6.11 Integrated Land Use, Air Quality & Transportation Planning

This chapter identifies the need for an interdisciplinary approach to integrate land use, transportation, and air quality planning efforts with one another to improve mobility throughout Placer County and the Sacramento region.

OPPORTUNITIES & CONSTRAINTS (ISSUES & NEEDS)

Placer County possesses an array of development patterns ranging from fast-growing suburban areas to the west, year-round tourist destinations in Lake Tahoe to the east, and small bustling foothill towns in between. The Placer region continues to develop as a result of constant pressure for urban growth throughout California and specifically within the six-county Sacramento metropolitan area. As the need to move people and goods increases along with stringency of air quality regulations, the importance of developing balanced land use patterns and coordinated transportation networks remains critical within the region and beyond.

The escalating growth in population, housing, and employment in Placer County brings increasing demand for the planning and installation of infrastructure needed to effectively transport people and their goods between the places in which they live, work, shop, recreate, obtain services, and go to school. This demand to provide access between different land uses is directly related to the quality of life provided within Placer County. Quality of life can also be affected by the levels of air quality which are greatly influenced by our land use and transportation decisions. As a result, maintenance of this quality of life occurs cumulatively through the region-wide coordination of the land use, air quality, and transportation planning processes. However, integration of these processes is not without certain opportunities and constraints.

One of the prime motivations for the establishment of PCTPA in 1975 was to provide a forum for interjurisdictional coordination on county-wide issues. Interjurisdictional coordination is a key component of an effective and efficient transportation system, and remains the underlying strategy for integration of land use, transportation, and air quality planning efforts. Planning agencies and jurisdictions in Placer County must work together to support and encourage land use patterns that promote alternatives to driving alone while preserving the natural and cultural resources that are so attractive to existing residents, newcomers, and visitors alike. Land use decisions are made relatively quickly – in contrast to transportation projects that may take decades to fund, design, and implement. A continuous dialogue, interdisciplinary approach, and proactive strategy will be needed to keep land use decision-making and transportation investments in step with one another to improve mobility throughout the region.
Regional Planning

Impacts resulting from major land use and transportation decisions extend beyond any single jurisdictional boundary. As people continue to work and shop outside the county in which they live, traffic congestion and air quality issues are shared throughout many of the region’s jurisdictions. Regional planning efforts that address land use, transportation, and air quality issues are crucial to maintaining an acceptable quality of life for residents inside and outside of Placer County.

SACOG Blueprint

Placer County and its incorporated areas continue to work with the Sacramento Area Council of Governments (SACOG) through a cooperative regional planning effort called “Blueprint.” The Blueprint was adopted in April 2004 by SACOG and continues to live on through SACOG’s sustainable communities strategy as required by SB 375. Jurisdictions have subsequently adopted its implementation strategies. Blueprint planning integrates land use development and housing to transportation and air quality planning, considering these needs simultaneously, while focusing on the principles of “smart growth.” The Blueprint approach fosters more efficient land use patterns and transportation systems that improve mobility and reduce dependency on single-occupant vehicle trips; reduce congestion; increase transit use, walking and bicycling; encourage infill development; accommodate an adequate supply of housing for all incomes; reduce impacts on valuable habitat and productive farmland; improve regional air quality; increase efficient use of energy and other resources; and result in safer neighborhoods.

Placer County Conservation Plan

Another example of regional planning is the Placer County Conservation Plan, a Habitat Conservation Plan under the federal Endangered Species Act and a Natural Community Conservation Plan under California’s Natural Community Conservation Planning Act. The Conservation Plan covers approximately 201,000 acres of western Placer County, and is intended to directly provide regulatory coverage for 34 special status species and for federally regulated wetlands, as well as indirectly protect the habitat of hundreds of other plants and animal species dependent on the same habitat. The Conservation Plan is designed to avoid potential conflicts between the County’s growth areas and unique ecological assets, while clearing regulatory obstacles toward development. Participating agencies include SPRTA. The Plan would aid SPRTA in planning for the Placer Parkway, a transportation corridor that will link SR 65 with SR 99/70 in Sutter County.

The PCCP has been in development since 2001, and has involved the public and other stakeholders interested in the region’s future growth and protection of natural resources. The Planning Agreement was signed in December 2001, the Independent Science Advisors Report was completed in January 2004, and the Administrative Draft PCCP was completed in February 2011. The environmental review documents (EIR/EIS) are in progress. The lead agency will need to execute an Implementing Agreement, and prepare Findings before a
federal and state permit is issued. The timing of the PCCP is not known, but may go into effect during the life of the RTP.

**Rural & Urban Development**

With a mix of both urban and rural development in Placer County, there currently exists a wide range of transportation services provided. In general, the more urbanized areas have a greater demand for transportation services and therefore possess more extensive infrastructure and opportunity for use of alternative transportation modes. But as both rural and urban areas experience their own levels of growth, there exists opportunities in each of these areas to consider how land use decisions and transportation choices affect one another. Conscious design of both rural and urban communities can help encourage people to use alternative modes of transportation including walking, riding bicycles, riding the bus, taking light rail, riding the train, or ridesharing. While rural portions of Placer County will always demand less transportation services than urbanized areas, it remains that the more people walk, bike, or ride the bus, the more congestion and air pollution are reduced.

**SACOG Rural-Urban Connections Strategy**

Placer County and its incorporated areas continue to work with the Sacramento Area Council of Governments (SACOG) on rural-urban transportation issues, through a multi-faceted planning effort known as the Rural-Urban Connections Strategy (“RUCS). The RUCS project was designed to help implement the Sacramento Region Blueprint through finding methods to help ensure the economic vitality of rural areas of the region, including sustainable transportation and land use, agriculture, natural resources and other uses for the rural landscape. The RUCS project focuses on the region’s farm economy that produces food for the nation and world, as well as increasing the share of the region’s collective consumption that is grown within the region. The program is ongoing and the findings are reflected in SACOG’s 2016 MTP/SCS through transportation investments and policies and land use patterns that support the rural economy.

It is expected that the RUCS project will result in an economic and environmental sustainability strategy for rural areas. As the strategy continues to be developed the RTP as well as local jurisdiction plans will incorporate applicable elements.

**General Plans**

As the constitution of development within any California jurisdiction, the general plan provides policies to guide the land use and circulation patterns within a given city or county. In addition, goals and policies related to air quality are typically found within the general plan. The general plan must reflect both the anticipated level of land development and the road system necessary to serve that level. Currently, all of Placer County’s jurisdictions have
adopted general plans which contain the mandated land use and circulation elements and which also contain policies and goals for improving air quality.

State law requires all approved development projects to be consistent with a jurisdiction’s adopted general plan policies. This essential and required relationship provides an ongoing opportunity for integration of land use and transportation planning as development projects are approved and as changes and updates are made to the General Plans of any of Placer County’s seven jurisdictions. As land use and transportation projects in Placer County are planned, General Plan policies related to land use, transportation, and air quality for the respective jurisdiction will be consistently considered in order to ensure compliance with these policies during the project approval process.

**Economic Development**

Every jurisdiction within Placer County has some form of economic development authority. It is the nature of these authorities to attract development of appropriate need and scale to their respective jurisdiction for the benefit of the local economy. While the need and scale may vary between rural and urban areas, the basic factors that attract development often remain constant. These factors include whether or not the appropriate land uses and transportation services are provided to serve the needs of a prospective development. In addition, specific air quality regulations may be a factor for prospective commercial and industrial developments if they produce emissions. These factors provide reason and opportunity for economic development authorities throughout Placer County to participate in and encourage the integration of land use, transportation, and air quality planning efforts.

**Transportation Funding Resources**

There are many more transportation projects in Placer County than there are funds available to implement them. Future funding sources for state and local projects will continue to be dependent on the condition of the state budget and the state legislature’s development of statewide transportation funding programs. Funding and construction of transportation projects needed to serve new developments will continue to be provided by developers to the extent possible, while innovative approaches to transportation funding and development of new funding sources will be needed to provide for the multi-modal transportation needs of the residents of Placer County. Coordinated transportation and land use planning efforts will be essential in order to maintain minimum levels of service on those roadways potentially impacted by future developments.

**Environmental Considerations**

Current growth rates in Placer County and surrounding counties in the Sacramento region have resulted in increasing vehicle miles traveled, making it difficult for the region to meet
state and Federal air quality standards. Other environmental constraints also affect how transportation and land use projects are planned in Placer County, including sensitive plant and animal species, wetlands and vernal pool locations, noise impacts, archeological/historic resources, geologic issues, and drainage. In order to limit the effects of increased population growth on air quality and global climate, and to limit the impacts of transportation projects on the environment, it is important that local and regional land use, transportation, and air quality planning are closely coordinated.

**PLANNING STRATEGIES**

One of the overall goals of the RTP Policy Element is to integrate land, air, and transportation planning, in order to build and maintain the most efficient and effective transportation system possible while achieving the highest possible environmental quality standards. With this goal in place, strategies must be developed consistent with supporting policies and objectives of this plan as well as with applicable land use and air quality policies and regulations of other agencies and member jurisdictions.

**Interjurisdictional Coordination**

Interjurisdictional coordination is necessary to ensure connectivity of roads, transit, bicycle and pedestrian paths, and other transportation systems to provide continuity and access between communities. Coordination is also critical for addressing transportation-related regional impacts, such as air quality, congestion, and preservation of natural and cultural resources. Furthermore, in a time of limited financial resources, coordination is even more important to ensure that those funds that are available for transportation projects are spent in the most efficient and effective manner possible. Intergovernmental coordination furthers this goal by developing county-wide transportation priorities, implementing studies and projects in cooperation with other counties, facilitating joint transportation projects, and anticipating and mitigating impacts of governmental decisions of one jurisdiction on another.

PCTPA has a variety of venues to promoting interjurisdictional coordination. The Technical Advisory Committee (TAC), which includes public works representatives from all member jurisdictions, meets monthly to discuss project delivery, funding opportunities, air quality, and other relevant regional transportation issues. Regular meetings are also held with the members of the Transit Operators Working Group (TOWG), which includes representatives from all of the transit operators and PCTPA member jurisdictions. This group coordinates transit marketing, planning, and related subjects. Caltrans and SACOG also participate in the TAC and the TOWG.

Coordination within Placer County and with the other SACOG jurisdictions, as well as the Bay Area, Nevada County, and the Tahoe Regional Planning Area (TRPA), will be crucial in the effort to address transportation challenges along key corridors such as Interstate 80, State Route 49, and State Route 65. Coordination among regional agencies such as Caltrans,
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SACOG, Placer County Air Pollution Control District (PCAPCD), Sacramento Metropolitan Air Quality Management District (SMAQMD), the California Air Resources Board, and others will also play an important role. PCTPA will continue to “encourage jurisdictions to require land uses which produce significant trip generation to be served by transportation corridors with adequate capacity and design standards to provide safe usage for all modes of travel,” consistent with Policy 9.A.3.

**Corridor Preservation**

Corridor preservation is a means of coordinating transportation planning with land use planning by minimizing development in areas which are likely to be required to meet future transportation needs. Preserving land for the eventual construction of large transportation projects can help to prevent inconsistent development, minimize or avoid environmental, social, and economic impacts, reduce displacement, prevent the foreclosure of desirable location options, permit orderly project development, and reduce costs.

Corridor preservation should occur when the multimodal planning process has indicated the need for additional transportation facilities in an area where significant development has not yet taken place. It may be especially important in those areas of Placer County which are beginning to experience development pressures. Only as part of a multi-jurisdictional planning effort, can successful corridor preservation occur. The Placer Parkway project is a prime example of an existing effort underway in Placer County.

Interim tools such as general plan designations, zoning controls, and access management, should be used to help secure future right of way for essential transportation corridors. This strategy is consistent with Policy 9.A.4 in Chapter 5 which encourages “jurisdictions to protect corridors and rights-of-way, when identified, for future expressway and highway corridors through the adoption of specific plans and general plans.” Permanent tools such as acquisition, development easements, and development agreements should also be used when possible.

**Infrastructure Investments**

Where existing infrastructure cannot efficiently provide for the transportation needs of new development, additional investments in infrastructure should be made to ensure levels of service are not compromised. Providing adequate corridor infrastructure that meets existing and future needs is essential for successful transportation networks. However, simply building more roadways is not always the best solution when financial resources, environmental impacts, and smart growth concepts are considered.

Consistent with policies contained in this plan, PCTPA will continue to encourage jurisdictions to develop local roadways that complement planned growth patterns and economic development programs. Jurisdictions will also be encouraged to review and assess
the impact of new development proposals on transit system demand and supply as well as air quality. Requirements of public transit and facilities for pedestrian and bicycle activities should also be considered as jurisdictions require street patterns for new roadways, especially in commercial, industrial, and high-density residential areas. Furthermore, coordination between agencies on the timing of roadway construction where utilities and other facilities are planned will be necessary to provide the most cost-effective solution to providing needed infrastructure.

**Integration of Blueprint Principles into Community Types**

SACOG’s 2016 MTP/SCS builds upon and refines the regional land use development pattern developed for the regions first SCS in 2012. An important part of the SCS is forecasting a land use growth pattern for the 2036 horizon. In the development of the land use growth pattern, SACOG researched the market trends, housing preferences, demographics, the status of land development proposal and challenges to implementing development proposals. The land use development pattern reflects the anticipated regional growth to accommodate all future populations and the growth anticipated for Placer County (see Chapter 3: Physical & Socioeconomic Setting).

SACOG’s MTP/SCS land use pattern can be described in three ways: by Community Type, by Blueprint principle, and by Transit Priority Areas. SACOG’s MTP/SCS determined that travel patterns vary by community type due to the development location near employment centers, transit accessibility, and street pattern. The following section summarizes the community types and the estimated travel patterns. Appendix C contains the breakdown of land uses by community type and by jurisdiction. Figure 6.11-1 illustrates the boundaries of the community types within the SACOG region and in Placer County.

**Center and Corridor Communities**

Center and Corridor Communities Land uses in Center and Corridor Communities are typically higher density and more mixed than surrounding land uses. Centers and Corridors are identified in local plans as historic downtowns, main streets, suburban or urban commercial corridors, rail station areas, central business districts, or town centers. They typically have more compact development patterns, a greater mix of uses, and a wider variety of transportation infrastructure compared to the communities surrounding them. Some have frequent transit service, either bus or rail, and all have pedestrian and bicycling infrastructure that is more supportive of walking and bicycling than other Community Types.

**Established Communities**

Established Communities are typically the areas adjacent to, or surrounding, Center and Corridor Communities. Many are characterized as “first tier,” “inner-ring,” or mature suburban communities. Local land use plans aim to maintain the existing character and land use pattern in these areas. Land uses in Established Communities are typically made up of existing low- to medium-density residential neighborhoods, office and industrial parks, or commercial strip centers. Depending on the density of existing land uses, some Established...
Communities have bus service; others may have commuter bus service or very little service. The majority of the region’s roads are in Established Communities in 2012 and in 2036.

**Developing Communities**
Developing Communities are typically, though not always, situated on vacant land at the edge of existing urban or suburban development; they are the next increment of urban expansion. Developing Communities are identified in local plans as special plan areas, specific plans, or master plans and may be residential-only, employment-only, or a mix of residential and employment uses. Transportation options in Developing Communities often depend, to a great extent, on the timing of development. Bus service, for example, may be infrequent or unavailable today, but may be available every 30 minutes or less once a community builds out. Walking and bicycling environments vary widely though many Developing Communities are designed with dedicated pedestrian and bicycle trails.

**Rural Residential Communities**
Rural Residential Communities are typically located outside of urbanized areas and designated in local land use plans for rural residential development. Rural Residential Communities are predominantly residential with some small-scale hobby or commercial farming. Travel occurs almost exclusively by automobile and transit service is minimal or nonexistent.

**Transit Priority Areas**
A subset of the MTP/SCS housing and employment growth falls within what SACOG refers to as Transit Priority Areas (TPAs). TPAs are areas of the region within one-half mile of a major transit stop (existing or planned light rail, street car, or train station) or an existing or planned high-quality transit corridor included in the MTP/SCS. A high-quality transit corridor is a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours (Pub. Res. Code, § 1155.) SACOG uses this definition of TPAs because it coincides with the definition of Transit Priority Projects in SB 375 which, as discussed below, are eligible for CEQA streamlining benefits. TPAs are considered an overlay geography and do not necessarily correspond directly to Community Types. While substantial overlap exists between TPAs and Center and Corridor Communities, TPAs provide additional opportunities to realize the benefits of smart land use during the MTP/SCS planning period.

Figure 6.11-1 illustrates the relationship of the TPAs to the Community Types. Table 6.11-1 summarizes the expected housing and employment within the Placer County Transit Priority Area.
| Table 6.11-1  
Summary of Expected Housing and Employment within 2036 Transit Priority Areas¹ |
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Dwelling Units</strong></td>
<td></td>
</tr>
<tr>
<td>2012 Dwelling Units</td>
<td>17,005</td>
</tr>
<tr>
<td>2012-2036 New Dwelling Units</td>
<td>2,252</td>
</tr>
<tr>
<td>2036 Total Dwelling Units</td>
<td>19,257</td>
</tr>
<tr>
<td><strong>Employees</strong></td>
<td></td>
</tr>
<tr>
<td>2012 Employees</td>
<td>42,732</td>
</tr>
<tr>
<td>2012-2036 New Employees</td>
<td>15,147</td>
</tr>
<tr>
<td>2036 Total Employees</td>
<td>57,879</td>
</tr>
</tbody>
</table>

¹Note: Transit Priority Areas are those areas of the region within one-half mile of a major transit stop (existing or planned light rail, street car, or train station) or high-quality transit corridor. A high-quality transit corridor is a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours (Pub. Resources Code, § 21155). 

Source: SACOG Draft 2016 MTP/SCS, September 2015

Providing transportation choice increases opportunities for non-vehicle travel, an essential Blueprint principle and MTP/SCS component. The more people walk, bicycle, or take transit, the less they will drive, which reduces the mileage the average household drives in a day, commonly known as vehicle miles traveled (VMT). In the MTP/SCS, VMT reduction is the primary driver of GHG reduction. However, providing transportation choice without all of the other land use considerations discussed above would not result in as much VMT reduction as it does with it, and conversely the other land use factors would not reduce VMT as much as when paired with key transit investments. Travel patterns by region wide community type are summarized below:

- Residents of Center and Corridor Communities have the lowest per capita VMT for the MTP/SCS of all Community Types: 13.1 miles in 2012, decreasing to 11.9 miles by 2036. These rates are 27 to 30 percent lower than regional average. Centers and Corridors have the most compact land uses, which support walking and biking for shorter trips, and have the greatest access to transit, which provides alternatives to driving for longer trips.

- Residents of Established Communities have the next lowest per capita VMT: 17.3 miles in 2012, decreasing to 16.3 by 2036. Although Established Communities are neither as compact nor as well served by transit as Centers and Corridors, because of the proximity of Established Communities to existing developed areas, especially employment centers, there are more options for making shorter vehicle trips.

- Residents of Developing Communities have the next lowest per capita VMT: 21.4 miles in 2012, decreasing to 19.8 by 2036. These rates are 17 to 19 percent higher than regional average. Both of these levels are above the regional average (18.8 miles for 2012, and 17.0 for 2036). There are a number of factors related to these VMT rates. First, by 2036 the Developing Communities in the SCS are only partially built-out. Because these areas are in general at the edges of the urbanized area where factors like regional accessibility are below average, partial build-out limits the potential for land use and transportation factors to reduce VMT. Also, transit service in these areas,
while present in the SCS, is limited. As Developing Communities develop more fully, and the full value of planned land uses in these areas emerge, the VMT rates for residents should drop significantly.

- Residents of Rural Residential Communities and Lands not Identified for Development in the MTP/SCS are similar in VMT per capita: about 29.0 miles in 2012, declining slightly to about 28.7 miles in 2036. These rates are 62 to 69 percent higher than regional average. Because of the locations of these Community Types, options for shortening vehicle trips are few, and most of the areas have limited, if any, transit service.

Figure 6.11-2 illustrates the regional VMT per community type in the SACOG Region.

**Figure 6.11-2**
Weekday Household Vehicle Miles Traveled By Community Types in SACOG Region
Figure 6.11-3 illustrates the regional VMT by transit priority area in the SACOG Region.

**Figure 6.11-3**

*Weekday Household Vehicle Miles Traveled per Capita by Transit Priority Area in the SACOG Region*

Both written and financial support should be provided for infill and transit oriented projects in Placer County and transit priority areas wherever feasible. This strategy is consistent with Policy 9.A.5 which encourages “jurisdictions to design neighborhoods and communities to reduce vehicle miles traveled (VMT) and enable shorter length trips to be made using alternative modes.”

**Prioritize Reduced Emission Projects**

The Sacramento region, which includes Placer County, has the seventh worst air quality in the nation (*American Lung Association - for ozone, 2005*), with various air basins currently at non-attainment levels. With increasingly strict air quality conformity standards being implemented in the Sacramento region, ensuring that transportation projects do not significantly contribute to increased vehicle emissions is becoming more essential. Yet consistent growth pressures create demand for more transportation projects.

PCTPA continues to work with the PCAPCD and SACOG to develop plans that meet the performance standards of the California Clean Air Act and the Federal Clean Air Act Amendments. These agencies will also evaluate the impacts of each transportation plan and program on achievement of timely attainment of ambient air quality standards.
Support Regional Projects & Programs

Because the successes or failures of many transportation projects are shared across jurisdictional boundaries, coordination among local jurisdictions, SACOG, Caltrans, the California Transportation Commission, and other transportation agencies is essential in order to develop a regional planning and programming process that ensures that Placer County jurisdictions have maximum participation and control in the transportation decision-making process. Coordination of interjurisdictional transportation projects requires land use, air quality, and transportation planning considerations. By helping to facilitate the coordination and implementation of local, county-wide, and regional transportation programs, integrated transportation and land use planning can help to improve mobility and air quality while influencing sound land use decisions.

One of the objectives listed in this plan is to participate in state, multi-county and local transportation efforts to ensure coordination of transportation system expansion and improvements. Mechanism such as Memorandums of Understanding (MOU) and joint powers agreements between jurisdictions can be used to accomplish sound planning and implementation of multi-jurisdictional transportation projects and programs. PCTPA will strive to build coalitions with key private sector and community groups to involve the community in developing transportation solutions.

PCTPA is in a somewhat unusual position, representing the transportation interests from blend of urban and rural perspective. As such, PCTPA is represented in a number of forums and committees, including the Regional Transportation Planning Agency Group, Self-Help Counties Group, Regional-Caltrans Coordinating Group, California Transportation Commission, California Association of Councils of Government, and others; representing the interests of local jurisdictions in federal, State, and regional policy and funding decisions.

PCTPA also works very closely and continuously with the Sacramento Area Council of Governments (SACOG), as the Metropolitan Planning Organization (MPO) for the Sacramento region, to implement federal and State transportation programs. While many of the interactions are specified under a Memorandum of Understanding, regional interests and overlapping jurisdictions provide additional need for close coordination; for example, the update of the Metropolitan Transportation Plan, as well as the Sustainable Communities Strategy planning efforts. In addition, PCTPA works in close coordination with the Placer County Air Pollution Control District (APCD) in regards to transportation/air quality issues.

By promoting a transportation system which facilitates a balance of jobs and housing in Placer County, reduced environmental and air quality impacts, as well as increased transportation efficiency for all transportation modes can be achieved. Such a system should provide effective, convenient, and regionally and locally coordinated transit services that connect residential areas with employment centers, serve key activity centers and facilities, and offer a viable option to the drive-alone commute to, from, and within Placer County. It should also reduce single-occupancy vehicle trips during non-commute periods by presenting a safe, convenient, and affordable means of reaching shopping, recreation, and medical-
related destinations. Supporting projects that accommodate alternative modes of transportation such as pedestrian and bicycle activities and pursuing a regional approach to transit services in Placer County will be key components of this strategy.

**TRAVEL TRENDS**

MAP-21 shifted state and regional planning efforts to performance based planning and decision making in transportation investments. Performance based planning considers historical trends and future projections to qualitatively or quantitatively evaluate potential outcomes of transportation investments, choices, and the success of the transportation system. With the movement towards performance based planning requirements this RTP begins a movement in this direction to integrate more effective performance measures.

In addition to performance based planning, SACOG prepares a Sustainable Communities Strategy (SCS) along with their MTP pursuant to SB 375. The SCS is a scenario based planning component of the six-county MTP that considers complimentary land use and transportation alternatives. The scenario based planning is performance driven to achieve the greatest balance of transportation and land use benefits. As required by SB 375, SACOG’s MTP/SCS must achieve a reduction of 7% and 16% greenhouse gas (GHG) reductions by 2020 and 2036, respectively.

The following section summarizes the VMT trends and GHG reduction efforts as part of the RTP as a component to the overall SACOG six-county MTP/SCS.

Figure 6.11-4 illustrates the historical VMT estimates from Caltrans annual California Public Road Data report and the projected 2036 VMT according to SACOG’s SACSIM travel demand forecasting model. Table 6.11-2 compares the SACSIM base year (2012) and horizon year (2036) travel demand model VMT estimates. As shown VMT will increase; however, through the integrated land use plans of Placer County jurisdictions and transportation projects contained in the 2036 RTP, VMT per/capita is anticipated to decrease by 4.5% by 2036. This is in contrast to an approximately 41 percent increase in overall VMT and 48 percent increase in population during this same time period. The per capita decline in VMT is attributed to many factors such as transportation projects that improve mobility, preferences for travel (e.g., car vs. transit or bike), the interaction between land use options and transportation choices, and a greater balance in jobs and housing options in Placer County that keep local residents employed in the county.

Carbon dioxide (CO₂) from passenger vehicles closely tracks with GHG emissions. Table 6.11-3 compares the change in CO₂ emissions between 2012 and 2036. According to the EMFAC 2011 data provided by SACOG, a 0.56 percent reduction in CO₂ is anticipated by 2036. That is in comparison to overall VMT and population growth exceeding 40 percent during this same time period.
Figure 6.11-4
Placer County Vehicle Miles Traveled Trends

Table 6.11-2
VMT Projections Per Capita

<table>
<thead>
<tr>
<th>Measure</th>
<th>2012</th>
<th>2036</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMT (Daily)</td>
<td>9,770,592</td>
<td>13,762,652</td>
<td>40.9%</td>
</tr>
<tr>
<td>Population</td>
<td>346,984</td>
<td>512,045</td>
<td>47.5%</td>
</tr>
<tr>
<td>VMT / Capita</td>
<td>28.16</td>
<td>26.88</td>
<td>-4.5%</td>
</tr>
</tbody>
</table>

Source: SACOG SACSIM Travel Demand Forecasting Model, 2015

Table 6.11-3
CO₂ Emissions Projections Per Capita

<table>
<thead>
<tr>
<th>Measure</th>
<th>2012</th>
<th>2036</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger Vehicle CO₂ Emissions</td>
<td>5,618</td>
<td>8,243</td>
<td>46.7%</td>
</tr>
<tr>
<td>(weekday)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>346,984</td>
<td>512,045</td>
<td>47.5%</td>
</tr>
<tr>
<td>CO₂ / Capita</td>
<td>0.0162</td>
<td>0.0161</td>
<td>-0.56%</td>
</tr>
</tbody>
</table>

Source: SACOG EMFAC 2011 modeling results, 2015
INTEGRATED LAND USE, AIR QUALITY & TRANSPORTATION PLANNING ACTION PLAN

Short Range

1. Continue to coordinate with jurisdictions and agencies inside and outside of Placer County to help establish county-wide transportation priorities, implement studies and projects in cooperation with other counties, facilitate joint transportation projects, and anticipate impacts on Placer County from governmental decisions. (PCTPA, jurisdictions, SACOG, Caltrans, PCAPCD, CCJPA, Nevada County, Sacramento County, El Dorado County, Yuba County, Sutter County)

2. Review local general and specific plans, and land use entitlement applications for consistency with airport land use plans. (PCTPA, jurisdictions)

3. Seek grant funding to support transportation projects that benefit the environment, housing, sustainable communities, air quality, or reduced traffic congestion. (PCTPA, jurisdictions, PCAPCD, Caltrans)

4. Continue to participate in the SACOG regional Blueprint and Sustainable Communities Strategy planning efforts. (PCTPA, jurisdictions, SACOG)

5. Develop guidelines and/or implement policies to prioritize transportation projects that have air quality benefits, while providing cost effective movement of people and goods. (PCTPA, PCAPCD)

6. Provide support for projects consistent with Placer County’s Ozone Reduction Ordinance, and also lead to reduced Greenhouse Gas emissions. (PCTPA, PCAPCD)

7. Encourage jurisdictions to develop transportation corridors that complement Blueprint planned and Sustainable Communities Strategy growth patterns, infill development, economic development programs, and requirements of infrastructure to support planned land uses. (PCTPA, jurisdictions)

8. Encourage jurisdictions to review and assess the impact of new development proposals consistency with Blueprint principles, and the impact on local circulation plans and transit system demand and supply. (PCTPA, jurisdictions, transit operators)

9. Continue active participation in local and regional coordinating groups as well as statewide forums to maximize opportunities for transportation improvements in Placer County. (PCTPA)

10. Provide written support for development projects which may increase residential and employment densities near existing transit and rail stations, as well as future rail
stations that may emerge as a result of expansion of the Capitol Corridor service to Colfax, Soda Springs, Truckee, and Reno/Sparks. (PCTPA)

11. Plan for new/expanded facilities such as pedestrian and bicycle facilities, park-and-ride lots, and intermodal transfer stations where development projects will provide increased residential and/or employment densities. (PCTPA, jurisdictions, Caltrans, CCJPA)

12. Encourage thorough examination, context sensitive design, and mitigation of transportation impacts when planning and constructing transportation improvements through or near residential communities. (PCTPA, jurisdictions)

13. Work with jurisdictions to include the needs of all transportation users in the planning, design, construction and maintenance of roadway (complete streets) and transit facilities where feasible. (PCTPA, jurisdictions, transit operators, Caltrans)

14. Encourage jurisdictions to consider multi-modal transportation facility proximity when siting educational, social service, and major employment and commercial facilities. (PCTPA, jurisdictions, transit operators)

15. Provide information and support services to jurisdictions regarding the countywide transportation impacts of local land use decisions. (PCTPA, jurisdictions, transit operators, Caltrans)

16. Where possible, support jurisdictions’ efforts to maintain their adopted Level of Service (LOS) on local streets and roads in accordance with the applicable general plan Circulation Element. (PCTPA, jurisdictions)

17. Encourage jurisdictions to require land uses which produce significant trip generation to be served by roadways with adequate capacity and design standards to provide safe usage for all modes of travel. (PCTPA, jurisdictions, Caltrans)

18. Encourage jurisdictions to include transit-oriented development Blueprint principles in designing neighborhoods and communities to reduce vehicle miles traveled (VMT) and to deal with more short trips. (PCTPA, jurisdictions, transit operators, Caltrans)

**Long Range**

1. Integrate land, air, and transportation planning, in order to build and maintain the most efficient and effective transportation system possible while achieving the highest possible environmental quality standards. (PCTPA, jurisdictions, SACOG, PCAPCD, SMAQMD)
2. Continue to coordinate with SACOG, the Placer County Air Pollution Control District, and the Sacramento Metropolitan Air Quality Management District to ensure transportation projects meet all applicable budgets for air quality conformity standards. (*PCTPA, PCAPCD, SMAQMD, SACOG*)

3. Encourage the use of general plan designations, zoning controls, access management, acquisition, development easements, and development agreements to help secure future right of way for essential transportation corridors. (*PCTPA, jurisdictions*)

4. Coordinate and arrange for regional workshops focused on the incorporation of “smart growth” and transportation project planning.

**INTEGRATED LAND USE, AIR QUALITY & TRANSPORTATION PLANNING PROJECTS**

Unlike in prior Action Plan sections, there are no projects included in the 2036 RTP that are specifically identified as “integrated planning projects” and consequently are not depicted as a proportionate share of total expenditures. There are projects that are consistent with this Action Plan, which are included in the other sections. Examples of these projects include the following improvements:

- City of Roseville Safe Routes to School Toolkit Expansion (see TSM Action Plan)
- Electric Vehicle Charging and Alternative Fuels Infrastructure (see ITS Action Plan)
- PCTPA Planning, Programming, and Monitoring (PPM) (see TSM Action Plan)
- Capital Corridor Third Track Project from Roseville to Sacramento (see Passenger Rail Action Plan)