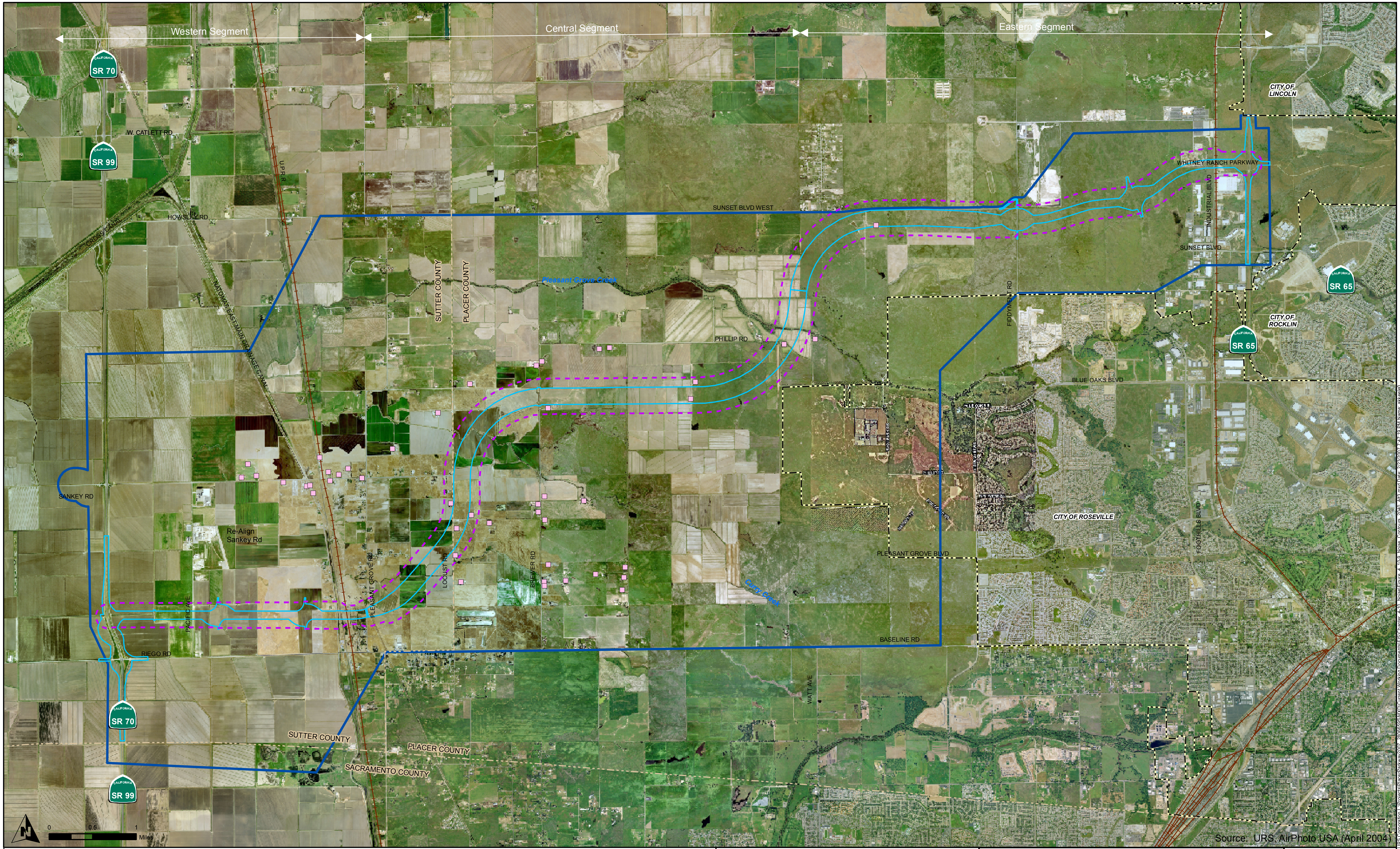
PLACER PARKWAY

Tier 1 EIS/EIR

Noise Contours - 2040 - Alternative 2

Figure 4.10-8

June 2007



Alternative 3
Study Area Boundary
County Boundary
City Boundary
Noise Contour (66 dBA)
Noise Receptors

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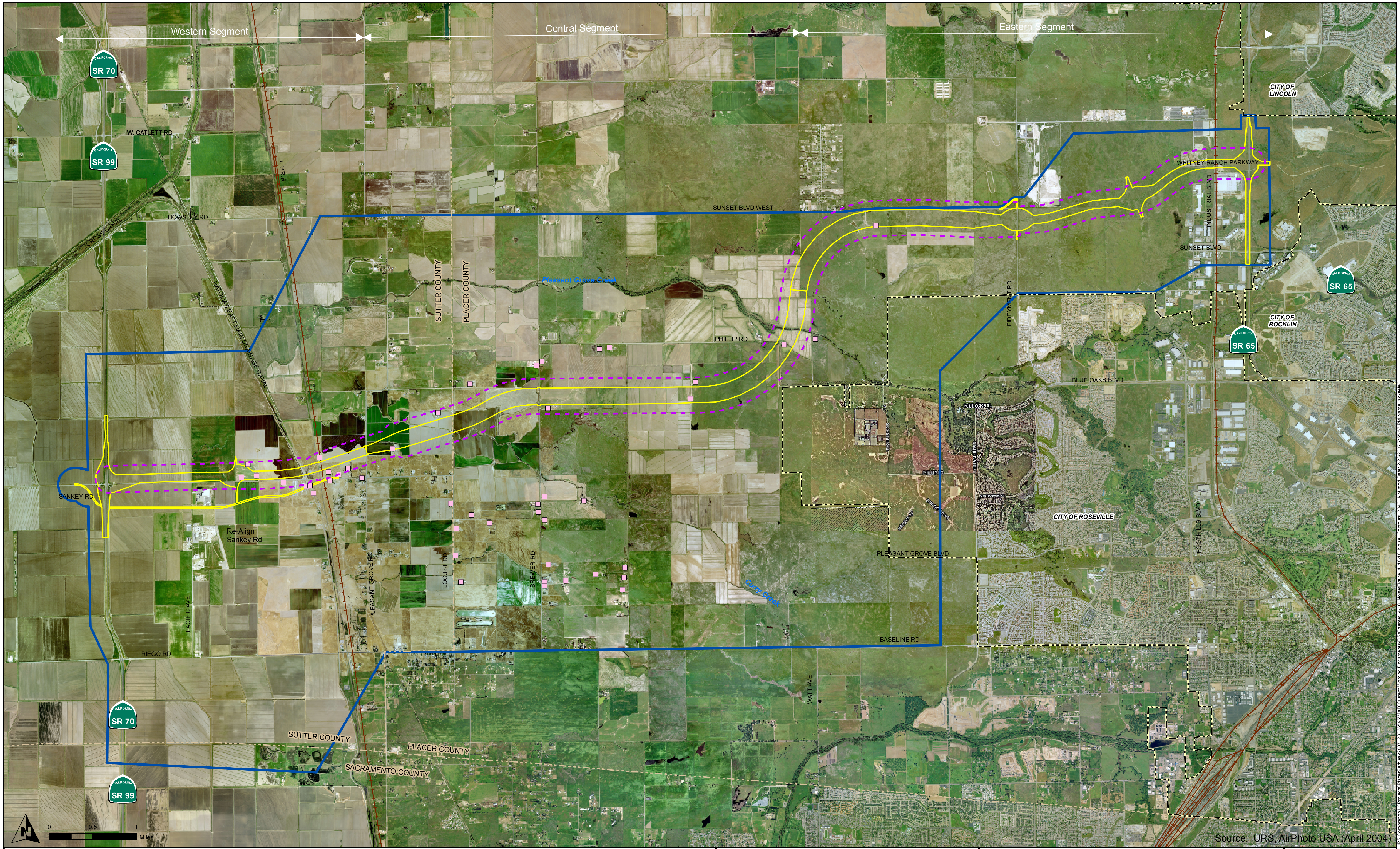
Tier 1 EIS/EIR

Noise Contours - 2040 - Alternative 3

Figure 4.10-9

June 2007



Alternative 4
Study Area Boundary
County Boundary
City Boundary
Noise Contour (66 dBA)
Noise Receptors

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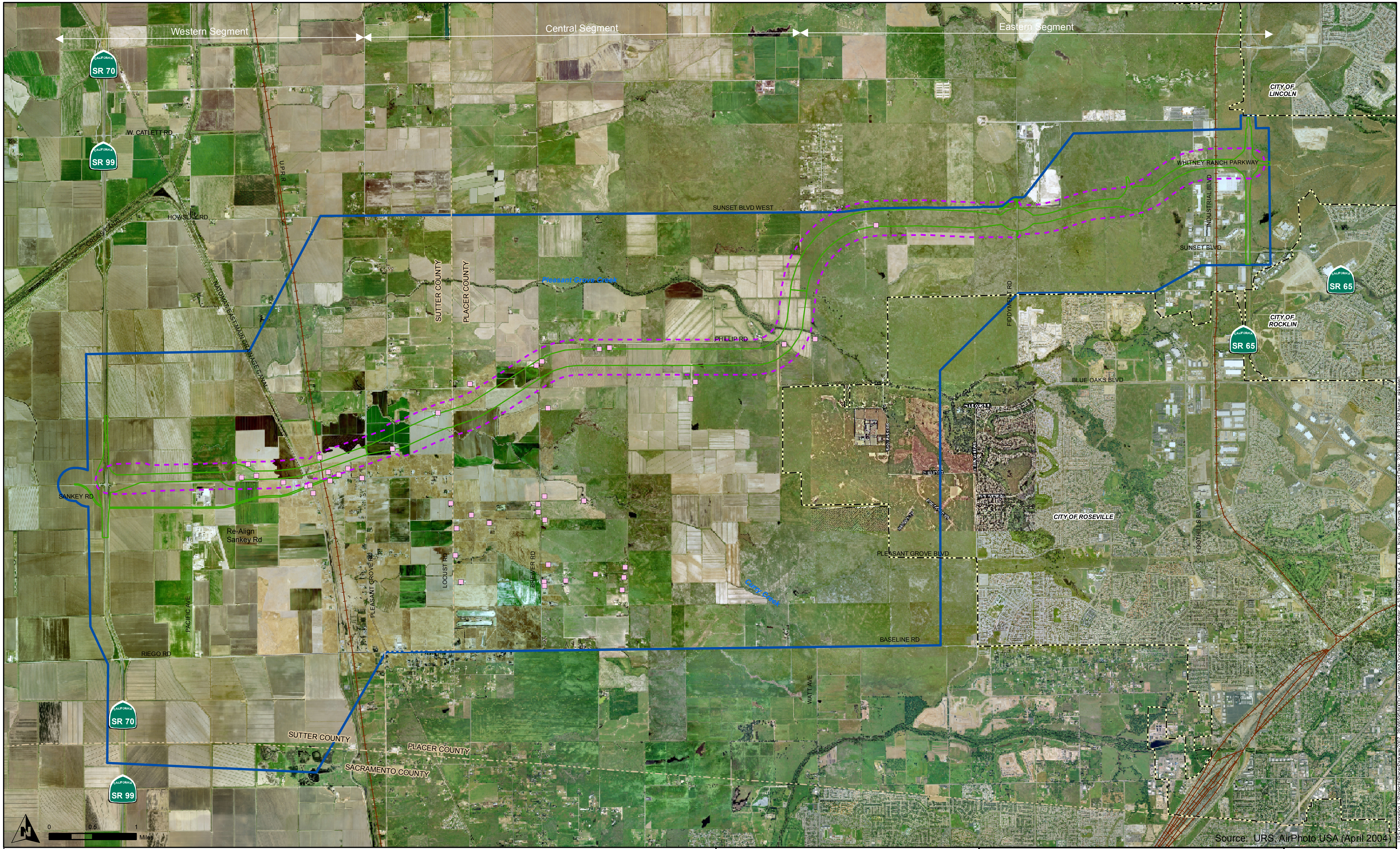
Tier 1 EIS/EIR

Noise Contours - 2040 - Alternative 4

Figure 4.10-10

June 2007



Alternative 5
Study Area Boundary
County Boundary
City Boundary
Noise Contour (66 dBA)
Noise Receptors

PLACER PARKWAY

Tier 1 EIS/EIR	Noise Contours - 2040 - Alternative 5	Figure 4.10-11
		June 2007

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 (PRSP) applicants have been working cooperatively to reserve ROW for a future Parkway within the proposed PRSP, since all Placer Parkway corridor alignment alternatives cross through the PRSP area in the same location. Although it is not certain that currently proposed land uses will be approved, this is the best current information on which to base a projected evaluation of potential absolute noise impacts of the Parkway's build alternatives in 2040.

The following narrative addresses each build alternative, identifying which planned and/or proposed developments experience some degree of overlap with the projected 2040 66 dBA contour.

Alternative 1

The Alternative 1 66 dBA contour width in 2040 would range from a minimum of 826 feet at the Natomas West Main Drainage Canal to a maximum of 1,660 feet close to the SR 65 Interchange. The contour width would be 1,316 feet along the majority of the alternative alignment. The contour would overlap with areas of the SPSP, the CCCP (both northern and southern regions), the SVSP, the RUSP, the WRSP, the CSP, the Brookfield property, and the PRSP. Based on current information, Alternative 1 would potentially result in absolute noise impacts on the SPSP area and the RUSP. Impacts to other development areas are unknown.

Alternative 2

The Alternative 2 66 dBA contour width in 2040 would range from a minimum of 1,106 feet at the Natomas West Main Drainage Canal to a maximum of 1,680 feet east of Foothills Road. The contour width would be 1,500 feet along the majority of the corridor alignment. The contour would overlap with areas of the SPSP, the CCCP (both northern and southern regions), the RUSP, the WRSP, the CSP, the Brookfield property, and the PRSP. Based on current information, Alternative 2 would potentially result in absolute noise impacts on the SPSP area and the RUSP area. Potential impacts on the RUSP area would be more severe than that under Alternative 1 or any other alternative. There would be no potential impacts on the SVSP area. Impacts to other development areas are unknown.

Alternative 3

The Alternative 3 66 dBA contour width in 2040 would range from a minimum of 1,000 feet at the Natomas West Main Drainage Canal to a maximum of 1,600 feet along the majority of the corridor alignment. The contour would overlap with areas of the SPSP, the CCCP (only northern region), the RUSP, the CSP, the Brookfield property, and the PRSP. Based on current information, Alternative 3 would potentially result in absolute noise impacts on the SPSP area and the RUSP area. Potential impacts on the RUSP area would be limited to a small area on the northern Plan area boundary. There would be no potential impacts on the WRSP area or the SVSP area. Impacts to other development areas are unknown.

Alternative 4

The Alternative 4 66 dBA contour width in 2040 would range from a minimum of 1,112 feet at the Natomas West Main Drainage Canal to a maximum of 1,700 feet east of Foothills Road. The contour width would be 1,500 feet along the majority of the corridor alignment. The contour would overlap with areas of the Measure M area, the CCCP (only northern region), the RUSP, the CSP, the Brookfield property, and the PRSP. Based on current information, Alternative 4 probably would not result in impacts to the SPSP 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 RUSP area as under

Alternative 3. There would be no potential impacts on the WRSP area or the SVSP area. Impacts to other development areas are unknown.

Alternative 5

The Alternative 4 66 dBA contour width in 2040 would range from a minimum of 1,096 feet at the Natomas West Main Drainage Canal to a maximum of 1,680 feet east of Foothills Road. The contour width would be 1,480 feet along the majority of the corridor alignment. The contour would overlap with areas of the SPSP, the CSP, the Brookfield property, and the PRSP. Based on current information, Alternative 5 would not likely result in impacts to the SPSP area since industrial and commercial uses are planned in the area of overlap with this alternative. There would be no potential impacts on the CCCP area, the RUSP area, the WRSP area, or the SVSP area. Impacts to other development areas are unknown.

Appropriate planning within future development could involve location of noise-sensitive receptors (e.g., residences) far enough away from the overlap zones depicted on Figures 4.10-7 through 4.10-11 and listed in Table 4.10-8. This potential mitigation strategy is discussed in Section 4.10.4.

Relative Impacts on Future Roadways

Relative impacts related to the existing and projected future roadways in the study area are summarized in Table 4.10-9. In this case, the No-Build Alternative is shown for comparison purposes.

Table 4.10-9 indicates that, similar to 2020, Alternatives 4 and 5 would generate the same number of roadway segments experiencing relative impacts. Although these two alternatives would have a slightly larger quantity of noticeable impacts than the totals for Alternatives 1, 2, and 3, Alternatives 4 and 5 each would have one less impact of 12 dBA or greater. On the basis of counts, Alternatives 4 and 5 would be quieter or need less mitigation.

As for absolute impacts, actual relative impacts also would depend on the nature of the land uses ultimately approved for the various planned and proposed developments.

4.10.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION STRATEGIES

4.10.4.1 Tier 1 – Avoidance/Minimization Strategies

- During the Parkway alternatives screening process, efforts were made to avoid impacts on communities, which would also reduce the potential for noise impacts. Examples of such efforts included modification and/or elimination of Project Study Report corridor alignment alternatives (see Section 2.5) to avoid community impacts. Additional details are provided in Section 4.2.3.6.

- During the development of alternatives, in order to reduce environmental impacts, avoidance alternatives were also considered (see Section 2.5.4). These alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

- During development of the Tier 1 conceptual design of the Parkway, efforts have been made to avoid socioeconomic and community impacts, which would also contribute to reduction in future potential noise impacts.

Table 4.10-9
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

- The restriction of access between Pleasant Grove Road and Fiddyment Road to avoid inducing urban growth in areas not designated for development in existing general plans and to maintain the rural character of western Placer County and south Sutter County.

- The location of the Parkway within a no-development buffer zone (see Section 2.5) that would preserve open space and agricultural uses adjacent to the Parkway and limit future development in the buffer zone.

- During the Tier 1 environmental review process, PCTPA worked with local jurisdictions to plan for the Parkway and proposed development in order to reduce the likelihood of environmental impacts, including noise. Results of this coordination included modification and elimination of alternatives and refinement of corridor alignments to avoid community impacts, which would also reduce noise impacts.

4.10.4.2 Tier 2 – Consultation

- PCPTA will continue to coordinate with local jurisdictions in Tier 2 to reduce the likelihood of noise impacts. Coordination will include development of specific Parkway design details to minimize impacts, such as the roadway footprint within the adopted corridor, landscaping features to provide noise attenuation, and consultation regarding the design and location of other planned and proposed development in the study area.

4.10.4.3 Tier 2 – Mitigation Commitments

- PCTPA will request that jurisdictions require that applicants for development proposals that may be affected by traffic patterns associated with the Parkway perform a noise impact study as part of their environmental review process, using the projected traffic volumes in the Parkway traffic report (DKS Associates, 2007) to assess the potential for exceedances of the land use compatibility noise thresholds identified in their general plans. PCPTA will recommend that jurisdictions should work to avoid such exceedances in their planning processes so as to avoid costly mitigation in the future

- To minimize construction noise, the following construction noise control strategies will be required to be implemented by the contractor:

  - 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.

  - Compliance with Caltrans' Standard Specifications 7-1.011 (July 1999) "*Sound Control Requirements.*" The contractor shall comply with all local sound control and noise level rules, regulations, and ordinances that 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.

4.10.4.4 Tier 2 – Mitigation Considerations

- Potential noise abatement strategies 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 strategies to regulate types of vehicles and speeds.
  - Acoustically insulating public use or nonprofit institutional structures.

- PCTPA would consider the use of noise barriers to abate noise impacts on sensitive receptors. The reasonableness of this noise mitigation strategy and the criteria for determining it would be guided by Caltrans policy.

4.10.5 TIER 1 AND TIER 2 STUDIES

- Analyses that will begin in Tier 2

  – A project-specific noise analysis would be performed based on detailed road segment design and locations and additional information on noise receptors within future planned and proposed developments. The analysis would include project-specific noise monitoring to enhance the accuracy of noise impact predictions made possible with a Tier 2 TNM model. It would also include the development of noise contours that would have finer resolution with respect to specific identified noise-sensitive receiver locations and that would include modeled features based on a more complex TNM model, which would account for such factors as intervening topography, actual roadway alignment, ramp designs, locations, expected traffic volumes, level of service, vehicle speeds, and category composition. The analysis will also include separate modeling of interchange ramps.

  – Construction traffic noise impacts analysis.

4.11 HYDROLOGY AND FLOODPLAINS

This section presents a Tier 1/Program level assessment of potential hydrology and floodplain impacts associated with the Parkway. Additional information on hydrology and floodplains is provided in the Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR) Hydrology and Floodplains Technical Memorandum (URS, 2007d), which is available at the locations identified in the Executive Summary, including the Placer County Transportation Planning Agency (PCTPA) website.

4.11.1 REGULATORY SETTING

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require consideration of impacts to hydrology and floodplains. 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 influence hydrology and floodplains. Relevant laws and guidelines are described below.

4.11.1.1 Federal 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 CFR 771; Environmental Impact and Related Procedures (Federal Highway Administration [FHWA]); and
- National Flood Insurance Act 1968.

The implementation of Executive Order 11988 in transportation projects is addressed by 23 CFR 650A. When transportation improvements encroach on a base floodplain (i.e., 100-year floodplain), the FHWA requires the agency responsible for the proposed 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, the FHWA must make a finding that the project is the "only practicable alternative."

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. As part of any application for a 404 permit, coordination with U.S. Fish and Wildlife Service would be required. It is anticipated that the future construction of the Placer Parkway probably either will require an individual USCOE Permit or will be covered by a future permit obtained for the Placer County Habitat Conservation Plan (HCP). A Section 401 Certification also 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.

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 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 rise of 1 foot in the base flood elevation (BFE).

4.11.1.2 State Regulations

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 of the Hydrology and Floodplain Technical Memorandum (URS, 2007d) 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.

The California Department of Fish and Game (CDFG)'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.

4.11.1.3 General Plans and Policies

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. The 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 Hydrology and Floodplain Technical Memorandum for this Tier 1 EIS/EIR (URS, 2007d) lists the specific goals and policies.

Sutter County has developed Design Standards to regulate and guide the design and preparation of plans for construction of street and highway drainage facilities. In addition, 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 BFEs.

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. The Hydrology and Floodplains Technical Memorandum for this Tier 1 EIS/EIR (URS, 2007d) lists the specific goals and policies of this plan.

The Placer County Flood Control and Water Conservation District (PCFCWCD) formulates regional strategies for flood control management. The main objective of the PCFCWCD is to reduce the effects of flooding through Best Management Practices (BMPs). Stormwater management policies, guidelines, and specific development criteria are presented in the PCFCWCD Stormwater Management Manual. This manual requires that peak flows be reduced to approximately 90 percent of pre-project conditions for 2-year through 100-year storm events. The manual also requires that retention be provided for flow volumes exceeding pre-project flow volumes. The manual addresses elements that must be included in a stormwater management project. Additional information on the manual is available in the Hydrology and Floodplain Technical Memorandum (URS, 2007d).

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 limit the effect of development on BFEs.

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 of the Hydrology and Floodplain Technical Memorandum (URS, 2007d) for a detailed description of the Basin). 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 are listed in the Hydrology and Floodplain Technical Memorandum (URS, 2007d).

Sacramento Area Flood Control Agency

The Sacramento Area Flood Control Agency (SAFCA) includes the City and County of Sacramento, Sutter County, the American River Flood Control District, and RD 1000. This agency coordinates flood control on a regional basis. One of SAFCA's primary focuses is on the levees that are part of the flood control system surrounding the Natomas Basin (see Natomas Basin, below). These include levees along the Cross Canal, Sacramento River, American River, the Pleasant Grove Creek Canal, and the Natomas East Main Drainage Canal (NEMDC).

Pleasant Grove Creek/Curry Creek Watershed Management Groups

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. Relevant policies include:

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.

Natomas Basin Habitat Conservation Plan

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. These requirements ensure that runoff does not affect sensitive wildlife habitats.

City of Roseville Reason Farms Retention Basin

The City of Roseville has developed a regional stormwater retention facility—Reason Farms Retention Basin—for the alleviation of potential downstream flooding that could be caused by entitled projects and future projects within the City of Roseville or within the area covered by a Memorandum of Understanding (MOU) between the City of Roseville and the County of Placer (County). The Reason Farms Retention Basin is located on Pleasant Grove Creek within the north-central portion of the Placer Parkway study area. 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.

4.11.2 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. Additional information is provided in the Hydrology and Floodplain Technical Memorandum (URS, 2007d).

The study area is located within the Sacramento River Basin. The Sacramento River's 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.

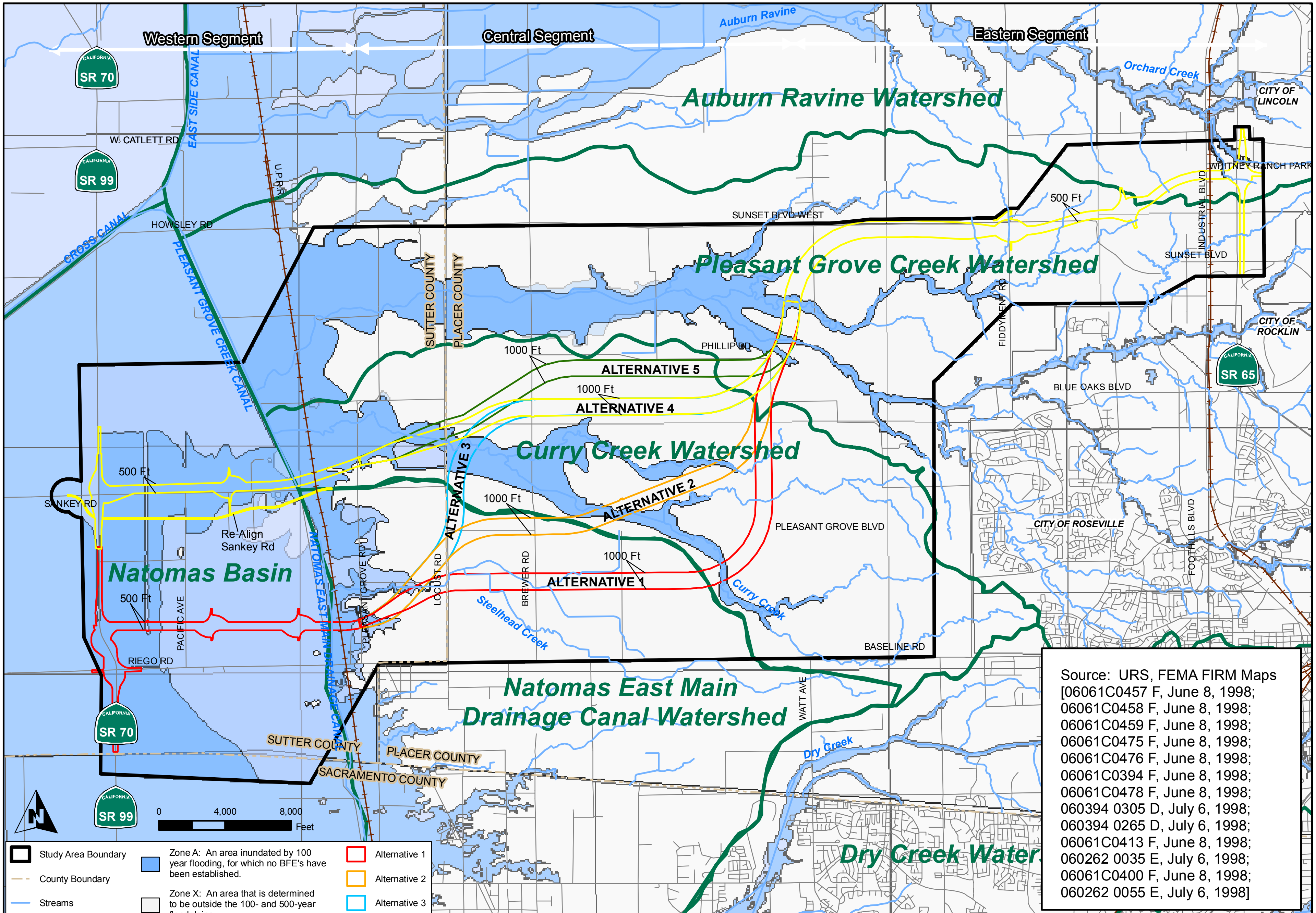
As shown on Figure 4.11-1, the majority of the study area is east of the Natomas Basin and is within the watersheds of Pleasant Grove Creek, Curry Creek, and the NEMDC (also known as Steelhead Creek). A small portion of the study area in the northeastern corner is within the Auburn Ravine watershed.

The existing topography of the study area is relatively flat. The area generally slopes from east to west, from an elevation of 165 feet above mean sea level (msl) in the northeastern corner to less than 10 feet above msl 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 (see Section 4.13, Soils, Geology, and Seismicity, for additional details of soils and geology in the study area).

4.11.2.1 Watersheds

Natomas Basin

The western portion of the study area (approximately 23 percent) is located within the Natomas Basin (see Figure 4.11-1). The Natomas Basin is defined as land in Sutter and Sacramento counties and includes 53,000 acres. 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. Sutter County, RD 1000, and the City and County of Sacramento have all established guidelines for drainage and flood control within the Natomas Basin.



Source: URS, FEMA FIRM Maps [06061C0457 F, June 8, 1998; 06061C0458 F, June 8, 1998; 06061C0459 F, June 8, 1998; 06061C0475 F, June 8, 1998; 06061C0476 F, June 8, 1998; 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]

Study Area Boundary

County Boundary

Streams

Watershed Boundaries

Zone A: An area inundated by 100 year flooding, for which no BFE's have been established.

Zone X: An area that is determined to be outside the 100- and 500-year floodplains.

Zone X500: An area inundated by 500-year flooding; an area inundated by 100-year flooding with average depths of less than 1 foot or with drainage areas less than 1 square mile; or an area protected by levees from 100-year flooding.

Alternative 1

Alternative 2

Alternative 3

Alternative 4

Alternative 5

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Watershed Boundaries

Figure 4.11-1

June 2007

URS Corporation L:\Projects\PlacerParkway2007_28066595\MXD\Current Working Documents\EIS\Chapter_4-11_Hydrology_and_Floodplains\Fig_4_11-1_Watershed_Boundaries.mxd Date: 2/15/2007 6:06:49 PM Name: akkeele0

Pleasant Grove Creek Watershed

Pleasant Grove Creek (Figure 4.11-1) discharges to the Pleasant Grove Creek Canal, which conveys flow north to the Cross Canal and ultimately to the Sacramento River near Verona (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.

There are no long-term continuous streamflow measurements for Pleasant Grove Creek. Previous studies of this creek are described in the Hydrology and Floodplain Technical Memorandum (URS, 2007d).

Curry Creek Watershed

Curry Creek (Figure 4.11-1) 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. Previous studies of this creek are described in the Hydrology and Floodplain Technical Memorandum (URS, 2007d).

Auburn Ravine Watershed

A small portion of the study area, approximately 4 square miles in the northeastern corner, is within the Auburn Ravine watershed, which covers approximately 79 square miles. This portion of the study area drains to Orchard Creek, which is a tributary to Auburn Ravine.

There are no long-term continuous streamflow measurements for Auburn Ravine or Orchard Creek. The Hydrology and Floodplain Technical Memorandum (URS, 2007d) describes previous studies and includes previous streamflow data.

Natomas East Main Drainage Canal Watershed

The 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 4.11-1).

There are no long-term continuous streamflow measurements for Steelhead Creek. Previous measurements are included in the Hydrology and Floodplain Technical Memorandum (URS, 2007d).

4.11.2.2 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 4.11-2.

The 100-year floodplains mapped by FEMA are designated as Zone A, for which no detailed studies were performed and no BFEs were determined. Although 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 (see Figure 4.11-1). 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. According to Sutter County officials, there are plans to remove the Sankey Gap from the 100-year floodplain (see Figure 4.11-2). The timing of these potential floodplain improvements to this area is not known.

4.11.3 IMPACT ANALYSIS

4.11.3.1 Methodology for Impact Evaluation

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.

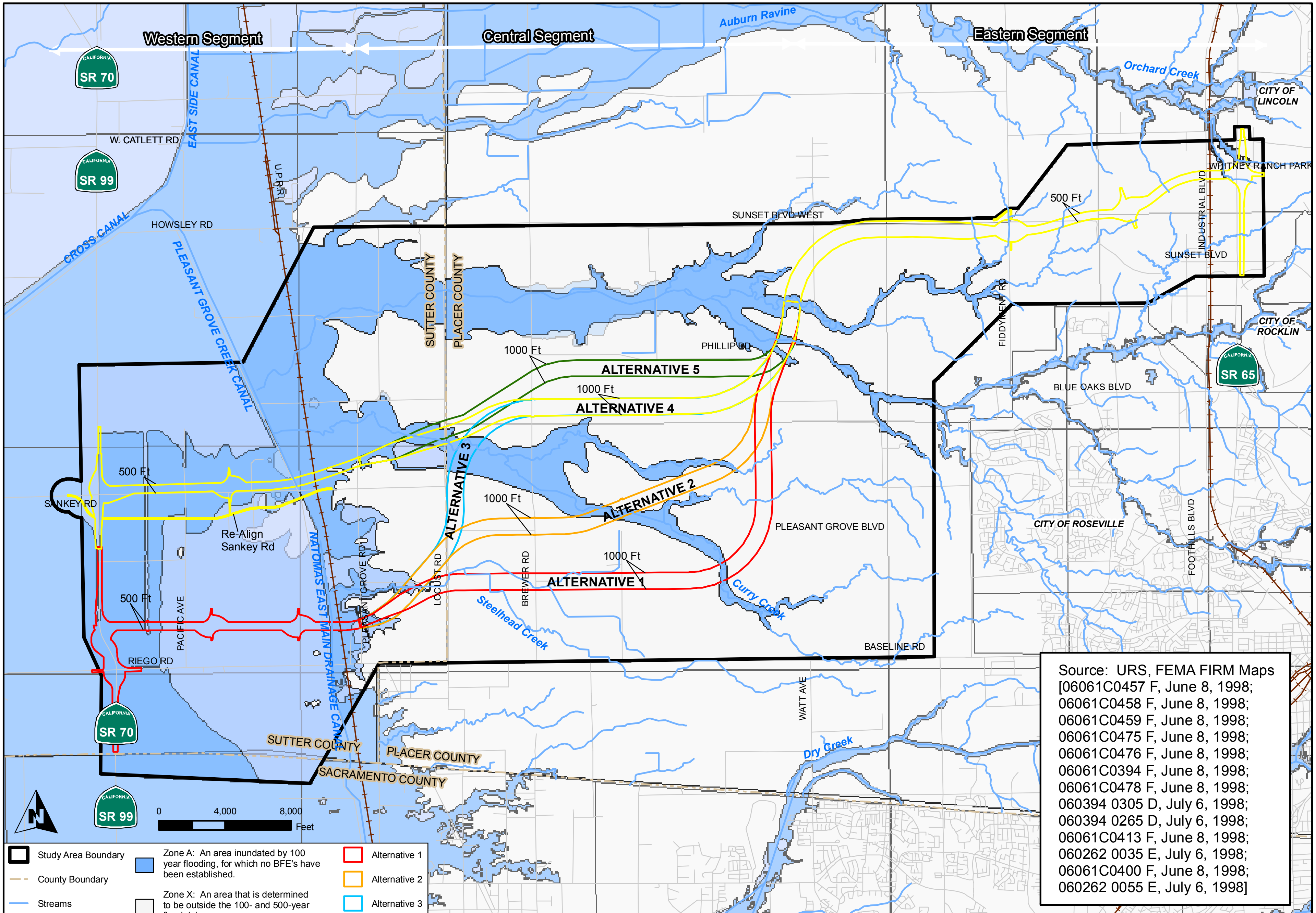
The criteria used in this analysis were developed to allow comparison of potential impacts to hydrology and floodplains associated with each of the corridor alignment alternatives. The focus of this Tier 1 analysis was to identify potential impacts that differentiate between proposed alternatives. For example, the measurement of linear feet of floodplain crossed by an alternative quantifies the magnitude of that resource in the watersheds that potentially would be 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 potentially could impact floodplain 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.

4.11.3.2 Evaluation Criteria

For the project, potential impacts to hydrology and floodplains have been evaluated on a preliminary basis using the evaluation criteria listed below, which typically are used by FHWA and the California Department of Transportation (Caltrans) in the assessment of hydrology and flood plain impacts.

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 increased temporarily. 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 indication 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 Parkway could contribute to localized and regional flooding.

Stream and Canal Crossings. Stream and canal crossings 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.



Source: URS, FEMA FIRM Maps [06061C0457 F, June 8, 1998; 06061C0458 F, June 8, 1998; 06061C0459 F, June 8, 1998; 06061C0475 F, June 8, 1998; 06061C0476 F, June 8, 1998; 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]

Study Area Boundary
County Boundary
Streams

Zone A: An area inundated by 100 year flooding, for which no BFE's have been established.

Zone X: An area that is determined to be outside the 100- and 500-year floodplains.

Zone X500: An area inundated by 500-year flooding; an area inundated by 100-year flooding with average depths of less than 1 foot or with drainage areas less than 1 square mile; or an area protected by levees from 100-year flooding.

Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

FEMA Floodplains

Figure 4.11-2

June 2007

Table 4.11-1
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 CDFG
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 on 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 BFE 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

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 Figure 2-2, Typical Cross-Section (Conceptual)). If the width of the floodplain at the planned crossing exceeds the typical span length for a bridge (assumed to be 150 feet), 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).

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 proposed 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 4.11-2.

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 Figure 2-2). Bridges would be designed such that the base of any new bridges within floodplains would be above the 100-year water surface elevation. Encroachment at these crossings from or column installation within the floodplain could compromise creek capacity for conveyance of the 100-year flow and result in an increase in the BFE and corresponding floodplain width upstream of the proposed crossing. The encroachment in the floodplain would be limited to the bridge columns. The columns would be placed to minimize potential impacts. In addition, increased flows due to increased impervious surfaces also could affect the floodplain.

Comparative data were collected and evaluated for each alternative and its segments (i.e., Western, Central and Eastern) using Geographical Information System technology. Table 4.11-2 summarizes the detailed information for each alternative and segment.

4.11.3.3 Direct Impacts

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), land for the 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.

Table 4.11-2
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 4.11-2
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 4.11-1.
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 & 5 are the same

Eastern Segment impacts are the same for all alts

Alternative 1 – the Red Alternative

Western Segment

Amount of Impervious Area. Most of the estimated amount of impervious area associated with this segment is in the Natomas Basin watershed (316 acres), with the remaining 6 acres in the NEMDC watershed. Impacts associated with impervious surface creation include increase in runoff, erosion, downstream flooding, and sedimentation.

Stream and Canal Crossings. There are no stream crossings. There is a canal crossing at the NEMDC/Steelhead Creek. 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. Impacts associated with stream and canal crossings include flow constriction and impacts on water quality during construction.

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/Steelhead Creek. The remaining 600 feet of the segment crosses the 100-year floodplain east of the NEMDC. Impacts associated with floodplain encroachment include impairment of floodplain, flood control, and water storage function.

Total Area of Designated Floodplain Crossed. As shown on Figure 4.11-2, the western portion and the easternmost 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. Impacts associated with total area floodplain include adverse effects on floodplain function and values, such as loss of water storage capacity.

Central 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/Steelhead Creek, Curry Creek, and Pleasant Grove Creek watersheds, respectively.

Stream and Canal Crossings. There are nine stream crossings within this segment: four on NEMDC/ 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 NEMDC/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. (Stream crossings for all alternatives are shown on Figure 4.11-3.)

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/Steelhead Creek and extend for approximately 1,000 feet. Impacts would be the same as discussed for the Western Segment.

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. 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. Impacts would be the same as discussed for the Western Segment.

Angle of Crossing of Floodplain. This segment crosses the NEMDC/Steelhead Creek longitudinally; i.e., the angle of the crossing is essentially zero. The floodplain for the NEMDC/Steelhead Creek has not been fully delineated; however, it may extend farther upstream than is designated on the current FEMA flood insurance rate map (FIRM). Detailed studies would need to confirm the 100-year water levels for this water body in the vicinity of the creek crossings. This segment is almost entirely within the floodplain, which is broad and shallow; therefore, the angle of crossing is not applicable to this segment. Impacts associated with the angle of floodplain crossing include adverse effects on hydraulic and floodplain functions.

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/Steelhead Creek; approximately 14 acres are within this 500-year floodplain. Impacts would be the same as discussed for the Western Segment.

Eastern Segment

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. Impacts would be the same as discussed for the Western Segment.

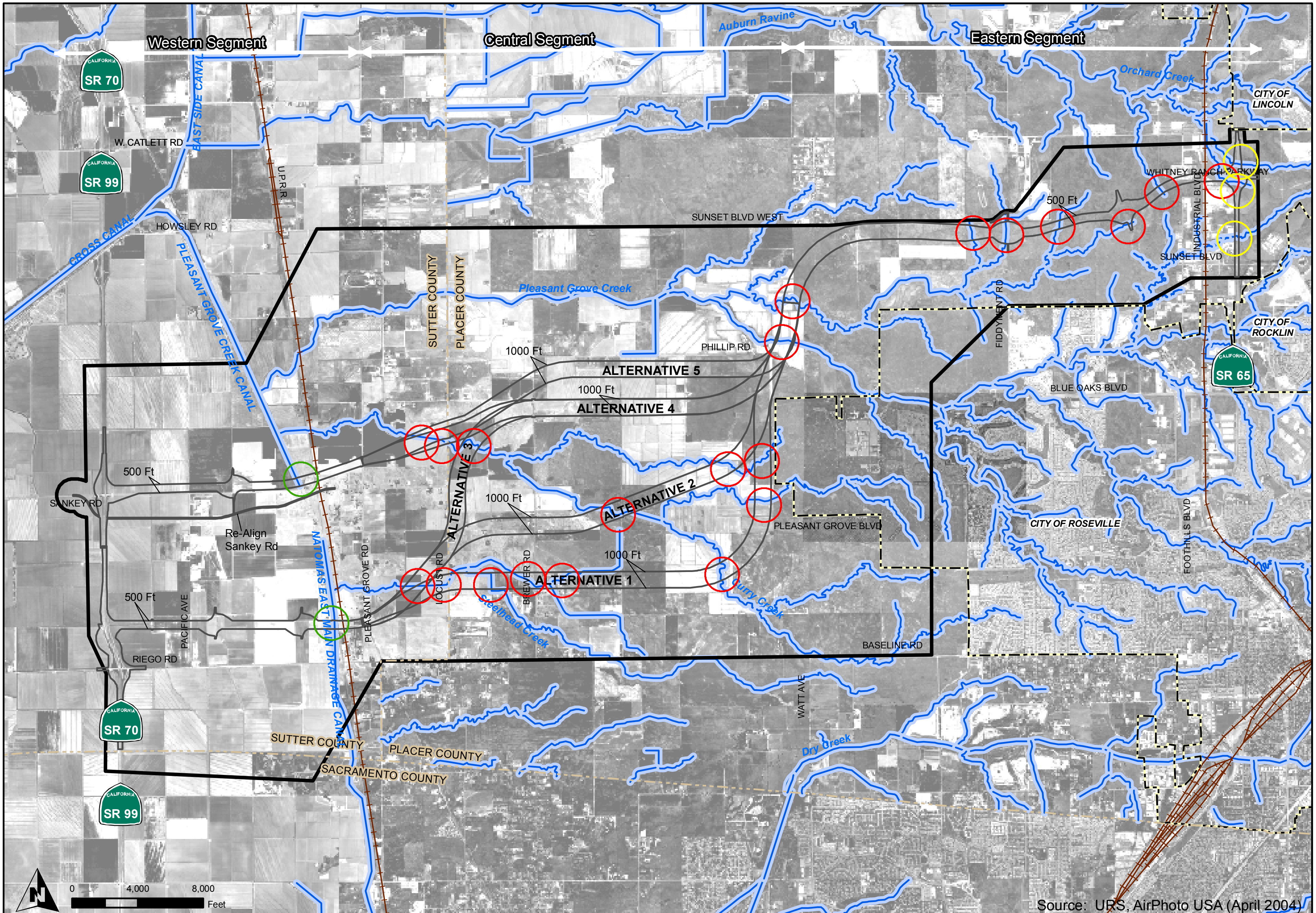
Stream and Canal Crossings. Six new stream crossings are within this segment: four on tributaries of Pleasant Grove Creek and two on tributaries of Orchard Creek. All of these crossings are in the headwaters of the creeks; therefore, culverts would be used at these crossings. In addition, this segment includes three existing stream crossings along State Route 65. These crossings would require modifications, such as extension of existing culverts, as part of adding the auxiliary lanes. Impacts would be the same as discussed for the Western Segment.

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.

Angle of Crossing of Floodplain. This segment crosses the floodplain associated with a tributary of Pleasant Grove Creek at approximately a 90-degree angle. Impacts would be the same as discussed for the Central Segment.

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. Impacts would be the same as discussed for the Western Segment.



Alternative
Study Area Boundary
County Boundary
City Boundary
Stream
New Stream Crossing
Existing Canal Crossing
Existing Stream Crossing

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Stream Crossings

Figure 4.11-3

June 2007

URS Corporation L:\Projects\PlacerParkway2007_28066595\MXD\Current Working Documents\EIS\Chapter_4-11_Hydrology_and_Floodplains\Fig_4_11-3_Stream_Crossings.mxd Date: 2/15/2007 6:36:13 PM Name: akeele0

Alternative 2 – the Orange Alternative

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.

Central Segment

The Central Segment for Alternative 2 is located in Sutter and Placer counties. It traverses three watersheds: the NEMDC/Steelhead Creek, 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/Steelhead Creek, Curry Creek, and Pleasant Grove Creek watersheds, respectively. Impacts would be the same as discussed for Alternative 1.

Stream and Canal Crossings. Five stream crossings are within this segment: one on the NEMDC/ 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. Impacts would be the same as discussed for Alternative 1.

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/Steelhead Creek and extend for approximately 1,000 feet. Impacts would be the same as discussed for Alternative 1.

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. Impacts would be the same as discussed for Alternative 1.

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. Impacts would be the same as discussed for 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 crossings are at approximately 45- and 90-degree angles. Both of the Pleasant Grove Creek floodplain crossings are at approximately 90-degree angles. Impacts would be the same as discussed for Alternative 1.

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. Impacts would be the same as discussed for Alternative 1.

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.

Alternative 3 – the Blue Alternative

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.

Central Segment

The Central Segment for Alternative 3 is located in Sutter and Placer counties. It traverses three watersheds: NEMDC/Steelhead Creek, 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/Steelhead Creek, Curry Creek, and Pleasant Grove Creek watersheds, respectively. Impacts would be the same as discussed for Alternative 1.

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. Impacts would be the same as discussed for Alternative 1.

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. Impacts would be the same as discussed for Alternative 1.

At the western edge, the Central Segment would start in the eastern edge of the 100-year floodplain associated with the NEMDC/Steelhead Creek 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. 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. Impacts would be the same as discussed for 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. Impacts would be the same as discussed for Alternative 1.

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. Impacts would be the same as discussed for Alternative 1.

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.

Alternative 4 – the Yellow Alternative

Western Segment

Amount of Impervious Area. The estimated amount of impervious area associated with this segment is 223 acres. 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 and Canal 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 would be the same as discussed for Alternative 1.

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. Impacts would be the same as discussed for Alternative 1.

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 4.11-2, 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. Impacts would be the same as discussed for Alternative 1.

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. Impacts would be the same as discussed for Alternative 1.

Stream and Canal 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. Impacts would be the same as discussed for Alternative 1.

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.

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 are at approximately 90-degree angles. Impacts would be the same as discussed for Alternative 1.

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.

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.

Alternative 5 – the Green Alternative

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.

Central 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. Impacts would be the same as discussed for Alternative 1.

Stream and Canal 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. Impacts would be the same as discussed for Alternative 1.

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. Impacts would be the same as discussed for Alternative 1.

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. Impacts would be the same as discussed for Alternative 1.

Angle of Crossing of Floodplain. This segment crosses the Curry Creek floodplain at an approximately 45-degree angle. Both of the Pleasant Grove Creek floodplain crossings are at approximately 90-degree angles. Impacts would be the same as discussed for Alternative 1.

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. Impacts would be the same as discussed for Alternative 1.

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.

Comparison of Alternatives

The five build alternatives are summarized and ranked in Table 4.11-3. The No-Build Alternative is not shown in Table 4.11-3 because no impacts would be associated with this alternative. A ranking of 1 correlates to the least number of impacts in any particular input category.

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 proposed project would be created by the proposed interchanges.

As summarized in Table 4.11-4, 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 proposed 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 proposed project would range from approximately 0.4 to 0.6 percent of the total Natomas Basin drainage area.

Table 4.11-3
Summary of Alternatives 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

1 = least number of impacts.

Table 4.11-4
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 through 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 (six lanes at 12 feet), shoulders (four lanes at 10 feet), interchanges and Sankey Road realignment.
4. While the Parkway corridor and roadway would not traverse the NEMDC/Steelhead Creek watershed for Alternatives 4 and 5, there would be a small amount of impervious area (approximately less than 5 acres) created by the re-alignment of Sankey Road.

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/Steelhead Creek watershed area. Alternatives 4 and 5 do not traverse this watershed and therefore the proposed Parkway would not contribute any impervious area in this area; however, the proposed Sankey Road re-alignment would create less than 5 acres of impervious area within the NEMDC/Steelhead Creek 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.

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.

Alternatives 1, 2, and 3 would cross the NEMDC/Steelhead Creek, and Alternatives 4 and 5 would cross the Pleasant Grove Creek Canal. Each of the proposed canal crossings probably would 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) (NEMDC/Steelhead Creek) 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 as or wider than a typical bridge span, it is very likely that columns or an embankment would be required at one or both locations.

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.

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 Segment.

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), the alternatives cross the Curry Creek floodplain in different places. As summarized in Table 4.11-5, 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 affect 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 4.11-5
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

4.11.3.4 Secondary and Indirect Impacts

No-Build Alternative

Under the No-Build Alternative land would not acquired and the Parkway would not be constructed. There would not be any secondary or indirect impacts on hydrology and floodplains.

Build Alternatives

Construction and operation of the Parkway could result in secondary and indirect impacts on hydrology and floodplains. Secondary and indirect impacts associated with anticipated growth are discussed in Section 6.1, Growth.

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 runoff 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 runoff; or
- Impacts on aquatic wildlife as a result of constriction or blockage of natural stream flow associated with stream crossings.

4.11.3.5 Cumulative Impacts

No-Build Alternative

Under the No-Build Alternative, land would not be acquired and the Parkway would not be constructed. The No-Build Alternative would not contribute to cumulative impacts on existing hydrology and floodplains within the study area.

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 a 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 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 substantial.

Mitigation strategies have been identified to reduce these impacts. 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 BMPs, 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 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.

4.11.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

4.11.4.1 Tier 1 – Avoidance/Minimization Strategies

- During the development of alternatives, in order to reduce environmental impacts, avoidance alternatives were considered (see Section 2.5.4). These alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

- During development of the Tier 1 conceptual design of the Parkway, efforts were made which directly or indirectly help to avoid impacts on hydrology and floodplains. These efforts included:

  – The use of bridges to span floodplains. 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.

  – Roadway elevation within the 100-year floodplain 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 and not impede stream and flood flows.

  – The restriction of access between Pleasant Grove Road and Fiddyment Road. This would help to minimize floodplain and hydrological impacts.

  – The location of the Parkway within a no-development buffer zone (see Section 2.5) that would preserve open space and agricultural uses adjacent to the Parkway and limit future development in the buffer zone. This would help to minimize floodplain and hydrological impacts

4.11.4.2 Tier 2 – Consultation

- PCTPA will continue to coordinate with local jurisdictions in Tier 2 to reduce the likelihood of impacts on hydrology and floodplains. Coordination will include development of specific project design details described below to minimize impacts and consultation regarding the design and location of other planned and proposed development in the study area.

4.11.4.3 Tier 2 – Mitigation Commitments

- Tier 2 design will include the following strategies to reduce potential hydrological and floodplain impacts:

  – Limitation of temporary disturbance to minimum areas necessary for construction and restoration of disturbed areas to pre-project conditions.

  – Avoidance and/or minimization of construction activities in or near creeks and floodplains, including limiting amount of fill placed in creeks.

  – Use of the least intrusive construction methods reasonably available.

  - Design of project features (e.g., culverts, drainage systems, and bridges) to avoid increasing flow velocities that may cause or contribute to downstream erosion and flooding and minimize potential for debris clogging that could cause flooding. Bridges and columns will be designed such that increase in the BFE will be less than one foot as specified by FEMA (see Section 3.1 Placer Parkway Hydrology and Floodplains Technical Report (URS, 2007d).
  - Use of structural runoff controls, such as vegetated swales.
  - Incorporation of appropriate BMPs (e.g., provided appropriate detention and use vegetation to reduce flow velocities and peak discharges).
  - Maximization of the angle of stream crossing to as close to 90° as possible.
  - Implementation of Caltrans/Sutter County/Placer County BMPs as described in the Caltrans Statewide Stormwater Management Plan.
  - Compliance with standard conditions in the form of regulatory requirements of federal, state and local agencies including Sutter County, PCFCWCD, and RD 1000 requirements for siting and design of facilities and hydrologic modification and floodplain encroachment guidance and siting/design guidance from FHWA, USCOE, Caltrans, and CDFG.

4.11.4.4 Tier 2 – Mitigation Considerations

- Tier 2 design would consider, where possible, implementation of the following strategies to reduce potential impacts on hydrology and floodplains:
  - Avoidance or minimization of stream crossings.
  - Alignment of the roadway within the corridor to decrease impervious cover by reducing the area of pavement or number of road miles.
  - Provision of sufficient setback distances in accordance with Caltrans and county requirements between the highway right-of-way and wetlands or riparian areas.
  - Location of the Parkway and bridges away from sensitive areas and establish buffer zones.
  - Mimic natural patterns as much as possible, including considering Low Impact Development whenever appropriate.
- PCTPA will evaluate the potential use of an expansion of this retention basin as part of mitigation for the Parkway. Such an expansion would require City of Roseville approval and additional environmental review.
- PCTPA will identify and address, as needed, Pleasant Grove Creek/Curry Creek Watershed Management Groups' requirements.
- Objectives from the Pleasant Grove/Curry Creek ERP may be relevant and should be considered during planning, design, and construction of Placer Parkway.

4.11.5 TIER 1 AND TIER 2 STUDIES

- Analyses that will begin in Tier 2

  – Preparation of a 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).

  – Preparation of a Location Hydraulic Study consistent with Caltrans Environmental Handbook, Volume 1, Chapter 17 requirements (Caltrans, 2005). The Location Hydraulic Study is performed to evaluate the base flood (100-year) and potential impacts from the proposed action on the base floodplain and is based on FEMA's Flood Insurance Study data and the FIRMs. This is performed to demonstrate that the proposed design would not significantly encroach on or impact floodplains.

  – Preparation of a Summary Floodplain Encroachment Report consistent with Caltrans Environmental Handbook, Volume 1, Chapter 17 requirements (Caltrans, 2005). This is performed to document the findings of the Location Hydraulic Study; that the Parkway design would not significantly encroach on or impact floodplains.

4.12 WATER QUALITY

4.12.1 REGULATORY SETTING

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require consideration of impacts on water quality. A general discussion of NEPA and CEQA requirements is provided in Chapter 1 of this Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR). In addition, other types of legislation influence water quality. Relevant laws and guidelines are described below.

4.12.1.1 Federal Regulations

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants to waters of the United States. Section 303 of the 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 of wetlands/habitat where "waters of the United States" are affected.

The U.S. Army Corps of Engineers (USCOE) regulates the placement of fill or dredged materials that affect the waters of the United States (including stream courses and jurisdictional wetlands) under the authority of Section 404 of the CWA. 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.

4.12.1.2 State Regulations

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. Porter-Cologne applies to surface waters, wetlands, and groundwater and to both point and nonpoint sources. The study area is located within Region 5 – the Central Valley River Basin RWQCB. Porter-Cologne incorporates many provisions of the federal CWA, such as delegation to the SWRCB and RWQCBs of the National Pollutant Discharge Elimination System (NPDES) permitting program.

NPDES Stormwater Discharge Permits

Surface water quality is regulated by the NPDES, which was 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 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 acres of land.

In 1999, the SWRCB issued an NPDES permit (Order No. 99-06-DWQ, CAS0000003) that regulates stormwater discharges from California Department of Transportation (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 best management practices (BMPs) used to control the discharge of pollutants to waters of the United States.

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.

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 protect the beneficial uses of water in the basin, in compliance with the CWA and Porter-Cologne.

The SWRCB regulates activities that could result in adverse impacts to groundwater quality. Policies and regulations promulgated by the SWRCB (under either its CWA authority or state-derived authority) are implemented and enforced by the Central Valley Regional Water Quality Control Board (CVRWQCB). Groundwater-related activities are governed by NPDES permits or Waste Discharge Requirements (WDRs) issued by the CVRWQCB. The CVRWQCB also oversees local implementation of underground storage tank management programs and other programs related to prevention and control of groundwater impacts.

California Lake and Streambed Alteration Program

The California Department of Fish and Game's (CDFG) 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.

4.12.1.3 General Plans and Policies

Sutter and Placer counties each have local regulations in their general plans that are relevant to water quality. The general plans contain goals and policies to minimize potential impacts associated with water quality. The counties are responsible for reviewing and approving development plans within their unincorporated areas. The Water Quality Technical Memorandum (URS, 2007i) lists the specific goals and policies.

4.12.2 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.

Water quality affects the human and the natural environment, including fisheries, wildlife, recreation, and human health. Surface water quality generally can 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. Water quality degradation from nonpoint–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, or 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 nonpoint–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 the Natomas East Main Drainage Canal (NEMDC)/Steelhead Creek, Pleasant Grove Creek, Curry Creek, and 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 toxins 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.

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 affected primarily 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).

4.12.2.1 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.

4.12.2.2 Pleasant Grove Creek Watershed

Water quality sampling was conducted to support the Pleasant Grove/Curry Creek Ecosystem Restoration Plan (ERP) (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 degrees Celsius (°C) to 25.0°C (69.4 degrees Fahrenheit [°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 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.

4.12.2.3 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 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.

4.12.2.4 Auburn Ravine Watershed

The Auburn Ravine/Coon Creek ERP contains preliminary data on heavy metals and a number of other constituents for Auburn Ravine (Placer County, 2002). 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.

4.12.2.5 Natomas East Main Drainage Canal Watershed

NEMDC/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, 2003). 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 maximum contaminant level (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.

4.12.3 IMPACT ANALYSIS

4.12.3.1 Methodology for Impact Evaluation

Potential impacts to water quality were evaluated through a quantitative comparison of the potential impact of each of the proposed alternatives on 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 alternative corridors. The focus of this Tier 1 analysis was to identify potential impacts that differentiate between proposed build alternatives. For example, the measurement of impervious area quantifies the magnitude of that resource in the watersheds that potentially would be affected by the Parkway. An alternative that has more impervious area potentially would contribute more runoff and more pollutants. Comparison of the magnitude of impervious area for each corridor alignment alternative is a quantitative approach to comparing the relative potential impact of the various alternatives.

4.12.3.2 Evaluation Criteria

Potential significant impacts to water quality have been evaluated on a preliminary basis, using the evaluation criteria listed below.

Table 4.12-1 summarizes the evaluation criteria considered in the analysis of the corridor alignment alternatives. These criteria are described below.

Amount of Impervious Area. The increase in impervious area due to implementation of the Parkway 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.

The grading involved in construction of all the build alternatives 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 potentially could 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. BMPs would be employed to ensure that such impacts on water quality are avoided.

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.

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 and 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 4.11-3 in Section 4.11, Hydrology and Floodplains.

Table 4.12-1
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 affect 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 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, whereas 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 4.12-1.

Canal Crossings. Similar to stream crossings described above, roads and bridges that cross canals may discharge pollutants into canals. Canal crossings in relation to the alternatives and segments are shown on Figure 4.11-3 in Section 4.11, Hydrology and Floodplains.

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 4.12-2 and 4.12-3 summarize the information for each alternative and segment.

4.12.3.3 Direct Impacts

The No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), land for the future construction of the Placer Parkway would not be acquired and the Parkway would not be constructed. No impacts on water quality would occur as a result of the No-Build Alternative.

Alternative 1 – the Red Alternative

Western Segment

Amount of Impervious Area. The estimated amount of impervious area associated with this segment is 322 acres (see Table 4.12-2). Most of this is in the Natomas Basin watershed (316 acres), with the remaining 6 acres in the NEMDC/Steelhead Creek watershed. The amount of impervious area includes the road, shoulder, and interchanges.

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 Section 4.11, Hydrology and Floodplains, approximately 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 4.12-1). Unless detailed mapping shows otherwise, it appears that the Parkway would not be able to avoid these areas.

Canal Crossings. This segment would cross the NEMDC/Steelhead Creek.

Central Segment

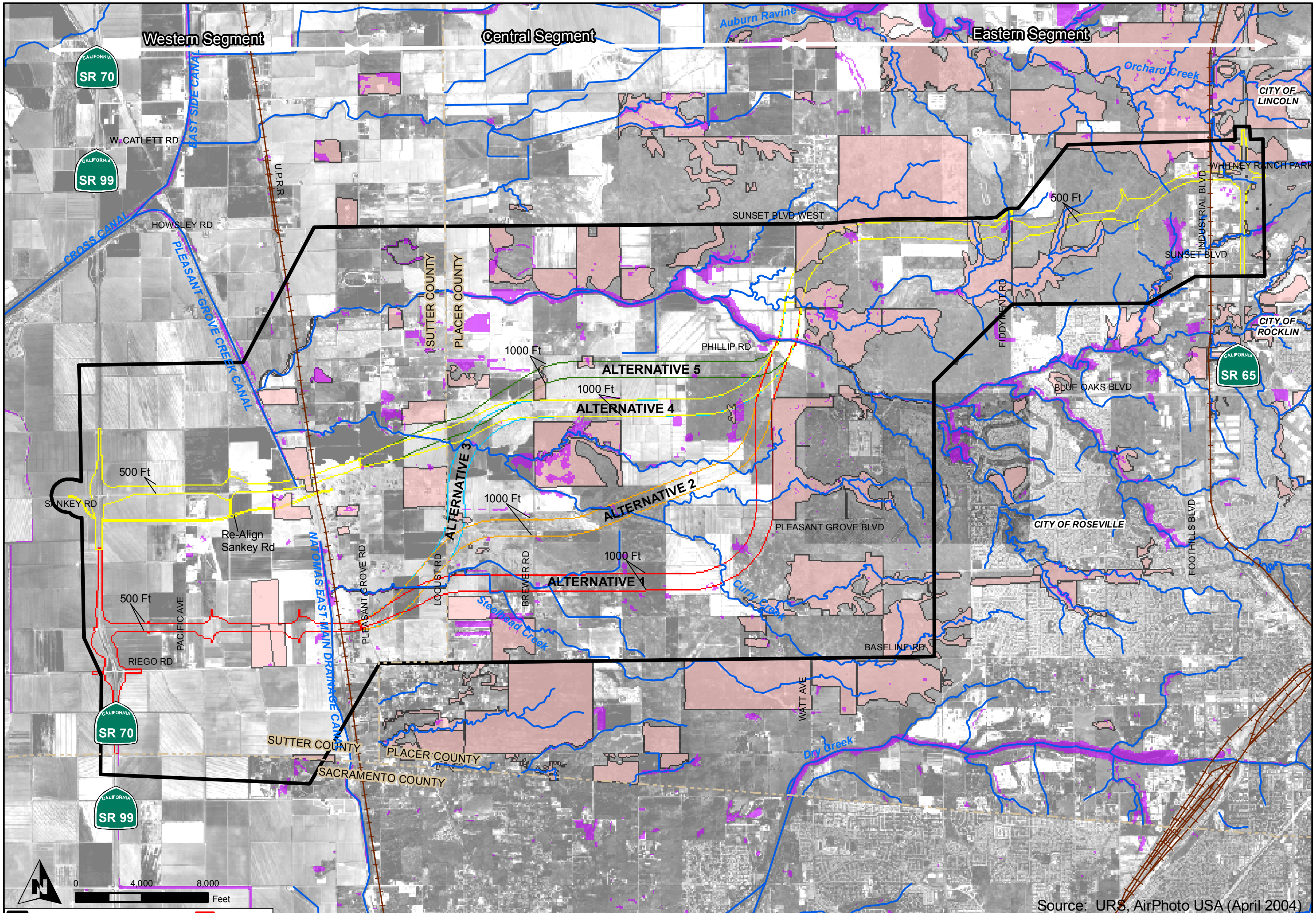
Amount of Impervious Area. The estimated amount of impervious area associated with the Central Segment is 103 acres. Approximately 51, 33, and 19 acres are within the NEMDC/Steelhead Creek, Curry Creek, and Pleasant Grove Creek watersheds, respectively.

Table 4.12-2
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	2	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	5	745	35.8	123	6	15	1
2	Western	15,300	2	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	2	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	2	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	2	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, 4.11-1, 4.11-3, and 4.12-1. Impervious area includes assumptions for paved road surface, paved shoulders, and interchanges. Road surface assumes six lanes (three in each direction).



Study Area Boundary	Alternative 1
County Boundary	Alternative 2
Streams	Alternative 3
Vernal Pool Complex	Alternative 4
Wetlands and Other Waters of the U.S.	Alternative 5

PLACER PARKWAY
CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Watershed Boundaries, Wetlands, and Vernal Pool Complexes

Figure 4.12-1

June 2007

URS Corporation L:\Projects\PlacerParkway2007_28066595\MXD\Current Working Documents\EIS\Chapter_4.12_Water_Quality_and_Storm_Water_Run-Off\Fig_4.12-1_Wetland_VernalPoolComplex.mxd Date: 2/15/2007 6:56:04 PM Name: akkeele0

Table 4.12-3
Summary of Distribution of Watersheds Crossed by Corridor Alignment Alternatives

Alternative	Total Watershed Area (sq. mi.)	Area Downstream of Crossing (sq. mi.)	Area in Corridor (sq. mi.)	Area Upstream of Crossing (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					
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. There are nine stream crossings within the Central Segment of Alternative 1: four on Steelhead Creek, three on Curry Creek, and two on Pleasant Grove Creek. This segment crosses approximately 7,000 feet of the NEMDC/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.

Amount of Watershed Downstream of Crossing. The Central Segment of Alternative 1 crosses the NEMDC/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 4.12-3).

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 4.12-3).

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 36 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 4.12-3).

Amount of Wetlands and Vernal Pool Complex Areas Crossed. The Central Segment of Alternative 1 crosses approximately 15.5 acres of wetlands and approximately 5.5 acres of vernal pool complex area (see Figure 4.12-1).

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.

Canal Crossings. The Central Segment of Alternative 1 does not cross any existing canals. Therefore, there would be no potential impacts to canals.

Eastern Segment

Amount of Impervious Area. The estimated amount of impervious area associated with the Eastern 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.

Stream Crossings. Six new stream crossings are within the Eastern Segment of Alternative 1: 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.

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. The Eastern Segment crosses approximately 16 acres of wetlands and approximately 94 acres of vernal pool complex area (see Figure 4.12-1). 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.

Canal Crossings. The Eastern Segment of Alternative 1 does not cross any existing canals. Therefore, there would be no potential impacts to canals.

Alternative 2 – the Orange Alternative

Western Segment

The Western Segment of Alternative 2 would be the same as for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

Central 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/Steelhead Creek, Curry Creek, and Pleasant Grove Creek watersheds, respectively.

Stream Crossings. Five stream crossings are within the Central Segment of Alternative 2: 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.

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 4.12-3).

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 4.12-3).

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 4.12-3).

Amount of Wetlands and Vernal Pool Complex Areas Crossed. The Central Segment of Alternative 2 crosses approximately 10.6 acres of wetlands and approximately 6.9 acres of vernal pool complex area (see Figure 4.12-1).

Canal Crossings. The Central Segment of Alternative 2 does not cross any existing canals. Therefore, there would be no potential impacts to canals.

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.

Alternative 3 – the Blue Alternative

Western Segment

The Western Segment of Alternative 3 would be the same as for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

Central 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/Steelhead Creek, Curry Creek, and Pleasant Grove Creek watersheds, respectively.

Stream Crossings. Four stream crossings are within this segment: one on the NEMDC/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.

Amount of Watershed Downstream of Crossing. The Central Segment of Alternative 3 crosses the NEMDC/Steelhead Creek in the lower portion of the watershed. Approximately 21 percent of the watershed is below these stream crossings (see Table 4.12-3).

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 4.12-3).

Within the Pleasant Grove Creek watershed, impacts are identical to the Central Segment of Alternative 2.

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 4.12-1).

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 therefore may be required to ensure that the vernal pool complex area is not affected adversely 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.

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.

Alternative 4 – the Yellow Alternative

Western Segment

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, 2007i), 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. The Western Segment of Alternative 4 crosses approximately 0.3 acre of wetlands and approximately 9 acres of vernal pool complex area (see Figure 4.12-1). Unless detailed mapping shows otherwise, it appears that the proposed roadway would not be able to avoid these areas.

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.

Central 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.

Stream Crossings. Three stream crossings are within the Central Segment of Alternative 4: 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.

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 4.12-3).

Within the Pleasant Grove Creek watershed, impacts are identical to the Central Segment of Alternative 2.

Amount of Wetlands and Vernal Pool Complex Areas Crossed. The Central Segment crosses approximately 8 acres of wetlands and approximately 3.7 acres of vernal pool complex area (see Figure 4.12-1).

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 portion of the corridor, the proposed road would be upstream of the vernal pool complex and Curry Creek.

Canal Crossings. This segment does not cross any existing canals. Therefore, there would be no potential impacts to canals.

Eastern Segment

The Eastern Segment of Alternative 4 would be the same as for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

Alternative 5 – the Green Alternative

Western Segment

The Western Segment of Alternative 5 would be the same as for Alternative 4. Therefore, the potential impacts for this segment are the same as discussed for Alternative 4.

Central 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.

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.

Amount of Watershed Downstream of Crossing. The Central Segment of Alternative 5 would cross Curry Creek in the lower portion of the watershed. Approximately 14 percent of the watershed is below these stream crossings (see Table 4.12-3).

Within the Pleasant Grove Creek watershed, impacts are identical to the Central Segment of Alternative 2.

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 4.12-1).

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 therefore may be required to ensure that the vernal pool complex area is not affected adversely 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.

Eastern Segment

The Eastern Segment of Alternative 5 would be the same as for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

Comparison of Alternatives

The five alternatives are summarized and ranked in Table 4.12-4. The No-Build Alternative is not shown on Table 4.12-4 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, and Alternative 5 would be the shortest route and have the smallest amount of impervious area. The difference between these two alternatives is 123 acres, which is approximately 20 percent. Increased

Table 4.12-4
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		Total Rank
	Acres	Rank	Acres	Rank	Number	Rank	Percentage	Rank	
1	35.8	5	123	2	6	2	63	4	32
2	30.9	2	124	3	6	2	52	3	18
3	32	4	127	4	6	2	26	2	24
4	28.3	3	107	1	5	1	14	1	12
5	28	1	124	3	5	1	14	1	9

Note:
Rankings range from least impact per category (1) to most impact per category (5).

roadway surface increases the volume of runoff; therefore, Alternative 1 would have a greater potential impact on water quality, as described above. Three of the alternatives (Alternatives 1, 2, and 3) would have six interchanges, and 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 would have the fewest stream crossings, and Alternative 1 would have the most. Alternative 1 would cross Steelhead Creek longitudinally for approximately 7,000 feet; this may require relocation of the creek or realignment of the corridor. Alternatives 4 and 5 would cross Curry Creek lower in the watershed than would Alternatives 1, 2, and 3; therefore, these alternatives would have fewer potential impacts on the water quality of Curry Creek (i.e., less of Curry Creek would be affected by the project). In addition, Alternatives 4 and 5 would avoid Steelhead Creek and thus potentially affect one less watershed and stream than would Alternatives 1, 2, and 3.

The corridor associated with Alternative 1 traverses the largest amount of wetlands; Alternative 3 would traverse 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 affect 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 adverse impacts on water quality.

4.12.3.4 Secondary and Indirect Impacts

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), land would not be acquired and the Parkway would not be constructed. There would be no secondary or indirect impacts on water quality.

Alternatives 1 Through 5

Under build alternatives 1 through 5, secondary and indirect impacts on water quality could occur as a result of direct impacts associated with the Parkway. These impacts would be associated primarily with runoff. Secondary and indirect impacts associated with anticipated growth are discussed in Section 6.1, Growth.

Although it is not possible to predict with any certainty where increased runoff will occur, it is reasonable to assume that secondary and indirect impacts associated with reduction in pervious land cover and increased runoff, either from the construction of the Parkway or as a result of growth induced by the Parkway, could affect water quality adversely. This could occur in a number of ways:

- Increased nonpoint–source water pollution of surface water bodies through increased runoff 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.

4.12.3.5 Cumulative Impacts Evaluation

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), land would not be acquired and the Parkway would not be constructed. There would not be any cumulative impacts on water quality.

Alternatives 1 Through 5

Future development projects 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, 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 on water quality in the study area.

Impacts associated with Placer Parkway would 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). Although this is a very small amount compared to the total area of the watersheds and the Parkway'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 still could be substantial.

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. 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 miles 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 minor.

In addition, Placer County's 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 predevelopment levels. Because peak runoff rates from new development would be maintained at predevelopment levels, increases 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 section into enforceable mitigation measures, Placer Parkway's incremental contribution to cumulative impacts related to water quality would not be cumulatively considerable.

Construction activities must be performed in accordance with the NPDES General Permit for Construction Activities. No cumulative impacts related to water quality are expected to occur.

4.12.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

4.12.4.1 Tier 1 – Avoidance/Minimization Strategies

- During the development of alternatives, in order to reduce environmental impacts, avoidance alternatives were also considered (see Section 2.5.4). These alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

- During development of the Tier 1 conceptual design of the Parkway, efforts were made which directly or indirectly helped to avoid impacts on water quality. These efforts included:

  - The use of bridges to span floodplains. 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 1,600-foot multi-span 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. Maximum span length would be 150 feet, with support by columns located outside of the ordinary high water level.

  - Roadway elevation within the 100-year floodplain 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 and not impede stream and flood flows.

  - The restriction of access between Pleasant Grove Road and Fiddyment Road. This would reduce the creation of impervious surfaces and associated water quality impacts.

  - The location of the Parkway within a no-development buffer zone (see Section 2.5) that would preserve open space and agricultural uses adjacent to the Parkway and limit future development in the buffer zone. This would help to minimize water quality impacts.

4.12.4.2 Tier 2 – Consultation

- PCTPA will continue to coordinate with local jurisdictions in Tier 2 to reduce the likelihood of impacts on water quality. Coordination will include development of specific project design details to minimize impacts as described below, and consultation regarding the design and location of other planned and proposed development in the study area.

4.12.4.3 Tier 2 – Mitigation Commitments

- Compliance with standard conditions in the form of regulatory requirements of federal, state and local agencies including compliance with NPDES requirements and Sutter and Placer county ordinances during Parkway construction and operations with respect to the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) and BMPs to prevent erosion, control runoff, reduce roadway and vehicle pollutants from entering watercourses; and prevention of pollution discharge off site. Additional details of these strategies are included in the Placer Parkway Water Quality Technical Memorandum. Specific strategies would include:

- Meeting Sutter and Placer county, and Reclamation District No. 1000 requirements for siting and design of facilities.
- Pursuant to the Phase II NPDES General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems, the Parkway 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. To comply with federal and state CWA requirements, local agencies may be required to adhere to Low Impact Development (LID) principles to protect water quality in the interest of fish and wildlife. LID strategies that integrate BMPs to protect water quality may also reduce runoff quality. Compliance with the applicable Caltrans and county NPDES Stormwater Permits; includes preparation and implementation of a Water Quality Management Plan.
- Compliance with the NPDES General Construction Activity Stormwater Permit; includes preparation and implementation of an SWPPP.
- Compliance with the applicable Sutter and Placer county ordinances that require Erosion and Grading Plans.

- If the Parkway 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 Parkway 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 Placer County Transportation Planning Agency (PCTPA) will file an application for the Dewatering and Low Threat Discharges to Surface Waters Permit, Order No. 5-00-175 (NPDES CAG995001).
- The Caltrans Stormwater Quality Handbook (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 and which must be considered during the planning and design process. Details of these BMPS are provided in the Placer Parkway Water Quality Technical Memorandum.

4.12.4.4 Tier 2 – Mitigation Considerations

- To offset the increased volume of runoff created by the Parkway, the Parkway proponents could contribute to an expansion of the Reason Farms Regional Retention Basin.. PCTPA will evaluate the potential use of an expansion of this retention basin as part of mitigation for the Parkway. Such an expansion would require City of Roseville approval and additional environmental review. PCTPA would also incorporate additional mitigation facilities to minimize run-off in areas outside of the Roseville Basin.

- PCTPA will identify and address, as needed, Pleasant Grove Creek/Curry Creek Watershed Management Groups' requirements. Objectives from the Pleasant Grove/ Curry Creek ERP may be relevant and should be considered during planning, design, and construction of Placer Parkway.

- Tier 2 design would consider, where possible, implementation of the following strategies to reduce potential impacts on water quality:

  – Limitation of disturbance during construction to minimize impacts, particularly near creeks, wetlands and vernal pool complexes, including limiting amount of fill placed in creeks, wetlands, or vernal pool complex areas and restoring disturbed areas to minimize erosion.

  – Locating the roadway to avoid or minimize impacts to streams and ecologically sensitive areas (e.g., wetlands and vernal pool complex areas).

  – Avoidance or minimization of stream crossings.

  – Consideration of bridges or viaducts across stream crossings where the angle of the crossing is 45 degrees or less.

  – Consideration of the use of a combination of a viaduct/conventional highway in the western part of the Parkway.

  – Alignment of the roadway within the corridor to decrease impervious cover by reducing the area of pavement or number of road miles.

  – Provision of sufficient setback distances in accordance with Caltrans and county requirements between the highway right-of-way and wetlands or riparian areas.

  – Location of the Parkway and bridges away from sensitive areas and establish buffer zones.

  – Mimic natural patterns as much as possible, including considering LID whenever appropriate.

  – Locate the alternative as low in the watershed as possible, to minimize the area affected.

  – 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).

  – Use of structural runoff controls, such as vegetated swales.

  – Obtaining floodplain easements on private land adjacent to the Parkway in order to provide potential detention/retention facilities to mitigate excessive run-off and provide flood control.

  – Identify and address, as needed, Natomas Basin Habitat Conservation Plan (NBHCP)'s Requirements, including ensuring that stormwater runoff from the Parkway should not be discharged directly into habitat areas of special-status species (see the Placer Parkway Water Quality Technical Memorandum for further details).

4.12.5 TIER 1 AND TIER 2 STUDIES

- Analyses that will begin in Tier 2
  - Preparation of a 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 because not all information will be available. The SWDR is updated as the project proceeds.
  - Preparation of a 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).
  - Selection of 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. For Tier 2, BMP selection will be preliminary because not all information will be available and will be refined as the proposed 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

4.13 SOILS, GEOLOGY, AND SEISMICITY

4.13.1 REGULATORY SETTING

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require consideration of impacts to soils, geology, and seismicity. A general discussion of NEPA and CEQA requirements is provided in Chapter 1 of this Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR). In addition, other types of legislation influence soils, geology, and seismicity.

No other federal or state regulations specifically apply to the evaluation of potential impacts on soils, geology, and seismicity. Provisions of water quality regulations that relate to soil erosion and runoff and are described in Section 4.12, Water Quality, would be relevant during construction of the Parkway.

4.13.2 AFFECTED ENVIRONMENT

4.13.2.1 Topography

The study area lies within the Great Valley geomorphic province, which is characterized by low-lying ridges and valleys separated by streams. Within the study area vicinity, slopes are gentle and dip generally to the west and southwest. There are several streams within the study area that generally drain from the northeast to the southwest.

The study area consists of series of low rises and intervening valleys in the eastern portion and relatively level floodplain topography in the western portion. The study area generally slopes and drains toward the Sacramento River, located approximately 2½ miles west of the western edge. Several manmade canals, including the Pleasant Grove Creek Canal and Natomas East Main Drainage Canal, are in the western portion of the study area.

4.13.2.2 Geology

This section presents a summary of regional and local geology in the vicinity of the study area (Figure 4.13-1).

Regional Setting

The study area is in the eastern portion of the Sacramento Valley, which 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 formed by the Great Valley geocline, which is a large, elongate, northwest-trending asymmetric structural geologic feature. The valley is bordered by the Coast Ranges to the west, the Klamath Mountains and Cascade Range to the north, and the Sierra Nevada Mountains to the east. The trough continues southward from the Sacramento-San Joaquin Delta region, where it is called the San Joaquin Valley. Both the Sacramento and San Joaquin valleys constitute the Great Valley geomorphic province of California (Hackel, 1966).

The Great Valley geocline trough has a long, stable eastern shelf that is supported by metamorphic and igneous rocks of the west-dipping Sierran slope. The basement rocks of the western edge of the structural trough are composed of Jurassic metamorphic, ultramafic, and igneous rocks of the Franciscan Formation (Hackel, 1966). The northwest-trending axis of the geocline is closer to the west side of the valley; therefore, the regional dip of the formations on the east side is less than that of the formations on the west side. The Great Valley geocline structural trough began receiving sediments in the Late Jurassic epoch (208 to 144 million years ago [Ma]). It has been filled with sediments derived from both marine and continental sources. The thickness of the valley fill ranges from thin veneers along the valley edges to greater than 40,000 feet in the central portion of the valley. These sedimentary deposits range in age from Jurassic (190 to 135 Ma) to Holocene (0 to 0.01 Ma), with the older deposits (Jurassic to Eocene [57.8 to 36.6 Ma]) constituting the marine sequence and the younger deposits (Eocene to Holocene age) constituting the continental sequence. The marine deposits were formed in offshore shallow ocean shelf and basin environments. Continental sediments were derived from mountain ranges surrounding the valley and were deposited in lacustrine, fluvial, and alluvial environments (Norris & Webb, 1990).

Local Geology

Based on the typical depth of excavation anticipated during construction of the Parkway, only geologic deposits occurring at or within approximately 10 feet of the surface are relevant to this evaluation; therefore, only those deposits are described in this section. A map of rock and general soil types associated with the study area is provided in Figure 4.13-1. Five distinct geologic units exist within the study area; they are presented below in order of youngest to oldest.

- Alluvial deposits (Holocene) are located in present-day stream channels in the eastern portion of the study area and consist of unweathered gravel, sand, and silt. Basin deposits can be found along the western edge of the study area. These deposits consist of fine-grained silt and clay.

- The Modesto Formation, which consists of an upper and a lower member, is in the northwestern portion of the study area and is composed primarily of unconsolidated gravel, sand, silt, and clay.

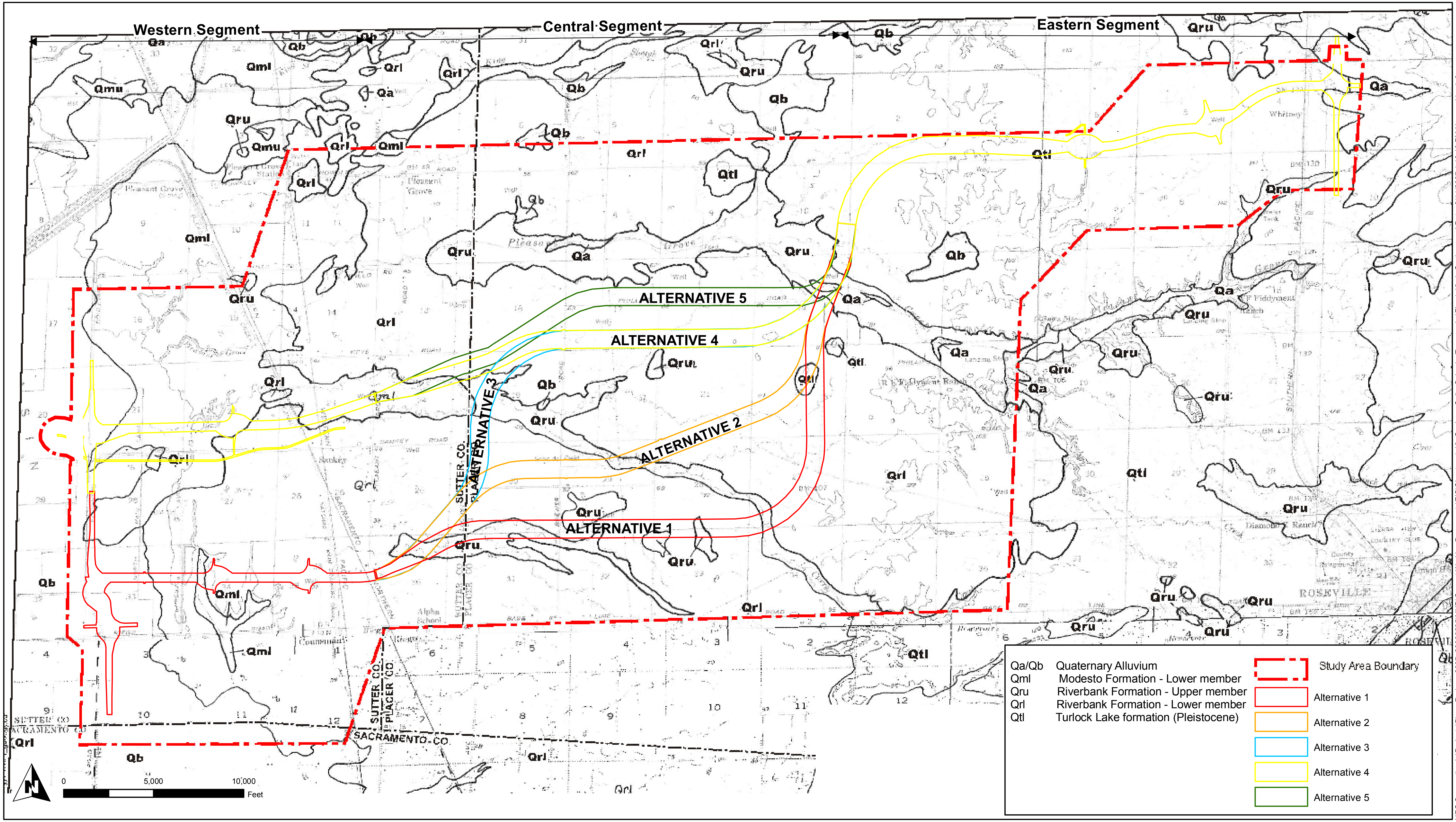
- The Riverbank Formation consists of red semiconsolidated gravel, sand, and silt. The Riverbank was deposited as alluvial terraces and fans and is separated into an upper and a lower member. The lower member, which has been mapped by Helley and others (1985), outcrops in the central portion of the study area and represents the most commonly occurring unit within it.

- The Turlock Lake Formation represents eroded alluvial fans that were derived primarily from granitic and metamorphic rocks of the Sierra Nevada Mountains to the east of the study area. Deposited approximately 600,000 to 700,000 years ago, the Turlock Lake Formation represents materials that were carried within stream channels emanating from elevated terrains and deposited on more level surfaces downgradient of steeper terrain. The Turlock Lake Formation, which has been mapped in the eastern portion of the study area, consists of deeply weathered and highly dissected arkosic (feldspar-rich) gravel, sand, and silts with minor resistant metamorphic rock fragments as well as quartz pebbles (Helley and others, 1985).

- The Mehrten Formation consists of sandstone, laminated siltstone, conglomerate, and mudflow breccia (lahar deposits) composed primarily of andesitic material and is of Miocene to Pliocene age (Wagner et al., 1981). The Mehrten Formation originated as flood-induced mudflows that descended into the valleys from local volacanic sources (Piper et al., 1939). The unit is adjacent to the easternmost portion of the study area.

4.13.2.3 Faults and Seismicity

The study area is located along the eastern edge of the Central Valley of California in a relatively seismically quiescent area between two areas of documented tectonic activity. The Coast Ranges to the west contain many active faults that are associated with the northwest-trending San Andreas Fault system (Jennings, 1994). The Coast Ranges-Sierran Block boundary zone follows the physiographic boundary between the Coast Ranges and the Great Valley.



Note: Locations of alternatives are approximate in relation to the geology boundaries due to the format of the original geology map.

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR	Geology	Figure 4.13-1 June 2007

The Foothills Fault System, located generally east of the study area, forms the boundary between the Sierra Nevada foothills and the Great Valley. The Foothills Fault Zone is characterized by a zone of deformation where there are active faults, such as the Cleveland Hills Fault, and older faults (pre-Holocene in age, or greater than 11,000 years before present), such as the Bear Mountain and Melones Fault zones (Figure 4.13-2).

Other faults, including the Willows Fault at the western edge of the study area, are considered to be inactive, with displacements occurring more than 2 million years before the present (Jennings, 1994; Harwood and Helley, 1987).

The faults within approximately 60 miles (100 kilometers) of the study area that currently are zoned as active by the California Division of Mines and Geology (CDMG) (now called the California Geological Survey [CGS]) under the Alquist-Priolo Special Studies Zone Act (Hart, 1992) are listed in Table 4.14-1. Table 4.14-1 also includes the distance to the fault (in miles and kilometers) from the site and the fault's Maximum Credible Earthquake magnitude (MCE). An active fault is one that has had surface displacement within Holocene time (during the last 11,000 years). A list of some of the faults zoned as potentially active by the CDMG (those showing Late Quaternary displacement) within about 60 miles of the study area are listed in Table 4.13-2. These faults are associated primarily with the physiographic boundaries of the Great Valley to the east and west of the site.

Table 4.13-1
Active Faults Zoned by CDMG Within 60 Miles of the Study Area

Fault Name	Distance and Direction to Site (miles [kilometers])	Maximum Credible Earthquake Magnitude (MCE)
Cleveland Hill Fault	40 [65] north-northeast	6.5
Green Valley Fault	47 [75] southwest	6.3-6.9
Dunnigan Hills Fault	22 [35] west	6.5
Hunting Creek Fault	47 [75] west	6.7

Source: Hart, 1992; Jennings, 1994; WGCEP, 1999
MCE = Maximum Credible Earthquake magnitude

Table 4.13-2
Selected Potentially Active Faults Within 60 Miles of the Study Area

Fault Name	Distance and Direction to Site (miles [kilometers])
Spenceville Fault	19 [30] northeast
Swain Ravine Fault	28 [45] north-northeast
Bear Mountain Fault Zone	22 [35] east
DeWitt Fault	19 [30] west
Melones Fault Zone	56 [90] northeast
Vaca-Kirby Hills Faults	43 [70] southwest
Willows Fault	Located at western boundary of study area

Source: Jennings, 1994
Note: Not all faults identified on Figure 4.13-2 listed, only representative structures

The CDMG has classified the south Placer County area as a low-severity earthquake zone (City of Roseville, 1992). The maximum expected intensity in a zone of this classification would range between

VI and VII on the Modified Mercalli Scale. Events of this intensity level would include cracking in weak masonry and chimneys, shaking or rustling of trees and bushes, moving of furniture, and breaking of glassware.

There are no known active faults zoned beneath or near the study area, and no active fault trace is known to pass beneath the study area. The nearest active fault to the study area is the Cleveland Hills Fault, approximately 40 miles (65 kilometers) north-northeast and the source of a magnitude 5.7 earthquake in 1975.

The MCE postulated for each of the known active faults within approximately 60 miles of the study area is also listed in Table 4.13-1. MCE magnitudes were derived empirically for each fault based on a combination of parameters known for each fault, including the potential fault rupture length and regional seismic data (Slemmons, 1982).

It is not anticipated that any provisions will be required to comply with the Alquist-Priolo Special Studies Zones Act of 1972 because the study area is not in an area that is classified as a Special Studies Zone under this Act.

4.13.2.4 Landslides

Landslides occur as a result of the downward movement of masses of loosened soil and/or rock down a hillside or moderately steep slope. Fundamentally, landslides are the result of a hillslope material's loss of strength or cohesion due to an increase in pore water pressures and gravity. The high variability of landslides is due in part to many factors, including but not limited to steepness of slope, type of material, water content of slope soils, amount of vegetation, areas subject or prone to erosion due to man-made activities, and earthquake or strong ground motions. Landslide categories include fast-moving debris flows to slow-moving soil creep.

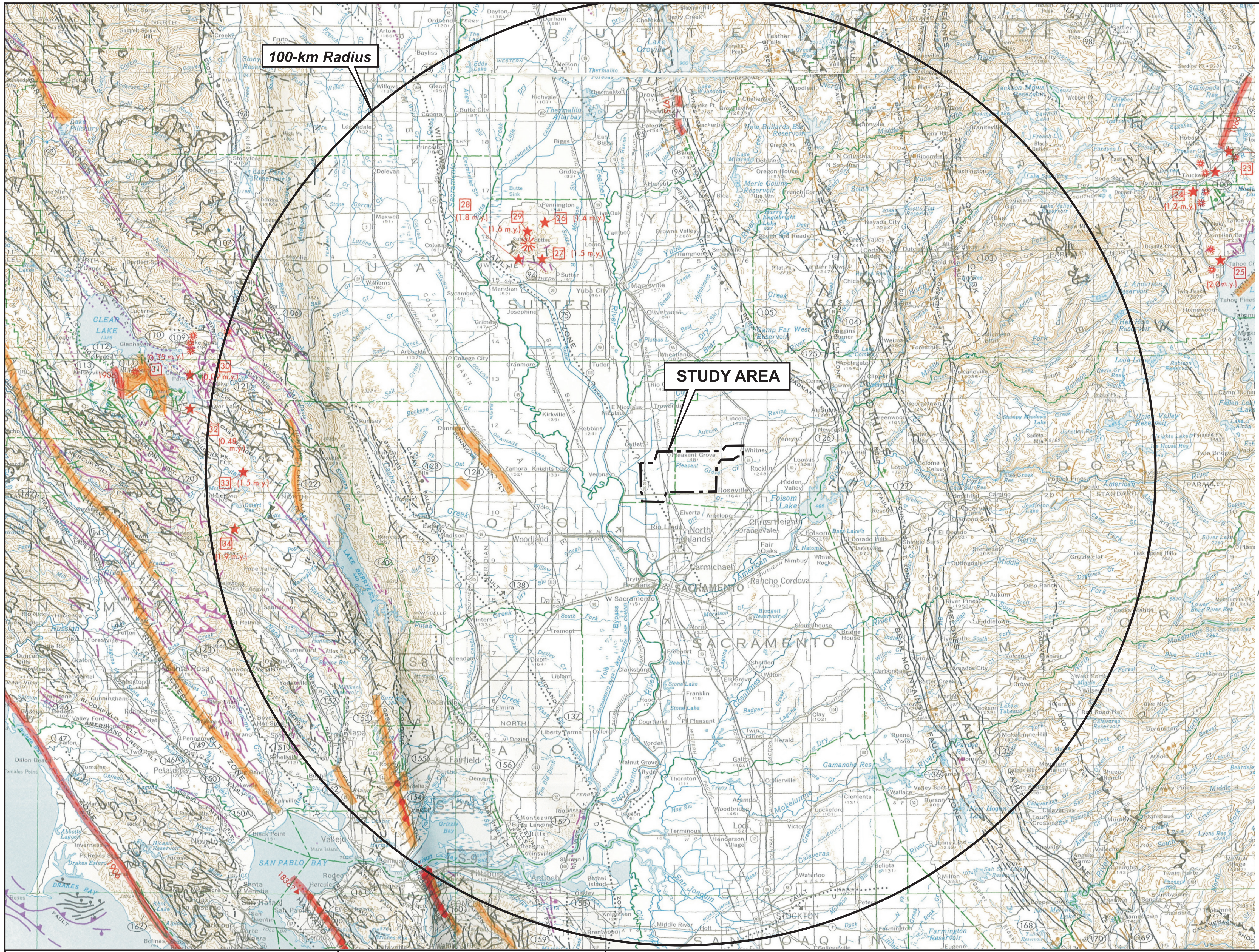
Based on the presence of relatively level topography across the five corridor alignment alternatives and relatively low annual precipitation, the overall risk for landslides in the study area is low. However, the northeastern portion of the study area in the vicinity of the Alternative 4 alignment includes areas adjacent to moderately sloping terrain where the risk of landslides may be considered moderate. In addition, areas adjacent to stream channels that the corridor alignment alternatives pass over or through could have a greater risk for landsliding.

4.13.2.5 Liquefaction

Soil liquefaction is a process by which the shear strength of granular saturated soils is reduced due to an increase in pore pressure during human-induced events or seismic shaking. Requisite conditions for liquefaction to occur include saturated granular soils with a loose-packed grain structure capable of progressive rearrangement of grains during repeated cycles of seismic loading. Conditions susceptible to seismic liquefaction are not expected within the study area.

4.13.2.6 Mineral Resources

Information on the mineral resource potential within the study area was obtained from the CDMG, Mineral Land Classification of Placer County (OFR 95-10, 1995). In accordance with California's Surface Mining and Reclamation Act of 1975, this document classifies the land in Placer County according to "the presence, absence, or likely occurrence of significant mineral deposits in areas of the county subject to either urban expansion or other irreversible land uses incompatible with mining."



Source:
Jenning, C.W., Fault Activity Map of California and Adjacent Areas, 1994, California Department of Conservation, Division of Mines and Geology

LEGEND

Study Area Boundary

Radius

FAULT CLASSIFICATION COLOR CODE (Indicating Recency of Movement)

Fault along which historic (last 200 years) displacement has occurred and is associated with one or more of the following:

(A) a recorded earthquake with surface rupture.

(B) fault creep slippage - slow ground displacement usually without accompanying earthquakes.

(C) displaced survey lines.

Pink Band added to emphasize location or historic fault displacement.

Holocene fault displacement (during past 10,000 years) without historic record.

Pale orange band added to emphasize location of Holocene displacement.

Late Quaternary fault displacement (during past 700,000 years).

Quaternary fault (age undifferentiated).

Late Cenozoic faults with the Sierra Nevada including but not restricted to, the Foothills fault system.

Pre-Quaternary fault (older than 1.6 million years) or fault without recognized Quaternary displacement.

S-25 Fault segment associated with a significant linear trend of accurately located earthquake epicenters (magnitude 0.2 or greater).

Cinder cone and other types of volcanoes. Most were active in Pleistocene time, some are Holocene, a few are historic.

(0.5 m.y.) = Age of volcanic flow or eruption in million years (m.y.)

N

0 12 24
Approximate Scale in Miles

0 30 60
Approximate Scale in Kilometers

6/19/07 vsa/hk...T:\Placer Parkway 2007\EIS-EIR 2007\June 2007\4.13-2_faults.cdr

PLACER PARKWAY
CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Regional Faults

Figure 4.13-2

June 2007

The study area encompasses portions of western Sutter County and eastern Placer County, and includes a very small portion of Sacramento County. The majority of the study area lies within Placer County. Land in Placer County has been classified as Mineral Resource Zone 1 (MRZ-1), Mineral Resource Zone 2a (MRZ-2a), Mineral Resource Zone 2b (MRZ-2b), Mineral Resource Zone 3a (MRZ-3a), Mineral Resource Zone 3b (MRZ-3b), and Mineral Resource Zone 4 (MRZ-4). Mineral Resource Zones are defined as follows:

- MRZ-1 = Areas where available geologic information indicates there is little likelihood for the presence of significant mineral resources.
- MRZ-2a = Areas underlain by mineral deposits where geologic data indicate that significant measured or indicated resources are present.
- MRZ-2b = Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present.
- MRZ-3a = Areas containing known mineral occurrences of undetermined mineral resource significance.
- MRZ-3b = Areas containing inferred mineral resources of undetermined mineral resource significance.
- MRZ-4 = Areas of no known mineral occurrences where geologic information does not rule out either the presence or the absence of significant mineral resources.

The portion of the study area within Placer County is classified as MRZ-4, which is an area with no known mineral occurrences. MRZ-4 classification implies a lack of knowledge regarding mineral resources; however, there is little likelihood of the occurrence of mineral resources. OFR 95-10 identifies one sand and gravel pit (Collet Pit) as MRZ-2a, indicating that significant resources are expected to be present based on geologic data. The Collet Pit was located approximately 2½ miles to the southeast of the study area but has ceased operation and is no longer used for aggregate production. No other valuable deposits of mineral commodities are known to exist within 3 miles of the study area.

The portion of the study area within Sacramento County is classified as MRZ-1, which is an area where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence. No similar information is currently available for the Sutter County portion of the study area.

4.13.2.7 Seiches and Tsunamis

A seiche refers to the movement of a body of water such as a bay, lake, river, or reservoir due to periodic oscillation. Seiches commonly occur as a result of intense seismic shaking or catastrophic landslides that displace large amounts of water in a short period of time. The period of oscillation varies and depends on the size of the water body. The period of a seiche can be last for minutes to several hours and depends on the magnitude of oscillations. Seiches have been recorded to cause substantial damage to nearby structures, including dams, shoreline facilities, and levees or embankments. Because ground shaking is considered to be low and large bodies of water are not located close to the study area, the risk of damage from seiches is low.

A tsunami is a large ocean wave that develops as a result of the displacement of large amounts of water over a short period of time. Tsunamis are commonly associated with submarine faults, which displace water in the ocean over long distances. The effect of a tsunami on a shoreline is associated closely with the bathymetric properties of an ocean basin. Tsunamis can also occur as a result of submarine as well as land-based landslides that displace large volumes of water over a short period of time. Because the study area is located primarily within alluvial valleys, is adjacent to granitic hills and mountains, and is a considerable distance from a large water body, the potential for a tsunami is nonexistent.

4.13.2.8 Subsidence

Subsidence is the result of the sinking of a ground surface by which material is displaced vertically downward. There is little to no horizontal component to ground subsidence. Subsidence occurs as a result of many factors, including but not limited to, groundwater or gas and oil removal, the removal or breakage of subsurface supports such as pipes, voids beneath the upper soils such as caves, and/or shaking as a result of earthquakes.

Subsidence, which is usually a direct result of groundwater withdrawal or oil and gas withdrawal, is common in several areas of California, including parts of the Sacramento Valley. Subsidence is a greater hazard in areas where the subsurface geology includes compressible layers of silt and clay.

In the Sacramento Valley, preliminary studies suggest that much smaller levels of subsidence, 0.5 to 2 feet, may have occurred, primarily due to water extraction (Sutter County General Plan, 1996).

The amount of subsidence caused by groundwater withdrawal depends on several factors, including (1) the extent of water level decline, (2) the thickness of the water-bearing strata tapped, (3) the thickness and compressibility of silt-clay layers within the vertical sections where groundwater withdrawal is occurring, (4) the duration of maintained groundwater level decline, (5) the number and magnitude of water withdrawals in a given area, and (6) the general geology and geologic structure of the groundwater basin (Sutter County General Plan, 1996).

Subsidence can have substantial damaging effects such as damage to infrastructure, including roads, bridges, and railway lines. Slight changes in grade due to subsidence can have a significant impact on these types of structures; however, the grade changes tend to occur over relatively large areas.

It is anticipated that subsidence would not be expected across the majority of the study area; however, some soils along its western edge include layers of silt and clay.

4.13.2.9 Expansive Soils

Figure 4.4-2 depicts soil types in the study area. Certain soils exhibit the capacity to shrink and swell depending on moisture content. This can adversely affect engineered structures, including roadways, if not handled properly. Soils susceptible to expansion are fine-grained clays with substantial montmorillonite content. Granular soils (for example, sands and gravels) do not exhibit expansive characteristics. No soils within the Placer County portion of the study area are known to be expansive. Soils showing a high susceptibility to expansion, including those of the Clear Lake-Capay series, are restricted to the western portion of the study area in Sutter and Sacramento counties in the vicinity of SR 70/99 and near the Sutter County/Placer County line.

4.13.3 IMPACT ANALYSIS

4.13.3.1 Methodology for Impact Evaluation

Potential impacts related to soils, geology, and seismicity were evaluated by comparing possible impacts on each of the proposed corridor alignment alternatives in order to distinguish between alternatives as part of the Tier 1 analysis.

4.13.3.2 Evaluation Criteria

Potential adverse impacts associated with soils, geology, and seismicity have been evaluated by using the following criteria:

- Substantial alteration of existing topographic features of the study area;
- Potential constraints to development as a result of seismic hazards within the study area;
- Increased erosion during construction activities and after completion of the proposed project;
- Loss of availability of important mineral resources; and
- Potential constraints to development as a result of soils and geologic conditions in the area of the proposed project.

4.13.3.3 Direct Impacts

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), land would not be acquired and the Parkway would not be constructed. No changes to soil or geologic conditions would occur under the No-Build Alternative and there would not be any effects from or on seismic conditions.

Alternatives 1 Through 5

There would not be any adverse impacts on soils or geology as a result of any of the build alternatives. Likewise, no geologic or seismic factors are judged to represent hazards to any of the build alternatives. There is no differentiation between any of the build alternatives with respect to geologic or seismic conditions. There are expansive soils present in the western portion of the Western Segment of the study area, but because these soils are common to all build alternatives in this area and to Alternatives 4 and 5 in the extreme western portion of the Central Segment, potential soil expansivity is not judged to be a distinguishing factor.

4.13.3.4 Secondary and Indirect Impacts

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), land would not be acquired and the Parkway would not be constructed. There would not be any secondary or indirect impacts on the existing soil, geologic, or seismic conditions within the study area.

Alternatives 1 Through 5

As there are not expected to be any impacts on soils or geology associated with any of the build alternatives (other than potential water quality impacts that could arise from soil erosion, which are discussed in Section 4.12), there would not be any secondary and indirect impacts on soils or geology or associated with seismic conditions.

4.13.3.5 Cumulative Impacts Evaluation

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), land would not be acquired and the Parkway would not be constructed. The Parkway would not contribute to cumulative impacts on existing soils geology or seismic conditions within the study area.

Alternatives 1 Through 5

As there are not expected to be any impacts on soils or geology associated with any of the build alternatives (other than potential water quality impacts that could arise from soil erosion, which are discussed in Section 4.12), there would not be any cumulative impacts on soils or geology, or associated with seismic conditions.

4.13.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

No potential impacts associated with soils, geology, or seismicity have been identified in this Tier 1 analysis of the Parkway. Potential impacts associated with erosion and sedimentation during construction of the Parkway are discussed in Section 4.12, Water Quality.

4.13.5 TIER 1 AND 2 STUDIES

- Analyses completed in Tier 1
  - Soils, geology and seismicity.
  - Mineral resources.

4.14 BIOLOGICAL RESOURCES

4.14.1 REGULATORY SETTING

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (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 Environmental Impact Statement/ Environmental Impact Report (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).

4.14.1.1 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 (CWA), and the Migratory Bird Treaty Act.

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.

Sections 404 and 401 of the Federal Clean Water Act

The U.S. Army Corps of Engineers (USCOE) and the U.S. Environmental Protection Agency (U.S. EPA) regulate the discharge of dredged and fill material into “waters of the United States” (waters) under Section 404 of the CWA. USCOE jurisdiction over nontidal waters encompasses navigable waters and their tributaries and wetlands adjacent to these waters that will be affected directly or indirectly by a proposed project.

Section 401 of the CWA 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.

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.

4.14.1.2 State Regulations

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 typically are 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.

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.

Native Plant Protection Act

The Native Plant Protection Act of 1977 designates rare and endangered plants and provides specific protection measures for identified populations.

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 CWA. 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.

4.14.1.3 General Plans and Policies

Sutter County General Plan

The Sutter County General Plan, which was adopted in 1996, contains policies to preserve open space and 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.

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 and 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.

4.14.1.4 Placer County Conservation Plan

The Placer County Conservation Plan (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 ESA and the 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. The South Placer Regional Transportation Agency (SPRTA) has indicated its intention to become a participating agency with the Parkway as a covered activity.

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.

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 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.

4.14.2 AFFECTED ENVIRONMENT

4.14.2.1 Physical Conditions

The study area is 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, Project Alternatives). Large commercial developments generally are 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 located partly within the former floodplain of the Sacramento River. The low floodplain areas are predominantly in rice cultivation. Rice fields typically are inundated by irrigation water during the growing season and by rainwater during the winter as well as from upstream runoff from urban development.

4.14.2.2 Habitats and Natural Communities

In general, the eastern side of the Western Segment and the entire Central Segment of the study area are composed of a patchwork of seasonally flooded habitat and drier annual grasslands/agricultural areas, which are 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 consists almost entirely 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 4.14-1. Other important habitat types, such as freshwater marsh wetlands and vernal pool complexes, are spread throughout the study area. Seasonal and perennial streams and associated riparian habitats also occur in the study area. Detailed definitions and descriptions of each habitat type, plus known conservation areas, are provided in the Natural Environment Study for this Tier 1 EIS/EIR (URS, 2007f).

4.14.2.3 Regional Species and Habitats of Concern

Table 4.14-1 shows species that are listed as threatened or endangered under the federal or California endangered species act, California Fully Protected species, or candidates for listing and are described in detail in the Natural Environment Study. Table 4.14-2 lists threatened or endangered species with a low potential to occur in the study area that consequently are not considered in this Tier 1 EIS/EIR. Table 4.14-3 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. Each of these species is also described in more detail in the Natural Environment Study.

Regional species and habitats of concern were identified on the basis of 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 Sutter, Placer, or Sacramento County (USFWS, 2006; Appendix F), and a review of the California Native Plant Society's Electronic Inventory (CNPS, 2006).

4.14.3 IMPACT ANALYSIS

4.14.3.1 Methodology for Impact Evaluation

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.

4.14.3.2 Evaluation Criteria

For the proposed project, potential impacts to biology have been evaluated on a preliminary basis by using the evaluation criteria listed below.

The following thresholds are used to evaluate potential impacts of the proposed project on biological resources:

- A substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG, U.S. Fish and Wildlife Service (USFWS), or National Marine Fisheries Service (NMFS);

- A substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFG, NMFS, or USFWS;

Table 4.14-1
Listed and Proposed Threatened/Endangered Species Potentially Occurring or Known to Occur in the Study Area

Scientific Name	Common Name
Branchinecta conservatio	Conservancy fairy shrimp (FE)
Branchinecta lynchi	vernal pool fairy shrimp (FT)
Lepidurus packardi	vernal pool tadpole shrimp (FE)
Desmocerus californicus dimorphus	Valley elderberry longhorn beetle (FT)
Buteo swainsoni	Swainson's hawk (ST)
Elanus leucurus	white-tailed kite (SFP)
Grus canadensis tabida	greater sandhill crane (ST, SFP)
Haliaeetus leucocephalus	Bald eagle (FPD, SE, SFP)
Riparia riparia	Bank swallow (ST)
Thamnophis gigas	giant garter snake (FT, ST, SP)
Gratiola heterosepala	Boggs Lake hedge hyssop (SE)
Oncorhynchus tshawytscha	Central Valley fall-run Chinook salmon (FC)
Oncorhynchus mykiss	Central valley steelhead (FT)

Notes:

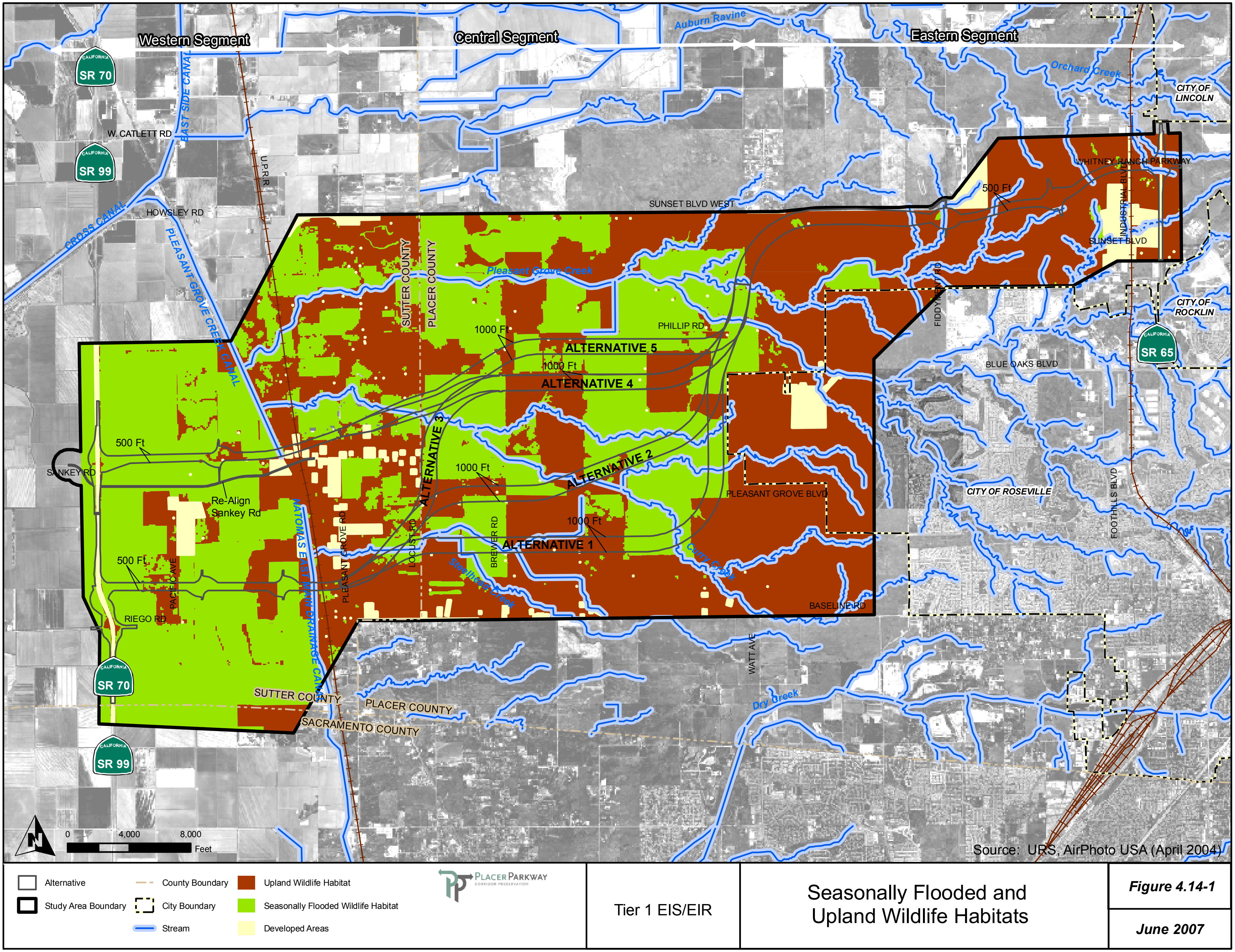
FC – listed as a "candidate" species under the federal ESA
FE – listed as "endangered" under the federal ESA
FPD – proposed for delisting under the federal ESA
FT – listed as "threatened" under the federal ESA
SE – listed as "endangered" under the California ESA
SFP – listed as "fully protected" under the California Fish and Game Code
SP – listed as "protected" under the California Fish and Game Code
ST – listed as "threatened" under the California ESA

Table 4.14-2
Listed and Proposed Threatened/Endangered Species with Low Potential to Occur in the Study Area

Scientific Name	Common Name
Aquila chrysaetos	golden eagle (SSC, SFP)
Coccyzus americanus occidentalis	Western yellow-billed cuckoo (SE)
Laterallus jamaicensis coturniculus	California black rail (ST, SFP)
Hypomesus transpacificus	Delta smelt (FT, ST)
Oncorhynchus tshawytscha	Central valley spring-run Chinook (FT, ST)
Oncorhynchus tshawytscha	Central valley winter-run Chinook (FE, SE)
Ambystoma californiense	California tiger salamander, central population (FT, SSC)
Rana aurora draytonii	California red-legged frog (FT, SSC)

Notes:

FE – listed as "endangered" under the federal ESA
FT – listed as "threatened" under the federal ESA
SE – listed as "endangered" under the California ESA
SFP – listed as "fully protected" under the California Fish and Game Code
SSC – California Department of Fish and Game designated species of special concern
ST – listed as "threatened" under the California ESA



Tier 1 EIS/EIR

Seasonally Flooded and Upland Wildlife Habitats

Figure 4.14-1

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Table 4.14-3
Other Species of Concern with Potential to Occur in the Project Study Area

Scientific Name	Common Name
Invertebrates	
Linderiella occidentalis	California linderiella (FSC)
Birds	
Agelaius tricolor	tricolor blackbird (FSC, SSC)
Asio flammeus	short-eared owl (SSC)
Athene cunicularia hypugea	western burrowing owl (FSC, SSC)
Baeolophus inornatus	oak titmouse (FSC)
Buteo regalis	ferruginous hawk (FSC, SSC)
Carduelis lawrencei	Lawrence's goldfinch (FSC)
Charadrius montanus	mountain plover (FSC, SSC)
Circus cyaneus	northern harrier (SSC)
Dendroica petechia	yellow warbler (SSC)
Eremophila alpestris actia	horned lark (SSC)
Falco columbarius	Merlin (SSC)
Icteria virens	yellow-breasted chat (SSC)
Lanius ludovicianus	loggerhead shrike (FSC, SSC)
Melanerpes lewis	Lewis' woodpecker (FSC)
Numenius americanus	long-billed curlew (FSC, SSC)
Picoides nuttallii	Nuttall's woodpecker (FSC)
Plegadis chihi	white-faced ibis (FSC, SSC)
Progne subis	purple martin (SSC)
Sphyrapicus ruber	red-breasted sapsucker (FSC)
Toxostoma redivivum	California thrasher (FSC)
Reptiles	
Emys marmorata[*]	northwestern pond turtle (FSC, SSC, SP)
Phrynosoma coronatum frontale	California horned lizard (FSC, SSC, SP)
Amphibians	
Scaphiopus hammondii	western spadefoot (FSC, SSC)
Mammals	
Myotis ciliolabrum	small-footed myotis bat (FSC)
Myotis yumanensis	Yuma myotis bat (FSC)
Corynorhinus townsendii townsendii	Pacific western big-eared bat (FSC, SSC)
Eumops perotis californicus	greater western mastiff bat (FSC)

Table 4.14-3
Other Species of Concern with Potential to Occur in the Project Study Area
(Continued)

Scientific Name	Common Name
Fish	
Oncorhynchus tshawytscha	fall-run Chinook salmon (FC, SSC)
Pogonichthys macrolepidotus	Sacramento splittail (FD, SSC)
Plants	
Downingia pusilla	dwarf downingia (CNPS 2.2)
Legenere limosa	legenere (CNPS 1B.1)
Balsamorhiza macrolepis var. *macrolepis*	big scale balsamroot (CNPS 1B.2)
Cordylanthus mollis ssp. *hispidus*	Hispid bird's-beak (CNPS 1B.1)
Juncus leiospermus var. *ahartii*	Ahart's dwarf rush (CNPS 1B.2)
Sagittaria sanfordii	Sanford's arrowhead (CNPS 1B.2)
Juncus leiospermus var. *leiospermus*	Red Bluff dwarf rush (CNPS 1B.1)

Notes:

*Formerly *Clemmys marmorata marmorata*, also called *Actinemys marmorata marmorata*.

CNPS 1B.1 – Plants endemic to California that are identified by the California Native Plant Society as "seriously endangered in California"
CNPS 1B.2 – Plants endemic to California that are identified by the California Native Plant Society as "fairly endangered in California"
CNPS 2.2 – Plants endemic to California and elsewhere that are identified by the California Native Plant Society as "fairly endangered in California"
FC – listed as a "candidate" species under the federal ESA
FD – delisted from the federal ESA
FSC – species identified by the USFWS as species of concern
SP – listed as "protected" under the California Fish and Game Code
SSC – California Department of Fish and Game designated species of special concern

- A substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including but not limited to marshes, vernal pools, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- Substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impeding the use of native wildlife nursery sites.

The discussion of potential project-related impacts is presented by each alternative below and organized as follows:

- Natural Communities of Special Concern
- Endangered, Threatened, Candidate, and Fully Protected Species
- Conservation Lands.

4.14.3.3 Direct Impacts

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 4.14-2. Vernal pool complexes are also shown on Figure 4.14-2. Potential habitat for the Valley elderberry longhorn beetle, Swainson's hawk, and giant garter snake are shown on Figures 4.14-3, 4.14-4, and 4.14-5, respectively. Potential stream crossings are shown on Figure 4.11-3 in Section 4.11, Hydrology and Floodplains.

Although potential impacts are quantified below, the results of the environmental screening of Project Study Report (PSR) alternatives have identified areas where slight modifications to the corridor alignments would reduce potential impacts to biological resources significantly. Future (Tier 2) efforts to site the alignment within the selected corridor also will place a high priority on avoiding impacts to sensitive biological resources (see Section 4.14.5).

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), land for the Parkway would not be acquired and the Parkway would not be constructed. No impacts to natural communities of special concern or to endangered, threatened, candidate, or fully protected species would occur as a result of the No-Build Alternative.

Alternative 1 – the Red Alternative

Western Segment

Natural Communities of Special Concern

Wetland Resources: In the Western Segment, wetlands (excluding vernal pool complexes) are associated primarily with areas around the Pleasant Grove Creek Canal and the Natomas East Main Drainage Canal (NEMDC)/Steelhead Creek. Alternative 1 in the Western Segment has 0.3 acre of wetlands within the corridor alignment. Impacts to wetlands 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 consists 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.

Endangered, Threatened, Candidate, and Fully Protected Species

Potential Giant Garter Snake Habitat: Much of the Western Segment is composed 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 could impact 85 acres of foraging habitat for this species 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.

Potential Stream Crossings: Although this segment would not cross any streams, it would cross the NEMDC/Steelhead Creek. Impacts as a result of the bridge crossing at the NEMDC/Steelhead Creek would include loss of stream bottom and/or riparian habitat where columns are placed, and shading of a 150-foot-wide section of the canal.

Conservation Lands

No conservation areas are present within the Western Segment of Alternative 1.

Central Segment

Natural Communities of Special Concern

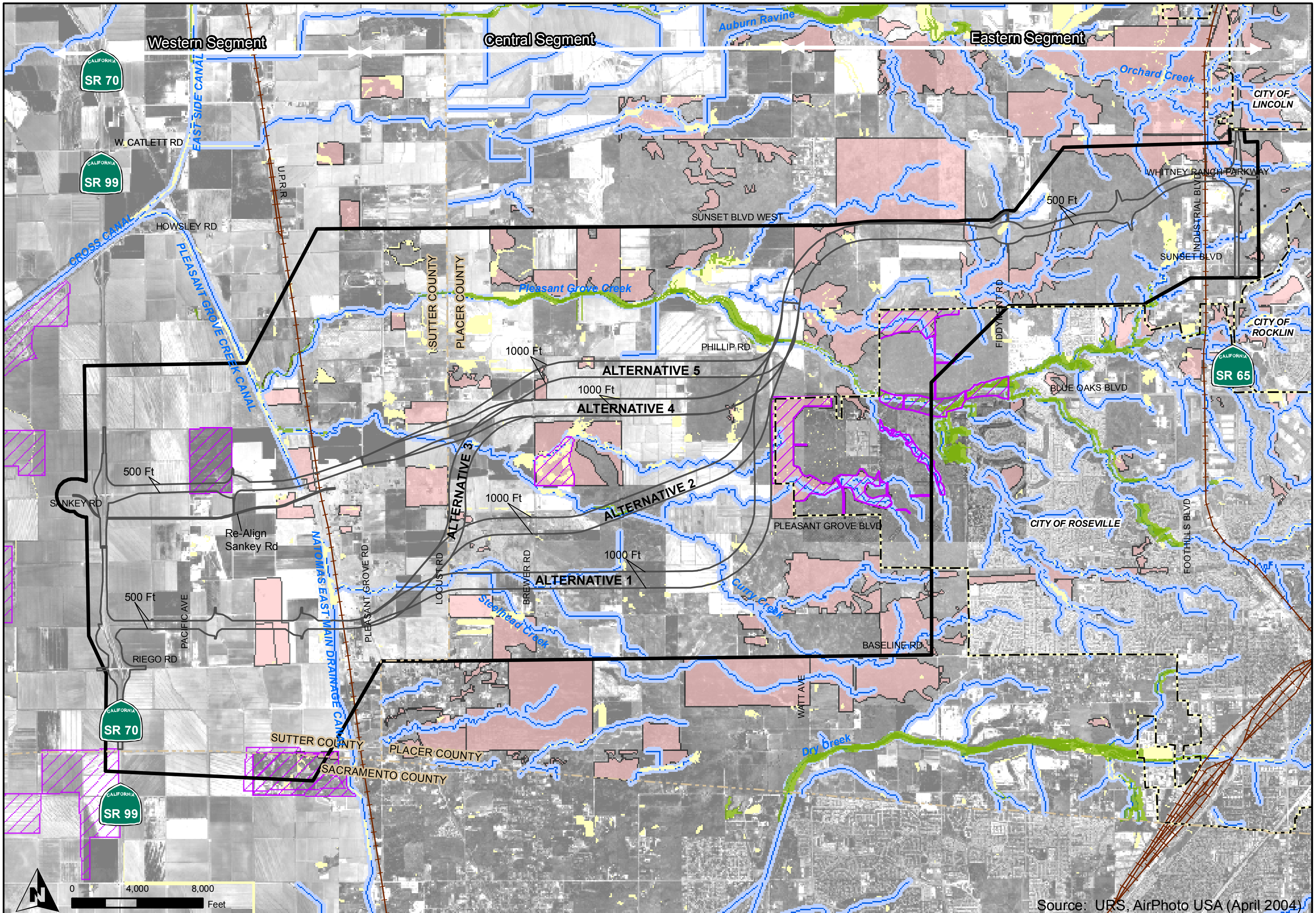
Wetland Resources: Alternative 1 has 15.5 acres of wetlands in the Central Segment. Impacts to wetlands would be similar to those associated with the Western Segment.

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 be similar to those associated with the Western Segment.

Endangered, Threatened, Candidate, and Fully Protected Species

Potential Giant Garter Snake Habitat: Garter snakes historically have been absent from this segment of the project area, and there are no documented occurrences of the giant garter snake east of the NEMDC/Steelhead Creek 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.



Alternative
Study Area Boundary
Conservation Area
County Boundary
City Boundary
Stream
Riparian Area
Vernal Pool Complex
Wetlands and Other Waters of the U.S.

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Wetland, Riparian, Conservation Areas, and Vernal Pool Complexes

Figure 4.14-2

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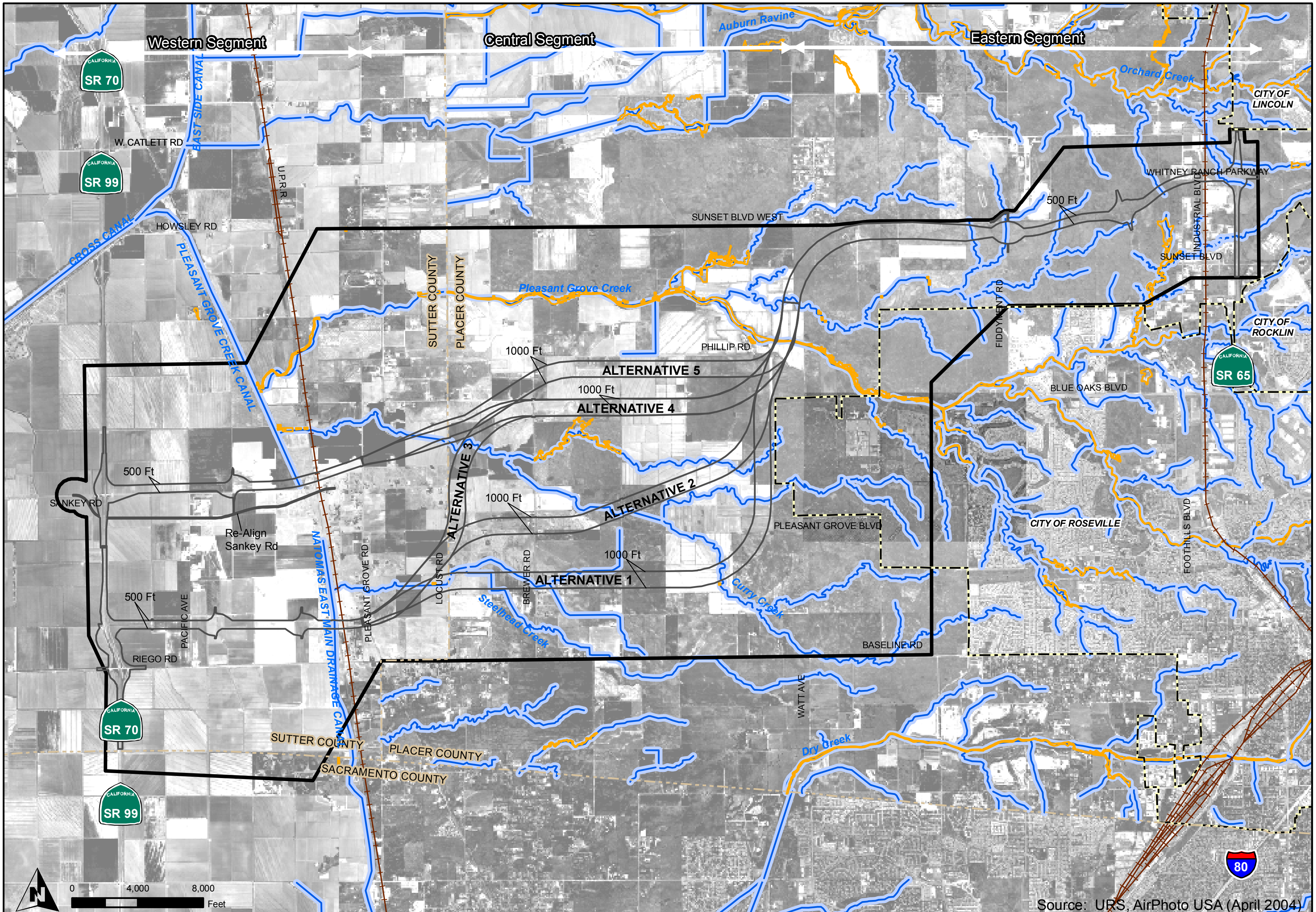
URS Corporation L:\Projects\PlacerParkway2007_28066595\MXD\Current Working Documents\EIS\Chapter_4-14_Biology Resources\Fig_4_14-2_Wetland_Riparian_Conservation_Areas_VernalPools.mxd Date: 2/16/2007 12:38:40 PM Name: akkeele0



Alternative
Study Area Boundary
County Boundary
City Boundary
Stream
Potential Valley Elderberry Longhorn Beetle Habitat

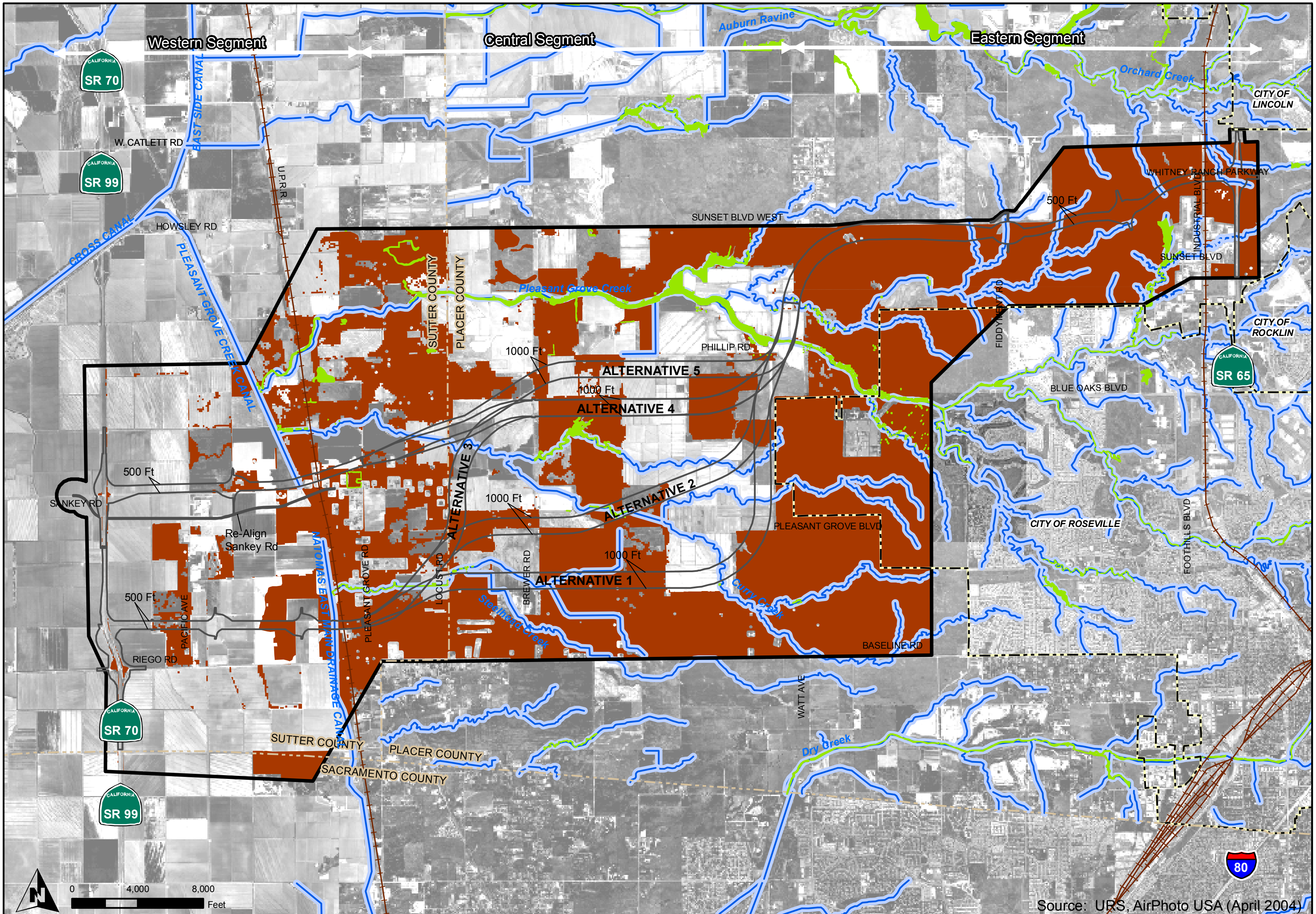
PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Potential Valley Elderberry Longhorn Beetle Habitat

Figure 4.14-3

June 2007



Alternative
Study Area Boundary
County Boundary
City Boundary
Stream
Potential Swainson's Hawk Nesting Habitat
Potential Swainson's Hawk Foraging Habitat

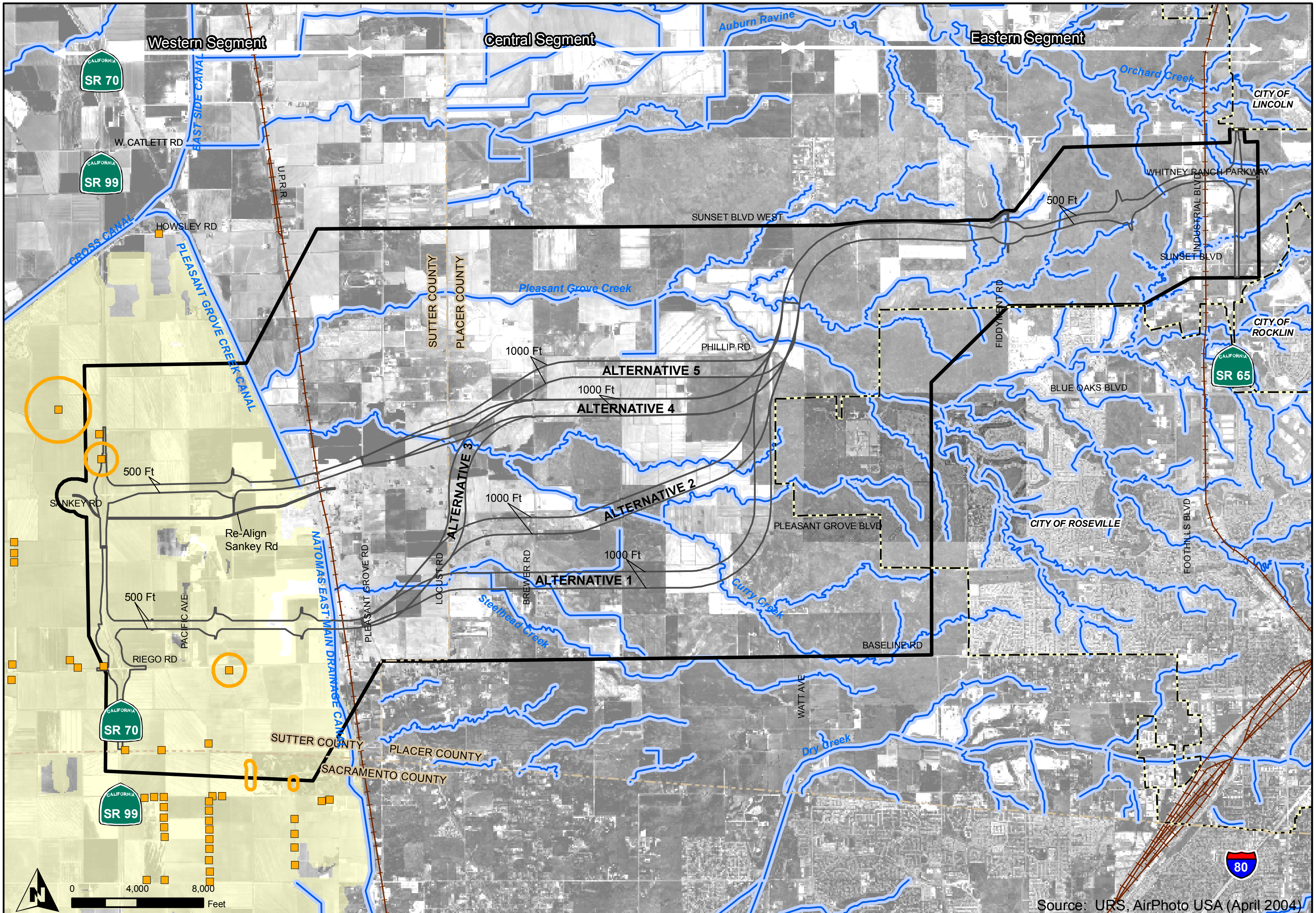
Placer Parkway Corridor Preservation

Tier 1 EIS/EIR

Potential Swainson's Hawk Habitat

Figure 4.14-4

June 2007



Alternative
Study Area Boundary
County Boundary
City Boundary
Stream
Giant Garter Snake Records from CNDDB Dec. 2005
Potential Giant Garter Snake Habitat
Giant Garter Snake Sighting from the Natomas Basin Conservancy (CH2MHill 2003)

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Potential Giant Garter Snake Habitat and Sightings

Figure 4.14-5

June 2007

Potential Swainson's Hawk Nesting and Foraging Habitat: The Central Segment of Alternative 1 passes through several patches of potential Swainson's hawk nesting habitat, associated with the NEMDC/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 also would impact 387 acres of Swainson's hawk foraging habitant in the Central Segment.

Potential Valley Elderberry Longhorn Beetle Habitat: Potential Valley elderberry longhorn beetle habitat includes 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: Nine stream crossings are within this segment: four on the NEMDC/Steelhead Creek, three on Curry Creek, and two on Pleasant Grove Creek. This segment crosses approximately 7,000 feet of the NEMDC/Steelhead Creek longitudinally. Depending on the alignment of the road within the corridor, realignment of this section of the NEMDC/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 would have the potential to create a drop in elevation (particularly at the downstream end) that may become a barrier to fish migration and also may alter the morphology and fluvial dynamics of the channel substantially (GANDA, 2006; Appendix C of the Natural Environment Study). Under higher flow conditions, such a 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 substantial impacts on fish habitat (GANDA, 2006; Appendix C of the Natural Environment Study). 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.

Eastern Segment

Natural Communities of Special Concern

Wetland Resources: Within the Eastern Segment, 20.0 acres of wetlands are located within the corridor alignment. Impacts to wetlands would be similar to those associated with the Western Segment.

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.

Endangered, Threatened, 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 would be the same as those associated with the Central Segment. 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.

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. Impacts associated with stream crossings would be the same as those discussed under the Central Segment.

This segment does not cross any existing canals; therefore, there would be no potential impacts on canals.

Conservation Lands

No conservation areas are located within the Eastern Segment of Alternative 1.

Alternative 2 – the Orange Alternative

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.

Central Segment

Natural Communities of Special Concern

Wetland Resources: Alternative 2 has 10.6 acres of wetlands in the Central Segment. Impacts to wetlands would be the same as discussed for Alternative 1.

Riparian Resources: Alternative 2 has 12.3 acres of riparian habitat in the Central Segment. Impacts to riparian resources would be the same as discussed for Alternative 1.

Vernal Pool Complexes: Alternative 2 has 6.9 acres of vernal pool complexes in the Central Segment. Impacts to vernal pool complexes would be the same as discussed for Alternative 1.

Endangered, Threatened, Candidate, and Fully Protected Species

Potential Giant Garter Snake Habitat: Garter snakes historically have been absent from this segment of the project area, and there are no documented occurrences of the giant garter snake east of the NEMDC/Steelhead Creek 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.

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 would be the same as discussed for Alternative 1. This alternative would impact 315.3 acres of Swainson's hawk foraging habitat in the Central Segment.

Potential Valley Elderberry Longhorn Beetle Habitat: Potential Valley elderberry longhorn beetle habitat includes 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 the NEMDC/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. Impacts associated with stream crossings would be the same as those discussed under the Central Segment of Alternative 1.

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.

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.

Alternative 3 – the Blue Alternative

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.

Central Segment

Natural Communities of Special Concern

Wetland Resources: Alternative 3 has 11.7 acres of wetlands in the Central Segment. Impacts on wetlands would be the same as those discussed under Alternative 1.

Riparian Resources: Alternative 3 has 4.8 acres of riparian habitat in the Central Segment. Impacts on riparian habitat would be the same as those discussed under Alternative 1.

Vernal Pool Complexes: Alternative 3 has 10.4 acres of vernal pool complexes in the Central Segment. Impacts to vernal pool complexes would be the same as those discussed under Alternative 1.

Endangered, Threatened, Candidate, and Fully Protected Species

Potential Giant Garter Snake Habitat: Garter snakes historically have been absent from this segment of the project area. There are no documented occurrences of the giant garter snake east of the NEMDC/Steelhead Creek 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.

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 would be the same as discussed for Alternative 1. 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 includes 1.2 acres of the Central Segment of Alternative 3. Impacts to this habitat would be the same as discussed for Alternative 2.

Potential Stream Crossings: Four stream crossings are within this segment: one on the NEMDC/Steelhead Creek, one on Curry Creek, and two on Pleasant Grove Creek. Culverts or a bridge could be used at the NEMDC/Steelhead Creek crossing. The Curry Creek and Pleasant Grove Creek crossings coincide with floodplain crossings; therefore, the road would be elevated on a bridge. Impacts associated with stream crossings would be the same as those discussed under Alternative 1.

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.

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.

Alternative 4 – the Yellow Alternative

Western Segment

Natural Communities of Special Concern

Wetland Resources: Alternative 4 has 0.3 acre of wetlands in the Western Segment. Impacts to wetlands would be similar to those associated with Alternative 1.

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 be similar to those discussed under Alternative 1.

Endangered, Threatened, 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 Swainson'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.

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. 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, and shading of a 150- to 200-foot-wide section of the canal.

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 land area.

Central Segment

Natural Communities of Special Concern

Wetland Resources: Alternative 4 has 8.0 acres of wetlands in the Central Segment. Impacts to wetland resources would be similar to those associated with Alternative 1.

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 be similar to those discussed under Alternative 1.

Endangered, Threatened, Candidate, and Fully Protected Species

Potential Giant Garter Snake Habitat: Garter snakes historically have been absent from this segment of the project area. There are no documented occurrences of the giant garter snake east of the NEMDC/Steelhead Creek 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.

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 would be the same as discussed for Alternative 1. This alternative would impact 250.8 acres of Swainson's hawk foraging habitat in the Central Segment.

Potential Valley Elderberry Longhorn Beetle Habitat: Potential Valley elderberry longhorn beetle habitat includes 1.2 acres of the Central Segment of Alternative 4. Impacts to this habitat would be the same as discussed for Alternative 2.

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. Impacts associated with stream crossings would be the same as those discussed under Alternative 1.

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.

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.

Alternative 5 – the Green Alternative

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.

Central Segment

Natural Communities of Special Concern

Wetland Resources: Alternative 5 has 7.7 acres of wetlands in the Central Segment. Impacts to wetlands would be the same as discussed under Alternative 1.

Riparian Resources: Alternative 5 has 4.9 acres of riparian habitat in the Central Segment. Impacts to riparian resources would be the same as discussed under Alternative 1.

Vernal Pool Complexes: Alternative 5 has 21.0 acres of vernal pool complexes in the Central Segment. Impacts to vernal pool complexes would be similar to those discussed under Alternative 1.

Endangered, Threatened, Candidate, and Fully Protected Species

Potential Giant Garter Snake Habitat: Garter snakes historically have been absent from this segment of the project area. There are no documented occurrences of the giant garter snake east of the NEMDC/Steelhead Creek 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.

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 vernal pool complexes would be similar to those discussed under Alternative 1. 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 includes 1.2 acres of the Central Segment of Alternative 5. Impacts to vernal pool complexes would be similar to those discussed under Alternative 1.

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. Impacts associated with stream crossings would be the same as those discussed under Alternative 1.

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.

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.

Impacts to Special-Status Species – Alternatives 1 Through 5

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. 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 potentially would remove habitat used by the white-tailed kite and Swainson's hawk (see Figure 4.14-4 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 nests that would be disturbed during construction activities. The proposed corridor alignments 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 4.14-4). The corridor alignments for Alternatives 1 and 3 have the largest area of these habitat types. Most of the nesting habitat is within the Central Segment of the study area, but most of the potential foraging habitat, approximately 552 acres, is within the Eastern Segment.

Table 4.14-4
Sensitive Resources Potentially Impacted by Each Build Alternative
(acres)

Resource Category	Alternative				
	1	2	3	4	5
Wetland Resources	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 potentially are used by migrating and wintering greater sandhill cranes. The loss of this habitat would also affect other nonlisted 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 corridor alignment alternatives compared to the amount of habitat that potentially would be affected. Approximately 660 to 760 acres of seasonally flooded habitat is present within each of the corridor alignment 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 4.14-5). 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.

Alternatives 4 and 5 have the smallest amount of potential giant garter snake habitat within the proposed corridors alignments, approximately 268.2 acres, compared to Alternatives 1, 2, and 3, which have a approximately 340.8 acres of this habitat category (Table 4.14-4). All of the giant garter snake habitat is within the Western Segment of the proposed corridor alignment alternatives, so the proposed corridor is reduced to two alignments with generally similar areas of this habitat type, although the area within the northern corridor alignment (Alternatives 4 and 5) is 8 percent larger than the area of the southern corridor alignment.

Fall-Run Chinook Salmon and Central Valley Evolutionarily Significant Units (ESU) Steelhead. All life stages of 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 NEMDC/Steelhead Creek (Placer County, 1999; ECORP, 2003b; GANDA, 2001, 2005). Additional details of these species are provided in the Natural Environment Study.

Construction of the Parkway is unlikely to affect steelhead or fall-run Chinook salmon adversely as these species are not likely to be present in the study area except for occasional transient occurrences of adult steelhead or Chinook salmon that may reach the study area 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:

- Conservancy fairy shrimp;
- Vernal pool fairy shrimp;
- Vernal pool tadpole shrimp;
- Boggs Lake hedge hyssop;
- Legenere;
- Western spadefoot; and
- Dwarf downingia.

Vernal pool complexes would be directly affected as a result of construction of the Parkway, which could adversely affect populations of these special-status species. Conservancy fairy shrimp is known from fewer than thirty occurrences in the Central Valley. This fairy shrimp species was recently documented from a single specimen at the Mariner Vernal Pool Conservation Bank west of Lincoln, California, approximately 6 miles north of the Placer Parkway study area. However, it is unlikely that Conservancy fairy shrimp is present in the vernal pools in the study area.

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 4.14-4). 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 typically are associated with the understory of riparian habitats. Construction of the Parkway potentially would remove or disturb riparian habitats and associated 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 substantially between alternatives (see Figure 4.14-4). 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 4.14-4).

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 do 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 the NEMDC/Steelhead Creek in the Central Segment (Table 4.14-5).

Table 4-14-4 summarizes the amount of sensitive habitat within each alternative corridor alignment. Alternatives 4 and 5 could affect 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 largest for Alternative 3 and smallest 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 4.14-5 summarizes the number of new waterway crossings of each alternative. Figure 4.11-3 in Section 4.11, Hydrology and Floodplains, shows the location of each stream crossing by alternative.

Table 4.14-5
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

The special-status species with potential to be impacted substantially by the proposed action include the giant garter snake, Swainson's hawk, and the Valley elderberry longhorn beetle, primarily through direct removal of habitat. The analysis presented below is based on the amount of potential habitat for each species that occurs within each build alternative. Riparian and vernal pool habitats also would be affected substantially by each of the build alternatives and are considered sensitive natural communities in regional plans or by the CDFG or USFWS. Impacts to vernal pool habitat also would represent the area of potential impacts to Conservancy fairy shrimp, vernal pool fairy shrimp, vernal pool tadpole shrimp, and Boggs Lake hedge hyssop, which are protected under the federal and state endangered species acts. Wetlands and other waters protected under Section 404 of the federal CWA would be affected and are considered in the following evaluation. The potential for movement of native fish or wildlife species to be affected is considered in the secondary and indirect impacts section.

4.14.3.4 Secondary and Indirect Impacts

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), land would not be acquired and the Parkway would not be constructed. There would not be any secondary or indirect impacts on biological resources. Secondary and indirect impacts associated with growth are discussed in Section 6.1, Growth.

Build Alternatives 1 Through 5

Construction and operation of the Parkway could result in secondary and indirect impacts on biological resources.

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 3-1). The general nature of such impacts is discussed below.

Preservation of a future transportation corridor has the potential to affect biological resources indirectly if management of the land within the corridor is modified. 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 currently are flood-irrigated during the growing season or vernal pool complexes that currently are 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 also might benefit nesting Swainson's hawks and white-tailed kites, the Valley elderberry longhorn beetle, and riparian habitats that are affected adversely by intensive land management activities.

The existence of a new roadway would affect the surrounding natural communities and special-status species adversely in a variety of ways. In particular, the remaining habitat immediately adjacent to the roadway probably would be considered of lower value and function for wildlife. The increased noise and lights associated with the roadway probably would 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 also may attract wildlife to the roadway, causing higher rates of mortality from vehicle strikes.

Construction of the Parkway would 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 the NEMDC/Steelhead Creek [Figure 4.11-1]). 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 potentially would be a substantial barrier to wildlife dispersal. All 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 be susceptible to the effects of fragmentation caused by a new roadway. Development can have effects on the hydrology of vernal pools that are not impacted directly. 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 also may produce conditions that are favorable for exotic predators such as bullfrogs and mosquito fish (USFWS, 1996). The USFWS typically considers any ground-disturbing activities within 250 feet of a vernal pool to constitute an indirect impact. All alternatives would have indirect impacts on vernal pools to some extent. In the Eastern Segment, the study area narrows greatly, 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 probably would be the most substantial for those alternatives. Alternatives 4 and 5 also intersect the edges of several smaller vernal pool complexes in the Western and Central segments.

Landscaping would be installed within the Parkway's no-development buffer zones, 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 nonnative landscaping materials. If the appropriate species were used, the potential for the spread of nonnative 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.

4.14.3.5 Cumulative Impacts

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), land would not be acquired and the Parkway would not be constructed. The No-Build Alternative would not contribute to cumulative impacts on existing biological resources.

Alternative 1 Through 5

Placer Parkway would incrementally contribute to the projected loss of natural vegetation and sensitive natural communities within western Placer County. 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 also may 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 runoff, noise, and disturbance.

The Parkway would occupy approximately 500 to 600 acres[1] depending on 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 (Figure 1-15).

The additional development that is anticipated by 2040 would reduce and fragment remaining habitats within south Sutter County and western Placer County substantially. 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 affected particularly. 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 1-15) in the north.

The Parkway would be located primarily 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 corridor alignment 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 (WRSP) area and the open space areas within the Reason Farms Retention Basin site.

4.14.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

4.14.4.1 Tier 1 – Avoidance/Minimization Strategies

- During the development of alternatives, in order to reduce environmental impacts, avoidance alternatives were also considered (see Section 2.5.4). These alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

- During the alternatives screening process, efforts were made to avoid biological resources impacts. Examples of such efforts included modification and/or elimination of PSR corridor alignment alternatives (see Section 2.5). These efforts included;

1. The developed area of the Placer Parkway corridor is estimated on the basis of 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 alignment.

- For connections at Whitney Ranch Parkway, the central and southern alignments were rerouted to the north to avoid a large vernal pool complex that is located immediately northeast of the WRSP area.

- The central corridor alignment was modified to minimizing encroachment into a large wetland/vernal pool/conservation area at the confluence of two main branches of Curry Creek in the Central Segment. All central corridor alignments were modified to avoid this area and reduce habitat fragmentation and impacts to special-status species, wetlands, vernal pools, and a large conservation area by adjusting the alignment in the Western Segment to avoid the Pleasant Grove/ Sankey community and a designated conservation area.

- Modification of the southern corridor alignment to avoid large vernal pool areas and areas of manmade waters of the United States.

- A Sunset Boulevard connection at SR 65 was eliminated due to potential impacts on existing businesses and large vernal pool complexes.

- A portion of a central corridor alignment that encroached into a large wetland/vernal pool/conservation area at the confluence of two main branches of Curry Creek was eliminated and the alignment moved northward. Adjustments were made to southern corridor alignments to reflect different distances between it and Riego/Baseline Road and reduce habitat fragmentation by placing the two roadways next to each other. Based on substantive vernal pool impacts, impacts to a residential community in the vicinity of County Acres, and input from jurisdictions that this was not perceived as good infrastructure planning by the Technical Advisory Committee, this alternative was eliminated.

- Landowner-identified alignments 1N, 2N and 2S (see Section 2.5.5) were eliminated from further consideration, in response to substantial federal and state resource agency concerns regarding alignments north of Pleasant Grove Creek, because of substantially more impacts to aquatic resources.

- During development of the Tier 1 conceptual design of the Parkway, efforts were made which directly or indirectly help to avoid impacts on biological resources. These efforts included:

  - The use of bridges to span floodplains. 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 1,600-foot-long multi-span 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. Bridge spans would be a maximum of 150 feet and would be supported by columns located outside of the ordinary high water level.

  - Roadway elevation within the 100-year floodplain 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 and not impede stream and flood flows.

  - The restriction of access between Pleasant Grove Road and Fiddyment Road. This would avoid inducing urban growth in the agricultural areas not designated for development in existing general plans, and maintain the rural character of south Sutter and western Placer counties.

- The location of the Parkway within a no-development buffer zone (see Section 2.5) that would preserve open space and agricultural uses adjacent to the Parkway and limit future development in the buffer zone. This would provide opportunities to preserve biological resources along the corridor

- A commitment to the use of native plant species, where appropriate, in line with Caltrans policy.

- During the Tier 1 environmental review process, the Placer County Transportation Agency (PCTPA) worked with local jurisdictions to plan for the Parkway and other proposed development in order to reduce the likelihood of impacts on biological resources. Results of this coordination included modification and elimination of alternatives and refinement of corridor alignments.

4.14.4.2 Tier 2 – Consultation

- PCTPA would continue to coordinate with local jurisdictions in Tier 2 to reduce the likelihood of impacts on biological resources. Coordination would include development of specific project design details to minimize impacts as described below, and consultation regarding the design and location of other planned and proposed developments in the study area.

4.14.4.3 Tier 2 – Mitigation Commitments

- Mitigation Strategy under the Natomas Basin Habitat Conservation Plan (NBHCP): Mitigation strategy for the Natomas Basin area will include a combination of avoidance, minimization, and compensation. To meet the mitigation goals of the NBHCP, a mitigation fee is paid to the NBHCP by developers of projects when they apply for building permits. The NBHCP 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 will be paid to the NBHCP to mitigate for Parkway impacts to special-status species in the NBHCP service area.

- Tier 2 design would implement the following strategies to reduce potential impacts on biological resources:

  - Avoidance or minimization of stream crossings.

  - Alignment of the roadway within the corridor to avoid sensitive resources, and provision of buffer zones, including provision of sufficient setback distances in accordance with Caltrans and county requirements between the highway right-of-way and wetlands or riparian areas.

4.14.4.4 Tier 2 – Mitigation Considerations

- The following presents a summary of mitigation strategies that could be applicable to biological resource impacts. Additional details are provided in the Placer Parkway Natural Environmental Study.

– Mitigation strategy for impacts to areas within Sutter County but not in the Natomas Basin: This would include a combination of avoidance, minimization, and compensation. Strategies 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.

– Mitigation for impacts to vernal pool species would be consistent with the Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon. Existing USFWS and CDFG mitigation guidelines for giant garter snake, Valley elderberry longhorn beetle, and Swainson's hawks would be used.

– Mitigation strategy under the proposed Placer County Conservation Plan (PCCP): The PCCP is currently under development and the timing of its completion is uncertain, but one of its goals to use regional opportunities to build on existing or planned conservation efforts. The conceptual mitigation for Placer Parkway is consistent with the goals of the PCCP, and may 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 Parkway 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).

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 to compensate for Parkway 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).

– Mitigation strategy for impacts in the absence of the PCCP: This mitigation strategy 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 based on several criteria reflecting habitat value and regulatory and planning parameters. Compensatory habitat mitigation in the absence of the PCCP would be implemented according to the strategies outlined for Placer County in the Natural Environment Study.

4.14.5 TIER 1 AND TIER 2 STUDIES

- Analyses begun in Tier 1 which will be undertaken in greater detail in Tier 2
  - Habitat mapping will be conducted using a combination of GIS data, aerial photography, and field reconnaissance. Habitat mapping would be included (if applicable) in a Biological Assessment in support of Section 7 consultation with the USFWS, National Oceanic and Atmospheric Administration (NOAA) Fisheries, and/or California State Endangered Species Consultation.
- Analyses that will begin in Tier 2
  - Field surveys for special-status species, such as 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.
  - Preparation of a Biological Assessment in support of Section 7 consultations with the USFWS, NOAA Fisheries, and/or California State Endangered Species Consultation. This may continue to consider analyses with and without the proposed Placer County Conservation Plan.
  - A formal wetland delineation in order to ensure compliance with the U.S. Army Corps of Engineers and California Regional Water Quality Control Board permitting requirements under Section 404/401 of the CWA.

4.15 HAZARDOUS WASTE/MATERIALS

This section presents the findings of an Initial Site Assessment (ISA) prepared for this Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR) (URS, 2007e), which reviewed past and current land uses and activities within the study area and identified the potential presence of hazardous substances, including hazardous wastes. The 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.

4.15.1 REGULATORY SETTING

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require consideration of impacts associated with hazardous materials. A general discussion of NEPA and CEQA requirements is provided in Chapter 1 of this Tier 1 EIS/EIR.

4.15.1.1 Federal Regulations

The U.S. Environmental Protection Agency (U.S. EPA) is responsible for implementing the Resource Conservation and Recovery Act (RCRA) and delegates this responsibility to individual states. The goals of the RCRA are to protect human health, conserve natural resources (and energy) through recycling and recovery, waste reduction and elimination, and clean up waste (spills, leaks, etc.).

The ISA for Placer Parkway (URS, 2007e) was based on guidance from the Federal Highway Administration (FHWA), Environmental Checklists for Draft and Final Environmental Documents (FHWA, 1998a; FHWA, 1998b).

4.15.1.2 State Regulations

The California Department of Toxic Substances Control (DTSC) regulates hazardous materials under the authority of the RCRA and the California Health and Safety Act (U.S. EPA, 2006; DTSC, 2006). In addition, other types of legislation pertain to hazardous materials. Relevant laws and guidelines are described below.

The evaluation of potential hazardous materials was based on the California Department of Transportation (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).

4.15.2 SITE HISTORY

4.15.2.1 Site History and Regulatory Files

This section presents data obtained from aerial photographs and historical topographic maps, and information obtained from federal, state, and county database files.

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 ISA (URS, 2007e) presents the findings of this review.

Historical Topographic Maps

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 that may have involved the manufacture, generation, use, storage, and/or disposal of hazardous materials. Findings from this review are presented in full in the ISA (URS, 2007e).

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 Environmental Data Resources, Inc. (EDR) of Milford, Connecticut. The EDR Report is presented in Appendix A of the ISA (URS, 2007e). Review of the EDR Report and site reconnaissance concluded that only five locations represent potential RECs for the Parkway. These are shown on Figure 4.15-1 and are discussed in subsequent sections of this report.

EDR Report

EDR is a commonly used source for review of federal, state, and local governmental agencies' hazardous materials databases. The accuracy and 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. As the Parkway encompasses several potential project alignments, the entire study area was reviewed for potential facilities. Records searched for in the EDR report are described in the ISA (URS, 2007e) and summarized below.

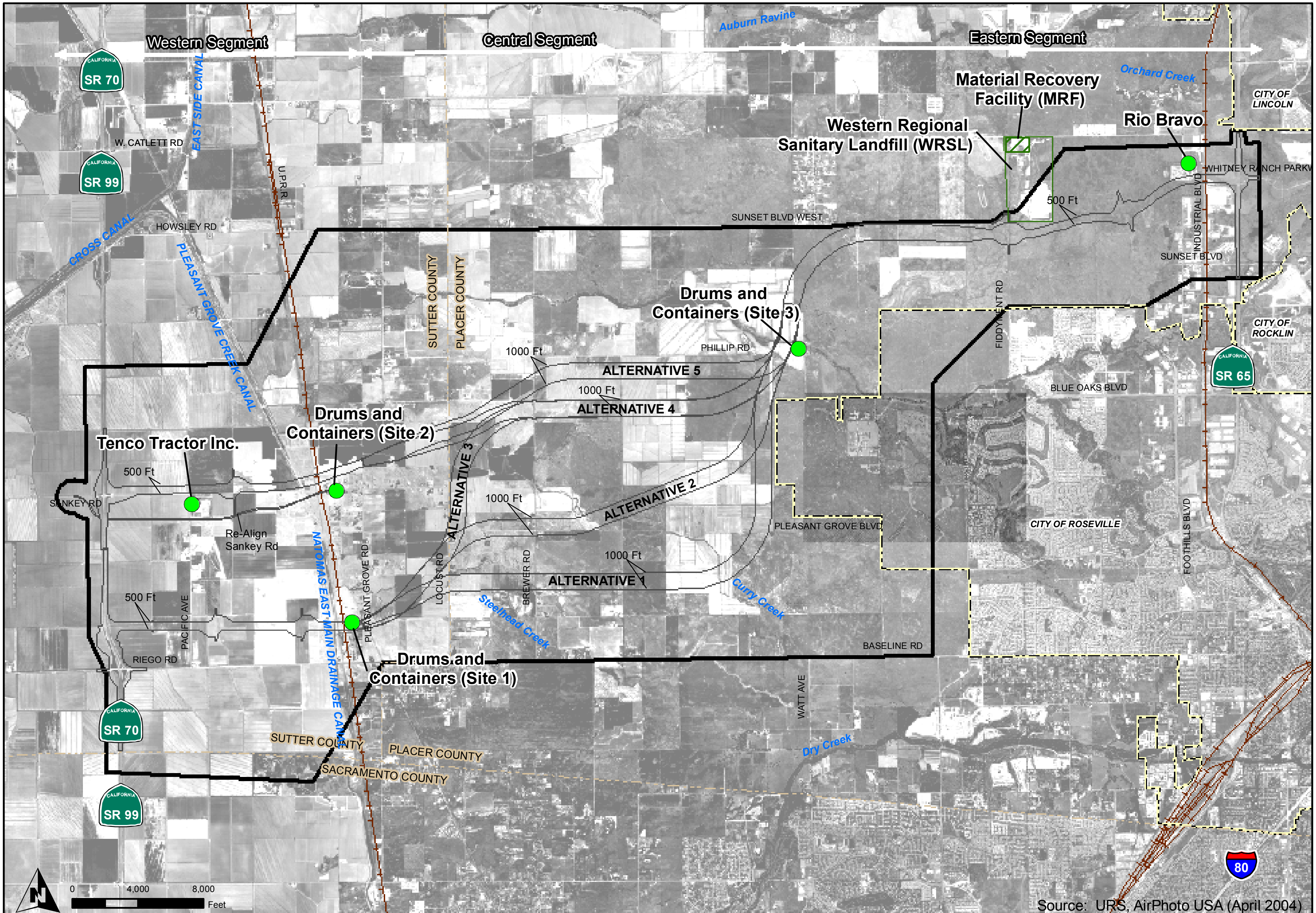
Table 4.15-1 lists the number of potential hazardous materials/waste sites for each alternative within the study area.

4.15.2.2 Orphan Facilities

Orphan facilities are facilities that have been identified within the database report, but as being in the vicinity of the study area, which cannot be mapped precisely due to inadequate or erroneous geocode information. Fifty-nine orphan facilities were listed in the EDR report. Location information was sufficient to indicate that three of these facilities could be located in the study area. Further investigation identified the name and precise location of these facilities. These are as follows.

Western Placer Household Hazardous Waste Collection Facility (HHWCF), 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) (Figure 4.15-1). 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 California Integrated Waste Management Board 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 (Figure 4.15-1). 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.



Alternative

Study Area Boundary

Recognized Environmental Condition (REC)

County Boundary

City Boundary

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Potential Recognized Conditions (RECs) With Respect to Project Alternatives

Figure 4.15-1

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Table 4.15-1
Number of Potential Hazardous Materials/Waste Sites within the Study Area

Regulatory Agency Files	Quantity within Study Area
Federal	
National Priorities List (NPL)	0 sites
Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)	0 sites
No Further Remedial Action Planned	0 sites
Resource Conservation and Recovery Act (RCRAInfo)	1 LQG* facility; 13 SQG** facilities
Emergency Response Notification System	1 site
State	
CAL-SITES	0 sites
Annual Work Plan	0 sites
Leaking Underground Storage Tank (LUST)	3 facilities
Solid Waste Information System (SWIS)	0 facilities
Underground Storage Tank	4 facilities
Aboveground Storage Tank	5 facilities
State Referred (REF)	1 facility
Waste Discharge System (WDS)	7 facilities
*LQG = Large Quantity Generator **SQG = Small Quantity Generator	

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 monitoring only).

A monitoring well immediately west of one of the original unlined modules first showed evidence of groundwater degradation in the fourth quarter of 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 Central Valley Regional Water Quality Control Board (CVRWQCB) 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. The power plant is listed on the SWEEPS and underground storage tank (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 are not known. If the UST is located within the proposed Placer Parkway alignment, it would represent an 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 Corporation 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 Corporation property is not considered to be an REC for the project.

4.15.2.3 Sutter County Environmental Health Division

The Sutter County Environmental Health Division confirmed that there are no known contaminated sites in the Sutter County portion of the Parkway study area (Wilson, 2006).

4.15.2.4 Sutter County Agricultural Commission

The Sutter County Agricultural Commission issues aboveground storage tank (AST)/UST permits within Sutter County. There are no known leaking ASTs or USTs in the Sutter County portion of the study area (Schoenwald, 2006).

4.15.2.5 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 for fire at the WRSL had been prepared. The office did not consider any other facilities within the study area to be of concern.

4.15.2.6 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. The PCEHD confirmed that it is not aware of any sites and/or facilities within or near the study area that could represent an REC to the project (Miners, 2006).

4.15.2.7 Regional Water Quality Control Board

The CVRWQCB maintains a website (www.waterboards.ca.gov) with comprehensive LUST and SLIC databases. The WRSL is owned and operated by the Western Placer Waste Management Authority (WPWMA). It operates under Waste Discharge Requirements issued by the CVRWQCB. A release of hazardous constituents was detected in 1995 and corrective actions were implemented, as discussed in the ISA. 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 LFG, leachate, and groundwater indicates that regulatory criteria are not exceeded in this area. The presence of the WRSL does not constitute an REC for the proposed action at this time.

4.15.2.8 Department of Toxic Substances Control

The DTSC was contacted regarding information about hazardous materials releases within the study area. DTSC information did not indicate that any hazardous materials releases had occurred in the study area.

4.15.3 AFFECTED ENVIRONMENT

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. 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. Photographs of the site taken during the site reconnaissance are included in the ISA (URS, 2007e). In accordance with the size of the study area (approximately 110 square miles) and the Tier 1 level of analysis, the site reconnaissance was general in nature and did not include specific studies of any particular type of site.

4.15.3.1 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.

4.15.3.2 Site Observations

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 listed in Table 4.15-1 and discussed in the database report section in Appendix A of the ISA (URS, 2007e).

Drums and Containers

During the site reconnaissance, drums were noted in three areas (Figure 4.15-2):

Site 1: The first site was a property containing numerous abandoned automobiles and pieces of agricultural equipment. Several drums also were noted among the debris. This property is 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 corridor alignments 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/Steelhead Creek. 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 placed irregularly in animal pastures, and 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 affect 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 action.

Hazardous Waste

No direct evidence of hazardous waste was observed in the study area during the site reconnaissance; however, the three sites mentioned above possibly contain hazardous wastes.

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 at the time of the site reconnaissance. 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 constructed in 1990.

Solid Waste

Solid waste dumpsters and trashcans were observed at properties throughout the study area. As noted in Section 4.15.2.2, the WRSL is located in the Eastern Segment of the study area. This facility is not considered to be a potential REC for the project.

Drains and Sumps

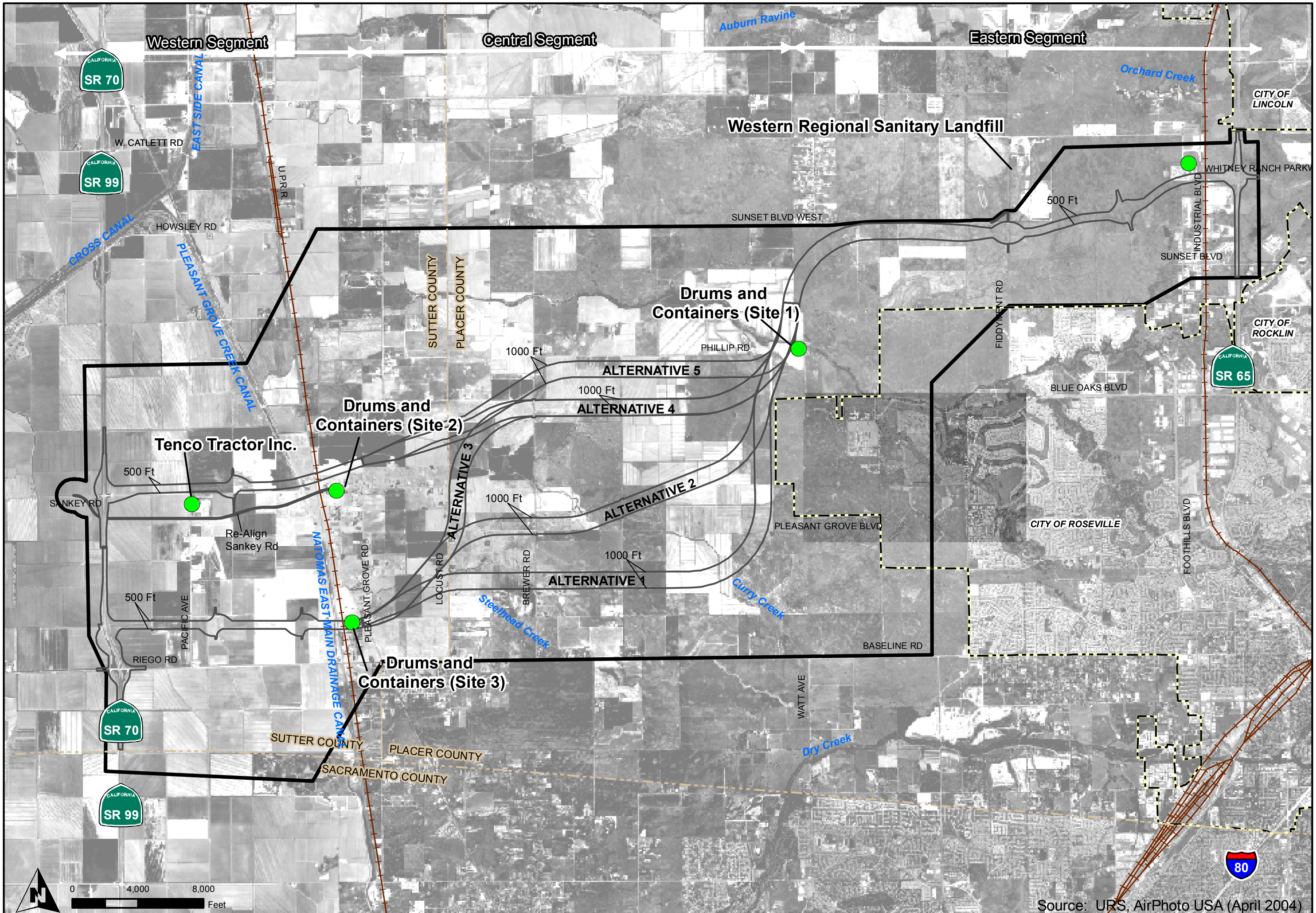
The scope of this site reconnaissance did not permit investigation of the entire study area for drains and sumps.

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 assumed to be present.

Pits, Ponds, and Lagoons

Several catchment basins are located in developed areas in the Eastern Segment of the study area. Several agricultural ponds also 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.



Alternative
Study Area Boundary
County Boundary
City Boundary
ISA Location

PLACER PARKWAY CORRIDOR PRESERVATION

Tier 1 EIS/EIR

Potential Hazardous Waste Sites in Study Area

Figure 4.15-2

June 2007

URS Corporation L:\Projects\PlacerParkway2007_28066595\MXD\Current Working Documents\EIS\Chapter_4-15_Hazardous_Waste\Fig_4_15-2_Potential_Haz_Waste_Sites.mxd Date: 2/16/2007 3:14:43 PM Name: akeee0

4.15.3.3 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 an REC for the project is considered to be low.

4.15.4 IMPACT ANALYSIS

4.15.4.1 Methodology for Impact Evaluation

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 remediated appropriately before the onset of any construction activities. A summary of the potential presence of hazardous materials is presented in the ISA (URS, 2007e) and in Section 4.15.2.

The second category of potential environmental impacts associated with hazardous materials relates to the potential of the Parkway 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. Additional details of potential water quality impacts are provided in Section 4.11, Hydrology and Floodplains, and Section 4.12, Water Quality. Potential impacts that may occur as a result of encroachment on the WRSL are discussed in Section 4.5.3.3.

4.15.4.2 Evaluation Criteria

Potential impacts associated with the presence of hazardous materials were evaluated against the following criteria. Impacts were considered to be adverse if they would:

- Create a hazard to the public or the environment through routine use, transport, or disposal of hazardous waste.
- Create a hazard to the public or the environment through reasonably foreseeable conditions resulting in the release of hazardous materials into the environment.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials or waste within one-quarter mile of an existing or proposed school.
- Be located on a site that is included on a list of known hazardous material sites.
- Expose the public or property to a risk of loss, injury, or death involving wildland fires, in the vicinity of urban or residential areas.

4.15.4.3 Direct Impacts

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), land for Placer Parkway would not be acquired and the Parkway would not be constructed. There would not be any impacts associated with the potential presence of hazardous materials in the study area.

Alternative 1 – the Red Alternative

Western Segment. One dump site, discussed above under Hazardous Materials in Section 4.15.2.2, was identified in the Western Segment of Alternative 1 during the site reconnaissance. Site 1 is located near the corridors of Alternatives 1, 2, and 3 (Figure 4.15-1). It contains numerous abandoned automobiles and pieces of agricultural equipment. Several drums were also noted amid the debris. This property is 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.

The presence of a REC could create an adverse impact based on the following criteria:

- Creation of a hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment

- Emission or handling of hazardous materials within one-quarter mile of an existing or proposed school.

Central Segment. The site reconnaissance identified an uncontrolled dumping site (Figure 4.15-1, 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. Potential impacts are the same as discussed for the Western Segment.

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 4.15.2.2, does not at present represent a potential REC for the project. Potential impacts are the same as discussed for the Western Segment.

Alternative 2 – the Orange Alternative

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.

Central Segment. The Central Segment of Alternative 2 differs in alignment from Alternative 1, but the single REC identified for Alternative 2 is the same REC that is identified for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

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 4.15.2.2, does not at present represent a potential REC for the project.

Alternative 3 – the Blue Alternative

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.

Central Segment. The Central Segment of Alternative 3 differs in alignment from Alternative 1, but the single REC identified for Alternative 3 is the same REC that is identified for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

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 4.15.2.2, does not at present represent a potential REC for the project.

Alternative 4 – the Yellow Alternative

Western Segment. One dump site (Figure 4.15-1, Site 2), discussed under Solid Waste in Section 4.15.2.2, 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 the ISA (URS, 2007e), also represents a potential REC for the project, with a low potential for impact. Potential impacts associated with this REC are the same as discussed in Alternative 1.

Central Segment. The Central Segment of Alternative 4 differs in alignment from Alternative 1, but the single REC identified for Alternative 4 is the same REC that is identified for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

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 4.15.2.2, does not at present represent a potential REC for the project.

Alternative 5 – the Green Alternative

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.

Central Segment. The Central Segment of Alternative 5 differs in alignment from Alternative 1, but the single REC identified for Alternative 5 is the same REC that is identified for Alternative 1. Therefore, the potential impacts for this segment are the same as discussed for Alternative 1.

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 4.15.2.2, does not at present represent a potential REC for the project.

Comparison of Alternatives

All five build alternatives potentially could be affected by the presence of RECs within the corridor alignment alternative. All alignment 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 substantially different in terms of need for further investigation and potential remediation requirements.

The potential RECs are identified on Figure 4.15-1 and listed below:

- An uncontrolled dump site (Site 1) in the Western Segment (Alternatives 1, 2, and 3);
- A second uncontrolled dump site (Site 2) in the Western Segment (Alternatives 4 and 5);
- The Tenco Tractor site (Alternatives 4 and 5);
- A third uncontrolled dump site (Site 3) 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 4.15.6 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.

Table 4.15-2
Comparison of Alternatives Impacts Associated with Hazardous Materials

Alternative	1	2	3	4	5
Number of RECs potentially located in alignment	3	3	3	4	4

4.15.4.4 Secondary and Indirect Impacts

The following discussion considers secondary and indirect impacts associated with the presence of hazardous materials or sites in the study area. Secondary and indirect impacts that may occur as a result of anticipated growth are discussed in Section 6.1, Growth.

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), there would not be any secondary or indirect impacts associated with hazardous materials and sites present in the study area. Land would not be acquired for the Parkway and the Parkway would not be constructed.

Build Alternatives

No secondary or indirect impacts with respect to hazardous materials or sites are expected 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, 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 remediated properly before any construction activities.

4.15.4.5 Cumulative Impacts

No-Build Alternative

Under the No-Build Alternative (see Section 2.3-1), there would not be any cumulative impacts associated with hazardous materials and sites present in the study area. Land would not be acquired for the Parkway, and the Parkway would not be constructed.

Alternatives 1 Through 5

The Parkway build alternatives would contribute to increased disturbance, storage, use, disposal and transport of hazardous materials in the study area. 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.

These activities would not result in adverse impacts, as storage, use, disposal, and transport of hazardous materials is extensively regulated by various federal, state, and local agencies. In addition, each of these related projects would undergo independent environmental review, including implementation of mitigation measures, as appropriate, based on these regulations. Therefore, adverse hazards to the public would not occur, and no considerable cumulative impacts related to hazardous wastes or materials are expected.

The Placer Parkway project potentially could experience impacts associated with the presence of lead-based paint (LBP) and/or asbestos-containing materials (ACM) due to the demolition of structures along the corridor alignment, the presence of aerially deposited lead (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 historically have been 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 through design of the Parkway to avoid these site locations or implementation of appropriate preventive and mitigation measures during construction to prevent accidental release of contaminants to soil or groundwater.

Mitigation strategies have been identified to address these impacts. With implementation of mitigation, the Parkway's incremental contribution to cumulative impacts related to hazardous materials would not be considerable.

4.15.5 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

4.15.5.1 Tier 1 – Avoidance/Minimization Strategies

- During the development of alternatives, in order to reduce environmental impacts, avoidance alternatives were also considered (see Section 2.5.4). These alternatives did not meet the project Purpose and Need and were therefore eliminated from further consideration.

4.15.5.2 Tier 2 – Consultation

- The Placer County Transportation Planning Agency would continue to coordinate with local jurisdictions in Tier 2 to reduce the likelihood of impacts related to the presence of hazardous materials. Coordination would include development of specific project design details to minimize impacts such as the location of the roadway footprint within the approved corridor, and consultation regarding the design and location of other planned and proposed developments in the study area

4.15.5.3 Tier 2 – Mitigation Commitments

- All buildings and other structures proposed for demolition would 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.

- Potentially impacted soils proposed for excavation associated with potential RECs, e.g., Tenco Tractor, Rio Bravo Power Plant, and three uncontrolled dump sites, will 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 will be tested for pesticides and other contaminants and disposed of in accordance with federal, state, and local regulations.

- A Health and Safety Plan will be prepared by the contractor prior to construction. This plan will 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.

4.15.5.4 Tier 2 – Mitigation Considerations

- The Parkway should be located, if feasible, so as to avoid disturbance of the five potential RECs identified in this Tier 1 EIS/EIR (see Section 4.15.4.3)

- 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 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 the Parkway is constructed (Chadha, 2006).

4.15.6 TIER 1 AND TIER 2 STUDIES

- Analyses that will begin in Tier 2

  - The analysis of RECs would include 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 construction; identification of location and condition of USTs within Rio Bravo; development of detailed hydrogeology information, including geology and groundwater depth and gradient; and further investigation of the 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.

  - An update of the ISA, comprising a current database search, updated regulatory agency file review, and site reconnaissance. If the potential for any businesses adjacent to the project to create an REC cannot be clarified, recommendations would be developed for appropriate soil sampling within the adjacent project area.

4.16 ENERGY

As part of the Placer Parkway Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR), an evaluation of potential energy impacts was performed. This evaluation considered the potential changes in energy use associated with changes in traffic patterns in the study area resulting from the Parkway. The primary energy demand associated with the Parkway will be vehicle fuel. Vehicle fuel efficiency standards are controlled by the federal and state governments (see below).

4.16.1 REGULATORY SETTING

Energy consumption is regulated through federal and state government agencies via a number of policies and programs. At the federal level, the U.S. Environmental Protection Agency (U.S. EPA), the U.S. Department of Energy (USDOE), and the U.S. Department of Transportation (USDOT) all have roles and responsibilities in the regulation of energy consumption.

At the state level, the three key energy agencies responsible for energy in California—the California Energy Commission (CEC), the California Power Authority (CPA), and the California Public Utilities Commission (CPUC)—have adopted an Energy Action Plan (EAP) (CEC and PUC, 2005), which lists joint goals for California's energy future and sets forth a commitment to achieve those goals through specific actions.

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require consideration of impacts associated with energy use. A general discussion of NEPA and CEQA requirements is provided in Chapter 1 of this Tier 1 EIS/EIR.

4.16.2 AFFECTED ENVIRONMENT

Existing energy consumption in the study area is associated primarily with residential and commercial use, transportation, and construction of new development.

4.16.3 IMPACT ANALYSIS

4.16.3.1 Methodology for Impact Evaluation

Construction of Placer Parkway

Energy is consumed both directly and indirectly during project construction. Direct energy consumption includes the energy used to operate construction machinery, provide construction lighting, and produce and transport materials. Most of this energy is in the form of petroleum. Indirect energy consumption includes activities such as manufacturing and maintaining construction equipment and the energy consumed by workers commuting to the project site. At the Tier 1 level of analysis when no Parkway alignment has been selected, there is not sufficient detail available on the construction schedule or equipment to calculate construction energy use at this time. Therefore, for this Tier 1 EIS/EIR an estimate of energy use during construction is not provided.

Operation of Placer Parkway

Operational energy consumption impacts were evaluated by quantitatively comparing vehicle energy consumption among alternatives. Energy consumption rates for vehicles operating a roadway can be differentiated by comparing changes in traffic operations measured by vehicle miles traveled (VMT) and changes in traffic speed throughout the study area. Fuel consumption is proportional to distance traveled and decreases as speed increases up to about 40 miles (60 kilometers) per hour. Fuel consumption increases as speed increases above that point (U.S. Department of Transportation, 1980). Energy consumption estimates for roadway traffic within the study area are based on the Transportation Technical Report (DKS Associates, 2007). Net changes in overall energy use by roadway vehicles are assessed by using daily VMT and average speed values calculated from the transportation forecasting model for each alternative. Energy consumption was calculated by multiplying daily VMT by the appropriate fuel consumption rate for the average speed. Ongoing roadway maintenance consumes energy. The California Department of Transportation (Caltrans) estimates that maintenance activities for urban freeways consume approximately 170 million British thermal units per lane mile per year (Caltrans, 1983). Because this value is less than 1 percent of the energy consumption of vehicles traveling over the roadway, it is not included in the comparison of alternatives in this study.

4.16.3.2 Evaluation Criteria

For the proposed project, potential impacts related to energy use have been evaluated on a preliminary basis, using the evaluation criteria listed below:

- Potential energy impacts that may be associated with a proposed project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy

- Potential effects of the project on local and regional energy supplies and on requirements for additional capacity

- The project's projected transportation energy use requirements (fuel consumption)

4.16.3.3 Direct Impacts

Existing Plus Project Conditions (2004)

The Parkway transportation analysis includes a qualitative evaluation of existing conditions with the Parkway. This analysis concludes that under Existing Plus Project conditions, the Parkway build alternatives would result in similar but smaller changes in travel patterns in the Transportation Analysis Study Area (TASA) (see Transportation Technical Report [DKS Associates, 2007] for definition) than under 2020 conditions (described in the following section). These would include increased traffic volumes on some roadway segments near proposed interchanges, although these increases probably would be less than those under 2020 conditions. Traffic volumes would decrease on a larger number of local roadway segments in south Sutter County and southwestern Placer County. These decreases probably would be less than those under 2020 conditions.

If the project were added to existing conditions, energy use as a function of VMT would increase slightly. This increase would be at least partially offset by the reduction in travel under congested conditions. As the existing study area does not include any of the planned/proposed developments expected to be constructed in the future, under Existing Plus conditions the magnitude of reduction in congested travel will be lower than in 2020 and 2040.

Future Analysis (2020) Conditions

No-Build Alternative

Under the No-Build Alternative, Placer Parkway would not be constructed or operated and would not incur construction costs or result in the expenditure of any energy (see Section 2.3-1). There would not be any impacts associated with the use of energy under the No-Build Alternative.

Parkway Build Alternatives – Construction

Construction costs for the Parkway build alternatives would vary slightly depending on the length of the alternative and the number of proposed interchanges included (Table 4.16-1).

Table 4.16-1
Length and Number of Interchanges Associated with Parkway Alternatives

Alternative	Length in Miles	No. of Interchanges
No-Build	N/A	0
1	16.2	6
2	15.4	6
3	15.6	6
4	14.3	5
5	14.2	5

Energy would be consumed on a one-time basis during construction of any of the build alternatives to manufacture materials, transport materials, and operate construction equipment. All build alternatives would incur substantial energy consumption during consumption in comparison to the No-Build Alternative. Alternative 1, which has six interchanges and is 16.2 miles in length, would be expected to consume the greatest amount of energy during construction compared with other build alternatives. Alternative 5, which has five interchanges and is 14.2 miles in length, would consume the least.

With respect to the length of new roadway and associated transportation benefits in the study area, the Parkway will require a relatively short-term temporary investment of energy that will result in an overall benefit for energy consumption efficiency due to the reduced congestion that the project will afford. These values would not put substantial additional demand on energy sources or fuel availability in the region.

Parkway Build Alternatives – Operation

Traffic is predicted to increase by the year 2020, independent of the Parkway. Vehicle fuel consumption dominates the total energy use for each alternative. Energy consumption resulting from daily vehicle operations in the affected area is presented for the No-Build Alternative and build alternatives for 2020 in Table 4.16-2.

In order to calculate the average gas mileage for all new vehicles sold within a calendar year, the National Highway Traffic Safety Administration (NHTSA) uses a calculation called Corporate Average Fuel Economy (CAFE). This essentially takes the U.S. EPA estimated gas mileage for each make and model sold and weights that estimated gas mileage against the total number of vehicles sold during that year.

According to NHTSA, the average gas mileage for new vehicles sold in the United States was 24.7 miles per gallon (mpg) in 2004. This represents an increase in fuel efficiency of slightly less than 7 percent since 1980, when average gas mileage was 23.1 mpg. Table 4.16-2 shows estimated average fuel consumption for Parkway alternatives using this gas mileage estimate.

The relative energy efficiency of a transportation network is dependent, among other factors, on the speed of traffic and any congestion. Faster, uniform vehicle speeds are generally more fuel-efficient than

Table 4.16-2
Estimated Energy Consumption Associated with VMT for the Build Alternatives in Transportation Analysis Study Area (2020)

Alternative	Daily VMT in TASA (Freeways and Arterials)	Estimated Fuel Consumption (Gallons) (2020)
No-Build	17,725,900	717,647
1	17,846,974	722,457
2	17,875,272	723,695
3	17,888,226	724,219
4	17,871,573	723,545
5	17,874,270	723,591

Source: DKS Associates, 2007

All VMT data excludes the effect of a potential future interchange with a Watt Avenue Extension as the effect on daily VMT of this interchange is similar for all build alternatives and adds less than 0.5 percent total VMT.

The analysis does not differentiate between trucks and passenger vehicles, numbers of which are not assumed to differ substantially between alternatives

Calculations do not reflect changes in average mpg by 2020, which are not expected to differ substantially between alternatives.

Calculations do not reflect potential congestion that would be expected under the No-Build Alternative, which would result in decreased fuel efficiency if VMT were at slower speeds.

slower, stop-and-go congestion. An uncongested roadway operating at a high Level of Service (LOS) will conserve energy use per vehicle using the system in comparison to a congested facility. Analysis of energy consumption in the form of gasoline use and traffic flow efficiency in terms of passenger miles traveled for the build alternatives in comparison to the No-Build Alternative therefore reflects the operating efficiency of the transportation system. As the Parkway would be expected to reduce overall congestion in the study area, it would result in more efficient traffic flow on a more energy-efficient roadway in comparison to the No-Build Alternative, as the VMT traveled under the No-Build Alternative would be on more congested roadways than would occur under the build alternatives. This is demonstrated in the Transportation Technical Report (DKS Associates, 2007), which shows that, compared with the No-Build Alternative, the Parkway build alternatives would decrease traffic on many arterial/collector roadway segments in the study area.

During roadway operation, lighting and traffic signals consume energy in the form of electricity. This would not be expected to differ substantially between any of the Parkway build alternatives. The existing electricity grid is expected to have sufficient capacity to service the project's operational electricity demand.

4.16.3.4 Comparison of Alternatives

Table 4.16-2 illustrates that estimated fuel consumption does not differ substantially between build alternatives or between the No-Build Alternative and the build alternatives. The operational fuel consumption of Alternative 3, which has the greatest VMT of all build alternatives and therefore the greatest fuel consumption, is only 0.9 percent greater than that of the No-Build Alternative. This is because VMT does not increase substantially for any of the Parkway build alternatives in comparison to the No-Build Alternative. Furthermore, this Tier 1 analysis does not take into account the reduction in fuel use due to substantial reduction in congestion associated with all build alternatives; energy use under the build alternatives probably is overstated compared with the No-Build Alternative.

4.16.3.5 Secondary and Indirect Impacts

The Parkway is not expected to result in any secondary and indirect energy-related impacts. Although the manufacturing and maintenance of vehicles consume energy, the construction and operation of any of the Parkway build alternatives are not anticipated to affect vehicle purchasing or maintenance decisions made by drivers and/or residents or business in the study area. Potential secondary and indirect impacts associated with growth are discussed in Section 6.1, Growth.

4.16.3.6 Cumulative Impacts

Under the No-Build Alternative (see Section 2.3-1), Placer Parkway would not be constructed or operated and would not incur construction costs or result in the expenditure of any energy. There would not be any cumulative impacts associated with the use of energy under the No-Build Alternative.

Energy consumption associated with the construction of any of the Parkway build alternatives is not expected to make cumulatively considerable contribution to energy consumption. The Parkway will require a relatively short-term temporary investment of energy that will result in an overall benefit for energy consumption efficiency due to the reduced congestion that the project will afford. The construction of the Parkway is not expected to overlap with most of the proposed and planned development in the study area, as the majority of such projects either will be constructed before 2020 or will be constructed between 2020 and 2040, so that the number of projects under construction at the same time is not expected to have an adverse effect on energy sources or fuel availability in the region.

Table 4.16-3 illustrates that estimated fuel consumption does not differ substantially between build alternatives or between the No-Build Alternative and the build alternatives in 2040. The operational fuel consumption of Alternative 3, which has the greatest VMT of all build alternatives and therefore the greatest fuel consumption, is only approximately 1.9 percent greater than that of the No-Build Alternative. This is because VMT does not increase substantially for any of the Parkway build alternatives in comparison to the No-Build Alternative.

Table 4.16-3
Estimated Energy Consumption Associated with VMT
for the Build Alternatives in Transportation Analysis Study Area (2040)

Alternative	Daily VMT in TASA (Freeways and Arterials)	Estimated Fuel Consumption (Gallons) (2020)
No-Build	25,983,131	1,051,948
1	26,424,662	1,069,824
2	26,477,729	1,071,972
3	26,488,169	1,072,395
4	26,482,450	1,072,163
5	26,461,066	1,071,298

Source: DKS Associates, 2007

All VMT data excludes the effect of a potential future interchange with a Watt Avenue Extension as the effect on daily VMT of this interchange is similar for all build alternatives and adds less than 0.5 percent total VMT.

The analysis does not differentiate between trucks and passenger vehicles, numbers of which are not assumed to differ substantially between alternatives.

Calculations do not reflect changes in average mpg by 2040, which are not expected to differ substantially between alternatives.

Calculations do not reflect potential congestion that would be expected under the No-Build Alternative, which would result in decreased fuel efficiency if VMT were at slower speeds.

As the Parkway would be expected to reduce overall congestion in the study area, it would result in more efficient traffic flow on a more energy-efficient roadway in comparison to the No-Build Alternative, assuming that the VMT traveled under the No-Build Alternative is on more congested roadways than would occur under the build alternatives. Therefore, the Parkway would not make any contribution to cumulative energy impacts during operation.

4.16.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

Measures to reduce energy consumption during construction could include limiting the idling of construction equipment and employee vehicles, encouraging carpooling or van pools among construction workers, and locating construction staging areas as close as possible to work sites. Any transportation control measures to reduce traffic volumes and congestion also would decrease energy consumption.

4.16.5 TIER 2 STUDIES

Additional analysis will be undertaken to evaluate potential energy impacts at the Tier 2 level. These would include:

- Detailed evaluation of energy consumption based on vehicle use of the Parkway by vehicle type (trucks and cars).
- An evaluation of potential measures that could be implemented in the design, construction, operation, and maintenance of the Parkway in order to reduce wasteful, inefficient, and unnecessary consumption of energy, including an explanation of why measures are incorporated in the project and which measures were dismissed.
- An evaluation of ways to utilize new energy-efficient technologies, including alternative fuels, in the maintenance of the Parkway.

5.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT EVALUATION

The Federal Highway Administration (FHWA) with 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). Specifically, the action being considered and evaluated by FHWA, Caltrans and SPRTA 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. Placer Parkway is intended to reduce anticipated congestion on both the local and regional transportation system and to advance economic development goals in south Sutter County and southwestern Placer County.

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.

Each phase will be subject to its own environmental review, a process known as “tiered” environmental review under both state and federal law. The selection of a corridor is the subject of this Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/ Environmental Impact Report (hereinafter referred to as the Tier 1 EIS/EIR). As discussed below, to the degree feasible this Tier 1 EIS/EIR reviews the reasonably foreseeable environmental effects of the construction and operation of the Parkway. Selection of a more precise alignment within the corridor, and construction and operation of the Parkway, will be the subject of a later, Tier 2 environmental document.

“Tiering” is a streamlining tool for environmental review of large projects with several environmental review stages or phases. It is a way to focus environmental studies at an appropriate level of detail for each phase of the project. The Tier 1 document allows the agencies to focus on broad topics such as general location, mode choice, area-wide air quality and land use, and other environmental issues. The Tier 2 document involves more focused environmental analyses that address a narrower geographical area, a more focused set of issues, and a specific roadway alignment. The 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 proposed project.

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.

Given the existing and projected rapid growth in and around the study area, it is vital to select a corridor as early as feasible, so that the location of the future Placer Parkway can be considered in local jurisdictions' planning decisions. Also, it is important to select a corridor before new development reduces corridor options or increases right-of-way acquisition costs. A tiered approach to Parkway planning was selected in order to address these concerns and select a corridor for the Parkway before design and engineering are initiated. Although some designs for the Parkway have been developed during Tier 1, to the extent required for environmental analysis, such designs are entirely conceptual and are subject to further engineering and refinement during subsequent Tier 2 analysis. Construction-level engineering would not occur until a specific alignment for the Parkway is selected based on the Tier 2 environmental analysis.

Once the Tier 1 EIS/EIR is completed and a corridor is selected, local governmental agencies may take steps to preserve land within the selected corridor, using their own funds. 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.

Tier 1 is called a program-level analysis pursuant to California Environmental Quality Act (CEQA) Guidelines §15161. CEQA requires that each significant impact be identified in the EIR (Public Resources Code Section 21082.2). In this chapter, references to significant adverse impacts of the Placer Parkway alternatives are made to fulfill the requirements of CEQA.

No representation as to significance made in this chapter represents an assessment of the magnitude of such an impact under the requirements of federal law. Under NEPA, no determination need be made for each environmental effect. The Council on Environmental Quality (CEQ) regulations implementing NEPA state that “significantly” as used in NEPA requires consideration of both context and severity/intensity. The CEQ regulations recognize that the significance of an action must be analyzed in several contexts such as the society as a whole, the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action (40 CFR Section 1508.27).

This CEQA impact analysis incorporates and relies upon the information contained in all other Tier 1 EIS/EIR chapters. The same technical reports and analyses used in other chapters of this Tier 1 EIS/EIR is used as the basis for the CEQA significance conclusions provided in this chapter. The thresholds of significance applied to impacts in this chapter are the same as the as the evaluation criteria identified in Chapter 4 used to assess the potential effects of Parkway alternatives. The following CEQA analysis identifies the significance of each adverse impact before and after the application of mitigation strategies. No impacts are identified for the No-Build Alternative, unless specifically identified below. Other required CEQA sections such as Cumulative Impacts and the Environmentally Superior Alternative, are also provided.

The conclusions apply to all alternatives, unless otherwise specified.

5.1 LAND USE

Information regarding land use is found in Section 4.1, and in the Community Impact Assessment (Mara Feeney & Associates and North Fork Associates, 2007) which is available at the locations identified in the Executive Summary, including the Placer County Transportation Agency (PCTPA) web site.

5.1.1 Significant and Unavoidable Impacts

Land Use Conversion

Table 4.1-3 in Section 4.1, Land Use, shows the potential impacts on land conversion by build alternative. Alternative 1 would affect the greatest amount of total land acreage, while Alternative 4 would affect the least. Impacts related to land conversion would be significant and unavoidable because all alternatives would result in conversion of substantial amounts of agricultural land to infrastructure-related uses (conversion of all land uses would range from 1,623 to 1,918 acres, depending on the alternative). Because of the extent of agricultural lands affected and the scarcity of opportunities to replace existing agricultural uses, SPRTA has determined that mitigation strategies would not be expected to reduce impacts to a less-than-significant level.

Compatibility with Proposed Land Uses

All of the project build alternatives would affect the ongoing planning processes for the Placer Ranch Specific Plan, Brookfield, the Reason Farms Master Plan update, and the Sutter Pointe Specific Plan. Alternatives 1 and 2 would also affect the proposed Regional University Specific Plan and the Curry Creek Community Plan, which is still in the conceptual stage. 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 corridor alignment through these developments would, of necessity, affect the development plans, because subsequently the developments would need to accommodate the corridor alignment selected. This could be a significant impact, depending on the status of planning efforts by local jurisdictions. It could also potentially benefit these projects by lending certainty to the location of a major transportation corridor that has been planned for some time but not adopted. Because there is uncertainty with respect to the adjacent land uses, this impact is considered potentially significant. No mitigation is available because SPRTA has no authority over local jurisdictions' planning processes or land uses, or the timing of the ongoing planning processes in the study area.

Consistency with Applicable General Plan Policies

Sutter County General Plan policy 6.A.1 requires the County to preserve agriculturally designated areas for agricultural uses and direct nonagricultural development to areas designated for urban/suburban growth, or rural communities and/or cities. All alternatives lie within land designated as agricultural in Sutter County, including the lands within the area designated as Measure M (within which the Sutter Pointe Specific Plan is proposed), where alternatives identify the conceptual location of interchanges to serve proposed future development. All alternatives would conflict with this policy. While there are no feasible measures to preserve all existing agricultural land in Sutter County affected by the Parkway, a portion of the area through which any of the Parkway alternatives would be constructed is designated for growth through its underlying General Plan designation (Industrial Reserve) and through the effects of implementation of Measure M.

Placer County General Plan policies 7.A.1, 7.A.2, 7.A.3, 7.A.7, 1.H.3, and 1.H.4 are aimed generally at preserving farmland and agricultural uses in the study area. To the extent that all Placer Parkway alternatives would use land currently designated agricultural, they could divide parcels currently used for agriculture and would diminish the size of some agricultural parcels. Therefore, they would conflict with these policies.

Four Sunset Industrial Area Plan policies, 1.E.1, 1.E.2, 1.E.3, and 1.E.4, are identical to Placer County General Plan policies 7.A.1, 7.A.2, 7.A.3, and 7.A.7, respectively, and the Parkway alternatives would also conflict with these policies.

The only agriculturally designated land within the Sunset Industrial Area Plan (SIAP) affected by this project (Eastern Segment) is undergoing review by Placer County for urban development and amendment to the SIAP. The decisions regarding this agricultural land are anticipated to be made prior to a Record of Decision and certification of the Placer Parkway Tier 1 EIS/EIR.

Conflicts with general policies aimed at preserving and enhancing agricultural uses, while under threat from other development proposals as well, would be a significant and unavoidable impact. The only potential mitigation strategy would be to amend applicable plan policies related to preservation of agricultural lands, which SPRTA has determined would not be feasible.

5.1.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Potentially Bisected Parcels

Alternative 5 would potentially bisect the most parcels in the study area, while Alternative 1 would bisect the fewest parcels, as shown in Table 4.1-3 in Section 4.1, Land Use. Mitigation strategies include General Plan Amendments or Zoning Ordinance Amendments to change General Plan land use designations and zoning. For parcels no longer meeting minimum size requirements, alternative mitigation could include enactment of a zoning overlay district for parcels reduced in size that would recognize the special nonconforming nature of these properties or purchase of remainder parcels in their entirety to eliminate the zoning conflict. With implementation of these mitigation strategies, this impact would be less than significant.

Compatibility with Adjacent Land Use

All alternatives would have similar issues of compatibility with adjacent land uses. The project area and adjacent surrounding areas are primarily used for agriculture. The project's effects on commercial, industrial, and public facilities would not be expected to adversely affect land use within the study area because the Parkway would potentially benefit those land uses. The project would purchase more right-of-way than is required for the footprint of the Parkway, partly to create a buffer between adjacent land uses and minimize the project's impacts to farmland and other agricultural uses. Local access would be maintained. Incompatibility with adjacent land uses would be less than significant. No mitigation is warranted.

Consistency with Zoning Acreage Requirements

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. Mitigation strategies include General Plan Amendments or Zoning Ordinance Amendments to change General Plan land use designations and zoning. For parcels no longer meeting minimum size requirements, alternative mitigation could include enactment of a zoning overlay district for parcels reduced in size that would recognize the special nonconforming nature of these properties or purchase of remainder parcels in their entirety to eliminate the zoning conflict. With implementation of these mitigation strategies, this impact would be less than significant.

Consistency with Applicable General Plan Policies and Other Local Plans

The proposed project would potentially conflict with certain policies contained in the Sutter County General Plan, the Placer County General Plan, and the Sunset Industrial Plan Area, which are described below.

The Sutter County General Plan policy C-6b states that "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." Policies 6.A-6 and 6.A-7, related to preservation of farmlands, are similar. The project has the potential to conflict with these policies, as it could create remnant parcels that do not meet the minimum size requirements under current zoning.

Conflicts with General Plan policies identified above are considered significant without mitigation. Mitigation strategies include General Plan Amendments or Zoning Ordinance Amendments to change General Plan land use designations and zoning. For parcels no longer meeting minimum size requirements, alternative mitigation could include enactment of a zoning overlay district for parcels reduced in size that would recognize the special nonconforming nature of these properties or purchase of remainder parcels in their entirety to eliminate the zoning conflict. With implementation of these mitigation strategies, impacts related to minimum parcel size would be less than significant.

A Habitat Conservation Plan (HCP)/Natural Community Conservation Plan (NCCP), called the Placer County Conservation Program (PCCP), is currently under development by Placer County. It would cover the lands in Placer County through which all of the Placer Parkway alternatives would traverse. SPRTA is working with Placer County staff to ensure that the Parkway would not conflict with the PCCP. The Placer Parkway could be a covered activity under the PCCP. It is unknown exactly if or when the plan will be adopted or implemented. Since the PCCP is not adopted, there are no conflicts and therefore no impacts would occur. No mitigation is warranted.

5.2 POPULATION AND HOUSING

Information regarding population and housing is found in Section 4.2, and in the *Community Impact Assessment* (Mara Feeney & Associates and North Fork Associates, 2007), which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.2.1 Significant and Unavoidable Impacts

There would be no significant and unavoidable impacts to population and housing with mitigation.

5.2.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Disruption or Division of the Physical Arrangement of an Established Community or Employment Center

Four rural residential areas occur in the study area. None of the alternatives would directly affect any existing community services in the study area, such as schools or fire stations. Alternative 1 would take up to 120.6 acres of the rural residential community located on the north side of Baseline Road in the Central Segment. The alignment would not split or divide this community, but it would remove a strip of land along a one-mile section at the northern end of this community, removing several rural residential homes. Alternatives 4 and 5 would directly affect about 15 acres at the northwestern corner of the Sankey-Pleasant Grove community and would impact several residences located east of the Union Pacific Railroad (UPRR) tracks in this vicinity. While these alternatives would not split or divide this community, they would affect several rural residential properties along its northern edge, near the railroad right-of-way north of Sankey Road. This would be a potentially significant impact. Since no vital community services or gathering places would be in either of the two affected areas, it may be possible to mitigate this potential 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 affected in either of these two areas, no mitigation is required beyond standard provisions of the Uniform Relocation and Real Property Acquisition Assistance Act. With implementation of these mitigation strategies, impacts would be less than significant.

Displacement of People, Businesses, or Jobs

Each of the corridor alignment alternatives would displace several isolated homes or farmsteads, ranging from three (Alternative 3) to ten (Alternative 5) (see Table 4.2-11 in Section 4.2, Socioeconomics). Alternatives 1, 4, and 5 each would affect a rural residential community in the study area. Alternative 1 would have the greatest impact, on 120.6 acres of the rural residential settlement on the north side of Baseline Road, compared with 14.7 acres in the Sankey-Pleasant Grove area that would be affected by Alternatives 4 and 5. Depending upon the project alternative selected and the size of the households displaced, the number of persons displaced could range from less than ten to more than thirty. This would be a potentially significant impact. It may be possible to relocate the affected homes to vacant land in the vicinity. If not, there should be suitable replacement housing in the area, making the construction of new replacement housing unnecessary. These residential displacements would be mitigated as required by the Uniform Relocation Assistance and Real Property Acquisition Act of 1970. With implementation of these mitigation strategies, impacts would be less than significant.

All of the build alternatives would directly affect the same employment center in the Eastern Segment, in the Sunset Industrial Area, and would not affect any employment centers in the Central Segment (see Table 4.2-12). 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. This would be a potentially significant impact. Any 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. With implementation of this mitigation, impacts would be less than significant.

5.3 FARMLANDS

Information regarding farmlands is found in Section 4.3, and in the Community Impact Assessment (Mara Feeney & Associates and North Fork Associates, 2007) which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.3.1 Significant and Unavoidable Impacts

Farmland Conversion

The project would convert between 792.46 (Alternative 4) and 990.06 (Alternative 2) acres of farmland, depending on the alternative selected (see Table 4.4-8). This would be a significant and unavoidable impact of the project because this is a substantial amount of farmland conversion, and converting substantial amounts of farmland is inconsistent with state and county goals and policies relative to the importance of maintaining farmland resources. Two strategies for mitigation of farmland impacts are provided in Section 4.4.4.1. Mitigation Strategy No. 1 would provide full replacement of the agricultural land lost for the Parkway, and Mitigation Strategy No. 2 could also provide full replacement via agricultural easements administered by land trusts or other non-profit entities.

It is not known at this time if all of the no-development buffer zone adjacent to the Placer Parkway would be viable for farmland, because of the potential for parcel splitting or other impacts on particular farm units such as the proximity of remnant parcels to overhead power lines or other constraints to continued farming. In addition, some of the land may be converted to non agricultural uses before Placer Parkway is implemented. SPRTA will participate in any fair share mitigation strategy that may be adopted by Placer and Sutter County Agricultural Commissioners or the respective counties. Because of the uncertainty over future conditions, and the level of fair share mitigation, if any, that may be adopted in the future, SPRTA has determined that this impact is not completely mitigated and a significant and unavoidable impact remains.

Other changes in the existing environment that could result in conversion of farmland to nonagricultural use include bisecting agricultural parcels. If the bisected parcels are no longer easily accessible or are too small for large-scale agricultural use, these parcels could be taken out of agricultural uses, or converted to small-scale agriculture if economically feasible. This is a potentially significant impact. Mitigation strategies could reduce the level of impact, but potentially not to a less-than-significant level. Therefore, this impact would remain significant and unavoidable.

Williamson Act Conversion

The project would convert between 119.85 (Alternative 1) and 243.70 (Alternative 2) acres of Williamson Act contracted lands, depending on the alternative selected (see Table 4.4-9). This would be a significant and unavoidable impact of the project because it would be a conversion of more than 100 acres. No feasible mitigation is identified to reduce this impact to a less-than-significant level.

Conflicts with Agricultural Plans or Policies

Conflicts with agricultural plans or policies would be a significant and unavoidable impact, and are addressed in Section 5.1, above. Similar to conflicts with land use plans or policies, the only potential mitigation strategy would be to amend applicable plan policies related to preservation of agricultural lands, which SPRTA has determined would not be feasible.

5.4 PUBLIC SERVICES AND UTILITIES

Information regarding public services and utilities is found in Section 4.5, and in the Community Impact Assessment (Mara Feeney & Associates and North Fork Associates, 2007) which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.4.1 Significant and Unavoidable Impacts

There would be no significant and unavoidable impacts to public services and utilities, with implementation of identified mitigation strategies.

5.4.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Displacement or Disruption of Public Services and Utilities

During construction of Placer Parkway, the ability of emergency service providers, including fire responders and police, to meet response time goals could be temporarily affected by traffic delays on arterials that feed into the Parkway. These temporary construction impacts would be potentially significant. Mitigation strategies would be employed to reduce this impact to a less-than-significant level through coordinating with emergency services prior to and during construction, and by providing adequate access for emergency vehicles both during construction and operation. Overall emergency response time is anticipated to improve with the addition of Placer Parkway as a result of faster driving times along the Parkway route and reduced congestion on local roadways. Final design will include features to allow emergency turnaround routes along the Parkway for emergency providers. Since local access will be retained, emergency providers would still be able to cross over the Parkway in localized areas.

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). None of the alignments would impact the retention aspects of this facility. The City of Roseville is planning for and accommodating the Parkway corridor alignments in their planning process, so no disruption is anticipated. No mitigation is warranted.

The Western Placer Waste Management Authority sanitary landfill may be affected by the proposed project's interchange at Fiddyment Road. The area immediately west of the landfill has been identified as a landfill expansion area. Encroachment, if any, would affect approximately 5 to 6 acres of the southeastern corner of this property. 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. Impacts could be potentially significant. Mitigation strategies 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. With implementation of these mitigation strategies, impacts would be less than significant.

No other community facilities or services, such as schools or fire stations, would be directly affected by any of the corridor alignment alternatives. Therefore, there would be no impacts.

New Demand on Public Services or Utilities

The development of the proposed project would require the construction of new stormwater drainage facilities within the selected corridor, to manage stormwater runoff from the new roadway. Design of these new facilities would be incorporated into project plans, and at this time no expansion of existing facilities is expected to be required. Therefore, impacts would be less than significant. No mitigation is warranted.

The proposed project would generate some solid waste during construction. The project would comply with federal, state, and local requirements for the disposal of construction-related solid waste. Any hazardous materials that would be used during construction would be stored, used, and disposed of in accordance with applicable regulations for transport and disposal. Therefore, there would be no impact.

The proposed project would require nominal amounts of water during construction, and irrigation water for landscaping. This demand would be quantified when the landscaping plans are completed during final design. Since landscaping concepts for the project envision low-maintenance plantings, demand is not expected to be substantial. Impacts would be less than significant. No mitigation is warranted.

No wastewater would be generated by the project and therefore the project would not impact wastewater treatment facilities or require expansion of existing facilities. Therefore, there would be no impact.

Displacement or Disruption of Parks and/or Recreational Facilities

There are no parks within any of the corridor alignment alternatives. There would be no increase in the use of existing parks or recreational facilities associated directly with the Parkway. The planning for recreational facilities at the City of Roseville's Retention Basin site is proceeding in cooperation with the Parkway project, and no impacts are expected. Therefore, there would be no impact on parks.

5.5 VISUAL AND AESTHETICS

Information regarding visual impacts is found in Section 4.6, Visual Resources, and in the Visual Impact Assessment (URS, 2007h), which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.5.1 Significant and Unavoidable Impacts

The project would change the visual character and quality of the study area, and increase viewer sensitivity and exposure. Alternatives 1 and 2 would have the most visual impacts of all alternatives, with potentially Moderate/High impacts using FHWA visual impact criteria. These impacts would be potentially significant. Alternative 3 would have more impacts than Alternatives 4 and 5 and would be considered Moderate/High using FHWA visual impact criteria. Alternatives 4 and 5 would have potentially Moderate impacts, based on FHWA visual impact criteria. Mitigation strategies to reduce impacts would include project design to preserve the existing character as far as possible, and enable the project to visually complement its setting. Landscaping would be designed to respect the topography and vistas in the study area and complement the varying character of land adjacent to the Parkway corridor. Species would incorporate native plants wherever possible, in accordance with Caltrans policy. Even with implementation of these mitigation strategies, because of the change in the visual character of the site and its surroundings, SPRTA has determined that this impact would remain significant and unavoidable.

5.5.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

There are no designated state scenic highways within the project vicinity. There are no eligible officially Designated State Scenic Highways within views of the study area. Therefore, no impact to a State Designated Scenic Highway is anticipated as a result of any of the alternatives.

No glare would result from the project because no buildings or structures with reflective coatings would be built. The project, by necessity, would include the installation of nighttime lighting fixtures, and the resulting night-time light is a potential significant impact on night-time views. Mitigation strategies include design considerations such as shielding lighting elements, using lower voltage lighting for planting areas, and proposing lighting fixtures that complement the visual character of the area. With implementation of these mitigation strategies, impacts would be less than significant.

5.6 CULTURAL RESOURCES

Information regarding cultural resources is found in Section 4.7, Historical Consulting, in the Archaeological Survey Report (URS, 2007b), in the Historical Resources Evaluation Report (JRP, 2007), and in the Historical Properties Survey Report (URS, 2007c), which are available at the locations identified in the Executive Summary, including the PCTPA web site.

5.6.1 Significant and Unavoidable Impacts

Historic Resources (Built Environment)

The Parkway could cause a substantial adverse change in the significance of a historic resource as defined in CEQA Guidelines §15064.5. Three properties warrant future formal evaluation as potentially representative examples of a type, period, or method of construction, or as works of a master. Reclamation District No. 1000 (RD 1000) is present in the study area, which is a National Register–eligible and California Registry of Historic Resources–eligible property. All build alternatives would impact this property. A determination of effect by the State Historic Preservation Officer has not been made at this Tier 1 stage. SPRTA has determined that this is a potentially significant and unavoidable impact of the proposed project, because no feasible route that meets the need and purpose of the project has been identified that would not cross through RD 1000, and a determination of effect has not yet been made.

5.6.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Archaeological Resources

Based on this Tier 1 analysis, no known archaeological resources are present within the corridor alignment alternatives. Unknown archaeological resources that may be present in the study area could be adversely affected during construction. This could be a significant impact. The mitigation strategy identified would require that ground-disturbing activities within the vicinity of the resource encountered would be halted until a qualified archaeologist can evaluate the nature and significance of the find. This would reduce impacts to a less-than-significant level.

A significant impact would occur if the project disturbed previously unknown human remains during construction. The mitigation strategy identified in this event would require that ground-disturbing activities within the vicinity of the human remains encountered would be halted until a qualified archaeologist can evaluate the nature and significance of the remains, and the Sutter and/or Placer County Coroners and Departments of Museums would also be consulted. This would reduce impacts to a less-than-significant level.

Paleontological Resources

Based on this Tier 1 analysis, no known paleontological resources are present within the corridor alignment alternatives. Unknown paleontological resources that may be present in the study area could be adversely affected during construction. This could be a significant impact. The mitigation strategy identified in this event would require (1) preconstruction meetings to train construction workers about paleontological resources and notification procedures; (2) monitoring of construction areas contained geological units designated with a potentially Moderate or High sensitivity rating, and (3) collecting, preparing, identifying and curating significant fossil material into a state-designated repository. This would reduce impacts to a less-than-significant level.

5.7 TRAFFIC AND TRANSPORTATION

Information regarding traffic and transportation housing is found in Section 4.8, Traffic and Transportation, and in the Transportation Technical Report (DKS Associates, 2007), which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.7.1 Significant and Unavoidable Impacts

In 2020, the projected opening year of Placer Parkway, the project would affect traffic patterns and volumes on arterial and collector roadways in a broad area covering south Sutter County, southwest Placer County, and north Sacramento County. While some roadway segments near proposed interchanges would have increases in traffic volumes due to Placer Parkway, a larger number of roadway segments would have decreases in traffic volumes.

All build alternatives would result in similar but smaller changes in travel patterns in the Transportation Analysis Study Area (TASA) under Existing Plus Project conditions as would occur under 2020 conditions. That is, the build alternatives would:

- Increase traffic volumes 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 southwestern Placer County and south Sutter County. These decreases would likely be less than those under 2020 conditions.

- Have a lower traffic volume on Placer Parkway than 2020 conditions.

A comparison between the No-Build Alternative and the build alternatives under 2020 conditions indicates that there would be significant level of service impacts on some roadway segments. These impacts are summarized below.

State Route 70/99

Under all build alternatives, Placer Parkway would add traffic to SR 70/99 between Interstate 5 (I-5) and Elkhorn Boulevard and would cause a significant impact on the level of service of this freeway segment.

SR 70/99 would operate at Level of Service (LOS) F conditions in 2020 between I-5 and Elkhorn Boulevard under the No-Build Alternative. All of the alternatives (with or without a potential interchange on the Parkway at Watt Avenue) would add traffic to SR 70/99 from I-5 to the Elkhorn Boulevard and thereby lengthen the period of time during the peak period where SR 70/99 would operate at LOS F conditions.

Mitigation strategies, implemented individually or collectively, include decreasing the length of time spent in LOS F conditions during the morning and evening peak period by adding high occupancy vehicle lanes to SR 70/99 between Placer Parkway and I-5; constructing 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; providing 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 southwest Placer counties to the Natomas area and downtown Sacramento, and/or identifying “fair share” contributions for new development in portions of Sutter, Placer, 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 Sutter, Placer, and Yuba counties, would need to be established to collect fees and plan, design, and construct improvements. Because it is not certain that these mitigation strategies would be implemented for some time, or at all, SPRTA has determined that this impact remains significant and unavoidable.

State Route 65

Under all build alternatives, 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 level of service of this freeway segment.

SR 65 would operate at LOS F conditions in 2020 between Interstate 80 (I-80) and the SR 65 Lincoln Bypass under the No-Build Alternative. All 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 where SR 65 would operate at LOS F conditions.

Mitigation strategies that, by themselves or in combination, could improve the level of service impacts on this segment of SR 65 to a less-than-significant level include widening SR 65 to six lanes between Placer Parkway and the SR 65 Lincoln Bypass; providing additional north-south capacity on local roadways parallel to SR 65; providing substantial transit services in the SR 65 corridor; and identifying “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. 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. Because it is not certain that these mitigation strategies would be implemented for some time, or at all, SPRTA has determined that this impact remains significant and unavoidable.

5.7.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Nonmotorized Transportation

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. Thus it would not include bus turnouts or bicycle racks. The proposed Placer Parkway median is wide enough (100 feet) to accommodate future transit facilities that may be proposed. It 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 TASA.

Placer Parkway would not directly remove or obstruct existing and planned bicycle facilities/bikeways. It 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 future bicycle facilities/bikeways. No impacts are identified.

5.8 AIR QUALITY

Information regarding air quality is found in Section 4.9, Air Quality, and in the Air Quality Technical Memorandum (URS, 2007a) which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.8.1 Significant and Unavoidable Impacts

The project is considered to be a regionally significant project for air quality as defined in the Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan (MTP).

Construction air quality impacts would be significant because under all build alternatives construction emissions would exceed the Placer County Air Pollution Control District (PCAPCD) and the Feather

River Air Quality Management District's (FRAQMD) construction emissions thresholds for reactive organic gases (ROG), oxides of nitrogen (NO_X), and particulate matter less than or equal to 10 microns (PM_{10}). Mitigation strategies identified to reduce impacts include preparation and implementation of a dust control plan; controlling dust and prevent dirt from going off site; controlling dust from inactive areas, unpaved roads, and adjacent public thoroughfares; providing air districts with a list of construction equipment and an anticipated construction timeline to identify whether potential additional restrictions would apply; maintaining construction equipment and vehicles in good condition; minimizing idling time for diesel-powered equipment and keeping idling time to 5 minutes or less; using alternative power sources where feasible; prohibiting open burning of removed vegetation; and strategic placement of trees near roadways. Even with these mitigation strategies, SPRTA has determined that impacts could remain significant and unavoidable during construction because it cannot be certain that construction air quality impacts would be reduced to a less-than-significant level.

All build alternatives would result in similar but smaller changes in air quality under Existing Plus Project conditions as would occur under 2020 conditions, which is the projected opening year of the Parkway. Impacts under 2020 conditions are described below.

All build alternatives would exceed the FRAQMD significance thresholds for ROG and NO_X. SPRTA has determined that this would be a significant and unavoidable impact of the proposed project. No feasible mitigation measures have been identified that would reduce these impacts to a less-than-significant level.

This analysis is tempered by the following: (1) as fuel and vehicle technology improves over the next decade, vehicle emissions increases can be expected to be lower than the projections presented in this analysis; (2) a reduction in traffic congestion would increase travel speed, which would reduce overall vehicle exhaust emissions (i.e., vehicle emissions are linearly correlated with travel speed); and (3) historical and current studies and testing of vehicles show that lower travel speed results in emission of Placer Parkway would reduce vehicle hours of delay within the TASA and Analysis Focus Area (AFA), and would alleviate traffic congestion, reduce travel time, and increase average travel speed, resulting in reduced emissions. While a detailed analysis of these factors would not occur until Tier 2, they are likely to reduce air quality impacts identified in this Tier 1 EIS/EIR.

5.8.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

All build alternatives would result in similar but smaller changes in air quality under Existing Plus Project conditions as would occur under 2020 conditions, which is the projected opening year of the Parkway. Impacts under 2020 conditions are described below.

None of the build alternatives would exceed the PCAPCD significance thresholds for criteria pollutants. All build alternatives would result in a less than 1 percent incremental increase in criteria pollutants over the No-Build Alternative, and differences among build alternatives are less than one-quarter of 1 percent. Alternative 1 and Alternative 3 would generate the least and most amount of pollutants, respectively. Hence, the implementation of Alternative 1 can be considered to have slightly fewer air quality impacts when compared with the other four build alternatives. Conversely, implementation of Alternative 3 would generate slightly more air pollutants and potentially create slightly greater air quality impacts than the other build alternatives.

The proposed project would not conflict or obstruct implementation of the Air Quality Attainment Plan (AQAP) as the project is included in the Regional Transportation Plan for Placer County, SACOG's MTP, and therefore conforms to the State Implementation Plan.

5.9 NOISE

Information regarding population and housing is found in Section 4.10, Noise, and in the Traffic Noise Analysis Technical Memorandum (URS, 2007g) which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.9.1 Significant and Unavoidable Impacts

The project could result in exceedances of noise standards set by FHWA and Caltrans. The project could also result in exceedances of noise thresholds as specified in the Sutter and Placer County General Plans. This would be a significant impact.

All build alternatives would result in similar but smaller changes in the noise environment under Existing Plus Project conditions as would occur under 2020 conditions, which is the projected opening year of the Parkway. Impacts under 2020 conditions are described below.

The Parkway would result in a permanent increase in ambient noise levels in the study area above existing ambient noise levels. Under all build alternatives, several roadways would experience a 3 dB or greater increase in noise relative to existing (2004) levels attributable to higher traffic volumes. One roadway segment in the noise study area would experience relative noise increases of more than 12 dBA with the project. This location is at 18th Street, north of Elverta Road (location #107, as shown on Table 4.10-5). This would be a significant impact.

Mitigation strategies to reduce operational noise impacts include avoiding placing noise-sensitive receptors near the Parkway (which would be the responsibility of individual jurisdictions), operational noise abatement strategies such as altering the horizontal and vertical alignment of the project, construction of noise barriers, acquiring property to serve as a buffer zone, or acoustically insulating public use or nonprofit institutional structures. Since the future adjacent land uses in the area where the Parkway would be constructed are in flux, with many projects in the planning stage, it is not known whether the jurisdictional mitigation strategy would be implemented or if the other strategies would be completely effective in all locations. Therefore, SPRTA has determined that this impact remains significant and unavoidable.

5.9.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

The Parkway would have a substantial increase in temporary or periodic ambient noise levels in the study area during construction. During construction, standard construction noise controls would be implemented. Given the temporary nature of the construction, this would reduce impacts to a less-than-significant level.

5.10 HYDROLOGY

Information regarding hydrology is found in Section 4.11, Hydrology and Floodplains, and in the Hydrology and Floodplain Technical Memorandum (URS, 2007d) which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.10.1 Significant and Unavoidable Impacts

There will be no significant and unavoidable impacts to hydrology with implementation of mitigation strategies.

5.10.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Increase in Impervious Surface Area Resulting in Increased Stormwater Runoff

All build alternatives would result in the construction of paved surface areas in the study area, thereby increasing stormwater runoff. 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. All build alternatives would increase impervious surfaces which would lead to potential increases in runoff, with Alternative 1 causing the most increase and Alternative 5 the least. The increase in impervious surface area would be a significant impact. Mitigation strategies include erosion controls and stabilization during and after construction, design of project features to avoid increasing flow velocities that may cause or contribute to downstream flooding, minimizing the potential for debris clogging that could cause flooding, structural runoff controls, best management practices (BMP), maximizing spans and minimizing piers/columns, maximizing the angle of stream crossings, consideration of Low Impact Development, and compliance with Federal Emergency Management Agency (FEMA) requirements regarding base flood elevations. These mitigation strategies would reduce impacts to a less-than-significant level.

Stream and Creek Crossings Affecting Downstream Hydrology

All build alternatives would require crossing creeks and streams, which may affect the hydrology of downstream segments. Crossings could affect hydrologic integrity and contribute to constriction or blockage of natural streamflow and/or natural streambed migration. They could result in modification of downstream natural flooding regime or reduction in downstream transport of sediment and nutrients. 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. This would be a significant impact.

Maintenance of existing drainage patterns will be considered during final design to prevent substantial erosion or siltation. Mitigation strategies identified for increases in impervious area, identified above, would also be applicable to this impact. Other mitigation strategies identified include minimizing the number of stream crossings, minimizing flow modifications to streams, and mimicking the natural patterns as much as possible. In combination with standard conditions for siting and design of facilities and hydrologic modification employed by Sutter County, RD 1000, and Placer County Flood Control and Water Conservation District, these impacts would be reduced to a less-than-significant level.

Floodplain Encroachment

The proposed project would cross designated 100-year floodplain areas. Alternatives 4 and 5 would impact the most 100-year floodplain (21,600 lineal feet; approximately 370 total acres), and Alternative 1 would impact the least (6,900 lineal feet; 269 total acres). Impacts to floodplains include potential reduction of hydrologic integrity, reduction of beneficial floodplain values, and constriction or blockage of flows. Encroachment at creek 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. At some major creek crossings, sections of the Parkway would be elevated on a bridge. Bridges would be designed such that the base of any new bridges within floodplains would be above the 100-year water surface.

Floodplain impacts would be potentially significant, but mitigation strategies described above would reduce impacts to a less-than-significant level.

5.11 WATER QUALITY

Information regarding water quality is found in Section 4.12, Water Quality, and in the Water Quality Technical Memorandum (URS, 2007i) which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.11.1 Significant and Unavoidable Impacts

There would be no significant and unavoidable impacts on water quality, with mitigation.

5.11.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Stormwater Runoff Due to Increase in Impervious Surface Area, Resulting in Degradation of Water Quality

All build alternatives would result in the construction of paved surface areas in the study area, thereby increasing stormwater runoff. This would increase the potential for erosion during construction activities. Also, as a consequence of vegetation removal during construction activities, stormwater runoff may be temporarily increased. This would be a potentially significant impact. The project would comply with National Pollutant Discharge Elimination System (NPDES) permit requirements during construction, which would reduce the potential for violation of any water quality standards or waste discharge requirements.

Discharges of stormwater from the project rights-of-way, properties, facilities, and activities, including stormwater management activities in maintenance and operation of state-owned highways within the State of California, have been shown to be contributors of water pollutants. 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. All build alternatives could discharge roadway runoff that may contain pollutants into streams and other sensitive sites, and would have the potential to result in substantial erosion or siltation through local alteration of existing drainage pattern. This would be a potentially significant impact.

The project would comply with NPDES permit requirements during maintenance and operation, which would reduce the potential for violation of any water quality standards or waste discharge requirements. Mitigation strategies include appropriate project design to avoid direct discharge, structural runoff controls, and incorporation of appropriate BMPs including appropriate detention and use of vegetative swales to provide opportunities for particulate and pollutant settlement. PCTPA would work with the Pleasant Grove Creek/Curry Creek Watershed Management Group and the Natomas Basin HCP staff during design phases of the project. These mitigation strategies would reduce impacts to a less-than-significant level.

The project would not substantially deplete groundwater supplies, as it would not use groundwater during either construction or operation. It would result in an increase in impervious surface related to the roadway pavement; however, runoff would be directed to adjacent unpaved surfaces in the median and shoulders, and groundwater recharge would not be affected. This would be a less-than-significant impact. No mitigation is warranted.

Stream and Creek Crossings Affecting Water Quality

Stream crossings provide an opportunity for stormwater runoff that may contain pollutants to enter a waterway, affecting the water quality of downstream segments. Crossings may constrict or block natural streamflows that may result in erosion, and provide discharge point for pollutants to enter streams or creeks. There are some differences among the alternatives relative to the number of stream crossings and the amount of the watershed downstream of creek crossings (providing an indication on how much of the creek and watershed may be affected). Since mitigation strategies (as identified for the impacts of stream and creek crossings on downstream hydrology, identified in Section 5.10 above) would reduce impacts to a less-than-significant level, the differences among the alternatives do not change the conclusion on level of significance.

Discharge of Pollutants Into Sensitive Areas

The amount of wetland and vernal pool complex areas crossed could be indicative of the potential for pollutants to be discharged into sensitive areas. Canal crossings also would have this potential. The corridor associated with Alternative 1 traverses the largest amount of wetlands; Alternative 3 would traverse 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. This would be a potentially significant impact. Mitigation strategies related to stormwater runoff due to an increase in impervious surface area, described above, are applicable to this impact. These mitigation strategies would reduce impacts to a less-than-significant level.

5.12 SOILS, GEOLOGY AND SEISMICITY

Information regarding geology is found in Section 4.13.

5.12.1 Significant and Unavoidable Impacts

There would be no significant and unavoidable impacts to geology, with standard construction techniques and implementation of mitigation strategies.

5.12.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

The proposed project would result in some soil erosion and loss of topsoil associated with construction. In addition, there are localized areas with potential for subsidence and expansion. Erosion, subsidence and expansive soils could be a potentially significant impact. Standard construction techniques and the mitigation measures identified for reduction of erosion in Hydrology and Water Quality, would reduce this impact to a less-than-significant level.

No faults delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map are located within or in the vicinity of the study area. The study area is located in a seismically quiescent region, thus strong ground shaking due to future earthquakes is not anticipated. The likelihood of seismic-related ground failure is remote. Impacts would be less than significant. No mitigation is warranted.

No known mineral resources or known mineral resource recovery sites are known to exist or to be delineated within the study area, which is classified as MRZ-4. Therefore, no impacts would result.

5.13 BIOLOGICAL RESOURCES

Information regarding biological resources is found in Section 4.14, Biological Resources, and in the Natural Environment Study (URS, 2007f), which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.13.1 Significant and Unavoidable Impacts

Endangered, Threatened, Candidate, and Fully Protected Species and Their Habitat

The proposed project has the potential to affect seven special-status species: the vernal pool fairy shrimp, vernal pool tadpole shrimp, Valley elderberry longhorn beetle, Swainson’s hawk, white-tailed kite, giant garter snake, and Boggs Lake hedge hyssop. The potential loss of individuals and of habitat would be a significant impact under all build alternatives. The degree of impact varies by species and habitat, by alternative, and is described in more detail in Section 4.14.3.3 and in Table 4.14-4.

Vernal Pool and Wetland Species

Vernal pool fairy shrimp, vernal pool tadpole shrimp, and Boggs Lake hedge hyssop are all vernal pool–dependant species, and each of the proposed built alternatives would directly impact this habitat. The area of habitat within the preservation corridor for each build alternative would range from a low of 106.7 acres for Alternative 4 to a high of 127.6 acres for Alternative 3. The mitigation strategy for vernal pool dependent species would be directed by principles set by the Placer County Conservation Plan (if implemented), *Eco-logical* (Brown, 2006) and/or the Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon (USFWS, 2005), which could include avoidance, minimization, or mitigation through in-lieu fee payment or acquisition of conservation lands. Implementation of the mitigation strategy would substantially lessen the impact of the loss of vernal pool habitat potentially utilized by these species; however, the impact would remain significant after mitigation. To the extent that replacement, re-creation or restoration of vernal pools can be implemented, this impact would be reduced; however, because the mitigation measure does not guarantee replacement of the affected habitat, this impact would remain significant.

Vernal Pools and Wetlands

Vernal pools and other federally protected wetlands would be significantly affected by each of the proposed build alternatives. The area of habitat that is within each of the corridor alignment alternatives is presented in Table 4.14-4, and range from a high of 167.3 acres under Alternative 2 to a low of 137.8 acres under Alternative 4. Mitigation for impacts to wetlands would be directed by principles set by the Placer County Conservation Plan (if implemented), and would include avoidance, minimization, or mitigation through in-lieu fee payment or acquisition of conservation lands. Implementation of these mitigation strategies would reduce non-vernal pool wetland impacts to a less-than-significant level.

Mitigation for vernal pool impacts associated with the Placer Parkway project (with or without the PCCP) would have two components: (1) habitat preservation, and (2) habitat creation. Habitat preservation in Placer County is complicated by the lack of habitat available that has not already been designated for conservation or development. Therefore, preservation in Placer County might not be possible if there are not suitable lands that can be acquired. If it is necessary to direct vernal pool preservation efforts outside of Placer County it may be difficult to satisfy the mitigation requirements because the preservation would not meet the goals of the USFWS recovery plan for vernal pool species or the goals of the PCCP. Habitat creation in Placer County is possible, but creating habitat that meets the same functions as the affected habitat could be difficult. Vernal pools rely on a close relationship between upland habitats and small-scale hydrologic conditions. If a site does not have the right subsurface conditions (a seasonally perched groundwater table over a hardpan or claypan), it may be difficult to achieve the appropriate duration of ponding and therefore the vernal pool flora and aquatic fauna may not become established. Much of the land that is potentially available for vernal pool creation in western Placer County has been cultivated in the past which often disrupts the topography and the subsurface hydrology. To the extent that replacement, re-creation, or restoration of vernal pools would be feasible, this impact would be reduced. Implementation of the mitigation strategies would substantially lessen the impact of the loss of vernal pool wetlands. However, because the mitigation strategies do not guarantee replacement of the affected onsite vernal pools, SPRTA has determined that the impact would remain significant and unavoidable.

5.13.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Endangered, Threatened, Candidate, and Fully Protected Species and Their Habitat

Potential habitat for the Valley elderberry longhorn beetle, nesting or foraging Swainson's hawks and white-tailed kites, and giant garter snakes would also be significantly affected by all of the build alternatives. Table 4.14-5 in Section 4.14 of this Tier 1 EIS/EIR presents the area of potential habitat for each species that occurs within each corridor alignment alternative. Actual impacts to habitat would likely be smaller in area than the amount indicated in Table 4.14-5, but would likely still be significant, without mitigation. Mitigation strategies would be similar to those for vernal pool species, and would include additional measures described in the Natomas Basin Conservation Plan and existing guidelines set by the U.S. Fish and Wildlife Service and California Department of Fish and Game. These mitigation strategies would reduce impacts to a less-than-significant level.

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 for water quality would be implemented during construction of the Parkway at the water crossings to protect aquatic habitats in the streams. Impacts would be less than significant. No mitigation is warranted other than mitigation identified for protection of water quality, which would also mitigate impacts to fisheries.

Riparian Habitat/Wetlands

The proposed project would have significant impacts on riparian habitat. Between 4.8 and 12.3 acres would potentially be affected, as presented in Table 4.14-5 in this Tier 1 EIS/EIR. Mitigation for impacts to riparian habitats would be directed by principles set by the Placer County Conservation Plan (if implemented), and would include avoidance, minimization, or mitigation through in-lieu fee payment or acquisition of conservation lands. If the PCCP were not adopted, mitigation strategies 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. Compensatory habitat mitigation in the absence of the PCCP would be implemented according to the strategies outlined for Sutter County, above. The Placer Parkway project may contribute to the recovery effort identified in the Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon through habitat protection and the establishment of conservation areas and reserves that will maintain or enhance species habitat values. Implementation of these mitigation strategies would reduce impacts to a less-than-significant level.

Tree Protection Ordinance

The proposed project could have significant impacts on trees protected under the Placer County Tree Preservation Ordinance in the vicinity of the Pleasant Grove Creek crossing. Impacts to protected trees would be mitigated by guidelines set forth in the preservation ordinance. This would include avoidance of protected trees where feasible, replacement in accordance with provisions of the ordinance, or payment of in-lieu fee as allowed by the ordinance. With implementation of this mitigation, impacts would be less than significant.

Conservation Lands

The project would impact a portion of the area covered by the Natomas Basin HCP. The project is not in conflict with this plan and would mitigate for all impacts as required by the plan. The proposed Placer County Conservation Plan is described in Section 4.14.1.3. Although the NCCP/HCP has not yet been adopted, PCTPA has requested and Placer County has agreed that the project would be a covered activity if this plan were adopted, and the project would abide by mitigation strategies identified in the plan. Impacts would be less than significant. No mitigation is warranted.

5.14 HAZARDOUS MATERIALS

Information regarding hazardous waste/materials is found in Section 4.15, and in the Initial Site Assessment (URS, 2007e), which is available at the locations identified in the Executive Summary, including the PCTPA web site.

5.14.1 Significant and Unavoidable Impacts

There would be no significant and unavoidable impacts to hazardous materials, with mitigation.

5.14.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

The proposed project would not create a significant hazard to the public or environment and would not require the routine transport, use, or disposal of hazardous materials within the study area. Hazardous materials that are stored or used in the corridor of the selected alternative would be removed prior to construction of Placer Parkway. During construction the use of some hazardous materials and generation of some hazardous waste would occur; however, the project would comply with all applicable regulations, and would not result in substantive impacts associated with transport, use, or disposal of hazardous materials. Impacts would be less than significant. No mitigation is warranted.

Hazardous materials are currently used and stored within the study area. It is anticipated that hazardous materials found in the selected corridor would be removed in accordance with all applicable regulations during initial phases of construction. Impacts would be less than significant. No mitigation is warranted.

Five potential Recognized Environmental Conditions (RECs) were identified within or adjacent to the build alternatives:

- 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).

During construction, the potentially hazardous wastes associated with these RECs could be released in the environment. This would be a potentially significant impact. Mitigation strategies would include locating the roadway so that potential RECs would not be disturbed; testing soils for appropriate analytes and handling them in accordance with regulatory standards; and preparing and implementing a Health and Safety Plan 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. With implementation of these mitigation strategies, impacts would be less than significant.

Trucks would use Placer Parkway. Some trucks and potentially other vehicles would likely be hauling hazardous materials. Accidents involving such vehicles could potentially result in the release of hazardous materials into the environment. The potential for this is similar to most existing facilities of a similar nature, and are not caused by the Parkway other than the fact that it would be in existence. Therefore, impacts associated with the release of hazardous materials into the environment would be less than significant. No mitigation is warranted.

The proposed project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. The proposed project would comply with the policies and goals on wildlands and fire safety, outlined in Sutter, Placer, and Sacramento Counties' General Plans. As a result, the impacts are anticipated to be less than significant. No mitigation is warranted.

5.15 ENERGY

Information regarding energy is found in Section 4.16.

5.15.1 Significant and Unavoidable Impacts

There would be no significant and unavoidable impacts on Energy.

5.15.2 Potential Environmental Effects Which Are Not Significant or Which Can Be Mitigated to Below a Level of Significance

Estimated fuel consumption does not substantially differ between build alternatives, or between the No-Build Alternative and the build alternatives. The operational fuel consumption of Alternative 3, which has the greatest projected number of vehicle miles traveled (VMT) of all build alternatives, and therefore the greatest fuel consumption, is only 1.9 percent greater than the No-Build Alternative. Furthermore, this Tier 1 analysis does not take into account the reduction in fuel use due to substantial reduction in congestion associated with all build alternatives; energy use under the build alternatives is likely overstated as compared to the No-Build Alternative. Impacts would be less than significant. No mitigation is warranted.

5.16 GROWTH

Information regarding growth is found in Section 6.1, and in the Community Impact Assessment (Mara Feeney & Associates and North Fork Associates, 2007), which is available at the locations identified in the Executive Summary, including the PCTPA web site. The project would not induce growth directly through construction of new homes or businesses, but it could be one of many factors that would encourage growth in and near the study area by extending and improving the regional transportation system. It is expected to influence the time 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. No single alternative would be more growth-inducing than another (Mara Feeney &

Associates and North Fork Associates, 2007). The project includes components that would reduce this impact, such as minimizing the number of interchanges and establishment of a no-development buffer zone which would make it difficult to construct new interchanges in the future. However, no mitigation strategies have been identified to reduce this impact to a less-than-significant level. While its contribution to regional growth would be limited, SPRTA has determined that this impact would be significant and unavoidable.

5.17 SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED AND SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE CAUSED BY THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED

5.17.1 Significant Environmental Effects Which Cannot Be Avoided if the Proposed Project Is Implemented

The following significant environmental effects cannot be avoided if the proposed project is implemented:

Land Use:

- land use conversion;
- compatibility with proposed land uses;
- consistency with applicable General Plan policies;

Farmland:

- farmland conversion;
- Williamson Act conversion;
- conflicts with agricultural plans or policies;

Visual and Aesthetics:

- change in visual character and quality of the study area;

Cultural Resources:

- potential substantial adverse change in the significance of a historic resource;

Traffic and Transportation:

- addition of traffic on SR 70/99 (between I-5 and Elkhorn Boulevard), and on SR 65 (between I-80 and the SR 65 Lincoln Bypass), thereby lengthening the period of time during the peak period where these two freeways operate at LOS F conditions.

Air Quality:

- exceedance of FRAQMD operational emission thresholds for ROG and NO_X;

- construction emissions would exceed FRAQMD and PCAPCD thresholds for ROG, NO_X, and PM_{10};

Noise:

- exceedances of noise standards set by FHWA and Caltrans, and exceedances of noise thresholds as specified in the Sutter and Placer County General Plans;

Biological Resources:

- potential to affect seven special-status species and their habitat: the vernal pool fairy shrimp, vernal pool tadpole shrimp, Valley elderberry longhorn beetle, Swainson's hawk, white-tailed kite, giant garter snake, and Boggs Lake hedge hyssop;

- potential loss of vernal pool species and their habitat;

Growth:

- one of many factors that would encourage growth in and near the study area by extending and improving the regional transportation system; and,

Cumulative Impacts.

Impacts related to the proposed project's cumulatively considerable contribution to (see Section 5.18):

- Land Use and Farmland – farmland conversion and Williamson Act conversion;

- Visual Resources – change in visual character and quality of the study area;

- Cultural Resources – potential adverse change in historic architectural resources;

- Traffic and Transportation –

  – Add traffic, in 2040, to SR 70/99 and thereby lengthen the period of time during the peak period where SR 70/99 would operate at LOS F conditions (from I-5 to the proposed Placer Parkway);

  – Add traffic, in 2040, to SR 65 and thereby lengthen the period of time during the peak period where SR 70/99 would operate at LOS F conditions (between I-80 and Lincoln Bypass);

  – traffic level of service impacts on Sierra College Boulevard between the future Valley View Parkway and English Colony Way; on Valley View Parkway, and on Whitney Ranch Parkway between SR 65 and University Avenue;

- Air Quality

  – Exceed FRAQMD significance thresholds for ROG and NO_X during operation;

  – Exceed PCAPCD significance thresholds for ROG (all build alternatives) and NO_X (all alternatives except Alternative 1)

  – Potential air toxic impacts (diesel particulates) could occur depending on the future roadway alignment within the selected corridor and the distance to existing/future sensitive receptors;

- Noise – increased noise related to vicinity development and associated roadway systems
- Hydrology – the combined effects of floodplain encroachment, loss of pervious surfaces, increased rates of runoff, and increased flooding;
- Water Quality – degradation of water quality when combined with upstream flow increases
- Biological Resources – habitat loss and fragmentation.

5.17.2 Significant Irreversible Environmental Changes Which Would Be Caused by the Proposed Project Should it Be Implemented

Land converted for use as the Placer Parkway would represent a significant irreversible environmental change which would be caused by the Parkway, since costs for reclaiming land should the transportation facility be abandoned at a future date would likely preclude reclamation of the land for its present use. Other environmental changes which would be irreversible include loss of agricultural lands including Williamson Act lands; change in the visual character and quality in the study area; change to RD 1000, an historic resource; increased traffic resulting in potential degradation of air quality and in increased noise in the study area; potential loss of potential special-status species and their habitat; and contribution to growth in the study area.

5.18 CUMULATIVE IMPACTS

Information regarding cumulative impacts is found in each section of Chapter 4, as well as in each Technical Study and Memorandum referenced above.

Chapter 3 characterizes the 2040 cumulative scenario in the study area against which potential cumulative environmental impacts have been evaluated. Each of the technical analysis sections in Chapter 4 includes a discussion of potential cumulative impacts associated with the project. This method of analysis satisfies both NEPA and CEQA requirements to evaluate the proposed project's contribution to the effect on the environment caused by the accumulation of past, present, and reasonably foreseeable projects. The discussion below presents a summary of these impacts and makes a conclusion pursuant to CEQA as to the significance of these impacts; impacts that were not cumulatively significant are not discussed.

Land Use and Farmland

The combined effects of farmland conversion and Williamson Act contract cancellation or nonrenewal could increase adverse impacts associated with individual projects, through the loss of agricultural resources or support services and increasing conflicts with urban development. This would be a cumulatively significant impact. All five alternatives would cross the Central Segment in a generally 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.

As shown on Table 4.4-10 in Section 4.4, Farmlands, it is estimated that other anticipated urban development and roadway projects in the study area would convert 5,203 acres of Farmland of Statewide Importance, 1,429 acres of Prime Farmland, 6,687 acres of Unique Farmland, and 250 acres of Grazing Land. The converted farmland would also include nearly 717 acres of Williamson Act contracted land within Sutter and Placer counties, as shown in Table 4.4-11 in Section 4.4. Depending on the alternative, the project could impact between 676.46 and 990.06 acres of farmland and between 119.85 and

243.70 acres of Williamson Act contracted land. This could represent an incremental contribution to the cumulative conversion of designated farmland. This would be a significant cumulative impact of the project.

Visual

The project would change the visual character of the region. All build alternatives, in combination with other planned and proposed development in and near the study area, would contribute to a change in visual character and quality. By 2040, the study area will be more urbanized and will have changed from rural to urban/suburban, which will result in a cumulatively significant visual impact. Placer Parkway's incremental contribution to cumulative impacts related to planned/proposed development in the study area could be cumulatively considerable. This would be a significant cumulative impact of the project.

Cultural Resources

Cumulative impacts to historic architectural resources could be expected, given the substantial amount of planned and anticipated development that could occur within the study area. The proposed Sutter Point development lies within RD 1000, which would affect this resource. Potential cumulative impacts on historic architectural resources could occur as a result of acquisition of land and construction of any of the Parkway build alternatives in conjunction with other planned and proposed development within RD 1000. The Parkway's contribution to this cumulative impact would be cumulatively considerable. This would be a significant cumulative impact of the project.

Traffic and Transportation

FHWA and Caltrans have requested that cumulative conditions for the transportation analysis of build alternatives be based on 2040 conditions, or 20 years beyond the projected opening of the Placer Parkway facility. A comparison between the No-Build Alternative and the build alternatives under 2040 conditions indicates that there would be a significant level of service impacts on some roadway segments. These impacts, which were based on the level of service policies of the jurisdiction or agencies that control each roadway, are summarized below.

State Route 70/99

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 would add traffic to SR 70/99 from I-5 to the proposed Placer Parkway and thereby would 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 farther north than under Alternatives 1, 2 and 3, and thus a longer stretch of SR 70/99 would be affected under those two alternatives. This would be a cumulatively significant impact.

Mitigation strategies identified for SR 70/99 in Section 5.7 above would be applicable to cumulative impacts as well. For the same reasons as described above (i.e., it is not certain that these mitigation strategies would be implemented for some time, or at all), the Parkway's contribution to this impact is cumulatively considerable. This would be a significant cumulative impact of the project.

State Route 65

SR 65 would operate at LOS F conditions in 2040 between I-80 and the SR 65 Lincoln Bypass under the No-Build Alternative. All 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 would lengthen the period of time during the peak period where SR 65 would operate at LOS F conditions. This would be a cumulatively significant impact.

Mitigation strategies identified for SR 65 in Section 5.7 above would be applicable to cumulative impacts as well. For the same reasons as described above (i.e., it is not certain that these mitigation strategies would be implemented for some time, or at all), the Parkway's contribution to this impact is cumulatively considerable. This would be a significant cumulative impact of the project.

Fiddyment Road

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 would be a cumulatively significant impact.

Mitigation strategies include providing adequate lanes at the Fiddyment Road/Blue Oaks Boulevard and Fiddyment Road/North Hayden Parkway intersections; widening Fiddyment Road to six lanes between Blue Oaks Boulevard and the Roseville City limits; constructing an interchange on Placer Parkway at a future extension of Watt Avenue; and identifying "fair share" contributions for new development that would contribute traffic to Fiddyment Road to help fund improvements to Fiddyment Road. The impacts associated with constructing an interchange on Placer Parkway at a future extension of Watt Avenue are identified in Chapter 7.

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 would need to be established, such as a multi-jurisdictional Joint Powers Authority that covers portions of several jurisdictions. 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. Because the build alternatives would reduce traffic at this location, the Parkway's contribution to the cumulative impact is not cumulatively considerable. Cumulative impacts would be less than significant.

Sierra College Boulevard

Under all build alternatives, 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. 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 build alternatives, and would cause a significant impact on the level of service of this roadway segment.

Mitigation strategies include providing adequate turn lanes at the Sierra College Boulevard/Valley View Parkway and Sierra College Boulevard/English Colony Way intersections, widening Sierra College Boulevard to six lanes between Valley View Parkway and English Colony Way, and identifying "fair share" contributions for new development that would contribute traffic to Sierra College Boulevard to help fund improvements to Sierra College Boulevard.

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. 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. Because it is not certain that this mitigation strategy would be implemented for some time, or at all, the Parkway's contribution to this impact is cumulatively considerable. This would be a significant cumulative impact of the project.

Valley View Parkway

Under all build alternatives, Placer Parkway would add traffic to Valley View Parkway. 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 build alternatives. This would be a cumulatively significant impact.

Mitigation strategies include providing adequate turn lanes at the Valley View Parkway/Sierra College Boulevard and Valley View Parkway/Park Drive intersections, widening Valley View Parkway to four lanes, and identifying "fair share" contributions for new development that would contribute traffic to Valley View Parkway to help fund improvements to Valley View Parkway. Because it is not certain that these mitigation strategies would be implemented for some time, or at all, the Parkway's contribution to this impact is cumulatively considerable. This would be a significant cumulative impact of the project.

Whitney Ranch Road

Under all build alternatives, Placer Parkway would add traffic to Whitney Ranch Parkway between SR 65 and University Avenue. 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.

Mitigation strategies include widening Whitney Ranch Parkway to eight lanes west of University Avenue, and identifying "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. Because it is not certain that these mitigation strategies would be implemented for some time, or at all, the Parkway's contribution to this impact is cumulatively considerable. This would be a significant cumulative impact of the project.

Air Quality

The study area for the proposed project is located in the Sacramento Metropolitan Area (SMA), which is designated as severe non-attainment for the 8-hour average O_3 National Ambient Air Quality Standards. O_3 precursors include ROG and NO_X. Under cumulative conditions, incremental emissions associated with the proposed project would exceed the FRAQMD significance thresholds for ROG and NO_X. The proposed project would exceed the PCAPCD significance threshold for ROG and CO. Similarly, the proposed project would potentially exceed the PCAPCD significance threshold for ROG, and except for Alternative 1 would exceed the PCAPCD threshold for NO_X. This would be a significant cumulative impact of the project.

Potential air toxic impacts, especially related to diesel particulates, could occur depending on the roadway alignment within the selected corridor and its distance from existing/future sensitive receptors. This could be a significant impact. 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. Therefore, the Parkway's contribution to this cumulative impact would be cumulatively considerable. This would be a significant cumulative impact of the project.

Noise

Under cumulative conditions, increased development, including its roadway systems, would result in a cumulatively significant increase in noise. With up to more than 70,000 average daily trips on the Parkway, depending on the alternative selected, the project's contribution to cumulative noise impacts would be cumulatively considerable near the Parkway, at Parkway interchanges, and potentially at other locations where a change in traffic patterns caused in part by the project would result in more traffic. Because the Parkway would result in a permanent increase in ambient noise levels in the study area above existing ambient noise levels, the project's contribution to this cumulative impact would be cumulatively considerable. This would be a significant cumulative impact of the project.

Hydrology

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 to impervious surface, 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 Parkway's contribution to this cumulative impact would be cumulatively considerable. This would be a significant cumulative impact of the project.

Water Quality

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. The Parkway's contribution to this cumulative impact would be cumulatively considerable. This would be a significant cumulative impact of the project.

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. The Parkway's contribution to this cumulative impact would be cumulatively considerable. This would be a significant cumulative impact of the project.

Biology

Placer Parkway would incrementally contribute to the projected loss of natural vegetation and sensitive natural communities within western Placer County, which would be a cumulative impact. 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[1] 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. The additional development that is anticipated by 2040 would substantially reduce and fragment remaining habitats within western Placer County and south Sutter County. Habitat fragmentation would increase, with areas in the south and east of the study area being particularly affected. 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.

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 United States 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. 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.

The potential adverse impacts on sensitive biological resources associated with Placer Parkway are considered cumulatively considerable. The Parkway’s contribution to cumulative impacts associated with habitat loss and habitat fragmentation would be a significant impact of the project.

5.19 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

To determine the environmentally superior alternative, all alternatives were evaluated with respect to their ability to avoid or substantially lessen significant environmental effects or provide meaningful differences in less-than-significant impacts, and their ability to meet the purpose and need for the project.

This analysis evaluates the No-Build Alternative, followed by the build alternatives. Build alternatives are considered in two ways. First, system-wide impacts—traffic, air quality, noise and energy—are evaluated. These are impacts that are a function of traffic movements, including vehicles miles traveled and vehicle hours of delay attributable to an alternative by virtue of where it connects to the State Routes and where other interchanges would occur. Such impacts have a broader impact that can be identified within a specific geographic segment, and extend beyond the project study area.

Second, the analysis considers impacts on environmental resources by geographic segment, where such impacts can be quantified. This is useful because it provides a clear focus on differences among alternatives: there are two alignments in the Western Segment, five alignments in the Central Segment, and one alignment in the Eastern Segment. This segment analysis therefore focuses on the differences between a SR 70/99 connection one-half mile north of Riego Road or at Sankey Boulevard, and differences among alternatives in the Central Segment.

1 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 at the outer margins in the proposed corridor.

5.19.1 No-Build Alternative

The No-Build Alternative would result in significant traffic congestion, and would not meet the purpose and need for the proposed project. It is estimated that the No-Build Alternative would result in slightly fewer VMTs than any of the build alternatives (less than 1 percent fewer in 2020 and less than 2 percent fewer in 2040). It would, however, result in substantially more vehicle hours of delay (VHD) in congested conditions as compared to the build alternatives, ranging from 3.34 to 6.07 percent in 2020 and from 5.24 to 6.98 in 2040 in the TASA, and from 10.19 to 24.04 percent in 2020 and from 15.62 to 20.67 in 2040 in the AFA.

Projected air quality under the No-Build Alternative would exceed air quality standards, but with smaller exceedances than the build alternatives when considering only VMT. It is likely that the increase in VHD as compared to the build alternatives would result in worse air quality conditions than those quantified in this Tier 1 level of analysis. Under the No-Build Alternative, energy would not be consumed during construction. During the more congested conditions expected in the future without the Parkway, energy consumption per vehicle would be expected to increase, in correlation with the greater VHD that would occur.

The No-Build Alternative would avoid many of the significant and unavoidable environmental impacts of the proposed project such as impacts on land use and farmlands; visual, cultural and biological resources; noise; and growth. Impacts that are cumulatively significant would remain significant with or without the Parkway. In particular, the assumed increase in VMT and VHD under the No-Build Alternative is in large part associated with the cumulative impact scenario.

5.19.2 System-Wide Impacts of Build Alternatives

For system-wide impacts, both opening year (2020) and cumulative year (2040) impacts are considered. This analysis focuses on significant impacts that cannot be mitigated below a level of significance.

Alternative 1 – the Red Alternative

Alternative 1 is the southernmost build alternative and would connect to SR 70/99 at the north of Riego Road interchange.

Alternative 1 would result in significant conversion of farmland, result in potential incompatibility with proposed land uses, conversion of lands under Williamson Act contracts, and inconsistency with applicable General Plan policies.

Alternative 1 would increase VMT over conditions without the project by 0.68 percent and 1.7 percent in 2020 and 2040, respectively. The increase in VMT among all build alternatives differs by less than one-quarter of 1 percent; Alternative 1 would have the smallest increase in VMT of all build alternatives. Alternative 1 would decrease VHD during LOS D, E, and F conditions without the project by 4.17 to 6.07 percent in the TASA and by 11.66 to 24.04 percent in the AFA, depending on the LOS and the analysis year. The decrease in VHD among all build alternatives ranges from 0.83 to 1.77 percent in the TASA, and from 0.65 to 3.16 percent in the AFA, depending on the LOS and the analysis year. Alternative 1 would have the largest decrease in VHD of all build alternatives.

In 2020, Alternative 1 would reduce traffic congestion on most local roadways as compared to the 2020 condition without the project. It would increase traffic congestion on SR 70/99 between I-5 and Elkhorn Boulevard and on SR 65 between Placer Parkway and the SR 65 Lincoln Bypass, contributing more traffic to those locations than would occur without the project. In 2040, Alternative 1 would contribute to a cumulatively significant impact on the following roadways: SR 70/99 between I-5 and Elkhorn

Boulevard; SR 65 between I-80 and the SR 65 Lincoln Bypass; Sierra College Boulevard between the future Valley View Parkway and English Colony Way; Valley View Parkway, and Whitney Ranch Road between SR 65 and University Avenue.

In 2020 and 2040, Alternative 1 would exceed the FRAQMD significance thresholds for ROG and NO_X; in 2040 Alternative 1 would exceed the PCAPCD significance threshold for ROG. It is the only alternative that would not exceed the PCAPCD significance threshold for NO_X in 2040. Alternative 1 would generate the least amount of criteria pollutant emissions, although differences among build alternatives are less than 2 percent.

Alternative 1 (along with the No-Build Alternative and Alternative 4) would have the fewest projected noise impacts in 2020, but not in 2040. It would have the lowest energy consumption in terms of estimated fuel consumption in both 2020 and 2040.

There is no substantive difference in growth inducement, resulting in secondary and indirect impacts, among the build alternatives.

Alternative 2 – the Orange Alternative

Alternative 2 would connect to the SR 70/99 at the north of Riego Road interchange and cross diagonally across the Central Segment of the study area. Alternative 2 would increase VMT over conditions without the project by 0.84 and 1.9 percent in 2020 and 2040, respectively. Alternative 2 would decrease VHD during LOS D, E, and F conditions over conditions without the project by 3.98 to 5.58 percent in the TASA and by 11.16 to 24.04 percent in the AFA, depending on the LOS and the analysis year. Impacts related to traffic congestion on local roadways and freeways would be similar to Alternative 1.

Air quality impacts under Alternative 2 would be similar to and slightly greater than Alternative 1. Noise impacts would be greatest under Alternative 2 (along with Alternative 3) in 2020 and 2040 (along with Alternatives 1 and 3). Alternative 2 would have the second highest energy consumption in 2020, and the third highest in 2040.

Alternative 3 – the Blue Alternative

Alternative 3, would connect to SR 70/99 at the north of Riego Road interchange and would cross the Central Segment north of the proposed Regional University and Community Specific Plan area. Alternative 3 would increase VMT over conditions without the project by 0.92 and 1.94 percent in 2020 and 2040, respectively. Alternative 3 would have the largest increase in VMT of all build alternatives. Alternative 3 would decrease VHD during LOS D, E, and F conditions over conditions without the project by 3.6 to 6.18 percent in the TASA and by 10.59 to 19.42 percent in the AFA, depending on the LOS and the analysis year. Impacts related to traffic congestion on local roadways and freeways would be similar to Alternative 1.

Air quality impacts under Alternative 3 would be similar to and slightly greater than Alternative 1. Alternative 3 would generate the greatest amount of air pollutant emissions among all build alternatives. Noise impacts would be greatest under Alternative 3 (along with Alternative 2) in 2020 and 2040 (along with Alternatives 1 and 2). Alternative 3 would have the highest energy consumption of all alternatives in both 2020 and 2040.

Alternative 4 – the Yellow Alternative

Alternative 4 would connect to SR 70/99 at the Sankey Road interchange and would cross the Central Segment north of the proposed Regional University and Community Specific Plan area. Alternative 4 would increase VMT over conditions without the project by 0.82 and 1.92 percent in 2020 and 2040, respectively. Alternative 4 would decrease VHD during LOS D, E, and F conditions over conditions without the project by 3.34 to 5.52 percent in the TASA and by 10.19 to 17.51 percent in the AFA, depending on the LOS and the analysis year. Alternative 4 would have the smallest reduction in VHD of all build alternatives. Impacts related to traffic congestion on local roadways and freeways would be similar to Alternative 1.

Air quality impacts under Alternative 4 would be similar to and slightly greater than Alternative 1. Alternative 4 (along with the No-Build Alternative and Alternative 1) would have the fewest projected noise impacts in 2020, and also in 2040 (along with Alternative 5). Alternative 4 would have the second lowest energy consumption in 2020, but the second highest in 2040.

Alternative 5 – the Green Alternative

Alternative 5 would connect to SR 70/99 at the Sankey Road interchange and would cross the Central Segment slightly to the north of Alternative 4. Alternative 5 would increase VMT over conditions without the project by 0.84 and 1.84 percent in 2020 and 2040, respectively. Alternative 5 would decrease VHD during LOS D, E, and F conditions over conditions without the project by 3.34 to 6.38 percent in the TASA and by 10.11 to 18.38 percent in the AFA, depending on the LOS and the analysis year. Impacts related to traffic congestion on local roadways and freeways would be similar to Alternative 1.

Air quality impacts under Alternative 5 would be similar to and slightly less than Alternative 4. Noise impacts would be greater than under Alternatives 1 and 4 in 2020 and the least in 2040 (along with Alternative 4). Alternative 5 would have the third lowest energy consumption of all alternatives in 2020, and the second lowest in 2040.

5.19.3 Impacts of Build Alternatives by Segment

This section considers impacts by geographic segment, for those resources where such impacts can be quantified. For this analysis, the existing plus project resource analyses were used. Use of existing plus project analyses provides a conservative estimate and acknowledges that it is infeasible to anticipate changes to the resources in 2040. This analysis focuses on significant impacts that cannot be mitigated below a level of significance. For some topics, these impacts are essentially the same for all alternatives. This is noted in the analysis below, which focuses on impacts which differentiate alternatives. In addition, the analysis also discusses impacts that can be mitigated to below a level of significance, where there are substantive impacts before mitigation.

Western Segment

In the Western Segment, all build alternatives would connect to SR 70/99 at one of two proposed locations. Alternatives 1, 2, and 3 are virtually identical in this segment, connecting at one-half mile north of Riego Road. Similarly, Alternatives 4 and 5 are also identical in this segment, connecting at Sankey Road.

Significant, unmitigable impacts related to compatibility with proposed land uses, consistency with applicable General Plan policies and agricultural plans and policies, and potential adverse change in the significance of a historic resource (RD 1000) would be essentially the same for all alternatives.

Several significant unmitigable impacts in the Western Segment differentiate between connections at Sankey Road versus those connecting at one-half mile north of Riego Road. Alternatives 1, 2, and 3 would convert almost twice as many acres of prime farmland and approximately 40 more acres of

Farmlands of Statewide Importance than Alternatives 4 and 5. The change in visual character and quality in the study area would be more pronounced under Alternatives 1, 2, and 3 than under Alternatives 4 and 5. Alternatives 1, 2, and 3 would have substantially greater impacts on biological resources than Alternatives 4 and 5. Alternatives 1, 2, and 3 would affect a 27 percent larger are of potential giant garter snake habitat (340.8 acres versus 268.2 acres for Alternatives 4 and 5); 40 percent more potential Swainson's hawk foraging habitat (85 acres versus 60.7 acres for Alternatives 4 and 5); and 160 percent more vernal pool complexes (23.1 acres versus 8.9 acres for Alternatives 4 and 5). Wetland impacts would be similar at 0.3 acre.

There are also substantive differences in the Western Segment in some impacts before mitigation would reduce them to less-than-significant levels. Alternatives 1, 2, and 3 would create fewer bisected parcels (11) as compared to Alternatives 4 and 5 (19), and would not impact existing residential communities, homes or farmsteads, or existing employment centers, while Alternatives 4 and 5 would affect the northern portion of a residential community between Pleasant Grove Road and the Union Pacific Railroad, approximately four homes or farmsteads, and one employment center associated with the relocation of Sankey Road. Since they are somewhat longer, Alternatives 1, 2, and 3 would result in approximately 40 percent more impervious surface in the Western Segment than would Alternatives 4 and 5, potentially having a greater effect on hydrology and water quality. As compared to Alternatives 4 and 5, Alternatives 1, 2, and 3 would result in 27 percent fewer acres in the 100-year floodplain and approximately twice as many acres in the 500-year floodplain. Alternatives 1, 2, and 3 would potentially impact one potential hazardous waste site of concern in the Western Segment as opposed to two such sites that would potentially be impacted by Alternatives 4 and 5.

Central Segment

Impacts within the Central Segment differ by alternative.

Significant, unmitigable impacts related to compatibility with proposed land uses, consistency with applicable General Plan policies and agricultural plans and policies, and change in the visual character and quality in the study area would be essentially the same for all alternatives.

Several significant unmitigable impacts in the Central Segment differentiate the build alternatives. Alternatives 1, 2, 3, 4, and 5 would convert from 672 to 903 acres of farmland to transportation uses, with Alternatives 4 and 5 converting the least (677 and 672 acres, respectively) and Alternative 1 converting the most (903 acres). Effects on farmland in the Central Segment by alternative are shown on Table 5-1. Overall, Alternatives 1 and 4 would have the least impacts on farmlands in the Central Segment.

Table 5-1
Important Farmlands Affected in the Central Segment

Alternative	Type of Important Farmland Affected (acres)			
	Prime	Unique	Statewide Importance	Williamson Act Lands
1	132	139	141	0
2	247	162	183	124
3	202	175	192	121
4	129	261	67	121
5	135	360	80	120

Alternatives 1, 2, and 3 would affect three residential properties that are potential historic resources in the Central Segment; none would be affected under Alternatives 4 and 5. In the Central Segment, all alternatives would have significant, unmitigable effects on biological resources, as shown on Table 5-2.

Table 5-2
Biological Resources Affected in the Central Segment

Alternative	Type of Biological Resource Affected (acres)						
	Riparian Habitat	Potential Giant Garter Snake Habitat	Potential Swainson's Hawk/White-Tailed Kite		Potential Valley Elderberry Long-Horned Beetle Habitat	Vernal Pool Complexes	Wetlands Habitat
			Nesting Habitat	Foraging Habitat			
1	5.9	0	6.0	387	1.9	5.5	15.5
2	12.3	0	7.5	315	1.3	6.9	10.6
3	4.8	0	4.2	352	1.2	10.4	11.7
4	4.8	0	2.9	251	1.2	3.7	8.0
5	4.9	0	3.2	147	1.2	21.0	7.7

Alternative 4 would affect substantially fewer acres of vernal pool complexes, a dwindling resource receiving special attention by federal resources agencies. Alternatives 1 and 2 would have the most impact on biological resources in the Central Segment. Overall, Alternatives 4 and 5 would have the least impact on biological resources.

There are also substantive differences in the Central Segment in some impacts before mitigation would reduce them to less-than-significant levels. Alternative 1 would impact the northern portion of Country Acres, an existing residential community in the Central Segment. Alternatives 1, 2, 3, and 5 would bisect 8 to 10 parcels each; Alternative 4 would only bisect 4 parcels. Alternatives 3 and 4 would affect the fewest homes and farmsteads (two), while Alternative 5 would affect the most (five). All alternatives would encroach into the planned City of Roseville Retention Basin (96, 96, 87, 87, and 83 acres would be affected by Alternatives 1 through 5, respectively), although none would encroach within the planned flood retention features of this facility. The potential for archaeological impacts would be lowest for Alternative 5, followed in order by Alternatives 4, 3, 2, and then 1.

Alternatives 4 and 5 would result in the least amount of impervious area (80 and 78 acres, respectively), following by Alternatives 2, 3, and 1 (94 acres, 97 acres, and 103 acres, respectively). Therefore, as respects the amount of impervious surface in the Central Segment, Alternatives 4 and 5 would have the least effect on hydrology and water quality, and Alternative 1 the most. Alternative 1 would affect the least amount of 100-year and 500-year floodplains (46.6 and 14 acres, respectively), followed by Alternative 2 (79.2 and 25.9 acres, respectively), and Alternative 3 (94.4 and 25.9 acres, respectively). Alternatives 4 and 5 would have the most effect on floodplains, with Alternative 5 affecting slightly more acres in the 100-year floodplain (107 versus 105 for Alternative 4), and Alternative 4 affecting more of the 500-year floodplain (37.2 acres versus 27.8 acres). Alternatives 4 and 5 would cross two watersheds, while Alternatives 1, 2, and 3 would traverse three watersheds. Alternatives 4 and 5 would cross three streams, Alternative 3 would cross four streams, Alternative 2 would cross five streams, and Alternative 1 would cross nine streams. Alternative 1 would have the most potential impact on hydrology and water quality related to stream crossings both because of the number of streams crossed and because the angles of stream crossing are more longitudinal than the other alternatives, and hence less desirable from a floodplain perspective. Overall, Alternatives 4 and 5 would have fewer impacts on hydrology and water quality, and Alternative 1 would have the most.

Eastern Segment

The corridor alignment is the same for all build alternatives in the Eastern Segment. Therefore, all impacts would be the same.

5.19.4 Conclusion

The system-wide transportation, air quality, noise, and energy analyses are based upon forecasted VMT and, for traffic, vehicle hours of delay. The analysis indicates that all build alternatives would reduce the significant traffic congestion that would occur without the project on most local roadways in 2020 and in 2040. Alternative 1 would result in slightly fewer VMT and slightly more VHD, and would therefore be slightly preferred, although there is no clear preference among build alternatives with respect to traffic because the differences among them are not substantive. The increase in VMT among all build alternatives differs by less than one-quarter of 1 percent. The decrease in VHD among all build alternatives differs by less than 1 percent overall. Differences among build alternatives with respect to air quality are also not substantial, except that Alternative 1 would not exceed the PCAPCD significance threshold for NO_X in 2040. The No-Build Alternative and Alternatives 1 and 4 would have the fewest projected noise impacts in 2020, while Alternatives 4 and 5 would be quieter or need less mitigation in 2040.

The analysis by segment indicates a preference for alternatives connecting at Sankey Road (Alternatives 4 and 5) in the Western Segment, based on the lesser amount of significant unmitigable impacts on prime farmland and farmlands of statewide importance; visual impacts; and impacts on biological resources, including substantially fewer impacts on vernal pool complexes.

In the Central Segment, Alternative 4 would be preferred over other build alternatives, due to the lesser amount of significant unmitigable impacts on prime farmland and farmland of statewide importance; impacts to potential historic resources; and impacts to biological resources, again with the least impact on vernal pool complexes.

An examination of impacts before mitigation indicates that all alternatives would affect approximately a similar number of residential communities and homes. Alternative 1 would have the least impact on the 100-year floodplain. Alternatives 1, 2, and 3 would have the most impact on hydrology and water quality, with Alternative 1 having the most impacts and Alternatives 4 and 5 the least. Alternatives 1, 2, and 3 would potentially have a slightly greater impact on hazardous waste than Alternative 4 or 5.

Based on this analysis, the No-Build Alternative is the Environmentally Superior Alternative, except with respect to traffic, where it is substantially worse than all build alternatives. Among the build alternatives, Alternative 4 is the Environmentally Superior Alternative.

6.0 OTHER IMPACT CONSIDERATIONS

6.1 GROWTH

Both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require consideration of impacts associated with growth. A general discussion of NEPA and CEQA requirements is provided in Chapter 1 of this Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR). In addition, other types of legislation pertain to growth. Relevant laws and guidelines are described below.

6.1.1 REGULATORY FRAMEWORK

The 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 that 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)).

The California Department of Transportation (Caltrans) Environmental Handbook, Volume 4, Community Impact Assessment (June 1997) is the primary guidance document that was used in the preparation of this growth inducement analysis. It defines growth inducement as the relationship between a proposed project and growth within the transportation project area (Caltrans, 1997). Just as this analysis was being completed, the Mare Island Accord interagency working group (representing the Federal Highway Administration [FHWA], the U.S. Environmental Protection Agency [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. 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. Results of the analyses have been compared and documented in the appropriate resource discussions contained in this Tier 1 EIS/EIR.

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 the preparation of the growth inducement analysis. The growth analysis is discussed in greater detail in the Community Impact Assessment (CIA) for this Tier 1 EIS/EIR (Mara Feeney & Associates and North Fork Associates, 2007).

6.1.2 METHODOLOGICAL APPROACH

Recent literature on the role of transportation infrastructure in land use changes demonstrates that growth and development patterns are shaped by a wide range of social, economic, political, and environmental influences. (A summary of pertinent literature is contained in Appendix B of the Community Impact Assessment.) 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 accurately determining the relationship between transportation and land use, 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 proposed project; and
- use of a ***growth inducement checklist***, which asks a series of questions about the proposed project in relation to population and employment growth and trends in the study area.

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. All four methodological approaches identified above—forecast method, factor analysis, the No-Build Alternative, and the Caltrans Growth Inducement Checklist—were employed for the growth 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.

The full analysis based on these methodologies is contained in the CIA for this Tier 1 EIS/EIR (Mara Feeney & Associates and North Fork Associates, 2007). For the purposes of the Tier 1 EIS/EIR, a summary description of these methods and findings is presented below.

6.1.3 IMPACT ANALYSIS

6.1.3.1 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, determined in conjunction with responsible local government agencies and with considerable public involvement.

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 International 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 the Sacramento Area Council of Governments [SACOG] and the California Department of Finance) for the southern Sutter County, western Placer County/northern Sacramento County subregions 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 Riego/Baseline 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 through adopted policies aimed at: (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. Placer Parkway project planning to date has been primarily a cooperative and collaborative process (see Appendix A) aimed at meeting projected travel demand (see Section 4.8, Traffic and Transportation) associated with actual and anticipated population and employment growth in the region, rather than an effort aimed at stimulating or facilitating unplanned growth.

6.1.3.2 Factor Analysis

Within the study area, as in any area, a wide variety of factors influence the direction and pace of development. 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. The paragraphs below provide a brief discussion of these factors as they apply to the project area. (Refer to the Community Impact Assessment for more detailed discussion.)

Cost of Land

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. 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 in the foothill areas of Placer County) and competitive with those in the greater Sacramento region.

Local Plans and Policies

Local government jurisdictions generally have adopted plans and policies that support orderly growth. In the Western Segment, local plans and policies have supported orderly industrial development in south Sutter County in the past, and now a Specific Plan for mixed-use development is being prepared for the Sutter Pointe Specific Plan area, as mandated by voters. 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 Sphere of Influence expansion. By contrast, local plans and policies are restrictive in the Central Segment, where land is designated and zoned predominantly for agricultural use with an 80-acre minimum parcel size.

Public Attitudes

Articulated attitudes toward growth and development in the study area vary. 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), but 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. There appears to be general public support for these proposed developments, despite concern for potential impacts on sensitive habitats and farmland.

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 3.4.1) 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 Sphere of Influence expansion areas; and the Curry Creek Community Plan area. Placer Parkway is recognized as a component of this future cumulative development scenario. In addition, there appears to be general public support for these proposed developments. As an example, Placer County voters passed Measure M in November 2005, supporting the development of a university in the region (Gold Country Media, 2006).

Terrain and Land Use

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 the Federal Emergency Management Agency (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 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, 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

In general, the labor force in the study region is competitive in terms of educational attainment or training and cost. 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. In the Central and Western segments at present, population density is low, the resident population is predominantly 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

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 Riego/Baseline 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.

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.

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 Metropolitan Transportation Plan (MTP) and Regional Transportation Plan (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

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. While there have been major recent improvements to the local and regional roadway network, many more improvements 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. The Parkway 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, 2007). This would shorten trip durations by approximately one-third.

Access

The Parkway would improve access to adjacent land in the Western and Eastern segments, where new high-speed interchanges are proposed to connect the Parkway 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 an interchange with Watt Avenue were to be constructed by others at some future time.

Constraints

Since it is likely that construction of Placer Parkway would happen incrementally, depending upon funding availability and willingness of adjacent property developers to provide land and/or finance roadway construction (see Section 2.2.1), 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.

Other Factors and Uncertainties

Numerous factors are at work influencing growth and development in the study area, in addition to those reviewed according to Caltrans guidance above. These include the 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 could lead to a building moratorium in that area until flood hazard issues are addressed. 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.

In summary, 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 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, potential conflicts with existing uses and flood hazards, but still predominately positive. The Parkway would improve access and commute times in both 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.

6.1.3.3 The No-Build Alternative

The purpose of the No-Build Alternative analysis is to attempt to compare the growth patterns that would occur in the study area with and without the Parkway. 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 Parkway 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 (DKS Associates, 2007b) 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). 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 interchange. Documentation of the MEPLAN model runs and results is provided in a separate technical report (DKS Associates, 2007a). Details of the effect of the addition of a Watt Avenue interchange on the MEPLAN findings are provided in Section 6.1.4.

The MEPLAN model predicted 2040 development levels in the study area and the surrounding region based on five scenarios:

- No Build-Alternative
- Alternative 1
- Alternative 1 with Watt Avenue interchange
- Alternative 5
- Alternative 5 with Watt Avenue interchange

For each scenario, the model predicted 2040 changes in households and employment in each of the 96 subareas defined for the study area and the surrounding region. The MEPLAN model showed that there would be slight differences in the distribution of households and jobs in the region under each scenario, but that, overall, these differences would not be substantial. 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 under the build alternatives, and that the amount of residential development in the surrounding region (e.g., rural portions of Yuba, Sutter and Yolo counties) 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, compared with the No Build Alternative.

The MEPLAN model estimates that the increase in households under Alternative 1 would be about the same as under Alternative 5. The location of the increase in households is somewhat influenced by the corridor alignment. A small number of additional households would be expected to be located further north under Alternative 5 compared to Alternative 1.

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 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 result in approximately 100 more jobs in the local project vicinity as compared to Alternative 5.

6.1.3.4 Expert Opinions

Telephone interviews were conducted in March and April 2006 with twenty-five 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.

Developer Responses

Nine developers representing major players in the project study region (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?" Generally it appeared that Placer Parkway had not been a major factor in development decisions, with most regional growth considered inevitable. Many developers saw the Parkway as beneficial for the congestion and regional economic growth. Additional details of findings from these interviews are included in the Community Impact Assessment (Mara Feeney & Associates and North Fork Associates, 2007).

Planner Responses

Eight senior-level planners representing eight jurisdictions or agencies (SACOG, Sutter County, Placer 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?" Most planners considered that the Parkway had no influence or very little influence on local land use planning in their jurisdiction, and 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. Additional details of findings from these interviews are included in the Community Impact Assessment.

Factor Ranking Exercise Results

Developers and planners were asked to rank the relative importance of 18 factors that can potentially influence development decisions. The developers and planners had slightly differing opinions as to which 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, the developers interviewed gave this factor a higher average score.

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. Two owned land in southern Sutter County and three owned land in southwestern Placer 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 elsewhere.

Other Comments

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.

6.1.3.5 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 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, as well as the Sutter Pointe Specific Plan area of Sutter County.

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 Placer Parkway project 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 Pointe Specific Plan areas), 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 South Sutter Specific Plan (approved in 2004, and subsequently rescinded). Plans are being developed for a major east-west thoroughfare to serve the south Sutter Pointe Specific Plan area, 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. 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). Most of the jurisdictions in the study area anticipated growth 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 predominantly 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 International 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 corridor alignment alternatives 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 (VMT), 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 Parkway 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.

6.1.4 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 Placer Parkway project and future growth in the project area. The factors influencing regional growth are complex, and there is no reliable method known for precisely 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 analysis 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). However, as explained below, the growth by 2040 would not be expected to be greater with the Parkway than without the Parkway.

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***, 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. At the same time, there are indications that the Placer Parkway's contribution to regional growth is limited, as discussed below.

Land Use Constraints Analysis

Figure 3-1 shows the alignment alternatives 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 3-1, outlined in dark purple. This area encompasses the entire Transportation Analysis Study Area as defined for the project (Placer Parkway Corridor Preservation Transportation Analysis Technical Report [DKS, 2007]) 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 3-1 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 predominantly built out or are expected to be predominantly 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 3-1. This is especially probable in the areas surrounding proposed future interchange locations, such as the Sutter Industrial Reserve/Sutter Pointe Specific Plan area 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 Habitat Conservation Plan 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 the 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 3-1. 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. 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 white areas 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 Corridor Alignment Alternatives

It is unlikely that the choice of one Placer Parkway corridor alignment 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 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 corridor alignments (Alternatives 1, 2, and 3) would provide two interchanges in the Sutter Pointe Specific Plan area, while the more northerly corridor alignments (Alternatives 4 and 5) would provide only one interchange in this area, approximately one mile farther north of the more southerly corridor alignment alternatives in the Western Segment. It could be argued that the more southerly corridor alignment alternatives would be more growth inducing because they would provide more interchanges (and more access) than the more northerly corridor alignment alternatives, in addition to which the northerly corridor alignment alternatives would be farther 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 corridor 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 Alternatives 4 and 5, which include fewer interchanges than Alternatives 1, 2 and 3, 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 corridor alignment would be more growth inducing than another in the Western Segment. Since none of the corridor alignment alternatives 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 corridor alignment, so there would be no differences in growth inducement effects among the corridor alignment 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. This area, however, is also already subject to intense development pressure, as indicated on Figure 3-1. 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.

6.1.4.1 Secondary and Indirect Impacts Associated with Growth

The following discussion presents a summary of secondary and indirect impacts associated with growth. Additional details of these impacts on the resource categories listed here are provided in the relevant Placer Parkway Tier 1 EIS/EIR technical memoranda. 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.

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. As described in this section, 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, however, it is likely that impacts from growth will be similar to those discussed below.

6.1.4.2 Build Alternatives

Secondary and indirect impacts associated with anticipated growth would be direct impacts of other projects (see Section 3.5.7 and Figure 3-1) 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 3.4.1, 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.

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.

Additional information on land use is provided in the CIA for this Tier 1 EIS/EIR (Mara Feeney and Associates and North Fork Associates, 2007).

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 runoff 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).

Additional information on farmlands is provided in the CIA for this Tier 1 EIS/EIR (Mara Feeney and Associates and North Fork Associates, 2007).

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.

Additional information on socioeconomics and community resources is provided in the CIA for this Tier 1 EIS/EIR (Mara Feeney and Associates and North Fork Associates, 2007).

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 this Tier 1 EIS/EIR (URS, 2007h).

Cultural Resources

- Potential disturbance of both known and as yet unidentified unknown historic properties, archaeological sites, and paleontological resources 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 this Tier 1 EIS/EIR (URS, 2007b, 2007c).

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.

- 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 this Tier 1 EIS/EIR (DKS Associates, 2007).

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 Memorandum prepared for this Tier 1 EIS/EIR (URS, 2007a).

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 this Tier 1 EIS/EIR (URS, 2007g).

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 runoff of pollutants;
- Increased peak flows and runoff volumes cause flooding downstream;
- Declining levels of developable land could place additional pressure for continued flood-plain 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 Floodplain Technical Memorandum prepared for this Tier 1 EIS/EIR (URS, 2007d).

Water Quality

Although it is not possible to predict with any certainty where increased runoff will occur, it is reasonable to assume that secondary and indirect impacts associated with reduction in pervious land cover and increased runoff, 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 nonpoint source water pollution of surface water bodies through increased runoff 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 water quality in the study area is provided in the Water Quality Technical Memorandum prepared for this Tier 1 EIS/EIR (URS, 2007i).

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 runoff 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 above.

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 effects 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 runoff 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 noncontiguous 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 water bodies 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 affected. 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 branchiopods 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 this Tier 1 EIS/EIR (URS, 2007f).

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 this Tier 1 EIS/EIR (URS, 2007e).

Energy

Anticipated growth would use 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 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.

6.2 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Preservation of right-of-way for the Placer Parkway corridor would not involve irreversible and irretrievable commitments of resources. If the Parkway were approved and built, a commitment of land and natural resources used for the construction and operation of this transportation facility would result.

When land is converted to a major transportation facility, is it unlikely that such land would ever be reclaimed for its present use. Costs for reclaiming land should the transportation facility be abandoned at a future date would likely preclude such reclamation. Therefore, while not impossible, it is assumed that the land converted for use as the Placer Parkway would represent an irreversible and irretrievable commitment of the land resource.

Future construction of the Placer Parkway would demand considerable amounts of construction materials such as aggregate or cement, fossil fuels, labor, and public capital. The physical materials are generally not retrievable, though some construction materials may be reused or recycled. Labor and public capital will be irretrievably committed when expended on Placer Parkway construction.

The amount of resources irretrievably committed would be similar for all build alternatives. Slightly more resources would be expended depending on the length of the roadway eventually constructed, with Alternative 1 being the longest at 16.2 miles, Alternatives 4 and 5 being the shortest at 14.3 and

14.2 miles, respectively, and Alternatives 2 and 3 falling in between at 15.4 and 15.6 miles, respectively. The No-Build Alternative would not require irreversible and irretrievable commitments of resources.

The commitment of resources is made in anticipation of benefits from improvements in the local and regional transportation system. These benefits include improved vehicular access and circulation, and enhanced efficiency and economy of vehicular travel. These benefits will accrue to area residents, businesses, and visitors. These benefits are expected to outweigh the costs of the permanent commitment of resources descried above.

7.0 POTENTIAL WATT AVENUE INTERCHANGE

The Placer County General Plan includes a transportation element defining the planned future roadway system. 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. A Watt Avenue extension and/or interchange is not part of the proposed Placer Parkway. It would be subject to independent future environmental analysis and review and is not being fully evaluated within this Tier 1 Environmental Impact Statement/Environmental Impact Report (EIS/EIR). However, such an extension could provide access onto the Placer Parkway via a new interchange (see Figure 7-1). The analysis of traffic, air and noise impacts includes an evaluation of potential impacts from travel patterns in the Transportation Analysis Study Area (TASA) associated with a potential Watt Avenue interchange, as this interchange could affect future travel patterns in the area, including use of the Parkway. Other technical evaluations assess the footprint of the interchange only. Based on direction from previous planning studies, this chapter of the Tier 1 EIS/EIR evaluates each corridor alternative with the addition of 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 interchange with Placer Parkway and does not analyze the extension of Watt Avenue. The evaluation is intended only to disclose any potential, reasonably foreseeable, effects of the Parkway, if the Parkway design is modified in the future to include a Watt Avenue interchange.

All of the potential 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. As a result, only preliminary concepts, as shown in Figure 7-1, are available for review and analysis at this time.

A precise location or alignment has not been identified for a potential interchange between the Parkway and Watt Avenue. As shown on Figure 7-1, the location of an interchange at Watt Avenue would depend on the build alternative. Alternative 1 includes two different potential locations for the interchange. The first Alternative 1 interchange location (Option One), would be located near and potentially cross Curry Creek. The second potential location for the Alternative 1 Watt Avenue interchange (Option Two), which is also the Alternative 2 interchange location, lies to the north of Option One and is located outside of the Pleasant Grove Creek floodplain south of Pleasant Grove Creek. Alternatives 2, 3, 4, and 5 each incorporate only one potential interchange location, located south of Pleasant Grove Creek.

The following sections describe potential impacts that could be associated with a Watt Avenue interchange. As there could not be a Watt Avenue interchange to the Parkway under the No-Build Alternative, as the Parkway would not exist, the No-Build Alternative is include only for comparative purposes and is not analyzed.

The discussion of impacts focuses on direct impacts; the evaluation of potential secondary and indirect impacts that could be associated with a potential Watt Avenue interchange is considered speculative at this stage. Such impacts would be subject to independent environmental review by others and are not attributable to Placer Parkway. The Parkway traffic analysis did incorporate an evaluation of cumulative impacts that could be associated with a potential Watt Avenue interchange as this is less speculative and is based on direction from previous planning studies, and therefore this is included in this chapter, together with a corresponding analysis of air and noise impacts.

7.1 LAND USE

An interchange on Placer Parkway to a potential Watt Avenue roadway extension could affect existing and proposed land uses within the area of the interchange. Table 7-1 shows the additional land acreage and parcels that would be potentially affected by the conceptual Watt Avenue interchange.

Table 7-1
Parcels Potentially Affected by Potential Watt Avenue Interchange

Alternative Interchange	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 North Fork Associates GIS analysis of potential Interchanges
Note: calculated acreage accounts for area outside potential Parkway corridor alignment only

7.1.1 Alternative 1 (Option 1)

This connection would potentially convert an additional 17.5 acres of land on two separate parcels from existing uses to a highway interchange. The area within and adjacent to the connection is currently in or would be suitable for agricultural production. Impacts to farmland from the potential interchange are described in Section 7.3. No newly bisected parcels would be created as a result of the Watt Avenue interchange and parcels would be created that would be inconsistent with the existing zoning.

The potential connection may impact future proposed developments in the area of the interchange, including areas of 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.

7.1.2 Alternative 1 (Option 2)/Alternative 2

This interchange would potentially convert an additional 16.5 acres of land on two separate parcels from existing uses to a highway interchange. 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 interchange are analyzed in Section 7.3. No newly bisected parcels would be created as a result of the Watt Avenue interchange and no parcels would be created that would be inconsistent with the existing zoning.

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 was designated to protect wetland resources, and land use here is limited to activities allowed under the Section 404 permit 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, 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 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.

7.1.3 Alternative 2

Alternative 2 has the same potential Watt Avenue interchange as Alternative 1. Potential impacts would therefore be similar to those discussed above under Alternative 1.

7.1.4 Alternatives 3 and 4

This interchange would potentially convert an additional 15 acres of land on two separate parcels (see Table 7-1) from its existing uses to highway interchange. The area within and adjacent to the interchange is currently suitable for agricultural production. Impacts to farmland from the potential interchange are analyzed in Section 7.3. There would not be any newly created bisected parcels as a result of this Watt Avenue interchange, and no parcels would be created that would be inconsistent with the existing zoning.

The Alternative 3 or 4 interchange would not directly affect any proposed developments in the study area.

7.1.5 Alternative 5

This connection would potentially convert an additional 17.5 acres of land on three separate parcels (see Table 7-1) 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 7.3.

There would not be any newly created bisected parcels as a result of this potential interchange with the Parkway. The Alternative 5 interchange 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 Watt Avenue interchange would reduce this parcel, which is currently 155 acres, to approximately 78 acres, thereby making it inconsistent with the existing zoning. Also, the potential interchange would remove 31 acres of right-of-way from an existing nonconforming 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 effects on these proposed land uses.

7.2 SOCIOECONOMICS AND COMMUNITY IMPACTS

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 7-1 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.

7.3 FARMLAND

7.3.1 Farmland Conversion

The potential amount and type of farmland converted by the potential Watt Avenue interchange are shown in Table 7-2. Depending on the alternative or option selected, the interchange could affect an additional 1.88 acres to 10.95 acres of farmland.

Table 7-2
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					

7.3.2 Williamson Act Contracts

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 not have any impact on Williamson Act land in the study area under any of the Parkway build alternatives and the new connection would not add to the severity of project impacts on Williamson Act protected parcels.

7.4 PUBLIC SERVICE AND UTILITIES

A Watt Avenue interchange would not 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.

7.5 VISUAL AND AESTHETICS

A Watt Avenue interchange could have visual and aesthetic impacts. The proposed Option One location for Alternative 1 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 interchange option. Viewer response (consisting of viewer sensitivity and viewer exposure) for this interchange 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 potential impacts of the Alternative 1, Option Two 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 area and the open space buffer specified 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 interchange would be most visible from the northern portion of the Curry Creek Community Plan area, 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 interchange. 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.

7.6 CULTURAL RESOURCES

A future Watt Avenue interchange would not impact any known archaeological, historic (built environment) or paleontological resources, as none exist within the vicinity of any of the potential Watt Avenue interchange locations.

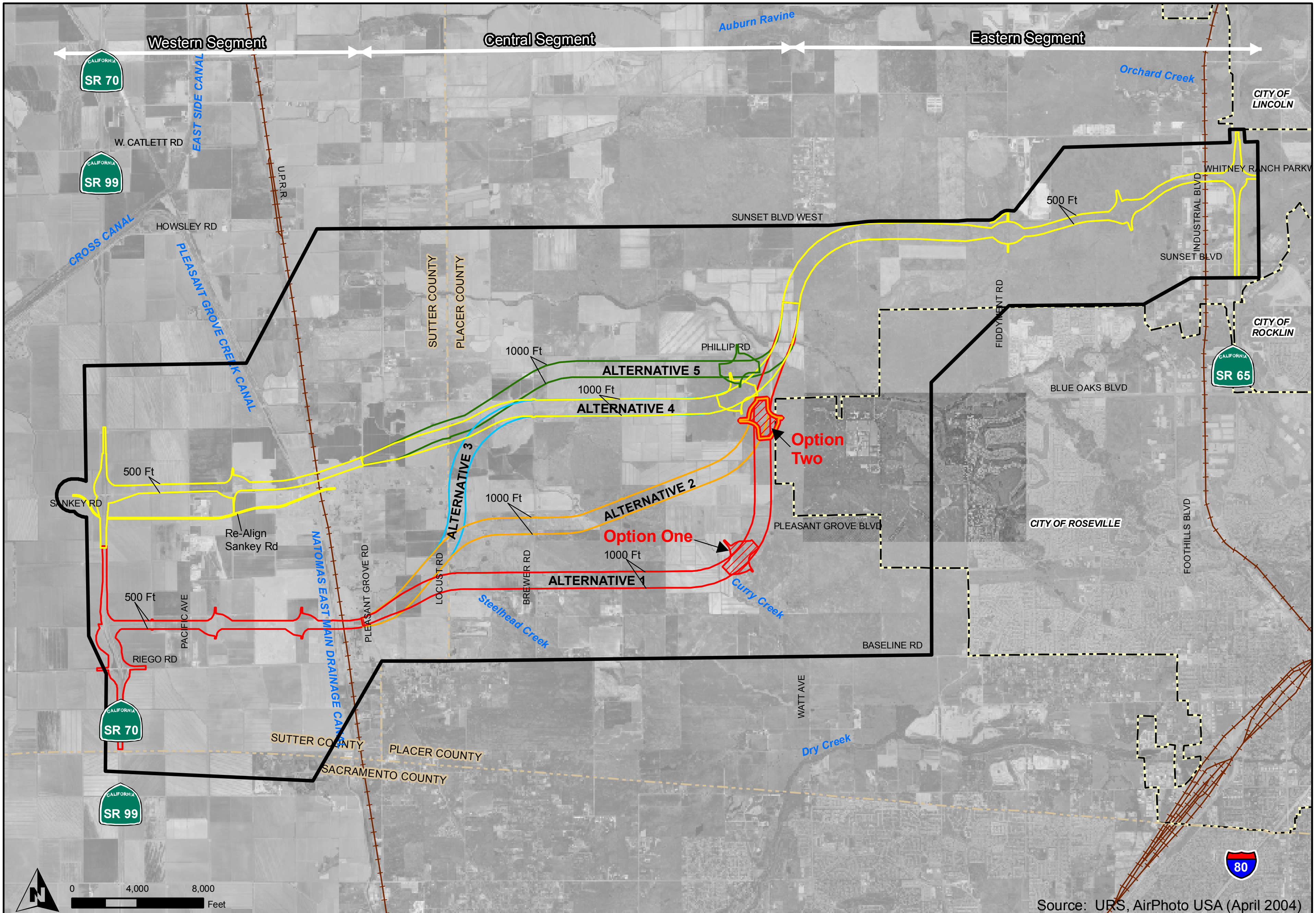
A future Watt Avenue interchange could impact unknown archaeological and paleontological resources in the study area.

7.7 TRAFFIC AND TRANSPORTATION

The changes in traffic volumes on the arterial/collector roadway system serving the TASA due to each build alternative with and without a potential Watt Avenue interchange are described in detail in the Transportation Technical Report (DKS, 2007). A review of that information 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 without that connection. The roadway segments that would have the most substantial increase in traffic volume due to a Watt Avenue interchange in both 2020 and 2040 are as follows:

- Placer Parkway
- Watt Avenue north of Elverta Road



Study Area Boundary
City Boundary
County Boundary
Alternative 1
Alternative 2
Alternative 3
Alternative 4
Alternative 5
Potential Future Watt Avenue Interchange*
Alternative Watt Avenue Interchange Location: Alternative 1
Potential Future Interchange
* Note: Watt Ave Interchange is not part of project and may be constructed in the future by others.

PLACER PARKWAY

Tier 1 EIS/EIR

Potential Watt Avenue Interchange

Figure 7-1

June 2007

URS Corporation L:\Projects\PlacerParkway2007_28066595\MXD\Current Working Documents\EIS\Fig_7-1_Potential_Watt_Ave_Interchange.mxd Date: 2/28/2007 11:11:31 AM Name: akkeele0

- 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, primarily in the vicinity of the 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.

The connection of Placer Parkway via a potential Watt Avenue interchange 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 in both 2020 and 2040 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 that would also have lower volumes with a Watt Avenue interchange than without that connection in both 2020 and 2040 include:

- 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

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 levels of service on individual roadway segments, the following systemwide measures were defined to show the impacts and benefits to the roadway system as a whole:

- Vehicle miles traveled (VMT) on congested roadways
- Vehicle delay

Tables 7-3 and 7-4 show the projected VMT on congested roadways during commute periods under the 2020 conditions for the full TASA (shown in Figure 4.8-1 in Section 4.8, Traffic and Transportation). Tables 7-7 through 7-10 show the same information for 2040. Tables 7-5 and 7-6 show this same information but as percentages of the total VMT in the full TASA.

VMT was summarized in those tables separately for roadways that would operate at Level of Service (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.

Table 7-3
Estimated 2020 VMT by Level of Service Category – TASA

		Estimated 2020 VMT (3-Hour AM and 3-Hour PM Commute Periods) within Transportation Analysis Area[1]											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
LOS	Facility Type	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 4.8-2 for TASA

Source: DKS Associates, 2007

Table 7-4
Summary of 2020 VMT by Level of Service Category – TASA

		Estimated 2020 VMT (3-Hour AM and 3-Hour PM Commute Periods) within Transportation Analysis Area[1]											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
LOS	Facility Type	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 4.8-2 for TASA

Source: DKS Associates, 2007

Table 7-5
Estimated Percentage of 2020 VMT by Level of Service Category – TASA

LOS	Facility Type	Percentage of VMT (3-Hour AM and 3-Hour PM 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 4.8-2 for TASA
Source: DKS Associates, 2007

Table 7-6
Summary of the Percentage of 2020 VMT by Level of Service Category – TASA

LOS	Facility Type	Percentage of VMT (3-Hour AM and 3-Hour PM 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 4.8-2 for TASA
Source: DKS Associates, 2007

Table 7-7
Estimated 2040 VMT by Level of Service Category – TASA

		Estimated 2040 VMT (3-Hour AM and 3-Hour PM Commute Periods) within Analysis Area[1]											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
LOS	Facility Type	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 4.8-3 for TASA
Source: DKS Associates, 2007

Table 7-8
Summary of Estimated 2040 VMT by Level of Service Category – TASA

		Estimated 2040 VMT by Level of Service Category (3-Hour AM and 3-Hour PM Commute Periods)											
			Alternative 1			Alternative 2		Alternative 3		Alternative 4		Alternative 5	
LOS	Facility Type	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 4.8-3 for TASA
Source: DKS Associates, 2007

Table 7-9
Estimated 2040 VMT by Level of Service Category – TASA

LOS	Facility Type	Percentage of VMT (3-Hour AM and 3-Hour PM 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 4.8-3 for TASA
Source: DKS Associates, 2007

Table 7-10
Summary of Estimated 2040 VMT by Level of Service Category – TASA

LOS	Facility Type	Estimated 2040 VMT by Level of Service Category (3-Hour AM and 3-Hour PM 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 4.8-3 for TASA
Source: DKS Associates, 2007

- Compared to the No-Build Alternative, all build alternatives would reduce the amount of VMT on congested roadways. 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:

- > 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 7-11 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 4.8-1). Table 7-12 shows the same information for 2040. These tables indicate that Placer Parkway would significantly reduce vehicle hours of delay. Vehicle delay would be lower for scenarios with a Watt Avenue interchange than without that interchange.

7.8 AIR QUALITY

As described in the Transportation Technical Report (DKS, 2007) and summarized in Section 7.7, an interchange at Watt Avenue would have a number of effects as compared to without one, irrespective of which location is evaluated. These include:

- A larger reduction in VMT on congested roadways than without an interchange;

- A higher reduction in Vehicle Hours of Delay (VHD) within the TASA and especially in the Analysis Focus Area (AFA) with the inclusion of a Watt Avenue interchange. 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 interchange would reduce travel time by 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. Emissions associated with a Watt Avenue interchange were quantified using the VMT data from the traffic analysis.

7.8.1 Alternative 1

Total emissions under Alternative 1 with and without a Watt Avenue interchange in 2020 are presented in Table 7-13. The percentage difference in emissions between the three Alternative 1 scenarios and the No-Build Alternative is presented in Table 7-14.

Compared to the No-Build Alternative, Alternative 1 with a Watt Avenue interchange would have greater VMT and emissions than without such an interchange. The Option One location would increase VMT and carbon monoxide (CO) slightly more than Option Two.

Table 7-11
Estimated Vehicle Hours of Delay within TASA[4]

LOS	Facility Type	Estimated 2020 Vehicle Hours of Delay (3-Hour AM and 3-Hour PM 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 am and pm commute periods
[2] > LOS E is the added travel time for vehicles faced with LOS F conditions in the TASA during the 3-hour am and pm commute periods
[3] > LOS F2 is the added travel time for vehicles faced with LOS F3+ conditions in the TASA during 3-hour am and pm commute periods
[4] See Figure 4.8-2 for TASA

Source: DKS Associates, 2007

Table 7-12
Estimated 2040 Vehicle Hours of Delay within TASA[4]

LOS	Facility Type	Estimated 2040 Vehicle Hours of Delay (3-Hour AM and 3-Hour PM 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 am and pm commute periods
[2] > LOS E is the added travel time for vehicles faced with LOS F conditions in the TASA during the 3-hour am and pm commute periods
[3] > LOS F2 is the added travel time for vehicles faced with LOS F3+ conditions in the TASA during the 3-hour am and pm commute periods
[4] See Figure 4.8-3 for TASA

Source: DKS Associates, 2007

Table 7-13
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	17,723,337	8,940	69,120	9,920	1,460	180
Alternative 1	17,844,410	9,000	69,600	10,000	1,480	180
Alternative 1 with Watt Avenue Interchange Option One	17,904,849	9,020	69,840	10,020	1,480	180
Alternative 1 with Watt Avenue Interchange Option Two	17,888,410	9,020	69,760	10,020	1,480	180

Notes:
1. VMT data are from the Placer Parkway VMT by Speed Bin.xls, April 26, 2006, prepared by DKS Associates for this project.
2. Pollutants are calculated using the Burden option in the California Air Resources Board (CARB)'s EMFAC2002 model and project-specific VMT data.

Table 7-14
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	0.69	0.81	1.37	0.00
Alternative 1 with Watt Avenue Interchange Option One	(+1.02)	0.89	1.04	1.01	1.37	0.00
Alternative 1 with Watt Avenue Interchange Option Two	(+0.93)	0.89	0.93	1.01	1.37	0.00

Notes:
1. VMT data are from the Placer Parkway VMT by Speed Bin.xls, April 26, 2006, 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.

7.8.2 Alternative 2

Total emissions for Alternative 2 with and without a Watt Avenue interchange are presented in Table 7-15. The percentage difference in emissions between these two scenarios and the No-Build Alternative is presented in Table 7-16.

Table 7-15
VMT and Criteria Pollutant Emissions for Alternative 2 and the No-Build Alternative in 2020[1]

Description	VMT	ROG (lbs/day)	CO (lbs/day)	NO_X (lbs/day)	PM_{10} (lbs/day)	SO_X (lbs/day)
No-Build Alternative	17,723,337	8,940	69,120	9,920	1,460	180
Alternative 2	17,872,706	9,020	69,700	10,000	1,480	180
Alternative 2 with Watt Avenue Interchange	17,921,643	9,040	69,880	10,040	1,480	180

Notes:

1. VMT data are from the Placer Parkway VMT by Speed Bin.xls, April 26, 2006, 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 7-16
Percentage Change in VMT and Criteria Pollutant Emissions Between Alternative 2 and the No-Build Alternative in 2020

Description	VMT (%)	Emissions Increase Over No-Build Alternative (%)				
		ROG	CO	NO_X	PM_{10}	SO_X
Alternative 2	(+0.84)	0.89	0.84	0.81	1.37	0.00
Alternative 2 with Watt Avenue Interchange	(+1.12)	1.12	1.13	1.21	1.37	0.00

Notes:

1. VMT data are from the Placer Parkway VMT by Speed Bin.xls, April 26, 2006, 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 with a Watt Avenue interchange would have greater VMT and emissions than Alternative 2. All other alternatives with a Watt Avenue interchange would have similar increases.

7.8.3 Alternative 3

The emissions for Alternative 3 with and without a Watt Avenue interchange are presented in Table 7-17 with the percentage increase in emissions between these two scenarios and the No-Build Alternative presented in Table 7-18.

Table 7-17
VMT and Criteria Pollutant Emissions for Alternative 3 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	17,723,337	8,940	69,120	9,920	1,460	180
Alternative 3	17,885,664	9,020	69,760	10,020	1,480	180
Alternative 3 with Watt Avenue Interchange	17,914,037	9,040	69,880	10,040	1,480	180

Notes:

1. VMT data are from the Placer Parkway VMT by Speed Bin.xls, April 26, 2006, 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 7-18
Percentage Change in VMT and Criteria Pollutant Emissions Between Alternative 3 and the No-Build Alternative in 2020

Description	VMT (%)	Emissions Increase Over No-Build Alternative (%)				
		ROG	CO	NO_X	PM_{10}	SO_X
Alternative 3	(+0.92)	0.89	0.93	1.01	1.37	0.00
Alternative 3 with Watt Avenue Interchange	(+1.08)	1.12	1.10	1.21	1.37	0.00

Notes:

1. VMT data are from the Placer Parkway VMT by Speed Bin.xls, April 26, 2006, 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 with a Watt Avenue interchange would have greater VMT and emissions than Alternative 3. All other alternatives with a Watt Avenue interchange would have similar increases.

7.8.4 Alternative 4

Total emissions for Alternative 4 with and without a Watt Avenue interchange are presented in Table 7-19. The increase in emissions between these two scenarios and the No-Build Alternative is presented in Table 7-20.

Table 7-19
VMT and Criteria Pollutant Emissions for Alternative 4 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	17,723,337	8,940	69,120	9,920	1,460	180
Alternative 4	17,869,007	9,020	69,700	10,000	1,480	180
Alternative 4 with Watt Avenue Interchange	17,910,748	9,020	69,860	10,020	1,480	180

Notes:

1. VMT data are from the Placer Parkway VMT by Speed Bin.xls, April 26, 2006, 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 7-20
Percentage Change in VMT and Criteria Pollutant Emissions Between Alternative 4 and the No-Build Alternative in 2020

Description	VMT (%)	Emissions Increase Over No-Build Alternative (%)				
		ROG	CO	NO_X	PM_{10}	SO_X
Alternative 4	(+0.82)	0.89	0.84	0.81	1.37	0.00
Alternative 4 with Watt Avenue Interchange	(+1.06)	0.89	1.07	1.01	1.37	0.00

Notes:

1. VMT data are from the Placer Parkway VMT by Speed Bin.xls, April 26, 2006, 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 with a Watt Avenue interchange would have greater VMT and emissions than Alternative 4. All other alternatives with a Watt Avenue interchange would have similar increases.

7.8.5 Alternative 5

Total emissions for Alternative 5 with and without a Watt Avenue interchange are presented in Table 7-21. The increase in emissions between these two scenarios and the No-Build Alternative is presented in Table 7-22.

Table 7-21
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	17,723,337	8,940	69,120	9,920	1,460	180
Alternative 5	17,871,704	9,020	69,700	10,000	1,480	180
Alternative 5 with Watt Avenue Interchange	17,906,108	9,020	69,840	10,020	1,480	180

Notes:
1. VMT data are from the Placer Parkway VMT by Speed Bin.xls, April 26, 2006, 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 7-22
Percentage Change in VMT and Criteria Pollutant Emissions Between Alternative 5 and the No-Build Alternative in 2020

Description	VMT(%)	Emissions Increase Over No-Build Alternative (%)				
		ROG	CO	NO_X	PM_{10}	SO_X
Alternative 5	(+0.84)	0.89	0.84	0.81	1.37	0.00
Alternative 5 with Watt Avenue Interchange	(+1.03)	0.89	1.04	1.01	1.37	0.00

Notes:
1. VMT data are from the Placer Parkway VMT by Speed Bin.xls, April 26, 2006, 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 with a Watt Avenue interchange would have greater VMT and emissions than Alternative 5. All other alternatives with a Watt Avenue interchange would have similar increases.

7.8.6 Cumulative Impacts Associated with a Watt Avenue Interchange

A detailed discussion of potential cumulative air quality impacts associated with a Watt Avenue interchange is presented in the Air Quality Technical Memorandum (URS, 2007a). The main findings of this analysis are as follows:

- 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.
- Under Alternative 1, either Watt Avenue interchange location would increase VMT, reactive organic gases (ROG), CO, and oxides of nitrogen (NO_X) as compared to this

alternative without such an interchange. Emissions of oxides of sulfur (SO_X) would be similar. An Option One connection (close to Baseline Road) would increase VMT, ROG, CO, NO_X, and particulate matter less than or equal to 10 microns (PM_{10}) more than would Option Two.

- Under Alternative 2, a Watt Avenue interchange would increase VMT, ROG, CO, NO_X, and PM_{10} as compared to this alternative without such an interchange. Emissions of SO_X would be similar.
- Under Alternative 3, a Watt Avenue interchange would increase VMT, ROG, CO, NO_X, and PM_{10} as compared to this alternative without such an interchange. Emissions of SO_X would be similar.
- Under Alternative 4, a Watt Avenue interchange would increase VMT, CO, NO_X, and PM_{10} as compared to this alternative without the interchange. Emissions of ROG and SO_X would be similar.
- Under Alternative 5, a Watt Avenue interchange would increase VMT, ROG, CO, and NO_X as compared to this alternative without the interchange. Emissions of PM_{10} and SO_X would be similar.

7.9 NOISE

7.9.1 2020 Impact Analysis with Watt Avenue Interchange

The predicted 66 A-weighted decibels (dBA) noise contours in 2020 for Alternatives 1 (Options One and Two) through Alternative 5 with a Watt Avenue Interchange are presented in the Traffic Noise Analysis Technical Memorandum (URS, 2007).

Absolute impacts with respect to residential units existing as of 2004 for the five build alternatives are summarized in Table 7-23. Residential units built after 2004 may also be affected in a similar manner. The No-Build Alternative is not shown in Table 7-23 because no impacts would be associated with this alternative.

Table 7-23
Placer Parkway Absolute Noise Impact Summary
with Watt Avenue Interchange (2020)

Alternative	Homes Within Proposed ROW[1]				Impacted Residential Units by Segment (2020)			
	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:

1. Homes within the proposed ROW are units that are currently within the identified right-of-way for the given proposed alternative/segment. Affected 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 7-23.

Relative impacts related to the existing roadways in the project area are summarized in Table 7-24. In this case, the No-Build Alternative is shown for comparison purposes.

Based on counts of roadway segments expected to experience relative impacts, Alternative 4 would have slightly more impacts than Alternative 5. 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.

Table 7-24
Relative Noise Impacts for Existing Roadways, with Watt Avenue Interchange (2020)

DKS Tag	Roadway	Segment	2004 Daily Traffic Vol.	Estimated 2020 Daily Traffic Volumes (with potential Watt Interchange)							Projected Relative Decibel (dBA) Increases in Traffic Noise from 2004 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

7.9.2 2040 Impact Analysis with Watt Avenue Interchange

7.9.2.1 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 interchange in 2040 are presented in the Traffic Noise Analysis Technical Memorandum (URS, 2007g).

Table 7-25 summarizes absolute impacts on existing (2004) residential units for the five build alternatives with respect to 2040. Homes within the proposed right-of-way (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 2004 may also be affected in a similar manner.

Table 7-25
Placer Parkway Absolute Noise Impact Summary
with Watt Avenue Interchange (2040)

	Homes Within Proposed ROW[1]				Impacted Residential Units by Segment (2020)			
Alternative	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:

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 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, as discussed in Section 4.10, Noise, new residential units in the overlap zones could therefore experience absolute impacts and be quantified in a manner similar to that shown in Table 7-25.

7.9.3 Relative Impacts on Future Roadways

Relative impacts related to the existing roadways in the project area are summarized in Table 7-26. In this case, the No-Build Alternative is shown for comparison purposes.

Table 7-26 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 7-26
Relative Noise Impact for Existing Roadways, with Watt Avenue Interchange (2040)

DKS Tag	Roadway	Segment	2004 Daily Traffic Vol.	Estimated 2040 Daily Traffic Volumes (with potential Watt Interchange)							Projected Relative Decibel (dBA) Increases in Traffic Noise from 2004 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 7-27 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 7-27
Noise Impact Rating by Alternative, with Watt Avenue Interchange (2040)

Alternative	Absolute Impacts[1]	Relative Impacts[2]	Ranking[3]
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:

1. Number of residences.
2. Number of roadways with projected increases in traffic noise > 12 dBA.
3. A ranking of 1 indicates that an alternative has the fewest projected combined impacts; A ranking of 7 — the most.

7.10 HYDROLOGY AND FLOODPLAINS

The presence of an interchange with Watt Avenue could have potentially greater hydrological impacts in comparison to the absence of such an interchange through the increase in impervious surface that would occur as a result of construction of the interchange. This 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.

7.11 WATER QUALITY AND STORMWATER RUNOFF

The presence of an interchange with Watt Avenue could have potentially greater water quality impacts, in comparison to the absence of such an interchange, through the increase in impervious surface that would occur as a result of construction of the interchange. This increase in impervious surface would be similar for all locations. As described above in Section 7.10, as the Alternative 1 (Option One) interchange location would be located near and potentially cross Curry Creek, potential impacts to water quality would be greater for this alternative than for other build alternatives.

7.12 GEOLOGY/SOIL/SEISMIC/TOPOGRAPHY

There would not be potential impacts on geology, soils, or topography associated with a Watt Avenue interchange other than potential impacts on water quality (see Section 7.11). No geologic or seismic factors are expected to present any hazard to the construction or operation of any of the build alternatives or the potential Watt Avenue interchange, and there are no expansive soils in the vicinity of the interchange location.

7.13 BIOLOGICAL RESOURCES

It is estimated any of the proposed Watt Avenue interchanges could result in approximately 65 acres of potential habitat impacts. 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 affect approximately 9 acres of wetlands beyond the corridor alignment. 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 affect 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 affect 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.

7.14 HAZARDOUS MATERIALS

There would not be potential impacts from the construction or operation of the Watt Avenue interchange associated with the presence of hazardous materials. 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 extension and any of the Placer Parkway alternatives.

7.15 ENERGY

There would not be potential impacts from the construction or operation of the Watt Avenue interchange associated with the consumption of energy. Energy would be consumed on a one-time basis during construction of a Watt Avenue interchange to any of the build alternatives to manufacture materials, transport materials, and operate construction equipment. Substantial energy would be consumed during construction of all build alternatives with a Watt Avenue interchange in comparison to the No-Build Alternative. Alternative 1, which has six interchanges and is 16.2 miles in length, would be expected to consume the greatest amount of energy during construction compared to other build alternatives. Alternative 5, which has five interchanges and which is 14.2 miles in length, would consume the least.

With respect to the length of new roadway, and associated transportation benefits in the study area, any of the Parkway build alternatives with a Watt Avenue interchange would require a relatively short-term temporary investment of energy that would result in an overall benefit for energy consumption efficiency due to reduced congestion that the project would afford. This would not put substantial additional demand on energy sources or fuel availability in the region.

A Watt Avenue interchange would result in a greater reduction in VMT on congested roadways than without an interchange and a higher reduction in VHD within the TASA, and especially in the AFA, with the inclusion of a Watt Avenue interchange as compared to without one. Lower VMT and VHD would result in less fuel consumption. As all of the Parkway build alternatives would be expected to reduce overall congestion in the study area, it would result in more efficient traffic flow on a more energy efficient roadway in comparison to the No-Build Alternative, as the VMT traveled under the No-Build Alternative would be on more congested roadways (DKS Associates, 2007) than would occur under any of the build alternatives with a Watt Avenue interchange.

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9.0 LIST OF AGENCIES, ORGANIZATIONS, AND PERSONS TO WHOM COPIES ARE SENT

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Dan Silva	SACOG Board		1160 Civic Center Blvd., Ste. A	Yuba City	CA	95993	1		1	1
Darryl Claire	SACOG Board		380 Civic Drive	Galt	CA	95632				1
Dave Mason	Sacramento Metro Chamber of Commerce	Manager	917 Seventh St.	Sacramento	CA	95814				1
David A. Valler, Jr.	Feather River AQMD	Air Pollution Control Officer	938 14th Street	Marysville	CA	95901-4149				1
David Breninger	PCWA	General Manager	144 Ferguson Road	Auburn	CA	95602				1
David Flory	SACOG Board		300 First Street	Woodland	CA	95695				1
Deborah Maus	So Natomas TMA		2295 Gateway Oaks Drive, Suite 250	Sacramento	CA	95833				1
Donald Schrader	SACOG Board		215 Fifth Street	Marysville	CA	95901				1
E. Maisch	PCWA		P.O. Box 6570	Auburn	CA	95603				1
Gayle Garbolino-Mojica	Placer County Office of Education	Superintendent of Schools	360 Nevada Street	Auburn	CA	95603				1
Gina Garbolino	PCTPA Board		311 Vernon Street	Roseville	CA	95678	1		1	1
Gordon Garry	SACOG	Mgr. Of Research & Analysis	1415 L Street, Suite 300	Sacramento	CA	95814				1
Greg Bates	American Basin Council of Watersheds		P.O. BOX 1311	ROSEVILLE	CA	95678-8311				1
Harold Anderson	SACOG Board		318 First Street	Winters	CA	95694				1
Heather Fargo	SACOG Board		915 I Street, Suite 205	Sacramento	CA	95814				1
Helen Thomsom	SACOG Board		625 Court St.	Woodland	CA	95695				1
James Barrington	SACOG Board		313 Main St.	Wheatland	CA	95692				1
James Cooper	SACOG Board		8400 Laguna Palms Way	Elk Grove	CA	95758				1

REGIONAL										
Name	**Organization**	**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Study (HC)**	**Technical Studies (CD)**	**NOA**
Jeannie Bruins	SACOG Board		6237 Fountain Square Drive	Citrus Heights	CA	95621				1
Jeff Holland	Sutter County	Superintendent of Schools	970 Klamath Lane	Yuba City	CA	95993				1
Jim Durfee	Western Placer Waste Mgmt Authority	Executive Director	3033 Fiddyment Road	Roseville	CA	95747				1
Jim Gray	SACOG Board		311 Vernon St.	Roseville	CA	95678	1		1	1
Jim Gray	SPRTA Board		311 Vernon Street	Roseville	CA	95678	1		1	1
Jim Holmes	PCTPA Board		175 Fulweiler Avenue	Auburn	CA	95603				1
John R. Roberts	Natomas Basin Conservancy	Executive Director	2150 River Plaza Drive, Suite 400	Sacramento	CA	95833				1
Judy Richards	SACOG Board		9955 Live Oak Blvd.	Live Oak	CA	95953				1
Kathy Lund	PCTPA Board		3970 Rocklin Road	Rocklin	CA	95679				1
Kathy Lund	SACOG Board		3970 Rocklin Road	Rocklin	CA	95679				1
Ken Hough	SACOG Board		1415 L Street, Suite 300	Sacramento	CA	95814	1		1	1
Kevin Forsberg	Sacramento-Yolo Port District		53 Heritage Wood Circle	Sacramento	CA	95831				1
Kirk Uhler	PCTPA Board		175 Fulweiler Ave.	Auburn	CA	95603	1		1	1
Kirk Uhler	SPRTA Board		175 Fulweiler Ave.	Auburn	CA	95603	1		1	1
Larry Robinson	Sacramento Metropolitan Air Quality Management	Program Coordinator	777 12th Street, 3rd Floor	Sacramento	CA	95814				1
Lauren Hammond	SACOG Board		915 I Street, Suite 205	Sacramento	CA	95814				1
Leslie McBride	SACOG Board		1201 Civic Center Blvd.	Yuba City	CA	95993				1
Linda Budge	SACOG Board		3121 Gold Canal Drive	Rancho Cordova	CA	95670				1
Mat Ehrhardt	Yolo-Solano AQMD		1947 Galileo Ct., #103	Davis	CA	95616				1
Michael Cooper	PCWA	Director	144 Ferguson Road	Auburn	CA	95604				1
Mike Holmes	SACOG Board		1225 Lincoln Way	Auburn	CA	95603				1
Mike McKeever	SACOG	Executive Director	1415 L Street, Suite 300	Sacramento	CA	95814				1
Mike Wiley	Sacramento Regional		PO Box 2110	Sacramento	CA	95812				1

REGIONAL										
Name	**Organization**	**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Study (HC)**	**Technical Studies (CD)**	**NOA**
Peter Hill	SPRTA Board		3970 Rocklin Road	Rocklin	CA	95679	1		1	1
Primo Santini	SPRTA Board		640 Fifth Street	Lincoln	CA	95648	1		1	1
Robby Colvin	SACOG Board		487 Main St.	Placerville	CA	95667				1
Roberta MacGlashan	SACOG Board		700 H Street, Suite 2450	Sacramento	CA	95814	1		1	1
Rocky Rockholm	SACOG Board		175 Fulweiler Ave.	Auburn	CA	95603				1
Roger Dickinson	SACOG Board		700 H Street, Suite 2450	Sacramento	CA	95814				1
Ron McIntyre	PCTPA Board		P.O. Box 5487	Tahoe City	CA	96145				1
Russ Kelley	PCTPA Board		6140 Horseshoe Bar Rd., Suite K	Loomis	CA	95650				1
Rusty Dupray	SACOG Board		330 Fair Lane	Placerville	CA	95667				1
Ruth Asmundson	SACOG Board		23 Russell Blvd.	Davis	CA	95616				1
Samson Okhade	SACOG		1415 L Street, Suite 300	Sacramento	CA	95814				1
Sherrie Blackmun	PCTPA Board		PO Box 702	Colfax	CA	95173				1
Sherrie Blackmun	SACOG Board		PO Box 702	Colfax	CA	95173				1
Steve Miklos	SACOG Board		50 Natoma St.	Folsom	CA	95630				1
Susan Peters	SACOG Board		1415 L Street, Suite 300	Sacramento	CA	95814				1
Terry Bassett	Yolo County Transportation District	Executive Director	350 Industrial Way	Woodland	CA	95776				1
Tom Cosgrove	PCTPA Board		640 Fifth St.	Lincoln	CA	95648	1		1	1
Tom Cosgrove	SACOG Board		640 Fifth St.	Lincoln	CA	95648	1		1	1
Walt Scherer	SACOG Board		6140 Horseshoe Bar Rd., Suite K	Loomis	CA	95650				1
	SACOG Board		1415 L Street, Suite 300	Sacramento	CA	95814	1		1	1
Patrick Gillum	Central Valley Water Resource Control Board		11020 Sun Center Dr. #200	Rancho Cordova	CA	95670-6114	1		1	1
Pete Ghelfi	Sacramento Area Flood Control Agency		1007 7th Street, 7th Floor	Sacramento	CA	95814	1		1	1

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LOCAL										
Name		**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
Butte County Planning Department			7 County Center Drive	Oroville	CA	95965				1
City of Elk Grove Planning Division			8400 Laguna Palms Way	Elk Grove	CA	95758				1
City of Folsom Planning Department			50 Natoma Street	Folsom	CA	95630				1
City of Galt Planning Department			495 Industrial Drive	Galt	CA	95632				1
City of Rancho Cordova Planning Department			10461 Old Placerville Road, Suite 110	Sacramento	CA	95827				1
Isleton Planning Commission			101 Second Street	Isleton	CA	95641				1
City of Chico Planning Division			411 Main Street	Chico	CA	95927				1
City of Oroville Planning Department			1735 Mongomery Street	Oroville	CA	95965				1
City of Gridley Planning Department			685 Kentucky St. Agendas	Gridley	CA	95948				1
City of Biggs Planning Department			3018 Ninth Street	Biggs	CA	95917				1
Town of Paradise			5555 Skyway	Paradise	CA	95969				1
The Natomas Basin Conservancy	1750 Creekside Oaks Drive		Suite 290	Sacramento	CA	95833	1		1	1
Mike Holmes	City of Auburn		1225 Lincoln Way	Auburn	CA	95603				1
Megan Siren	City of Auburn		1225 Lincoln Way	Auburn	CA	95603				1
Bridget Powers	City of Auburn	City Council	1225 Lincoln Way	Auburn	CA	95603				1
Keith Nesbitt	City of Auburn		1225 Lincoln Way	Auburn	CA	95603				1
Bob Snyder	City of Auburn		100 Marina Avenue	Auburn	CA	95603				1
Wilfred Wong	City of Auburn	Community Development Director	1225 Lincoln Way, Room 3	Auburn	CA	95603				1
Kevin Hanley	City of Auburn		1225 Lincoln Way	Auburn	CA	95603				1
Jack Warren	City of Auburn Public Works Department		1225 Lincoln Way	Auburn	CA	95603				1
Citrus Heights City Hall	City of Citrus Heights Planning Department		6237 Fountain Square Drive	Citrus Heights	CA	95621				1
Joan Phillipe	City of Colfax	City Manager	PO Box 702	Colfax	CA	95713				1

LOCAL										
Name		**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
Sharon Gieras	City of Colfax	City Council	P.O. Box 702	Colfax	CA	95713				1
Sherrie Blackmun	City of Colfax	City Council	PO Box 702	Colfax	CA	95713				1
James Albright	City of Colfax	City Council	PO Box 702	Colfax	CA	95713				1
Suzanne Roberts	City of Colfax	City Council	PO Box 702	Colfax	CA	95713				1
Joshua Alpine	City of Colfax	City Council	P.O. Box 702	Colfax	CA	95713				1
Kent Nakata	City of Lincoln	City Council	640 Fifth Street	Lincoln	CA	95648				1
Linda Stackpoole	City of Lincoln	City Council	640 5th Street	Lincoln	CA	95648				1
Tom Cosgrove	City of Lincoln		640 5th Street	Lincoln	CA	95648				1
Primo Santini	City of Lincoln	City Council	640 Fifth Street	Lincoln	CA	95648	1		1	1
Spencer Short	City of Lincoln		640 Fifth Street	Lincoln	CA	95648				1
Pam Mathus	City of Lincoln	Admin, Jerry Johnson	640 Fifth St.	Lincoln	CA	95648				1
Gerald Johnson	City of Lincoln	City Manager	640 Fifth Street	Lincoln	CA	95648				1
Rodney Campbell	City of Lincoln	Director of Community Development	640 Fifth Street	Lincoln	CA	95650				1
John Pedri	City of Lincoln	Director of Public Works	640 Fifth Street	Lincoln	CA	95650				1
Lincoln Chamber of Commerce	City of Lincoln		511 Fifth Street	Lincoln	CA	95648				
Planning Department	City of Lincoln Planning Department		640 Fifth Street	Lincoln	CA	95648	1		1	1
Public Works Department	City of Lincoln Public Works Department		640 Fifth Street	Lincoln	CA	95648	1		1	1
Gary Price	City of Marysville	Community Development Coordinator	526 C Street, P.O. Box 150	Marysville	CA	95901				1
Scott Yuill	City of Rocklin	City Council	3970 Rocklin Road	Rocklin	CA	95677				1
Kathy Lund	City of Rocklin	City Council	3970 Rocklin Road	Rocklin	CA	95679				1
George Magnuson	City of Rocklin	City Council	3970 Rocklin Road	Rocklin	CA	95677				1
Laura Webster	City of Rocklin		3970 Rocklin Road	Rocklin	CA	95677				1
Brett Storey	City of Rocklin	Mayor	3970 Rocklin Rd.	Rocklin	CA	95677				1
David Mohlentrok	City of Rocklin		3970 Rocklin Rd	Rocklin	CA	95747				1
Kent Foster	City of Rocklin	Public Works Director	3970 Rocklin Road	Rocklin	CA	95677				1

LOCAL										
Name		**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
Terry Richardson	City of Rocklin	Community Development Director	3970 Rocklin Road	Rocklin	CA	95677				1
Larry Wing	City of Rocklin	City Engineer	3970 Rocklin Road	Rocklin	CA	95677	1		1	1
Carlos Urrutia	City of Rocklin	City Manager	3970 Rocklin Road	Rocklin	CA	95677				1
Planning Department	City of Rocklin Planning Department		3970 Rocklin Road	Rocklin	CA	95677	1		1	1
Public Works Department	City of Rocklin Public Works Department		3970 Rocklin Road	Rocklin	CA	95677	1		1	1
Scott Gandler	City of Roseville		316 Vernon Street	Roseville	CA	95658				1
John Sprague	City of Roseville	Community Development Director	311 Vernon Street	Roseville	CA	95678				1
Craig Robinson	City of Roseville	City Manager	311 Vernon Street	Roseville	CA	95678				1
Richard Roccucci	City of Roseville	City Council	311 Vernon Street	Roseville	CA	95678				1
John Allard	City of Roseville	City Council	311 Vernon Street	Roseville	CA	95678				1
Jim Gray	City of Roseville	City Council	311 Vernon Street	Roseville	CA	95678	1		1	1
Vicki Philpott	City of Roseville		311 Vernon Street	Roseville	CA	95678				1
Carol Garcia	City of Roseville		311 Vernon St.	Roseville	CA	95678				1
Mark Morse	City of Roseville Community Development	Environmental Coordinator	311 Vernon Street	Roseville	CA	95678				1
Nela Luken	City of Roseville Planning	Sr. Planner	311 Vernon Street	Roseville	CA	95678				1
Kathy Pease	City of Roseville Planning		311 Vernon Street	Roseville	CA	95678				1
Planning Department	City of Roseville Planning		311 Vernon Street	Roseville	CA	95678	1		1	1
Public Works Department	City of Roseville Public Works Department		311 Vernon Street	Roseville	CA	95678	1		1	1
Bonnie J. Pannell	City of Sacramento	City Council - District 8	915 I Street	Sacramento	CA	95814				1
Kevin McCarty	City of Sacramento	City Council - District 6	915 I Street	Sacramento	CA	95814				1
Lauren Hammond	City of Sacramento	City Council - District 5	915 I Street	Sacramento	CA	95814				1
Ray Tretheway	City of Sacramento	City Council -- District 1	915 I Street	Sacramento	CA	95814				1
Heather Fargo	City of Sacramento	Mayor	915 I Street	Sacramento	CA	95814				1
Robert King Fong	City of Sacramento	City Council -- District 4	915 I Street	Sacramento	CA	95814				1

LOCAL										
Name		**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
Robbie Waters	City of Sacramento	City Council -- District 7	915 I Street	Sacramento	CA	95814				1
Sandy Sheedy	City of Sacramento	City Council --District 2	915 I Street	Sacramento	CA	95814				1
Steve Cohn	City of Sacramento	City Council -District 3	915 I Street	Sacramento	CA	95814				1
Jim Regan-Vienop	City of Sacramento -- Planning & Building		1231 I Street, Room 300	Sacramento	CA	95814	1		1	1
Helen Selph	City of Sacramento -- Planning & Building	Assistant Planner -- Long Range	1231 I Street, Room 300	Sacramento	CA	95814	1		1	1
Steve Peterson	City of Sacramento -- Planning & Building	Principle Planner --	1231 I Street, Room 300	Sacramento	CA	95814	1		1	1
Public Works Department	City of Sacramento Department of Transportation		915 I Street, Room 2000	Sacramento	CA	95814	1		1	1
Planning Department	City of Sacramento Planning Department		915 I Street	Sacramento	CA	95814	1		1	1
Planning Division	City of Yuba City		1201 Civic Center Blvd.	Yuba City	CA	95993				1
	Colusa County Department of Planning and Building		220 12th Street	Colusa	C	95628				1
City of Placerville	Community Development Department - Planning Division		487 Main Street	Placerville	CA	95667				1
Cameron Park	Community Services Department		3200 Country Club Drive	Cameron Park	CA	95682				1
City of Dorado Hills	Community Services Department		1021 Harvard Way	El Dorado Hills	CA	95762				1
Bill Emlen	Davis Community Development, Planning & Building Department	Planning Director	23 Russell Blvd.	Davis	CA	95616				1
	Dixon Economic and Community Development Dept.		600 East A. Street	Dixon	CA	95620				1
Ann Kohl	Environmental Council of Sacramento		909 12th Street, Suite 100	Sacramento	CA	95814	1		1	1
John Deeter	Environmental Council of Sacramento		909 12th Street, Suite 100	Sacramento	CA	95814	1		1	1
	Grass Valley Planning Department		125 East Main Street	Grass Valley	CA	95945				1
Les Doolitle	Interim City Manager, Planning		425 Webster Street	Colusa	CA	95932				1
	Ione Planning Department		PO Box 398	Ione	CA	95640				1
	Lodi Community Development Dept.		PO Box 3006	Lodi	CA	95241-6711				1

LOCAL										
Name		**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
Planning Department	Nevada County Community Development Agency		950 Maidu Avenue	Nevada City	CA	95959	1		1	1
Nevada County Community Development Agency	Nevada County Planning Department		950 Maidu Avenue	Nevada City	CA	95959				1
Tom Miller	Placer County	Executive	175 Fulweiler Avenue	Auburn	CA	95603				1
Robert Weygandt	Placer County Board of Supervisors		175 Fulweiler Avenue	Auburn	CA	95603	1		1	1
Linda Brown	Placer County Board of Supervisors	Field Rep for Supervisor Rockholm	101 Cirby Hills Drive	Roseville	CA	95678				1
Bruce Kranz	Placer County Board of Supervisors	District 5	175 Fulweiler Avenue	Auburn	CA	95603				1
Jim Holmes	Placer County Board of Supervisors	Board of Supervisors	175 Fulweiler Avenue	Auburn	CA	95603				1
Sharlet Pyne	Placer County Board of Supervisors		175 Fulweiler	Auburn	CA	95603				1
Kirk Uhler	Placer County Board of Supervisors (District #1)		175 Fulweiler Avenue	Auburn	CA	95603	1		1	1
Rocky Rockholm	Placer County Board of Supervisors (District 1)		175 Fulweiler Avenue	Auburn	CA	95603				1
Will Dickinson	Placer County Department of Facilities Services	Deputy Director	11476 "C" Avenue	Auburn	CA	95603				1
Phillip T. Vassion	Placer County Dept. of Public Works, Transportation Division	Associate Civil Engineer	3091 County Center Drive, Suite 220	Auburn	CA	95603				1
Bob Patterson	Placer County Environmental Health		3091 County Center Dr. Suite 180	Auburn	CA	95603				1
Jim Durfee	Placer County Facility Services	Director	11476 C Avenue	Auburn	CA	95603				1
Bob Eicholtz	Placer County Fire Protection Planner	CA Dept of Forestry and Fire Protection	Nevada-Yuba-Placer Unit 11444 B Avenue	Auburn	CA	95603	1		1	1
Andrew Darrow	Placer County Flood Control and Water Conservation District		3091 County Center Drive, Suite 220	Auburn	CA	95603	1		1	1
David Snyder	Placer County Office of Economic Development	Executive Director	175 Fulweiler Ave.	Auburn	CA	95603				1
Bill Santucci	Placer County Planning Commission		175 Fulweiler Ave.	Auburn	CA	95603				1
Alex Fisch	Placer County Planning Department	Assistant Planner	3091 County Center Drive	Auburn	CA	95603				1

LOCAL										
Name		**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
Planning Department	Placer County Planning Department		3091 County Center Drive	Auburn	CA	95603	1		1	1
Paul Thompson	Placer County Planning Department		3091 County Center Drive	Auburn	CA	95603				1
Edmund P. Sullivan	Placer County Planning Department	Sr. Planner -- Natural Resources	3091 County Center Drive	Auburn	CA	95603				1
Michael Johnson	Placer County Planning Department	Director	3091 County Center Drive	Auburn	CA	95603				1
Ann Baker	Placer County Planning Department	Senior Planner	3091 County Center Drive	Auburn	CA	95603	1		1	1
Ken Grehm	Placer County Public Works	Director Public Works	3091 County Center Drive, Suite 220	Auburn	CA	95603				1
Public Works Department	Placer County Public Works Department		3091 County Center Drive, Suite 220	Auburn	CA	95603	1		1	1
Stephanie Holloway	Placer County Public Works Department	Associate Civil Engineer	3091 County Center Drive, Suite 220	Auburn	CA	95603				1
Rick Dondro	Placer County Public Works, Transportation Division		3091 County Center Drive, Suite 220	Auburn	CA	95603	1		1	1
El Dorado County	Planning Department		2850 Fairlane Court	Placerville	CA	95677				1
City of Yuba	Planning Division		1201 Civic Center Blvd.	Yuba City	CA	95993	1		1	1
	Rio Visa Community Development Dept.		PO Box 745	Rio Vista	CA	94571				1
Frank Carl	Sacramento County	Agricultural Commissioner	4137 Branch Center Road	Sacramento	CA	95827				1
Steve Pedretti	Sacramento County	Director of County Engineering	827-7th Street, Room 304	Sacramento	CA	95814				1
Cynthia Somers	Sacramento County		700 H Street, Room 7650	Sacramento	CA	95814				1
Terry Schutten	Sacramento County	County Executive	700 H Street, Room 7650	Sacramento	CA	95814				1
Jimmie Yee	Sacramento County Board of Supervisors	District 2	700 H Street, Suite 2450	Sacramento	CA	95814				1
Roberta MacGlashan	Sacramento County Board of Supervisors	District 4	700 H Street, Suite 2450	Sacramento	CA	95814	1		1	1
Susan Peters	Sacramento County Board of Supervisors	District 3	700 H Street, Suite 2450	Sacramento	CA	95816				1
Don Nottoli	Sacramento County Board of Supervisors	District 5	700 H Street, Suite 2450	Sacramento	CA	95818				1

LOCAL										
Name		**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
Roger Dickinson	Sacramento County Board of Supervisors	District 1	700 H Street, Suite 2450	Sacramento	CA	95814				1
Planning Department	Sacramento County Planning Department		827 7th Street, Room 230	Sacramento	CA	95814	1		1	1
Public Works Department	Sacramento County Public Works Department		827 7th Street, Room 230	Sacramento	CA	95814	1		1	1
Hardy Acre	Sacramento International Airport	Manager	6900 Airport Boulevard	Sacramento	CA	95837				1
	San Joaquin County Community Development Department		1810 East Hazelton Avenue	Stockton	CA	95205				1
	Solano County Department of Environmental Management		601 Texas Street	Fairfield	CA	94533				1
Larry Bagley	Sutter County -- Community Services Dept. -- Planning	Director	1130 Civic Center Blvd.	Yuba City	CA	95993				1
Larry Munger	Sutter County Board of Supervisors	Board of Supervisors	1160 Civic Center Blvd., Suite A	Yuba City	CA	95993				1
Stan Cleveland	Sutter County Board of Supervisors	District 4	1160 Civic Center Blvd., Suite A	Yuba City	CA	95993	1		1	1
Dan Silva	Sutter County Board of Supervisors		1130 Civic Center Blvd.	Yuba City	CA	95993	1		1	1
Randy Cagle	Sutter County Community Services	Deputy Director	1160 Civic Center Blvd.	Yuba City	CA	95993				1
Doug Libby	Sutter County Community Services	Senior Planner	1130 Civic Center Blvd.	Yuba City	CA	95993	1		1	1
Charles Van Evenhoven	Sutter County Fire Department	Chief	1130 Civic Center Blvd.	Yuba City	CA	95993	1		1	1
Planning Department	Sutter County Planning Department		1130 Civic Center Blvd.	Yuba City	CA	95993	1		1	1
Public Works Department	Sutter County Public Works Department		1130 Civic Center Blvd.	Yuba City	CA	95993	1		1	1
Clay Castleberry	Sutter County Public Works Department	Director	1160 Civic Center Blvd.	Yuba City	CA	95993				1
Flood Control	Sutter County Public Works Department		1160 Civic Center Blvd.	Yuba City	CA	95993				1
Brian Fragiao	Town of Loomis		6140 Horseshoe Bar Road, Suite K	Loomis	CA	95650	1		1	1
Walt Scherer	Town of Loomis	Town Council	6140 Horseshoe Bar Rd., Suite K	Loomis	CA	95650				1
Tom Millward	Town of Loomis	Town Council	6140 Horseshoe Bar Rd., Suite K	Loomis	CA	95650				1
Rhonda Morillas	Town of Loomis	Town Council	6140 Horseshoe Bar Rd., Suite K	Loomis	CA	95650				1

LOCAL										
Name		**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
Miguel Ucovich	Town of Loomis	Town Council	6140 Horseshoe Bar Rd., Suite K	Loomis	CA	95650				1
Walt Scherer	Town of Loomis	Town Council	6140 Horseshoe Bar Rd., Suite K	Loomis	CA	95650				1
Planning Department	Town of Loomis Planning Department		6140 Horseshoe Bar Road	Loomis	CA	95650	1		1	1
Public Works Department	Town of Loomis Public Works Department		6140 Horseshoe Bar Road	Loomis	CA	95650	1		1	1
	West Sacramento Community Development Dept.		300 First Street	Woodland	CA	95695				1
Planning Department	Woodland Community Development Department		300 First Street	Woodland	CA	95695	1		1	1
Dave Daly	Yolo County Planning Department		292 West Beamer Street	Woodland	CA	95695				1
Robert Meneni	Yuba County Planning Division	Interim	938 14th Street	Marysville	CA	95901				1

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Placer Parkway Tier 1 EIS/EIR Technical Advisory Committee										
Name	**Organization**	**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Study (HC)**	**Technical Studies (CD)**	**NOA**
Al Sawyer	Sutter Co. Public Works Dept.	Director	1130 Civic Center Blvd., Suite D	Yuba City	CA	95993	1		1	1
Cesar Perez	FHWA		650 Capitol Mall	Sacramento	CA	95814				
Christine Turner	Placer Co. Agricultural Commission	Agricultural Commissioner	11477 E. Ave.	Auburn	CA	95603	1		1	1
Dennis Azevedo	Caltrans -- District 3 -- Sacramento Area Office	Chief -- Office of Travel Forecasting & Modeling	2389 Gateway Oaks Dr.	Sacramento	CA	95833	1		1	1
Erick Wulf	Caltrans -- District 3 -- Sacramento Area Office	Cultural Resources	2389 Gateway Oaks Dr.	Sacramento	CA	95833	1		1	1
George Dellwo	City of Lincoln Community Development Dept.	Assistant Director	640 Fifth St.	Lincoln	CA	95648	1		1	1
Jeff Clarke	Sacramento Co. Public Works Agency -- Dept. of Transportation		906 G Street	Sacramento	CA	95814	1		1	1
John Pedri	City of Lincoln Public Works Department	Director of Public Works	640 Fifth Street	Lincoln	CA	95648	1		1	1
Kathy Pease	City of Roseville Community Development -- Planning	Administrative Analyst	311 Vernon Street	Roseville	CA	95678	1		1	1
Larry Wing	City of Rocklin Community Development Dept.	Engineering Service Mgr./City Engineer	3970 Rocklin Road	Rocklin	CA	95677	1		1	1
Laura Walsh	Caltrans -- District 3		P.O. Box 911	Marysville	CA	95901	1	1	1	1
Lisa Wilson	Sutter Co. Planning Dept.	Acting Planning Chief	1130 Civic Center Blvd., Suite E	Yuba City	CA	95993	1		1	1
Michael Johnson	Placer Co. Planning Dept.	Director	3091 County Center Drive	Auburn	CA	95603	1		1	1
	City of Roseville Public Works Department	Director	311 Vernon Street	Roseville	CA	95678	1		1	1
Perry Beck	Town of Loomis	Town Manager	6140 Horseshoe Bar Rd., Suite K	Loomis	CA	95650	1		1	1
Pete Hathaway	SACOG		1415 L Street, Suite 300	Sacramento	CA	95814	1		1	1
Richard Moorehead	Placer Co. Dept. of Public Works -- Transportation Division		3091 County Center Drive, Suite 220	Auburn	CA	95603	1		1	1
Rob Jensen	City of Roseville Public Works Department	Director	311 Vernon Street	Roseville	CA	95678	1		1	1
Robert Sherry	Sacramento Co. Planning & Community Development	Director	827 Seventh Street, Rm. 230	Sacramento	CA	95814	1		1	1
Steve Propst	Caltrans -- District 3	Local Assistance Engineer	703 B Street	Marysville	CA	95901	1		1	1

Placer Parkway Tier 1 EIS/EIR Technical Advisory Committee										
Name	**Organization**	**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Study (HC)**	**Technical Studies (CD)**	**NOA**
Terry Richardson	City of Rocklin	Community Development	3970 Rocklin Road	Rocklin	CA	95677	1		1	1
	Sutter Co. Public Works Dept.	Director	1130 Civic Center Blvd., Suite D	Yuba City	CA	95993				1
Will Schilling	Caltrans -- District 3 -- Sacramento Area Office		2389 Gateway Oaks Dr.	Sacramento	CA	95833	1		1	1

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Placer Parkway Tier 1 EIS/EIR Study Advisory Committee										
Name	**Organization**	**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
Al Clark	Friends of Placer County Communities		1492 Stone Way	Auburn	CA	95603	1		1	1
E. Howard Rudd	Rural Lincoln Municpal Advisory Committee	Alternate	5895 Mt. Vernon Road	Lincoln	CA	95648	1		1	1
Eric Bryant	Granite Bay and Capital and Bryant Property #120		3483 Douglar Plaza Drive	Granite Bay	CA	95746	1		1	1
Erin Foresman	U.S. Environmental Protection Agency, Region 9 (Water)		75 Hawthorne St.	San Francisco	CA	94105	1		1	1
Ernie McPherson	Roseville Coalition of Neighborhood Associations (RCONA)	Alternate	528 Alola Street	Roseville	CA	95678	1		1	1
George Alves	Rural Lincoln Municipal Advisory Committee		630 Fowler Road	Newcastle	CA	95658	1		1	1
George Brown	West Placer Municipal Advisory Committee		3858 St. Julian Way	Roseville	CA	95747	1		1	1
Hans Kreutzberg	SHOP, Cultural Resources Program	Supervisor	1416 Ninth Street 1442-7	Sacramento	CA	95814	1		1	1
Jack Ritchie	Lennar Properties (Sutter Pointe Specific Plan)		5018 Dodson Lane	Sacramento	CA	95835	1		1	1
Jack Wallace	Roseville Coalition of Neighborhood Associations (RCONA)		1116 Fairfield Ave.	Roseville	CA	95678	1		1	1
Jana Milliken	U.S. Fish & Wildlife Service		2800 Cottage Way	Sacramento	CA	95825	1		1	1
Jeff Finn	California Department of Fish and Game		13515 Schooner Hill Dr.	Grass Valley	CA	95945	1		1	1
Joan Powell	Sun City Roseville Homeowners Association		7050 Del Webb Blvd.	Roseville	CA	95747	1		1	1
Joe Cruz	Sacramento Metro Area Chamber		917 7th Street	Sacramento	CA	95814	1		1	1
John Baker	U.S. NOAA - National Marine Fisheries Svc.		650 Capitol Mall, Suite 8-300	Sacramento	CA	95814	1		1	1
John Costa	Building Industry Association -Superior California		1536 Eureka Road	Roseville	CA	95661	1		1	1
John Deeter	Environmental Council of Sacramento		909 12th Street, Suite 100	Sacramento	CA	95814	1		1	1
John Tallman	Signature Properties		1322 Blue Oaks Blvd., Ste. 100	Roseville	CA	95678	1		1	1
Julie Hanson	KT Development		2251 Douglas Blvd., Suite 110	Roseville	CA	95661	1		1	1
Loren Clark	Placer County Planning Department.	Assist. Director	3091 County Center Dr.	Auburn	CA	95603	1		1	1
Mark Quisenberry	Sutter County Agricultural Department		142 Garden Highway	Yuba City	CA	95991	1		1	1
Nancy Levin	U.S. Environmental Protection Agency, Region 9		75 Hawthorne St.	San Francisco	CA	94105	1		1	1
Patrick Gillum	California Regional Water Quality Control		11020 Sun Center Dr. #200	Rancho Cordova	CA	95670 6114	1		1	1
Terry Davis	Placer Group Sierra Club -- Sierra Club Mother Lode Chapter		1414 K Street, Suite 500	Sacramento	CA	95814	1		1	1

Placer Parkway Tier 1 EIS/EIR Study Advisory Committee										
Name	Organization	Title	Street Address	City	State	Zip	EIS/EIR (HC)	Technical Studies (HC)	Technical Studies (CD)	NOA
Tim Johnson	Yuba-Sutter Economic Development Corporation		1300 Franklin Road	Yuba City	CA	95993	1		1	1
Tom Cavanaugh	U.S. Army Corps of Engineers --Sacramento District		1325 J Street	Sacramento	CA	95814	1		1	1
Tom Christofk	Placer County Air Pollution Control District		3091 County Center Drive, Suite 240	Auburn	CA	95603	1		1	1
Wendy Gerig	Roseville Chamber of Commerce		650 Douglas Blvd.	Roseville	CA	95678	1		1	1
William Morebeck	Placer County Agricultural Commission		4272 Garden Bar Road	Lincoln	CA	95648	1		1	1

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Placer Parkway Tier 1 EIS/EIR Political Advisory Committee										
Name	**Organization**	**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
Dan Silva	Sutter County Board of Supervisors (District #5)		1160 Civic Center Blvd., Ste. A	Yuba City	CA	95993	1		1	1
Gina Garbolino	City of Roseville		311 Vernon Street	Roseville	CA	95678	1		1	1
Jody Jones	Caltrans District 3	Ex-Officio	703 B Street (PO Box 911)	Marysville	CA	95901	1		1	1
Kirk Uhler	Placer County Board of Supervisors (District #1)		175 Fulweiler Ave.	Auburn	CA	95603	1		1	1
Larry T. Combs	Sutter County - County Administrative Officer	Ex Officio	1160 Civic Center Blvd.	Yuba City	CA	95993	1		1	1
Peter Hill	City of Rocklin		3970 Rocklin Road	Rocklin	CA	95677	1		1	1
Robert Weygandt	Placer County Board of Supervisors (District #2)		175 Fulweiler Ave.	Auburn	CA	95603	1		1	1
Roberta MacGlashan	Sacramento County Board of Supervisors	District 4	700 H Street, Suite 2450	Sacramento	CA	95814	1		1	1
Stan Cleveland	Sutter County Board of Supervisors (District #2)		1160 Civic Center Blvd., Ste. A	Yuba City	CA	95993	1		1	1
Tom Cosgrove	City of Lincoln		640 Fifth Street	Lincoln	CA	95648	1		1	1
Tom Miller	Placer County	County Executive Officer	175 Fulweiler Avenue	Auburn	CA	95603	1		1	1

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SUTTER COUNTY										
Name	**Organization**	**Street Address**	**City**	**State**	**Zip**	**APN**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
A/VICENTE		3358 SANKEY RD	PLEASANT GROVE	CA	95668	35-160-036				1
AKT INVESTMENTS		7700 COLLEGE TOWN DR #101	SACRAMENTO	CA	95826	35-160-056				1
ANDERSON RONALD/DENISE		1446 I ST	RIO LINDA	CA	95673	35-160-031				1
ARNOLD MATTHEW A/JILL S		3508 SANKEY RD	PLEASANT GROVE	CA	95668	35-160-018				1
AUTREY SCOTT/CYNTHIA		6317 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-110-033				1
BAROSSO FAM '00 TR ETAL		2951 FIFIELD RD	PLEASANT GROVE	CA	95668	35-120-005				1
BAROSSO FAM TR ETAL		3007 FIFIELD RD	PLEASANT GROVE	CA	95668	35-110-054				1
BAROSSO MICHAEL H		3007 FIFIELD RD	PLEASANT GROVE	CA	95668	35-120-010				1
BEACH JOAN C ETAL		P O BOX 1388	YUBA CITY	CA	95992	35-090-026				1
BEETEM FAM '01 TR ETAL		220 STONEWALL RD	BERKELEY	CA	94705	35-160-014				1
BELTRAN ERNESTO/MAGDALENA		7059 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-180-010				1
BERRY DON L/CAROL I		P O BOX 751	PLEASANT GROVE	CA	95668	35-090-013				1
BERTI RICHARD		P O BOX 602	PLEASANT GROVE	CA	95668	35-180-012				1
BETTES LOUIS RAY/VIOLET C		3567 ELORDUY LN	ELVERTA	CA	95626	35-170-033				1
BIANCHI GERTRUDE S		8391 PLEASANT GROVE RD	ELVERTA	CA	95626	35-280-011				1
BIANCHI JOHN M		P O BOX 730	PLEASANT GROVE	CA	95668	35-310-013				1
BOLI J RUTH FAM TR ETAL		1815 CLEMENT AVE BLDG 26	ALAMEDA	CA	94501	35-110-024				1
BORGMAN MELVIN J/CHARLOTTE E		P O BOX 653	PLEASANT GROVE	CA	95668	35-100-002				1
BOWEN REV LIV '02 TR ETAL		3601 A HOWSLEY RD	PLEASANT GROVE	CA	95668	35-100-005				1
BRIEFMAN VALITA M		P O BOX 784	PLEASANT GROVE	CA	95668	35-170-028				1
BRILL BERNARD/DEBRA		7029 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-180-009				1
BROWN SANDRA A		P O BOX 716	PLEASANT GROVE	CA	95668	35-160-051				1
BURKE CHRISTOPHER C/SUSAN G		6623 LOCUST RD	PLEASANT GROVE	CA	95668	35-170-055				1
BURNSED GEORGE L JR		7521 NATOMAS RD	ELVERTA	CA	95626	35-271-014				1

SUTTER COUNTY										
Name	**Organization**	**Street Address**	**City**	**State**	**Zip**	**APN**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
CALIF SUNSHINE FISHERIES INC		9149 E LEVEE RD	ELVERTA	CA	95626	35-280-013				1
CALSTON FAM '82 TR		119 LAURELWOOD DR	DANVILLE	CA	94506	35-250-020				1
CARMICAL KENNETH R/LORENE ETAL		8606 ELWYN AVE	ELVERTA	CA	95626	35-110-026				1
CARPENTER GEORGE A/SHARYL R		7281 NATOMAS RD	ELVERTA	CA	95626	35-170-079				1
CARTER JAMES/JUDIE REV '96 TR		P O BOX 800	W. SACRAMENTO	CA	95691	35-220-013				1
CHEN JENNIFER ETAL		606 N FIRST ST	SAN JOSE	CA	95135	35-170-074				1
CHILL ROBERT E ETAL		6016 PLEASANT GR RD	PLEASANT GROVE	CA	95668	35-110-014				1
CHO SHANG PIL/YOUNG SOON		6 HONEY BEE CT	SACRAMENTO	CA	95826	35-273-010				1
CHON HANK C		3298 SANKEY RD	PLEASANT GROVE	CA	95668	35-160-035				1
CLARKE GEOFF M		6297 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-110-030				1
CLEARY STEPHEN ETAL		7460 PLEASANT GROVE RD	ELVERTA	CA	95626	35-170-042				1
COFFMAN DANIEL/CHRISTINE		5604 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-100-010				1
COLLETT BRETT R/VIRGINIA D		P O BOX 685	PLEASANT GROVE	CA	95668	35-170-086				1
CONELY EARL L/AGNES C		5104 INDEPENDENCE DR	FAIRFIELD	CA	94533	35-160-054				1
CONSOLIDATED DEALER SYSTEMS		P O BOX 891	ROSEVILLE	CA	95661	35-220-022				1
CONSULO DAVID/SANDRA ETAL		6594 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-160-053				1
COOPER FAM '05 TR ETAL		7231 PLEASANT GRV RD	PLEASANT GROVE	CA	95668	35-170-010				1
COOPER SHARON V		7315 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-170-011				1
CORTEZ EMILY		10700 BASELINE RD	ELVERTA	CA	95626	35-260-010				1
CRUMLEY DONALD A JR/LINDA F		P O BOX 11	COLLEGEDALE	TN	37315	35-100-016				1
CULL MICHAEL		3403 RIEGO RD	ELVERTA	CA	95626	35-280-026				1
CULLEY '01 TR ETAL		3479 SANKEY RD	PLEASANT GROVE	CA	95668	35-180-006				1

SUTTER COUNTY										
Name	**Organization**	**Street Address**	**City**	**State**	**Zip**	**APN**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
CUNDIFF JAMES B/ARMALINDA		P O BOX 748	PLEASANT GROVE	CA	95668	35-214-002				1
D/MYRTLE		3387 SANKEY RD	PLEASANT GROVE	CA	95668	35-180-011				1
DA VIA-FOSTER LP		P O BOX 940	WOODLAND	CA	95776	35-220-017				1
DAVIS GEORGE A SR		3535 ELORDUY LN	ELVERTA	CA	95626	35-170-026				1
DE WIT FARMS		44718 S EL MACERO DR	EL MACERO	CA	95618	35-170-017				1
DJKM '00 REV TR ETAL		P O BOX 1076	W SACRAMENTO	CA	95691	35-150-006				1
DROWN JUDY		P O BOX 613	PLEASANT GROVE	CA	95668	35-170-053				1
ECK GERALD G/NADINE H ETAL		3799 KEYS RD	PLEASANT GROVE	CA	95668	35-160-013				1
EDGAR NANCY L ETAL		707 BELLE LN	ROSEVILLE	CA	95678	35-120-009				1
ELKHORN PROPERTIES GP		P O BOX 1965	WOODLAND	CA	95776	35-260-002				1
ELLIS ROBERT L		3566 FIFIELD RD	PLEASANT GROVE	CA	95668	35-090-020				1
ENES MARK ETAL		7700 COLLEGE TOWN DR # 101	SACRAMENTO	CA	95826	35-230-031				1
ESCALANTE TERESA R/PETE W		7193 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-170-083				1
FAMILY REAL PROPERTY LP		1130 IRON POINT RD STE 150	FOLSOM	CA	95630	35-170-003				1
FISHER FAM '97 TR/ ETAL		3700 RIEGO RD	ELVERTA	CA	95626	35-260-013				1
FISHER FAM TR ETAL		P O BOX 1005	FORT JONES	CA	96032	35-260-015				1
FORAN BRIAN ETAL		5425 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-040-033				1
FOUNTAINVILLE N V		1505 STARR DR	YUBA CITY	CA	95993	35-040-020				1
FRANKLIN RICHARD D/TERRI L		P O BOX 608	PLEASANT GROVE	CA	95668	35-110-052				1
FUENTES TERRANCE J/HEIDI		3589 HOWLSEY RD	PLEASANT GROVE	CA	95668	35-100-004				1
GIBSON FAMILY RP LLC ETAL		7700 COLLEGE TOWN DR #101	SACRAMENTO	CA	95826	35-230-019				1
GILLEN DANIEL M/SUSAN S		7314 PLEASANT GRV RD	PLEASANT GROVE	CA	95668	35-170-073				1
GILLESPIE NORVAL R		5792 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-090-012				1
GILLESPIE ROBERT/ROBBIE		P O BOX 711	PLEASANT GROVE	CA	95668	35-090-004				1

SUTTER COUNTY										
Name	**Organization**	**Street Address**	**City**	**State**	**Zip**	**APN**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
GLENN GEORGE R SR/PATRICIA A		7029 9TH AVE	RIO LINDA	CA	95673	35-170-085				1
GRAN DOUGLAS J ETAL		6500 PLEASANT GRV RD	ELVERTA	CA	95626	35-170-024				1
GRAY DONLY SR (EST		8020 LOCUST RD	ELVERTA	CA	95626	35-260-012				1
GRETHER PHYLLIS J		3750 CATLETT RD	PLEASANT GROVE	CA	95668	35-100-014				1
GROLLA STEVE/VALERIE M		7389 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-170-063				1
GROSSMAN ALLAN W/KAREN L		6176A PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-110-040				1
GUTIERREZ JOSEPH G/TERRI L		3589 ELORDUY LN	ELVERTA	CA	95626	35-170-032				1
HAENGGI TERRY C		3577 HOWSLEY RD	PLEASANT GROVE	CA	95668	35-100-003				1
HALTOM JIM G		3695 HOWSLEY RD	PLEASANT GROVE	CA	95668	35-100-013				1
HANFORD FAM '06 TR ETAL		3475 KEYS RD	PLEASANT GROVE	CA	95668	35-160-046				1
HANSON FAM RESID '03 TR ETAL		5021 SANDBURG DR	SACRAMENTO	CA	95819	35-260-008				1
HARDIN LOREN/BARBARA TR		6852 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-160-042				1
HATFIELD ROBERT L/ ETAL		7444 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-170-023				1
HINTZ FAM TR ETAL		2800 SANKEY RD	PLEASANT GROVE	CA	95668	35-150-007				1
HINTZ FAM TR ETAL		4996 HARRISON ST	NORTH HIGHLANDS	CA	95660	35-272-001				1
HINTZ GILBERT W/KATHRYN I ETAL		4996 HARRISON ST	NORTH HIGHLANDS	CA	95660	35-170-084				1
HINTZ JAMES G/DIANE E		3355 SANKEY RD	PLEASANT GROVE	CA	95668	35-170-047				1
HOBDAY PRICILLA C		2480 VINEYARD RD	ROSEVILLE	CA	95747	35-250-017				1
HOGAN DEBRA R '05 TR ETAL		6262 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-110-025				1
HOLT OF CALIFORNIA		P O BOX X	SACRAMENTO	CA	95813	35-220-023				1
HOMERICK JAMES G/PATRICIA J		8249 HEMINGWAY DR	SACRAMENTO	CA	95828	35-170-067				1
IRBY VIVIAN I		P O BOX 491	RIO LINDA	CA	95673	35-213-002				1
JACKSON REV '05 TR ETAL		P O BOX 363	ELVERTA	CA	95626	35-180-004				1
JAMES CALVIN/EDITH LLE ETAL		5686 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-090-027				1

SUTTER COUNTY										
Name	**Organization**	**Street Address**	**City**	**State**	**Zip**	**APN**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
JOHAL KULDIP S/BALBIR K ETAL		1721 DASHWOOD DR	ROSEVILLE	CA	95747	35-260-018				1
JOHNSON LORRAINE P		3035 SANKEY RD	PLEASANT GROVE	CA	95668	35-170-029				1
JONES MICHAEL		7495 NATOMAS RD	ELVERTA	CA	95626	35-170-080				1
JONES NOLA M		7089 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-170-087				1
JONES RANDOLPH E		3700 SANKEY RD	PLEASANT GROVE	CA	95668	35-160-025				1
KEENAN WENDELL G JRTR		3417 FIFIELD RD	PLEASANT GROVE	CA	95668	35-110-032				1
KENT ESTHER/ETAL		3451 SANKEY RD	PLEASANT GROVE	CA	95668	35-180-003				1
KNICKERBOCKER RICK		3525 ELORDUY LN	ELVERTA	CA	95626	35-170-043				1
LAUPPE & SON		7339 PACIFIC AVE	PLEASANT GROVE	CA	95668	35-140-033				1
LAUPPE '98 RV TR ETAL		7339 PACIFIC AVE	PLEASANT GROVE	CA	95668	35-250-019				1
LIMARY JEFFREY/CHRISTINE D		3691 ELORDUY LN	ELVERTA	CA	95626	35-170-077				1
LOPEZ ISIDRO		7147 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-170-076				1
LORDGE TRUST ETAL		6204 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-110-038				1
LUTZ OLETA I REV '95										
MALCOLM FAITH A ETAL		P O BOX 370	ELVERTA	CA	95626	35-273-003				1
MALONE SHARON L ETAL		157 CANYON HIGHLANDS DR	OROVILLE	CA	95966	35-170-004				1
MANICH STEPHEN		3888 SANKEY RD	PLEASANT GROVE	CA	95668	35-160-029				1
MANION JAMES E SR		3469 SANKEY RD	PLEASANT GROVE	CA	95668	35-180-005				1
MATTOS DON J/WENDY		3521 HOWSLEY RD	PLEASANT GROVE	CA	95668	35-100-022				1
MAXEY CHADWICK ETAL		5881 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-090-028				1
MC DANIEL BARBARA		5815 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-090-015				1
MC KENZIE BARRY C ETAL		P O BOX 603	PLEASANT GROVE	CA	95668	35-250-014				1
MC KENZIE FARMS		P O BOX 657	PLEASANT GROVE	CA	95668	35-250-009				1
MC PHERSON										
MEHALAKIS		P O BOX 26	LINCOLN	CA	95648	35-160-027				1

SUTTER COUNTY										
Name	**Organization**	**Street Address**	**City**	**State**	**Zip**	**APN**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
MILBERGER LESLIE R		P O BOX 418253	SACRAMENTO	CA	95841	35-160-007				1
MOORE JERRY EARL/SUE CAROL		7193-B PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-170-082				1
MORGAN '01 REV TR ETAL		8195 PLEASANT GROVE RD	ELVERTA	CA	95626	35-273-001				1
MORGAN ERNEST E /LUCIANDA J		P O BOX 443	RIO LINDA	CA	95673	35-273-004				1
MUCK GERALD F/MARY		609 MAIN ST	WHEATLAND	CA	95692	35-100-026				1
MUCK STEPHEN		3653 HOWSLEY RD	PLEASANT GROVE	CA	95668	35-100-025				1
NARAYAN PUSHPA		8170 MONTREUX WAY	SACRAMENTO	CA	95828	35-271-024				1
NATOMAS BASIN CONSERVANCY		2150 RIVER PLAZA DR #460	SACRAMENTO	CA	95833	35-280-005				1
NEVIS THOMAS E ETAL		P O BOX 1154	YUBA CITY	CA	95992	35-211-001				1
NIEGEL GREGORY S		2939 A HOWSLEY RD	PLEASANT GROVE	CA	95668	35-170-016				1
NIEGEL LAND/DEVELOPMENT CORP		4906 PLEASANT GRV RD	PLEASANT GROVE	CA	95668	35-110-007				1
NIEHAUS '02 TR ETAL		6176 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-110-041				1
NORRELL CHARLES										
O NEIL JAMES PATRICK/PAULA J		3635 ELORDUY LN	ELVERTA	CA	95626	35-170-025				1
ODYSSEUS FARMS		P O BOX H	YUBA CITY	CA	95992	35-120-006				1
OLYMPUS STONERIDGE LLC ETAL		7700 COLLEGE TOWN DR #101	SACRAMENTO	CA	95826	35-240-033				1
OSBORN DONALD E/VICTORIA L		3598 HOWSLEY RD	PLEASANT GROVE	CA	95668	35-040-029				1
PAIK CHANG S		1611 TELEGRAPH AVE ROOM 330	OAKLAND	CA	94612	35-160-050				1
PANEBIANCO FAM '94 TR ETAL		3924 RAMSEY DR	N. HIGHLANDS	CA	95660	35-273-006				1
PAYNE ARTHUR J/DEBORAH J		7759 NATOMAS RD	ELVERTA	CA	95626	35-271-015				1
PHIFER DELBERT J		1780 NIELSEN LN	HOMEDALE	ID	83628	35-160-009				1
PHILLIPS FRANCIS E/DOROTHY M		557 U ST	RIO LINDA	CA	95673	35-271-013				1
PLEASANT GROVE FIRE PROTECTION		5000 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-180-007				1

SUTTER COUNTY										
Name	**Organization**	**Street Address**	**City**	**State**	**Zip**	**APN**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
POULSON REED/EMMA		5453 GRANITE DELL CT	LOOMIS	CA	95650	35-170-078				1
PRATHER DAISY L(EST OF) ETAL		3407 FIFIELD RD	PLEASANT GROVE	CA	95668	35-090-025				1
QUACH DINH T		P O BOX 660482	SACRAMENTO	CA	95866	35-160-008				1
RASHED ABED		6938 RAWLEY RD	ELK GROVE	CA	95757	35-170-008				1
RECLAMATION DISTRICT 1000		1633 GARDEN HWY	SACRAMENTO	CA	95833	35-160-038	1		1	1
REYNOLDS		6221 SCOTIA WAY	N. HIGHLANDS	CA	95660	35-160-023				1
RICHIE '06 TR ETAL		7401 SEABLUFF DR #106	HUNTINGTON BEACH	CA	92648	35-110-034				1
ROBERTI REV LIV TR ETAL		850 GREENWOOD AVE	W. SACRAMENTO	CA	95605	35-170-034				1
ROBERTS MAUREEN D		7159 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-170-060				1
Robin Trimble	Rocklin Chamber of Commerce	3700 Rockline Rd.	Rocklin	CA	95677		1		1	1
ROWLAND '04 TR ETAL		3650 ELORDUY LN	ELVERTA	CA	95626	35-170-020				1
ROYAL/JEANNE TR ETL		3574 ELORDUY LN	ELVERTA	CA	95626	35-170-068				1
RUBALCAVA RUBEN JR/ ETAL		7021 PLEASANT GRV RD	PLEASANT GROVE	CA	95668	35-180-008				1
SALVA KENNETH J/ELSIE L		3480 PLEASANT VIEW LN	SHINGLE SPRINGS	CA	95682	35-170-031				1
SCOTT DAVID K/CHRISTINE		7569 PLEASANT GROVE RD	ELVERTA	CA	95626	35-273-013				1
SERVIN MARTHA P		3606 HOWSLEY RD	PLEASANT GROVE	CA	95668	35-040-018				1
SHAFI MOHAMMAD/SAKINA		3132 AA HOWLSEY RD	PLEASANT GROVE	CA	95668	35-090-029				1
SHELLEY MENVIL R FAM TR/ ETAL		2434 HOWSLEY RD	PLEASANT GROVE	CA	95668	35-260-003				1
SHEPHERD RICK C		5734 SUNSHINE LN	MONTAGUE	CA	96064	35-110-015				1
SILLS ALICE M		P O BOX 216	ELVERTA	CA	95626	35-280-002				1
SILLS FAMILY LLC		725 SANBORN RD	YUBA CITY	CA	95993	35-310-010				1
SILLS JAMES V		3415 RIEGO RD	ELVERTA	CA	95626	35-280-023				1
SILLS REV FAM '04 TR ETAL		8139 PLEASANT GROVE RD	ELVERTA	CA	95626	35-280-021				1
SIMPSON CLINTON M		8958 CAPE WINDHAM PL	ORANGEVALE	CA	95662	35-170-041				1
SINCLAIR THOMAS W		P O BOX 503	LINDSAY	OK	73052	35-160-034				1

SUTTER COUNTY										
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SLEVA LORI B		3420 SANKEY RD	PLEASANT GROVE	CA	95668	35-160-037				1
SMITH GILBERT/ESTHER FAM		5992 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-090-014				1
SMITH SANDRA J		15995 TOMAHAWK CT	SONORA	CA	95370	35-271-025				1
SORENSON WILLIAM H		3131 SANKEY RD	PLEASANT GROVE	CA	95668	35-170-089				1
SOUTH SUTTER LLC		1075 CREEKSIDE RIDGE DR #11	ROSEVILLE	CA	95678	35-260-016				1
SOUZA RONALD F ETAL		1772 LARKIN RD	GRIDLEY	CA	95948	35-040-041				1
STEPHENS SAMUEL L/JOYCE A		5545 PLEASANT GRV RD	PLEASANT GROVE	CA	95668	35-100-017				1
STEVENSON FAM '05 TR ETAL		10385 GARDEN HWY	SACRAMENTO	CA	95837	35-170-044				1
SULLIVAN SCOTT M/MELANIE		3689 HOWSLEY RD	PLEASANT GROVE	CA	95668	35-100-012				1
SYSCO FOOD SRVS SACRAMENTO INC		P O BOX 138007	SACRAMENTO	CA	95813	35-220-024				1
TEICHERT LAND CO		3500 AMERICAN RIVER DR	SACRAMENTO	CA	95864	35-220-020				1
TESTER FRANK H JR/MARY L ETAL		P O BOX 731	PLEASANT GROVE	CA	95668	35-160-030				1
THOMAS JOHN R/DELORIS W		P O BOX 734	PLEASANT GROVE	CA	95668	35-170-019				1
TIBBETTS FAM LIV '04 TR ETAL		7413 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-170-066				1
TIBBETTS JACK R/VADA I		7405 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-170-065				1
TIKKER RALPH N SR/ROBERTA P		5555 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-100-019				1
TOLER LANA L		6080 LOCUST RD	PLEASANT GROVE	CA	95668	35-170-054				1
TR ETAL		3145 KEYS RD	PLEASANT GROVE	CA	95668	35-160-055				1
TSAKOPOULOS ANGELO K ETAL		7700 COLLEGE TOWN DR #101	SACRAMENTO	CA	95825	35-260-014				1
TURNER PEGGY J/ ETAL		6034 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-110-008				1
VALLEY SIERRA INVESTMENTS LLC		7512 PACIFIC AVE	PLEASANT GROVE	CA	95668	35-250-021				1
VAN DYKE DEAN S/DONNA TR ETAL		7354 SCHOOL HOUSE LN	ROSEVILLE	CA	95747	35-150-005				1
VANG XOR ETAL		5745 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-090-016				1

SUTTER COUNTY										
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VARGAS REBECCA										
VEACH MARY TR ETAL		3546 RIEGO RD	ELVERTA	CA	95626	35-260-006				1
VESTAL ELLIS C		3683 HOWSLEY RD	PLEASANT GROVE	CA	95668	35-100-023				1
VICE MARVIN K/JOANN L		3793 SANKEY RD	PLEASANT GROVE	CA	95668	35-170-050				1
VIDUCICH MARK D/CATHERINE G		3205 FIFIELD RD	PLEASANT GROVE	CA	95668	35-110-012				1
VINSON MARTY W/DIANA L		7137 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-170-075				1
VOGT JEFFREY D/CYNTHIA D		9494 SUNSET BLVD WEST	PLEASANT GROVE	CA	95668	35-090-010				1
WAGNER JANICE M		3670 SANKEY RD	PLEASANT GROVE	CA	95668	35-160-032				1
WALLACE REV '99 TR ETAL		P O BOX 678	PLEASANT GROVE	CA	95668	35-080-030				1
WEST DANIEL E/PAULA		3675 ELORDUY LN	ELVERTA	CA	95626	35-170-027				1
WESTERN PACIFIC RAILROAD		SECOND ST	YUBA CITY	CA	95991	35-340-020				1
WHITE DOUGH/NICOLE		3533 HOWSLEY RD	PLEASANT GROVE	CA	95668	35-100-020				1
WILLEFORD DANNY D/ELOISE R		3828 SANKEY RD	PLEASANT GROVE	CA	95668	35-160-028				1
WIRT		3417 SANKEY RD	PLEASANT GROVE	CA	95668	35-180-014				1
YA MAIGE ETAL		6058 PLEASANT GROVE RD	IRVINE	CA	92618	35-110-016				1
YANDELL BRENDA M		7549 PLEASANT GROVE RD	ELVERTA	CA	95626	35-273-012				1
ZECH HOLLY M		7101 PLEASANT GROVE RD	PLEASANT GROVE	CA	95668	35-170-088				1

HC=Hard Copy
Note: Where an individual is included in more than one distribution category only one copy of documents was transmitted.

INTERESTED										
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			722 B Main Street	Woodland	CA	95695				1
	Cheyenne Realty, Inc.		PO Box 3665	Yuba City	CA	95992				1
	City of Davis		23 Russell Blvd.	Davis	CA	95616				1
	Placer County Contractors Assoc.		271 Auburn Ravine Road	Auburn	CA	95603				1
	Union Pacific Railroad		1200 Corporate Center Dr., Suite 301	Monterey Park	CA	91754				1
Donly Clifford Gray Sr Estate	C/O Donly C Gray Jr		8020 Locust Rd.	Elverta	CA	95626				1
Mario Piz Robles			10580 Lowell St.	Elverta	CA	95626				1
A & B Holding Baseline LLC			7700 College Town Dr. #101	Sacramento	CA	95826				1
A. & J. Cannarozzi			3100 Amoruso Way	Roseville	CA	95747				1
A. & R. Baker			3040 Amoruso Way	Roseville	CA	95747				1
A. & S. Melnichuk			3260 Amoruso Way	Roseville	CA	95747				1
A. Jaynes, Trustee			6115 West Wise Rd.	Lincoln	CA	95648				1
A. Walker			5885 Dinky Lane	Roseville	CA	95747				1
AB Dejarnett			2690 Royal Park Drive	Cameron Park	CA	95682				1
Adam S. Towers	Best Best & Krieger LLP		3500 Porsche Way, Suite 200	Ontario	CA	91764				1
Alan Green			E4720 Rolling Ridge Rd.	Spring Green	WI	53588				1
Alan Hirsch	Sacramento Transportation Equity Network		3850 San Ysidro	Sacramento	CA	95864				1
Alan Telford	Fehr & Peers		2990 Lava Ridge Court, Suite 200	Roseville	CA	95661				1
Alan Vail	Claybar		7949 California Avenue	Roseville	CA	95747				1
Alex Ferriera	Placer Legacy Citizens Advisory		1364 Ferreira Road	Lincoln	CA	95648				1
Allan W./Karen L. Grossman	KG Ranch		6176A Pleasant Grove Road	Pleasant Grove	CA	95668				1
Allen Cuenca			2500 Abbeyhill Road	Lincoln	CA	95648				1
Allen Johnston			7021 Pleasant Grove Rd.	Pleasant Grove	CA	95468				1

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Allen Sanders			7265 Brewer Rd.	Roseville	CA	95747				1
Amarjeet S. Benipal			703 B Street (PO Box 911)	Marysville	CA	95901-0911				1
Andrea Shill			5121 Pleasant Grove Rd	Pleasant Grove	CA	95668				1
Andrew Gillespie			5800 Pleasant Grove Rd	Pleasant Grove	CA	95668				1
Andrews Scott C & Jacquelynn D			10461 Baseline Road	Elverta	CA	95626	1		1	1
Ann Davies-Nesbitt	UC Davis		UC Davis Transportation & Parking Services	Davis	CA	95616				1
Ann Kohl	Environmental Council of Sacramento		909 12th Street, Suite 100	Sacramento	CA	95814	1		1	1
Ann Noble			7114 Lost Lake Lane	Roseville	CA	95747				1
Anna Carpenter			5550 Sunset Blvd. West	Roseville	CA	95747				1
Anthony/Shelly Caputo			5881 Pleasant Grove Road	Pleasant Grove	CA	95668				1
Auburn & Vanmaren LLC, et al			5046 Sunrise Blvd. #1	Fair Oaks	CA	95628-4945				1
B. & C. Bowler			PO Box 24	Elverta	CA	95626				1
B. & C. Hilbert			3090 Amoruso Way	Roseville	CA	95747				1
B. & D. Astle			3280 Amoruso Way	Roseville	CA	95678				1
B. & M. Busby			3227 Amoruso Way	Roseville	CA	95747				1
B. Boyd			3261 Amoruso Way	Roseville	CA	95747				1
B. Chris McKenzie	McKenzie Farms		P.O. Box 603	Pleasant Grove	CA	95668				1
B. Niece, Jr.			5900 Sunset Blvd. West	Roseville	CA	9739				1
B. West			3200 Amoruso Way	Roseville	CA	95678				1
Barb Koppel			5073 Frontier Lane	Roseville	CA	95747				1
Bernie Schroeder	City of Auburn		1225 Lincoln Way	Auburn	CA	95603				1
Beth Renken	RCONA/Vineyard		1321 Puebla Way	Roseville	CA	95678				1
Bill Boudier			PO BOX 297	Roseville	CA	95678				1
Bill Durant	Paratransit, Inc.		PO Box 231100	Sacramento	CA	95823				1
Bill Foster	RCONA/Hillcrest		313 Lorraine Avenue	Roseville	CA	95678				1

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Bill Powell	U.S. Federal Transit Admin,		201 Mission St., Suite 2210	San Francisco	CA	94105				1
Bill Roberts			P.O. Box 459	Turner	OR	97392				1
Bill Santucci	Placer County Planning Commission		175 Fulweiler Avenue	Auburn	CA	95603				1
Bill Turpie			4790 Caughlin Pkwy., #463	Reno	NV	89509				1
Bob Amarel			6368 So. Township	Yuba City	CA	95993				1
Bob Haworth	CHP		PO Box 640	Rancho Cordova	CA	95741				1
Bob Jawanda			840 Jefferson Blvd.	West Sacramento	CA	95691				1
Bob Kraft	RCONA/Enwood		301 Center Street	Roseville	CA	95678				1
	High Sierra RC+D		251 Auburn Ravine Road, Suite							
Bob Roan	Council		201	Auburn	CA	95603				1
Bob Taylor			308 Stonework Court	Roseville	CA	95661				1
Bob Weber			6228 Everest Way	Sacramento	CA	95842				1
Brian Allen	MacKay & Somps		1376 Lead Hill Blvd., Suite 150	Roseville	CA	95661				1
Brodie Hamilton	TAPS	Executive Director	University of CA Davis	Davis	CA	95616				1
Brookfield Cal Land LLC et al.	Brookfield Land		2271 Lava Ridge Court	Roseville	CA	95661				1
Bruce Hilton	Kleinfelder & Associates		3077 Fite Circle	Sacramento	CA	95827				1
Bruce Houdesheldt	Lennar Communities	Community Planning Manager	1075 Creekside Ridge Drive, Suite 110	Roseville	CA	95678				1
Bryan Porter	Parsons Brinkerhoff Quade		3840 Rosin Court, Suite 200	Sacramento	CA	95834				1
C. & D. Poling			5530 Sunset Blvd. West	Roseville	CA	95747				1
C. & H. Kehler			3193 Amoruso Way	Roseville	CA	95747				1

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C. & P. Carlton			3370 Amoruso Way	Roseville	CA	95747				1
C. & R. Brill			2990 Vineyard Road	Roseville	CA	95747				1
C. Doyle, Trustee			209 Harding Blvd.	Roseville	CA	95678				1
C. Ford			6357 La Cienega Drive	North Highlands	CA	95660				1
C/O David Derosier	Derosier David D Et Al		P O Box 913	Shingle Springs	CA	95682				1
Carl Coebaca			PO Box 770	Pleasant Grove	CA	95668				1
Carl Haack	HDR		2365 Iron Point Road, Suite 300	Folsom	CA	95630				1
Caroline Quinn	City of West Sacramento		P.O. Box 966	West Sacramento	CA	95691				1
Cathy LaPlante			1005 Chisum Ct.	Roseville	CA	95747				1
Cathy Spence-Wells	North Fork Associates		110 Maple Street, Suite 100	Auburn	CA	95603				1
Charles C. Richie			7401 Seabluff Drive, #106	Huntington Beach	CA	92648				1
Charles Hoag	RCONA/Highland Reserve		249 Farmington Circle	Roseville	CA	95678				1
Charles Waters	RCONA/Los Cerritos		624 Elefa Street	Roseville	CA	95678				1
Charlie Ray	Construction Materials Association of California (CMAC)		1029 J Street, Suite 300	Sacramento	CA	95814				1
Charlotte Burgman			3559 Howsley Rd.	Pleasant Grove	CA	95668				1
Cheryl Hines	Westfield Corporation		11601 Wilshire Blvd. 11th Floor	Los Angeles	CA	90025				1
Cheryl Strickland			525 Morse Avenue, Suite 101	Sacramento	CA	95864				1
Chris Beale	Resources Law Group		555 Capitol Mall, Suite 1590	Sacramento	CA	95814				1

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Chris Colson	Kimley Horn Associates		11070 White Rock Rd., Ste. 185	Rancho Cordova	CA	95670				1
Chris Dickinson			5731 Eastridge Drive	Sacramento	CA	95842				1
Chris Swift	Sierra View Landscape Inc.	dba Habitat Restoration Contractors	3868 Cincinnati Avenue	Rocklin	CA	95765				1
Christine Scott			7569 Pleasant Grove Rd	Pleasant Grove	CA	95668				1
Clark Peri			1741 Fergus Drive	Roseville	CA	95747				1
Claudette & Frank Weismantel	District 1 MAC		10029 Newton Street	Elverta	CA	95626				1
Clay A. Loomis	Granite Bay Development	Manager	4210 Douglas Blvd., Suite 300	Granite Bay	CA	95746				1
Colleen Mains			5101 Stratton Court	Rocklin	CA	95765				1
Curtis Eaton	Yolo Co Planning & Public Works		292 W Beamer Street	Woodland	CA	95695				1
Cynthia Autrey			6317 Pleasant Grove Road	Pleasant Grove	CA	95668				1
D. & A. Benzel			3050 Amoruso Way	Roseville	CA	95747				1
D. & A. Lavaud			3168 Amoruso Way	Roseville	CA	95747				1
D. & C. Cox			3015 Amoruso Way	Roseville	CA	95747				1
D. & E. Ahrens			3027 Amoruso Way	Roseville	CA	95747				1
D. & N. Wilhelm			7349 Bayoak Way	Citrus Heights	CA	95621				1
D. & R. Fortenberry			8027 Elder Street	Elverta	CA	95626				1
D. & R. Johnson Trustee			3271 Amoruso Way	Roseville	CA	95747				1
D. & S. Gray			3220 Amoruso Way	Roseville	CA	95747				1
D. & Y. Birchfield			5901 Dinky Lane	Roseville	CA	95747				1
D. Cochran			3009 Amoruso Way	Roseville	CA	95747				1
D. Deveau, Trustee			2669 Country Place Drive	Roseville	CA	95747				1
D. Hand			23337 Santa Cruz Hwy.	Los Gatos	CA	95030				1

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D. Roye Trustee			3369 Amoruso Way	Roseville	CA	95747				1
D. Ullyot Trustee			1230 La Cumbre Road	Hillsborough	CA	94010				1
Dain Domich	Separovich-Domich		3321 Power Inn Road, Suite 100	Sacramento	CA	95826				1
Dale Roberts			5481 E Catlett Road	Lincoln	CA	95648				1
Dan & Lisa Dukes			9500 Newton Street	Elverta	CA	95626				1
Dan Heilman			3526 Sankey Rd.	Pleasant Grove	CA	95668				1
Dan Kaufman			2580 Sierra Boulevard, Suite D	Sacramento	CA	95825				1
Dan McCallum			1700 Cathay Way	Sacramento	CA	95864				1
Dan Risse			3998 Keys Road	Pleasant Grove	CA	95668				1
Darin Gale			1945 Phillips Road	Yuba City	CA	95991				1
Darla Guenzler	California Council of Land Trusts		162 Court Way	Vacaville	CA	95688				1
Daryl Lauppe			4840 Winding Ridge Court	Sacramento	CA	95841				1
Dave Butler	Sacramento Metro Chamber of Commerce		917 Seventh St.	Sacramento	CA	95814				1
Dave Jarrette			2520 Douglas Blvd., Suite 160	Roseville	CA	95661				1
Dave Mason	Sacramento Metropolitan Chamber of Commerce		917 7th Street	Sacramento	CA	95814				1
David A. Wilson, P.E.	Mark Thomas & Company, Inc.	Acting Division Manager	7300 Folsom Blvd., Ste. 203	Sacramento	CA	95826				1
David M. Switalski			3154 Pleasant Grove Road	Pleasant Grove	CA	95668				1
David Switalski			3154 Howsley Rd	Pleasant Grove	CA	95668				1
David Wade	Wade Associates	Principal	777 Campus Commons Rd., Suite 200	Sacramento	CA	95825				1
Dawn & Peter										

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Panton			4442 North Park Drive	Sacramento	CA	95821				1
Deanne M. Green	Brookfield Land	Project Manager	2271 Lava Ridge Court, Suite 220	Roseville	CA	95661				1
Del Stephenson	RCONA/Folsom Road		115 S Lincoln Street	Roseville	CA	95678				1
Denal Green	RCONA/Sierra Gardens		1601 Swallow Way	Roseville	CA	95661				1
Deneen Blair	RCONA/RCONA/Police		1051 Junction Blvd	Roseville	CA	95678				1
Dennis Meyer	Andregg, Inc.		11661 Blocker Drive, Suite 200	Auburn	CA	95603				1
Derwin Davis	Bender Rosenthal		3815 Marconi Avenue, Suite 1	Sacramento	CA	95821				1
DF Properties			2013 Opportunity Dr., Suite 140	Roseville	CA	95678				1
Dick Lordge			6204 Pleasant Grove Rd.	Pleasant Grove	CA	95668				1
Sherbina			6601 Locust Road	Pleasant Grove	CA	95668				1
Don Mattos			4710 Brewer Road	Pleasant Grove	CA	95668				1
Don Perera			4000 Silver Star Court	Rocklin	CA	95765				1
Don Powers			424 Pleasant Street	Roseville	CA	95678				1
Don Riolo	Placer Legacy Citizens Advisory		3050 Eight Mile Drive	Lincoln	CA	95648				1
Donna Van Dyke			4114 Pleasant Grove Rd.	Pleasant Grove	CA	95668				1
Doug Dieter			11290 Point East Dr. #200	Rancho Cordova	CA	95742				1
Doug Gram			7500 Pleasant Grove Rd	Elverta	CA	95626				1
Ducks Unlimited			380 Nevada Street	Auburn	CA	95603				1
Dwight and Rachel Johnson			3271 Amoruso	Roseville	CA	95747				1
E. & D. Cabral, Trustee			30711 Granger Ave.	Union City	CA	94587				1
E. & D. Sussli			1734 Wolfe	San Mateo	CA	94402				1
E. & J. Vogt, Trustee			PO Box 724	Pleasant Grove	CA	95668				1

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	Organization	**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
E. & P. Brooks			PO Box 276	Elverta	CA	95626				1
E. Oneill			5945 Country Lane	Roseville	CA	95678				1
Earl Withycombe	Sierra Research		1801 J Street	Sacramento	CA	95814				1
Ed Pandolfino, Ph.D.	Sierra Foothills Audubon Society	Chair, Placer Conservation Committee	5530 Delrose Ct.	Carmichael	CA	95608				1
Ed Willey			4455 Garden Highway	Sacramento	CA	95837				1
Edward Bart			7624 SUMMERTIME LANE	Roseville	CA	95747				1
Elisa Herrera	Vail Engineering		2033 Howe Avenue, #220	Sacramento	CA	95825				1
Elizabeth T. Dunlap Tr et al			3042 Howsley Road	Pleasant Grove	CA	95668				1
Elizabeth Williams	Hoyt Company,		660 J Street, Suite 444	Sacramento	CA	95814				1
Emma Poulson			3690 Elorduy Lane	Elverta	CA	95626				1
Empire West Athens 65 LLC	C/O Tri Commercial		2250 Douglas Blvd., Suite 200	Roseville	CA	95661				1
Eric Hubbard	Wallace-Kuhl & Associates		3050 Industrial Blvd.	West Sacramento	CA	95691				1
Ernie Bouillon			6224 Everest Way	Sacramento	CA	95842				1
Ester Smith			5992 Pleasant Grove Rd	Pleasant Grove	CA	95668				1
Eugene Booen	Sun City CRC		7352 Acorn Glen Loup	Roseville	CA	95747				1
F. & B. Brauer			5910 Laramie Ln.	Roseville	CA	95747				1
F. & M. Gonzales			3310 Amoruso Way	Roseville	CA	95747				1
F. Elaine Magee			6000 Whisperlodge Way	Roseville	CA	95747				1
Fehr & Peers Associates			2990 Lava Ridge Ct. #200	Roseville	CA	95661				1
Foran Brian et al			5425 Pleasant Grove Rd	Pleasant Grove	CA	95668				1
Frank Dowd			7120 Sierra View Place	Loomis	CA	95650				1
Frank H JR/Mary L Tester			3990 Sankey Road	Pleasant Grove	CA	95668				1

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	Organization	**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
Frazer Donald Hastings			1046 Lytonn Springs Road	Healdsburg	CA	95448				1
Fred Blomquist	Associated Land Consultants		6500 Auburn Folsom Road	Granite Bay	CA	95746				1
Fred Springer	Tri Commercial		2250 Douglas Blvd., Suite 200	Roseville	CA	95661				1
Freda Quackenbush			6909 Locust Rd	Pleasant Grove	CA	95668				1
G. & C. Vierra			10345 Baseline Road	Elverta	CA	95626				1
G. & D. Hilbert			3070 Amoruso Way	Roseville	CA	95747				1
G. & M. Neidhardt			3430 Brewer Road	Pleasant Grove	CA	95668				1
G. & S. Hopping			5560 Teaberry Place	Roseville	CA	95678				1
G. Thomas, et al			5980 Sunset Blvd. West	Roseville	CA	95747				1
Gary A Allen	Friends of Placer Co Communities		11205 Rosemary Drive	Auburn	CA	95603				1
Gary Archer	Archer & Ficklin, Inc.		255 North First Street	Dixon	CA	95620 3027				1
Gary Hansen	KD Anderson Transportation Engineers		3853 Taylor Rd.	Loomis	CA	95650	1		1	1
Gary Woolsey	RCONA/Johnson Ranch		2669 Stockwood Drive	Roseville	CA	95661				1
George Atteberry	AR Associates		275 Nevada Street	Auburn	CA	95603				1
George Carpenter			141 Morella Court	Roseville	CA	95747				1
George Phillips			2306 Garfield Avenue	Carmichael	CA	95608				1
Gilbert Hintz			4996 Harrison Street	North Highlands	CA	95660				1
Gilbert Smith			5992 Pleasant Grove Rd	Pleasant Grove	CA	95668				1
Glenn Scheller	Scheller		3555 Sailors Ravine	Auburn	CA	95603				1
Glenn Steven			8660 Baseline Rd.	Pleasant Grove	CA	95668				1
Gloria Cunha			1722 Piute Street	Rocklin	CA	95765				1

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	Organization	**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
Gordon Hodel			5600 Straight Road	Roseville	CA	95747				1
Greg Glosser			2789 Pleasant Grove Rd	Pleasant Grove	CA	95668				1
	Kent Baker &		7996 California Avenue, Suite							
Gregory Stedfield	Associates		C	Fair Oaks	CA	95628				1
Gunther Boccius	Centex Homes	Director of Community Development	3700 Douglas Blvd., Suite 150	Roseville	CA	95661				1
H. & B. Seamans, Trustee			PO Box 472	Elverta	CA	95626				1
H. & K. Frasch			3393 Amoruso Way	Roseville	CA	95747				1
H. Ford Trustee			3140 Amoruso Way	Roseville	CA	95747				1
H. Nihei			5975 Country Lane	Roseville	CA	95747				1
H. Proctor, et al			9230 Sunset Blvd. West	Pleasant Grove	CA	95668				1
H. Rand, Trustee			8125 Locust Road	Elverta	CA	95626				1
Hal Freeman	Ecorp-Sugnet		2260 Douglas Blvd., Suite 160	Roseville	CA	95661				1
Hanson Fam Resir '03 Tr et al.	Eric M Hanson Suss TR		5021 Sandburg Drive	Sacramento	CA	95819				1
Harold Nihei			5975 Country Lane	Roseville	CA	95747				1
Helen Roberts			10275 Lowell Street	Elverta	CA	95626				1
Henning Golden A Trustee Et Al			46 West Wise Rd.	Lincoln	CA	95648				1
Holger Fuerst	Vail Engineering Corp		2033 Howe Avenue	Sacramento	CA	95825				1
Holly Heinzen	Placer County CEO Office		175 Fulweiler Avenue	Auburn	CA	95603				1
Holt of California			P.O. Box X	Sacramento	CA	95813				1
I. Curtis			3041 Amoruso Way	Roseville	CA	95747				1
Ike Njoku	City of Davis		23 Russell Blvd	Davis	CA	95616				1
J. & A. White			3110 Amoruso Way	Roseville	CA	95747				1

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	Organization	**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
J. & C. Coy			10031 Baseline Road	Elverta	CA	95626				1
J. & D. Kuhn			3412 Amoruso Way	Roseville	CA	95747				1
J. & G. Williams			3051 Amoruso Way	Roseville	CA	95747				1
J. & K. Switzler			9555 Baseline Road	Elverta	CA	95626				1
J. & K. Teeters			408 Rosewood Court	Roseville	CA	95747				1
J. & K. Webb			8000 Pleasant Grove Rd.	Elverta	CA	95626				1
J. & P. Shelton			3330 Amoruso Way	Roseville	CA	95747				1
J. & V. Neves			5672 Sunset Blvd. West	Roseville	CA	95678				1
J. Marcus Lee			1236 Muirfield Drive	Schereville	IN	46375				1
J. Plympton, et al			5605 Laramie Lane	Roseville	CA	95747				1
J. Sutherland			5600 Sunset Blvd. West	Roseville	CA	95747				1
Jack Harbour	Eco Logic Engineering		3875 Atherton Rd.	Roseville	CA	95765				1
Jack London			3340 Amoruso Way	Roseville	CA	95747				1
Jack Prescott			6025 Buggy Whip Lane	Roseville	CA	95747				1
Jack Remington	A.R. Associates		275 Nevada Street	Auburn	CA	95603				1
James and Patricia Homerick			8249 Hemingway Drive	Sacramento	CA	95828				1
James Erskine			333 Savannah Court	Roseville	CA	95747				1
James Gleason			6495 Sunset Blvd. West	Roseville	CA	95747				1
James Kidd			1939 Johnson Rd.	Roseville	CA	95747				1
James Lauren H., et al			4809 Pacific Avenue	Pleasant Grove	CA	95668				1
James T. Williams	Williams & Paddon Architects & Planners	Principal	2237 Douglas Blvd., Suite 160	Roseville	CA	95661				1
James Teeters			10849 Baseline Road	Elverta	CA	95626				1
Jan & Joe Russo			6450 Brewer Road	Pleasant Grove	CA	95668				1
Jan Deakle			9191 Moore Road	Pleasant Grove	CA	95668				1
Jan Huttula	RCONA/Cirby		1222 San Simeon Drive	Roseville	CA	95661				1

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	Side									
Jan McKinsey			8085 Stagecoach Circle	Roseville	CA	95747				1
Jane Janca	Remax Advantage		4881 Granite Drive	Rocklin	CA	95677				1
Janet Ruggiero	Community Development	Director	6237 Fountain Square Drive	Citrus Heights	CA	95621				1
Jeff Bordelon	Placer Legacy Citizens Advisory		1293 Lincoln Way	Auburn	CA	95603				1
Jeff Jones	Del Webb		98 Sun City Hall	Lincoln	CA	95648				1
Jeffery Semones			10841 Baseline Road	Elverta	CA	95608				1
Jeffrey Bordelon		Attorney	P.O. Box 3336	Auburn	CA	95604				1
Jeffrey D/Cynthia D Vogt			9494 Sunset Blvd West	Pleasant Grove	CA	95668				1
Jerry K Lo	City of West Sacramento		P.O. Box 966	West Sacramento	CA	95691				1
Jim Braziel			8546 Turn Trails Drive	Antelope	CA	95843				1
Jim Haagen-Smit			7589 Ridge Road	Newcastle	CA	95658				1
Jim Kidd	RCONA/Maidu		1939 Johnson Ranch Drive	Roseville	CA	95661				1
Jim McDonald	Sacramento-Yolo Port District		PO Box 980070	West Sacramento	CA	95798				1
Jim Moose	Remy, Thomas, Moose and Manley, LLP		455 Capitol Mall, Suite 210	Sacramento	CA	95814				1
Jim Williams	RCONA/Meadow Oaks		1008 Parkview Drive	Roseville	CA	95661				1
	Placer Legacy									
Joanne Neft	Citizens Advisory		326 Aeolia Drive	Auburn	CA	95603				1
Joanne Roselli	CB Richard Ellis	Marketing Assistant	1512 Eureka Road, Suite 100	Roseville	CA	95661				1
Joe Costanzo	RCONA/Sierra		543 Alta Vista Avenue	Roseville	CA	95678				1
John Amarel	Farm Shop		6368 South Township Road	Yuba City	CA	95993				1

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John B Lusk	Burrell Engineering Group		11344 Coloma Road, Room 345	Gold River	CA	95670				1
John Cantlay	RCONA/Olympus Pointe		3312 Chapelle Drive	Roseville	CA	95661				1
John Deeter	Environmental Council of Sacramento		909 12th Street, Suite 100	Sacramento	CA	95814	1		1	1
John Donat	Kleinfelder & Associates		3077 Fite Circle	Sacramento	CA	95827				1
John Duffie			7569 School House Lane	Roseville	CA	95747				1
John Feller			4101 Napa Loop	Roseville	CA	95747				1
John G. Hauck Exemp Tr., et al			PO Box 2137	McCall	ID	83638				1
John M. Bianchi			PO Box 730	Pleasant Grove	CA	95668				1
John Murray	Westpark Association		116 Rock Canyon	Folsom	CA	95630				1
John R. Dickerson			3825 Pettigrew Rd	Roseville	CA	95747				1
John Roberts	Natomas Basin Conservancy	Executive Director	1750 Creekside Oaks Drive, Suite 290	Sacramento	CA	95833				1
John Rowland	Peters Engineering Group		55 Shaw Avenue, Suite 220	Clovis	CA	93612				1
John Thias	RCONA/Quail Glen		1532 Verbena Way	Roseville	CA	95747				1
Judy Biawki			P O BOX 849	Elverta	CA	95626				1
Judy Hildebrandt	Lyon & Associates		2220 Douglas Blvd., #100	Roseville	CA	95661				1
K. Reintsma			10491 Baseline Road	Elverta	CA	95626				1
Karen Diepenbrock	Diepenbrock Law Firm		400 Capitol Mall, Suite 1800	Sacramento	CA	95814				1
Karen Ostrowski	RCONA/Sun City		4571 Wanderlust Loop	Roseville	CA	95747				1
Karen Webb			228 Donner	Roseville	CA	95678				1
Kate Kirsch	Foothill Associates		655 Menlo Drive, Suite 100	Rocklin	CA	95765				1

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Katherine Hess	Economic Development–City of Davis		23 Russell Blvd	Davis	CA	95616				1
Katherine Tikker			5555 Pleasant Grove Road	Pleasant Grove	CA	95668				1
Kathleen Brown	Goldman Sachs	Head of Public Finance	2121 Avenue of the Stars, Suite 2600	Los Angeles	CA	90067				1
Kathleen Mead			4929 Olive Oak Way	Carmichael	CA	95608				1
	RCONA/Foothills									
Kathleen Teeters	Junction		408 Rosewood Court	Roseville	CA	95747				1
Kathryn Mathews	El Dorado Co Transportation Commission	Executive Director	2828 Easy Street, Suite 1	Placerville	CA	95667				1
Kathy Curtis			2435 Meadow Landway	Lincoln	CA	95648				1
Kathy Sands			426 Olive Orchard Drive	Auburn	CA	95603				1
Kelly Rich			985 Sun City Lane	Lincoln	CA	95648				1
Ken Friedman			529 Brookline Ave.	Mill Valley	CA	94941				1
Ken Giannotti	Stanford Ranch Company		2210 Plaza Drive, Ste. 300	Rocklin	CA	95765				1
Ken Mc Ghee			761 Minnie Way	Sacramento	CA	95831				1
Ken Monroe			7310 Pacific Avenue	Pleasant Grove	CA	95668				1
Ken Monroe	Holt of California		P.O. Box X	Sacramento	CA	95813				1
Ken Ryan	WRA & Associates	Principal	P.O. Box 307	Rocklin	CA	95677				1
Ken Stevenson			2050 Moonstone Way	Sacramento	CA	95835				1
Ken Vice			3793 Sankey Drive	Pleasant Grove	CA	95668				1
Ken Whitney	Foothill Associates		655 Menlo Drive, Suite 100	Rocklin	CA	95765				1
Kent MacDiarmid			735 Sunrise Avenue, Suite 155	Roseville	CA	95661				1
Kevin Mallen	Yuba County Public Works	Director	915 8th Street, Ste.125	Marysville	CA	95901				1
	HDR/HLB Decision		8403 Colesville Road, Suite							

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Khalid Bekka	Economics, Inc.	Vice President	910	Silver Spring	MD	20910				1
Kim Dugoni			555 Capitol Mall, Suite 100	Sacramento	CA	95814				1
Kirk Julin	Brown Construction		3104 Big Bear Drive	Roseville	CA	95747				1
Kris Steward	Law Offices of George E. Phillips		2306 Garfield Avenue	Carmichael	CA	95608				1
Kristi Kinzel	RCONA/Theiles		524 B Street	Roseville	CA	95678				1
Kyriakos Tsakopoulos			2251 Douglas Blvd., #110	Roseville	CA	95661				1
Kyriakos Tsakopoulos	AKT		2251 Douglas Blvd., Suite 110	Roseville	CA	95661				1
L. & C. Broberg			3161 Amoruso Way	Roseville	CA	95747				1
L. & D. Roberts			9801 Baseline Road	Elverta	CA	95626				1
L. & H. Valdez			3425 Amoruso Way	Roseville	CA	95747				1
L. & M. Hernandez			5951 Dinky Lane	Roseville	CA	95747				1
L. Bace			3171 Amoruso Way	Roseville	CA	95747				1
L. Debiase			3331 Amoruso Way	Roseville	CA	95747				1
L. Novoa, et al			3120 Amoruso Way	Roseville	CA	95747				1
L. Shaw, et al			3380 Amoruso Way	Roseville	CA	95747				1
Larry Fletcher			4161 Enchanted Circle	Roseville	CA	95747				1
Larry Lewis	RCONA		1527 River Oak Way	Roseville	CA	95747				1
Larry Welch	Placer Legacy Citizens Advisory		3045 Eagles Nest	Auburn	CA	95603				1
Lauri Kinne			101 S. Brewer Rd.	Lincoln	CA	95648				1
Lee Lewis			5803 Thoroughbred Court	Rocklin	CA	95677				1
Leo Rubio	MHM Engineering		1082 Sunrise Avenue, Suite 100	Roseville	CA	95661				1
Leonard Federico		President	4955 East Anderson Drive, #115	Fresno	CA	93727				1

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Leslie Hintz			2800 Sankey Road	Pleasant Grove	CA	95668				1
Lewis Compton			7110 Country Acres Lane	Elverta	CA	95626				1
Lisa Lacky	RCONA/RCONA/Police		1051 Junction Blvd	Roseville	CA	95678				1
Lisa Pool	RCONA/Johnson Ranch East		110 Ashridge Ct	Roseville	CA	95678				1
Lou Merzario	West Coast Environmental and Engineering	Project Manager/Senior Planner	101 Providence Mine Road, Suite 106C	Nevada City	CA	95959				1
M. & C. Baumgartner			3290 Amoruso Way	Roseville	CA	95747				1
M. Hartwell			3436 Amoruso Way	Roseville	CA	95747				1
M. Marsh			3435 Amoruso Way	Roseville	CA	95747				1
Marcus LoDuca	Sandberg &		3300 Douglas Blvd., #365	Roseville	CA	95661				1
Marilyn Bryant	Sacramento Central City TMA		917 7th Street	Sacramento	CA	95814				1
Marilyn Jasper	Sierra Club		3921 Daion Drive	Loomis	CA	95650				1
Mark Jagow			1091 Caragh Street	Roseville	CA	95747				1
Mark Mc Comas			PO Box 8358	Woodland	CA	95776				1
Mark Nelson	Hewlett-Packard		8000 Foothills Blvd., MS 5608	Roseville	CA	95747				1
Mark Rayback	Wood Rodgers	Associate	3301 C Street, Bldg. 100-B	Sacramento	CA	95816				1
Mark Sauer	MacKay & Somps		1552 Eureka Rd., Ste. 100	Roseville	CA	95661				1
Marnie Prock	McDonough, Holland & Allen		555 Capitol Mall, Suite 950	Sacramento	CA	95814				1
Mary Braschuk			7072 COUNTRY ACRES LANE	Elverta	CA	95626				1
Mary Van Dyke			PO Box 673	Pleasant Grove	CA	95668				1
Mauro Lara	CTSA	General Manager	10030 Foothills Blvd., MS 1750	Roseville	CA	95747				1

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Mc Monagle, James R & Carol A Trustees			1752 Orvietto Drive	Roseville	CA	95661				1
McKenzie Barry C et al.	Barry C McKenzie		PO Box 603	Pleasant Grove	CA	95668				1
Mel Borgman			3559 Howsley Road	Pleasant Grove	CA	95668				1
Michael Becker	KD Anderson Transportation Engineers		3853 Taylor Rd.	Loomis	CA	95650				1
Michael Cattuzzo			3830 Auburn Blvd., #A	Sacramento	CA	95821				1
Michael M/Jody Jones			7495 Natomas Road	Elverta	CA	95626				1
Michael Terpstra			269 Technology Way, Suite 7	Rocklin	CA	95765				1
Michele Fell			2345 Irma Way	Sacramento	CA	95825				1
Mike Applegate	Applegate Logistics/Freight		P O Box 2728	Sacramento	CA	95812				1
Mike Brown	HalBear Enterprises		2100 Northrop Ave., Suite 500	Sacramento	CA	95825				1
Mike Forga	Caltrans - Office of Special Funded		PO Box 911	Marysville	CA	95901				1
Mike Taylor	RCONA/Cirby Ranch		1736 Chelsea Way	Roseville	CA	95661				1
Miles Treaster			8615 Eldercreek Road	Sacramento	CA	95828				1
Mintier & Associates			1416 20th Street	Sacramento	CA	95814				1
Monica Tugaeff			8957 Rio Linda Blvd.	Elverta	CA	95626				1
Mr. Gray			7875 Pleasant Grove Road	Elverta	CA	95626				1
N. & S. Cupler			5544 Night Owl Lane	Roseville	CA	95747				1
N. Spearman			3293 Amoruso Way	Roseville	CA	95747				1
Nadine Langley	Anderson Consulting Group		360 Idaho Maryland Road	Grass Valley	CA	95945				1
Nancee Moran	RCONA/Woodcreek Oaks		301 Wedmore Court	Roseville	CA	95747				1
Nancy Kulas	RCONA/Kaseberg		1457 Dorchester Drive	Roseville	CA	95678				1
Nick Avdis	Marcus DoLuca Law Firm		3000 Douglas Blvd., #365	Roseville	CA	95661				1

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Nina Waraich			7731 Bradshaw Road	Sacramento	CA	95829				1
O. Salvatierra, Jr.			1794 Stanford Avenue	Menlo Park	CA	94025				1
Oleta Wendell Lutz			3145 Keys Road	Pleasant Grove	CA	95668				1
	MHM Engineers &									
Orin Bennett	Surveyors		735 Sunrise Avenue, Suite 220	Roseville	CA	95661				1
P. Sing, et al			4504 Winje Drive	Antelope	CA	95843				1
Pam Gomez	Global Investments & Development		3470 Wilshire Blvd., Suite 120	Los Angeles	CA	90010				1
Patrick Fisher	Espana Geotechnical Cons		502 Guiseppe Court, Suite 11	Roseville	CA	95678				1
Patrick Flynn	HDR Engineering		271 Turnpike Drive	Folsom	CA	95630				1
Patrick McAchren	Caltrans -- District 3 -- Sacramento Area Office	Associate Environmental Planner	2389 Gateway Oaks Dr.	Sacramento	CA	95833				1
Paul Luzancick			7490 Secret Ravine Rd	Pleasant Grove	CA	95668				1
Pete Nixon			4143 Los Coches Way	Sacramento	CA	95864				1
Phil Morrison			PO Box 632	Pleasant Grove	CA	95668				1
Phillip Gray, Jr.			1518 Planeta Way	El Dorado Hills	CA	95762				1
Phillip Road Land LLC et al.	c/o Friedman, K.		529 Brookline Avenue	Mill Valley	CA	94941				1
Phyllis Andre	RCONA/Roseville Heights		319 Berkeley Avenue	Roseville	CA	95678				1
Pierre Martinez	Lennar Communities	Community Planning Manager	1075 Creekside Ridge Drive, Suite 110	Roseville	CA	95678				1
Pierre Martinez	Lennar Communities, Inc.	Community Planning Mgr.	1075 Creekside Ridge Drive, Suite 110	Roseville	CA	95678				1
	Everglade Farms,									

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Pietro Saviotti	Inc.		PO Box H	Yuba City	CA	95662				1
Placer 58 KS LLC			2277 Fair Oaks Blvd., Suite 295	Sacramento	CA	95825 5598				1
Precision Land Surveying, Inc.			PO Box 1042	Folsom	CA	95763-1042				1
Quentin Miller			7713 Rosestone Lane	Roseville	CA	95747				1
R & B Woodside			9848 Business Park Dr. #H	Sacramento	CA	95827				1
R. & A. Vancleve			2121 Ala Wai Blvd. #1601	Honolulu	HI	96815				1
R. & B. Pronovost			3178 Amoruso Way	Roseville	CA	95747				1
R. & C. Bracken, Trustees			10515 Baseline Road	Elverta	CA	95626				1
R. & C. Pitkin			5955 Laramie Lane	Roseville	CA	95747				1
R. & T. Wickham			3071 Amoruso Way	Roseville	CA	95747				1
R. & W. Moen			3199 Amoruso Way	Roseville	CA	95747				1
R. Karlson			3247 Amoruso Way	Roseville	CA	95747				1
Ralph Martinez			2701 Rattlesnake Road	Newcastle	CA	95658				1
Randy Grimsman			555 Capitol Mall, Suite 100	Sacramento	CA	95814				1
	Sierra Engineering									
Randy Wall	Services		1161 High Street	Auburn	CA	95603				1
Ray Vante			6591 S. Brewer Rd	Roseville	CA	95747				1
Raymond			8848 Baseline Rd	Pleasant Grove	CA	95668				1
Raymond Mello			7909 Walerga Road #112-1293	Antelope	CA	95843				1
Raymond Moore			7227 Timberrose Way	Roseville	CA	95747				1
Rebecca Gillespie			3075 Howsley Rd	Pleasant Grove	CA	95668				1
Rich Briner	Kent Baker & Associates		7996 California Avenue, Suite C	Fair Oaks	CA	95628				1
Rich Woods	Wood Rodgers, Inc. P.E.		3301 C Street, Bldg 100B	Sacramento	CA	95816				1
Richard Folkers			7273 Shadylane Way	Roseville	CA	95747				1

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	Organization	**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
Richard Morton	Morton & Pitalo		1788 Tribute Road #200	Sacramento	CA	95815				1
Richard Rozumowicz	Area West Engineers		7478 Sandalwood Drive #500	Citrus Heights	CA	95621				1
Richard Sebastian-Lewis			7713 Manet Parkway	Sacramento	CA	95823				1
Richard Williams			7975 Locust Road	Pleasant Grove	CA	95668				1
Rick Russell	Carlton		3883 Ponderosa Road	Shingle Springs	CA	95682				1
Rob Lapkass			3205 Mt. Tamalpais Dr.	Roseville	CA	95747				1
Robert Duvall			PO Box 601	Pleasant Grove	CA	95668				1
Robert Hampton			PO Box 7012	Citrus Heights	CA	95621				1
Robert Joslin	Joslin Geotechnical		PO Box 193	Dutch Flat	CA	95714				1
Robert Townley	RCONA/South		1940 No Cirby Way	Roseville	CA	95661				1
Robert Van Dyke			PO Box 735	Pleasant Grove	CA	95668				1
Robert Watkins			317 Zola Avenue	Roseville	CA	95678				1
Robert/Robbie Gillespie			P.O. Box 711	Pleasant Grove	CA	95668	1		1	1
Roger Imsdahl			10562 Rock View Court	Auburn	CA	95603				1
Ron Heskett	Placer Legacy Citizens Advisory		3775 Whiskey Hill Road	Loomis	CA	95650				1
Ron Smith			3825 Atherton #115	Rocklin	CA	95765				1
Ronald Bakken	Placer Legacy Citizens Advisory		6315 Long Meadow Road	Granite Bay	CA	95746				1
Russell King	King Engineering, Inc.		10563 Brunswick Road, Suite 11	Grass Valley	CA	95945				1
S. & F. Newth			3350 Amoruso Way	Roseville	CA	95747				1
S. & G. Loe			5840 Sunset Blvd. West	Roseville	CA	95747				1
S. & L. Cotter			3270 Amoruso Way	Roseville	CA	95747				1
S. Javidan			9631 Baseline Road	Elverta	CA	95626				1
Sacramento County										
Builders			1331 T Street	Sacramento	CA	95812				1

INTERESTED										
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Exchange										
Sara Lee	Goldman, Sachs	Vice President	555 California Street	San Francisco	CA	94104				1
Sasha Spiegel			7633 Lowst Road	Auburn	CA	95603				1
Scott/Cynthia Autrey			6317 Pleasant Grove Road	Pleasant Grove	CA	95668				1
Shane M Vaughn			3431 Amoruso Way	Roseville	CA	95678				1
Sharon Cavallo	Placer Legacy Citizens Advisory		2812 Stevens Drive	Auburn	CA	95602				1
Shawn Burnsed			7521 Natomas Rd.	Elverta	CA	95626				1
Sherie Dortes			10938 Jay Rd.	Wilton	CA	95693				1
Sheryl Osterli			1485 W. Catlett Rd.	Pleasant Grove	CA	95668				1
Shirley Lieneit			1861 Striplier Rd.	Pleasant Grove	CA	95668				1
Shirley Wallace			2950 Fi Field Rd	Pleasant Grove	CA	95668				1
Stan Randolph	California Trucking Association		3251 Beacon Blvd.	West Sacramento	CA	95691				1
Stephan Monich			3888 Sankey Rd	Pleasant Grove	CA	95668				1
Stephen Au Clair	G.C. Wallace Companies		2150 River Plaza Drive, Suite 100	Sacramento	CA	95833				1
Steve Brar			1721 Dashwood Drive	Roseville	CA	95747				1
Steve Crosbie	Crosbie Real Estate		2545 E. Bidwell Street, Suite 150	Folsom	CA	95630				1
Steve Sutton	Land Acquisitions- N. California Miller Holdings		213 Rodeo Drive	Sacramento	CA	95823				1
Steve Waterburg			4320 Brewer Road	Pleasant Grove	CA	95668				1
Steven P. Rosenblatt	Brookfield Natomas		555 Capital Ave., Suite 600	Sacramento	CA	95814				1
Steven Speights	Psomas		2295 Gateway Oaks Drive #250	Sacramento	CA	95833				1

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Sun City-Roseville	Community Relations		308 Stone Work Court	Roseville	CA	95747				1
Susan Rohan			2932 Alder Point Drive	Roseville	CA	95661				1
Sutter County Builders Exchange			832 Richland Road	Yuba City	CA	95991				1
Suzanne Richards	GT Retail Services		3721 Douglas Blvd., Suite 230	Roseville	CA	95661				1
T. & J. Peterson			3323 Amoruso Way	Roseville	CA	95747				1
T. & K. Nathan			3055 Amoruso Way	Roseville	CA	95747				1
T. & S. Mekeel			5510 Teaberry Place	Roseville	CA	95678				1
T. & S. Romo			5620 Night Owl Ln.	Roseville	CA	95747				1
T. & T. Miskel			3010 Amoruso Way	Roseville	CA	95747				1
T. Feaster, et al			5570 Sunset Blvd. West	Roseville	CA	95747				1
T. Hudson			9971 Baseline Road	Elverta	CA	95626				1
T. Kays, et al			3284 Amoruso Way	Roseville	CA	95678				1
T. Mitchell			5555 Laramie Lane	Roseville	CA	95747				1
T. Pellini, et al			233 Fig Street	Roseville	CA	95678				1
Tara Brocker			1864 W. Catlett Road	Pleasant Grove	CA	95668				1
Ted Coppin, et al			3068 Howsley Road	Pleasant Grove	CA	95668				1
Ted Sessions	Marcu & Millichal		3200 Douglas Blvd. #300	Roseville	CA	95747				1
Terry Bentley	Sutter Co. Chamber of Commerce -- Live	President	P.O. Box B	Marysville	CA	95901				1
Terry Lowell	Terrance E. Lowell & Associates, Inc.		1528 Eureka Rd., Ste. 100	Roseville	CA	95661				1
Thomas J. Lumbrazo	Planning, Inc.		1504 Sierra Gardens Drive	Roseville	CA	95661				1
Thomas W. Blackburn	Blackburn Consulting, Inc.		3265 Fortune Ct.	Auburn	CA	95602				1
Tim Kwan	Attain Development Corp.		9601 Jorney Ct.	Granite Bay	CA	95746				1

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Tim Woodall	Placer Legacy Citizens Advisory		149 Court Street	Auburn	CA	95603				1
Todd Ballard			5880 Sunset Blvd. W.	Pleasant Grove	CA	95668				1
Todd Kotey	Eco Logic Engineering		3875 Atherton Rd.	Roseville	CA	95765				1
Tom Aiken	Bureau of Reclamation		7794 Folsom Dam Road	Folsom	CA	95630				1
Tom Roberts			PO Box 29500	Las Vegas	NV	89126				1
Tom Rousakis	Goldman, Sachs	Vice President	85 Broad Street	New York	NY	10004				1
Tom Tratt	GW Consulting Engineers		7447 Antelope Road, Suite 202	Citrus Heights	CA	95621				1
Tommie & Wendy Steinhoff			5950 Sunset Blvd. West	Roseville	CA	95747				1
Tommy Davis	Yolo County Public Works		292 West Beamer Street	Woodland	CA	95695				1
Tony Gallas			3 Fig Leaf Court	Sacramento	CA	95838				1
Tony Plescia			600 Fowler Road	Newcastle	CA	95658				1
Tony Plescia			7473 Pocket Road	Sacramento	CA	95831				1
Trinh Nguyen	Surface Transportation Policy Proj		1414 K Street, Suite 315	Sacramento	CA	95814				1
V. L. Mitchell			7104 Timberrose Way	Roseville	CA	95747				1
Valita Noble			PO Box 784	Pleasant Grove	CA	95668				1
Vern _________	Southhamp Ranch		7255 S. Brewer Road	Pleasant Grove	CA	95668				1
Vic Pelton			5993 Whisperlodge Way	Roseville	CA	95747				1
Vicky Wingate	RCONA/Cherry		207 ½ Clinton Avenue	Roseville	CA	95678				1
Victor Vasquez	Miller Holdings	Director California Div.	2280 Grass Valley Hwy. #257	Auburn	CA	95603				1
Vinh Quach			3202 Sankey Road	Pleasant Grove	CA	95688				1
Violis Bettes			3567 Elorduy Lane	Elverta	CA	95626				1
W. & K. Harless			9777 Baseline Road	Elverta	CA	95626				1
W. & L. Siefert			PO Box 235	Rocklin	CA	95677				1
W. & P. Kennedy			3061 Amoruso Way	Roseville	CA	95747				1
W. Kasprzk			5650 Sunset Blvd. West	Roseville	CA	95678				1

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W. Sigl			5720 Almond Ranch Road	Roseville	CA	95747				1
Walt Seifert	Sacramento Area Bicycle Advocates		P.O. Box 1295	Sacramento	CA	95812				1
Walt Trevethan			2985 Catlett Rd.	Pleasant Grove	CA	95668				1
Wayne Allen			10323 Pleasant Grove Rd	Elverta	CA	95626				1
Wayne Blunk	Kaiser Permanente Medical Group		2025 Morse Avenue	Sacramento	CA	95825				1
Wayne Horiuchi	Union Pacific Railroad		915 L Street, Suite 1230	Sacramento	CA	95814				1
Wayne Nader			13837 Range Court	Auburn	CA	95602				1
Wei-Jen Harrison			3001 Morse Avenue	Sacramento	CA	95821				1
Wendy Burgstahler			5905 Laramine Lane	Roseville	CA	95747				1
Wendy Hoyt	Hoyt Company		660 J Street, Suite 444	Sacramento	CA	95814				1
William & Pat Dowd			7120 Sierra View Place	Loomis	CA	95650				1
William Burns			10621 Garden Highway	Sacramento	CA	95837				1
William Callejo, Trustee	California Associates		4314 North Central Expressway	Dallas	TX	75206				1
William Turpie			4790 Caughlin Pky. #463	Reno	NV	89509				1
William V. McIntosh	Pacific Gas & Electric		12182 Salada Court	Grass Valley	CA	95949				1
Wynette Sills			2728 Howsley Road	Pleasant Grove	CA	95668				1
Yuan Keh Chang & Gloria Trustee Et Al			1180 Countess Ct	San Jose	CA	95129				1
	Rocklin Chamber of Commerce		3700 Rocklin Road	Rocklin	CA	95677	1		1	1

HC=Hard Copy
Note: Where an individual is included in more than one distribution category only one copy of documents was transmitted.

PLACER COUNTY										
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NORTH AMERICAN RESORT PROPERTIES INC		100 BAYVIEW #4500	NEWPORT BEACH	CA	92660	017-281-007-000	1		1	1
COY WILLIAM JAMES & CAROL JEAN		10031 BASELINE RD	ELVERTA	CA	95626	023-020-019-000				1
ROCKLIN BUSINESS PARK LLC ET AL		101 FIRST ST PMB 486	LOS ALTOS	CA	94022	017-282-010-000				1
G D A TECHNOLOGIES INC	C/O PROP TAX DEPT	1010 RINCON CIR #200	SAN JOSE	CA	95131-1325	017-282-003-000				1
MABE JACK & BRANDI		10122 SEVEN FALLS AVE	BAKERSFIELD	CA	93312	017-030-058-510				1
RITACCO GREGORY A		102 KENMARE CT	ROSEVILLE	CA	95747	023-093-003-000				1
SCOTT WILLIAM J III &	SCOTT DEBRA J	10220 LOWELL ST	ELVERTA	CA	95626	023-040-032-000				1
MEEKS STEPHEN & TEMEKO		10240 LOWELL ST	ELVERTA	CA	95626-9435	023-040-036-000				1
PATTERSON DENTAL SUPPLY INC		1031 MENDOTA HGTS RD	ST PAUL	MN	55120	017-281-004-000				1
WHITAKER LOREN J ET AL		10310 LOWELL ST	ELVERTA	CA	95626	023-040-008-000				1
ALLEN JOAN L TRUSTEE ET AL		10323 PLEASANT GROVE SCHOOL RD	ELK GROVE	CA	95624	017-090-030-000				1
VIERRA GEORGE A & CHRISTINE J		10345 BASELINE RD	ELVERTA	CA	95626	023-040-029-000				1
VOGT EDWIN F & JOYCE A TRS		104 DEEP SPRINGS CT	LINCOLN	CA	95648	017-010-047-000				1
ANDREWS SCOTT C & JACQUELYNN D		10461 BASE LINE RD	ELVERTA	CA	95626	023-040-038-000				1
ABBEY DEWEY W & PATSY J TRUSTEES		10480 LOWELL ST	ELVERTA	CA	95626	023-040-019-000				1
REINTSMA KATHLEEN TRUSTEE		10491 BASELINE RD	ELVERTA	CA	95626	023-040-037-000				1
BRACKEN ROGER D & CINDY R TRUSTEES		10515 BASELINE RD	ELVERTA	CA	95626	023-030-002-000				1
STAUFFER PATRICIA ET AL		10520 LOWELL ST	ELVERTA	CA	95626	023-030-006-000				1
OGANISYAN MARETA & MIKAYELYAN HOVSEP		10621 BASELINE	ELVERTA	CA	95626	023-081-015-000				1

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		RD								
DOYLE CARMEN TTEE ET AL	ATTN: LORI RISPOLI	10630 MATHER BLVD	SACRAMENTO	CA	95655	023-221-057-000				1
BARDIS CHRISTO D ET AL		10630 MATHER BLVD	MATHER	CA	95655	017-081-058-000				1
WILHELM NOREEN E		10651 BASELINE RD	ELVERTA	CA	95626	023-081-013-000				1
VO CHAU PATRICK	DBA KIMPHOUG HAIR & NAIL	107 S HARDING BLVD #K	ROSEVILLE	CA	95678	017-130-053-000				1
GANGUET PATRICK T & CHRISTIE M		10701 BRYANT ST	ELEVERTA	CA	95626	023-072-010-000				1
US HOME CORPORATION	VALUE PRORATED TO LOTS	1075 CREEKSIDE RIDGE DR STE 110				482-040-051-000				1
LENNAR HOMES OF CALIFORNIA INC		1075 CREEKSIDE RIDGE DR #110	ROSEVILLE	CA	95678	490-060-086-000				1
LENNAR RENAISSANCE INC	ATTN SPITZER JEFF	1075 CREEKSIDE RIDGE DR STE 100	ROSEVILLE	CA	95678	488-010-001-000				1
WHITE CLARK R & JANINE M TRUSTEES		108 MEADOW CREST LN	WALNUT CREEK	CA	94595	017-070-032-000				1
COON CREEK CATTLE CO	C/O CHARLES DUNN REAL EST	10855 OLSON DR	RANCHO CORDOVA	CA	95670	017-283-002-000				1
SAINT JOHNS PARISH	ATTN: SCHIVELY JOHN A	1090 MAIN ST	ROSEVILLE	CA	95678	017-150-059-000				1
KOREAN JOHN G & CATHERINE N TRUSTEES ET	C/O HERB LIVERETT COMPANI	1100 N STREET STE 1-C	SACRAMENTO	CA	95814	017-070-022-000				1
GUIDE ONE INSURANCE		111 ASHWORTH RD	WEST DES MOINES	IA	50265	017-282-010-000				1
BAYBROOK LIMITED PARTNERSHIP	C/O REGAS JAMES A	111 W WASHIINGTON ST	CHICAGO	IL	606022709	017-150-009-000				1
REGENTS OF THE UNIVERSITY OF CALIFORNIA		1111 FRANKLIN ST 6TH FL	OAKLAND	CA	94607-5200	491-010-002-000				1
P K CROWN DISTRIBUTING INC	DBA CROWN DISTRIBUTING CO	1115 W SUNSET BLVD	ROCKLIN	CA	95765	017-070-031-000				1
HENRICHS ROBERT A		1120 TARA CT	ROCKLIN	CA	95765	017-200-032-000				1
AMERICAN UPGRADE AUTO PRODUCTS INC		1123 W SUNSET BLVD	ROCKLIN	CA	95765	017-070-030-000				1

PLACER COUNTY										
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D & D SUPPLY INC		11309 FOLSOM BLVD	RANCHO CORDOVA	CA	95742	017-070-013-000				1
COOK JOHN C	DBA JOHN COOK ASSOCIATES	1131 W SUNSET BLVD	ROCKLIN	CA	95765	017-070-034-000				1
POBLETE BEN L	DBA ARCHITECTURAL	1131 W SUNSET BLVD STE B	ROCKLIN	CA	95765	017-070-034-000				1
LOUTHAN ROGER	DBA DIGITAL IMAGING SUPER	1140 TARA CT	ROCKLIN	CA	95765	017-200-031-000				1
HATCH MICHAEL D & NANCY E TRUSTEES		11411 MIDWICK PL	GARDEN GROVE	CA	92640	017-150-016-000				1
FIDDYMENT JOAN Y TRUSTEE ET AL	C/O CLAUSS JIM	11417 SUTTERS MILL CIR	GOLD RIVER	CA	95670	017-200-053-000				1
WESTERN REGIONAL SANITARY L A	C/O WESTERN PLACER WASTE	11476 C AVE	AUBURN	CA	95603	017-061-074-000	1		1	1
DESIGN SELECT	DBA DESIGN SELECT	1151 W SUNSET BLVD	ROCKLIN	CA	95765	017-070-028-000				1
YUN KUN SOO & YUN TAE HUI	DBA PRIMO CAFE	11573 MARISSA WAY	GOLD RIVER	CA	95670	017-282-002-000				1
GIFFIN INVESTMENTS LLC	C/O VITABLEND	1160 TARA CT	ROCKLIN	CA	95765	017-200-034-000				1
GIFFIN ROBIN	DBA VITABLEND LTD	1160 TARA CT #A	ROCKLIN	CA	95765	017-200-034-000				1
AMERICAN CONCRETE ENGINEERING INC	DBA AMERICAN LANDSCAPE &	1175 TARA COURT	ROCKLIN	CA	95765	017-200-030-000				1
THOMAS L ASHER CO		1175 TARA CT	ROCKLIN	CA	95765	017-200-030-000				1
ASHER THOMAS L & MARY E		1175 TARA CT	ROCKLIN	CA	95765-1200	017-200-030-000				1
YUAN KEH CHANG & GLORIA TRUSTEES ET AL		1180 COUNTESS CT	SAN JOSE	CA	95129	017-130-063-000				1
MORRISON HOMES INC		1180 IRON POINT RD # 100	FOLSOM	CA	95630	488-130-003-000				1
TARA CT LLC	C/O MURPHY MICHAEL J SR	1180 TARA CT	ROCKLIN	CA	95677	017-200-033-000				1
ALL ASSETS LLC	ATTN MIKE MURPHY	1180 TARA CT	ROCKLIN	CA	95765-1200	017-200-033-000				1
INNOVATIVE POND PRODUCTS INC		1180 TARA CT STE B	ROCKLIN	CA	95765	017-200-033-000				1

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BASE LINE 82 PLUS	C/O GALAXIDAS GUS	1205 LA SIERRA DR	SACRAMENTO	CA	95864	017-130-057-510				1
PLACER NINETY FOUR-TWENTY PTSP	C/O GALAXIDAS GUS	1205 LA SIERRA DR	SACRAMENTO	CA	95864	017-130-058-000				1
GALAXIDAS CONSTANTINO ET AL		1205 LA SIERRA DR	SACRAMENTO	CA	95864	023-090-004-000				1
ULLYOT DANIEL J TRUSTEE		1230 LA CUMBRE RD	HILLSBOROUGH	CA	94010	017-030-029-510				1
CHUANG CHAU HSIUNG & YUEH JING TRUSTEES		12351 CRAYSIDE LN	SARATOGA	CA	95070	017-100-033-000				1
LEE J MARCUS &	LEE SUZANNE Y	1236 MUIRFIELD DR	SCHERERVILLE	IN	46375	017-090-034-000				1
TOMICH PAUL L ET AL		12680 ERIN DR	AUBURN	CA	95603	017-090-051-000				1
WEST ROSEVILLE INVESTORS L P	C/O CHRISTOPHERSON HOME I	1315 AIRPORT BLVD	SANTA ROSA	CA	95401	488-070-007-000				1
WEST ROSEVILLE DEVELOPMENT COMPANY INC	C/O SIGNATURE PROPERTIES	1322 BLUE OAKS BLVD STE 100	ROSEVILLE	CA	95678	017-100-092-000				1
ROSEVILLE/FIDDYMEN T LAND VENTURE LLC	C/O SIGNATURE PROPERTIES	1322 BLUE OAKS BLVD STE 100	ROSEVILLE	CA	95678	017-100-093-000				1
WEALTH PROPERTIES INC		1388 SUTTER ST #730	SAN FRANCISCO	CA	94109	017-150-029-510				1
STOKES THOMAS J & CATHERINE E TRUSTEES		13960 MOSS ROCK DR	AUBURN	CA	95602	017-070-023-000				1
H J & P E INVESTMENT		1415 LOWER PASEO LA CRESTA	PALOS VERDES EST	CA	90274	017-081-004-000				1
JOHN MOURIER CONSTRUCTION INC		1430 BLUE OAKS BLVD STE 190	ROSEVILLE	CA	95747-7143	484-160-071-000				1
BOT MARTIAN		145 MEDFORD AVE	HAYWARD	CA	94541	017-140-006-000				1
TATARA ALEXANDER S		14967 BERKSHIRE CIR	TRUCKEE	CA	96161-1160	017-270-064-000				1
TINKER ROAD ASSOCIATES LLC ,ET		1500 E HAMILTON								

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AL		AVE #201	CAMPBELL	CA	95008	017-300-043-000				1
TINKER ROAD GROUP I LLC	C/O LONGMEADOW DEVELOPMEN	1504 EUREKA RD #220	ROSEVILLE	CA	956610717	017-300-094-000				1
ATHERTON GRIFFIN LLC	C/O LONGMEADOW DEVELOPMEN	1504 EUREKA RD STE 220	ROSEVILLE	CA	95661	017-281-008-000				1
PLACER CENTER LLC	C/O CITADEL EQUITIES	1508 EUREKA RD STE 130	ROSEVILLE	CA	95661	017-270-071-000				1
PLACER CENTER LLC	C/O CITADEL EQUITIES	1508 EUREKA RD STE 130	ROSEVILLE	CA	95661	017-270-072-000				1
BENNETT DAVID R & DAWN M TRUSTEES ET AL	C/O WILDWOOD PROPERTIES	151 N SUNRISE AVE #1116	ROSEVILLE	CA	95661	017-282-003-000				1
590 MENLO ROCKLIN LLC	C/O WILDWOOD PROPERTIES	151 N SUNRISE AVE SUITE 1116	ROSEVILLE	CA	95661	017-282-008-000				1
HULME PAUL L & HELGA A TTEES		15222 MONTALVO HEIGHTS CT	SARATOGA	CA	95070	017-130-050-510				1
CALIFORNIA BACKYARD INC	DBA CALIFORNIA BACKYARD W	1529 EUREKA RD	ROSEVILLE	CA	95661	017-270-019-000				1
ORCHARD CREEK INVESTORS LLC		1530 J ST SUITE 200	SACRAMENTO	CA	95814	491-010-001-000				1
269 TECH LLC		15450 BANYAN LN	MONTE SERENO	CA	95030	017-270-051-000				1
PECK JOHN H JR & DENISE E TRS		1555 MISTYWOOD DR	ROSEVILLE	CA	95747	017-200-002-510				1
TCHERKOYAN GREGORY & SETA TRUSTEES ET AL		157 EMMONS CANYON LN	ALAMO	CA	94507	017-283-003-000				1
CUMMINGS WILLIAM C ET AL		1625 CREEKSIDE DR #201	FOLSOM	CA	95630	017-090-049-000				1
ROSCO LLC		1700 LA VEREDA RD	BERKELEY	CA	94709	017-061-063-000				1
TRAN HIEN T ET AL		1709 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-029-000				1
TRAN HIEU		1717 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-028-000				1
CAREY DEREK		1724 GREYWOOD CIRCLE	ROSEVILLE	CA	95747	482-160-018-000				1
DODD KAREN L		1726 PICO RIVERA DR	ROSEVILLE	CA	95747	484-160-046-000				1
DODICH MICHAEL ET AL		1732 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-017-000				1

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SUSSLI EUGENE & DOROTHY ET AL		1734 WOLFE	SAN MATEO	CA	94402	017-040-011-000				1
OROAK BRUCE E & SANDRA P		1740 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-016-000				1
POWELL JOYCE ET AL		1741 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-027-000				1
SAMSON ELENITA A		1741 PICO RIVERA DR	ROSEVILLE	CA	95747	484-160-049-000				1
LIMON JAMES & PERENA LORELEI S		1742 PICO RIVERA DR	ROSEVILLE	CA	95747	484-160-044-000				1
MCCLURE PENNY & SHANE		1748 GREYWOOD CIRCLE	ROSEVILLE	CA	95747	482-160-015-000				1
SELLS NORMAN A & LINDSAY A		1749 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-026-000				1
PATEL DEEPA & SHAH JAGAT		1749 PICO RIVERA DR	ROSEVILLE	CA	95747	484-160-050-000				1
JOHNSON GENEVIEVE L		175 COUNTY RD 346	IUKA	MS	38852	017-200-001-510				1
WHITESIDE JAMIE N & KYLE K		1750 PICO RIVERA DR	ROSEVILLE	CA	95747	484-160-043-000				1
MCMONAGLE JAMES R & CAROL A TRUSTEES		1752 ORVIETTO DR	ROSEVILLE	CA	95661	017-010-019-000				1
B & W 60 LP	C/O THE EVERGREEN COMPANY	1755 CREEKSIDE OAKS DR #290	SACRAMENTO	CA	95833	023-200-064-000				1
WELLS RICH H ET AL		1756 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-014-000				1
GIBBONS JOHN A & GENA L TRUSTEES		1757 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-025-000				1
HEATHMAN CHRISTOPHER A & HUBBARD ANGELIC		1757 PICO RIVERA DR	ROSEVILLE	CA	95747	484-160-051-000				1
DUDLEY JAMES R & NEILIA E		1758 PICO RIVERA DR	ROSEVILLE	CA	95747	484-160-042-000				1
SMITH MICHAEL P		1764 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-013-000				1
ROSSMILLER ANTHONY R & CHRISTINE M		1765 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-024-000				1

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AQUINO MARIA JESSICA & JOHN		1765 PICO RIVERA DR	ROSEVILLE	CA	957477143	484-160-052-000				1
BROWN MARK L & JESSICA L		1766 PICO RIVERA DR	ROSEVILLE	CA	95747	484-160-041-000				1
REGAN MICHAEL J JR & MINDY L		1772 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-012-000				1
CALDWELL GUYLA M		1773 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-023-000				1
ZHIRKOV LIANA		1776 DIAMOND WOODS CIR	ROSEVILLE	CA	95747	482-160-031-000				1
VO KENNY		1780 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-011-000				1
GURNEY TRAVIS & JULIE M		1781 GREYWOOD CIRCLE	ROSEVILLE	CA	95747	482-160-022-000				1
AUSTIN VALERIE		1788 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-010-000				1
MCMASTER KENT & JUANITA		1789 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-021-000				1
KORNAK R SCOTT & JILL A		1796 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-009-000				1
MATTIX BRENT & LEANNE		1797 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-020-000				1
JONES SUSAN COSTANZO	DBA ZO WEAR	1800 VERNON ST #6	ROSEVILLE	CA	95678-6308	017-282-003-000				1
BLOCK STEPHEN E & DALE FORREST TRUSTEES		1804 5TH ST	BERKELEY	CA	94710	017-282-002-000				1
SCOTT MARK S & REBECCA L		1804 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-008-000				1
SHANABERGER VICKI L		1805 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-019-000				1
LINDSAY CHRISTOPHER		1812 GREYWOOD CIRCLE	ROSEVILLE	CA	95747	482-160-007-000				1
PALACIO STEPHEN C & SHARON V		1820 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-006-000				1
JORDAN JEREMY & JENNIFER		1824 DIAMOND WOODS CIR	ROSEVILLE	CA	95747	482-160-037-000				1
TRAN DAVID & TRANG		1828 BRIDGEVIEW CT	SAN JOSE	CA	95138	017-040-056-510				1
GRIFFIN DORSEY W II & BEVERLY T TRUSTEES		1828 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-005-000				1

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SCHUHWERK SCOTT		1832 DIAMOND WOODS CIR	ROSEVILLE	CA	95747	482-160-038-000				1
BATTEATE GIOVANNI & MELISSA		1836 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-004-000				1
SHERBINA CAROLE C TRUSTEE		1838 HAPPY LN #7	EUGENE	OR	97401	017-130-002-000				1
MALIHINA TATIANA		1840 DIAMOND WOODS CIR	ROSEVILLE	CA	95747	482-160-039-000				1
HOPKINS RODERICK L & DEIRDRA A		1844 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-003-000				1
FORTNER BRIAN		1845 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-042-000				1
PENNEY FREDERICK W & KATHLEEN TRUSTEES E		1850 CREEKSIDE LN	LOOMIS	CA	95650	017-270-040-000				1
POMFRET ESTATES INCORPORATED		1850 MOUNT DIABLO BLVD STE 108	WALNUT CREEK	CA	94596	017-283-005-000				1
MARTINEZ RAYMOND J & ARLENE A		1852 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-002-000				1
PILARSKI BRENT A & LAURA A		1853 GREYWOOD CIR	ROSEVILLE	CA	95747	482-160-041-000				1
LEONTIEFF JOHN M & YELENA		1855 RAVENNA WAY	ROSEVILLE	CA	95747-7143	484-120-024-000				1
ULTRAPOWER-ROCKLIN	DBA RIO BRAVO ROCKLIN	19100 VON KARMAN STE 570	IRVINE	CA	92612	017-061-040-000				1
LACKEY JOSEPH H & STACY L		1964 CAMINO VERDERA	LINCOLN	CA	95648	017-270-067-000				1
SOHRAKOFF JAMES & MIRNA L ET AL		1979 OAKLEY LN	WHEATLAND	CA	95692	017-010-031-000				1
LONG BEACH MORTGAGE TRUST 2006-1	C/O WASHINGTON MUTUAL BAN	19850 PLUMMER ST				482-040-004-000				1
YOUNG JEFFREY A & SHELLEY L		201 SILVERSTONE CT	ROSEVILLE	CA	95747	482-040-006-000				1
D F PROPERTIES		2013 OPPORTUNITY DR STE 140	ROSEVILLE	CA	95678	017-150-027-510				1
HENSON & ASSOCIATES LLC		20216 WYANDOTTE ST	WINNETKA	CA	91306	017-130-059-000				1
DEER CREEK		2027 ELEVADO HILLS								

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PRESERVE LLC ET AL		DR	VISTA	CA	92084	017-130-005-000				1
CHEN SHUKAI ET AL		2046 CRONER PLACE	SAN JOSE	CA	95131	017-010-015-000				1
CONSULO NAT TRUSTEE		2073 CENTRAL AVE	ROSEVILLE	CA	95747	017-140-011-510				1
STATES CURTIS		208 SILVERSTONE CT	ROSEVILLE	CA	95747	482-040-005-000				1
DOYLE CARMEN TRUSTEE ET AL	C/O KIRK DOYLE	209 HARDING BLVD	ROSEVILLE	CA	95678	023-200-005-000				1
VERIFONE INC	PROP TAX DEPT/GHADA BURTO	2099 GATEWAY PLACE #600	SAN JOSE	CA	95110	017-283-002-000				1
VANCLEVE ROGER D & AILEEN T		2121 ALA WAI BLVD #1601	HONOLULU	HI	96815	017-030-024-510				1
FEDERICOTYLER FAMILY LIMITED PARTNERSHIP		2144 SHIELAH WAY	SACRAMENTO	CA	95822	017-150-033-510				1
NORTH AMERICAN TITLE COMPANY INC		2185 N CALIFORNIA BLVD STE 575	WALNUT CREEK	CA	94596-7323	017-282-002-000				1
ACE HARDWARE CORPORATION	C/O TAX DIRECTOR	2200 KENSINNTON CT	OAK BROOK	IL	60523-2100	017-081-007-000				1
MERCADO GABRIEL		2209 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-059-000				1
STANFORD RANCH I LLC		2210 PLAZA DR STE 300	ROCKLIN	CA	95765	017-270-002-000				1
HAND NATHANIEL G		2212 LOS GATOS ALMADEN RD	SAN JOSE	CA	95124	023-072-011-000				1
GRAVEL MARK & CHULABHORN		2232 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-038-000				1
PERENA ROEL S & NAVARROPERENA MARIA J		2233 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-057-000				1
NGUYEN WALTER T D & LIEN T B TRUSTEES		224 N WOLFE RD	SUNNYVALE	CA	94085	017-070-046-000				1
E M E TECHNOLOGIES INC		224 NORTH WOLFE RD	SUNNYVALE	CA	94086	017-070-046-000				1
LUM YIP KEE LIMITED ET AL	C/O PRENTISS PROPERTIES L	2240 DOUGLAS BLVD STE 105	ROSEVILLE	CA	95661	017-281-003-000				1
CAYLOR JEFF J & JENNIFER		2240 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-039-000				1

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HUMPHERS PAUL & STACI		2241 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-056-000				1
EMPIRE WEST ATHENS 65 LLC	C/O TRI COMMERICIAL	2250 DOUGLAS BLVD #200	ROSEVILLE	CA	95661	017-061-022-000				1
KOBRA PROPERTIES		2251 DOUGLAS BLVD #120	ROSEVILLE	CA	95661	017-270-070-000				1
GONTHIER ERIC S & ALLISON D		2256 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-041-000				1
BALDRIDGE MARK R & TIFFANY A TTEE		2264 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-042-000				1
YO KISU & LORETTA		2272 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-043-000				1
PLACER 58 KS LLC	C/O SIOUKAS DEAN	2277 FAIR OAKS BLVD #295	SACRAMENTO	CA	95825	017-130-011-000				1
PLACER 536	C/O JAS DEVELOPMENTS INC	2277 FAIR OAKS BLVD STE 295	SACRAMENTO	CA	95825-5598	023-200-065-000				1
PORTFOLIO 372 PARTNERS	C/O JAS DEVELOPMENTS INC	2277 FAIR OAKS BLVD STE 295	SACRAMENTO	CA	95825-5598	017-130-021-000				1
ARELLANO KHRISTINE C & ROBERT		2280 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-044-000				1
TURCOTTE ALEXANDER A JR & JENI M		2288 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-045-000				1
ARRENDONDO MARTIN & GARCIA LOURDES		2296 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-046-000				1
ORTEGA GREG R & TAWNYA L		2297 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-055-000				1
MARIANO MELLIE & FELIX JR		2297 LOCKTON DR	ROSEVILLE	CA	95747	490-040-054-000				1
LEE DAVID T & MARY R		2304 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-047-000				1
HUTCHINSON MATTHEW JOHN & LAURA ANN		2305 LOCKTON DR	ROSEVILLE	CA	95747	490-040-053-000				1
ERFELIU GERTRUDES O & FASTIDIO DENNIS										

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RH		2312 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-048-000				1
VILLAFLOR MARIA S		2320 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-049-000				1
KONG MARC P & KRISTINA S		2321 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-054-000				1
CRISOSTOMO VIRGIE F ET AL		2328 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-050-000				1
BAGAOISAN AMOR E & DIONISIA P		2329 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-053-000				1
INCLINE VENTURES LLC		233 TECHNOLOGY WAY STE A4	ROCKLIN	CA	95765	017-270-062-000				1
MCCLURE DAVID T	DBA FOOTHILL SYSTEMS	233 TECHNOLOGY WAY #A-8	ROCKLIN	CA	95765	017-270-064-000				1
MULLANY PROPERTIES & INVESTMENTS LLC		233 TECHNOLOGY WAY A-3	ROCKLIN	CA	95765	017-270-061-000				1
PROFESSIONAL PLANNING GROUP INC	ATTN MEGAN	233 TECHNOLOGY WAY STE 5	ROCKLIN	CA	95765	017-270-064-000				1
POLYPROS INC		233 TECHNOLOGY WAY UNIT A 7	ROCKLIN	CA	957651208	017-270-065-000				1
SITEK PROCESS SOLUTIONS INC		233 TECHNOLOGY WY #A3	ROCKLIN	CA	95765	017-270-061-000				1
E Z CLONE ENTERPRISES INC		233 TECHNOLOGY WY STE 4B	ROCKLIN	CA	95765	017-270-061-000				1
GRANITE BUSINESS SOLUTIONS INC	DBA EVOLVE TECHNOLOGY GRO	233 TECHNOLOGY WY STE A4	ROCKLIN	CA	95765	017-270-064-000				1
UTZ RANDY W & SHARON A		2336 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-051-000				1
GARCIA JOSE & CASILLAS LILLIANA		2337 HARTLAND CIR	ROSEVILLE	CA	95747	490-090-052-000				1
BOVEE RON & DEANNA S		2351 EVERLEY CIR	ROSEVILLE	CA	95747	490-040-009-000				1
PALMER MICHAEL D & MARILYN C		2359 EVERLEY CIR	ROSEVILLE	CA	95747	490-040-008-000				1
2215 STANFORD RANCH INVESTORS LLC	C/O CRISTINA AGRAHUGHES	23622 CALABASAS RD #200	CALABASAS	CA	91302	017-270-050-000				1
VELEBIT STEVE & MICHELLE		2367 EVERLEY CIR	ROSEVILLE	CA	95747	490-040-007-000				1
ALAMEDA ANTONE E ET AL		2400 BUENA VISTA RD	HOLLISTER	CA	95023	017-130-014-000				1

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STATION CASINOS INC	C/O NIELSON SCOTT M	2411 W SAHARA AVE	LAS VEGAS	NV	89102	017-061-084-000				1
AUBURN DEVELOPMENT LLC	ATTN HEINHOLD MATTHEW L	2411 WEST SAHARA AVE	LAS VEGAS	NV	89102	017-061-072-000				1
KB HOME NORTH BAY INC		2420 DEL PASO RD #200	SACRAMENTO	CA	95834	488-110-031-000				1
PLACER 2780		2428 PROFESSIONAL DR	ROSEVILLE	CA	95661	017-130-016-000				1
PREVITE JACK TRUSTEE ET AL		250 PALM VALLEY BLVD	SAN JOSE	CA	95123	017-150-026-510				1
CORDOVA THOMAS M		250 XIMENO AVE	LONG BEACH	CA	92803	023-072-017-000				1
WILDON INDUSTRIES INC	ATTN: BENNETT EARL M	255 EAST 5TH ST STE 200	CINCINNATI	OH	45202-4724	017-061-005-000				1
TERPSTRA MICHAEL A & ALLYN		2601 MARIELLA CR	ROCKLIN	CA	95765	017-270-056-000				1
PARKER DORIAN DEON		2652 ROXBY WAY	ROSEVILLE	CA	95747	490-060-058-000				1
TORREY CLAUDE LEWIS III & MICHELLE CERLE		2660 ROXBY WAY	ROSEVILLE	CA	95747	490-060-057-000				1
LENNAR HOMES OF CALIFORNIA INC		2661 ROXBY WAY	ROSEVILLE	CA	95747	490-060-044-000				1
DEVEAU DON E TRUSTEE		2669 COUNTRY PLACE DR	ROSEVILLE	CA	95747	023-150-014-000				1
GORDET CHARLES K & LINDA S TTEE		2673 PIPESTONE LP	ROSEVILLE	CA	95747	488-010-034-000				1
GORMAN ROBERT J II		2681 PIPESTONE LP	ROSEVILLE	CA	95747	488-010-035-000				1
FLANAGAN PROPERTIES LLC		269 TECHNOLOGY WAY STE B-5	ROCKLIN	CA	95765	017-270-054-000				1
FLANAGAN PRODUCTIONS INC	DBA ATV VIDEO CENTER ROCK	269 TECHNOLOGY WAY #5	ROCKLIN	CA	95765	017-270-054-000				1
SD TECHNOLOGY LLC		269 TECHNOLOGY WAY B8	ROCKLIN	CA	95765	017-270-058-000				1
DOCUWARE INC		269 TECHNOLOGY WAY B8	ROCKLIN	CA	95765	017-270-050-000				1
L C COMMUNICATIONS INC		269 TECHNOLOGY WY #B6	ROCKLIN	CA	95765	017-270-050-000				1
REMINGTON CRAIGE JAMES & CHARLENE		2696 BICKLEIGH LP	ROSEVILLE	CA	95747	490-070-026-000				1

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COOK LOREN J & SUE J HALLAHAN		2697 PIPESTONE LP	ROSEVILLE	CA	95747	488-010-037-000				1
PLANT BROS CORP		27 REED BLVD	MILL VALLEY	CA	94941	017-200-029-000				1
BARTELS DONALD L& LYNDA J		2711 SAN PABLO AVE	PINOLE	CA	94564	023-081-007-000				1
FRANCO MIGUEL & FANNY		2720 BICKLEIGH LP	ROSEVILLE	CA	95747	490-070-023-000				1
SIINO JAMES A & PATRICIA H		2726 WOODGATE WAY	ROSEVILLE	CA	95747	490-060-048-000				1
NIKLAS MATTHEW & CASSANDRA		2734 WOODGATE WAY	ROSEVILLE	CA	95747	490-060-047-000				1
QUATTROCCHI PAUL & NANCY A		2741 WARM SPRINGS RD	GLEN ELLEN	CA	95442	017-200-031-000				1
ANCHOR FINANCIAL MORTGAGE CO INC		290 TECHNOLOGY WAY #100	ROCKLIN	CA	95765	017-270-046-000				1
PENNEY FREDERICK W & KATHLEEN TRUSTEES		2998 DOUGLAS BLVD STE 310	ROSEVILLE	CA	95661	017-200-004-510				1
PENNEY RACING SUPPLY LLC	GLENN BAER ACCOUNTING OFF	2998 DOUGLAS BLVD STE 315	ROSEVILLE	CA	95661	017-200-004-510				1
BAYLON EMMA L & GERARD S		300 MT BADGER CT	ROSEVILLE	CA	95747	482-060-012-000				1
ORR TERRY & LORI		300 SANDSTONE CT	ROSEVILLE	CA	95747	482-050-029-000				1
COCHRAN DIANE L		3009 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-061-510				1
MISKELL THOMAS A & TERRI L		3010 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-028-510				1
COX DALE V & CAROL L		3015 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-062-510				1
AHRENS DANIELLE & ERIC F		3027 AMORUSO WY	ROSEVILLE	CA	95747	017-030-064-510				1
MASLOV PAUL & ANNA		3030 AMORUSO WAY	ROSEVILLE	CA	95678	017-030-030-510				1
J D PASQUETTI INC		3032 THUNDER VALLEY CT #B	LINCOLN	CA	95648	017-061-041-000				1
KLOTZ TIM & AMANDA		3040 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-091-000				1
CURTIS IRMA J		3041 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-004-510				1
BENZEL DANIEL & ARDATH G		3050 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-031-510				1

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WILLIAMS JAMES BLAKE & GLENDA RAY		3051 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-040-510				1
NATHAN TERRY F & KAREN S		3055 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-041-510				1
KENNEDY WILLIAM D & PATRICIA S TTEES		3061 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-043-510				1
HILBERT GERALD T & DIANE M		3070 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-034-510				1
ALTHOUSE RICHARD A & CAROLDEE M		3071 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-042-510				1
CABRAL EDUARDO S & DORIE V TRUSTEES ,ET		30711 GRANGER AVE	UNION CITY	CA	94587	023-200-060-000				1
PALMA ROBERTO E ET AL		308 MT BADGER CT	ROSEVILLE	CA	95747	482-060-013-000				1
SCHMITZ MATTHEW T & KERRY L		308 SANDSTONE CT	ROSEVILLE	CA	95747	482-050-030-000				1
BONVILLE CURTIS A		3083 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-010-510				1
TAFARRODI DAR & GINA		309 SANDSTONE CT	ROSEVILLE	CA	95747	482-050-033-000				1
HILBERT BRUCE ALLAN & CYNTHIA LEIGH		3090 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-033-510				1
CANNAROZZI										
ANTHONY L & JOANNE		3100 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-074-510				1
RHEIN JOHN D & TRACI E TRUSTEES		3105 MAMMOTH WAY	ROSEVILLE	CA	95747	482-060-011-000				1
ROSEVILLE CITY OF		311 VERNON ST	ROSEVILLE	CA	95678	017-100-027-510				1
WHITE JAMES LYLE & AMY JO		3110 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-075-510				1
NOVOA LINDA ET AL		3120 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-035-510				1
ZUVERINK DAVID H & CHRISTIE L		3128 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-019-000				1
HILL CHARLES E & BEVERLY J FMLY REV										

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TRUS		3130 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-015-510				1
BREWER ROAD PARTNERS	C/O ADAMS GEORGE R	3131 AMERICAN RIVER DR	SACRAMENTO	CA	95864	017-140-001-000				1
SCHNEIDER GREGGORY & KORI		3136 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-020-000				1
AHWAL SAMER & TAMMY		3137 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-016-000				1
FORD HOMER B		3140 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-086-000				1
HOLGUIN RAUL		3141 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-055-510				1
DEOL AJIT K & BALJINDER S		3144 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-021-000				1
FLORES GUILLERMO		3145 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-015-000				1
PRICE HUGH L & BARBARA A		3151 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-056-510				1
FALAPPINO JOHN M & KATHRYN L TRUSTEES		3153 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-014-000				1
MIRSEPASSI NADDER & FIROUZEH		316 MOUNT BADGER CT	ROSEVILLE	CA	957477149	482-060-014-000				1
SANTOS ERROL F & CELESTE S TRUSTEES ET A		316 SANDSTONE CT	ROSEVILLE	CA	95747	482-050-031-000				1
ROSEVILLE CITY OF		316 VERNON ST #106	ROSEVILLE	CA	95678	017-100-030-510				1
BROBERG LARRY L & CYNTHIA J		3161 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-047-510				1
SOLANO CONSTANCE		3161 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-013-000				1
LAVAUD DARREN & AMBER		3168 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-037-510				1
CARMODY ROBERT P & SANDRA		3169 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-012-000				1
RANDHAWA RAJBIR		317 SANDSTONE CT	ROSEVILLE	CA	95747	482-050-032-000				1
BACE LORI L		3171 AMORUSO WY	ROSEVILLE	CA	95747	017-030-019-510				1
PRONOVOST REJEAN I & BONNIE J		3178 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-039-510				1

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BAILEY STUART L & LAURA A		3185 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-010-000				1
MARCUM ELIZABETH A & ROBERT		3193 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-023-510				1
SCHAYLTZ DONALD K & KAREN J		3193 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-009-000				1
REESE WILLIAM ET AL		3199 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-022-510				1
WEST BRIAN D		3200 AMORUSO WAY	ROSEVILLE	CA	95678	017-030-073-510				1
WRIGHT SHELLEY LEIGH		3201 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-008-000				1
HOLMES DAVID L & MARY ANN		3201 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-025-000				1
BARNES GREGORY H & ELAINE S TRUSTEES		3208 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-002-000				1
KING RANDALL M & CATHY A		3209 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-007-000				1
GARCIA AGUSTIN P & ANITA		3212 MT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-023-000				1
REYNOLDS CHRISTINE J		3213 MT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-048-000				1
BOYD ALVIN L & RITA A TRUSTEES		3216 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-003-000				1
FORSYTH CRAIG & ANGELA M		3217 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-006-000				1
DOCKSWELL RONALD G		3217 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-024-000				1
RAMOS BEN J & KAREN A		3217 HOPSCOTCH WAY	ROSEVILLE	CA	95747	482-040-028-000				1
GRAY DENNIS E & SHERRY		3220 AMORUSO WY	ROSEVILLE	CA	95747	017-030-072-510				1
LARSON DAVID		3220 MT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-024-000				1
WOMELDORF TIMOTHY & TAUNIE		3223 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-004-000				1
MYLES MARK A & KAREN N		3224 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-007-000				1
BATRA SUMIT & SONIA		3225 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-005-000				1
ANWAR MOHAMMAD & NASRIN		3225 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-023-000				1
LIANG DALE & NORA		3225 HOPSCOTCH WAY	ROSEVILLE	CA	95747	482-040-027-000				1

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BUSBY BRUCE & MARGARET		3227 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-049-510				1
GREEN DEBORAH M		3229 MOUNT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-043-000				1
KREBS JOHN & ANN		3232 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-078-000				1
JOHN KREBS RACING INC	DBA JOHN KREBS DIAMOND RI	3232 AMORUSO WY	ROSEVILLE	CA	95678	017-030-078-000				1
WATTIER STEVEN J		3232 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-008-000				1
SUMMAN JASVER SINGH & SURINDERPAL KAUR T		3233 HOPSCOTCH WAY	ROSEVILLE	CA	95747	482-040-026-000				1
LEONG STANLEY ET AL		3236 MT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-025-000				1
MOBINI NADER N & BOZORGZAD FAHIMEH F		3237 MOUNT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-042-000				1
DIAMOND H LIMITED PARTNERSHIP	DBA DIAMOND H RANCH	32385 PALOMARES RD	CASTRO VALLEY	CA	94552	017-090-021-510				1
VALLE ROMMEL MENDOZA & JENNIFER MAE REV		3240 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-034-000				1
TOOLEY PHILLIP W & REBECCA H		3240 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-009-000				1
HOUSE JOHN F & KAREN D TRUSTEES		3241 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-003-000				1
CONFER NED & SUSAN		3241 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-022-000				1
EMERSON JOHN C & SHANTEL		3244 MOUNT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-026-000				1
WHIDDON DAVID & LAURA		3245 MT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-041-000				1
KARLSON ROGER WAYNE & EDITH ELAINE TRUST		3247 AMORUSO WAY	ROSEVILLE	CA	95747	017-030-026-510				1
MISTRETTA		3248 GOLDSTONE								

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LAWRENCE A & KELI J		DR	ROSEVILLE	CA	95747	482-040-010-000				1
LUM WILLIAM & DEBRA		3249 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-002-000				1
HANGLEW KATHERINE PHUNG ET AL		3249 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-021-000				1
BORROMEO CHARLES & LUCILA ET AL		3251 HIGHLAND DR	SAN BRUNO	CA	94066	017-140-009-000				1
METZGER STEVEN R		3252 MOUNT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-027-000				1
WELD MITCHELL C		3253 MOUNT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-040-000				1
LYON ALFRED A & SHAWNA C		3256 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-035-000				1
HOPLA FAMILY TRUST		3256 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-011-000				1
EDGAR RICK & JILL		3257 BIG BEAR DR	ROSEVILLE	CA	95747	482-050-001-000				1
DUNWOODY CHRISTOPHER T & DENISE L		3257 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-020-000				1
MELNICHUK ANATOLY & SVETIANA		3260 AMORUSO WY	ROSEVILLE	CA	95747	017-040-002-510				1
ZOLLER JEANNE F TRUSTEE		3260 MOUNT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-028-000				1
BOYD BONNIE SUE		3261 AMORUSO WAY	ROSEVILLE	CA	95747	017-040-004-510				1
CONNORS MILA BONETE & GERALD BLAKE ET AL		3261 MOUNT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-039-000				1
WYGANT KEVIN T		3264 BIG BEAR DR	ROSEVILLE	CA	95747	482-040-016-000				1
JOHNSON JERRY & CHRISTINE		3264 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-012-000				1
EGGIMANN STEVE J & CINDY L		3268 MT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-029-000				1
VALENCIA ARTHUR		3269 MOUNT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-038-000				1
COTTER STUART										

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TITLOW & LOIS SHEREE TRUST		3270 AMORUSO WAY	ROSEVILLE	CA	95747	017-040-035-510				1
MORGAN FERN T TRUSTEE ET AL		3270 S BREWER RD	PLEASANT GROVE	CA	95668	023-091-010-000				1
JOHNSON DWIGHT ALLEN & RACHEL TRUSTEES		3271 AMORUSO WAY	ROSEVILLE	CA	95678	017-040-005-510				1
JOHNSON DWIGHT ALLEN & RACHEL TRUSTEES		3271 AMORUSO WY	ROSEVILLE	CA	95747	017-240-001-510				1
BALLARD GARY C & GAIL J TRUSTEES		3272 BIG BEAR DR	ROSEVILLE	CA	95747	482-040-017-000				1
THOMAS BRUCE & STACY		3272 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-013-000				1
PULVER ANDREW J & DENISE H		3273 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-019-000				1
JOHNSON RODNEY & RENEE		3276 MOUNT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-030-000				1
OERTLY GREGORY & DOROTHY		3277 MOUNT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-037-000				1
ASTLE BART L & DEBRA A		3280 AMORUSO WY	ROSEVILLE	CA	95678	017-040-054-510				1
GRIMES AARON & SHELLY		3280 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-014-000				1
KELLOGG BRIAN K & DENISE L		3281 BIG BEAR DR	ROSEVILLE	CA	95747	482-040-030-000				1
SALINAS MARTIN		3281 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-018-000				1
KAYS TIMOTHY R ET AL		3284 AMORUSO WY	ROSEVILLE	CA	956789786	017-040-053-510				1
BAILEY TERRY ET AL		3285 MT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-036-000				1
HUTCHINGS ROSS & CAROL		3288 GOLDSTONE DR	ROSEVILLE	CA	95747	482-040-015-000				1
BAUMGARTNER MARK A & COLLEEN L		3290 AMORUSO WY	ROSEVILLE	CA	95747	017-040-037-510				1
SPEARMAN NORMA		3293 AMORUSO WAY	ROSEVILLE	CA	95747	017-040-057-510				1
FOWLER RICHARD & KRIS		3293 MT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-035-000				1

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FONG LARISA & RUSSELL		3301 MOUNT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-034-000				1
KAMIN DARREN ET AL		3309 MT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-033-000				1
GONZALES FERMIN JR & MARY V W		3310 AMORUSO WAY	ROSEVILLE	CA	95747	017-040-039-510				1
OCHIKUBO LANE J & JANET TTEES		3316 MT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-009-000				1
KIM NAMYOUNG		3317 MOUNT TAMALPAIS DR	ROSEVILLE	CA	95747	482-060-032-000				1
PETERSON TROY & JESSICA		3323 AMORUSO WAY	ROSEVILLE	CA	95747	017-040-060-510				1
WILLIAM JESSUP UNIVERSITY	C/O GENE DE YOUNG WILLIAM	333 SUNSET BLVD	ROCKLIN	CA	957653707	017-270-068-000				1
SHELTON JEFFREY D & PENNY R		3330 AMORUSO WAY	ROSEVILLE	CA	95747	017-040-055-510				1
DEBIASE LINDA		3331 AMORUSO WAY	ROSEVILLE	CA	95747	017-040-010-510				1
NEWTH SHARON L & FRANK T		3350 AMORUSO WAY	ROSEVILLE	CA	95747	017-240-002-510				1
VOLEN PROPERTIES LLC		3350 WATT AVE #E	SACRAMENTO	CA	95821-3618	017-283-004-000				1
ROYE DAVID M TRUSTEE		3369 AMORUSO WAY	ROSEVILLE	CA	95747	017-240-003-510				1
CARLTON CLAYTON & PATRICE		3370 AMORUSO WY	ROSEVILLE	CA	95747	017-240-004-510				1
SHAW LARRY R ET AL		3380 AMORUSO WAY	ROSEVILLE	CA	95747	017-240-008-510				1
COMTEK COMPUTER SYSTEMS INC		3387 INDUSTRIAL AVE	ROCKLIN	CA	95765	017-061-034-000				1
FRASCH HARLEY L & KATHLEEN L TRS		3393 AMORUSO WAY	ROSEVILLE	CA	95747	017-240-009-510				1
KUHN JAMES A &	KUHN DIANNA L	3412 AMORUSO WAY	ROSEVILLE	CA	95747	017-240-013-510				1
CHI PARTNERSHIP &	C/O CLEMETSON DON	3420 CLARIDGE DR	DANVILLE	CA	94526	017-010-043-000				1
SHAFER JOHN & KIM		3424 AMORUSO WAY	ROSEVILLE	CA	95747	017-240-015-510				1
VALDEZ LUPE G & HELGA L TRUSTEES		3425 AMORUSO WAY	ROSEVILLE	CA	95747	017-240-011-510				1
HENSON FRED & JESSIE		3425 BASELINE RD	ROSEVILLE	CA	95747	023-271-001-000				1
VAUGHN SHANE M		3431 AMORUSO WY	ROSEVILLE	CA	95678	017-240-010-510				1
MARSH MARILYN L		3435 AMORUSO WY	ROSEVILLE	CA	95747	017-240-012-510				1

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HARTWELL MARILYN		3436 AMORUSO WY	ROSEVILLE	CA	95747	017-240-014-510				1
PENNINGTON DORIS M TTEE		3450 AMORUSO WAY	ROSEVILLE	CA	95747	017-240-019-510				1
ECKROAT ROBERT W & LAURAL E		3455 AMORUSO WAY	ROSEVILLE	CA	95747	017-240-034-000				1
AMORUSO PETER & JENNIFER M TRUSTEES		3460 AMORUSO WAY	ROSEVILLE	CA	95747	017-020-017-510				1
WASTE CONNECTIONS INC #4015		35 IRON POINT CIRCLE #200	FOLSOM	CA	95630	017-061-074-000				1
SHERGILL HARDEV DAVY S		3524 ROCKY RIDGE WAY	EL DORADO HILLS	CA	95762	017-270-032-000				1
PIERCE DENNIS S		3610 CINCINNATI AVE	ROCKLIN	CA	95765	017-200-035-000				1
J R PIERCE PLUMBING CO INC		3610 CINCINNATI AVE	ROCKLIN	CA	95765	017-200-035-000				1
VO DAVID & KIMBERLY		3615 ORANGE GROVE AVE	NORTH HIGHLANDS	CA	95660	023-071-002-000				1
ENERGY ABSORPTION SYSTEMS INC		3617 CINCINNATI AVE	ROCKLIN	CA	95765-1202	017-200-022-000				1
NORTHERN VIDEO SYSTEMS INC		3625 CINCINNATI AVE	ROCKLIN	CA	95765	017-200-012-510				1
FEDERAL EXPRESS CORPORATION	TAX DEPT	3630 HACKS CROSS RD	MEMPHIS	TN	38125	017-061-063-000				1
JENSON CONSTRUCTION INC		3640 CINCINNATI AVE	ROCKLIN	CA	95765	017-200-003-510				1
PECK HEATING & AIR COND INC		3650 CINCINNATI AVE	ROCKLIN	CA	95765	017-200-002-510				1
CENTEX HOMES		3700 DOUGLAS BLVD STE 150	ROSEVILLE	CA	95678	490-040-057-000				1
PLACER RANCH INC		3715 ATHERTON RD STE 1000	ROCKLIN	CA	95765-3722	017-061-078-000				1
ORCO CONSTRUCTION SUPPLY		3725 CINCINNATI AVE #200	ROCKLIN	CA	95765	017-200-052-000				1
ODBERT JOHN P III		3732 T ST	SACRAMENTO	CA	95816	023-070-009-510				1
WEST COAST CABINETS INC		3740 CINCINNATI AVE	ROCKLIN	CA	95765	017-200-038-000				1

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BRIGGS RONALD C TRUSTEE &	BRIGGS LINDA G TRUSTEE	3740 CINCINNATI AVE	ROCKLIN	CA	95765	017-200-038-000				1
GALIL MOTION CONTROL INC	ATTN JOHN THOMPSON	3750 ATHERTON ROAD	ROCKLIN	CA	95677	017-281-002-000				1
SEEVERS P RICHARD ET AL	DBA SEEVERS JORDAN ZIEGEN	3825 ATHERTON RD #500	ROCKLIN	CA	95765-3704	017-282-001-000				1
ATHERTON ROAD PARTNERS LLC		3825 ATHERTON RD STE 500	ROCKLIN	CA	95765	017-282-001-000				1
QUANTUM EVENT SERVICES INC		3825 CINCINNATI AVE #D	ROCKLIN	CA	95765-1302	017-070-022-000				1
HYDRAULIC TECHNOLOGY INC		3833 CINCINNATI AVE	ROCKLIN	CA	95765	017-070-023-000				1
ADVANCED PHOTONICS SOLUTIONS LLC		3845 ATHERTON RD #1	ROCKLIN	CA	95765	017-282-005-000				1
CLIMATE SELECT INC	DBA ONE HOUR HEATING & AI	3845 ATHERTON RD #4				017-282-005-000				1
ANTENNA WIRELESS INC		3845 ATHERTON RD #7	ROCKLIN	CA	95765	017-282-005-000				1
EALING CATALOG INC		3845 ATHERTON RD #8	ROCKLIN	CA	95765	017-282-005-000				1
FINANCIAL PACIFIC INSURANCE COMPANY		3850 ATHERTON RD	ROCKLIN	CA	95677	017-281-006-000				1
VOURNAS ANDREW	DBA VOURNAS COFFEE TRADIN	3850 CINCINNATI AVE #B	ROCKLIN	CA	95765	017-070-023-000				1
THE KEARNS COMPANY BLDRS & DEVPRS INC		3850 CINCINNATI AVE STE A				017-070-023-000				1
WILLDAY PROPERTIES INC		3850 CINCINNATI AVE STE A	ROCKLIN	CA	95765	017-070-047-000				1
WILDLANDS INC		3855 ATHERTON RD	ROCKLIN	CA	95765	017-282-006-000				1
MORGAN STEVEN KENT & STACY ANN TTEES		3855 ATHERTON RD	ROCKLIN	CA	95765-3715	017-282-006-000				1
JBBH PROPERTIES LLC		3856 A CINCINNATI AVE	ROCKLIN	CA	95765	017-070-045-000				1
D AMBRA EQUIPMENT & SUPPLY CO INC		3856-A CINCINNATI AVE	ROCKLIN	CA	95765	017-070-048-000				1

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NEXT LEVEL WAREHOUSE SOLUTIONS INC		3862 CINCINNATI AVE	ROCKLIN	CA	95765	017-070-046-000				1
SIERRA VIEW LANDSCAPE INC	DBA HABITAT RESTORATION C	3868 CINCINNATI AVE	ROCKLIN	CA	95765	017-070-040-000				1
LOGICAL INVESTMENTS LLC	C/O ECO LOGIC ENGINEERING	3875 ATHERTON RD STE 1	ROCKLIN	CA	957653716	017-282-007-000				1
ECO LOGIC ENGINEERING		3875 ATHERTON RD STE 1	ROCKLIN	CA	95765	017-282-007-000				1
P C EXPLORATION INC		3883 CINCINNATI AVE	ROCKLIN	CA	95765	017-070-053-000				1
TAKAGI LINDA J ET AL		390 VALLEY VIEW DR	LOS ALTOS	CA	94024	017-282-004-000				1
EVANS RONALD L JR		3912 KENWOOD WAY	ROSEVILLE	CA	95747	023-232-008-000				1
GARFIELD LESLIE J		40 EAST 94TH ST	NEW YORK	NY	10128	023-200-029-000				1
DIAMOND WOODS PARK RESERVE LLC		400 EAST VAN BUREN #650	PHOENIX	AZ	85004	482-130-008-000				1
ZAN DENNIS A & CATHLEEN G TRUSTEES		400 PEARLSTONE CT	ROSEVILLE	CA	95747	482-050-022-000				1
JELD-WEN INC	DBA DOORCRAFT OF CALIFORN	401 HARBOR ISLES BLVD	KLAMATH FALLS	OR	97601-1017	017-070-051-000				1
NUNEZ LUCIANO & EDELMIRA		401 MT DARWIN CT	ROSEVILLE	CA	95747	482-060-047-000				1
ZUNIGA RICHARD E & CATHERINE D		401 PEARLSTONE CT	ROSEVILLE	CA	95747	482-050-028-000				1
KLINGBEIL DOROTHY J		402 DELOACH DR	HINESVILLE	GA	31313-5743	017-130-065-520				1
TILESTON BRIAN L & ANGELA K		408 MT DARWIN CT	ROSEVILLE	CA	95747	482-060-044-000				1
BAUMGARTNER JIM A & CARY R		408 PEARLSTONE CT	ROSEVILLE	CA	95747	482-050-023-000				1
GONZALES FRANK F & JODIE FENSLER		409 MT DARWIN	ROSEVILLE	CA	95747	482-060-046-000				1
MOSS KEITH		409 PEARLSTONE CT	ROSEVILLE	CA	95747	482-050-027-000				1
D M PLACER 400 LLC ET AL		4100 NEWPORT PLACE DR STE 800	NEWPORT BEACH	CA	92660	017-150-019-510				1
HOOD KIMBERLY J & SHELDON D		416 PEARLSTONE CT	ROSEVILLE	CA	95747	482-050-024-000				1
CHRISTY THOMAS & MEGAN		417 MT DARWIN CT	ROSEVILLE	CA	95747	482-060-045-000				1

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FREEMAN MATT		417 PEARLSTONE CT	ROSEVILLE	CA	95747	482-050-026-000				1
NICHOLS INDUSTRIAL PARK LLC ET AL		4175 CINCINNATI AVE	ROCKLIN	CA	95765	017-061-090-000				1
PL ROSEVILLE LLC		4196 DOUGLAS BLVD STE 100	GRANITE BAY	CA	95746-5904	490-220-039-000				1
PULTE HOME CORPORATION		4196 DOUGLAS BLVD STE 100	GRANITE BAY	CA	95746-5904	490-150-034-000				1
FITZPATRICK J COLLECTION INC		4208 DOUGLAS BLVD STE 200	GRANITE BAY	CA	95746-5902	017-282-003-000				1
ALLEN TROY D & LISELOTTE		425 SIENNA RIVER CT	ROSEVILLE	CA	95747	484-160-056-000				1
SWITZER ROBERT W ET AL		4287 VENTAVO DR	MOORPARK	CA	93021	017-210-001-510				1
CALLEJO WILLIAM F		4314 N CENTRAL EXPY	DALLAS	TX	75206	017-130-051-510				1
MCCLURE D THOMAS & KRISTEEN M TRUSTEES		4320 COLDSTREAM RD	AUBURN	CA	95602	017-270-066-000				1
DS & RR RANCH		4320 S BREWER RD	PLEASANT GROVE	CA	95668	017-090-040-000				1
PATSKIN ROBERT M & MAUREEN		43235 LONDON DR	PARKER	CO	80134	017-030-050-510				1
CALIFORNIA MOTOCROSS LIMITED LIABILITY C	ATTN THOMAS NELSON	4360 STIRLING ST	GRANITE BAY	CA	95746	017-061-044-000				1
TIRE DISTRIBUTION SYSTEMS INC	POINT PLACE SUITE 310	441 DONELSON PIKE	NASHVILLE	TN	37214	017-200-037-000				1
J & V COOK PROPERTIES LLC		4501 MOUNTAINGATE DR	ROCKLIN	CA	95765	017-070-034-000				1
WEST SUNSET BUSINESS PARK ASSOCIATION		4531 HARLIN DR	SACRAMENTO	CA	95826	017-070-048-000				1
JAYNES ALLEN R TRUSTEE ,ET AL	C/O SCILACCI KIRK S TRUST	45824 HERITAGE RANCH RD	BAKER CITY	OR	97814	017-010-050-000				1
HENNING GOLDEN A TRUSTEE ET AL		46 WEST WISE RD	LINCOLN	CA	95648	023-072-005-000				1
MILLER DAVID R ET AL		4601 PARKRIDGE RD	SACRAMENTO	CA	95822	017-130-032-000				1

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DUNBAR LARA & HARVEY ET AL		4660 NATOMAS BLVD #120-52	SACRAMENTO	CA	95835	023-150-020-000				1
SIGNATURE AT FIDDYMENT RANCH	C/O SIGNATURE PROPERTIES	4670 WILLOW RD #200	PLEASANTON	CA	94588	488-090-007-000				1
WEST ROSEVILLE DEVELOPMENT COMPANY INC	C/O SIGNATURE PROPERTIES	4670 WILLOW RD #200	PLEASANTON	CA	94588	488-020-056-000				1
MATTOS ENTERPRISES		4710 S BREWER RD	PLEASANT GROVE	CA	95668	017-090-038-000				1
MATTOS DONALD J & WENDY		4710 S BREWER RD	PLEASANT GROVE	CA	95668	017-090-038-000				1
TROUCHON DAVID C TRUSTEE		4899 EL CID DR	ROCKLIN	CA	95677	017-070-031-000				1
HARRIS WILLIAM C SR & Y P &	HARRIS WILLIAM C JR	4900 PHILLIP RD	ROSEVILLE	CA	95747	017-100-032-000				1
BAGLEY & ASSOCIATES		492 MODELAIRE DR	LA GRANDE	OR	97850	017-150-030-510				1
ENCON ENERGY CONSERVATION CO INC		4940 EL CAMINO REAL	LOS ALTOS	CA	94024	017-282-005-000				1
SOMERS JOHN S & MINDY A		500 GIUSEPPE CT	ROSEVILLE	CA	95661	017-070-033-000				1
WALLACE KUHL & ASSOCIATES	C/O PROPERTY TAX DEPT	500 MENLO DR	ROCKLIN	CA	95765	017-282-010-000				1
NORTON JAMES H & MANUELA B TRUSTEES		5000 MONTEVERDE LANE	LINCOLN	CA	95648	482-050-011-000				1
AUBURN &	C/O BASELINE &	5046 SUNRISE BLVD								
VANMAREN LLC ET AL	WATT LLC	#1	FAIR OAKS	CA	95628-4945	023-200-037-000				1
CHAN FRANK T TRUSTEE ET AL		5100 ELMER WY	SACRAMENTO	CA	95822	017-150-034-510				1
SUNSET GL	C/O MARK III ENGINEERING	5101 FLORIN PERKINS RD	SACRAMENTO	CA	95826	017-281-020-000				1
PHILLIPS ROAD 160 INVESTORS	MANIKAS JOHN	511 35TH ST	SACRAMENTO	CA	95816	017-100-042-000				1
RUSSELL STEVEN E & LYNDA J &	BENBOW STEVEN D	5120 PHILLIP RD	ROSEVILLE	CA	95747	017-100-030-510				1
CARLTON GEORGE H &	CARLTON SHELLEY A	513 SADDLEB ACK DR	MARYSVILLE	CA	95901	017-200-037-000				1

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IL CENTRO LLC		5150 FAIR OAKS BLVD #101				023-200-067-000				1
FEKETE GEORGE O TRUSTEE ET AL		5237 SPRINGRIDGE WAY	FAIRFIELD	CA	945344009	017-200-026-000				1
YAFFE GERALD TRUSTEE ET AL		524 SUNSET WAY	REDWOOD CITY	CA	94062	017-270-055-000				1
S B M CLEANING COMPANY LLC		5241 ARNOLD AVE	MCCLELLAN	CA	95662	017-061-034-000				1
THOMAS JAMES K & ALISON S		5280 OLD MOSS LN	GRANITE BAY	CA	95746	017-070-030-000				1
PHILLIP ROAD LAND LLC ET AL	C/O FRIEDMAN K	529 BROOKLINE AVE	MILL VALLEY	CA	94941	017-100-041-000				1
AGILENT TECHNOLOGIES INC	US PROPERTY TAX ADMINISTR	5301 STEVENS CREEK BLVD				017-200-016-510				1
FRAYJI DESIGN GROUP INC		535 MENLO DR STE A	ROCKLIN	CA	95765	017-283-003-000				1
WAGNER MALCOLM E & DORIS TRUSTEES		54 CHICORY RD	CHICO	CA	95928	017-100-037-000				1
SIGL MARK A &	SIGL TAMMY D	5412 APLAND PL	SACRAMENTO	CA	95842-5949	017-040-063-000				1
MOURIER FAMILY ENTERPRISES LP ET AL	C/O MOURIER MS LOIS	5460 STRAIGHT RD	ROSEVILLE	CA	95747	017-010-017-000				1
ARCHIE OBRIENS BOARDING KENNEL		5480 PHILLIPS RD	ROSEVILLE	CA	95747	017-100-028-510				1
NOEL PROPERTIES LLC	C/O JAMES W NOEL	55 KEMLINE CT	ALAMO	CA	94507	017-282-005-000				1
MEKEEL THOMAS C & SHELLY L		5510 TEABERRY PL	ROSEVILLE	CA	95678	017-030-080-000				1
SANTOS KENNETH & PATRICIA		5520 TEABERRY PL	ROSEVILLE	CA	95747	017-030-081-000				1
POLING CHRISTOPHER E & DEBORAH C		5530 SUNSET BLVD WEST	ROSEVILLE	CA	95747	017-240-023-510				1
KUKURUDA JOHN E & DIANE M		5533 NIGHT OWL LN	ROSEVILLE	CA	95747	017-030-066-510				1
CORNACCHIOLLI FRED P JR TRUSTEE		5544 ENGLE RD	CARMICHAEL	CA	95608	017-130-055-510				1
CUPLER NORMAN M & SHIRLEY L		5544 NIGHT OWL LN	ROSEVILLE	CA	95747	017-030-085-000				1

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LURIE SAN FRANCISCO INC		555 CALIFORNIA ST STE 5100	SAN FRANCISCO	CA	94104	017-300-086-000				1
SUNSET 65 BUSINESS PARK LLC A DELAWARE L	C/O MCDONOUGH HOLLAND AND	555 CAPITOL MALL 9TH FLOOR	SACRAMENTO	CA	95814	017-300-096-000				1
BEDROCK PAVE SYSTEMS INC		555 MENLO DR #B	ROCKLIN	CA	95765	017-283-003-000				1
FINISHING TOUCHES CONSTRUCTION INC		555 MENLO DR STE B	ROCKLIN	CA	95765	017-283-003-000				1
CARPENTER MICHAEL GREGORY & ANNA MARIA		5550 SUNSET BLVD WEST	ROSEVILLE	CA	95747	017-240-024-510				1
MITCHELL TIMOTHY ROLLIN &	MITCHELL DENISE LYNN	5555 LARAMIE LN	ROSEVILLE	CA	95747	017-040-048-510				1
HOPPING GERROLD JR E & SANDRA J		5560 TEABERRY PL	ROSEVILLE	CA	95678	017-030-083-000				1
FEASTER COLLEEN		5570 SUNSET BLVD WEST	ROSEVILLE	CA	95747	017-240-025-510				1
SUTHERLAND JAMES VICTOR		5600 SUNSET BLVD W	ROSEVILLE	CA	95747	017-240-026-510				1
PLYMPTON JAMES N ET AL		5605 LARAMIE LN	ROSEVILLE	CA	95747	017-040-047-510				1
HAMBRIDGE ROBERT M & MILDRED F		5611 NIGHT OWL LN	ROSEVILLE	CA	95747	017-030-065-510				1
ROMO THOMAS F & SHERILYN R		5620 NIGHT OWL LN	ROSEVILLE	CA	95747	017-030-084-000				1
KASPRZYK WALTER E &	KASPRZYK JULIA M R	5650 SUNSET WEST	ROSEVILLE	CA	95678	017-240-027-510				1
NEVES JOEL A & VICKIE L TRUSTEES		5672 SUNSET BLVD WEST	ROSEVILLE	CA	95678	017-240-022-510				1
SIGL WALTER J &	SIGL ROMAINE J	5720 ALMOND RANCH RD	ROSEVILLE	CA	95747-9777	017-040-064-000				1
DUDGEON JAMES R & KATHLEEN A	DBA ACRYLIC SHAPERS	575 MENLO DR #1	ROCKLIN	CA	95765	017-283-004-000				1
UNITED AUBURN INDIAN COMMUNITY		575 MENLO DR #2	ROCKLIN	CA	95677	017-283-004-000	1		1	1
SIGN EFFECTS INC		575 MENLO DR STE 1	ROCKLIN	CA	95765	017-283-004-000				1
SPECIAL ORDER SYSTEMS INC		575 MENLO DR STE 4	ROCKLIN	CA	95765	017-283-004-000				1

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LOE STEVE S & GAYLE A		5840 SUNSET BLVD WEST	ROSEVILLE	CA	95747	017-240-030-510				1
BALLARD TODD A		5880 SUNSET BLVD WEST	ROSEVILLE	CA	95678	017-240-032-000				1
WALKER AMANDA E		5885 DINKY LN	ROSEVILLE	CA	95747	017-240-007-510				1
PARATI OF CALIFORNIA INC	CONSULTING ENGINEERS SURV	590 MENLO DR STE 1				017-282-008-000				1
NIECE BILL JR		5900 SUNSET BLVD WEST	ROSEVILLE	CA	95747-9739	017-240-031-000				1
BIRCHFIELD DAVID N & YVONNE		5901 DINKY LN	ROSEVILLE	CA	95747	017-240-006-510				1
BURGSTAHLER WENDY LEE TTEE		5905 LARAMIE LN	ROSEVILLE	CA	95747	017-040-062-510				1
STROMAR MICHAEL I & LORI ET AL		5910 LARAMIE LN	ROSEVILLE	CA	95747	017-030-079-000				1
ONEILL EUGENE D & ETHEL		5945 COUNTRY LN	ROSEVILLE	CA	95678	017-030-060-510				1
HANDS ON VIDEO RELAY SERVICES INC		595 MENLO DR	ROCKLIN	CA	95765	017-283-005-000				1
STEINHOFF TOMMIE & WENDY		5950 SUNSET BLVD W	ROSEVILLE	CA	95747	017-240-017-510				1
HERNANDEZ LUIS & MARTHA		5951 DINKY LN	ROSEVILLE	CA	95747	017-240-005-510				1
PITKIN RICHARD J & CARRIE K		5955 LARAMIE LN	ROSEVILLE	CA	95747	017-040-061-510				1
JENSON FRED G & PAULINE A TRUSTEES		5955 SIERRA COLLEGE BLVD	ROCKLIN	CA	95677	017-200-036-000				1
NIHEI HAROLD Y		5975 COUNTRY LN	ROSEVILLE	CA	95747	017-030-059-510				1
TERESI STEPHEN		5980 COUNTRY LN	ROSEVILLE	CA	95747	017-030-088-000				1
THOMAS GEORGE ,ET AL		5980 SUNSET BLVD W	ROSEVILLE	CA	95747	017-240-016-510				1
NGUYEN LIEM M & ELISABET		603 FARRINGTON LN	LINCOLN	CA	95648	017-040-058-510				1
SCHEIDEL SILMER & DORTHA M TTEE		6201 S BREWER RD	PLEASANT GROVE	CA	95668	017-130-007-000				1
FONG EDWARD G H ET AL	C/O FONG ROGER	6230 GLORIA DR	SACRAMENTO	CA	95831	023-221-046-000				1
SCHEIDEL KIM S TRUSTEE		6257 S BREWER RD	PLEASANT GROVE	CA	95668	017-130-033-000				1
FORD CONNIE ET AL		6357 LA CIENEGA DR	NORTH HIGHLANDS	CA	95660	017-030-087-000				1

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LINCOLN CITY OF		640 FIFTH ST	LINOLN	CA	95648	329-020-011-000				1
RUSSO JOSEPH MICHAEL SR & JANISE ANN		6450 SOUTH BREWER RD	PLEASANT GROVE	CA	95668	017-130-029-510				1
GLEASON JAMES C & GAYNELL TRUSTEES		6495 SUNSET BLVD WEST	ROSEVILLE	CA	95678	017-020-029-000				1
JOHN DEERE LANDSCAPES INC	ADMINISTRATIVE OFFICE	650 STEPHENSON HWY	TROY	MI	48083	017-210-034-000				1
3625 CINCINNATI LLC	C/O JASON MOREHOUSE	6520 CAROLINDA DR	GRANITE BAY	CA	95746	017-200-012-510				1
LAMBROS VASILIOS S & HELEN L TRS ET AL		665 ALLEN AV	SAN MARINO	CA	91108	017-090-053-000				1
MCLEMORE DOUGLAS A & LUCY T		6680 BASELINE RD	ROSEVILLE	CA	95747	017-150-040-000				1
PLAYBOY ENTERPRISES INTERNATIONAL INC	DBA ICS ENTERTAINMENT	680 N. LAKE SHORE DRIVE	CHICAGO	IL	60611	017-270-059-000				1
KB ONE LLC	C/O GMAC MODEL HOME FINAN	6802 PARAGON PL	RICHMOND	VA	23230	488-120-031-000				1
TALBERT EUGENE GEORGE TR &	TALBERT YONG CHA TR	6845 ROSA VISTA LN	CITRUS HEIGHTS	CA	95610	017-130-041-000				1
SWIFT RILEY J TRUSTEE ET AL		6935 SOUTH FORBES RD	LINCOLN	CA	95648	017-061-079-000				1
JOHN L SULLIVAN FAMILY LIMITED PARTNERSH		700 AUTO MALL DR	ROSEVILLE	CA	95678	017-070-039-000				1
REVERSE EXCHANGE PROPERTIES INC	C/O SULLIVAN JOHN L FAMIL	700 AUTOMALL DR	ROSEVILLE	CA	95661	017-300-093-000				1
WHITE PARKER & ROBINSON LINDSEY		7035 S BREWER RD	PLEASANT GROVE	CA	95668	017-130-047-000				1
READ MILTON H ET AL	C/O K B LOWRY KENLOW CORP	705 MARTENS COURT PMB 71-119	LARADO	TX	78041-6010	017-061-023-000				1
GOWER CHARLES & CHERYL TRUSTEES		7070 COUNTRY ACRES LN	ELVERTA	CA	95626	017-130-039-000				1
COMPTON LEWIS DELMAR & SARA TRS		7110 COUNTRY ACRES LANE	ELVERTA	CA	95606-9408	017-130-037-000				1

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CORBETT KEVIN & DEANNA		7160 COUNTRY ACRES LN	ELVERTA	CA	95626	017-130-038-000				1
MILLERMON ARDEN & BETTY		7225 LOCUST RD	PLEASANT GROVE	CA	95668	017-130-027-000				1
WATTERS GABRIEL D		7231 26TH ST	RIO LINDA	CA	95673	017-130-040-000				1
PLANCARTE MARIA T		7236 2ND ST	RIO LINDA	CA	95673	023-070-001-000				1
RUSSELL JOHN		7245 S BREWER RD	PLEASANT GROVE	CA	95668	017-130-046-000				1
FIELD LAVERN F & PAMELA A		7255 S BREWER RD	PLEASANT GROVE	CA	95668	017-130-036-000				1
WHITE JACK D &	WHITE GAYLE L	7373 BREWER RD	PLEASANT GROVE	CA	95668	017-130-045-000				1
WHITE CHARLES A & WANDA L		7391 SOUTH BREWER RD	PLEASANT GROVE	CA	95668	023-040-014-000				1
PASQUETTI CARELL TRUSTEE ET AL		7455 WILLOW LN	GRANITE BAY	CA	95746	017-061-041-000				1
GRASSE ALVIS L & JEAN A		7470 COUNTRY ACRES LN	ELVERTA	CA	95626	017-130-042-000				1
PHONGSAIPHONH PHONEPHASOUK & PAKRIM		7495 SUNSET BLVD WEST	ROSEVILLE	CA	95747	017-010-014-000				1
CONSULO DAVID &	CONSULO SANDRA L	7520 COUNTRY ACRE LN	ELVERTA	CA	95626	017-140-011-510				1
SINGH PARMINDER ET AL		759 REGENCY PARK CIR	SACRAMENTO	CA	95835	023-072-012-000				1
AUJLA MANDEEP ET AL		759 REGENCY PARK CIR	SACRAMENTO	CA	95835	023-072-013-000				1
SPIEGEL ALEXANDRA MICHAELA	C/O BLAIR WALLACE	7633 LOCUST RD	PLEASANT GROVE	CA	95668	017-130-052-000				1
HIGHWAY 65 DEVELOPMENT LLC		7665 WILD FLOWER CT	GRANITE BAY	CA	95746	017-061-021-000				1
MOREHOUSE JASON		7665 WILDFLOWER CT	GRANITE BAY	CA	95746	017-200-010-510				1
HOURGLASS DEVELOPMENT LLC		7665 WILDFLOWER CT	GRANITE BAY	CA	95746	017-200-016-510				1
BASELINE P & R LLC		7700 COLLEGE TOWN DR #101	SACRAMENTO	CA	95826	017-150-008-000				1
TSAKOPOULOS ANGELO K ET AL	C/O AKT DEVEL CORP	7700 COLLEGE TOWN DR #101	SACRAMENTO	CA	95826	017-020-022-000				1
CSS BREWER ROAD INVESTORS LLC		7700 COLLEGE TOWN DR #205	SACRAMENTO	CA	95826	017-090-033-000				1

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ADAIR ERNIE & CAROL	DBA ERNIES EXCAVATING & G	7806 GALENA WAY	CITRUS HTS	CA	95610	023-030-004-000				1
ASHER THOMAS L & MARY E		7960 ANTELOPE RD	CITRUS HEIGHTS	CA	95610	017-070-052-000				1
WILLIAMS PATRICIA A & RICHARD D REV LIV		7975 LOCUST RD	PLEASANT GROVE	CA	95668	017-130-025-000				1
E B S ON LINE		800 S CLAREMONT ST #203	SAN MATEO	CA	944021450	017-282-005-000				1
GRAY DONLY CLIFFORD SR ESTATE	C/O GRAY DONLY C JR	8020 LOCUST RD	ELVERTA	CA	95626	023-071-001-000				1
SANDERS C DWAIN TRUSTEE		8025 OAK AVE	ROSEVILLE	CA	95747	017-070-013-000				1
GARCIA REX Q		8027 ELDER ST	ELVERTA	CA	95626	023-030-013-000				1
PRITCHETT LOREN L TRUSTEE		8093 ELDER ST	ELVERTA	CA	95626	023-030-015-000				1
HNC INVESTMENT PARTNERS LLC		810 GRAND ST	ALAMEDA	CA	94501	017-270-053-000				1
PLUNKETT MABEL LIFE ESTATE ET AL	C/O WARNICK DEAN	8100 PHILLIP RD	PLEASANT GROVE	CA	95668	017-090-055-000				1
KELLY HELEN C	C/O KELLY PATRICK	8100 PLEASANT GROVE RD	ELVERTA	CA	95626	023-070-005-000				1
PRITCHETT LAURA LEE		8109 ELDER ST	ELVERTA	CA	95626	023-030-016-000				1
SIGURDSON JOEL T & DANIELLE PIERCE TTEES		8112 ELDER ST	ELVERTA	CA	95626	023-101-006-000				1
HELLYER SUSAN W TRUSTEE		8121 PHILLIP RD	PLEASANT GROVE	CA	95668	017-090-036-000				1
RAND HAMILTON P TRUSTEE		8125 LOCUST RD	ELVERTA	CA	95626	023-020-018-000				1
LACROSS KENNETH J		8128 PLEASANT GROVE RD	ELVERTA	CA	95626-9419	023-091-014-000				1
ELLIOTT HOWARD L TRUSTEE &	ELLIOTT JEWEL F TRUSTEE	8132 ELDER ST	ELVERTA	CA	95626	023-101-005-000				1
CHATTERJEE SATYA N TRUSTEE		8167 RIVER FRONT LN	FAIR OAKS	CA	95628	017-270-065-000				1
OKRAY JEFFREY A &	OKRAY LINDA J	8170 PLEASANT GROVE RD	ELVERTA	CA	95626	023-091-006-000				1

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MORGAN ALVA E & FERN T TRUSTEES		8195 PLEASANT GROVE RD	ELVERTA	CA	95626	023-091-012-000				1
SHVETS VYACHESLAV		8222 MADRON WOODS PL	ANTELOPE	CA	95843	017-240-028-510				1
SCHMITT SCOTT L		827 ARNOLD DR #9	MARTINEZ	CA	94553	017-070-044-000				1
WOODLAND COX INC	DBA MILLENIUM SOLUTIONS G	8300 BARTON RD	GRANITE BAY	CA	95746	017-070-048-000				1
SCHAUER GARY D & JANET D TRS ET AL		8315 W HIDDEN LIKES DR	ROSEVILLE	CA	95661	017-270-015-000				1
INDUSTRIAL STAR LLC		8331 SIERRA COLLEGE BLVD STE 216B	ROSEVILLE	CA	95661-9486	017-270-020-000				1
SACRAMENTO VALLEY LIMITED PARTNERSHIP	C/O VERIZON WIRELESS PRO	8350 E CRESENT PKWY #400	GREENWOOD VILLAGE	CO	80111	017-270-039-000				1
ATSINGER EDWARD G III TRUSTEE ET AL		855 AVIATION DR STE 200	CAMARILLO	CA	93010-8569	017-061-073-000				1
BD PROPERTIES	BENNETT ORIN	8568 PHEASANT HILL CT	ORANGEVALE	CA	95662	017-100-038-000				1
CARMICAL KENNETH R TRUSTEE		8606 ELWYN AVE	ELVERTA	CA	95626	017-140-010-000				1
FIDDCO LP	C/O JOHN FIDDYMENT - BUZZ	8615 ELDER CREEK RD	SACRAMENTO	CA	95828	017-200-052-000				1
ROSENBERG DONALD D & MARY K TRS		865 RIDGE DR	CONCORD	CA	94518	017-281-005-000				1
STEVENS GLENN HAROLD & JOANNE H		8660 BASELINE RD	ELVERTA	CA	95626	017-140-008-000				1
DEALA EDWARD R & BEATRICE M TTEES		8683 PASATIEMPO CIR	ROSEVILLE	CA	95747	017-090-037-000				1
FISCHER JAMES B & SUSAN R		8718 BASE LINE RD	ELVERTA	CA	95626	017-140-007-000				1
MCCLAIN CECIL & DAISY M		8800 BASELINE RD	ELVERTA	CA	95626	017-140-005-000				1
VINCENT RAYMOND L & GERALDINE		8848 BASE LINE RD	ELVERTA	CA	95626	017-140-003-000				1
AQUA ENG CO INC		905 PLACER BLVD	ROCKLIN	CA	95765	017-270-015-000				1
JARVIS RICHARD D & JOAN E TRUSTEES		9077 SHADY HOLLOW WAY	FAIR OAKS	CA	95628	017-270-063-000				1
JOLANDCO INC		9083 FOOTHILLS BLVD STE 350	ROSEVILLE	CA	95747	017-282-010-000				1

PLACER COUNTY										
Name	**Organization**	**Street Address**	**City**	**State**	**Zip**	**APN**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Tehcnical Studies (CD)**	**NOA**
SKOVER FRANK R TRUSTEE ET AL		910 FLORIN RD STE 101	SACRAMENTO	CA	95831	017-010-052-000				1
SKOVER FRANK R TRUSTEE ET AL		910 FLORIN RD STE 101	SACRAMENTO	CA	95831	017-010-051-000				1
PROCTOR HOWARD D ET AL		9230 SUNSET BLVD WEST	PLEASANT GROVE	CA	95668	017-010-046-000				1
OBRIEN WILLA TTEE		9300 SUNSET BLVD W	PLEASANT GROVE	CA	95668	017-010-049-000				1
DELZER PIPELINE INC		9315 PINEHURST DR	ROSEVILLE	CA	95747	017-210-034-000				1
FLINT ALAN D ET AL		9325 CENTRAL AVE	ORANGEVALE	CA	95662	017-090-035-000				1
MELLO RAYMOND		9400 BASELINE RD	ELVERTA	CA	95626	017-130-066-000				1
MILLWEE CHARLES WAYNE		9400 NEWTON ST	ELVERTA	CA	95626	023-150-030-000				1
LWP INC		9500 BASELINE RD	ELVERTA	CA	95626	017-130-067-000				1
SWITZLER JEFFREY & KELLEY		9555 BASELINE RD	ELVERTA	CA	95626	023-150-031-000				1
PLACER ATHENS 2 LP	ATTN KWAN TIM	9601 JORNEY CT	GRANITE BAY	CA	95746	017-061-076-000				1
JAVIDAN SAM J		9631 BASELINE RD	ELVERTA	CA	95626	023-150-013-000				1
ROWAN CALVIN E & FRANCES A		9655 JACKSON	PLEASANT GROVE	CA	95668	023-040-013-000				1
R & B VENTURES LLC		9700 DEL ROAD	ROSEVILLE	CA	95747	017-210-002-000				1
HARLESS WILLIARD LEE & KATHLEEN M TRUSTE		9777 BASELINE RD	ELVERTA	CA	95626	023-150-023-000				1
ROBERTS LOUIS T & DEONN W		9801 BASELINE RD	ELVERTA	CA	95626	023-150-022-000				1
WOODSIDE R & B 356 LP		9848 BUSINESS PARK DR # H	SACRAMENTO	CA	95827	023-200-045-000				1
3939 CINCINNATI AVENUE LLC		9970 HADLEIGH DR	GRANITE BAY	CA	95746	017-061-093-000				1
HUDSON THOMAS N		9971 BASELINE RD	ELVERTA	CA	95626	023-020-017-000				1
WILBORN JD & VIOLA TTEES		9990 BASELINE RD	ELVERTA	CA	95626	017-130-024-000				1
HEWLETT PACKARD COMPANY	ATTN TAX DEPT - MIKE MC C	DBA 3407 ROSEVILLE RS	ALPHARETTA	GA	30004	017-061-034-000				1
WILDON INDUSTRIES INC	ATTN: GARY GARLAND	DBA FORMICA	CINCINNATI	OH	45202	017-061-046-000				1

PLACER COUNTY										
Name	**Organization**	**Street Address**	**City**	**State**	**Zip**	**APN**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Tehcnical Studies (CD)**	**NOA**
GAP INC	ATTN PROPERTY TAX DEPARTM	DBA GAP INC & SUBS #95571	ALBUQUERQUE	NM	87125	017-281-007-000				1
AMCOR SUNCLIPSE INC	ATTN CORPORATE ACCTG	DBA KENT H LANDSBERG CENTRAL VALLEY	BUENA PARK	CA	90620	017-200-029-000				1
WACHOVIA SERVICES	B COVERSTON PROP TAX SUPV	DBA MONEY STORE THE	CHARLOTTE	NC	28244	017-270-050-000				1
MILLER STEVEN P &	SITTMAN RONALD S ETAL	DBA R & S SMOG & REPAIR	ROCKLIN	CA	95677	017-200-005-510				1
SIERRA OLYMPUS CONSTRUCTION	C/O STEVEN & CANDY BROWN	DBA SIERRA OLYMPUS CONSTRUCTION	GRANITE BAY	CA	957466819	017-270-050-000				1
BRADEN CORDETT L	ATTN: JOLENE STROUSE	DBA SOUTH PLACER CONSTRUCTION	ROSEVILLE	CA	95678	017-130-041-000				1
WINCO FOODS LLC	C/O BURKE & NICKEL	DBA WINCO FOODS LLC	TULSA	OK	74135	017-282-004-000				1
PACIFIC BELL		ONE BELL CENTER 36-M-1	ST LOUIS	MO	63101	017-061-035-000				1
A TEICHERT & SON INC		P O BOX 15002	SACRAMENTO	CA	958511002	017-200-026-000				1
RISSE DANA M		P O BOX 10	RIO LINDA	CA	95673	017-090-003-000				1
COMPUTER DEDUCTIONS INC ET AL	C/O MARTINEZ RALPH & VICK	P O BOX 1031	NEWCASTLE	CA	95658	017-150-069-000				1
PROGRESS VANGUARD CORP	C/O TAX DEPT CX1G	P O BOX 1037	ALBERTVILLE	AL	35950	017-070-051-000				1
AMAZING FACTS INC		P O BOX 1058	ROSEVILLE	CA	95678	017-070-011-000				1
SCHELL JOHN L & MARIE A TTEES		P O BOX 1345	ROSEVILLE	CA	95678	490-090-040-000				1
HEIDINGER JOHN J & JOANN M		P O BOX 1357	ROSEVILLE	CA	95661	017-030-070-510				1
THREE SISTERS RANCH ENTERPRISES		P O BOX 1444	SAN CARLOS	CA	94070	017-282-009-000				1
SANDERS ALFRED A & FRANCES J		P O BOX 162	ELVERTA	CA	95626	017-130-043-000				1
BURKE RICHARD		P O BOX 1652	COLFAX	CA	95713	017-030-051-510				1

PLACER COUNTY										
Name	**Organization**	**Street Address**	**City**	**State**	**Zip**	**APN**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Tehcnical Studies (CD)**	**NOA**
PLACER 2780	C/O JOHAS & ASSOCIATES	P O BOX 22838	SACRAMENTO	CA	95822	017-100-025-000				1
SEIFERT WILLIAM J & LAURIE D		P O BOX 235	ROCKLIN	CA	95677	017-030-082-000				1
BOWLER BRENT & CATINA		P O BOX 24	ELVERTA	CA	95626	023-030-009-000				1
CALIFORNIA CORPORATE RESOURCES INC		P O BOX 2634	ROCKLIN	CA	956772634	017-282-010-000				1
BROOKS ELTON O & PATRICIA A		P O BOX 276	ELVERTA	CA	95626	023-040-022-000				1
TECH NET INC		P O BOX 3217	ROCKLIN	CA	95677-8467	017-070-028-000				1
CAYOCCA KENNETH B TRUSTEE &	CAYOCCA MARY LOU TRUSTEE	P O BOX 340723	SACRAMENTO	CA	95834	017-130-012-000				1
SCHWANS HOME SERVICE INC		P O BOX 35	MARSHALL	MN	56258	017-210-036-000				1
MCKENZIE CORA LEE		P O BOX 358	ELVERTA	CA	95626	023-040-017-000				1
ATWOOD JAMES D TRUSTEE ET AL		P O BOX 3990	YOUNTVILLE	CA	945993990	017-070-053-000				1
GREENHECK FAN CORPORATION	C/O PERSL PROP TAX DEPT	P O BOX 410	SCHOFIELD	WI	544760410	017-270-018-000				1
HOLZMEISTER SANDRA L		P O BOX 460	ELVERTA	CA	95626	017-130-044-000				1
SEAMANS BETTY J TRUSTEE		P O BOX 472	ELVERTA	CA	95626	023-040-026-000				1
AVNET INC	C/O ePROPERTY TAX	P O BOX 4900	SCOTTSDALE	AZ	85261-4900	017-282-003-000				1
MURPHY TIMOTHY J & HENDRIX JULIE		P O BOX 496	ROSEVILLE	CA	95678	017-040-059-510				1
HWY 65 SELF STORAGE LLC	C/O MCKIM RON	P O BOX 548	ROCKLIN	CA	95677	017-061-020-000				1
S C P DISTRIBUTORS LLC	GEORGE MCELROY & ASSOC IN	P O BOX 565048	DALLAS	TX	75356	017-070-039-000				1
TERAOKU IRVING Y		P O BOX 5736	CORNING	CA	96021-5736	023-070-006-510				1
ACE HARDWARE CORPORATION	C/O SMART AND ASSOCIATES	P O BOX 59365	SCHAUMBURG	IL	60159	017-061-034-000				1
DEMUTH BILL M & JUDY L		P O BOX 594	ROSEVILLE	CA	95678	017-150-018-000				1
REED & GRAHAM INC		P O BOX 5940	SAN JOSE	CA	95150	017-200-052-000				1

PLACER COUNTY										
Name	**Organization**	**Street Address**	**City**	**State**	**Zip**	**APN**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Tehcnical Studies (CD)**	**NOA**
SHEPHERD MICHAEL B & VIOLA M		P O BOX 6	ELVERTA	CA	95626	023-040-030-000				1
POWERS & COMPANY		P O BOX 619043	ROSEVILLE	CA	95661	017-283-003-000				1
KUMASAKA HIRO & BETTE T TRUSTEES		P O BOX 657	RANCHO MURIETA	CA	95683	017-270-059-000				1
PLACER COUNTY WATER AGENCY	EXEMPT FROM TAXATION	P O BOX 6570	Auburn	CA	95604	017-200-054-000				1
BARRETT VERNON J JR & GINGER G TRUSTEES		P O BOX 663	PLEASANT GROVE	CA	95688	017-090-004-000				1
ACEVEDO STAN & JOVITA		P O BOX 667	PLEASANT GROVE	CA	95668	017-130-049-510				1
AMERICAN TOWERS INC	DBA TOWER# 89357 PETTIGRE	P O BOX 723597	ATLANTA	GA	31139	017-010-022-000				1
VOGT JEFFREY D & CYNTHIA D		P O BOX 724	PLEASANT GROVE	CA	95668	017-010-001-510				1
SPIEGEL ALEXANDRA		P O BOX 7758	TAHOE CITY	CA	96145	017-130-053-000				1
QUALITY TELECOM CONSULTANTS INC		P O BOX 807	LOOMIS	CA	95650	017-061-004-000				1
SANDERS ALLEN M & LINDA		P O BOX 822	ELVERTA	CA	95626	017-130-043-000				1
SIERRA PACIFIC TURF SUPPLY INC	DBA SIERRA PACIFIC TURF S	P O BOX 84	CAMPBELL	CA	95009	017-070-013-000				1
BIMBO BAKERIES USA INC	DBA OROWHEAT ENTENMANNS	P O BOX 901031	FT WORTH	TX	76101-2031	017-070-039-000				1
DEROSIER DAVID D ET AL	C/O DEROSIER DAVID	P O BOX 913	SHINGLE SPRINGS	CA	95682	017-130-013-000				1
DICKERSON JOHN R		PO BOX 905	PLESANT GROVE	CA	95668	017-010-020-000				1

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SACRAMENTO										
Name	**Organization**	**Street Address**	**City**	**State**	**Zip**	**APN**	**EIS/EIR (HC)**	**Technical Study (HC)**	**Technical Studies (CD)**	**NOA**
	Natomas Basin Conservancy	2150 River Plaza Dr., 460	Sacramento	CA	95833	201-0030-020-0000	1		1	1

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MEDIA										
Name	**Organization**	**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
Harold Kruger	Appeal Democrat		PO BOX 431	MARYSVILLE	CA	95901-0431				1
Deric Rothe	Auburn Journal		1030 High Street	Auburn	CA	95603				1
	Colfax Record		P.O. Box 755	Colfax	CA	95713				1
	Granite Bay Press Tribune		188 Cirby Way	Roseville	CA	95678				1
Victoria Beninga	KAHI Radio		985 Lincoln Way, Suite #103	Auburn	CA	95603				1
Chris Anderson	KCRA-TV		3 Television Circle	Sacramento	CA	95814				1
Brendan Gage	KFBK		1449 Ethan Way	Sacramento	CA	95825				1
Brent Baader	KMAX-Channel 31		500 Media Place	Sacramento	CA	95815				1
Marvin Simons	KOVR-Channel 13		2713 KOVR Drive W.	Sacramento	CA	95605				1
Ron Lopez	KTXL - Fox 40		P.O. Box 40	Sacramento	CA	95820				1
	KUVS - 19 Univision		1710 Arden Way	Sacramento	CA	95815				1
Helen Mondia	KXTV-TV		400 Broadway	Sacramento	CA	95818				1
Wendy Lautner	Lincoln News Messenger		690 G Street	Lincoln	CA	95648				1
Martha Garcia	Loomis News		P.O. Box 125	Loomis	CA	95650				1
Toby Lewis	Placer Herald		5055 Pacific Street	Rocklin	CA	95677				1
Mitch Zak	Randle Communications		925 L STREET, SUITE 1275	Sacramento	CA	95814				1
Sherri Shaulis	Roseville Press Tribune		188 Cirby Way	Roseville	CA	95678				1
Jennifer Morita	Sacramento Bee		PO Box 15779	Sacramento	CA	95852				1
Tony Bizjak	Sacramento Bee		2100 Q Street	Sacramento	CA	95852				1
Melanie Turner	Sacramento Business		1400 X Street	Sacramento	CA	95818				1
Kel Munger	Sacramento News &		1015 20th Street	Sacramento	CA	95814				1
Joe Carroll	Sierra Heritage (Auburn Sentinel)		P.O. Box 9148	Auburn	CA	95604				1
Mary Jurkonis	Tahoe Bonanza		925 Tahoe Blvd Ste 205	Incline Village	NV	89452				1
Lee Denmark	Tahoe World		241 N. Lake Blvd	Tahoe City	CA	96145				1

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PROJECT TEAM										
Name	**Organization**	**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
John Long	DKS		8950 Cal Center Drive, #340	Sacramento	CA	95826	1		1	1
Cesar Perez	Federal Highway Administration		650 CAPITOL MALL, SUITE 4100	Sacramento	CA	95814	8	1	20	1
Brett Gainer	Federal Highway Administration						1			1
Joanne Koegel	Koegel & Associates		3316 Sierra Oaks Drive	Sacramento	CA	95864				1
Mara Feeney	Mara Feeney & Associates		19B Beaver Street	San Francisco	CA	94114	1		1	1
Daniel Iacofano	MIG		800 Hearst Avenue	Berkeley	CA	94710				1
Vikrant Sood	MIG		800 Hearst Avenue	Berkeley	CA	94710				1
Jane Kelly	MIG		800 Hearst Avenue	Berkeley	CA	94710				1
Nancy Miller	Miller, Owen & Trost		428 J Street #400	Sacramento	CA	95814				1
Adam Relin	Nossaman Guthner Knox Elliott LLP		18101 Von Karman Avenue, Suite 1800	Irvine	CA	92612	2	2	2	1
Monica Lawrence	Nossaman Guthner Knox Elliott LLP	Paralegal	18101 Von Karman Avenue, Sutie 1800	Irvine	CA	92612	1	1	1	1
Carollyn Lobell	Nossaman Guthner Knox Elliott LLP		18101 Von Karman Avenue, Sutie 1800	Irvine	CA	92612	1	1	1	1
John Flynn	Nossaman Guthner Knox Elliott LLP		18101 Von Karman Avenue, Sutie 1800	Irvine	CA	92612				1
Bryce Little	Nossaman, Gunthner, Knox & Elliott LLP		445 South Figueroa Street, 31st Floor	Los Angeles	CA	90071				1
Celia McAdam	PCTPA		299 Nevada Street	Auburn	CA	95603	1			1
Stan Tidman	PCTPA	Senior Planner	299 Nevada Street	Auburn	CA	95603	1	1	1	1
Denise Heick	URS Corporation	Vice President	221 Main Street, Suite 600	San Francisco	CA	94105-1917	1	1	1	
Julie Watson	URS Corporation		221 Main Street, Suite 600	San Francisco	CA	94105-1917	1	1	1	1
Allison Drury	URS Corporation		221 Main Street, Suite 600	San Francisco	CA	94105-1917	1			1
Catherine Short	URS Corporation		221 Main Street, Suite 600	San Francisco	CA	94105-1917	1	1	1	1
Garry Horton	URS Corporation		1380 Lead Hill Blvd., Suite 100	Roseville	CA	95661-2997	1		1	1

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STATE ASSEMBLY										
Name	**Organization**	**Title**	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
Ted Gaines	State Capitol	Assemblyman	P.O. Box 942849, Room 2002	Sacramento	CA	94249-0004	1	1	1	1

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LIBRARIES								
Organization	**Street Address**	**City**	**State**	**Zip**	**EIS/EIR (HC)**	**Technical Studies (HC)**	**Technical Studies (CD)**	**NOA**
Placer County Library	350 Nevada Street	Auburn	CA	95603	1	1	1	1
Placer County Library, Loomis	6050 Library Drive	Loomis	CA	95650	1	1	1	1
Sutter County Library, Main Branch	750 Forbes Avenue	Yuba City	CA	95991	1	1	1	1
Sutter County Library, Pleasant Grove Branch	3093 Howsley Road	Pleasant Grove	CA	95668	1	1	1	1
Roseville Public Library, Downtown	225 Taylor Street	Roseville	CA	95678	1	1	1	1
Roseville Public Library, Maidu	1530 Maidu Drive	Roseville	CA	95661	1	1	1	1
Placer County Library, Rocklin	5460 Fifth Street	Rocklin	CA	95677	1	1	1	1
Lincoln Library	590 Fifth Street	Lincoln	CA	95648	1	1	1	1
Sutter County Library, Browns Branch	1248 Pacific Avenue	Rio Oso	CA	95674	1	1	1	1
Sacramento County Public Library	828 I Street	Sacramento	CA	95814	1	1	1	1
Sacramento County Library, North	2500 New Market Drive	Sacramento	CA	95835	1	1	1	1
Sacramento County Library, North Highlands - Antelope	4235 Antelope Road	Antelope	CA	95843	1	1	1	1
Sierra College Library	5000 Rocklin Road	Rocklin	CA	95677	1	1	1	1
California State University, Sacramento Library	6000 J Street	Sacramento	CA	95819	1	1	1	1

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10.0 REFERENCES

The technical studies prepared for this Tier 1 EIS/EIR are listed below. These technical reports are incorporated by reference into this EIS/EIR and bound separately and are available for review at PCTPA, Caltrans, and selected Libraries.

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Archaeological Survey Report	URS, 2007b
Community Impact Assessment	Mara Feeney & Associates and North Fork Associates, 2007
Historical Properties Survey Report	URS, 2007c
Historical Resources Evaluation Report	JRP Historical Consulting, 2007
Hydrology and Floodplain Technical Memorandum	URS, 2007d
Initial Site Assessment	URS, 2007e
Land Use and Policy Scenarios	DKS Associates, 2007a
MEPLAN Technical Report	DKS Associates, 2007b
Natural Environment Study	URS, 2007f
Traffic Noise Analysis Technical Memorandum	URS, 2007g
Transportation Technical Report	DKS Associates, 2007
Visual Impact Assessment	URS, 2007h
Water Quality Technical Memorandum	URS, 2007i
Technical Memorandum Screening Evaluation of PSR Alternatives	URS and DKS Associates, 2004

10.1 CHAPTER 1 – INTRODUCTION AND PURPOSE OF AND NEED FOR PROJECT

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Nevada Department of Transportation, 1993. National Environmental Policy Act/Clean Water Act Section 404 Integration Process for Surface Transportation Projects Memorandum of Understanding.

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Sutter County, 2004. County of Sutter General Plan 2015 Housing Element, For the 2002 – 2007 Period. Community Services Department, County of Sutter. September 28.

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10.2 CHAPTER 2 – PROJECT ALTERNATIVES

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