

# CHAPTER 4

## REGIONAL TRANSPORTATION ISSUES & ENVIRONMENTAL CHALLENGES

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The purpose of this chapter is to introduce the various transportation modes and their interrelationships, and to discuss the key regional transportation issues and environmental challenges currently facing Placer County and the greater Sacramento metropolitan area. Subsequent chapters will build on this information, identifying overall goals and objectives for the transportation system, then addressing the specific needs and developing an action plan for each transportation mode.

### 4.1 Modal Issues

Placer County is a growing, dynamic, and diverse community. Population, housing, employment, and other key parameters all show continuous, significant growth. This growth brings increasing demands on our transportation systems to maintain and enhance safety, offer multimodal transportation options, preserve existing resources, reduce congestion, improve air quality, and coordinate efforts both locally and regionally.

#### HIGHWAYS / STREETS / REGIONAL ROADWAYS

##### Maintenance and Rehabilitation

As traffic increases, the issue of roadway rehabilitation and maintenance, including vegetation management, becomes increasingly important to ensure safe and effective travel. In particular, investing in the maintenance of the existing infrastructure will be a focus of road projects during the planning period. Roadways, bridges, and the associated infrastructure have a limited life, and funding must be available to maintain and, if needed, rehabilitate these facilities. In addition, rehabilitation projects may be needed to accommodate changes in travel patterns. Interchanges may need to be upgraded to accommodate more and varying types of traffic. Additional paving work may be needed to prevent the faster breakdown of pavement integrity resulting from increased truck traffic. Lanes may need to be added and shoulders may need to be widened or added.

Providing sufficient funding when it is needed to keep up with wear and tear and changes in traffic demands/patterns is crucial. A 1999 survey of the unfunded rehabilitation, maintenance, and operations needs of the existing multi-modal transportation system resulted in a 20-year cost estimate of over \$225 million. As maintenance and rehabilitation projects are undertaken, it will be important to include all modes in their design so that pedestrians, bicyclists, drivers, truckers, and transit can move efficiently and safely. These improvements will necessarily be coordinated with land use and air quality decisions and considerations.

## **Expansion**

In order to address the transportation needs associated with existing and projected growth, PCTPA and the local jurisdictions are planning for expansion and construction of the existing roadway systems and new regional connections. These plans, detailed in Chapter 6 – Action Element, focus on regional connectors such as Interstate 80, State Route 65, State Route 49, and the Placer Parkway. These efforts involve regional partnerships with SACOG, Caltrans, the private and public sectors, local jurisdictions, and all users (present and future) of these roadways.

## **Complete Streets**

Governor Schwarzenegger signed Assembly Bill 1358 (AB 1358), the California Complete Streets Act of 2009, into law in September 2008. AB 1358 requires a city or county's general plan to identify how the circulation of all users of the roadway, including motorists, pedestrians, bicyclists, children, seniors, individuals with disabilities, and users of public transportation will be accommodated. Accommodations may include sidewalks, bike lanes, crosswalks, wider shoulders, medians, and bus turnouts, among other complete street type improvements. AB 1358 is also a key strategy to help improve air quality and reduce GHG emissions. Further, integrating complete street improvements into the initial design of a project is more cost-effective than making retrofits later.

## **PUBLIC TRANSIT**

Placer County ranges from sparsely populated rural areas to more densely populated urban areas. With the county's increasing population and enlarging urban areas comes an increasing demand for transit service to more and larger areas. As the emphasis shifts from local bus service to regional services, the creation of multi-jurisdictional agreements for ongoing funding of transit will become even more important. The convenience, comfort, frequency, accessibility, and reliability of transit services will play a key role in encouraging transit use as opposed to drive-alone commuting. In particular, convenience can be provided by designing transit services that are as seamless as possible. Transit can also play a role in mitigating the jobs/housing imbalance by providing tailored commuter services such as that proposed for implementation between Reno and North Tahoe. Bus Rapid Transit services along selected corridors may prove helpful in enhancing convenience and providing a viable alternative to driving.

Other more specific factors also contribute to the need for increased transit:

- The Americans with Disabilities Act requires the expansion of paratransit services to specific areas complementary to fixed-route service.
- Jobs Access programs are expected to have a significant impact on local transit systems as the state enacts policies and programs to require more welfare recipients to get jobs.
- State and federal clean air legislation and transportation demand management principles call for the increased use of transit to offset and reduce automotive vehicle emissions. Commuter bus service to provide quick connections between Auburn, Roseville,

Rocklin, Lincoln and Downtown Sacramento has been a consistent need cited by Placer County citizens in the Unmet Transit Needs process.

- The aging of the population also contributes to the demand for transit and paratransit services, as people become unable to drive themselves.
- As the entire Sacramento region grows, interregional connections between suburban areas such as South Placer and Rancho Cordova will become increasingly important.

## **PASSENGER RAIL**

The Capitol Corridor train service, which currently has its eastern terminus in Auburn, has been experiencing significant growth in ridership. Studies of Regional Rail, a commuter service that would supplement the Capitol Corridor service providing half-hour train frequency during commute periods, and the potential for extension of Capitol Corridor service to Reno are currently underway. Given the anticipated increases in congestion along the Interstate 80 corridor, the Capitol Corridor and Regional Rail train services can potentially play a significant role in removing intercity drivers and commuters from that corridor. Close coordination with Union Pacific Railroad and significant additional funding will be needed in order to procure equipment and construct track improvements required for more frequent trains.

Another possible corridor for rail service may be the segment north from Sacramento to Lincoln and Marysville. This corridor was explored in 1995, and, under current and projected growth conditions, may indeed now be feasible. Such service could potentially relieve the growing congestion on Highway 65.

To be truly effective, rail improvements will need to incorporate convenient access at multimodal stations including adequate park-n-ride capacity, bus/rail transfer capability, secure bike storage, and safe pedestrian/handicapped access.

## **AVIATION**

PCTPA will continue to support the local jurisdictions, which operate airports (Lincoln, Auburn, and Placer County) in their efforts to identify and utilize available funding at the state and federal level for airport infrastructure improvement and expansion as warranted. These projects are typically included in the capital improvement plans for each jurisdiction. Aviation will probably continue to play a key role in moving goods throughout the region and beyond.

PCTPA's other role with regard to aviation will be to continue to function as the Airport Land Use Commission, ensuring that local land use in the vicinity of airports is compatible with airport operations and promote the safety of all concerned.

## **GOODS MOVEMENT**

As population increases along with traffic, the ability to move goods efficiently and safely within and through Placer County will be an ever-increasing challenge. Efficient goods movement is essential for the local and regional economy.

Most goods movement in Placer County is provided by truck transportation. Interstate 80 is one of the most important truck routes in Northern California. In 2002, truck traffic on I-80, as a percentage of Average Annual Daily Traffic, ranged from 5.75% to 18.95% on various segments in Placer County.

With the growth of intermodal container freight at the Port of Oakland, rail is playing an increasing role in ensuring efficient goods movement. This change creates several challenges, including the following:

- Ensuring the safety of at-grade railroad crossings.
- Anticipating longer waits at railroad crossings on key arterials.
- Avoiding conflicts between freight and passenger rail services.
- Promoting freight yard expansions and other capital improvements needed to accommodate this growth.

Regional air freight, utilized extensively by manufacturers in Roseville, Rocklin and Lincoln, is handled either at Sacramento International Airport or at Mather Airport. Because air freight is market-driven, it is impossible to reliably predict the nature and extent of future demand. It will be important to consider the needs of all road users (e.g., residents, truckers, buses, bicyclists) when planning for goods movement.

## **NON-MOTORIZED AND LOW-SPEED TRANSPORTATION**

As mentioned, bicyclists and pedestrians share the use of transportation facilities with motorized vehicles. Non-motorized and low-speed transportation can provide a viable transportation choice when design of new and/or rehabilitated facilities considers their needs for safe travel, direct routes, and off-road options. Non-motorized and low-speed travel, when it is carefully planned for, can be an increasingly used mode. To that end, this plan recommends inclusion of non-motorized and low-speed travel needs in all phases of both land use and transportation planning and design.

## **TRANSPORTATION SYSTEMS MANAGEMENT (TSM)**

PCTPA is the Congestion Management Agency (CMA) for Placer County. As such, staff works with the Placer County Air Pollution Control District (PCAPCD), local agencies, and employers to promote alternatives to drive-alone commuting. As part of these TSM efforts, PCTPA continues to implement its Congestion Management Program (CMP), which offers various sources of information on alternative transportation modes, coordinates public transit marketing campaigns for all of Placer County's transit operators, and provides cash incentives for those who

carpool, vanpool, bicycle, or ride transit through such programs as a the Guaranteed Ride Home program, Spare the Air, and Bucks for Bikes.

The PCAPCD provides funds collected from vehicle registration fees for projects that improve air quality, including PCTPA's Congestion Management Program (CMP). The PCAPQD has also funded the Freeway Service Patrol in Placer County, which reduces congestion and emission of pollutants by providing assistance to disabled motorists on Interstate 80 between the Placer / Sacramento County line and Sierra College Boulevard. PCTPA and the PCAPQD work in partnership with the Sacramento Metropolitan Air Quality Management District to conduct the Spare the Air campaign, which educates the public about air quality issues and promotes activities and habits that will improve air quality.

In the future, air quality and transportation planning organizations as well as local jurisdictions will need to continue to work together to creatively identify and fund ways to reduce mobile emissions so that the Sacramento region can achieve federal clean air standards. Achievement of these standards will play a key role in allowing important transportation infrastructure improvements to move forward.

## **RECREATIONAL TRAVEL**

The transportation needs of the recreation and tourism industries are increasingly impacting the transportation infrastructure. The natural and cultural resources draw visitors. This increases the need to plan for the unique demands for recreation-oriented travel since there are peak seasons and times of day different from the typical commute patterns. One of the challenges will be to provide a public transportation system that is convenient, flexible, and reliable enough to encourage visitors not to drive to their destination. Linking different modes seamlessly (air, rail, bus, shuttles) is also important for providing transportation to scenic and recreation venues.

## **INTEGRATED LAND USE, AIR QUALITY, AND TRANSPORTATION PLANNING**

One of the prime motivations for the establishment of PCTPA in 1975 was to provide a forum for interjurisdictional coordination on countywide and regional issues. Although not technically a transportation mode, interjurisdictional coordination is a key component of an effective and efficient transportation system, as it is necessary to ensure connectivity of roads, transit, bicycle and pedestrian paths, and other transportation systems between communities.

In a time of scarce governmental resources, coordination is even more important to ensure that those funds that are available 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 onto another.

Coordination both within Placer County and with "outside" jurisdictions in the Sacramento region, and even the Bay Area, 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, SACOG, Placer County Air Pollution Control District (PCAPCD), Sacramento Metropolitan Air Quality Management District (SMAQMD), and others will also play an important role.

Another aspect of coordination is that between transportation and land use planning. The planning agencies and jurisdictions can 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 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 investment in sync.

## 4.2 Regional Transportation Issues

### INTER-JURISDICTIONAL COORDINATION

Inter-jurisdictional coordination is a key component of an effective and efficient transportation system. Such coordination is necessary to ensure connectivity of the transportation system and access between communities. Coordination is also critical to addressing transportation-related regional impacts, such as air quality and traffic congestion. In a time of limited funding, coordination becomes even more important to ensure that those funds that are available are spent in the most efficient and effective manner possible. Inter-jurisdictional 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 onto another.

### CONGESTION

As Placer County continues to grow, congestion on Interstate 80, state highways, and local roads continues to increase. Commute times become longer, and the capacity of many roadways during peak periods is exceeded, slowing traffic to a crawl. This diverts regional and interregional auto and truck traffic to parallel local roadways that are not equipped to handle the increased traffic volumes.

From the public's perspective, the most noticeable effect of congestion is increased traffic delay. Rush hour traffic no longer occurs during the morning and evening peak periods but extends throughout the day. Truck traffic and recreational travelers are especially sensitive to congestion due to tightly scheduled freight distribution procedures and personal activities.

It is estimated by FHWA that roughly half of the traffic congestion experienced is what is known as recurring congestion – caused by recurring demands that exist virtually every day, where road use exceeds existing capacity. The other half is due to non-recurring congestion – caused by temporary disruptions such as, traffic incidents, work zones, weather and special events.

A mix of strategies will be necessary to address these congestion and capacity issues:

- Improving the availability, reliability, convenience, and frequency of public transportation;
- Increasing the capacity of existing roadways and interchanges;
- Promoting commute alternatives that remove vehicles from the road (e.g., telecommuting, bicycling, transit); and,
- Implementing bypasses that move traffic around congested areas and/or new roadways that connect growing residential areas to jobs.

Successful implementation of these strategies will require significant additional funding, careful coordination with land use changes, and calculation of positive and negative impacts on air quality.

## **GROWTH**

The Placer region continues to face urban growth and contains some of the fastest growing communities in California. Between 1990 and 2000, the Census-defined urbanized area grew significantly eastward from its previous terminus in Rocklin and Granite Bay to include Loomis, Auburn, and the unincorporated North Auburn area. Between 2000 and 2005, Placer County as a whole grew by over 20%. Between 2005 and 2027, the total county-wide population is projected to grow at approximately 2% annually, for an estimated overall growth of more than 44%.

Despite the current slow down in residential growth and the realignment occurring in the Sacramento region's economy, projections show that housing and employment will increase significantly. Between 2005 and 2035, the numbers of households and jobs are each projected to grow by over 85% throughout Placer County. New growth areas are being considered in western Placer County. Along with continuing commercial and industrial growth, these trends indicate that transportation within, into, and out of Placer County will be key issues. Balancing the types and location of housing available with the types and location of available employment will continue to be important factors that play into both land use and transportation planning over the next twenty-five years.

In addition to this RTP, jurisdictions in Placer County are also addressing growth in their communities by updating their general plans to address the long-term future and provide policies and strategies to meet those needs.

Mobility is a major concern for seniors, who are a growing portion of the State's and Placer County's population. By year 2025, the over-65 population in California will increase by 52 percent, greater than the total population growth percentage. Those over 80 years of age, is expected to increase by 62 percent. This means there will be a larger than ever group of people who are dependent on family, friends, or public transportation services for mobility, and who in some cases have serious limited mobility and life activities as a result of this dependence.

## TRANSPORTATION PLANNING

The 2035 RTP is a plan intended to continue the vision established in the 2027 RTP and also included in the 2035 MTP. The 2035 RTP will provide a bridge to the next update, due in 2015. The next RTP will follow the development of the next MTP. SACOG adopted the 2035 MTP in March 2008 and anticipates adopting the next MTP by December 2011. A number of regional transportation planning issues will be addressed as part of this MTP update, which is currently underway. These issues will play a significant planning role in the development of policies, projects and program activities for the next RTP. These issues are as follows:

- Update of the regional growth forecast in employment (type), population, and demand for housing through year 2050;
- Update of the regional financial plan due to a slower economy and growth rates, both which affect many of the revenue streams, especially at the state and local level;
- Inclusion of a regional greenhouse gas emission target, provided by the California Air Resources Board (CARB);
- Meeting the requirements of SB375 that the MTP must meet a regional greenhouse emissions target provided by CARB through a Sustainable Communities Strategy (SCS) or through an Alternative Planning Strategy (APS) that meets the target; and
- Meeting the requirements of SB375 that the Regional Housing Needs Allocation process now must be consistent with the MTP for the first eight years of growth under the SCS, which will affect local jurisdiction allocations for market rate and affordable housing.

## TRANSPORTATION FUNDING

Funding for transportation projects originates at federal, state, and local levels. Detailed descriptions of these funding sources are provided in the Financial Element and Appendix P of this RTP.

The 2035 RTP begins in a period of revenue uncertainty, declining economic outlook and high unemployment, creates an environment of increasing funding risk. Limited flexibility in transportation funding creates further challenges.

At the federal level, the reauthorization of SAFETEA-LU, a six-year bill for transportation funding, will determine whether the trend of increasing levels of federal funding will continue. In the near term, several transportation projects received a one-time boost through investments made possible by the federal stimulus package, the American Recovery and Reinvestment Act (ARRA) of 2009.

Over the past decade, the shrinking cost effectiveness of the federal and State gasoline tax has put transportation projects, maintenance and operating support at risk.

At the State level, the legislature continues to deal with a general fund deficit at nearly \$20 billion, on top of deficits of more than \$40 billion in the past two years. State transportation funding has fluctuated wildly over the past several years. Early in the decade, the State raided

transportation funds to balance their budget, which resulted in project programming delays for STIP projects. The passage of Propositions 1A and 1B in 2006 spurred a significant cash influx to transportation, but by 2009 was in jeopardy of shutting down because of continuing state budgetary issues.

The instability of state funding is best summarized in the following quotation from the California Transportation Commission's Annual Report to the Legislature, December, 2004:

*California's transportation program is in crisis and on the verge of collapse. Where the state once had a transportation program funded almost exclusively from user fees protected by the California Constitution (gasoline taxes and weight fees), we now have a program dependent primarily on motor fuel sales taxes, without constitutional protection. For each of the last 4 years, transportation funds have been taken to close the General Fund deficit. For the last 2 years, the California Transportation Commission has been forced to stop making new allocations to projects from all three of the major components of the state transportation program, the State Transportation Improvement Program (STIP), the State Highway Operation and Protection Program (SHOPP), and the Traffic Congestion Relief Program (TCRP). Cities and counties have not been receiving the state subventions committed to them in statute for local road rehabilitation and repair and state transit assistance.*

*In all, these programs account for about \$2.6 billion in state and local transportation projects that should be ready to go to construction this year but will not for lack of funding. Reduced spending on pre-construction work means the delay of billions more in future years. This represents a loss to California's economy in terms of reduced productivity, increased congestion, increased user costs, and increased system operating and maintenance costs. Applying standard economic multipliers, the work not going to construction this year alone will result in the loss of well over 50,000 jobs.*

At the local level many transportation projects substantially depend on development fees. All of the jurisdictions in Placer County implement local impact fees so that new development "pays its way" for additional infrastructure required to accommodate it. PCTPA has taken the lead in developing and implementing the South Placer Regional Transportation Authority (SPRTA), which now collects a transportation mitigation fee on all new development that impacts regional roadways in Roseville, Rocklin, Lincoln, and south Placer County. This effort provided the framework for a regional strategy for funding transportation projects. At the local level, cities and counties may provide funds for transportation projects. These may include dedicated sales taxes, redevelopment funds, general funds, special grants, or other sources.

The housing slowdown has reduced the flow of developer fees in most jurisdictions; thus postponing transportation projects funded with those fees until growth picks up again, as well as diminishing the population growth and traffic for which those projects are needed.

There are many more transportation projects 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. Innovative approaches to transportation funding and development of new funding sources will also be needed to provide for the multi-modal transportation needs of the residents of Placer County. Some of these possible approaches include: a dedicated sales tax, increased existing taxes such as the gasoline/fuel tax, expansion of developer impact fees, and public/private partnerships.

A funding shortage offers opportunities for those who can deliver projects because scarce funds tend to flow to projects ready to be delivered, rather to projects still working on delivery. Delivering projects within estimated cost, scope and schedule will remain a key issue in transportation policy for many years to come.

## **TRANSPORTATION SAFETY & SECURITY**

Ensuring the safety and security of all travelers on all modes is a theme throughout all of the transportation projects in this plan. Safety and security issues will be incorporated from the policy and standards level through to implementation of safety and security improvement projects. Such projects might include rail crossings, addition of shoulders where little or none exist, bikeways, newly designed intersections and interchanges that reduce the potential for car/bicycle collisions, pedestrian and bicycle bridges and walkways, airport improvements, interchange improvements/upgrades, additional transit shelters and benches, signal additions, ITS and/or video surveillance improvements on transit vehicles and at rail stations.

Safety and security projects are a high priority when it comes to transportation. State and federal funding exist for safety and security improvement projects for highway, public transit, passenger rail, safe routes to schools (including bicycle and pedestrian modes), bridge rehabilitation, airport upgrades, and land use plans for airport influence areas. However, the need for safety and security improvement projects will continue to far exceed the funding available.

## **4.3 Environmental Challenges**

### **AIR QUALITY**

One of the primary sources of air pollution in California is vehicle exhaust. As a result, transportation and air quality are closely linked. In fact, the Sacramento region, including Placer County, has been designated as a non-attainment area for air quality standards, which are specified by the California Clean Air Act of 1988 and the federal Clean Air Act Amendments of 1991. PCTPA works closely with the Sacramento Area Council of Governments (SACOG) and the Placer County Air Pollution Control District (PCAPCD) to assess the impact of all transportation projects on air quality in the region. Since 1991, Placer County has been eligible to receive an apportionment of Congestion Mitigation and Air Quality (CMAQ) funds from the federal government for projects designed to reduce congestion and improve air quality. Since that time, PCTPA has approved millions of dollars in CMAQ funds for alternatively-fueled transit buses, transit facilities, bikeways, rail station improvements, and pedestrian safety projects.

## **CLIMATE CHANGE, GLOBAL WARMING, AND GREENHOUSE GAS EMISSIONS**

California leads the nation in an effort to mitigate the impacts of motor vehicle generated Greenhouse Gas (GHG) emissions. One of two recent legislative efforts to achieve this is Assembly Bill 32 (AB 32), signed into law as part of the California Global Warming Solutions Act of 2006. AB 32 requires that by 2020 the state's GHG emissions be reduced to 1990 levels, about a 25 percent reduction under business as usual estimates. The second legislative effort, Senate Bill 375 (SB 375), is more focused on reducing GHG emissions through the regional transportation planning efforts of the Metropolitan Planning Organization (MPO). PCTPA will work closely with SACOG to reduce GHG emissions through the MTP planning process.