Stanislaus Council of Governments

# 2011 Regional Transportation Plan

Planning for the Transportation Needs of Tomorrow, Today!

Stanislaus Council of Governments 1111 | Street, Suite 308 Modesto, CA 95354 (209) 525-4600



www.stancog.org



July 2010

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# A MESSAGE FROM THE EXECUTIVE DIRECTOR

I am proud to present the **Stanislaus Council of Governments' 2011 Regional Transportation Plan (RTP)**. The RTP is not just a planning document; it is also our region's statement of how we intend to invest in the transportation system. The RTP is both a short-range and long-range strategy that is intended to lead to the development of a truly integrated transportation system that facilitates the efficient movement of goods and people.

The 2011 RTP is a step-stone or foundational update to the landmark update that will occur for the 2015 RTP. The State of California has recently passed legislation that will require future RTPs to address greenhouse gas emissions, and attempt to reduce them through a Sustainable Communities Strategy (SCS) by integrating land-use planning with transportation planning. No longer will transportation be planned and implemented singularly. The legislation calls for the alignment of three critical policy areas: transportation, land-use and air quality.

As such, the 2011 RTP sets the ground work for this transportation planning paradigm shift. StanCOG has introduced two foundational concepts of the RTP which have lead to the development of every aspect of the plan. These concepts are Fiscal Constraint and System Planning. Fiscal Constraint is imperative because the region cannot improve the transportation system using money that we do not have. System Planning, which analyzes all components of the transportation system across the entire county, ensures the system is meeting the needs of all users, is our key role as the Metropolitan Planning Organization (MPO) and Regional Transportation Planning Agency (RTPA).

Transportation helps shape an area's economic health and quality of life. A primary concern of the 2011 RTP is to better serve every transportation need, not just focus on the vehicular needs of the traveling public. And for the foreseeable future, the primary mode of travel will continue to be single-occupancy vehicles due to the relatively rural nature of the County, the goal of the RTP is to expand transportation options to all populations. Input into the planning process is paramount to the success of the plan and the region. Throughout the process, StanCOG sought input from the public, our member agencies and associated State and Federal agencies to help develop the 2011 RTP.

There are many issues facing the transportation system today, including high growth rates, an aging transportation system and the availability of funding. That is why the need for a RTP is greater than ever. The transportation needs of the region will always outweigh the funding available; which is why the region must plan well and maximize the benefit of each dollar spent on the transportation system. The 2011 RTP is the blueprint to accomplish this goal.

I submit to you StanCOG's 2011 Regional Transportation Plan.

Vince Harris, Executive Director

# EXECUTIVE SUMMARY

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Almond Orchard in Stanislaus County, California Photo courtesy of Studio Warner

Pres Mill Traile





Reducing congestion, commute times, and carbon emissions caused by growth is paramount to achieving a better quality of life. The State and the County are at a pivotal moment in creating a new transportation pattern integrated with land use planning. Everywhere, urban regions have been called on to develop plans for more efficient land use and development.

This growth presents an opportunity; we can utilize available monies to invest more wisely in our transportation system by integrating with our land use planning to make Stanislaus County an even better place to live and work. If we modify how we grow – if we grow smarter – we can make our region less congested and more economically competitive, while reducing greenhouse gas emissions and protecting our agricultural land and other natural resources.







# TRENDS

Stanislaus County and the entire San Joaquin Valley – comprised of eight counties, including San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and Kern – is one of the fastest growing regions in California. The population in the San Joaquin Valley has surged to approximately 3.9 million due largely to demand for housing within commuting distance of the San Francisco Bay area, Sacramento, and Los Angeles. It is estimated that the population will nearly double to 7.9 million by 2040. This growth has led to increased pressures on the transportation system.

Figure 1.1 shows a map of Stanislaus County.

The region currently houses more than 10 percent of California's population. Of these 3.9 million people, more than two million live in the three counties that border the major metropolitan areas north and south of the Valley. Approximately 1.2 million residents live in San Joaquin and Stanislaus counties adjacent to the San Francisco Bay Area. As the population of Stanislaus has grown, the form of development and use of land have changed. Stanislaus is increasingly a mix of urban, rural, and suburban communities, with the bulk of the population growth occurring in low-density suburban neighborhoods. However, agricultural acreage is still dominant in the County's landscape.

A large percentage of residents in the County are commuters to Sacramento and the Bay Area. As a result, roadways throughout the County have been subject to increased use and the agencies within the County have been faced with everincreasing costs associated with roadway improvements and maintenance of the interregional road system. In recent years, Stanislaus County has been forced to deal with increased transportation needs and funding opportunities that are more limited than those in neighboring job-rich regions.



STANCOG A REGIONAL Z TRANSPORTATION PLAN ₽ 2011 ↔



Turlock High School, Turlock, California

> The transportation network in Stanislaus County and the San Joaquin Valley are essential to our quality of life and the productivity of the State's economy. Stanislaus County maintains more than 1,500 miles of roadways within the unincorporated area of the County, and the incorporated cities maintain another 1,200 miles. Regrettably, the Valley's once great transportation system is losing the battle against time, growth, weather, and wear.

The system is suffering from decades of demand and underinvestment, and costs to improve and maintain the system are substantial.

Further, due to California's economic problems and the leakage of transportation-related funds, the region struggles to meet the increased transportation needs of businesses, residents, and visitors.



# **A BETTER PLAN**

The 2011 Regional Transportation Plan (RTP) strives to create a plan that addresses the many issues facing the region caused by growth pressures and persistent underinvestment in the transportation network.

The key to the RTP is focusing on improving the transportation system by relieving congestion, especially in heavily used corridors, increasing emphasis on alternate modes of transportation, and increasing the ability to move goods throughout and beyond the region. This will be accomplished by maximizing the benefit of the available transportation funding.

Based on the "mission statement" above, StanCOG is developing the 2011 RTP utilizing two foundational concepts: Fiscal Constraint and System Planning.

The limited availability of transportation funds for the Stanislaus region requires a high degree of project prioritization so that the region, cities, and county can benefit from all modes of transportation within a financially constrained environment. Fiscal constraint allows jurisdictions to focus their efforts on projects that bring about real change and that fully support RTP goals and objectives for all modes.

System planning is a well-known concept that StanCOG has adopted for the 2011 RTP update. The intent is to avoid simply a list of projects with little focus on their purpose, need, or overall connectivity; instead, the plan looks at the region as a whole, incorporating traffic pattern data and focusing on the areas that need to be improved. This RTP places a greater emphasis on addressing the key functions of the agency, including safety, congestion management, air quality, and mode choice.

These foundational concepts have directed the creation of goals for the 2011 RTP. The goals are intended as specific guidance to improve the transportation system and the region as a whole. StanCOG has created five goals:

- *Mobility*: Improve the opportunity and ability of people to travel between jobs, schools, and homes; and to efficiently move goods.
- Safety and System Preservation: Operate and maintain the transportation system to ensure public safety and to protect the region's transportation investment.
- **Environmental Quality**: Consider the environmental impacts when making transportation investments, and minimize direct and indirect impacts on the environment for cleaner air and natural resources.
- Economic/Community Vitality: Foster job creation and business attraction, retention, and expansion by improving the movement of goods, services and our local workforce while revitalizing our communities.
- Social Equity: Promote and provide equitable opportunities to access transportation services for the full spectrum of the population. Ensure that economically, physically, and socially disadvantaged groups have access to transportation services and share in benefits of transportation improvements.



# APPROACH

The RTP is the region's blueprint for future transportation improvements and investments based on specific transportation goals, objectives, and actions defined by StanCOG, the community, and its elected officials.



Recognizing the challenges and needs facing the region, StanCOG developed a fresh approach in preparing the RTP, which began with the two foundational concepts, referenced previously. To ensure fiscal constraint, we began the RTP update process by preparing the revenue forecast, a compilation of all available transportation funds to the region over the life of the plan. Typically, the process begins by identifying the transportation needs of the region by preparing the project list, but this often leads to fiscally unconstrained plans, as needs always outweigh available funds. We could better maximize each dollar spent by understanding the funds available to the region first, then preparing the project

list based on these funds. The Congestion Management Plan (CMP) process is one of the elements used to focus funds on needed projects.

# Coordination

The 2011 RTP is the product of collaboration between StanCOG; all 10-member jurisdictions, including the county government and the nine incorporated cities within the County; Caltrans; and a wide range of committees, interest groups, and other agencies.

With this RTP, StanCOG has established better communication and cooperation with the member jurisdictions and the public to develop a plan that meets the needs of all travelers and businesses in the region. StanCOG involved these groups early in the process, and their involvement led to the development of the plan, not just the review of completed drafts.

StanCOG utilized—to a greater extent than in the past—the standing committees, including the Bicycle Pedestrian Advisory Committee (BPAC), the Technical Advisory Committee (TAC), the Citizens Advisory Committee (CAC), the Social Services Transportation Advisory Council (SSTAC), and the Management and Finance Committee (MFC) to develop ideas, goals, and concepts that led to the development of the RTP. Appendix A discusses the StanCOG committee structure.

In addition, StanCOG created two ad hoc committees to provide further input and feedback into the RTP development process. The Planning Ad Hoc committee addressed system planning and other future planning issues, while the Public Works Ad Hoc committee addressed fiscal constraints and other technical issues regarding the projects listed in the RTP.



# **RELATED PLANNING EFFORTS**

Regional transportation planning, which is the responsibility of Metropolitan Planning Organizations (MPOs) such as StanCOG, is at the beginning of a new stage. Quality of life concerns associated with growth pressures, air quality, and other issues are driving communities throughout the State of California to make growing smarter a top priority. Nowhere is this mission more important than in the San Joaquin Valley, where growth is among the fastest in the State.

With the creation of Blueprint planning and smart growth/air quality policy such as Assembly Bill (AB) 32 and Senate Bill (SB) 375, planning efforts and legislation are calling on the State's urban regions to develop plans to create a more efficient land use pattern. The resulting "sustainable communities" are expected to be denser and better connected, thus fostering a balance between the social, economic, and environmental desires of the community.

The intent of the new legislation, which is also a goal of StanCOG, is for MPOs to be on the forefront of smart growth principles. StanCOG does not want to encourage business as usual in transportation and land use planning, particularly where it is not working and leads to unintended consequences such as congestion, poor air quality, and jobshousing imbalance.

These efforts have led to procedural changes in the way MPOs prepare planning documents. The legislation has more closely aligned three critical policy areas of importance to local government: transportation planning, land use/regional housing needs, and air quality. Relying on MPOs for planning coordination on this level makes sense because MPOs have been recent innovators in strategic growth planning in the form of the Blueprint effort.

# Blueprint

In early 2006, the eight San Joaquin Valley Councils of Governments came together in an unprecedented effort to develop a coordinated Valley Vision: the San Joaquin Valley Regional Blueprint. This venture is being conducted in each county and integrated to form a preferred

vision for future development throughout the Valley to the year 2050. The San Joaquin Valley Regional Policy Council adopted a list of 12 Smart Growth Principles to be used as the basis of Blueprint

Blueprint Planning Process

planning in the San Joaquin Valley. The Blueprint is now in the implementation phase.

Blueprint principles have helped to guide the selection of Tier I projects in the RTP. With this approach, we can make progress toward managing increased traffic congestion, and providing increasing modal choices, better connectivity, and greater mobility. This outcome helps protect air quality while improving the quality of life.



# AB 32 and SB 375

Assembly Bill 32, the Global Warming Solutions Act of 2006, requires the State to reduce greenhouse gas emissions to 1990 levels by the year 2020. The California Air Resources Board (CARB) has developed a Scoping Plan that includes actions designed to reduce overall carbon emissions in California. SB 375 provides a means for achieving AB 32 goals.

SB 375 is based on the successes of the first Blueprint process completed by the Sacramento Area Council of Governments. Both the Blueprint process and SB 375 align three critical policy areas: transportation planning, land use/ regional housing needs, and air quality.

While the 2011 RTP does not have the opportunity to fully comply with SB 375 – as the GHG emission reduction targets had not yet been established at the time the RTP was adopted – StanCOG has incorporated the concepts from these groundbreaking processes and will continue to build on these concepts in subsequent RTP updates.

# Valleywide Collaboration

In September 1992, the eight Valley MPOs entered into a Memorandum of Understanding (MOU) to ensure a coordinated regional approach to transportation and air quality planning efforts. The MOU was revisited in 2006 to update and solidify the partnership. One major addition to the MOU was the creation of the San Joaquin Valley Policy Council (Council). The MOU goes well beyond the requirements of State and Federal transportation planning acts by establishing a system of coordination of plans, programs, traffic emissions modeling, transportation planning, air quality planning, and consistency in data analysis/ forecasting. Development of the MOU and the ongoing process of coordinated planning have improved an already close working relationship between the eight valley MPOs and the representatives of Caltrans, CARB, the California Office of Planning and Research, the Valley Air Pollution Control District and FHWA.

The Valleywide group has produced a summary chapter, included as Appendix B, that provides an interregional perspective to transportation planning within the San Joaquin Valley (SJV). The Chapter addresses several issues of regional and interregional importance, including air quality conformity, goods movement, ITS, and other issues that we share as a valley. The purpose of the summary chapter is to provide a broad overview of issues that cross jurisdictional boundaries. The Congestion Management Processes (CMP) and Operations and Maintenance issues identified in the Valleywide chapter are addressed by individual MPOs including StanCOG within their respective RTPs.



# **TRANSPORTATION SYSTEM**

As a primarily agricultural/suburban county, travel is predominantly automobile-oriented, and this trend is not likely to change in the near future. However, rail transportation is starting to emerge in California as a way to move people. Also, in recent years, transit has been given a stronger emphasis in the region, and many new features and services have been and are being added.

Nevertheless, the highways are the dominant mode of travel in the Valley and in Stanislaus County. The highway system plays a critical role in the movement of both people and goods. The region's highway network provides east-west and north-south connection to major metropolitan markets in California and beyond. The most important routes are State Route 99 (SR-99) and Interstate 5 (I-5). Other state routes include SR-4, 33, 108, 120, 132, 165, and 219.

# **ROAD NEEDS SUMMARY**

A primary function of the RTP is to determine the transportation needs of the region. This is done through a traffic model program that overlays future growth and travel trends on the existing system to determine where the future transportation needs will be greatest. Projects are then incorporated into the plan to address these needs.

Funding for transportation improvements is limited and has generally not kept pace with the needs of the region. The main effort of the RTP is to focus the available resources on the priority needs of the region to maximize the benefit of each dollar



spent. The Transportation Plan identifies short-range and long-range transportation improvements for inclusion in the RTP and, ultimately, the Regional Transportation Improvement Program (RTIP) and the Federal Transportation Improvement Program (FTIP).



# **Tier I and Tier II**

All projects listed in the transportation plan fall into one of the following Tier designations.

Tier I RTP improvements represent shortrange and long-range projects that are fully fundable from anticipated revenue sources and will likely be programmed during the life of the RTP (by 2035). See Appendix M for a list of Tier I projects.

Tier II RTP improvements represent projects that do not have full funding during the life of the RTP given current revenue projections. However, these projects represent desired long-term projects for the region and are therefore included as "unfunded" projects. See Appendix N for a list of Tier II projects.



The recommended Tier I improvements for each transportation mode type, including roadways, bicycle and pedestrian, transit, and aviation, will serve to implement a balanced multimodal circulation system, improve air quality by reducing vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions, and help accommodate future travel demand in the County.

In addition to the typical transportation system improvements such as widening roadways and adding traffic signals to improve congestion and mobility, StanCOG is committed to analyzing alternative strategies such as Transportation Systems Management (TSM), Transportation Demand Management (TDM), and Intelligent Transportation Systems (ITS), which will serve to increase the efficiency of the existing system. We cannot simply build our way out of traffic congestion. Improving the existing system to the greatest extent possible will maximize each dollar spent. The alternative strategies will also provide increased opportunities for non-auto travel, thus reducing VMT and improving overall air quality.



# RTP REVENUES AND PROJECT COSTS

# **Total Revenues**

To estimate funding available for transportation improvements over the life of the plan, StanCOG prepared a Revenue Forecast, which, as described previously, is a summation of all transportationrelated funds available to the region. These funds come from local, State, and Federal sources.

Local sources account for almost one half of revenues, with State sources accounting for 21 percent of the total and Federal sources making up the remainder. Over the life of the RTP, total revenues are anticipated to be approximately \$4.4 billion.

# **Total Project Costs**

The Tier I project list, which is comprised of all transportation modes, makes up the total RTP project costs. The Federal Transportation Authorization Bill SAFETEA-LU requires that all RTP project costs reflect the Year of Expenditure (YOE). The intent of YOE is to ensure that the cost of each project is as realistic as possible and reflects the likely change in construction cost due to inflation over time. Therefore, the RTP needs to estimate what that true project cost will be at the year of construction. The Tier I project list is approximately \$4.4 billion through 2035.

The 2011 RTP is fiscally constrained. Overall, the RTP shows a small surplus of approximately \$331,000 through 2035.

# Measuring the Plan's Success

The projects and programs included in the 2011 RTP are intended to improve mobility, increase travel safety, limit environmental impacts to sensitive species and habitats, promote economic vitality, and improve environmental justice. The RTP process involved extensive public outreach and collaboration and relied on detailed data analysis to help develop recommended improvements. This process, guided by fiscal constraint and system planning objectives, is referenced within each chapter.

Evaluating the travel conditions in our major corridors is a key indicator to the mobility benefits of the planned transit and/or highway improvements. Variables such as reduced travel time, lowered VMT, and improved LOS measure the success the proposed projects.

The goals established for the RTP are a direct result of employing fiscal constraint and system planning to develop a transportation system development strategy and project improvement list for the region. Along with the five goals (mobility, safety and system preservation, environmental quality, economic/ community vitality, and social equity), the RTP uses an array of performance measure such as travel time, hours of delay, and collision monitoring to assess overall system performance. The performance measures will be monitored using various sources of State and local data as well as the StanCOG travel demand model.



# 2 REGIONAL TRENDS AND TRANSPORTATION GOALS

GALLO CENTER FO

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Gallo Center for the Arts, Modesto, California Photo courtesy of Modesto Convention & Visitors Bureau





Dos Rios Ranch, San Joaquin River National Wildlife Refuge, Stanislaus County

Stanislaus County has a history of growth through natural causes and through migration. As a result, the County's roadways have been subject to heavy usage, and the region faces increased costs associated with this use.



# DEMOGRAPHICS

Stanislaus County has seen exceptional growth since the 1970s due to three main factors: proximity to large employment areas, inexpensive land/home values, and large family sizes. These three factors can be grouped into two categories: natural increases and commuters.

# Natural Increases

Stanislaus County has a high natural growth rate (total births minus deaths) because of the relatively young population and the large family size. As a rural bedroom community, Stanislaus

Average Family Size in Stanislaus County: 3.66 persons per household County does not attract a high number of retirees and is typically home to young families.

The rural setting of the County attracts young families because of the good schools, open space, and largelot single-family homes. Stanislaus is well above the State and national average for the number of people living together in each household.

# Commuters

Stanislaus County is located approximately 75 miles south of Sacramento and 80 miles east of San Francisco. Because of the proximity to these employment areas (two of the largest in California), Stanislaus County has become a "bedroom community" for commuters seeking more affordable housing, open space, and better schools.

The County has a total land area of 1,521 square miles. It is land rich, with flat topography uninhibited by hills, water, or other undevelopable areas. Therefore, housing historically has been relatively inexpensive to build and purchase. Bay Area and Sacramento workers continue to seek affordable housing in the valley.

The costs of sprawl—traffic congestion, increased air pollution, and deteriorating roadways—are extremely high. Also, the individual costs of commuting are high, both financially, due to the increased costs of gas, general automobile upkeep, and bridge tolls, and socially, including time away from family and stress.

# Population

From 2000 to 2009, the Stanislaus County population grew approximately 81,416 (approximately 18.3 percent) to 526,383. This outpaces the State of California's population growth (14.7 percent) by nearly 5 percent, and is double the rate of the nation's population growth in the same time period. Table 2.1 shows the distribution of population in the previous decade. The State and adjacent counties are included for comparison.

The numbers indicate that within Stanislaus County the majority of the population is located on the major highways. The three largest cities in the County—Modesto, Turlock, and Ceres are located on the State Route 99 corridor and account for 61 percent of the county's total population. In addition, because of the proximity to I-5, Patterson and Newman in the western part of the County have experienced tremendous growth, with population increases of nearly 85 percent and nearly 54 percent respectively. These communities are joining Modesto, Ceres, and Turlock as bedroom communities for Bay Area commuters.

The unincorporated portions of the county contain 22 percent of the entire county population.



City	Population Jan 2000/Percent	Population Jan 2009/Percent	Percent Change (2000 - 2009)
Ceres	34,528(8%)	42,998(8%)	24.5%
Hughson	3,965(1%)	6,193(1%)	56.2%
Modesto	187,816(42%)	210,088(40%)	11.9%
Newman	6,988(2%)	10,739(2%)	53.7%
Oakdale	15,442(3%)	19,608(4%)	27.0%
Patterson	11,466(3%)	21,168(4%)	84.6%
Riverbank	15,726(4%)	21,805(4%)	38.7%
Turlock	55,395(12%)	70,256(13%)	26.8%
Waterford	6,900(2%)	8,816(2%)	27.8%
Unincorporated Area	106,741(24%)	114,712(22%)	7.5%
Total County Population	444,967	526,383	18.3%
San Joaquin County	563,598	689,480	22.3%
Merced County	210,554	256,450	21.8%
State of California	34,105,437	39,135,676	14.7%

# TABLE 2.1 – POPULATION TRENDS

Source: Department of Finance, Report E-4, City and County Population Trends

A comparison of adjacent counties and the State as a whole show that Stanislaus County is experiencing similar growth trends to the northern San Joaquin Valley counties and is outpacing the State average for the same period. This growth is resulting in greater transportation infrastructure needs and is contributing to increasing maintenance needs on the County's road system.

# Aging Population

As the region grows over the next 25 years, some basic demographic characteristics of the population will change. Demographically, the County is young, but as the population ages it will follow broader trends. The "over 60" population is currently the smallest group, but is expected to be the fastest growing group over the life of the plan. As people age, their transportation needs can change significantly. Seniors typically use the transportation system the same as younger groups, which is primarily by automobile in this region; however, while seniors with limited mobility will continue to rely on their automobiles to get around, the aging process can negatively impact their ability to drive, and many seniors will be unable to renew their driver's licenses.

Transportation is a means to an end. It connects the population with those goods, services, and activities that influence quality of life and well-being. Effective use of transportation alternatives affects one's ability to live independently in the community. The keys to successfully meeting the mobility needs

The **median age** in the County is 31.8 years nearly three years younger than the state average and five years younger than the national average.



of seniors will be the effective use of safe roadways, available transit, and "safety net" transportation alternatives so that no one is unable to access basic life needs.

# **Employment and Housing**

### Employment

Two of the most significant trends facing employment and housing in Stanislaus County are agriculture and commuters. Six of the seven largest employers in the County are directly related to the agricultural industry. The economy of the Stanislaus region and the San Joaquin Valley remains largely based in agriculture. While only 6.7 percent of the workforce is directly employed by

Largest Employers Gallo Winery Con Agra Foods Del Monte Foods Doctors Medical Foster Farms Patterson Vegetable Company Frito-Lay, Inc. farms, other employment sectors, such as food manufacturing, transportation, and warehousing employ a considerable portion of the workforce and are directly tied to the agriculture industry. Agriculture-related industries are reliant on I-5 and SR-99 to transport products from Valley farms to markets and ports in other parts of the State.

While the agriculture industry will be the leading employer both directly and indirectly, the fastest growing sector is the medical and healthcare industry.

# Housing

The housing stock in Stanislaus County in 2000 was estimated at approximately 151,000 units. In 2010, this number is estimated at approximately 175,000 units, which is an increase of 16 percent. An abundance of jobs in the Bay Area creates migration increases in the Valley as people move to take advantage of the lucrative job opportunities in the Bay Area and the affordable home prices in the Valley. The housing boom in the Valley has recently subsided, but it will likely rebound during the life of the plan.

Approximately 79 percent of the County's housing stock consists of single-family units and about 16 percent are multifamily units. The remaining five percent are mobile homes and trailers. Typically, commuters look for a reprieve from the dense, expensive housing located in the areas of their employment. The availability of developable land and low prices in the County has led to the development of primarily larger-lot single-family units.

# Jobs-Housing Balance

The trend described previously has led to a jobs-housing imbalance in Stanislaus County. A jobs-housing balance is generally defined as when both the quality and the quantity of housing opportunities match the job opportunities within an area. Currently in Stanislaus County the jobs-housing ratio is 1.05 jobs per household. The jobs in the County are typically lower-paying. The region generally has lower job quantity and quality compared to areas such as Sacramento and San Francisco.

The region must go beyond the policies dedicated to improving the travel time of commuters through road capacity improvements, to encouraging, attracting, and retaining higher-wage jobs through land use and financial decisions that make business in Stanislaus County a preferred location. Local policies are beginning to be implemented to address this problem, but it will take time for these efforts to see real results.



This RTP and future RTPs will continue to address this issue by combining transportation planning with land use planning.

The Stanislaus region is currently developing strategies to attract a mix of high-tech and industrial manufacturingrelated jobs. Of course the true success of these strategies relies on providing higher quality transportation infrastructure and community amenities that can attract new business and a highly qualified workforce. To this degree, many Stanislaus communities have initiated efforts to reinvest in community facilities such as performing arts centers, community parks, and downtown redevelopment projects. This RTP and future RTPs will continue to address the jobs/housing issue by combining transportation planning with land use planning so growth efficiencies will lead to an effective balance of work and travel.

# **Regional Housing Needs Allocation**

The California Department of Housing and Community Development (HCD) requires all MPOs to develop a Regional Housing Needs Assessment (RHNA) Plan allocating the region's share of statewide housing need to cities and counties within the region. The 2007-2014 RHNA, adopted by StanCOG in September 2008, determined the "fair share" of regional housing need for each jurisdiction in Stanislaus County during the time frame covered by the report. The allocation information in the report will be used by local jurisdictions to update the land use component of their general plans. The intent of the allocation is to:

- Increase the housing supply and the mix of housing types and affordability.
- Promote infill development and socioeconomic equity, protection of environmental and agricultural resources, and encouragement of efficient development patterns.
- Promote an improved intraregional relationship between jobs and housing.
- Balance the distribution of households by income category.

The process resulted in a housing allocation for each jurisdiction, which accounted for the projected housing growth based on historical trends between 1990 and 2007, the current housing stock, and employment levels with an adjustment for smaller cities. Table 2.2 summarizes the total housing allocation projections for Stanislaus County by jurisdiction.

# TABLE 2.2 – Stanislaus County Housing Needs Allocation 2007 - 2014

Jurisdiction	Housing Units Allocated
Ceres	1,819
Hughson	282
Modesto	11,130
Newman	421
Oakdale	983
Patterson	686
Riverbank	894
Turlock	3,461
Waterford	357
County	5,568
Total	25.602

Source: StanCOG Housing Needs Report, 2007

To reduce the impact of new residential growth in the unincorporated areas of the County, and to not overly burden the largest cities with the task of planning for the majority of low-income housing, an "equity adjustment" was used. Based on the 2007 population of the small and medium cities, which represented 34 percent of the total County population, 34 percent of the County's share (1,842 units) was thus distributed back to the small and medium cities based on population.

Unfortunately, the RHNA process inadvertently compounds the jobshousing balance problem. While a goal of the plan is to address the relationship between jobs and housing, it only addresses this relationship within the County, not interregionally. Therefore, the larger issues of commuting are not addressed. In addition, land-rich areas generally take on a greater share of the housing statewide as compared to areas with less available land.

# **TRAVEL PATTERNS**

Understanding our travel patterns is important in selecting and investing in transportation projects that yield the greatest benefit for our community. An understanding of these patterns has helped shape the 2011 RTP.

Like many Valley communities, Stanislaus County has seen the trend of singleoccupancy commuting increase. According to data collected by the StanCOG Traffic Model program, Stanislaus residents are far more likely to travel to work alone by automobile than any other mode of transportation, and a major shift in this trend is not expected over the life of the plan.

Although many jobs were added in Stanislaus County over the past decades, the lucrative job opportunities and the high housing costs of the Bay Area continue to exacerbate the jobs-housing imbalance in Stanislaus County. At least 15,000 Stanislaus County residents are estimated to commute by car over the Altamont Pass each day. This phenomenon leaves the County holding the bill for costly improvements to the interregional road system. Figure 2.1 shows the current commute patterns for Stanislaus workers.

In 2000, countywide vehicle miles traveled (VMT) on State facilities was estimated at 1.39 million miles. In 2008. VMT increased to 1.76 million miles on State facilities, an increase of 27 percent. Although several efforts are being incorporated into the RTP planning process, and other County planning processes, to curb this trend, the results tend to be slow. For this reason, objectives and policies that will contribute to a reduction in VMT in the County are outlined under the Sustainable Communities section in Chapter 4. The remainder of this section discusses planning and regulatory efforts to lower VMT and GHG throughout the State.







# **PLANNING EFFORTS**

Transportation is inherently affected by trends in population, employment, and housing, and therefore has a vital connection with land use planning. Recognizing this connection, planning for the regional transportation network requires coordination with adjacent counties and among member agencies within the County. In the early 2000s, a few MPOs recognized this link and sought to plan more effectively, by not just focusing on transportation planning, but by setting a vision of growth for the region that accounts for transportation, housing, environmental, and economic issues.

The State has also recognized the land use-transportation connection and become a leader in this area by passing legislation that built on the MPO successes and linked critical policy areas. The State has adopted new requirements that directly tie transportation investments and regional land use strategies to greenhouse gas (GHG) emissions reduction targets. The overall impetus is to change travel trends; it is clear that the State cannot build its way out of the problem. The MPO process, referred to as Blueprint, and the State legislation are described below.

# Blueprint

The Blueprint planning process was started by the Sacramento Area Council of Governments (SACOG) in 2002. At that time, SACOG began to study future land uses patterns and their potential effects on the region's transportation, air quality, housing, open space, and other resources. Now, MPOs around the State are developing "blueprints" to plan for population growth that is anticipated over the next 40 years.

According to the California Department of Finance, Stanislaus County's population is projected to grow by more than 60 percent between 2010 and 2035. The Blueprint process is being undertaken to develop a vision for management of this growth while maintaining and improving community values and overall quality of life.

The San Joaquin Valley Blueprint is a joint effort of the eight San Joaquin Valley MPOs, or Councils of Governments (COGs), initiated in 2006. The Blueprint focuses on alternatives to current transportation investment priorities to improve the region's travel patterns and air quality, while remaining consistent with local attitudes and values.

The eight Valley COGs have conducted local outreach to thousands of community members and stakeholder groups to create a unified vision for growth.


Following the Valleywide Blueprint Summit in January 2009, the San Joaquin Valley Regional Policy Council—made up of elected officials from each county and the Executive Directors of the MPOs adopted an integrated Valley Vision and a list of 12 Smart Growth Principles to be used as the basis of Blueprint planning in the San Joaquin Valley. Additionally, the Regional Policy Council adopted a preferred growth scenario to serve as guidance for the Valley's local jurisdictions as they update their general plans.

StanCOG is continuing to collaborate with the other San Joaquin Valley MPOs and the member jurisdictions throughout the Blueprint process. Currently, the SJV is in the fourth year of the Blueprint effort and in the first year of the three-year Implementation phase. The end goal is to provide a set of resources or "toolkit" that can be used to integrate Blueprint principles into the local planning process. Ultimately, each County will adopt a separate implementation plan, utilizing the toolkit that applies the concepts from the Valleywide Blueprint and applies them at the local level.

#### Assembly Bill 32 and Senate Bill 375

In 2006, the California State Legislature passed Assembly Bill (AB) 32—The Global Warming Solutions Act of 2006—which requires the State to reduce greenhouse gas (GHG) emissions to 1990 levels no later than 2020. This legislation directly affects the MPOs due to the heavy percentage of GHG emissions from the transportation sector; according to the California Air Resources Board (CARB), the transportation sector contributes over 40 percent of the GHGs throughout the State.

In 2008, the State of California adopted Senate Bill (SB) 375. The bill is intended as an implementation tool for AB 32, by reducing greenhouse gas (GHG) emissions from passenger vehicles by reducing VMT through transportation and land use strategies. SB 375 will play a key role in California's efforts to reach the GHG reduction goals set out in AB 32.

SB 375 requires CARB to provide each region with GHG reduction targets (or for each region to submit an ambitious but achievable target) by September 2010, and also requires MPOs to adopt a Sustainable Communities Strategy (SCS) as part of future RTPs to achieve the GHG targets. A SCS is an integrated land use and transportation plan that can be modeled to quantitatively demonstrate its compliance with GHG emission reduction goals. While the 2011 RTP does not have the opportunity to fully comply with SB 375, this RTP does introduce SCS principles and considers the relationship between transportation and land use, which is the core function of SB 375. This RTP will serve as the foundation for the 2015 RTP, which will fully comply with SB 375.



#### EXISTING TRANSPORTATION SYSTEM

Travel in Stanislaus County is primarily automobile-oriented due to the size of the County, the rural nature of the local communities, low development densities, and limited options for using alternative modes of travel. The roadway network serving the County is comprised of approximately 3,000 miles of streets, roads, and highways. Approximately 183 miles of the system are US Highways and State Routes, 1,546 miles are county roads, and 1,245 are local roads maintained by the nine cities.

However, the county also provides transportation in other modes, including transit, aviation, and non-motorized. In recent years, transit and non-motorized modes of transportation have received more attention and thus more funding. The intent is to improve air quality by reducing greenhouse gas emissions caused by cars. The following section discusses the trends and needs of each mode of transportation in the county, including goods movement.

#### **Highways and Roads**

Major roadway facilities in the County include Interstate 5 (I-5) and State Routes 4, 33, 99, 108, 120, 132, and 219. I-5 and State Route 99 (SR-99) are the two primary north-south corridors in Stanislaus County and the entire San Joaquin Valley. Both of these routes carry a significant number of interregional trips between southern and northern California, and are major trucking routes for goods movement. Figures 2.2 through 2.5 show the classification of highways and roads in Stanislaus County.

In addition to the State highways, several signed county highways and major county roadways are vital for inter- and intraregional travel. These roadways connect the incorporated cities and unincorporated towns within the County:

- Santa Fe Avenue (County Highway J7)
- Geer/Albers Road (J14)
- Howard/Grayson Road (J16)
- Keyes Road (J16)
- West Main Street/Las Palmas Avenue (J17)
- Crows Landing Road
- A portion of McHenry Avenue (J6)







EXISTING FUNCTIONAL CLASSIFICATION FIGURE 2.2



#### LEGEND

#### **Functional Classification**

Freeway	2-Lane Major
Expressway	Urban Collector
Urban Arterial	—— Rural Collector







FUTURE FUNCTIONAL CLASSIFICATION FIGURE 2.4



#### LEGEND

#### **Functional Classification**

 Freeway	 Rural Major
 Expressway	 Urban Collector
 Urban Arterial	 Rural Collector



#### **Operational Analysis**

#### Level of Service (LOS) Methodology

LOS is a qualitative description of traffic flow from the perspective of motorists based on factors such as speed, travel time, delay, freedom to maneuver, volume, and capacity. Six levels are defined in the Highway Capacity Manual from LOS A, as the least congested operating conditions, to LOS F, or the most congested operating conditions. Table 2.3 summarizes the various designations.

The analysis of roadway operations focuses on how well the existing system is operating (for example, Base Year 2006 LOS) compared to the future system (for example, 2035 LOS) with completion of the RTP improvement projects. To complete the analysis, the roadway network was divided into 139 roadway study segments (see Appendix D). StanCOG staff prepared appropriate model input files and conducted model runs to reflect the different scenarios: Table 2.4 presents the results of those model runs.

#### TABLE 2.3 -LOS DEFINITIONS/CHARACTERISTICS

LOS	Description
А	Represents free flow. Individual users are virtually unaffected by the presence of other in the traffic stream
В	Stable flow, but the presence of others in the traffic stream begins to be noticeable.
С	Stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interaction with others in the traffic stream.
D	Represents high density, but stable flow.
Е	Represents operating conditions at or near the capacity level.
F	Represents forced or a breakdown in traffic flow.

Source: Highway Capacity Manual - Transportation Research Board, 2000.

TABLE 2.4 – SUMMARY OF MODELING RESULTS								
Segment LOS	2006 Base	Percent	2035 No Project	Percent	2035 Plus Project	Percent		
LOS A-C	45	32%	20	14%	50	36%		
LOS D	29	21%	26	19%	22	16%		
LOS E	45	32%	32	23%	35	25%		
LOS F	20	14%	53	38%	32	23%		
Total Segments	139		139		139			

Source: StanCOG Travel Demand Model 2010



The average daily traffic volume (ADT) was determined for each segment and then compared to the LOS thresholds (Appendix C) to determine the LOS. The assignment of ADT for the base year (2006) relied on traffic counts. Where count data was not available, the travel demand model provided an estimate based on counts on similar or adjacent facilities.

Future ADT was estimated by the model under two scenarios: "2035 No Project" and "2035 Plus Project." The 2035 No Project scenario contained only those transportation improvement projects that are currently programmed or approved for funding in the Congestion Management Plan (CMP). The 2035 Plus Project scenario modeled the 2035 network with all of the road capacity projects that are included in Tier I of the 2011 RTP.

The 2007 RTP guidelines require each RTP also define a set of program level transportation system performance measures that reflect the objectives of the RTP, to evaluate and select plan improvements. This plan's performance measures were defined based on the goals and objectives of the Plan and specific objectives and action priorities for each mode.

Each RTP goal embodies one or more of the following measurable performance criteria that will be used to measure the success of projects and programs.

Mobility (vehicle hours of delay and LOS)

- Access (travel times)
- Connectivity (choice of mode and land use policies)
- Safety/System Preservation (collision monitoring and pavement condition)
- Efficiency (transportation system utilization (VMT and ridership)
- Equity (EJ analysis)
- Economic Vitality (protection of sensitive habitats, air quality, open space and agriculture)
- Cost-Effectiveness (transit farebox ratio; cost per new trip served)

#### **Observations**

The 2006 base year shows that 53 percent of segments are operating at LOS D or better. (Note that LOS C is generally the accepted threshold for rural areas, and LOS D is generally the accepted threshold in urbanized areas.) The remaining 47 percent are operating at LOS E or F given the current roadway network, number of lanes, and functional classification.

Under the 2035 No Project scenario, the effects of future growth and congestion are evident as the proportion of segments operating at LOS D or better drops from 53 percent to 33 percent. The number of segments at LOS E or F increases from 46 percent to 61 percent, with many more at LOS F than at LOS E. This outcome reflects the effects of anticipated population and employment growth, but with very limited improvements of the transportation system.



As mentioned previously, the 2035 Plus Project scenario includes all of the RTP Tier I projects that affect road segment capacity. The results shown in Table 2.4 indicate that, compared to the 2035 No Project scenario, the implementation of the RTP Tier I projects results in a substantial increase in the number of road segments operating at LOS D or better, and a reduction in the number of road segments operating at LOS F, indicating that the capacity enhancements included in the RTP Tier I project list help to address a number of the locations of potential future congestion. See Appendix D for more detailed information about the roadway segment LOS results.

#### Road Maintenance Needs

In Fiscal Year 2007/08, a survey of all 58 counties and 478 cities in California was conducted for the California League of Cities. The survey captured approximately 93 percent of the State's local streets and roads. The study's objective was to fully assess the condition of the local system and determine the cost to bring local facilities to a Best Management Practice (BMP) condition within 10 years. The results show that California's local streets and roads are at a point of crisis. On a scale of zero (failed) to 100 (excellent), the statewide average pavement condition index (PCI) is 68 or in the "at risk" category.

The study estimated that \$51.7 billion is needed just to bring the pavement condition of the State's local streets and roads to an acceptable level. The total estimated cost of improvements from the study was \$67.6 billion. The study estimated that Stanislaus County and its cities accounted for \$1.3 billion (two percent) of the State's total, which is on par with the percentage of roadway miles in Stanislaus County (1.8 percent).

#### Pavement Management System

In 2007, StanCOG provided funding for the nine cities and the County to maintain a countywide Pavement Management System (PMS). The process was then administered by the City of Modesto and contributed to by representatives from each city, the County, and StanCOG.

Table 2.5 provides a summary of the existing and future pavement needs and Pavement Condition Indexes (PCI) for the County and each city. The lowest PCI is present in the County. The population of the County, the amount of daily traffic, and commodity flows all contribute to the deteriorating pavement conditions of local facilities. Table 2.5 also estimates future PCI at current funding levels and how much the PCI can improve with additional funding. The County and the City of Modesto would experience even further deterioration if funding remains at current levels. As expected, all cities would benefit from additional maintenance funding over the next 10 vears. As Table 2.5 shows, the PCI for a majority of streets can be increased to the "good" range (PCI greater than or equal to 70) with additional funding devoted to maintenance needs.



SUMMARY OF PAVEMENT CONDITION INDEX AND MAINTENANCE NEEDS BY JURISDICTION									
Jurisdiction	PCI	5-Year Cost to Maintain Current PCI (Millions)	Estimated Future PCI w/o Additional Funding	Estimated Future PCI with Additional Funding	Percent of Streets in "Good Con- dition" with Additional Funding	Total Lane Miles			
Modesto	51	\$100	41	56	61%	630			
Ceres	64	\$11	56	69	76%	282			
Hughson	80	\$2	74	83	67%	57			
Oakdale	59	\$9	50	64	72%	171			
Riverbank	75	\$10	64	80	90%	147			
Turlock	59	\$45	48	64	68%	496			
Waterford	59	\$3	47	64	71%	47			
Patterson	65	\$11	53	70	84%	153			
Newman	74	\$11	62	86		28			
County*	43	\$94	29	47	20%	3,112			

**T**. **- - -** 

Source: StanCOG Pavement Management Program Budget Options Report, 2008 \*County total equals county roads plus state highways

#### Safety

Traffic collision data in Stanislaus County (2007) was compiled from the Statewide Integrated Traffic Records System (SWITRS) maintained by the California Highway Patrol (CHP). Data is collected on four collision types: Total Number (Total), Property Damage Only (PDO), Injury, and Fatal. The collision rate for the County is estimated at 1.06 collisions per one million miles traveled for all State facilities, compared to 0.87 collisions per one million miles traveled for similar facilities in the rest of Caltrans District 10.

Caltrans regularly monitors and investigates high collision locations on the State Highway System. According to Caltrans, approximately 35 percent of the investigations result in the identification





of potential corrections to the design or construction of specific highway segments. These corrections are implemented through maintenance work orders, minor projects, SHOPP projects, or by incorporating the correction into another highway improvement project already underway. Existing and future SHOPP projects are discussed in Chapter 4.

#### Transit

Public transit is a key factor in meeting the transportation needs of Stanislaus County residents, including its senior population, transit dependent, and persons with disabilities. Current data from the California Department of Finance and from Stanislaus County indicates that 13 percent of the County's population in 2008 is aged 60 years or older. In addition, 17 percent of the total County population reports having a disability, and approximately 45 percent of persons 65 years or older report having a disability. As the region grows, so too will the demand for transit, not only for the aging population, but also for everyday use.

#### **Existing Transit Service**

The Stanislaus County region offers local, regional, and inter-county transit services provided by five local transit operators, including Stanislaus County (StaRT), the City of Modesto (MAX), the City of Turlock (BLAST), the City of Ceres (CAT), and the Cities of Oakdale and Riverbank (ROTA). Appendix E provides a map of the existing fixed transit routes and dial-a-ride service coverage in Stanislaus County.

• Stanislaus County operates the Stanislaus Regional Transit (StaRT) fixed-route, runabout, shuttle, and dial-a-ride services. StaRT offers six *fixed-route services that connect* multiple cities and unincorporated communities within the County. The *Eastside Shuttle, Turlock/Modesto Shuttle, and Waterford/Modesto Runabout provide demand response* service between communities and cities, while the Newman, Patterson, and Waterford Dial-A-Rides offer demand response service within these respective cities. StaRT provides these services generally Monday through Saturday between 6:00 AM and 9:45 PM. StaRT also operates the Medivan as a nonemergency medical transportation service with one daily round trip Monday through Friday.

- The City of Modesto operates the *Modesto Area Express (MAX) transit* system, which provides 20 local fixedroutes serving Modesto, Ceres, Salida, and Empire. MAX also offers commuter express service to the Lathrop/Manteca Altamont Commuter Express (ACE) station in San Joaquin County and the Pleasanton/Dublin Bay Area Rapid Transit (BART) station in Alameda County. The City of Modesto also provides a Dial-A-Ride service, Modesto Area Dial-A-Ride (MADAR), within the City of Modesto and adjacent unincorporated communities, including Salida and Empire. MAX and MADAR operate seven days a week between 4:00 AM and 8:00 PM.
- The City of Turlock operates four fixedroutes as part of the Bus Line Service of Turlock (BLAST) transit service. The City of Turlock also manages Dial-A-Ride Turlock (DART). Both BLAST and DART operate Monday through Saturday between 6:00 AM and 7:00 PM.



- The City of Ceres provides two weekday fixed-route services and one Saturday fixed-route service as part of its Ceres Area Transit (CAT) system. The City of Ceres also operates Ceres Dial-A-Ride (CDAR) demand-response service. CAT and CDAR operate Monday through Saturday.
- The Riverbank Oakdale Transit Authority (ROTA) offers Dial-A-Ride service for Riverbank, Oakdale, and the adjacent unincorporated area Monday through Saturday.

The San Joaquin Regional Transit District provides bus service between Escalon and Modesto, and Merced County's "The Bus" has one fixed route that connects Turlock with Merced County cities along the SR-99 corridor.

#### <u>Transit Ridership Data</u>

The combined fixed routes in Stanislaus County accommodate approximately 4.1 million one-way passenger trips per year, while the dial-a-ride and demand-response services accommodate approximately 180,000 one-way passenger trips per year. However, farebox recovery for these services does not cover the cost to operate. The City of Modesto's MAX system collects the highest ratio at approximately 20.1 percent.

#### Private and Non-Profit Transit Services

In addition to transit service provided by the local jurisdictions within the County, social service agencies offer transportation services for their clients. These agencies typically focus on specific trip types or demographic groups, such as medical service trips, senior groups, and lowincome groups. These are typically referred to as "safety net" transportation programs. The "safety net" transportation programs are services that accommodate those trips required by individuals who require additional fare assistance or door to door service. These private and non-profit services include:

- Veterans Administration
- Howard Training Center
- Home In Stead Senior Care
- Generic Home Specialists
- Davis Guest Home
- Link 2 Care
- Catholic Charities Assisted Transportation
- Stanislaus ARC
- Turlock Adult Day Health Care Center
- Society for Handicapped Children and Adults
- Senior Access & Resource Team
- Salvation Army
- Valley Mountain Regional Center
- Miller's Place
- Oakdale's Citizen Auxiliary Police Services
- DMC Foundation
- Faith in Action of Oak Valley Hospital District
- Kindred Hospital Modesto
- Oak Valley Hospital District
- Satellite Dialysis-Central Modesto
- Vision Impaired Persons Support
- Center for Human Services: Patterson Family Resource Center
- Dale Commons Assisted Living

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- Kiernan Village Assisted Living
- Life Springs Senior Campus
- Environmental Alternatives (A Foster Family Agency)
- Nepethean Homes Foster Family Agency Inc.
- Waterford Unified School District
- Family Partnership Center
- Telecore Corp
- Stanislaus Homeless Outreach Program (SHOP) & East Modesto Regional Services
- El Concillo
- Family Partnership Center
- Calvary Temple Worship Center

#### Other Transportation Options

Stanislaus County has six taxi operators with five consolidated into one organization. The five taxi companies are County Cab, Modesto Cab Company, Red Top Taxi, Touch of Class, and Yellow Cab Company (Modesto Branch). Oakdale Taxi remains an independent operator. Most of the taxi services are concentrated in urban centers and are relatively expensive to use.

#### Transit Needs Assessment

In early 2009, after the narrow defeat of the Transportation Sales Tax Measure, Stanislaus County began preparing the Stanislaus County Transit Needs Assessment Study and the StanCOG Public Transit-Human Services Coordination Plan. Both of these studies were intended to identify the transportation needs of the elderly and disabled population in the region, and to provide feasible strategies to effectively and efficiently meet these local needs. The Transit Needs Assessment Study states that while most of the travel needs for seniors and persons with disabilities are being met, a small percentage of potentially unsatisfied travel demands remain for these demographic groups. To meet this unsatisfied demand, the Study recommends continued targeted outreach to social service agencies to encourage use of the County's transit system. The County, in cooperation with StanCOG, will continue to study and determine necessary services to meet the needs of all County residents.

As a result of the study, StanCOG is forming a Consolidated Transportation Services Agency (CTSA). The CTSA will administer a special program to provide "door-throughdoor service" for qualified riders. The Needs Assessment identified a need for this type of service among the elderly and disabled populations.

Currently, StanCOG is preparing an RFP to hire a CTSA consultant to develop the program and provide this service, which is estimated to be available by August 2010.

The Public Transit-Human Services Coordination Plan indicates that some transit services are duplicated for both fixed-route and demand-response operations. The Plan recommends minor routing modifications on the fixedroute systems to reduce overlapping service, and a reduction in duplication of demand-response coverage areas to increase efficiency. The Plan suggests that eliminating the overlapping operations could allow a reallocation of services to areas currently not served. Furthermore. the Plan advocates coordination and consolidation among private and nonprofit human service agencies that provide transportation options.

#### Rail

Existing rail services in Stanislaus County include Amtrak and the Altamont Commuter Express (ACE). Future opportunities include the proposed California Highway Speed Rail (HSR), which is further described in Chapter 4.

#### <u>Amtrak</u>

Amtrak provides intercity passenger rail service connecting Stanislaus County to major metropolitan areas in California and beyond. Amtrak California's San Joaquin route travels through Stanislaus County along the Burlington Northern/Santa Fe Railroad with stations in Modesto and Denair. The San Joaquin offers two trips daily from Stanislaus County to Sacramento, four trips daily to the Bay Area, and six trips daily to Bakersfield.

#### Altamont Commuter Express (ACE)

The Altamont Pass is the primary connection between the northern San Joaquin Valley and the Bay Area. With the influx of Bay Area commuters into



Stanislaus and San Joaquin Counties, vehicle travel over the Altamont Pass is increasingly congested during the commute peak periods.

The Altamont Commuter Express (ACE) provides an alternative means of reaching the Bay Area by offering commuter rail service through the Altamont Pass. ACE currently operates three westbound morning trains and three eastbound evening trains Monday through Friday between San Joaquin County and San Jose. To facilitate access to ACE service for Stanislaus County residents, MAX provides express bus service to and from the Lathrop/Manteca ACE station coinciding with each outbound and inbound ACE train.

#### Aviation

#### **Existing Aviation Facilities**

The State and Federal governments classify airports by how they function in relationship to other airports. The systems are based on two broad categories: commercial airports and general aviation airports. Stanislaus County has three general aviation airports per State and Federal standards, including the Modesto City-County Airport, the Oakdale Municipal Airport, and the Turlock Municipal Airport. Although all are considered general aviation per State and Federal standards, the Modesto City-County Airport does have commercial flights. Figure 1.1 shows the locations of these airports.

In addition, one privately owned airport with no aviation services is located in Patterson (airport identifier CA02). The airport occupies approximately 30 acres and is located two miles west of Patterson. The airport master log reports 11 based aircraft and one helicopter.



#### Modesto City-County Airport (Harry Sham Field)

The Modesto City-County Airport (MCCA) is located east of SR-99 and south of SR-132 near the Tuolumne River in Modesto. The airport's primary activity is general aviation and the airport is home base for approximately 175 general aviation aircraft, which include corporate jets, twin and single engine aircraft, helicopters, and ultra lights. Tenants at the airport are generally small aircraft owners, fixed-base operators, corporate aircraft owners, law enforcement, and medical responders.

The airport carries 10 commercial flights a day, connecting to the San Francisco International airport. The airport also handles approximately 389 cargo flights per year to various cities in California.

The airport is served by Modesto Area Express (MAX) and dial-a-ride. Taxi service and hotel shuttle services are also available. Connections to interregional and interstate service are available by Greyhound and Amtrak in Modesto.

#### Aircraft Operations

The Airport Master Record (October 23, 2009) shows 175 based aircraft at the facility, with the majority being single engine aircraft. In 2008, the airport recorded approximately 74,000 take-offs and landings.

#### Oakdale Municipal Airport

The Oakdale Municipal Airport (OMA) is a general aviation airport located southeast of the City of Oakdale, three miles from the city center. The Airport is primarily for private use. Approximately 35 percent of aircraft owners are from the City of Oakdale, and 44 percent from other parts of the County. The remaining 21 percent are from neighboring counties. The airport is a general aviation facility with one runway serving single and twin engine aircraft.

#### Aircraft Operations

The Airport Master Record (October 22, 2009) shows 56 based aircraft, and approximately 18,000 take-offs and landings occurred in 2008.

#### Turlock Municipal Airport

The Turlock Municipal Airport (TMA) is a public airport located eight miles east of the City of Turlock. The airport is primarily used by local and adjacent residents who own planes and fly recreationally.

#### Aircraft Operations

The Airport Master Record (October 22, 2009) shows 55 based aircraft, and approximately 10,400 take-offs and landings occurred over 12 months ending May 1, 2009.

#### **Aviation Needs**

The aviation needs in Stanislaus County have been identified in various planning documents from the region, including the 2007 RTP. Two types of needs have been identified: commercial aviation service and general aviation service.

#### Commercial Aviation Service

Expansion of more direct commercial aviation service to the MCCA continues to be a challenge for the City of Modesto and the region. Passenger connections to longer distance flights are made via the San Francisco International Airport. The potential benefits of providing improved air service directly from Modesto include improved passenger convenience, improved goods movement, and reduced VMT and emissions as fewer trips occur to San Francisco or Sacramento to access commercial flights.

#### **General Aviation Services**

General aviation operations comprise the majority of local aircraft activity in Stanislaus County, and this trend is expected to continue through 2035. The availability of funding to maintain existing facilities or construct additional facilities for aircraft parking, and the availability of ground transportation are the most significant issues facing the region in regards to aviation needs.

According to the 2007-2011 National Plan of Integrated Airport Systems (NPIAS), annual growth among general aviation facilities statewide could grow approximately 1.9 percent per year through the year 2017. As current operations at the Modesto City-County Airport are approximately 74,000 operations per year, this figure could increase to approximately 124,000 operations per year by the year 2017.

Critical to the ability of the MCCA to accommodate anticipated growth is the necessity of funded improvements to facilitate added operations. These future aviation improvements have been included in the 2011 Regional Transportation Plan in Chapter 4.

Future needs at MCCA include:

- Terminal expansions
- Rehabilitation of runways

- Improvements to storm drain system
- Construction of maintenance building

Future needs at OMA include:

- Fencing and security cameras
- Runway maintenance and upgrades

Future needs at TMA include:

- Restriping
- Navigational aids
- Lighting
- Improvement to access roads
- Construction of 20 new hangars
- Additional vehicle parking
- Runway relocation
- Runway extension
- New fuel tanks
- Development of pavement maintenance plan

#### **Non-Motorized Transportation**

#### **Existing Non-Motorized Facilities**

The existing Stanislaus County bikeway network consists of a system of over 140 miles of bikeways, including 25 miles of Class I multi-use pathways, 58 miles of Class II bicycle lanes, and 62 miles of Class III signed bicycle routes. The major destinations for bicycle and pedestrian travel include downtowns, schools, and employment centers. Approximately 0.7 percent of employed residents in Stanislaus County commute by bicycle, which is a slightly higher rate than the national average bicycle commute mode share of 0.4 percent.



Reasons for the relatively small percentage of bicycle commuters in the County include a lack of bike parking, hot summers, the rural nature of the County,

and few housing areas within biking distance of major employment areas. From this trend. **Stanislaus County** would likely benefit from a creative new transportation vision to match changing land development patterns, and emerging commute patterns. Greater congestion, more compact development, an



public awareness and positive attitudes about biking and walking in the region. Recommendations were developed to reflect existing and future conditions

and needs. The recommendations include bicycle and pedestrian system needs, infrastructure improvements, safety, and education programs. Appendix F includes a map of the planned future bicycle network in Stanislaus County per the NMTP.

#### Bicycle System Needs

The needs and preferences of bicyclists vary

aging population, clean-air goals, and energy conservation all indicate a need to improve and expand non-motorized transportation options.

#### Non-Motorized Transportation Plan (NMTP)

In 2008, representatives from each jurisdiction, as well as members of the Modesto Bicycle Coalition, collaborated to form a Bicycle and Pedestrian Advisory Committee (BPAC). The committee was created to assist StanCOG in the preparation of a NMTP. Based on input from the BPAC, the member agencies, and the public, the NMTP outlines a range of recommendations to guide Stanislaus County toward these goals: providing bikeways and trails for all Stanislaus County residents, increasing the number of people who bike and walk for everyday needs, improving safety for bicyclists and pedestrians, and increasing

depending on the skill level of the cyclist and the type of trip the cyclist is taking. The Stanislaus County NMTP considers these differences in planning a system that serves all user types. Based on field observations and input provided in the public process, the most critical needs of bicyclists in the region include:

- Direct bicycle access to major activity centers
- Safe bikeways that lessen vehicle conflicts
- Education programs such as "Share the Road"
- A countywide bike route network with improved roadway shoulders.
- Support for a long-term vision of a countywide network of Canal pathways connecting communities

#### Bicycle Infrastructure Needs

The county currently has a sparse bikeway system with local bike lanes, pathways, and routes in each community. The recommended bicycle infrastructure improvements are intended to:

- Fill in gaps within the current bicycle network, to continue the expansion of the existing network.
- Formalize existing routes used by cyclists, and to improve access between residential neighborhoods and the current bikeway network.
- Develop the Primary Countywide Bikeway Network. The Primary Bikeway Network is a concept that includes the 134 miles of bikeway corridors for connecting the cities within the County. Most are in the unincorporated areas.
- Develop intra-city bikeways that connect residential areas of Stanislaus County with schools, parks, community centers, downtowns, and other destinations.

#### Pedestrian System Needs

People walk for many reasons: traveling to work, transit facility, school, shopping, or social events, or for recreation, health/ exercise, personal errands, appointments, and social visits. Pedestrian needs for these trip types vary. For example, a commuter may desire a well-connected direct route with efficient signal timing, while a recreational pedestrian may be more concerned about the aesthetics of the surroundings.

Also, pedestrian mobility networks should also consider persons with disabilities. The Americans with Disabilities Act (ADA) mandates that reasonable accommodation



for access should be provided for those who may need such assistance. Based on field observations and input provided in the public input process, the most critical system needs of pedestrians in the region include:

- Improved crossing visibility
- Continuous connected facilities
- Use of uniform design guidelines
- Pedestrian connections across obstacles such as highways and rivers
- Pedestrian improvements to access shopping and school areas
- A countywide bicycle and pedestrian coordinator to act as liaison between agencies and help secure



#### Pedestrian Infrastructure Improvements

The following pedestrian infrastructure improvements are intended to enhance pedestrian access and circulation as well as help pedestrians feel more comfortable when walking in Stanislaus County.

- Elimination of sidewalk gaps to improve connectivity
- Installation of curb ramps to improve ADA access
- Improvements to signalized intersections to include pedestrian phase
- Improvements to pedestrian crossings at unsignalized intersections

#### **Goods Movement**

The State recognizes the importance of the agricultural industry in the San Joaquin Valley ("Valley"). The Valley contains millions of acres of the world's most fertile farmland, ideal growing conditions and state-of-the-art water distribution projects. Seven of the nation's top 10 agricultural counties are in the San Joaquin Valley. If the Valley were a state, it would be the top agricultural producing state in the country, ahead of Iowa.

With this as a backdrop, the State's Goods Movement Action Plan identifies four high priority gateway regions in California that are necessary to support the continued growth of the California economy. The Stanislaus region, which includes SR-99 and I-5 and other important east-west corridors that traverse Stanislaus County, including SR-120 and SR-132, comprises one of these four high priority regions.

The movement of agricultural products will continue to occur primarily by truck for the foreseeable future, which means that truck traffic volumes will continue to increase.

Stanislaus County has approximately 246 miles of designated truck routes, including I-5, SR-99, SR-132, SR-108, SR-219, Santa Fe Avenue, Briggsmore Avenue, Sylvan Avenue, Claus Road, Keyes Road, Hickman Road, S. Carpenter Road, and Crows Landing Road. Truck travel mixed with agricultural uses provides for roadway conditions that are significantly different during harvest seasons (late summer/fall) than non-agricultural counties. Truck travel is also the primary source of roadway degradation for local facilities. Therefore, truck traffic will continue to be a primary factor in the need for roadway restoration and maintenance.

The region exports and imports millions of tons of goods each year to maintain its economic activities and quality of life. However, the existing primary goods movement modes (truck, rail, and air) are rapidly reaching their capacity constraints. With the worsening national recession, rising unemployment and the State's \$40 million budget gap, the transport of agricultural commodities will remain an important function in Stanislaus County, as nearly 80 percent of the County's land is devoted to agricultural production, compared to 25 percent of the State as a whole, as well as an important food source for the State, nation. and world.

For the reasons described, traffic congestion and operational conflicts between trucks and passenger vehicles have been identified as key issues that need to be addressed in the RTP to maintain an efficient goods movement network. Recognizing this outcome, Stanislaus County is a partner in the San Joaquin Valley Interregional Goods Movement Plan effort being led by the Merced County Association of Governments (MCAG).

The eight MPOs in the San Joaquin Valley are coordinating on a Goods Movement Study. The Study, which is currently in the third phase, will outline improvements to goods movement throughout the Valley. The focus of Phase III is the SJV truck model, which will integrate with local models to provide an analytical basis for evaluating the benefits of transportation investments that impact the movement of goods.

The first phase of the study described the goods movement system and freight flow for the region and generated a list of key issues and problems. Phase II developed the SJV Truck model program.

### **GOALS AND OBJECTIVES**

The 2011 RTP is the blueprint used to address the many challenges facing the transportation system. This long range plan contains an integrated set of goals, objectives, and actions to maintain, manage, and improve the transportation system in Stanislaus County through the year 2035. The plan's strategy is to accommodate growth of the region by improving the movement of goods and people while maximizing the benefit of each dollar spent on the transportation system.

At the core of the 2011 RTP are five goals:

- *Mobility*: Improve the opportunity and ability of people to travel between jobs, schools, and homes; and to efficiently move goods.
- Safety and System Preservation: Operate and maintain the transportation system to ensure public safety and to protect the region's transportation investment.

- Environmental Quality: Consider the environmental impacts when making transportation investments, and minimize direct and indirect impacts on the environment for cleaner air and natural resources.
- Economic/Community Vitality: Foster job creation and business attraction, retention and expansion by improving the movement of goods, services and our local workforce while revitalizing our communities.
- Social Equity: Promote and provide equitable opportunities to access transportation services for the full spectrum of the population. Ensure that economically, physically, and socially disadvantaged groups have access to transportation services and share in benefits of transportation improvements.

The concepts of these goals were first established in the 2001 StanCOG RTP. However, for the 2011 RTP, the goals have been updated and refocused to acknowledge the latest planning practices and legislation, and also to address the new needs and challenges facing the region as described previously in this chapter.

The basis of the 2011 RTP derives from two foundational concepts: Fiscal Constraint and System Planning. The goals, objectives, and actions, which were derived from these two concepts, are mechanisms to implement strategies to address the issues facing the region. The goals, objectives, and actions are intended to guide the development of the transportation system and improve the quality of life for the citizens in Stanislaus County.



The RTP is focused on maintaining and extending a balanced multimodal transportation system that supports the concept of sustainable communities. A sustainable communities approach includes the three E's of Sustainability in all transportation decisions. The five goals (and supporting objectives and actions) were created to help encourage this focus and to provide the necessary tools to achieve the desired outcomes.

From the 2030 California Transportation Plan, "sustainability" is defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs. When applied to transportation, it means ensuring that economic, environmental, and social considerations are factored into decisions affecting transportation activity. A sustainable transportation system is one that meets people's needs equitably, fosters a healthy environment, provides a broad, balanced system in which the private vehicle, public transportation, bicycling, and walking are all viable options and can be maintained and operated efficiently and effectively over time.

#### Mobility

Improve the opportunity and ability of people to travel between jobs, schools, and homes; and to efficiently move goods.

#### **Objectives**

- Expand transportation mode choices for all residents and visitors.
- Strengthen the relationship between transportation and land use decisions; use regionwide system planning techniques to improve connectivity and integration between land uses and travel modes.

• Apply new technologies to make travel more reliable, convenient, and accessible.

#### Safety and System Preservation

Operate and maintain the transportation system to promote public safety and to protect the region's transportation investment.

#### Objectives

- Maximize safety and comfort for all transportation modes.
- Protect the region's investment by prioritizing the preservation of the existing transportation system before adding to the system.

#### **Environmental Quality**

Consider the environmental impacts of all transportation projects in making transportation investments, thus minimizing direct and indirect impacts on the environment for cleaner air and natural resources.

Three E's of Sustainability: Environmental Quality Economic Vitality Social Equity

#### Objectives

- Reduce the number of overall vehicle miles traveled, reduce greenhouse gas emissions, and improve overall air quality.
- Preserve farmland, open space, and natural resources by integrating transportation and land use planning.



#### **Economic and Community Vitality**

Foster job creation and business attraction, retention, and expansion, by improving the movement of goods, services, and the workforce while revitalizing our communities.

#### **Objectives**

- Promote alternative modes of transportation; promote communities that are transit-oriented, bicyclefriendly, and walkable, making them more livable, attractive, and economically vibrant.
- Focus not only on vehicular mobility but improve goods movement too; support the enhancement of goods movement by land and air.

#### Social Equity

Promote and provide equitable opportunities to access transportation services for the full spectrum of the population. Ensure that economically, physically, and/or socially disadvantaged groups have access to transportation services and share in benefits of transportation improvements.

#### Objectives

- Increase participation of the economically, physically, and socially disadvantaged groups in the transportation planning and decisionmaking processes.
- Provide an equitable level of transportation options for all users.
- Ensure transportation improvements do not negatively affect disadvantaged groups.



# 3 FINANCIAL PLAN

Knight's Ferry covered bridge spanning the Stanislaus River, Knight's Ferry, California Photo courtesy of Studio Warner





Flower Clock, outside Modesto Centre Plaza, Modesto, California

Fiscal constraint is one of the foundational concepts of the 2011 RTP. As such, the financial plan is a key component of the document. Given the nature of the current economy, fiscal constraint is especially important. As part of the 2011 RTP effort, StanCOG, in cooperation with the agencies in the region, has taken a strict approach on this issue. It is our assertion that while needs will always exceed available funding, it is smart planning to maximize the benefit of each available dollar and prioritize projects based on the funding availability, not strictly need.



#### **APPROACH**

A typical RTP approach is to determine transportation improvement needs based on an analysis of travel demand, identify needed projects, and then determine available funding. This approach typically results in a fiscal deficit, as needs generally outweigh revenue.

StanCOG, however, has taken these same steps and rearranged them. Our approach is to determine the available funds prior to determining the transportation-related needs of the region. Our thought is that regardless of the mounting needs, we cannot solve problems using money the region does not have. Therefore, prior to identifying the transportation needs and preparing the project list, we determined the level of funding we had to work with. This helped our region prioritize projects based on available funding.

The RTP prioritizes operation and maintenance projects (maintenance to the existing system) prior to widening projects that add to or expand the system.

#### Future Success of the RTP

StanCOG undertook an extensive public outreach effort for the 2011 RTP to develop strategies and projects and to ultimately garner support **Funding Sources:** for the projects included as the Federal Programs preferred strategy. StanCOG held several public workshops throughout the process to seek public input and to attempt to

place transportation planning issues on the forefront of public awareness. Working closely with the local agencies, State and Federal agencies, and with the public, increases the likelihood that the Plan will be implemented over the next 25 years.

Attracting State and Federal funding to implement the preferred strategy, and maintaining the local commitment to the funding projects identified in the Plan will play a critical role in the Plan's success.

The preparation and adoption of the Plan is just the beginning of a very long journey to implement these transportation projects. StanCOG will continue to review and work with the Plan to not only implement Tier I projects, but to prioritize Tier II projects so that the region is ready to utilize additional funding if it becomes available in the future. Establishing and maintaining clear priorities will help the region focus attention on the most important projects first and concentrate its collective political and technical resources to attract other State and Federal funding for projects in the Plan.

Investment priorities for local, State, and Federal funds are embodied in the RTP. The RTP describes both the short term and the long term investment strategy in the region's transportation system, indicating how all funding sources are to be utilized to meet the goals and objectives. This chapter further provides a summary of the projected transportationrelated revenues for the Stanislaus region over the life of the plan and an accounting of the project costs necessary to implement the goals of the RTP.

#### **Revenue Assumptions**

As a necessary condition of fiscal constraint, the financial plan contains assumptions about the availability of future funding from identified and new sources. It is assumed that the identified Federal and State funding sources will continue to be available over the life of the RTP. Our approach ensures that the



**Three Primary** 

State Programs

Local Programs

first four years of projected revenues are consistent with the 4-year STIP fund estimate adopted by the California Transportation Commission (CTC); the RTP goals, policies, and objectives; and the projects included in the RTIP, the ITIP and FTIP.

StanCOG has used the "Reasonable to Assume" barometer to identify and estimate revenues. No escalation rate, new funding source, or existing funding source has been included that is not "reasonable to assume." The following key assumptions have been made as part of the revenue projections process:

- The State and Federal gas taxes are assumed to stay at today's levels through 2035.
- The transportation sales tax initiative will become a reality given its narrow margin of defeat (less than ¼ percent) in 2008 and the growing discontentment with regional congestion and road maintenance. Funding from this program would commence in 2012.
- A specified level of State and Federal discretionary funding will be available for RTP improvements. These programs include the STIP, Surface Transportation Program (STP), and Local Transportation Funds (LTF). The appropriate match requirements for each program will be available from local funds.
- Extensive local funds consistent with commitments made in local facility fees and capital improvement programs will continue and are identified and included as part of the plan. These include Community Facilities Fees (CFF), Public Facilities Fees (PFF), and system development charges.

#### **Unconstrained Needs**

Transportation needs will always exceed available funding; therefore, the RTP includes a Tier II project list that identifies the needs beyond the available revenues.

## SUMMARY OF REVENUES AND COSTS

The following information summarizes revenue projections from all available sources and provides a recap of RTP project costs. A discussion of individual sources and programs is also provided.

#### **Total Revenues**

StanCOG has taken a conservative approach in forecasting future revenues. We have used historical revenues from the past several years (typically 4-8 years) to create a base figure for each source. An inflationary three percent rate is then applied to that figure to show the true funding levels over the life of the plan. The anticipated revenues for the life of the 2011 RTP are approximately \$1.9 billion in the short-range and approximately \$2.5 billion in the long-range.

Local sources account for almost one half of all revenues at 49 percent, with State sources accounting for 21 percent. Federal sources make up the remaining 30 percent. Over the life of the RTP, total revenues are anticipated to be approximately \$4.4 billion. See Table 3.1. The full revenue projection spreadsheet, which shows forecasts for each source, can be found in Appendix G.



IABLE 3.1 – MAJOR REVENUE SOURCES								
Revenue Sources	Estimat	ed Revenue (Escalat	ted)					
	Short-Range	Long-Range	Total					
Local								
Transportation Sales Tax Measure	\$448,272,849	\$492,190,258	\$940,463,107					
Local funding (Gas Tax, Prop 42, Impact Fees, General Fund)	\$199,907,718	\$293,571,223	\$493,478,941					
Transit Fares	\$30,923,225	\$45,411,799	\$76,335,024					
Local Transportation Fund (LTF)	\$247,620,876	\$363,639,604	\$611,260,480					
Subtotal	\$926,724,668	\$1,194,812,884	\$2,121,537,552					
State								
State Highway Operations and Protection Program (SHOPP)	\$196,784,160	\$288,984,173	\$485,768,332					
State Transportation Improvement Program (STIP)	\$119,684,832	\$119,684,832 \$195,031,171						
State Transit Assistance (STA)	\$46,802,738	\$68,731,399	\$115,534,138					
State and/or Federal Aviation	\$8,074,182	\$10,444,816	\$18,518,998					
Subtotal	\$371,345,912	\$563,191,559	\$934,537,471					
Federal								
Federal Transit (FTA) Formula and Non-Formula	\$231,566,375	\$334,690,868	\$566,257,243					
Congestion Mitigation and Air Quality (CMAQ)	\$96,245,490	\$141,268,670	\$237,512,160					
Regional Surface Transportation Program (RSTP)	\$79,020,457	\$116,044,205	\$195,064,661					
Highway Safety Improvement Program (HSIP)	\$1,684,382	\$3,083,904	\$4,768,286					
Highway Bridge Program (HBP)	\$115,843,523	\$135,691,129	\$251,534,652					
Safe Routes to School (SR2S)	\$2,920,818	\$4,930,139	\$7,850,957					
Rail/Highway Grade Crossing Protection (USC Section 130)	\$3,368,470	\$6,167,269	\$9,535,739					
Federal Demonstration Project	\$24,257,603	\$31,989,552	\$56,247,156					
Subtotal	\$554,907,118	\$773,865,735	\$1,328,772,853					
Grand Total Revenue Sources	\$1,852,977,698	\$2,531,870,178	\$4,384,847,876					



#### **Total Project Costs**

In line with Year of Expenditure (YOE) requirements, StanCOG has escalated all project costs to the year of completion. YOE ensures that "total" project costs are assumed (including inflation). The intent of this requirement is to ensure that the RTP project list is as realistic as possible. For example, a project that costs \$1 million today will not cost \$1 million in 2035. Therefore, the RTP is required to estimate the true project cost at the year of completion.

Short-range project costs for the 2011 RTP total approximately \$2 billion, while long-range costs are estimated at \$2.4 billion. The total for all RTP projects is approximately \$4.4 billion through 2035. Refer to Table 3.2 for details on Tier I cost estimates for all projects.

#### **FEDERAL REVENUES**

#### Federal Transportation Authorization Bill, SAFETEA-LU (Safe, Accountable, Flexible, Efficient, Transportation Equity Act – A Legacy for Users)

The current Federal Transportation Authorization Bill, SAFETEA-LU, was signed into law on August 10, 2005. The Bill authorized \$286.5 billion in transportationrelated spending in federal fiscal years (FFY) 2004-2009. The total national funding in SAFETEA-LU provides (an inflation-adjusted) increase in spending of approximately five percent for highways and 16 percent for transit over the previous bill, TEA-21. SAFETEA-LU officially expired in September 2009 but has been extended on a monthly and/or quarterly basis since that date. It is anticipated that the Bill in its present form will continue to be extended

#### TABLE 3.2 – TIER I COST ESTIMATES FOR ALL PROJECTS Short-Range Costs Long-Range Costs **Tier | Costs** Total Percent of Tier (2010 - 2022)(2023 - 2035) \$1,964,069,800 Roads \$1,719,868,300 \$3,683,937,100 84.0% Bicycle/Transit \$127,898,900 4.5% \$69,094,800 \$196,993,700 Transit \$340,737,800 \$123,449,600 \$464,187,400 10.6%

\$0

\$2,432,706,500

\$39,398,600

\$1,951,811,300

Source: StanCOG and Member Agencies 2010

Aviation

Total



0.9%

\$39,398,600

\$4,384,517,800

until a new Federal authorization bill is passed by Congress. Neither the date for the new Federal bill nor the actual name of the legislation is currently known.

Federal funding is divided into two funding types: highway (FHWA) and transit (FTA). The Highway Trust Fund (HTF) is the source of funding for most of the programs in SAFETEA-LU. The HTF is comprised of the Highway Account—which funds highway and inter-modal programs—and the Mass Transit Account. Federal motor fuel taxes are the major source of income into the HTF. In Stanislaus County, fuel tax monies are used primarily for State highway projects and county roads. They are also used for emergency repairs and bridge replacement. Federal funds are available for most rural collectors in the county road system and for rural portions of the State highway system. The two types of Federal funding are described further. Refer to Table 3.3 for a list of 2011 RTP Federal highway funding programs.

IABLE 5.5 - 2011 KTT TEDEKAL HIGHWAT FUNDING FROGRAMS								
Programs	Authority	Guaranteed Funding	Primary Use	Short-Range 09/10 - 21/22	Long-Range 22/23 - 34/35	Total		
Congestion Mitigation / Air Quality (CMAQ)	StanCOG	SAFETEA-LU	Air quality attainment	\$96,245,490	\$141,268,670	\$237,514,160		
Regional Surface Transportation Program (STP)	StanCOG	SAFETEA-LU	Streets (local)	\$79,020,457	\$116,044,205	\$195,064,661		
Hazard Safety Improvement Program (HSIP)	Caltrans	No	Streets (local)	\$1,684,382	\$3,083,904	\$4,768,286		
Highway Bridge Program (HBP)	Caltrans	No	Bridges (local)	\$115,843,523	\$135,691,129	\$251,534,652		
Safe Routes to School (SR2S)	Caltrans	No	Bicycle/ Pedestrian	\$2,920,818	\$4,930,139	\$7,850,957		
Rail Highway Grade Crossing Protection (USC Section 130) (RHGCP)	FHWA	SAFETEA-LU	Railroad crossings	\$3,368,470	\$6,167,269	\$9,535,739		
Federal Demonstration Project (FDP)	FHWA	No	Varies	\$24,257,603	\$31,989,552	\$56,247,156		
Federal Highway Total				\$323,340,743	\$489,174,868	\$762,515,611		

### TABLE 3.3 – 2011 RTP FEDERAL HIGHWAY FUNDING PROGRAMS



StanCOG anticipates approximately \$1.3 billion from all Federal sources, including approximately \$762 million from Federal highways and \$566 million from Federal transit.

#### Federal Highway Funding Programs

#### Congestion Mitigation and Air Quality Improvement Program (CMAQ)

CMAQ provides funding for projects and programs in air quality nonattainment areas for ozone, carbon monoxide (CO), and particulate matter (PM-10, PM-2.5), which reduce transportation-related emissions. Projects that reduce VMT, focus on nonauto modes, and are included in existing or proposed planning documents are the most successful in obtaining funding. The region estimates approximately **\$237.5 million** through 2035.

## Regional Surface Transportation Program (RSTP)

The RSTP guarantees counties 110 percent of their allocation under the old Federal Aid Urban/Federal Aid Secondary (FAU/ FAS) program. These funds may be spent on streets and roads. Jurisdictions may also use the funds for bikeway and pedestrian, transit, safety, ridesharing, traffic management, parking, environmental enhancements, and transportation control measures (TCMs). Stanislaus County has historically received approximately \$5 million per year in RSTP funds. The region expects to receive approximately **\$195.1 million** through 2035.

#### Highway Safety Improvement Program (HSIP)

This new program, introduced in SAFETEA-LU, replaces the previous Hazard Elimination Safety Program (HES). This program allows states to target funds to their most critical safety needs. A total of \$5.1 billion is provided nationally for FFY 2006-2009. The region estimates they will receive **\$4.8 million** through 2035.

#### Highway Bridge Program (HBP)

HBP provides for construction and maintenance of bridges that are not on the State highway system, such as bridges on rural minor collectors and local roads. The range of HBP funds available to the region is typically between \$4 and \$7 million annually, when funding is available. The County anticipates approximately **\$251.5 million** in HBP funds over the life of the RTP.

#### Safe Routes to School Programs (SR2S, Federal)

The purpose of the Federal SR2S is to enable and encourage children to walk and bicycle to school safely. The State DOT, California Department of Transportation (Caltrans) will administer the SR2S Programs at the local level through the Division of Local Assistance (DLA). The region anticipates they will be successful in receiving approximately **\$7.8 million** through this grant program over the life of the RTP.



#### Railway-Highway Crossings (USC 130)

The focus of this program is to reduce the number of fatalities and injuries at public highway-rail grade crossings through the elimination of hazards and/or the installation and upgrade of protective devices at crossings. The County anticipates approximately **\$9.5 million** through 2035.

#### Federal Demonstration Program

Federal demonstration funds are allocated by legislative action for specific spending priorities or implementing agencies. These funds must be used on the specific project in which they were identified. The region anticipates approximately **\$56.2 million** through 2035.

#### Federal Transit Funding Programs

StanCOG anticipates approximately **\$566.3 million** from all available Federal transit programs, as shown in Table 3.4.

### Federal Transit Administration Section 5307 (Urbanized Formula Program)

This program provides grants for urbanized areas (50,000+ population) for public transportation capital investments (and operating expenses in areas under 200,000 population) from the Mass Transit Account of the Highway Trust Fund. The region anticipates approximately **\$396.4 million** through 2035.

TABLE 3.4 – FEDERAL TRANSIT FUNDING PROGRAMS							
Program	Authority	Guaranteed Funding	Primary Use	Short-Range 09/10 - 21/22	Long-Range 22/23 - 34/35	Total	
Urbanized Area Formula Program	FTA 5307	Yes	Urban Transit Operations/ Capital	\$162,096,463	\$234,283,607	\$396,380,070	
Non-Urbanized Area Formula Program	FTA 5311	Yes	Rural Transit Operations	\$57,196,895	\$82,668,644	\$139,865,539	
Federal Transit Non-Formula	FTA 5309a, 5309b, 5309c	No	Discretionary Transit	\$8,799,522	\$12,718,253	\$21,517,775	
SAFETEA-LU Job Access & Reverse Commute	FTA 5316, New Freedom 5317	No	Senior and Low Income Transit Service	\$3,473,496	\$5,020,363	\$8,493,859	
Federal Transit Total				\$231,566,376	\$334,690,867	\$566,257,243	



## Federal Transit Administration Section 5311 (Non-Urbanized Transit)

Under this section, funds are provided to non-urbanized transit systems-of which Stanislaus County Transit, StaRT is one—on a formula basis for capital and operating expenses. Twenty percent of Section 5311 funds are distributed through a new tier-based formula based on land area. The remaining 80 percent of funds is allocated by the existing formula based on population. The rural transit assistance program (RTAP) is funded with a two percent set-aside of the Section 5311 grant funds. During the life of the RTP, the region anticipates receiving approximately **\$139.9 million** in formula funds through 2035.

## Federal Transit Non-Formula (5309a, 5309b, 5309c)

The transit capital investment program provides capital assistance for three primary activities: modernization of existing rail systems, new and replacement buses and facilities, and new fixed guideway systems. Funds for these programs are allocated on a discretionary basis. The new and replacement bus and facilities funding is used for maintenance, bus replacement, expansion of facilities, and passenger amenities. The new fixed guideway funding will help the region plan for high-speed rail (HSR) connections through portions of the county as well as implementation of high-occupancyvehicle (HOV) lanes. The region estimates approximately \$21.5 million in nonformula funds through 2035.

#### Federal Transit Administration Section 5316 (Job Access and Reverse Commute) and Section 5317 (New Freedom) Programs

This new program, introduced in SAFETEA-LU, provides funding for local programs that offer job access and reverse commute services to provide transportation for low income individuals who may live in the city core and work in suburban locations. The County anticipates receiving approximately **\$8.5 million** through 2035.

The New Freedom formula grant program aims to provide additional tools to overcome existing barriers facing Americans with disabilities seeking integration into the work force and full participation in society. Lack of adequate transportation is a primary barrier to work for individuals with disabilities. The New Freedom formula grant program seeks to reduce barriers to transportation services and expand the transportation mobility options available to people with disabilities beyond the requirements of the Americans with Disabilities Act (ADA) of 1990.



### **STATE REVENUES**

StanCOG anticipates receiving approximately \$934.5 million from all State programs through 2035, as shown in Table 3.5.

Programs	Authority	Guaranteed Funding	Primary Use	Short-Range 09/10 - 21/22	Long-Range 22/23 - 34/35	Total
State Highway Operations and Protection Program (SHOPP)	Caltrans	No	State Highways	\$196,784,160	\$288,984,173	\$485,768,322
State Transportation Improvement Program (STIP)						
Regional Improvement Program (RIP)	StanCOG	Yes	Flexible, Regional Needs	\$56,042,298	\$85,303,512	\$141,345,810
Regional Improvement Program (RIP) – Transportation Enhancement	StanCOG	Yes	Flexible, Regional Needs	\$10,739,950	\$16,241,292	\$26,981,241
Interregional Improvement Program (IIP) – Highway/Road	Caltrans	No	Significant State Highways	\$40,123,578	\$73,461,515	\$113,585,093
Interregional Improvement Program (IIP) – Transportation Enhancement	Caltrans	No	Significant State Highways	\$10,671,829	\$14,742,677	\$25,414,506
Public Transit Account	Caltrans	No	Transit and Rail	\$2,107,177	\$5,282,176	\$7,389,353
State Transit Assistance	StanCOG	Yes	Local Transit	\$46,802,738	\$68,731,399	115,534,137
State/Federal Aid to Airports	Caltrans/ FAA	Yes	Aviation	\$8,074,182	\$10,444,816	\$18,518,998
Total State Funding				\$371,345,912	\$563,191,560	\$934,537,460




# State Highway Operations and Protection Program (SHOPP)

Biennially, Caltrans is required to prepare a SHOPP for expenditure of transportation funds for major capital improvements that are necessary to preserve and protect the State highway system. Projects included in the SHOPP are limited to capital improvements relative to maintenance, safety, and bridges that do not increase capacity. Projects can also include bridge replacement and seismic retrofitting. MPOs are encouraged to coordinate with Caltrans on the SHOPP prior to its submission to the CTC. The region anticipates approximately **\$485.8 million** through 2035.

# State Transportation Improvement Program (STIP)

The STIP is a four-year planning document adopted every two years that displays commitments of transportation funds for improving operations of all mode types. Total STIP revenues are projected to be approximately **\$307.3 million.** Seventyfive percent of STIP funding goes to the Regional Improvement Program (RIP) and 25 percent goes to the State discretionary account the Interregional Improvement Program (IIP).

Under the RIP, the Stanislaus County region has the discretion to select and program transportation improvement projects on State highways, local roads, and transit and bike facilities. Projects for RIP funding are identified in the Regional Transportation Improvement Program (RTIP). The region anticipates approximately **\$141.3 million** through 2035. Regional STIP/Transportation Enhancement (TE) funds can be used for transportationrelated capital improvement projects that enhance quality of life, in or around transportation facilities. Projects must be over and above required mitigation and normal transportation projects, and the project must be directly related to the transportation system. The region anticipates approximately **\$27 million** through 2035.

The Interregional Transportation Improvement Program (ITIP) provides funding for highway and road improvements that are regional in nature, as well as TE projects. The region anticipates approximately **\$113.6 million** in ITIP and **\$25.4 million** in TE through 2035.

The Public Transit Account (PTA) provides funding for transit and rail projects within the County. The region anticipates **\$7.4 million** through 2035.

# State Transit Assistance (STA)

State Transit Assistance (STA) funds are derived from the Public Transportation Account (PTA). Half of the funds are allocated to Caltrans and the other half to MPOs. Of the MPO allocation, half is allocated to mass-transit projects for such needs as vehicles, equipment, and terminals, and the other half is allocated to transit operators, based on fare revenues. The region typically receives approximately \$2.5 million in STA funds annually. Over the life of the RTP, the County anticipates approximately **\$115.5 million** in STA funding.



#### **Bicycle Transportation Act (BTA)**

The BTA provides funding for projects that serve and encourage bicycle use. The account is supported by a portion of the State gasoline tax. Statewide, approximately \$5 to \$7 million is made available each year. Because these funds are limited, comparatively less-costly projects, such as bike parking facilities, are more likely to receive funding than high-cost projects. Public agencies that have an approved Bicycle Transportation Plan in place are eligible to apply for funding. Local agencies must fund at least 10 percent of the cost of BTA projects. In 2008, Stanislaus County adopted a Non-Motorized Transportation Plan (NMTP). This plan addresses the eleven elements required by Caltrans in a bicycle master plan and therefore qualifies for BTA funding through the normal competitive grant process.

# Safe Routes to School Programs (State SR2S)

The State's SR2S program is primarily a construction program. Projects funded by the program are intended to improve the safety of students who walk or bike to school. Construction improvements must be made on public property. Maximum reimbursement from State budget cannot exceed 90 percent. Maximum amount of SR2S funds for any single project is \$900,000. Eligible projects include pedestrian facilities, traffic calming, traffic control devices, bicycle facilities, public outreach, and enforcement.

#### **Aviation Funding**

Aviation funding for Stanislaus County is provided mainly by two sources: the Federal Aid Improvement Program (AIP), which is referred to as FAA, and the California Aid to Airports Program (CAAP). The FAA provides 90 percent Federal funding, with 10 percent local funding, for general aviation airports. FAA funds are derived from user charges, such as taxes on aviation fuels, taxes on civil aircraft, and a surcharge on air passenger fares. These funds can be used for most capital expenditures. The California Aid to Airports Program (CAAP) makes grant funds available for airport development and operation.

Although funding for aviation comes from both State and Federal sources, the State administers the distribution of funds and therefore revenue estimates are shown under the State category. StanCOG anticipates approximately **\$18.5 million** from both sources through 2035.

# LOCAL REVENUES

StanCOG anticipates approximately \$2.1 billion from all local sources for roads, transit, and non-auto modes through 2035, as shown in Table 3.6.

#### Local Sales Tax Measure

The California legislature has provided local jurisdictions the ability to increase the retail sales tax up to one percent for specific purposes, including transportation. The increase requires a



TABLE 3.6 – LOCAL FUNDING PROGRAMS						
Programs	Authority	Guaranteed Funding	Primary Use	Short-Range 09/10 - 21/22	Long-Range 22/23 - 34/35	Total
Transportation Sales Tax Measure	StanCOG	No	Roads	\$448,272,849	\$492,190,258	\$940,463,107
Local Funding (Gas Tax, Prop 42, Development Impact Fees, General Fund)	StanCOG	No	Local Road Maintenance	\$199,907,718	\$293,571,223	\$493,478,941
Transit Fares	Regional and Local Transit	No	Transit Operations	\$30,923,225	\$45,411,799	\$76,335,024
Local Transportation Funds (LTF)	StanCOG	Yes	Rural Transit	\$238,952,194	\$350,909,353	\$589,861,546
Local Transportation Funds (LTF Non- Motorized)	StanCOG	Yes	Bike and Pedestrian	\$8,668,682	\$12,730,252	\$21,398,934
Total Local Funding				\$926,724,668	\$1,194,812,885	\$2,121,537,552

super-majority vote (2/3), although an initiative that would remove the need for a 2/3 majority vote in favor of a simple majority is in the preliminary stages in the State legislature.

Several counties in California and the San Joaquin Valley have opted to increase the sales tax by a half cent for transportation improvements. In 2004, Stanislaus County prepared a measure (Measure K) for a half cent transportation sales tax for the November 2006 ballot. The Measure received 57 percent voter approval. Subsequently, StanCOG took the information gained from the narrow defeat of Measure K and created a new measure for the November 2008 ballot. While great strides were made in the measure and in voter approval, the measure narrowly failed. However, this raised expectations for a future measure. StanCOG, during the RTP process, has considered these narrow defeats and through discussions with its

policy bodies, the State and the Federal government, have included a local sales tax measure as part of the revenue projections.

The sales tax measure proposes funding for capacity projects on SR-99 and SR-132, as well as maintenance funds for each local agency. When passed, estimated in 2012, the region anticipates the transportation sales tax measure will generate approximately **\$940.5 million** through 2035.

#### Local Funding (State Gasoline Tax, Proposition 42, Development Impact Fees, and General Fund)

State gasoline tax and Prop 42 funds are used primarily for the maintenance of county roads. Development Impact Fees and General Fund monies are used to improve the local road system within the jurisdictions. The region anticipates approximately **\$493.5 million** from these sources through 2035.

#### **Transit Fares**

The Stanislaus County regions' five transit operators receive revenues from various subsidies as well as transit fares. StanCOG estimates future revenues from all transit fares at approximately **\$76.3 million** through 2035.These funds will be used for both operating and capital expenditures.

# Local Transportation Fund (LTF)

Existing law requires that ¼ percent of statewide sales and use tax money be transferred to the local transportation fund for allocation, as directed by the MPO, to various transit projects and programs. The LTF also provides limited funds (two percent set aside) for the construction and maintenance of pedestrian or bicycle facilities. StanCOG must designate the two percent to any eligible entity for such purposes. Each local claimant may use any portion of its respective apportionment for nonmotorized facilities.

The TDA also allows local agencies to use LTF funds on local streets and roads, provided that all unmet transit needs that are found "reasonable to meet" are funded. If funds remain, they can be used for local road projects. Under current law, Stanislaus County anticipates approximately **\$590.0 million** for LTF. The amount that would be available for non-auto purposes is approximately **\$21.4 million** through 2035. However, due to the passage of Senate Bill 716 (SB 716), future LTF funding for local roads may be eliminated for some agencies within Stanislaus County.

#### Senate Bill 716

On October 11, 2009, the Governor approved Senate Bill 716 (SB 716). SB 716 will disallow local transportation funds apportioned to the urbanized areas of counties with populations of 500,000 or more of street and road projects. Counties with populations of 500,000 or less are exempt from this requirement. Also exempt are cities with populations under 100,000 even if they are located within urbanized areas. Population numbers are calculated as of the 2000 decennial census and at each subsequent census. SB 716 takes effect July 1, 2014.

#### Assembly Bill 86 and 89

In 2009, the Governor signed AB 86 and AB 89, which will replace the sales tax on gasoline with an excise tax. The actual ramifications for future revenues or transit impacts are not known at this time. When the actual effect of the two bills is known, they will be incorporated into future RTP updates and revenue estimates.



#### Project Cost Summary – Funding Sources by Mode

#### <u>Roadway</u>

The funding for Tier 1 roadway projects comes from several sources, including City and Public Facilities Fees (CFF, PFF), Development Impact Fees and Transportation Impact Fees (DIF, TIF), Congestion Mitigation and Air Quality program (CMAQ), Highway Bridge Program (HBP), and Regional Surface Transportation Program (RSTP). Capacity enhancements on the regional road network are primarily funded through the State Transportation Improvement Program (STIP) and local sales tax measures.

#### Bicycle and Pedestrian

Funds for non-motorized projects are available from several State and Federal programs, as well as local sources. The majority of funding (57 percent) is anticipated from a combination of STIP, Prop 84, and Transportation Enhancement (TE). Another funding source assumed to be used for non-motorized projects includes CMAQ funds, which account for nearly 40 percent of project costs.

# <u>Transit</u>

The majority of transit funds are provided through passenger fares, the Federal Transit Administration (FTA), and the Transportation Development Act.

# <u>Aviation</u>

The primary fund sources for Aviation projects in the 2011 RTP are State and Federal FAA programs. Several proposed projects use a combination of funding from the Public Facility Fees program as well.





#### Tier I Project Costs vs. Total Revenues

The 2011 StanCOG RTP is fiscally constrained through 2035 based on revenue assumptions in this chapter. Overall, the RTP estimates a small surplus of approximately \$331,000 through 2035, as shown in Table 3.7. This surplus may change slightly as projects advance to actual construction stage and actual revenue sources are refined through Federal and State budget allocations. The FTIP will take a closer look at the projects that make up the first four years of the RTP.

#### Comparison of 2011 Needs to 2007 Needs

The percentage of funds directed to road improvements in the 2011 RTP declined from 86 percent to 84 percent compared to the 2007 RTP, while bicycle and pedestrian funding increased from one percent to four percent. Transit and Aviation remained about the same.

Table 3.7 – Comparison of Tier I Costs to Total Revenues				
Tier I Modes	Tier I Costs	<b>Revenue Sources</b>	<b>Revenue Totals</b>	Difference
Roads	\$3,683,937,100	Federal Highway	\$762,515,611	
Bicycle/Pedestrian	\$196,993,700	Federal Transit	\$566,257,243	
Transit	\$464,187,400	State	\$934,537,471	
Aviation	\$39,398,600	Local	\$2,121,537,552	
Total Costs	\$4,384,516,800	<b>Total Revenues</b>	\$4,384,847,877	\$331,076





# 4 TRANSPORTATION PLAN

SOUTHER

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Modesto Downtown Transit Hub, Modesto, California Photo courtesy of Studio Warner





Bus Terminal, Modesto Centre Plaza, Modesto, California

This chapter of the 2011 Regional Transportation Plan describes the priorities for regional transportation infrastructure and service improvements. It includes sections on roadways, bicycle/pedestrian improvements, transit, aviation, rail, and goods movement. The RTP is not merely a list of transportation projects; it is a strategy to improve all transportation modes to meet the movement needs of people and goods, which will in turn improve the overall quality of life in the region.



#### **PLAN DEVELOPMENT**

Funding for transportation improvements is limited and has generally not kept pace with the needs of the region. StanCOG recognizes this fact and has prepared the 2011 RTP to address this issue. A primary effort of the RTP is to focus the available resources on the priority needs of the region to maximize the benefit of each dollar spent. This approach builds upon the existing transportation system in place today, the major project commitments planned or under construction, and the analysis of traffic data to determine the needs of all travelers in the Stanislaus region. The desired outcome is to close the gap toward the ultimate network needs of the region. The Transportation Plan identifies short-range (0-12 years) and long-range (13-25 years) transportation improvements for inclusion in the RTP and ultimately, the Federal Transportation Improvement Program (FTIP).

The 2011 RTP and this chapter—the Transportation Plan—sets forth a plan to address RTP issues and needs identified in accordance with regional goals, objectives, actions, and modal trends. As discussed previously, StanCOG developed the RTP utilizing two foundational concepts: Fiscal Constraint and System Planning, with a focus on Smart Growth principles. Refer to Appendix H for a detailed description of the background of the RTP planning process.

#### **Fiscal Constraint**

Fiscal constraint requires future revenues to match the estimated costs of proposed projects over the life of the RTP. Fiscal constraint ensures prioritization of projects, allowing jurisdictions to focus their efforts on projects that bring about real change and that fully support RTP goals and objectives for all modes.

#### System Planning

System planning is a comprehensive review of the entire transportation system on a regional level, not bound by local agency lines. System planning incorporates all modes of the system to address travel/movement needs of both people and goods.

# Smart Growth Movement

With the inception and the future implementation of the San Joaquin Valley Blueprint, the region is seeing the benefits of better matching transportation investment with land use planning. Smart Growth includes land development methods that help reduce the amount of auto travel required to meet the needs of the people who live, work, shop, or play in a specific development or community. By concentrating new development in existing urban areas where transit services are available or where more urban services are within walking or bicycling distance, smart-growth strategies seek to reduce the amount of automobile travel required by making it possible for more trips to be made by transit, bicycling, or by walking. This approach of tying transportation planning to land use planning is a priority



of StanCOG as we find ways to limit the County's carbon footprint and reduce vehicle miles traveled (VMT). Therefore, the 2011 RTP update emphasizes a regional approach to transportation issues and makes recommendations relative to all modes of transportation within the County. The integration of land use and transportation planning improves the environment and the overall quality of life in the region.

# **Regional Cooperation**

The RTP supports local land use plans and development projects in three ways. First, the RTP is based upon future land use pattern assumptions found in the adopted General Plans of each jurisdiction. StanCOG works closely with the jurisdictions to ensure that the land use assumptions used in the StanCOG travel-forecasting model program reflect the most accurate information available. Second, by using local land use projections, transportation needs and priorities are evaluated and selected based on their ability to contribute toward the development of an efficient transportation system that supports local growth plans. Finally, the RTP identifies actions and programs to ensure that transportation projects and mitigation measures are incorporated into local land use decisions and are not inconsistent with the California State Wildlife Action Plan (23 CFR Part 450.322 (g)). The 2011 RTP projects and programs have no adverse impact on the CSWAP.

The cooperation of the local agencies with StanCOG on the RTP creates a feedback loop. As new smart growth measures such as the Blueprint and SB 375 are introduced, StanCOG incorporates these into the RTP. The local agencies then utilize this information in General Plan Updates; and since RTPs are required to be based on the latest planning assumptions (i.e., General Plans), the level of commitment to these measures are increased continuously.

# **Environmental Justice**

Environmental Justice (EJ) is defined as the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. EJ supports community involvement in regional planning and programming through improved communications and active engagement in the process. In October 1999, FHWA and FTA implemented environmental justice principles in all Metropolitan and Statewide Planning programs, policies, and activities to:

- Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects on minority populations and lowincome populations
- Ensure the full and fair participation by all potentially affected communities in the transportation decision-making process
- Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations

Environmental Justice principles encourage better land use decisions, improve access to jobs, help promote good air quality, and strengthen neighborhoods.



Currently, all of StanCOG's plans, projects, and programs, including the RTP, comply with and attempt to exceed the requirements of environmental justice and all associated Federal and State requirements. StanCOG also seeks to improve the implementation and integration of these principles into our transportation planning process. We strive to increase the use of census information, special studies, and public input to determine the effect that proposed projects have on particular populations and areas of the County. StanCOG is increasing environmental justice efforts agency-wide by two methods: data collection/analysis and public outreach.

# Data Collection

Analyzing the effects of an action without data is impossible. StanCOG continues to increase its efforts to collect and analyze data to truly determine the effects of transportation programs and projects, both positive and negative, on all populations, especially on typically underserved populations. One such effort was the Transit Needs Assessment completed in early 2009 (see page 49).

# **Public Outreach Efforts**

As part of the 2011 RTP effort, StanCOG has increased the public outreach activities to ensure all populations have opportunities to provide input into the planning process. To minimize adverse impacts of the RTP projects on minority, low-income, or other typically underserved populations, StanCOG implemented an extensive program to promote community involvement in the RTP planning process. Through the expanded community outreach effort, including public workshops and stakeholder meetings, StanCOG increased its knowledge of community needs for improved transportation and accommodated proposals for accomplishing the improvements from all interested parties.

A particular effort was directed at minority groups who received brochures, meeting notices, and mailings in English and in Spanish to keep them apprised of planning activities. In addition, special efforts were made to reach out to the senior population.

The public outreach program began during the early stages of the planning process so public input could be provided to produce the plan, not to simply review and comment on a completed draft plan. Appendix I provides detailed information about the public involvement activities designed specifically for the RTP. Through this process, StanCOG, its member agencies and staff have participated in community events throughout the region to discuss transportation needs with residents and interested groups.

Ensuring that the community is involved in the entire process is important. StanCOG continued to seek community input through public workshops, forums, and events, as well as the public hearing process through final adoption of the RTP.

# Regional EJ Analysis

StanCOG, as part of the 2011 RTP, has taken strides to improve the EJ Analysis effort. A quantitative and geographical evaluation of RTP projects helped to illustrate the extent to which proposed transportation projects and policies affect minority and low-income populations. Geographic Information System (GIS) methods were used to



analyze demographic, socioeconomic, and transportation data. The primary purpose of this analysis was to determine the positive and negative effects of the transportation improvement strategy on typically underserved populations.

The first step was to prepare GIS maps, based on 2000 census data, showing the geographic concentrations for the following sensitive groups:

- Population with Female Head-of-Household
- Population over 65 Years of Age
- Disabled Population
- Population Below the Poverty Level
- Minority Population.

The second step was to overlay the region's proposed road projects onto the base maps to identify any patterns of potential adverse impacts to the sensitive groups (Appendix J). As the data collection and analysis tools improve, StanCOG will use these to overlay other information such as transit projects, Blueprint efforts, and GHG emission information.

A visual evaluation of the maps does not reveal noticeable trends or patterns of disproportionate impact. The geographic distribution of transportation improvements throughout the County appears relatively balanced.

Again, as StanCOG improves our data collection and analysis tools, we will continue to prepare updated analyses with new base information and new overlays to further ensure that sensitive populations are not disproportionately affected by transportation improvements.

# **TRANSPORTATION PLANNING** ASSUMPTIONS

The RTP contains both policy and action direction for the future implementation of transportation system improvements in Stanislaus County. Proposed RTP projects and actions are based on the following assumptions.

- The demographic information projected as part of the RTP process is accurate and growth levels will remain relatively constant throughout the life of the plan.
- Significant commercial development is anticipated in the Crows Landing area as well as the cities of Turlock, Patterson, and Oakdale.
- The agriculture, retail trade, government, and medical service industries will continue to drive

the economy,

creating most

of the new jobs.

A visual evaluation of the maps does not reveal noticeable trends or patterns of disproportionate impact.

Recreation-oriented travel will continue to affect State highways and major *County and City roadways, particularly* during peak travel months as people travel to the mountains and coastal areas throughout the State.

- Existing sources of Federal, State and regional revenues will continue, as estimated in the Revenue Forecast, throughout the 25-year life of the RTP.
- State and local revenue contributions to maintain the existing system are expected to increasingly fall short of system needs. The current estimate for maintenance backlog in the region for county and local roads is approximately \$1.4 billion.



- Transit service demand will continue to grow, primarily due to the increase in the number of elderly and disabled persons residing in the County, and rising fuel prices.
- The relatively sparse population distributed over a large land area with long distances between residences, services, and employment, will continue to make the automobile the primary mode of travel by residents of Stanislaus County. However, smart growth and VMT-reduction efforts, such as Blueprint Planning and SB 375, will continue to be actively pursued by StanCOG and its member agencies to address the environmental impacts of these patterns.

#### **Current STIP**

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The current STIP, dated September 2009, for Stanislaus County is shown in Appendix K. It contains 15 projects totaling **\$53.3 million**. The project list includes six capacity and/or bridge projects, several beautification projects, and funding for programming, planning, and monitoring (PPM) activities by StanCOG. Thirty percent of the funding amount will go for construction. The remaining 70 percent is programmed for the purchase of right of way, planning and engineering, and environmental analysis. A map showing the location of STIP projects in Stanislaus County is also shown in Appendix K.

# **Current SHOPP**

The current SHOPP, dated February 2010, for Stanislaus County is shown in Appendix L. Biennially, Caltrans compiles the project lists from the MPOs within each District to determine the eligible SHOPP projects. Caltrans then prioritizes the projects based on their parameters. The list contains eight programmed projects within Stanislaus County, totaling approximately **\$9.6 million**.

SHOPP projects are non-capacity increasing projects that focus on preserving existing State facilities and improving safety for motorists. Projects in the 2011 RTP include intersection improvements with traffic signals near Modesto, centerline improvements near Knights Ferry and Modesto, bridge improvements near Westley, road rehabilitation in Newman and Modesto, and an interchange reconstruction near Salida. A map showing the location of programmed major and minor SHOPP projects, projects currently in construction or completed, and candidate projects for future SHOPP is also provided in Appendix L.

# **Completed Projects**

The 2011 RTP is building on the successes of the 2007 RTP. While the state of the economy has hindered the development of further progress, the 2007 RTP sought to enhance the transportation system in the region and succeeded by completing several important projects. The following have been completed or are currently under construction.

- Whitmore Road Interchange, Ceres
- SR-219 (Kiernan Avenue) from SR-99 to Dale Road, Stanislaus County
- SR-132 East Widening, Modesto
- Pelandale Road Widening from McHenry Avenue to Dale Road, Modesto
- Virginia Corridor Bicycle/Pedestrian segment improvements, Modesto



# **Project Selection Criteria**

In addition to general system considerations for purpose and need, RTP projects in the Stanislaus region are selected considering the following criteria:

- Public acceptance
- Cost effectiveness
- Operational efficiency/safety
- Congestion relief and improvement, utilizing the CMP
- StanCOG, local jurisdiction and/or Caltrans District 10 priority
- Pavement conditions (utilizing the pavement management system)
- Emergency, commercial, agricultural, and recreational importance of the roadway
- Average daily traffic volumes
- Funding constraints
- Usage for heavy trucks and goods movement circulation
- Principal arterial and high emphasis route designations

#### Regional Transportation Improvement Program (FY 2010/11 through FY 2014/15)

The 2010 RTIP reflects changes introduced by Senate Bill 45 (1998), which made significant modifications to the funding, programming, and planning of transportation improvement projects and consolidated State funding into the Regional Improvement Plan (RIP) and Interregional Improvement Plan (IIP). StanCOG is responsible for recommending projects under the RIP through its submittal of the RTIP. Caltrans is responsible for recommending projects under the IIP through its submittal of the IIP. The eight San Joaquin Valley COGs and Caltrans have collectively prioritized projects based on project deliverability and prior CTC-identified project priorities. This coordinated approach presents a comprehensive and collective annual programming recommendation for the San Joaquin Valley rather than relying on decisions of CTC staff based on individual COG priorities. The process maximizes the use of the State's limited financial resources for transportation investment. Regionally significant projects will be modeled for the 2011 RTP and FTIP prior to final CTC action on the 2011 STIP. Additionally, State law requires that specific capacity projects nominated in the RTIP be drawn from an adopted CMP (Congestion Management Program). The projects in the 2010 RTIP have been drawn from StanCOG's adopted CMP. No new projects are being recommended. The following projects and programs are being carried over or reprogrammed from the 2008 RTIP:

- Claribel Road Widening (SR-108 to Oakdale Road – PPNO: 230) – \$9.9 million
- North County Corridor (SR-99 to City of Oakdale – PPNO: 228) – **\$6.2 million**
- SR-132 Expressway (Dakota Ave. to SR-108/SR-99 – PPNO: 944M) – \$5.8 million
- SR-99/Whitmore Avenue Interchange (PPNO: 9401) – Under construction
- SR-219 Widening Phase II (SR-99 to SR-108 PPNO: 940C) **\$50.5 million**
- Planning, Programming and Monitoring (PPNO: 9953) – \$1.2 million
- Transportation Enhancement Activities (TE) – **\$1.8 million**



#### **Air Quality Conformity**

Transportation conformity or Air Quality Conformity (AQC) was first introduced in the 1990 Clean Air Act Amendments. Under this law, MPOs are required to evaluate the air quality impacts of regionally significant and non-exempt projects regardless of funding source.

StanCOG performs air quality analyses on all regionally significant, non-exempt transportation projects to ensure those projects conform to the Environmental Protection Agency (EPA) air quality regulations. Data on daily vehicle trips and mileage is extracted from the StanCOG Transportation Model Program and then inserted into air quality model program, which calculates the amount of pollutants produced daily.

Each time StanCOG adopts the Regional Transportation Plan (RTP) or its implementing document, the Federal Transportation Improvement Program (FTIP), StanCOG must determine if the plan or program conforms to the emissions budgets in the applicable State Implementation Plan (SIP). This is demonstrated by comparing the emissions generated by a proposed plan or project to the air quality emissions threshold for each criteria pollutant. Stanislaus County is located in the federally designated San Joaquin Valley Air Basin, which is currently nonattainment for NAAQS and Particulate Matter (PM 2.5). The region is not yet nonattainment for PM10 and carbon monoxide (CO), but maintenance plans are in place to reduce concentrations of these emissions.

The AQC Determination for the 2011 RTP is provided in a separate publication called the 2011 Air Quality Conformity Document. Based on the findings of that report, the 2011 RTP conforms to the SIP.

# StanCOG Traffic Model

StanCOG maintains a Transportation Model to assist decision makers with questions about travel patterns, transportation investments, land use decisions and air quality matters. The StanCOG Transportation Modeling Program supports key planning activities in the region, including the Regional Transportation Plan (RTP), Air Quality **Conformity Analysis, Congestion** Management Program (CMP), the San Joaquin Valley Regional Blueprint, and other regional transportation planning studies, general plans, and land use and traffic impact studies. In Fiscal Year 2009-10, StanCOG staff began and continues with efforts to update the transportation model components because of their importance to the Agency's planning and programming functions.



# TIER I AND TIER II

The 2011 RTP is a compilation of proposed and planned projects and programs within the Stanislaus County region, as well as new projects deemed necessary to provide adequate operation of the various transportation systems consistent with the County's regional goals and policies (Chapter 2), and the modal goals presented in this chapter. The highest priority improvements to the regional transportation system are linked to the system deficiencies identified in Chapter 2 and the Goals and Objectives from Chapter 2 that focus on future growth areas in the County. The Tier I and Tier II project list for each transportation mode type can be found in Appendix M and Appendix N, respectively.

All projects listed in the transportation plan fall into one of the following Tier designations.

Tier I RTP improvements represent short-range (0-12 years) and longrange (13-25 years) projects that are fully fundable from anticipated revenue sources and will normally be programmed during the life of the RTP (by 2035). See Appendix M for the list of funded projects by mode.

Tier II RTP improvements represent projects that do not have full funding during the life of the RTP given current revenue projections. However, these projects represent desired longterm projects for the region and are therefore included as "unfunded" projects. See Appendix N for the list of Tier II projects by mode. The recommended Tier I improvements for roads, the transit system, aviation facilities, and bikeway and pedestrian facilities. serve to implement a balanced multimodal circulation system that improves air quality by reducing VMT and greenhouse gas emissions, and helps accommodate future travel demand in the County. Recommended action programs for roads and goods movement focus on system maintenance, circulation improvements, capacity enhancements and safety improvements to facilitate inter- and intraregional travel and to reduce congestion. Alternative strategies, including Transportation Systems Management (TSM), **Transportation Demand Management** (TDM), and Intelligent Transportation Systems (ITS) are also addressed in this chapter.

#### **Project Purpose and Need**

The RTP guidelines require that a RTP "provide a clearly defined justification for its transportation projects and programs." This requirement is often referred to as the "Purpose and Need." Caltrans describes a project's "Need" as an identified transportation deficiency or problem, and its "Purpose" as the set of objectives that will be met to address the transportation deficiency. StanCOG has incorporated this information into the project list by adding columns for four categories that show the purpose/ need of each project. The following definitions are used in this document and included on all project lists.



#### System Preservation

This category of improvement indicates a project that serves to maintain the integrity of the existing system.

#### **Capacity Enhancement**

Capacity enhancement indicates a project that serves to increase traffic flows and to help alleviate congestion and improve level of service (LOS). This may be achieved by adding an additional lane of traffic, adding a passing lane, improving an intersection, and/or adding a turn-out for slow moving vehicles.

# Safety Projects

Safety improvements are intended to reduce the chance of conflicts between modes, prevent injury to motorists and others using the transportation system, and ensure that travelers can reach their destinations in a timely manner. The desired outcome is to reduce collisions on County facilities and the societal costs in terms of injury, death, or property damage.

#### Multimodal Enhancement

This type of improvement focuses on nonauto modes of travel such as bicycling, walking, and transit. Projects that are designated as multimodal are designed to enhance travel by one or more of these modes, provide for better connectivity between modes, and to improve non-auto access to major destinations and activity centers.

#### **Projects to Support Interregional Travel**

The following projects are highlighted to provide a centralized location of the projects considered most significant to support interregional travel.

- SR-99 Improvements and Widening
- SR-132 Connectivity project; improve connectivity from SR-132E to SR-132W and to SR-99
- SR-132 West Extension
- North County Corridor (NCC)
- Pelandale Interchange
- Kiernan Interchange
- SR-165 (Lander Avenue) Interchange
- Service Road/Mitchell Road Interchange

A primary function of the 2011 RTP is to develop an improved transportation system that advances the five goals of the Plan. Therefore, we must translate the goals and objectives into actions. StanCOG and the local agencies will implement these actions to ensure a transportation system that increasingly meets the needs of businesses, residents, and visitors.

Previously in the document, we have established the five goals and the objectives associated with those goals. We have also established demographic and transportation-related trends of the region, which led to the establishment of the goals. This section will identify the proposed actions for each transportation mode type.

The proposed actions are the set of "tools" that will enable the local agencies and StanCOG to implement the vision that has been created as part of the 2011 RTP. Actions include tasks that the region is currently undertaking or will address over the life of the plan.



# ACTIONS

	Roadways
Develop	a safe and efficient regional road system that facilitates the movement of people and goods and supports non-auto modes of transportation
Road Objectives	Incorporate system planning
	• Apply new technologies to make travel more reliable, convenient and accessible
	• Protect the region's investment by preserving the condition of the existing transportation system
	• Preserve farmland and natural resources by integrating land use and transportation planning
	• Adopt and integrate the regional expressway study into the RTP and local general plans
	• Integrate Intelligent Transportation System (ITS) strategies into projects and programs
	• Develop a comprehensive traffic management plan for the state highway system and regionally significant routes
Road Actions	• Design and implement a countywide Pavement Management Plan to be used in establishing and prioritizing maintenance needs at the regional and local level
	• Adopt a local Blueprint Plan, which will help to incorporate land use planning and transportation planning
	• Implement the projects identified in the 2008 StanCOG Non-Motorized Transportation Plan (NMTP) to ensure a workable network of alternative modes of transportation in the system
	• Identify potential locations and standards for construction of High-Occupancy Vehicle (HOV) lanes and other improvements to reduce congestion



#### **Roadway Priorities**

As a primarily rural county that has recently and increasingly been urbanized, the Stanislaus region is roadway-centric and will likely remain this way for the foreseeable future. StanCOG and the local agencies have made efforts to emphasize and encourage alternative modes of transportation and land use strategies to shift the high percentage of automobile use. However, the bulk of the funding for this RTP and future RTPs will be to improve roadways through rehabilitation, reconstruction, and capacity enhancements as funding allows.

The 2011 RTP roadway element contains 163 projects listed in Appendix M-1. The improvements include the following:

- Construction of new roads and expressways (11 percent)
- Capacity enhancements to SR-99, SR-132, and other major arterials within the County (55 percent)
- Intersection improvements to increase safety (7 percent)
- Seismic bridge repairs and replacement (5 percent)
- Interchange improvements (5 percent)
- System preservation through road reconstruction and rehabilitation (17 percent)

The roadway projects are designed to meet the regional and local needs and to accommodate future growth within the County and neighboring jurisdictions. For example, the general plans for the County and cities include new commercial and residential development in the communities of Salida, Del Rio, Valley Home, Westley, Grayson, Knights Ferry, East Oakdale, Denair, Modesto, and Crows Landing. To accommodate this growth and improve the transportation system, rehabilitation and new capacity projects are recommended.

The analysis of level of service (LOS) shows that the proposed capacity improvements will reduce the number of facilities experiencing LOS E and F in the future. However, many segments of SR-99 are currently experiencing LOS F and are anticipated to worsen due to the projected population increase in the County and in neighboring regions. SR-99 is the transportation backbone of this region, and StanCOG realizes the importance of this facility for both people and goods movement. To improve mobility and air quality in the region, StanCOG, in cooperation with the local agencies, encouraged the widening of SR-99 to eight lanes through the county. The projects were derived from the State Route 99 Business Plan. These widening improvements are included in the Tier I Roadway Project list.

The total for all proposed road improvements is approximately **\$3.68 billion**.



	Transit
	Provide an efficient, reliable, and attractive public transit system for the Stanislaus region
Transit Objectives	• Expand transportation mode choices for all residents and visitors
	• Apply new technologies to make travel more reliable, convenient, and accessible
	• Maximize safety and comfort for all transportation modes
	• Lower overall vehicle miles traveled, reduce greenhouse gas emissions, and improve overall air quality
	• Provide an equitable level of transportation for all modes for all users
Transit Actions	• Continue to work with transit providers to produce and implement programs from the 2009 Stanislaus County Transit Needs Assessment Study
	• Incorporate advanced public transportation management practices and Intelligent Transportation System (ITS) strategies into public operations
	• Work with transit providers to collect data by monitoring the productivity, reliability, efficiency, and coverage of the transit system and utilize data to make recommendations for improvement
	• Continue to pursue all forms of Federal and State grant funding to improve transit operations

# **Transit Priorities**

StanCOG is making great strides in improving the transit service in the region and is working with the public, as well as transit operators and providers, to serve the needs of all residents. As a result of the 2008 Transit Needs Assessment Study, StanCOG is forming a Consolidated Transportation Services Agency (CTSA) to administer a special program to provide "door-through-door service" for qualified riders. StanCOG is committed to identifying further needs of travelers and providing services to meet these needs, including special needs, such as the door-throughdoor service or simply providing a more convenient, safe, efficient, reliable public transit system.

The Stanislaus County public transit system is intended to provide residents with an alternative to the automobile to meet access and mobility needs. For some people, transit is a vital link to their home, work, and quality of life. Transit projects in the RTP were developed by the transit operators to meet the goals and objectives through implementation of the transit actions. Transit improvements in the RTP project list (Appendix M-2) were developed to ensure that transit equipment, facilities, and amenities maintain the effectiveness of transit service in the County as well as introduce new electronic and ITS improvements to modernize operations. The total for all Tier I transit projects is \$464.2 million.

RAIL			
Develop a system of	passenger rail services to facilitate intercity and interregional travel and encourage goods movement		
	• Expand transportation mode choice for all residents and visitors		
Rail Objectives	• Lower overall vehicle miles traveled, reduce greenhouse gas emissions, and improve air quality		
	<ul> <li>Focus not only on vehicular mobility but improve the movement of goods too; support the enhancement of goods by land (including rail) and air</li> </ul>		
	• Prepare a feasibility study and strategic implementation plan to extend ACE services to the region		
	• Continue to work with the Altamont Corridor Express Project (ACE) that was formed to facilitate the extension of ACE into the Stanislaus region		
Rail Actions	• Continue to work with the San Joaquin Regional Rail Commission and the California High Speed Rail Authority (CHSRA) to plan for and install a high speed rail line through the region		
	• Provide guidance and assistance on any proposed project that will increase the use of rail to move goods		

#### **Rail Priorities**

Increasing gas prices, coupled with population growth and air quality concerns, are all leading toward a paradigm shift in how transportation is planned for and delivered in California. Recognizing this fact, the region is positioning itself to take advantage of implementation of a future rail passenger system to serve intercity and interregional travel. The importance of rail to help expand passenger travel, enhance goods movement, and achieve environmental and air quality goals is recognized by StanCOG and its member agencies. The most important rail-related activities planned in the RTP include conducting a feasibility study to determine potential rail improvements and support actions necessary for intercity rail service, and continued coordination with the ACE and HSR projects planned for the Bay Area and Central Valley.

#### California High Speed Rail (HSR)

With the State's population projected to reach 50 million by 2030, new transportation options are considered vital to help accommodate the nearly one billion per year interregional trips that will occur as the population grows. This forward thinking has given rise to the California High-Speed Rail (HSR) project managed by the California High-Speed Rail Authority (CHSRA). As designed, the HSR will be electric powered and fully separated from automobile traffic. The system is being designed to carry more than 100 million passengers a year.

The project was approved by California voters on November 4, 2008 with the passage of Proposition 1A, authorizing \$9.95 billion in general obligation bonds for the project. The CHSRA is currently tasked with completing final planning,



design, and environmental efforts. When the system is built, high-speed trains capable of 220 mph (350 km/h) are anticipated to link San Francisco and Los Angeles in as little as two and a half hours. The planned system would also serve other major California destinations, such as Sacramento, Stockton, Modesto, Merced, San Jose, Fresno, Bakersfield, and San Diego. Construction efforts are anticipated to begin in 2012.

On October 2, 2009 Governor Arnold Schwarzenegger unveiled California's official application for ARRA high-speed rail stimulus funding. The total amount of the application was \$4.7 billion, representing more than half of the \$8 billion set aside for high-speed rail. The application included:

- \$2 billion for high-speed train facilities at Los Angeles Union Station, Norwalk Station, and the Anaheim Regional Transportation Intermodal Center; right-of-way acquisition, grade separations, utility relocation, environmental mitigation, earthwork, tunneling and track work between Los Angeles and Anaheim.
- \$1.28 billion for station improvements, grade separations, electrification, and other work between San Jose and San Francisco.
- \$819.5 million for right-of-way acquisition, grade separations, utility relocation, environmental mitigation, earthwork, and track between Bakersfield and Fresno.
- \$466 million for similar work between Fresno and Merced.

On January 28, 2010, the White House announced that California would receive \$2.25 billion of its request, primarily for advancing the High Speed Rail project. StanCOG will continue coordination and planning with its regional partners to make the rail improvements a reality.

#### Altamont Rail Corridor Project (ARCP)

ACE has formed a working group to develop the Altamont Corridor Rail Project (ACRP), which will improve the current ACE service and also connect the future California High Speed Rail line in the Bay Area with the line in the Central Valley. This new line will extend a link into Stanislaus County.

Prior to the completion of the high speed rail line, the San Joaquin Regional Rail Commission conducted a preliminary analysis for extending ACE service from Stockton to Merced and Stockton to Sacramento, including stops in the City of Modesto and Turlock in Stanislaus County.

# Bike and Pedestrian Priorities

The existing Stanislaus County bikeway network consists of a system of over 140 miles of bikeways, including 25 miles of Class I multi-use pathways, 58 miles of Class II bicycle lanes, and 62 miles of Class III signed bicycle routes. Some of the major destinations for bicycle and pedestrian travel include city downtowns, schools, and employment centers. Approximately 0.7 percent of employed residents in Stanislaus County commute by bicycle. This rate is slightly higher than the national average bicycle commute mode share of 0.4 percent.

	BICYCLE/PEDESTRIAN
Develop a sa	afe and convenient bicycle and pedestrian network linking neighborhoods to the regional system
	• Expand transportation mode choices for all residents and visitors
Non-Auto Mode Objectives	• Maximize safety and comfort for all transportation modes
	• Lower overall vehicle miles traveled, reduce greenhouse gas emissions, and improve overall air quality
	• Promote alternative modes of transportation; promote communities that are transit-oriented, bicycle-friendly and walkable, making them more livable, attractive, and economically vibrant
	• Provide an equitable level of transportation for all modes for all users
	• Construct bicycle and pedestrian facilities in accordance with the Stanislaus County Non-Motorized Transportation Plan
	• Install "Share the Roads" signs on existing and proposed roadways
Non-Auto Mode Actions	• Continue to work with Commute Connection to develop and distribute materials to encourage biking and walking as alternatives to automobile use
	• Continue participation in "Bike to Work" day and other festivities and seminars that educate the public on the benefits of biking and walking

Reasons for the small percentage of bicycle commuters in the County include a lack of bike parking, hot summers, and the rural nature of the County, and few housing areas located within biking distance of major employment centers. Stanislaus County would benefit from a creative new transportation vision to match changing land development patterns, and emerging commute patterns. Greater congestion, more compact development, clean-air goals, and energy conservation policies all point to a need to improve and expand non-motorized transportation options.

Therefore, in 2008, StanCOG prepared a Non-Motorized Transportation Plan (NMTP) to guide the region toward the goal of increasing alternative modes of transportation by providing bikeways and trails for all residents. StanCOG recognized that the non-motorized plan was a necessary component of effective system planning and a critical element of promoting "smart growth" principles. The primary focus of the plan is to increase access to important nodes such as neighborhoods, employment centers, shopping areas, schools, and recreational sites by non-auto modes. The plan also provides for the expansion of bicycle and pedestrian facilities and infrastructure in the cities and communities. A goal of the Plan to have 20 percent of all trips made by walking or biking by 2020. Promoting and providing facilities for bicycle and pedestrian trips will likely result in less VMT and ultimately reductions in GHG emissions.



According to the NMTP, many potential bicyclists cite traffic as their main objection to riding a bicycle on urban streets. Collision data from 2002-2007 show high numbers of bicycle-related collisions in Modesto, Turlock, and Ceres. The roadway types where most collisions occurred are major arterials running through cities. These roadways typically have high traffic volumes, high traffic speeds, and narrow shoulders.

The proposed Tier I bicycle and pedestrian projects in Appendix M-3 were included to enhance bicycle and pedestrian travel by making the system safer through design, providing better connectivity by using available streets, and increasing access to major destinations and activity centers. The proposed funding for bicycle and pedestrian improvements is increased approximately three percent from the 2007 RTP. The projects and improvements in the RTP will help achieve the nonmotorized goal and objectives through implementation of the stated actions. The total for all Tier I Bike and Pedestrian improvements is approximately **\$197 million**.

# **Goods Movement Priorities**

Goods movement is important to the economy and quality of life, especially in an agricultural region such as Stanislaus. Improvements to roadways, especially freeways, expressways and major arterials are vital to maintain efficient goods movement circulation. Traffic congestion and operational conflicts between trucks and passenger vehicles have been identified as key issues that need to be addressed in the RTP to maintain and improve the efficient movement of goods in the Central Valley. The average truck volumes and percentage of total traffic for 2007 on State facilities in Stanislaus County is shown in Appendix O. The highest truck volumes and percentage of total traffic occur on SR-99, SR-120 and SR-132. These locations are proposed for significant capacity increases.

	GOODS MOVEMENT
Develop a tr	ransportation system that supports efficient goods movement within and through the region
Goods Movement Objectives	• Focus not only on vehicular mobility but improve the movement of goods too; support the transportation of goods by land and air
	• Continue participation in the San Joaquin Valley Goods Movement Task Force and associated Study
Goods Movement	• Provide guidance and assistance on any proposed project that will increase the use of rail to move goods
Actions	• Adopt and integrate the regional expressway study into the RTP and local general plans
	<ul> <li>Identify high priority grade separation projects and capacity enhancements/ operational strategies to improve travel times and increase safety</li> </ul>



The junction of SR-99 and SR-132 shows an average daily truck volume slightly over 17,000 per day, representing 13.5 percent of all traffic and equating to approximately six million annual truck trips at this one location.

Truck travel continues to be the primary source of roadway degradation for local facilities, adding to the need for increased investment in maintenance. This is particularly true when goods movement is combined with agricultural uses that are substantively increased during harvest seasons (late summer/fall). Under these conditions, the demand for transportation resources and improvements is likely to be greater in Stanislaus County than other non-agricultural counties.

While trucks continue to be the primary method to move goods through the Valley, rising gas prices are contributing to the growth in other methods of moving freight. The Valley has several dominant rail lines, and proposed projects such as the Crows Landing Air Facility/Short-Haul Rail project look to capitalize on this trend.

The RTP includes numerous projects in the roads list (Appendix M-1) that will further improve the transportation system, especially as it relates to the movement of goods. StanCOG and its member agencies are preparing a Regional Expressway Study that identifies the existing and proposed expressway corridors in the region. The Study will ultimately propose new roadways or expanded corridors to meet the demand for people and goods movement. The RTP also includes projects that add to roadway restoration and preservation to maintain the system in a safe operating condition for years to come.

#### **Aviation Priorities**

In Stanislaus County, aviation is used to move both people and goods. The California Department of Transportation Division of Aeronautics developed "Aviation Planning Guidance for RTPs" in March 2006. The increased emphasis on responsible land use decision-making along with the increased recognition that airports provide significant economic benefits to a community is intended to strengthen and preserve aviation resources for the future to accommodate future aviation demand. One important step is to lessen the rate of incompatible land use encroachment around airports. StanCOG is implementing and promoting this concept as part of its airport land use planning, and development of the 2011 RTP.

Another planning activity that is receiving attention and promotion is the expansion of commercial flights into and out of the MCCA. This effort focuses on the use of commercial aviation as an efficient means to move freight between regions. Many of the proposed improvements to the MCCA are aimed at streamlining operations to attract more commercial activity and to improve goods movement throughout the system.

Stanislaus County is proposing to develop the former Crows Landing Naval Auxiliary Facility as a general aviation facility to accommodate the existing and future aviation demand within the County. This project is the first phase of the ultimate development that could include a short haul rail line to the Port of Oakland. Not only will this 1524-acre facility serve as the second general aviation airport in the county, it will also create a number of jobs.



AVIATION			
Develop an air transı	portation system responsive to local land use plans and capable of serving the growing air commerce, passenger, and general aviation needs of the region		
Aviation Objectives	• Lower overall vehicle miles traveled, reduce greenhouse gas emissions, and improve overall air quality		
	<ul> <li>Focus not only on vehicular mobility but improve the movement of goods too; support the transportation of goods by land and air</li> </ul>		
Aviation Actions	• Work with the Modesto City-County Airport to develop opportunities to expand air transportation services, including corporate aviation and general aviation; also increase scheduled air carrier service between the MCCA and major airports		
	• Implement projects to improve access to the MCCA		
	• Provide guidance and assistance on any proposed project that will increase the use of rail to move goods		

The County plans to develop industrial and commercial uses around the air facility. This first phase of the project, although not included in the Tier I project list due to a lack of funding at this time, is included in Tier II and could receive funding in the near future.

#### Airport Land Use Planning Process

Regions with public use airports are required to conduct airport land use compatibility planning per the State Aeronautics Act. This function is typically handled by an airport land use commission (ALUC). ALUC's have two functions: the preparation of airport land use compatibility plans (ALUCP) for each public use airport within the region, and review of local agency land use actions and airport master plans.

The ALUC for Stanislaus County is a ninemember committee appointed by the Modesto City Council, Stanislaus County Board of Supervisors, and cities of Ceres and Turlock that acts in an advisory capacity on airport policy matters by providing advice and recommendations in the following areas:

- Airport Rules and Regulations
- Airport Security
- Airport Master Plan
- Commercial Air Service
- Airport Land Use and Development

#### Airport Ground Access

The 2011 RTP addresses improved access to the MCCA via an improved SR-132 East (Yosemite Boulevard) and

StanCOG recognizes that an efficient and well-functioning aviation system will increases modal choice, increase the ability to move freight between locations, and help reduce VMT and GHG emissions.

Mitchell Road, which serve the majority of traffic accessing the airport. Mitchell Road will include four lanes and currently includes synchronized signalization



integrated into the Modesto-Ceres Advanced Traffic Management system. Studies are also underway to improve signal timing along SR-132 East through the City of Modesto's Signal Retiming Study. These improvements will enhance access to the airport by improving traffic flows and reducing congestion.

The list of aviation projects in Appendix M-4, submitted by the County's three airports includes terminal expansion and runway rehabilitation at the MCCA; fencing and runway upgrades at the Oakdale Municipal Airport; and runway restriping, drainage system improvements, runway rehabilitation, and new aviation technology improvements at the Turlock Municipal Airport. This array of improvements is intended to keep aviation a viable mode of travel for people and freight to and from the County. A copy of the Airport Master Record for each airport is included in Appendix P.

# ALTERNATIVE TRANSPORTATION PLANNING STRATEGIES

#### Intelligent Transportation Systems (ITS)

ITS, as defined in the "National ITS Architecture," refers to the employment

"The ITS vision for the San Joaquin Valley is to enhance the quality of life, mobility, and the environment through coordination, communication and integration of ITS technologies into the valleys' transportation systems" (San Joaquin Valley ITS Strategic Deployment Plan, 2001) of "electronics, communications, or information processing used singularly or in combination to improve the efficiency or safety of a surface transportation system." The implementation of ITS is a priority for the U.S. Department of Transportation and a central focus for the San Joaquin Valley COGs. Key ITS applications existing or recommended for the region are addressed below.

#### San Joaquin Valley ITS Strategic Deployment Plan

The Intelligent Transportation System Strategic Deployment Plan (ITSSDP) for the San Joaquin Valley Region is a 20year study jointly funded by Caltrans and the eight individual counties in the Valley. San Joaquin Council of Governments (SICOG) is serving as the project administrator. The ITSSDP identifies a strategy for valleywide and inter-jurisdictional initiatives to address transportation problems that affect the entire region. The development of the ITSSDP followed a combined planning and broad level systems engineering approach that included the identification of problems and needs, development of an ITS vision and goals for the valley region, and selection of a preliminary set of ITS strategies consistent with the national and statewide ITS architecture. The tool kit of strategies and recommendations includes emergency call boxes, changeable message signs (CMS), signal synchronization and preemption, highway advisory radio messages, traffic monitoring stations (TMS), and roadside weather information systems (RWIS). Specific ITS opportunities identified for the region are listed below:

• Create a Traffic Management System (TMS) to develop an integrated Urban Automated Traffic Management System (ATMS) between the City of Modesto and the City of Ceres.



- Improve safety and mobility on the County's east-west rural highways, including SR-132 between the I-5 and SR-99 corridors using Road Weather Information Systems (RWIS).
- Utilize intermodal freight facilities to provide improved information to commercial vehicles.
- Improve mobility, coordination, and information between the urbanized areas of Stockton and Modesto along the SR-99 corridor.

# 511

On July 21, 2000 the Federal Communications Commission (FCC) designated 511 as the single travel information telephone number to be made available to states and local jurisdictions across the country. The FCC ruling leaves nearly all implementation issues and schedules to State and local agencies and telecommunications carriers. No Federal requirements or mandates enforce implementation of 511.

However, mindful of both the opportunity and challenge 511 presents, the American Association of State Highway and Transportation Officials (AASHTO) in conjunction with other organizations including the Intelligent Transportation Society of America (ITS America) and U.S. Department of Transportation, established the 511 Deployment Coalition. The goal of the 511 Deployment Coalition is "the timely establishment of a national 511 traveler information service that is sustainable and provides value to users." The intent is to implement 511 nationally using a bottom-up approach facilitated by information-sharing and cooperative dialogue through the national associations represented on the Policy Committee, the governing body of the program.

In 2009, the StanCOG Policy Board authorized StanCOG to execute an MOU with the Sacramento Area Council of Governments (SACOG) for implementation of Phase I of the 511 project. Under the MOU, the Stanislaus County region will be able to access the Sacramento region's 511 network. In a parallel effort, FresnoCOG is creating a valley network. Regardless of the final outcome and format, StanCOG is committed to being an active participant in improving the transportation system by considering and acting on these types of communication issues.

The CMP identified ITS as an alternate strategy, meaning that for every widening project proposed in the RTP, the region must show that alternatives to that widening were considered first. Additional ITS improvements that are proposed by Caltrans District 10 for specific State facilities within Stanislaus County are listed in Appendix Q.

# Transportation Control Measures (TCM)

Transportation Control Measures are defined by the Federal Transportation Conformity Rule as any action taken to adjust traffic patterns or reduce vehicle use to reduce air pollutant emissions. TCMs generally include two strategies: System Management and Demand Management.



#### Transportation System Management (TSM)

Transportation System Management (TSM) is a low cost action that maximize the efficiency of existing transportation facilities and systems. Typical improvements include signing and striping modifications, high-occupancy vehicle lanes, ramp metering, parking restrictions, paving and re-striping, signal preemption, speed modifications, and traffic calming. In urbanized areas, strategies using various combinations of techniques can be implemented. However, in relatively rural areas, many measures that would benefit urbanized areas are not practical.

In 2009, the StanCOG Policy Board approved, but did not formally adopt, the Northern San Joaquin Valley Regional Ramp Metering and High-Occupancy Vehicle (HOV) Master Plan, a plan that in effect allows and encourages the region to continue planning for these types of facilities. This plan will help guide improvements in major corridors in the region such as SR-99. Ramp metering projects will be part of the short-range development plans for SR-99 that will ultimately potentially include adding a fourth lane in each direction. An HOV lane will be considered as part of this widening to help relieve congestion and improve commute and travel speeds.

The RTP includes intersection improvements and system preservation projects that will help to improve the existing system without adding new roads or capacity to the system. These types of improvements are a priority for the region. They account for approximately 37 percent of all road projects.

#### Transportation Demand Management (TDM)

**Transportation Demand Management** (TDM) involves strategies or actions that focus on changing travel behavior and choices. TDM strategies include ridesharing, tele-work, guaranteed ride home programs, improved transit access, bicycle and transit integration, parking management, and smart growth actions to improve access through land use decisions. TDM programs should generally be ongoing so they provide continual support and encouragement, and respond to future opportunities and changes in individual travel needs and preferences. TDM programs currently being considered in Stanislaus County include:

#### Commute Connection

Commute Connection is a program under the San Joaquin Council of Governments that serves San Joaquin and Stanislaus counties by promoting non-single occupancy vehicle use in an effort to reduce traffic congestion and improve air quality.

Commute Connection is a free one-stop transportation information and referral service that provides information on carpooling, vanpooling, transit and rail, bicycling, walking, and park and ride lots throughout San Joaquin and Stanislaus Counties. Services provided include bike maps, locations of park and ride lots and available bike parking, registration for ridematching services, and locations of transit connections. Commute Connection works with major employers and advocacy groups to ensure that people seeking alternatives to driving their own cars to work have their needs met. Visit www.sjcog.org/Programs & Projects/ Commute Connection for complete details.



# LAND USE AND SMART GROWTH STRATEGIES

StanCOG has been successful in developing procedures and processes that address regional transportation planning issues. By focusing on growth and its related impacts, StanCOG has encouraged the involvement of partner agencies, local jurisdictions, citizens and the State to focus resources on the most pressing regional issues and activities. This effort assures that the transportation network will move people and goods safely and efficiently while improving both air quality and overall quality of life for the residents of the region. The 2011 RTP embodies these efforts and shows planning consistency and coordination with the following planning documents and efforts.

# Land Use Strategies

Land use patterns affect the region's transportation, air quality, housing, open space and other resources. StanCOG, through the RTP and other efforts, analyze the effects of proposed projects on these resources. StanCOG is committed through the Blueprint and general plan process to strengthen the transportation land use connection. This connection is fundamental to the promotion of compact development and land uses that will help reduce congestion, VMT, and ultimately GHG emissions. As discussed later in this chapter, StanCOG and all MPOs will increase this effort during the next RTP update cycle, through the Sustainable Community Strategies (SCS) process.

#### Land Use Growth Initiative, Measure E

In November 2007, the voters of Stanislaus County passed Measure E, a 30-year land use restriction initiative. Measure E amended the Land Use Element of the Stanislaus County General Plan by restricting, for a period of 30 years, the County from approving the redesignation or rezoning of land in the unincorporated areas of the County from agricultural or open space uses to residential uses without the approval of a majority (51 percent) vote. The intent of the initiative is to direct residential growth into the incorporated cities, which

are better capable of serving these uses. The measure proposes to reduce sprawl in the County and help create a compact development footprint. The population projections

#### **StanCOG Mission**

"To provide planning coordination that embraces the quality of life in the Stanislaus Region by working with local governments, state and federal agencies and the public to create real solutions to regional transportation issues"

developed by StanCOG as part of its Blueprint process were adjusted for the 2011 RTP update based on Measure E.

# San Joaquin Valley Express Transit Study (SJVETS), May 2009

StanCOG has embraced recommendations from the SJVETS to pursue efforts for inter-county commuter-express transportation service within the San Joaquin Valley region, and between the San Joaquin Valley and its neighbors. The coordinated effort will focus on expanding vanpool offerings in the northern and



southern parts of the Valley, maintaining interregional bus service in the highest demand corridors, and expanding bus service into Stockton, Sacramento, and the Bay Area as funding allows. In addition, StanCOG will continue lobbying for State and Federal funds to improve ACE and to see the California HSR become a reality.

#### Congestion Management Plan (CMP), January 2010

StanCOG, as the Congestion Management Agency (CMA) for Stanislaus County, has the responsibility of preparing and maintaining a CMP. The 2010 update to the CMP was adopted in January 2010. The CMP is an integral component of StanCOG's planning process in which a systematic progression of activities to analyze and address regional congestion is integrated into the RTP and Federal **Transportation Improvement Program** (FTIP) process. The CMP has specific objectives that are derived from the vision, goals, and objectives of the 2011 RTP. The CMP is a performance-based process that is consistent with, and assists in, the implementation of the 2011 RTP.

In regions designated as nonattainment areas, the CMP takes on greater significance. Federal guidelines prohibit projects that increase capacity for singleoccupancy vehicles unless the project has been screened through the CMP. The process provides a consistent and coordinated approach for responding to congestion through investment in roadway capacity projects only after all reasonable non-capacity increasing measures have been employed.

In 2005, with the passage of the Transportation Bill known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), the Federal requirement for the CMP changed from the previous Transportation Bill (ISTEA), and the California statutory requirements for CMAs. Although the updated StanCOG CMP assumes key provisions of the original CMP document, it also focuses on incorporating key elements of the SAFETEA-LU requirements. Most prominently, the CMP is an integrated component of StanCOG's planning process in which a systematic progression of activities to analyze and address regional congestion is integrated into the Regional Transportation Plan (RTP) and Federal **Transportation Improvement Program** (FTIP) process. In the development of the StanCOG 2011 RTP and FTIP, the CMP is used as a selection and screening mechanism for single-occupant-vehicle (SOV) capacity increasing projects as appropriate alternatives to address and mitigate regional congestion and deficiencies in the transportation system. (Reference: 23 CFR 450.320 Congestion Management Process in Transportation Management Areas.)

In Stanislaus County, local jurisdictions have adopted their minimum level of service for their respective transportation networks in the general plan circulation element, and they are the main entities to monitor and maintain the adopted performance level. The jurisdictions in Stanislaus County typically use the StanCOG traffic model program to assess project traffic impacts on the existing system. This approach ensures some degree of consistency between StanCOG and its member jurisdictions in evaluating the transportation system's performance. Mitigation will be required if the LOS



on the affected system exceeds the minimum accepted LOS because of direct impacts from new development. The cities of Modesto, Turlock, and Ceres have adopted LOS D as their minimum LOS performance level. Stanislaus County has established LOS C as its goal. The remaining cities have adopted LOS C as their performance standard.

# **Regional Expressway Study**

StanCOG is in the process of preparing a Regional Expressway Study, which is an update of the 1990 Study adopted by the StanCOG Policy Board. The update will serve as a foundation for future layers or updates of the Study. Future layers could include but are not limited to Transit Routes and Habitat Conservation Areas. StanCOG will update the Study with each RTP update, incorporating local agency General Plan updates.

# California Governor's Strategic Growth Plan (SGP), May 2007

The SGP calls for a \$222 billion infrastructure improvement program and investment strategy designed to decrease congestion, improve travel times, and increase safety, while accommodating future growth in the State. The SGP utilizes demand-management strategies, such as dedicated truck lanes and highoccupancy toll lanes to move traffic in a less congested environment. In addition, the SGP adds new capacity to enable more traffic to move through existing roadways, rehabilitates miles of roads to preserve the existing system, adds new lanes and passing facilities, and employs strategies to increase public transit's mode share, such as park and ride facilities and improved passenger amenities. The planning process for the SGP requires innovation,

a strategic planning focus and, high levels of coordination between regional transportation agencies and the State.

The SGP embodies many of the principles being used by StanCOG in the 2011 RTP, including system monitoring and evaluation, maintenance and system preservation, smart growth land use principles, use of ITS technologies, and operational enhancements. The SGP will result in needed reforms to deliver projects more quickly and efficiently and to enable broader authority for publicprivate partnerships to leverage limited funds. These reforms will benefit StanCOG and its regional partners as it moves to implementation of the 2011 RTP.

# 2030 California Transportation Plan (CTP) and Interregional Blueprint (CIB)

Caltrans is expanding the State's transportation planning process to include the development of a Statelevel transportation blueprint focused on interregional travel needs. The California Interregional Blueprint (CIB) will articulate the State's vision for an integrated, multimodal interregional transportation system that complements the regional transportation plans and land use visions. The CIB, when fully developed, will become the foundation for the 2040 update of the State's longrange transportation plan, the California Transportation Plan (CTP). The CIB will move the region toward a smaller carbon footprint by reducing VMT through integrated land use planning and decision making. Results from this planning process will be incorporated into future RTPs as they become available. The CIB is scheduled for completion in two phases: phase one in September 2010 and phase two in 2012.



#### **REGIONAL PLANNING IN THE NEAR FUTURE**

Growth is inevitable; therefore, it must be shaped into the most intelligent form possible. Planning at the regional level is a good way to take local goals and policies and turn them into a comprehensive vision for the entire region.

A leader in the planning field says, "Think globally, act locally, but plan regionally. Regional planning is essential, for it alone operates at the true scale of people's lives. Planning a single town or city is not enough, because working, shopping, recreation, education, and other daily activities routinely take people across municipal lines."

No longer can we simply just plan for housing, or just plan for transportation. It is clear that these areas, which also include environmental and economic planning, are linked, and policies regarding one aspect affect the others. Efforts such as the Blueprint and legislation such as SB 375 recognize this concept. Regional planning in the future, as it relates to MPOs and the RTP, will link these policy areas together like never before. Most notably, MPOs will be required to prepare a Sustainable Communities Strategy (SCS) within the RTP, as part of SB 375. The SCS will set forth a vision for the region, taking into account transportation, housing, environmental, and economic needs of the region. The SCS will be a blueprint by which the region will meet the long term goals of the region, including greenhouse gas emission reductions.

MPOs, which historically have focused on transportation planning, will now deal with the local agencies in preparing a land use plan for the region. Future RTPs will go beyond simply planning for transportation. StanCOG will continue or begin considering implementation of the following policies and measures consistent with the intent of SB 375.

**Transit service improvements**: The region will continue to promote measures such as increasing transit service frequencies, operating speeds, service coordination, and service connections to attract additional ridership and reduce automobile mode share. StanCOG will further consider other techniques, including the designation of multimodal streets and transit boulevards.

For too long, miles of streets have been built that are safe and comfortable only for automobile travel. Communities have become inconvenient places to walk, bicycle, or take transit, leaving little choice for mobility.

Complete streets is a paradigm shift in traditional road construction philosophy. Instead of a project-by-project effort to accommodate bicycle- and pedestrianfriendly improvements, complete streets ensure all road construction and improvements evaluate how the right-ofway serves all who could use it, not just the automobile. Complete streets are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit-riders of all ages and ability. Typically, roadways include sidewalks, bicycle lanes, plenty of well-designed and well-placed crosswalks, bus pullouts or special bus lanes, street trees, center medians, and other features, all to encourage and accommodate use by all modes of travel.

The goal of BRT systems is to approach the service quality of rail transit while still enjoying the cost savings and flexibility of


bus transit. This goal is typically achieved by dedicating designated lanes or areas solely for bus travel. This allows buses to operate more freely by reducing the interference with typical automobile traffic. It also allows pedestrians greater access to the bus, thus reducing loading times.

**Transit-supportive land use**: The region will support the addition of jobs, housing and retail near transit, especially in urban downtowns. This will help place transitsupportive land uses within reasonable walking distances of transit. The effective walk-shed radius varies by transit mode: approximately a quarter mile for bus transit, and up to a half mile for rail transit. The region's desire to improve transit transfer points and add passenger amenities at stops provides opportunity to improve land use near transit.

Infill development: A key Smart Growth strategy is to locate new development on vacant infill sites, redevelopment areas, and available grayfield and brownfield sites. One major advantage of developing at such locations is the opportunity to capitalize on their proximity to other regional destinations, to major transportation services, and to existing infrastructure. The benefits of such a development location can be measured in terms of the site's relative accessibility to all other activities in the region, which correlates with reductions in vehicle trip generation per capita. This development strategy should be prioritized by the County and cities along with development of new areas to accommodate future growth and travel.

**Development density**: Elevating the numbers of residents and jobs per acre is often a valuable Smart Growth planning objective when accompanied by high levels of regional accessibility, a robust mixture of uses, and high-quality urban design. The region will continue to participate in the Valley Blueprint effort as it heads into the implementation phase and adopt a local Blueprint for the County. The County and cities will continue to develop general plans that address the benefits of density.

**Land use mix**: Areas with good balance between jobs and housing as well as a

mix of retail and non-retail jobs tend to promote shorter trips and more nonmotorized trips. Mixing land uses can greatly shorten trip distances and allow more walking or bicycling trips.

"Regional planning is essential, for it alone operates at the true scale of people's lives. Planning a single town or city is not enough, because working, shopping, recreation, education and other daily activities routinely take people across municipal lines."

Also, the general perception is that bedroom suburbs that are "dead" during the day and downtown areas that are "dead" at night are socially undesirable and unpleasant. Smart growth strategies for dealing with this include allowing neighborhood-serving retail uses and offices to be located in residential areas, and encouraging the development of medium- and high-density housing in or near downtown areas. The mix of uses needs to be present within walking/biking distance or, secondarily, short driving distance.

## Stanislaus County Region Primer for a Sustainable Communities Strategy

Regional transportation planning is at the beginning of a new era for MPOs. Quality of life concerns associated with growth pressures, air quality, and others issues are driving communities throughout the State of California to make growing smarter a top priority. This trend, coupled with new legislative and regulatory mandates, has reinforced the "smart growth" paradigm. The new paradigm calls for regions to transform their development patterns by: (1) creating a range of housing opportunities and choices; (2) creating walkable neighborhoods with access to desired activities and destinations; (3) encouraging community and stakeholder collaboration to strengthen a regional approach and consensus on how to grow; and, (4) making development decisions that lead to a mix of land uses that are more compact, supportive of non-auto modes of travel, and preserve open space, agricultural resources, and sensitive environmental habitats.

On the transportation side of the equation, smart growth principles emphasize increasing the array of transportation choices to move people and goods. These expanded choices focus on increasing the availability of high-quality transit, reducing reliance on single-occupant vehicle travel, and ensuring greater connectivity between autos and nonauto modes. This coordinated mission is particularly important in the San Joaquin Valley, where growth has been among the fastest in the State and low density development is typically the norm, leading to longer vehicle trips and more VMT.

#### Legislative and Regulatory Framework

With the creation of Blueprint planning and smart growth/air quality policy such as Assembly Bill (AB) 32 and subsequently Senate Bill (SB) 375, planning efforts and legislation are calling on the State's urban regions to develop plans to create a more efficient land use pattern. The resulting "sustainable communities" are expected to be denser and better connected, thus fostering a balance between the social, economic, and environmental desires of the community.

#### What do AB 32 and SB 375 require?

Assembly Bill 32, the Global Warming Solutions Act of 2006, requires the State to reduce greenhouse gas emissions to 1990 levels by 2020. The California Air Resources Board (CARB) has developed a Scoping Plan that includes actions designed to reduce overall carbon emissions in California. Principles from this scoping plan have been included in the new 2010 RTP Guidelines prepared by the CTC. AB 32 is particularly relevant to the RTP because the transportation sector contributes 37 percent of carbon dioxide  $(CO_2)$ emissions in California.

SB 375 provides a means for achieving AB 32 goals. This new legislation is based on the successes of the first Blueprint process completed in the Sacramento region. Both the Blueprint process and SB 375 align three critical policy areas: transportation planning, land use/regional housing needs, and air quality. Implementation of SB 375 by StanCOG will address five primary areas embodied in the legislation:

- 1. Meet regional GHG emission reduction targets for cars and light trucks established by the ARB.
- 2. Prepare a "sustainable communities strategy" (SCS) as part of the planning process for the 2015 RTP update. The SCS will specify how the GHG emission reduction target set by the ARB will be achieved for the Stanislaus region. If the target cannot be met through the SCS, then an alternative planning strategy (APS) must be prepared.



- 3. Incorporate actions for streamlining the California Environmental Quality Act (CEQA) requirements for residential and mixed-use developments that are consistent with the SCS or APS-approved by the ARB for the region.
- 4. Synchronize the regional housing needs assessment (RHNA) process with the RTP planning process. The synchronization process aligns the housing element of the GP with zoning for consistency with the SCS.
- 5. Use the StanCOG travel demand model in the development of the RTP to account for the relationship between land use density, household vehicle ownership and VMT, likely land use and travel changes resulting from either increased highway capacity or passenger rail expansion, and mode splitting between auto and non-auto travel.

# What is the State doing on sustainable transportation planning, and how does it relate to Stanislaus County-wide efforts?

The following concepts and issues are important to Stanislaus County and are reflected in the 2011 RTP regional transportation goals and policies.

• The volume of truck transport for commercial and agricultural products will likely continue to grow on State highways. The County is impacted by this growth and the need for improved truck routes, truck parking facilities, and truck access to commercial and agricultural land uses is an important component of goods movement and land use planning.

- The cost of transportation for disabled and low income groups will likely continue to increase. The RTP recognizes that a more extensive mix of flexible transportation choices and services will improve accessibility for both groups. The transportation system in Stanislaus County is striving through its RTP goals and policies to be more equitable by promoting urban growth patterns that are easier to serve by transit.
- *The CTP summarizes three land use* practices that have influenced urban design and have had profound impacts on travel behavior. These practices include the lack of coordinated decisionmaking between cities and counties. *single-use zoning, and low-density* growth patterns. Stanislaus County is experiencing some of these effects through increased traffic congestion and delays in several of its major commute corridors. The RTP is proposing several projects to improve and monitor LOS to help increase the positive effects of *good land use planning and decisions* and to incorporate "smart growth" principles to the degree possible. These principles focus on more compact development and the appropriate sizing of transportation infrastructure. In addition, adherence to AB 32 and SB 375 will move the region toward a smaller carbon footprint by reducing VMT through integrated land use planning and decision making.
- StanCOG is concerned with safety for all modes of travel in the County. It has developed specific goals to provide for the development of a safe and efficient system for all modes that expands



choices and strengthens the relationship between transportation and land use. Specific objectives are included to protect the region's investment by preserving the condition of the existing system, applying new technologies to make travel more reliable, convenient, and accessible, and maximizing safety for all modes.

#### StanCOG Planning Efforts

The enabling legislation and regulations have led to procedural changes in the way StanCOG prepares planning documents now and in the future. StanCOG's planning process fully recognizes the intent of the legislation that closely aligns the three most critical policy areas of importance to local government. Those policy areas include transportation planning, land use/ regional housing needs, and air quality. StanCOG supports this type of planning coordination at the regional level because MPOs such as StanCOG have been recent innovators in strategic growth planning in the form of their Blueprint effort.

#### What specific goals, objectives and actions in the 2011 RTP will prepare StanCOG for development of an SCS?

The SCS will evolve from the region's effort to strengthen the land use/ transportation connection. StanCOG is leading this effort as described below.

#### Land Use/Transportation Connection

StanCOG is committed through its Blueprint and general plan process to strengthen the land use/transportation connection. This connection is fundamental to the promotion of compact development and land uses that will help reduce congestion, VMT, and ultimately GHG. Achievement of the following land use goal and objectives are foundational to the SCS effort.

To build on the land-use connection, StanCOG is taking the following additional actions in the 2011 RTP to prepare the County for compliance with AB 32 and SB 375. The discussion begins with a specific modal goal followed by objectives and actions that will guide the future land use and transportation planning process.

Expanded transportation choices linked to intelligent land use decisions lead to "smart growth" development



LAND USE								
Goal: Develop a transpo	prtation system that supports local land use plans and integrates transportation and land use planning							
	• Coordinate planning efforts and policies that improve the jobs/housing balance in the County							
Land Use Objectives	• Coordinate integration of RTP policies and objectives with local land use plans and projects							
	• Maintain a presence on regional policy boards and committees regarding land use decisions							
	• Review local land use plans and projects for consistency with the adopted RTP							
	• Use the travel demand model to evaluate transportation needs generated by local general plans							
Land Use Actions	• Incorporate elements of the non-motorized plan for bicycles and pedestrians into the RTP							
	• Continue to promote mixed use and multi-family housing development with adequate transit access in development areas of the County							



	ROAD
	Goal: Develop a safe and efficient regional road system that facilitates the movement of people and goods and supports non-auto modes of transportation
Road Objectives	• Focus on system planning when proposing road improvements so all modes are considered
	• Apply new technologies where feasible to make travel more reliable, convenient, and accessible
	• Protect the region's investment by preserving the condition and function of the existing transportation system through routine maintenance and transportation system management techniques
	• Preserve farmland and natural resources by integrating land use and transportation planning so that projects do not have adverse impacts in sensitive areas
	• Adopt and integrate the results of the regional expressway study into the RTP and local general plans
	<ul> <li>Integrate intelligent transportation system strategies into projects and programs</li> </ul>
	• Develop a comprehensive traffic management plan for the state highway system and regionally significant routes
	• Design and implement a countywide pavement management plan to be used in establishing and prioritizing maintenance needs at the regional and local level
Road Actions	• Use intelligent land use planning to link transportation, access, mobility, and connectivity
	• Promote safety in all transportation decisions
	• Implement the projects identified in the 2008 Stanislaus County Non-Motorized Transportation Plan (NMTP) to ensure a workable network of alternative modes of transportation in the system
	• Identify potential locations and standards for construction of high-occupancy vehicle (HOV) lanes and other improvements to reduce congestion



Transit							
Goal: Pr	ovide an efficient, reliable, and attractive public transit system for the Stanislaus Region						
	• Expand transportation mode choices for all residents and visitors						
Transit Objectives	• Apply new technologies to make travel by transit more reliable, convenient, and accessible						
Tansit Objectives	• Maximize safety and comfort for transit riders through improved passenger amenities						
	• Provide door-through-door service for qualified residents within the County						
	• Continue to work with transit providers to produce and implement programs from the 2009 Stanislaus County Transit Needs Assessment study						
	• Incorporate advanced public transportation management practices and intelligent transportation system strategies into transit operations						
Transit Actions	• Monitor the productivity, reliability, efficiency, and coverage of the transit system and utilize data to make recommendations for improvement						
	• Pursue all forms of Federal and State grant funding to improve transit operations						
	• Implement a Consolidated Transportation Services Agency (CSTA) to administer door-through-door service consistent with recommendations in the transit needs study						



NON-MOTORIZED TRAVEL						
Goal: Develop a	safe and convenient bicycle and pedestrian network linking neighborhoods to the regional system					
	• Expand transportation mode choices for all residents and visitors					
	Maximize safety and comfort for bicyclists and pedestrians					
Non-Motorized Objectives	<ul> <li>Lower overall vehicle miles traveled, reduce greenhouse gas emissions and improve overall air quality through mode shifting</li> </ul>					
	<ul> <li>Make regional funding decisions that promote and support non-auto improvements in communities that are transit-oriented, bicycle-friendly, and walkable</li> </ul>					
	• Construct bicycle and pedestrian facilities in accordance with the Stanislaus County Non-Motorized Transportation Plan					
Non-Motorized	• Install "share the roads" signs on existing and proposed roadways where it is safe for bicycle travel					
Actions	• Continue to work with Commute Connection to develop and distribute materials to encourage biking and walking as alternatives to automobile use					
	• Continue participation in "Bike to Work" day and other festivities and seminars that educate the public on the benefits of biking and walking					

#### Next Steps for StanCOG

As StanCOG prepares to develop an SCS in conjunction with the next RTP, a number of actions and policies could be pursued:

- Capitalize on the Regional Blueprint planning process to develop land use policies that encourage mixing of uses, higher densities, and more accessibility to transit.
- Upgrade the available transportation modeling tools to ensure that they adequately capture the effects of smart growth policies and new land use patterns on travel behavior.
- Consider providing regional planning grants to assist local agencies in developing and implementing smart growth land use and transportation plans.
- Prepare a set of principles for site design and street design that would support sustainable development patterns and that could be transferable between local jurisdictions.
- Engage local, regional and State stakeholders and decision-makers in the SCS development process.



Appendix A: StanCOG Organization and Structure

#### STANCOG ORGANIZATION AND STRUCTURE

StanCOG is a Joint Powers Agency created and operates in accordance with the Joint Powers Agreement signed by all member agencies and its own Bylaws. In 2007/08, the Joint Powers Agreement was amended to clarify StanCOG's authority of eminent domain. StanCOG's standing and ad hoc committees include:

**The Policy Board** is comprised of sixteen voting members, including five members of the Stanislaus County Board of Supervisors, three council representatives for the City of Modesto and one council representative from each of the other cities in the County. A Caltrans District 10 representative serves in an "ex-officio" capacity and actively participates in transportation discussions.

**The Executive Committee** includes two county Supervisors, one representative from the City of Modesto, and two representatives from the other cities in the County. The committee is responsible for appointing members of the Citizens Advisory Committee and the Social Services Transportation Advisory Council, and recommends the annual StanCOG budget.

**The Management and Finance Committee (MAFC)** (formerly the Technical Advisory Committee (TAC)) is comprised of the chief administrative official of each member agency, and non-voting representatives from Caltrans and the San Joaquin Valley Unified Air Pollution Control District. The MAFC authorized the formation of the Consolidated Planning Committee (CPC), now called the Technical Advisory Committee (TAC). The TAC consist of planning, public works, and transit staffs from the jurisdictions, Caltrans District 10, and the San Joaquin and Merced COGs. The TAC advises the MAFC in most planning issues and makes recommendations on projects to be funded from the federal RSTP and CMAQ.

**The Citizens Advisory Committee\_**was established by the JPA and operates in accordance with the Policy Board Bylaws. Members are nominated by individual jurisdictions and appointed to four-year terms by the Executive Committee. The committee is particularly active in transportation funding, bicycle planning, transit roadway safety improvements, and project delivery.

*The Social Services Transportation Advisory Council (SSTAC)* has specific representation as outlined in the Transportation Development Act (TDA). The primary focus of the SSTAC is to review any potential unmet transit needs and to advise StanCOG on transit issues. This information is utilized by the Policy Board as part of its annual unmet transit needs determination and finding.

In addition to these committees, StanCOG participates in the **Northern San Joaquin Valley Goods Movement Task Force**. The Task Force serves to promote economic development in San Joaquin, Stanislaus and Merced counties. Appendix B: San Joaquin Valley Regional Transportation Overview

# DRAFT San Joaquin Valley Regional Transportation Overview

April 2010

## 1. Executive Summary

This chapter provides an interregional perspective to transportation planning within the San Joaquin Valley (SJV) of California, consisting of the entireties of the counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Tulare, Kings, and Kern. This chapter addresses several issues of regional and interregional importance including air quality, highways, streets and roads, aviation, rail, goods movement and bicycle efforts. The purpose of this chapter is to provide a broad overview of issues that cross jurisdictional boundaries. The Congestion Management Processes and Operations and Maintenance issues will be addressed by each individual RTPA as applicable.

#### Valleywide Planning

The recently approved Safe, Accountable, Flexible, Efficient Transportation Act: A Legacy for Users (SAFETEA-LU) replaced the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) as the funding for major infrastructure investment for transportation improvements. SAFETEA-LU funds are directed toward projects and programs for a broad variety of highway and transit work through several funding components including: Surface Transportation Program, Congestion Mitigation and Air Quality, Transportation Enhancements, Safety Program, Rail Program and Emergency Relief Programs, Previous federal legislation included the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and TEA-21. Transportation planning efforts are directed to be coordinated in geographically defined air basins. The eight counties mentioned above do share an air basin and have many attributes in common. There are also significant differences in the context of transportation planning. The eight San Joaquin Valley counties have already implemented an aggressive program of coordinated Valleywide planning. In September of 1992, the eight Valley Regional Transportation Planning Agencies (RTPAs) entered into a memorandum of understanding (MOU) to ensure a coordinated regional approach to transportation and air quality planning efforts. The MOU was revisited in 2006 to update and solidify the partnership. The MOU goes well beyond the requirements of state and federal transportation planning acts by establishing a system of coordination of plans, programs, traffic and emissions modeling, transportation planning, air quality planning, and consistency in data analysis/forecasting. Development of the MOU and the ongoing process of coordinated planning have improved an already close working relationship between the eight Valley RTPAs and the representatives of the California Department of Transportation (Caltrans), California Air Resources Board (CARB), State Office of Planning and Research (OPR), San Joaquin Valley Air Pollution Control District (SJVAPCD) and the Federal Highway Administration (FHWA).

Each of the areas addressed in the Valleywide MOU have been assigned to a specific RTPA to serve as a lead in the coordination of planning activities. Representatives of each of the eight agencies have been meeting regularly to coordinate the preparation of Regional Transportation Plans (RTPs), Regional Transportation Improvement Programs (RTIPs), and an aviation systems plan that involves not only the eight Valley counties but the Sacramento region as well. These cooperative efforts include both staff and financial assistance from Caltrans, CARB, the Environmental Protection Agency (EPA) and the SJVAPCD. These efforts have taken place as a voluntary response to the new issues, challenges and requirements facing the transportation planning community. The San Joaquin Valley Regional Transportation Overview represents the cooperative effort between the eight counties and their coordination in the Regional Transportation Plans.

## 2. San Joaquin Valley Profile

#### Geography

The San Joaquin Valley (Valley) is the southern portion of the Great Central Valley of California *[Exhibit 1-1]*. The San Joaquin Valley stretches from the Tehachapi Mountains in the south to the San Joaquin Delta in the north, a distance of nearly 300 miles. The eastern boundary is the Sierra Nevada Mountains, which reaches elevations of over 14,000 feet, while the western boundary is the lower coastal ranges. The Valley floor is about 10,000 square miles is size.



Exhibit 1-1 San Joaquin Valley Topography

For the purposes of this report, the San Joaquin Valley is considered to include the entirety of the counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and Kern. The total area of the eight counties is 27,383 sq. mi. (larger than West Virginia). Kern County straddles the Sierra Nevada Mountains and occupies a portion of the Mojave Desert. The desert portion of Kern County (about 3,650 sq. mi.) is within the Southeastern Desert Air Basin.

On the Valley floor, the topography is generally flat to rolling, and the climate is characterized by long, very warm summers, and short, cool winters. Precipitation is related to latitude and elevation, with the northern portions of the valley receiving approximately 12-14 inches of rain a year, while the southern portion has an annual average of less than six inches. Snow rarely falls on the Valley floor, but heavy winter accumulations are common in the Sierra Nevada Mountains.

The Valley occupies an area between the two largest metropolitan areas in California, San Francisco and Los Angeles. The major transportation facilities run generally north/south through the Valley and include State Route 99, Interstate 5, Union Pacific Railroad and Burlington Northern & Santa Fe Railroad. Several highways and some rail lines cross the Valley east/west including State Routes 4, 120, 152, 198 and 58 among others. In addition, the Valley contains numerous oil and natural gas pipelines, a myriad of telecommunication facilities, the Port of Stockton and air travel corridors.

#### **Population**

While the Valley is largely rural in nature, it does contain several large cities and suburbs with a total population of nearly 4 million people (more than the state of Oregon). The eight Valley counties are a part of seven Metropolitan Statistical Areas (MSAs): Stockton (San Joaquin County), Modesto (Stanislaus County), Merced, Fresno-Madera, Hanford-Corcoran (Kings County), Visalia-Porterville (Tulare County) and Bakersfield (Kern County). The large majority of the Valley's population resides along the State Route 99 corridor including four cities of over 150,000 people (Fresno, Bakersfield, Stockton and Modesto) [*Exhibit 1-2*]. Population growth has been sustained and significant [*Figure 1-1*]. In 1970, the eight San Joaquin Valley counties had a population of just over 1.6 million. By 2000, the population had over doubled to nearly 3.4 million. The Valley continues to be one of the fastest growing regions in the state. The Valley accounted for 8.2% of California's total population in 1970 and has grown to account for 10.4% of California's total population in 2009.



Figure 1-1

Sources: US Census 1940-2000, California Department of Finance 2009

Future population growth is also expected to be sustained and significant. Both ends of the Valley are under growth pressure from the neighboring metropolitan areas of Los Angeles and the San Francisco Bay Area in addition to the natural growth rate in the Valley. Population in the eight Valley counties is projected to exceed 6.5 million by the year 2030, using growth projections from the California State Department of Finance (DOF) [Table 1-1].

Table 1-1San Joaquin Valley Population Growth

	1960	1970	1980	1990	2000	2009	2020	2030	2040
Fresno	365,945	413,329	514,621	667,490	799,407	942,298	1,201,792	1,429,228	1,670,542
Kern	291,984	330,234	403,089	544,981	661,645	827,173	1,086,113	1,352,627	1,707,239
Kings	49,954	66,717	73,728	101,469	129,461	154,743	205,707	250,516	299,770
Madera	40,468	41,519	63,116	88,090	123,109	152,331	212,874	273,456	344,455
Merced	90,446	104,629	134,560	178,403	210,554	256,450	348,690	439,905	541,161
San Joaquin	249,989	291,073	347,342	480,628	563,598	689,480	965,094	1,205,198	1,477,473
Stanislaus	157,294	194,506	265,900	370,522	446,997	526,383	699,144	857,893	1,014,365
Tulare	168,403	188,322	245,738	311,921	368,021	441,481	599,117	742,969	879,480
TOTAL	1,414,483	1,630,329	2,048,094	2,743,504	3,302,792	3,990,339	5,318,531	6,551,792	7,934,485

Sources: US Census 1960-2000, DOF estimates 2009, DOF projections 2020-2040

Exhibit 1-2



#### **Economy**

The San Joaquin Valley is famous for agricultural production. Nearly ideal growing conditions, reservoirs, and water distribution projects, such as the federal Central Valley Project and the State Water Project have resulted in seven of the top ten agricultural counties in the nation being in the San Joaquin Valley [*Table 1-2*]. In addition, if the Valley were a state, it would be the top agricultural producing state in the country [*Table 1-3*]. The Valley produced \$25.4 billion in agricultural products in 2008. This amount is over double the remainder of California and more than the next highest producing state (lowa).

Top United States Ag Producing Counties						
Rank	County	Production*				
1	Fresno, CA	\$5,662,895				
2	Tulare, CA	\$5,018,023				
3	Kern, CA	\$4,033,312				
4	Monterey, CA	\$3,826,791				
5	Merced, CA	\$2,999,701				
6	Stanislaus, CA	\$2,473,843				
7	San Joaquin, CA	\$2,129,725				
8	Kings, CA	\$1,760,168				
9	Imperial, CA	\$1,684,522				
10	Ventura, CA	\$1,613,247				

Table 1-2

Source: USDA, NASS, California Field Office, 2008

\* In thousands

Table 1-3Top Agricultural States

Rank	State	Production*
1	San Joaquin Valley	\$25,388,542
2	Iowa	\$24,752,867
3	Texas	\$19,172,500
4	Nebraska	\$17,315,688
5	Illinois	\$16,356,790
6	Minnesota	\$15,838,094
7	Kansas	\$13,967,496
8	California (remainder)	\$10,798,193
9	Indiana	\$9,961,850
10	Wisconsin	\$9,885,557

Source: USDA Economic Research Service, 2008 \* In thousands

While in terms of economic productivity, agriculture is by far the Valley's leading industry, the leading industries in terms of employment are Education, Health and Social Services and Retail Trade. Agriculture along with these two other sectors account for over 40% of the jobs in the Valley. Statewide, Education, Health and Social Services is also the leading sector while Professional jobs are second and Retail third.

#### Table 1-4 Employment by Industry

	, Vall	ey	Califo	rnia
Agriculture, forestry, fishing and hunting, and mining	162,059	10.4%	355,362	2.1%
Construction	113,730	7.3%	1,222,364	7.1%
Manufacturing	128,910	8.3%	1,796,323	10.5%
Wholesale trade	58,456	3.7%	567,729	3.3%
Retail trade	179,859	11.5%	1,913,970	11.2%
Transportation and warehousing, and utilities	84,475	5.4%	837,208	4.9%
Information	24,132	1.5%	519,244	3.0%
Finance and insurance, and real estate and rental and leasing	65,863	4.2%	1,140,246	6.7%
Professional, scientific, and management, and administrative and waste management services	120,414	7.7%	2,056,620	12.0%
Educational services, and health care and social assistance	325,878	20.9%	3,438,701	20.1%
Arts, entertainment, and recreation, and accommodation and food services	124,330	8.0%	1,614,171	9.4%
Other services, except public administration	75,035	4.8%	900,254	5.3%
Public administration	97,245	6.2%	762,326	4.5%
Civilian employed population 16 years and over	1,560,386	100.0%	17,124,518	100.0%

Source: 2008 American Community Survey, U.S. Census Bureau

#### **Economically Distressed Area**

The San Joaquin Valley is one of the most economically distressed regions in the United States. High unemployment rates have historically plagued the Valley [Figure 1-2]. Over time, the Valley has consistently had unemployment rates 2.5% to 4% above the state unemployment rate and 3% to 6% above the national unemployment rate. While there is some variance with the unemployment rate in the Valley, unemployment in all Valley counties has been consistently higher than state and federal averages [Table 1-5].



Source: Bureau of Labor Statistics (not seasonally adjusted, data points are for August of each year)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Fresno	8.6	8.5	9.5	9.7	8.5	7.6	6.9	7.4	9.7	14.6
Kern	7.2	7.2	8.5	9.1	8.6	7.4	6.6	7.5	9.3	14.4
Kings	8.3	8.5	9.6	9.8	9.2	7.7	7.0	7.4	9.7	14.2
Madera	7.0	7.3	8.7	8.5	7.3	6.7	6.0	6.6	8.7	13.3
Merced	7.6	7.6	8.6	9.2	8.7	8.2	8.0	8.6	11.4	16.6
San Joaquin	6.1	6.6	8.0	8.6	7.9	7.2	6.9	7.7	10.2	15.7
Stanislaus	6.4	6.6	8.0	8.4	7.5	7.1	7.0	7.9	10.4	15.7
Tulare	8.9	9.8	10.1	10.6	10.2	8.2	7.5	8.2	10.3	15.2
Valley	7.5	7.7	8.8	9.3	8.5	7.5	7.0	7.6	9.9	15.0
California	5.1	5.7	6.7	6.9	6.0	5.2	4.9	5.5	7.7	12.2
United States	4.1	4.9	5.7	6.0	5.4	4.9	4.6	4.6	6.1	9.6

Table 1-5 Unemployment Rate – San Joaquin Valley Counties

Statistics (not seasonally adjusted, data points are for August of each year)

The economic plight of the San Joaquin Valley is starting to be recognized at a national level. The Congressional Research Service (CRS) completed a study in 2005 (California's San Joaquin Valley: A Region in Transition) comparing the economic conditions of the San Joaquin Valley to the Central Appalachian region, another severely economically distressed region. The Central Appalachian region (primarily eastern KY and parts of WV, TN and VA) is the most economically distressed sub-region within the Appalachian Regional Commission (ARC). ARC was created by Congress in 1965 in response to the persistent socioeconomic challenges in the Appalachian region. Economic conditions in the Valley were shown to be comparable to Central Appalachia and lagging far behind the state of California as a whole and the United States. For example, poverty rates in the Valley are similar to the poorest region of the Appalachians and are actually trending worse than the Central Appalachian region [Figures 1-3 and 1-4].





Figure 1-4

Source: US Census Bureau 2000 via CRS

Source: US Census Bureau via CRS

While being one of the most economically challenged regions in the country, the Valley has traditionally received far less federal assistance than other regions in the United States. The CRS study also showed that the Valley is lagging behind the Appalachian region, California and the United States in per capita federal expenditures [Figure 1-5].



Source: CRS

The per capita income for residents in the Valley was \$27,379 in 2007 compared to \$41,805 in California and \$38,615 in the United States. The average wage per job in the Valley was also significantly lower than California and the United States at \$36,309 in 2007 compared to \$50,182 and \$43,889 respectively. The disparity in income and wages between the Valley and the rest of the state and country has only increased over time [*Figures 1-7 & 1-8*].



#### **Demographics**

The Valley has a younger population than California as a whole and the United States [*Figures 1-8 & 1-9*]. In 2008, 33.1% of Valley residents were under the age of 20 compared to 28.7% for California and 27.3% for the United States. Figures 1-10 and 1-11 compare the racial/ethnic breakdown of Valley residents to the United States as a whole.



Source: 2008 American Community Survey, U.S. Census Bureau



Source: 2008 American Community Survey, U.S. Census Bureau

Education levels in the San Joaquin Valley lag behind California as a whole and the United States *[Table 1-6]*. Nearly 28% of Valley residents 25 years and older are not high school graduates compared to 20% across the state and 15.5% across the country. Only 15.4% of Valley residents (25+ years old) have a Bachelor's degree or higher compared to 29.4% across California and 27.4% in the United States.

Education Level	San Joaquin Valley		Californ	nia	United States		
Less than 9th grade	349,850	15.5%	2,463,199	10.6%	12,658,853	6.4%	
9th to 12th grade, no diploma	278,680	12.4%	2,137,871	9.2%	17,999,306	9.1%	
High school graduate	605,515	26.9%	5,205,251	22.4%	58,547,194	29.6%	
Some college, no degree	506,788	22.5%	4,833,447	20.8%	39,756,710	20.1%	
Associate's degree	163,074	7.2%	1,766,067	7.6%	14,636,799	7.4%	
Bachelor's degree	240,598	10.7%	4,368,693	18.8%	34,218,462	17.3%	
Graduate or professional degree	106,903	4.7%	2,463,199	10.6%	19,977,252	10.1%	

 Table 1-6

 Educational Attainment of Persons 25 Years of Age and Older

Source: 2008 American Community Survey, U.S. Census Bureau

#### Trends and Assumptions

Changes in population, housing and employment alter travel demand and patterns that affect transportation facilities and services. By anticipating the magnitude and distribution of growth and change within the San Joaquin Valley, present-day decisions can be made to capitalize on the positive aspects of the anticipated growth while minimizing the adverse consequences.

#### Population

Population growth within the San Joaquin Valley will continue into the foreseeable future. The driving force for the increasing population is the availability of land, the availability of water, the proximity of the urban centers of Stockton, Modesto, Fresno and Bakersfield to the large urban areas of Los Angeles and San Francisco, and the relatively low cost of land in the San Joaquin Valley.

#### Housing

Housing growth is generally a function of population growth. Housing is anticipated to grow at a rate similar to population growth.

#### Employment

Employment opportunities within the Valley will change over the time span of this plan. Agricultural employment will drop as a percentage of total employment as agricultural activities become more and more automated, requiring less human labor to accomplish more production. Services, wholesale trade and retail trade activities are anticipated to increase in importance in the future employment pattern of the Valley.

#### Other Trends and Assumptions

#### Cost of Travel

The cost of travel will increase for all modes as the price of fuel, equipment, labor, and service continue to rise.

#### Automobile Use

The private automobile will continue to be the dominant and preferred method of travel within the region. Travel demand management programs may lessen the percentage of trips made by private automobile.

#### Transit Use

Public transit use, including passenger rail, will keep pace with the rise in population and additional incentives, such as voluntary employer trip reduction programs, will be initiated to encourage additional transit use.

#### **Aviation Activity**

General and commercial aviation activity will increase as the regional population and economy expand.

#### Air Quality

Increases in hydrocarbons, oxides of nitrogen, carbon monoxide, particulate matter and greenhouse gases may result as population increases. Efforts will be made to reduce the number of vehicle miles traveled (VMT). VMT reduction efforts will take several forms, including compensatory and possible compulsory ridesharing, flex time work scheduling, and non-motorized commuting. Jobs-to-housing balance in local land use decision-making will become more important. Introduction of newer, cleaner fuels and more efficient internal combustion engines are also anticipated.

#### Railroad Activity

The California High-Speed Rail Authority is working toward the development and implementation of an inter-city high-speed rail system. Current activity focuses on evaluating alternative Central Valley alignments connecting the Los Angeles Basin with the San Francisco Bay area. Amtrak will continue its successful San Joaquin trains between Bakersfield and Oakland/Sacramento, with bus feeder lines to southern California and other areas.

#### Land Use

It is anticipated that agricultural land will continue to be converted at an increasingly rapid pace to residential, commercial, and industrial uses.

## 3. Valley Policy Element

## **3a. Memorandums of Understanding (MOUs)**

#### San Joaquin Valley Regional Planning Agencies MOU

In September of 1992, the eight Valley RTPAs entered into a MOU to ensure a coordinated regional approach to transportation and air quality planning efforts. The MOU was revisited in 2006 to update and solidify the partnership. One major addition to the 2006 MOU was the creation of the San Joaquin Valley Policy Council. The MOU goes well beyond the requirements of state and federal transportation planning acts by establishing a system of coordination of plans, programs, traffic and emissions modeling, transportation planning, air quality planning, and consistency in data analysis/forecasting. Development of the MOU and the ongoing process of coordinated planning have improved an already close working relationship between the eight Valley RTPAs and the representatives of Caltrans, CARB, OPR, SJVAPCD and FHWA.

Each of the areas addressed in the Valleywide MOU have been assigned to a specific RTPA to serve as a lead in the coordination of planning activities. These cooperative efforts include both staff and financial assistance from Caltrans, CARB, EPA and the SJVAPCD. These efforts have taken place as a voluntary response to the new issues, challenges and requirements facing the transportation planning community.

#### MOU Contents

The MOU covers many different items. Examples of items where San Joaquin Valley Regional Planning Agencies coordinate under this MOU are below, but this list is not all-inclusive:

- Preparation of multi-modal transportation plans
- Preparation of Regional Transportation Plans
- Coordination with the San Joaquin Valley Air Pollution Control District and Caltrans District Offices
- Coordinate on rail issues
- Coordinate planning efforts with state and federal agencies
- Coordinate on various technical issues

#### Addition of Regional Policy Council

The Valley RTPA's updated MOU, signed in 2006, created the San Joaquin Valley Regional Planning Agencies' Policy Council. The membership of the Policy Council consists of two elected officials and one elected alternate appointed from each RTPA Board, and one representative of the San Joaquin Valley Air Pollution Control District (added in 2009). The Policy Council is meets at least twice each year, and is authorized to represent the Valley RTPAs in multiple forums, including before the California Transportation Commission (CTC) and state and federal legislative bodies.

## MOU Between and Among the SJV RTPAs and the San Joaquin Valley Air Pollution Control District (Air District)

In 1992 the eight Valley RTPAs entered into an MOU with the Air District to ensure a coordinated transportation and air quality planning approach. This MOU was updated in 2009 to reflect the increase in membership to the Valley Policy Council. The MOU acknowledges that cooperation between the agencies is key to complying with the Federal Clean Air Act, keeping current with the Transportation Conformity Rule, and to address state and federal agencies with joint or consistent policy positions when necessary.

## 4. Modal Discussion

### 4a. Highways

The regional highway system in the San Joaquin Valley plays a critical role in the movement of both people and goods. The Valley's highway network provides east-west and north-south connections to major metropolitan markets in California and beyond. Given the San Joaquin Valley's north-south geographical layout, the most important truck routes in the Valley are State Route 99 and Interstate 5, which together account for 24 of the 25 highest volume truck routes in the system. State Route 99 also serves a dual purpose as the San Joaquin Valley's "Main Street" (i.e. connecting the majority of cities within the Valley) and as the primary goods movement corridor for goods moving from southern/northern California as well as goods that are moving along the 1,400 mile West Coast Corridor from British Columbia on the north to Baja California in the south.

Both facilities carry a mix of different types of traffic, although Interstate 5 appears to carry mostly longer haul interregional traffic, while SR 99 carries both interregional and intro-valley traffic. SR 99 serves as the primary highway providing goods to the vast majority of San Joaquin Valley residents. In fact, the majority (71%) of the Valley's population is located within five miles of State Route 99.

The \$1 billion for State Route 99 included in Proposition 1B makes a small dent in the nearly \$6 billion in immediate needs identified in Caltrans' 99 Business Plan. Far greater funding is needed, however, to bring the "Main Street" and the primary goods movement corridor of the Valley up to a full six lanes from Bakersfield to Sacramento. Widening to six lanes has been a long term goal of the Valley and is necessary to accommodate the forecasted growth and avoid major congestion problems along the SR 99 corridor in the future.

Arguably, the most neglected of the Valley's goods movement street and highway facilities are the east to west highways that serve as our primary farm-to-market connectors. These facilities carry California produce to domestic and international markets. Highways like State Routes 205, 132, 152, 180, 198, and the 46 are being asked to serve a wider range of purposes today and in the future. In order to accommodate the projected growth in population and goods movement, additional investment in these facilities will be required.

Truck traffic in the Valley is growing at an amazing rate. The following statistics reflect this trend.

Truck traffic accounts for anywhere from 19% of the traffic in Stanislaus County to 27% in Kern County, while the statewide average for truck volumes is 9% by segment.

In 1992, truck VMT in the Valley accounted for 18.7% of all statewide truck VMT. In 2007 it had grown to 28% and is still climbing.

Over a six-year period from 1997 to 2003, truck traffic grew 33% while the state as a whole grew about 8%.

It is estimated that between 25% and 30% of all truck movements in the San Joaquin Valley are through trips not generated or ending in the Valley.

On Interstate 5 it is estimated that up to 30% of the traffic is trucks, depending on the location. Truck traffic on SR 99 is two to three times (18% to 27%) the average for the state.

Large trucks (5+ axles) play a very important role in the region's trucking system, constituting over 20% of total Annual Average Daily Traffic in some locations on SR 99. Surface Transportation Assistance Act (STAA) trucks are the largest trucks (STAA trucks are defined as tractor-trailer combinations more than 65 feet in length or with a kingpin to rear axle length greater than 40 feet) allowed to operate on

California's highways and are restricted to a designated STAA roadway network. Unfortunately, the geometry of many of the Valley's interchanges does not easily accommodate these longer trucks which now make up about 70% of the truck fleet. In order to address this situation, additional STAA truck signing and geometric improvements to various interchanges will be required. Additionally, necessary expansion of our roadside rest system is required to deal with truck safety and to reduce the impact of on-street parking by trucks in communities along freeways.

As we look forward, several trends are clear. Among them are:

• The Valley's agricultural industry's reliance on local routes and state highways to move goods from farm-to-market will continue to increase as the Valley's farms production continues to grow in order to meet a growing planet's needs for food and fiber.

• The Valley's centralized location lends itself to the location of distribution centers, which in turn leads to more heavy-duty diesel trucks utilizing our street and highway system, thereby creating more "wear and tear" on the facilities and generating additional emissions.

• Forecasted congestion on east-west routes connecting the Bay Area to Stockton and Modesto will continue to worsen as goods movement increases and Bay Area employees continue to seek affordable housing in the Valley.

• Investments that improve access to intermodal transfer points will need to be taken into consideration and funding sought as "Just-in-Time" delivery continues to become the primary business model for many goods movement companies.

• The Port of Stockton has emerged as the fourth (effectively tied with the Port of San Diego) largest port in California, but continues to be growth constrained due to access issues on neighborhood surface streets.

• At-grade intersections between vehicular traffic and trains are quite numerous in the Valley and present a safety hazard. Future growth in population and goods movement will only worsen the situation.

• Problematic access to large activity centers for large STAA trucks and doubles will increase due to ramp and roadway geometrics as will safety and road maintenance issues associated with truck traffic.

### 4b. Transit

#### Existing Operations

For the San Joaquin Valley (SJV), there exist jurisdiction-by-jurisdiction transit services with limited intercounty transit operations throughout the SJV. These transit services include:

- Vanpool services: Kings Area Rural Transit / Agricultural Industries Transportation Services (KART/AITS), San Joaquin County Commute Connection
- Passenger rail service: Altamont Commuter Express (ACE)
- Bus services: Greyhound, San Joaquin Commuter routes, Modesto Area Express connections to ACE and BART, East Kern Express route, Yosemite Area Regional Transportation System (YARTS), Stanislaus Regional Transit routes, Merced County "The Bus" routes, KART, Tulare County Area Transit routes

However, there is not an integrated transit system that offers extensive inter-county transit and connectivity to other modes such as Bay Area Rapid Transit (BART), Altamont Commuter Express (ACE), and Amtrak.

Improvements to inter-county transit services will be needed to accommodate the projected future demands of inter-county commuters with viable modal choices.

#### Transit Improvements

The San Joaquin Valley (SJV) Express Transit Study was a sponsored effort of all eight valley Councils of Governments/Metropolitan Planning Organizations, which make up the San Joaquin Valley Regional Transportation Planning Agencies (SJVTPA). The consultant, Nelson/Nygaard Consulting Associates, commenced this study in February 2008.

The SJV Express Transit Study is valley wide and comprehensive in its documentation of existing interand intra-valley transit services. The study further projects future transit demand both within the Valley and to Sacramento, Bay Area, and SoCal destinations. The study proposes service options throughout the San Joaquin Valley and by various modes ranging from rideshare/TDM, vanpool, commuter express bus, and commuter rail. The study has been coordinated with local transit providers in each of our counties, vanpool programs, and the San Joaquin Regional Rail Commission.

The study identifies four feasible inter-county commute corridors.

Key Travel Corridors	Description				
Northern SR 99 corridor to	Nearly 10,000 daily trips heading towards Sacramento by				
Sacramento	2030				
Northern SR 99 corridor to Bay Area	More than 50,000 daily commute trips by 2030				
Madera and Visalia to Fresno Substantial growth in commute trips to Fresno jobs					
Northern LA Co. to Eastern Kern Co.	More than 20,000 people work at Edwards Air Force Base				

The study summarizes the proposed services by key corridor to best serve the SJV's inter-county commuters.

- Invest in ridesharing, which is the most cost-effective strategy for the region
- Focus on expanding vanpool offerings
- Consider expanding subscription bus service from Stockton to Sacramento and the Bay Area
- Consider implementing bus service between Lancaster Metrolink station and Edwards Air Force Base in Eastern Kern County in partnership with the base
- Consider upgrades to commuter rail service to northern SR 99 corridors which includes capitalizing on California High Speed Rail investments

Key Travel Corridors	Rideshare	Vanpool	Commuter Express Bus	Commuter Rail Improvements
Northern SR 99 corridor to	X	Х	Х	Х
Sacramento	Х			
Northern SR 99 corridor to Bay Area	Х	Х	Х	Х
Madera and Visalia to Fresno	Х	Х		
Northern LA Co. to Eastern Kern Co.	Х	Х		



The map depicts the study's proposed services for the SJV region.

The SJV Express Transit Study, from a procedural and geographic perspective, serves as a model for modal studies for the San Joaquin Valley.

#### **Recommendations**

#### Ridesharing/Vanpool

Recognizing that lower-density land use patterns will continue to dominate most of the San Joaquin Valley for the foreseeable future, the expansion of the ridesharing and vanpool opportunities should be the primary investment to increase transportation choices for inter-county commuters in most of the SJV region. Recommendations for expanding access to ridesharing and vanpool services are:

- Continue with plans to form a Joint Powers Authority in the Southern portion of the Valley to operate KART and AITS Vanpool
- Expand Commute Connection's service area to include Merced County, and enhance coordination between the participating MPOs
- Commute Connection should consider pilot testing lease-purchasing vanpool vehicles
- Prioritize vanpooling to Fresno
- Provide a single valley-wide ride-matching and vanpool website
- Invest in more marketing of vanpool to choice riders
- Expand park-and-ride opportunities
- Offer Guaranteed Ride Home throughout the Valley
- Seek to influence the development of the new Air District trip reduction rule, so that it can fund and promote ridesharing to large employers

#### Inter-county Express Bus

Three key corridors (Northern SR 99 corridor to Sacramento; Northern SR 99 corridor to Bay Area; Northern LA County to Edwards Air Force Base in Eastern Kern County), which were identified through this study, have potential for commuter express transit services. Recommendations for express bus services include:

- Maintain existing inter-county commuter service
- Enhance San Joaquin Regional Transit District subscription routes to Sacramento and the San Francisco Bay Area as funding becomes available
- Study express bus service between Lancaster Metrolink and Edwards Air Force Base

#### Commuter Rail

Nearly half of the San Joaquin Valley's inter-county commuters travel between the Valley and the neighboring San Francisco Bay Area and Sacramento areas. High trip densities, congested roads, and the opportunity to connect to dense downtowns and high quality local rail service on the destination end makes these corridors good candidates for commuter rail service. Expanding and improving passenger rail service in these rail corridors may be the best way to serve SJV commuters in the coming decades. Recommendations for commuter rail are:

- Develop a coordinated regional advocacy plan for enhanced state and federal investments in commuter rail
- Work cohesively as Valley Counties to upgrade ACE
- Work cohesively as Valley Counties for a direct ACE/BART connection
- Work toward expansion of commuter rail service between Merced and Sacramento
- Invest in great station area planning

## 4c. High Speed Rail

#### **Background**

The California High-Speed Train (HST) system will approximately be an 800-mile system that will serve Sacramento, the San Francisco Bay Area, the Central Valley, Los Angeles, the Inland Empire, Orange County and San Diego. By 2030, HST will potentially be carrying 93 million passengers annually at operating speeds of up to 220 miles per hour. At such high speeds, the expected trip time from San Francisco to Los Angeles will be just over 2  $\frac{1}{2}$  hours.

In 1996, the California High-Speed Rail Authority (CHSRA) was created to plan for the development, financing, construction and operation of the HST system. The CHSRA is made up of a nine-member policy board and a small core staff.

In 2000, CHSRA adopted the Business Plan, which described the economic viability of the HST system. This Final Business Plan included investment-grade forecasts of ridership, revenue, cost and benefits of the HST system.

In 2005, CHSRA, in cooperation with Federal Railroad Administration (FRA), completed the final programlevel Environmental Impact Report / Environmental Impact Statement (EIR/EIS) that looked at the entire proposed statewide HST system. This was the first phase of a tiered environmental review process.

In 2007, CHSRA adopted a Phasing Plan and laid out the Preliminary Financial Plan. Factors and conditions for adopting Phase I (San Francisco to Central Valley to Anaheim) of the Phasing Plan included the following:

- Early utilization of some segments
- Local and regional funding participation in construction
- Service to several regions
- Significant operating surplus to attract private sector financing
- Timely construction



In 2007, CHSRA also laid out the Preliminary Financial Plan, which was later updated in 2008.

In 2008, CHSRA, in cooperation with FRA, completed another program-level EIR/EIS, specifically for the Bay Area to Central Valley corridor. This program-level EIR/EIS finalization resulted in the CHSRA selecting Pacheco Pass (over Altamont Pass) as the preferred alignment.



Also, in 2008, the CHSRA released an updated Business Plan with updated ridership and revenue forecasts. The 2008 Financial Plan updated the financing strategy for Phase I.

Funding Sources	Cost (2008 dollars)
State (2006 Bond - \$9.95 billion)	\$10 billion
Federal grants	\$12-16 billion
Local partnerships	\$2-3 billion
Public-private partnerships	\$6.5-7.5 billion
Estimated cost (SF to Anaheim)	\$33.6 billion

In 2008, California voters approved \$9.95 billion in state bonds for California's HST.

#### Current Work

In 2009, with the state bond money, the CHSRA and the FRA have initiated the project-level EIR/EIS for the entire HST system. The CHSRA has invited local and transportation agencies to actively participate in the process in determining final alignments, station locations, and site for the central heavy maintenance facility. Endorsed by the SJV, the CHSRA are looking at station locations in Merced, Fresno, Bakersfield, and Hanford, and the central heavy maintenance facility somewhere within the SJV.

The CHSRA and the San Joaquin Regional Rail Commission (SJRRC) entered into a Memorandum of Understanding for the joint planning and development of the Altamont Corridor Rail Project between the northern SJV and the Bay Area. The Altamont Corridor Rail Project will be a dedicated, grade-separated, electric regional rail corridor, which will support intercity and commuter rail passenger services. The project would transform the existing Altamont Commuter Express (ACE) service into the new Altamont

Corridor Express by accommodating more trains per day, reducing travel times with high speed travel (150 mph or higher), and eliminating freight railroad delays by providing separate passenger tracks. The Altamont Corridor Express would possibly provide connections to potential bus links, BART, CalTrain, and the Valley Transportation Authority (VTA) light rail network. The Altamont Corridor Express will service large riderships (with proposed stations in San Jose, Milpitas, Fremont/Union City, Pleasanton, Livermore, Tracy, Stockton, and Modesto), and also serve as a feeder to the statewide HST system (with considered connections at stations located in San Jose, Stockton, and Modesto). Additionally, the San Joaquin Valley supports the Altamont Corridor Rail Project to connect to Merced in order to tie in to Phase I of the statewide HST system. By ending in Modesto and not extending to Merced, there will be a gap (disconnect) between this Altamont Corridor Rail Project service and the statewide HST system.



Following the completion of the project-level EIR/EIS for California's HST system, the CHSRA will be finalizing design and acquiring right-of-way.

The CHSRA will be working on acquiring Federal funding needed for California's HST system. CHSRA has already applied for more than \$4.7 billion in funding from the Federal Economic Stimulus' High Speed Rail Program. This \$4.7 billion application includes:

- \$2.19 billion for Los Angeles to Anaheim
- \$980 million for San Francisco to San Jose
- \$466 million for Merced to Fresno
- \$819.5 million for Fresno to Bakersfield
- \$276.5 million for preliminary engineering and environmental work in all segments including Los Angeles to San Diego via the Inland Empire, Los Angeles to Palmdale and Bakersfield, Sacramento to Merced, and the Altamont Rail Corridor

This \$4.7 billion, coupled with non-Federal dollar-for-dollar match will total a nearly-\$10 billion investment. This level of investment is expected to create nearly 130,000 new jobs throughout the state.

With more Federal funding prospectively available in the next Federal Surface Transportation Act, the CHSRA may have the opportunity to acquire more monies to complete the remaining segments of Phase I (Merced to San Jose; Bakersfield to Palmdale; Palmdale to Los Angeles).

With the completion of Phase I, the HST ridership is expected to generate profits. These profits will attract private partnerships to help pay (possibly match further Federal funding support) for the construction of the remaining segments (Merced to Sacramento; Altamont Corridor; Los Angeles to San Diego) of the envisioned HST system, which would be progressing towards final EIR/EIS.

#### **Recommendations**

The California High-Speed Train (HST) System is very important to the SJV. By connecting the SJV to other major metropolitan areas, high-speed rail will contribute to significant economic development opportunities, less vehicular congestion, safer highways, and improved air quality. Construction of the HST will also directly create jobs. For these reasons, the recommendations are:

- The San Joaquin Valley will continue to support the activities, including the pursuit of available future funds, of the CHSRA and the development of a HST network across our valley and throughout the state.
- The San Joaquin Valley supports the station locations in the cities of Merced, Fresno, Bakersfield, and Hanford.
- The San Joaquin Valley supports the heavy maintenance facility location somewhere within the Valley.
- The San Joaquin Valley supports the Altamont Corridor Rail Project service improvements including connection to Merced, which will tie in to Phase I of the statewide HST system.

### 4d. Goods Movement

### 4d-1. Freight and Passenger Rail

#### Introduction

In general, rail facilities are privately owned. Passenger service is provided by the National Rail Passenger Corporation, referred to as Amtrak. The Altamont Commuter Express (ACE) also provides passenger service between the bay area and the San Joaquin County. Private rail corporations, primarily the Union Pacific (UP) Railroad and the Burlington Northern Santa Fe (BNSF) Railroad provide freight service. In recent years, regional transportation planning agencies in the eight Valley counties have had an enhanced role in the planning of Interregional passenger rail service and rail freight movement.

#### Existing Interregional Rail Facilities

Rail facilities are located throughout the San Joaquin Valley. Many of these facilities provide for long distance movement of goods. In particular, several facilities owned by UP and BNSF stretch for significant lengths north-south through the Valley. These are connected at locations up and down the Valley by several shorter lines, owned, leased, and/or operated by a number of different companies, such as the San Joaquin Valley Railroad.

Valley passenger rail service is provided by Amtrak's *San Joaquins* service route. The *San Joaquins* is the fourth busiest route in the Amtrak national system outside the Northeast Corridor, with ridership annual ridership approaching 1 million as of October 2009. At present, there are six daily round trips provided from Oakland or Sacramento to Bakersfield. Connecting bus service has been significantly expanded over the years to now offer service points to the South Bay Area, as far north as Eureka, and as far south as Palm Springs and San Diego. The *San Joaquins* also provides connecting services to long-distance nationwide trains. Service stops along the route include the Valley cities of Lodi, Stockton, Modesto, Turlock/Denair, Merced, Madera, Fresno, Hanford, Corcoran, Wasco, and Bakersfield.

#### Interregional Issues

#### Passenger Rail

In 1987, members of the Caltrans San Joaquin Task Force formed a committee to take a more active role in developing suggestions for improving the Amtrak *San Joaquins* service. This committee, known as the San Joaquin Valley Rail Committee is comprised of representatives from each of the counties served by the trains, and representatives of interested counties served by the connecting bus network. The committee serves as an advisory body to Caltrans and Amtrak on issues pertaining to the *San Joaquins* service.

Efforts of the San Joaquin Valley Rail Committee included the adoption of an annul Business Plan for the San Joaquin Corridor. This report becomes a significant resource to the Caltrans Rail Program in their work efforts to update a business plan for the *San Joaquins* rail corridor.

In recent years Committee work has focused on:

#### Operations

#### Intercity Rail Connectivity

 Promote expansion of Transit Transfer Pass with local agencies; investigate further options for direct connectivity with other rail systems.

#### Amtrak Bus Operations

- Evaluate the bus program for opportunities for cost-effective expansions or to restructure or discontinue bus routes that are not cost effective.
- Initiate new service in Fall 2008 between Bakersfield and Los Angeles International Airport via west Los Angeles.

#### **Food Service**

- Continue evaluation of menu items; add new menu items as appropriate.
- Pursue mobile food-service cart implementation.

#### **On Board Amenities**

- Implement mid-route cleaning of restrooms.
- Evaluate and testing of potential for on-board wireless service.

#### Ticketing and Fares

- Implement on-board, automated ticket sales and validation, if pilot program on the Capitol Corridor is successful.
- Evaluate market reaction to Spring 2008 fare reductions and adjust accordingly. Fare increases will be considered to offset increased operating expenses from higher diesel locomotive fuel costs.
- Continue to install Quik-Trak ticket machines.

#### Marketing

#### Advertising, Public Relations and Partnerships

- The Department will promote the recent addition of Amtrak bus connections from Merced to the eastern Sierra and a new route between Bakersfield and Los Angeles International Airport through west Los Angeles.
- The Department will sponsor the ceremony opening the new Madera train station in the winter of 2008-09.
- The Department, Amtrak and California Operation Lifesaver will provide bilingual staff for information booths at the annual 2008 National Council of La Raza.
- Continue contract with Glass McClure for advertising services.

#### Passenger Information

- The Amtrak California website will be revised for easier navigation. It will provide more content, and a comment and suggestion feature.
- The Fall/Winter On-Line Timetable in 2008-09 will include an enhanced Amtrak
- California System Map which will allow users to "point and click" the icons for specific trains, stations or bus routes as well as view all relevant timetables and amenities.

• A combined San Joaquin / Capitol Corridor timetable will be introduced in Fall 2008.

#### Rail Safety

• California Operation Lifesaver will continue to actively promote rail safety educational and media campaigns in Central California.

#### **Capital Plan**

#### Track and Signal projects

- Construct siding track and signals at Emeryville.
- Construct track and signal improvements at Kings Park in Kings County.
- Complete Merced Crossover Project.

#### **Station Projects**

- Complete construction of new Madera station and associated track work.
- Construct bus terminal and parking structure at Emeryville.
- Complete Fresno station shelters, parking lot and traffic circulation project.

#### Equipment

• Continue rebuilding of 66 rail cars.

#### **Homeland Security**

• Utilize Homeland Security funding for the development of security projects in the corridor Long-range planning was last performed for the San Joaquins in 2001 as part of the California Passenger Rail System 20-Year Improvement Plan. That plan shows an increase from 6 to 10 trains per day, and discusses the co-benefits that capital improvements along the corridor have for both freight and passenger service. Since 1987 the State of California has invested over \$380 million on the BNSF San Joaquin Valley corridor for rail, siding and signal improvements.

#### The Amtrak San Joaquins and HST

The recently funded HST service, at a minimum, will provide the expanded capacity anticipated by Caltrans 20-Year Passenger Rail System Plan. In the interim, the San Joaquins will play an important role, providing rail service for missing segments of the HST as each segment is completed, and as a feeder service for the HST.

Federal stimulus funding is anticipated for the HST test track to be built in the San Joaquin Valley to connect Merced/Fresno – "the doorstep of Yosemite and the Sierras," with Bakersfield – "the gateway of Southern California." Existing San Joaquin Amtrak train sets could begin operating on this test track at speeds up to 120 MPH, cutting travel times in half, and ushering in one of the first segments of the HST in California. Construction could begin in 2012.

Long term service after the HST system is completed between Bakersfield and Merced needs further study to evaluate: 1) Amtrak San Joaquins as a feeder system for highspeed rail, and 2) addition of suburban commuter stops in outlying Fresno and Bakersfield and adjacent communities/counties. In the near-term some stops along the system may need to be serviced by connector buses, until population and ridership warrant commuter/HST feeder train service. Development of connector buses and community transit centers should be coordinated with potential future commuter rail corridors that provide service from outlying communities and counties to the HST stations within the valley. Preservation and expansion of freight service along future commuter rail corridors is an important strategy to preserving potential future commuter rail corridors to the Valley's HST stations.

#### Inter-County Commuter Rail

In 2009 the SJV RTPAs completed the San Joaquin Valley Express Transit Study. The study looks at a hierarchy of transit services which include commuter passenger rail service. The study made the following recommendations on passenger commuter rail.

## 1. Develop a coordinated regional advocacy plan for enhanced state and federal investments in commuter rail.

#### 2. Upgrade ACE.

Short Range ACE Corridor Improvements:

- Increase service to at least 12 trains (from current 8)
- Upgraded signaling
- Dispatching Improvements
- Altamont Slide Repairs
- Niles Canyon Drainage Improvements
- BNSF Crossing Improvements
- Increase Speed in curves as possible
- Additional sidings/passing tracks to speed operations and allow increase in service
- Purchase rolling stock to support expanded service

Mid Range ACE Corridor Improvements

- Purchase new rolling stock to support expanded and higher speed service
- Provide additional dedicated ACE track on Fresno Subdivision and Purchase
- Tracy Subdivision to create a dedicated corridor from Stockton to Lathrop.
- Double-track existing ROW where possible to separate freight and passenger rail
- service including operating on ACE owned track parallel to UP track from East
- Livermore to Hearst.
- Construct track in former SP Right of way owned by Alameda County between
- Midway and East Livermore, and relocate service to that trackway.
- Grade separations
- Station Improvements to support increased service frequency.

Longer Range ACE Corridor Improvements

- Increase service to 20 minute bi-directional peak hour service, plus regular midday service up to every half hour.
- Operate a dedicated ACE/Regional Rail corridor throughout the length of ACE
- Service through additional right of way acquisitions and new trackage.
  - Evaluate options including purchase of right of way/tunneling, and signalization
- as necessary to create a more direct, level alignment through Niles Canyon to
- support increased service
  - Evaluate options including purchase of right of way/tunneling, and signalization
- as necessary to create a more direct, level alignment through Altamont Pass to
- Support increased service.
  - Evaluate options including purchase of UP Warm Springs Subdivision to
- support increased service from Niles to Diridon Station
- Complete other improvements as necessary to support high speed equipment
- operating on regional rail corridor, including electrification.
- Purchase additional rolling stock compatible with high speed service.
- Make additional station improvements as needed to support higher frequency
- higher speed service.

#### 3. Lobby for a direct ACE/BART connection.

## 4. Work toward expansion of commuter rail service between Merced and Sacramento.

## 5. Consider express bus service or LA Metrolink expansion towards Edwards Air Force Base.

#### 6. Invest in great station area planning.

The study focused on inter-county commuter rail. The study noted the potential for commuter rail service within a county. Future studies of intra-county commuter rail service may be needed to augment this
study. Fresno and Kern COG have both funded long range transit studies that will look at future potential for light-rail, and bus rapid transit systems that could serve as feeder systems for the highspeed rail stations in those regions.

## Freight Rail

Central California is a major corridor for freight/goods movement. The highway system, and in particular State Route 99, is at times overwhelmed with truck traffic. In 1992, Caltrans District 6 prepared a report titled *Freight Movement in the San Joaquin Valley*. The report identifies key issues relating to goods movement and concludes "...modifying truck traffic demand over state highways by encouraging alternatives to highway freight movement. A logical alternative especially to long haul freight through the San Joaquin Valley of available capacity on rail mainlines."

In 2000, the counties of the San Joaquin Valley in conjunction with Caltrans, hired the consulting firm Cambridge Systematics, to conduct the "San Joaquin Valley Goods Movement Study". This study noted that trucking is the dominant mode for moving freight, while rail accounted for 11% of the total tonnage. Rail was also found to be important for long-haul shipments of certain key commodities. Less than 25% of

shippers surveyed currently use rail services and only one third of those indicated that their rail usage was likely to grow. The decline in rail shipments since 1993 may have been attributable to network rail mergers and acquisitions. Many rail shippers looked for alternative options shipping during this time and found it difficult to enough locate boxcars to meet their needs. Both the Cities of Fresno Bakersfield and have looked at



consolidation and relocation of rail yards in their downtowns during this period. In 2006, the CIRIS study was completed by SJCOG, looking at rail service between the San Joaquin Valley and the port of Oakland. The study concluded that a pilot project was needed to demonstrate the feasibility of such a service. The study looked at the potential for Service from Lathrop, Crows Landing, Fresno and Shafter to Oakland.

## Draft Rail Concept Report

In 2008, the 8-valley COGs prepared a draft report on *The Altamont/San Joaquin Valley Corridor: Optimizing Goods Movement for Exports and the Environment* synthesizing 12 years worth goods movement reports in the region. The concept report divided rail goods movement in the San Joaquin Valley into two types: 1) National Goods Movement Corridor For Long-Haul Rail, and 2) Regional Goods Movement Corridor For Short-Haul Rail. Nationally, the San Joaquin Valley serves a critical corridor between the rapidly growing Southern half of the nation, with the port of Oakland, and between Southern

California and the Pacific Northwest. This national goods movement is primarily pass-through traffic, and accounts for the majority of trains on the mainline system.

#### Tehachapi Pass

A critical bottleneck in the national rail freight system is the Tehachapi Pass at the Southern end of the Valley. The State and BNSF are investing over \$100M to increase capacity over the pass by as much as 70-percent. This project primarily benefits national goods movement without any federal funding. Because of this project national rail traffic is displacing short-haul rail capacity. The state and federal government needs to mitigate the potential environmental impacts of reduced short-haul rail capacity in the 8-county region.

#### Regional Goods Movement

Regional goods movement is characterized by shipments to and from the 8-county region to out-of-state destinations. There is currently no intra-state rail travel from the San Joaquin Valley. Goods currently traveling between the valley and the southern California or the Bay Area are shipped almost entirely by truck. This is especially true of containerized freight. Historically, the national rail companies will not ship less than 700 miles (the length of California).

One example of out-of-state shipments includes the Rail-Ex facility in Delano. This facility ships refrigerated box cars of perishable produce from the valley non-stop to Albany, NY in 5 days.

The rail concept report also pointed out the role that short haul rail can play in persevering rail infrastructure for future passenger service, and the potential for hauling un-subsidized freight on convential passenger corridors to help off-set the cost of subsidized passenger service.

#### Oakland to Shafter Inland Port Pilot Project

Building on the 2006 CIRIS study, the *Altimont/San Joaquin Valley Corridor* concept report reviewed efforts to create a rail freight shuttle between the Port of Oakland and the Valley. It proposed a phasing for the acquisition and refurbishment of the old Southern Pacific line. Phase I included a short-haul rail connection between Tulare to the rail yard in Fresno, for shipping goods out-of-state. Phase II was a proposed shuttle between the port of Oakland and Crows Landing in Stanislaus County. Phase III was completion of gaps in Los Banos and northern Kern County to complete the system to the Port of Oakland. Before the completion of such a project, a pilot effort on the BNSF or UP lines was needed.

In 2009, the Paramount Farming Company and the City of Shafter completed the Oakland-Shafter Inland Port (OSIP) position paper. The paper recommended that policy makers create long-term, sustained efforts to develop and maintain short haul rail with-in the state of California. This was critical to both economic and environmental goals for the state and nation.



ICFI, "Greenhouse Gas Emissions from Freight Trucks," Intl. Emissions Inventory Conf., 5/16/07

The OSIP paper concluded that a Midwest grain transloading facility could provide the backbone traffic necessary to make such a service from the Valley to Oakland economically viable, because the port of Oakland lacked the space necessary for such a facility. Once the service was established, other products from the valley could be containerized and shipped by rail to the ports such as almonds, nuts, cotton and other products, currently trucked to the port. By the end of 2009 a pilot shipment of grain from the Midwest had been successfully transloaded from bulk carriers to containers and then shipped to the port of Oakland. Shafter had also completed a "will-serve" agreement with the UP to provide the service, a prerequisite for state bond funding of an intermodal facility in Shafter.

### Rail Abandonment Issues

In an effort to preserve a rail corridor that was threatened with abandonment, funding for the rehabilitation of the Union Pacific Coalinga branchline between Huron and Visalia was obtained from various sources. Rehabilitation of the tracks improved freight service operated by the San Joaquin Valley Railroad and reduced the amount of truck traffic on regional roads and state highways. Funding for the \$15 million project was provided with the Governor's Traffic Congestion Relief Program, federal Economic Development Initiative grant, Congestion Mitigation and Air Quality funds from Fresno, Kings and Tulare Counties, the cities of Huron, Lemoore and Visalia, private agencies and the San Joaquin Valley Railroad. Rehabilitation work was completed in early 2004 and passenger service along this corridor could be revisited again as part of a HST feeder service.

In 2006, the San Joaquin Valley Railroad (SJVR) applied to the Federal Surface Transportation Board to abandon portions of the form Southern Pacific mainline between Richgrove and Exeter. Tulare CAG is working with the Central California Rail Shippers/Receivers Association and the SJVR to preserve the corridor and has identified funding from a local transportation sales tax measure for possible acquisition of the corridor.

## Short Range Action Plan

### Federal Government

- Fund HST to complete service between Los Angeles and the Bay Area with stops in the Valley the doorstep to Yosemite and the Sierras.
- Continue to fund Amtrak service as an interim gap service during HST construction and future feeder system/back-up service for HST
- Coordinate Amtrak with ACE and other future commuter services serving as feeder networks for HST

• Provide matching funding for Tehachapi Pass, to mitigate short-haul rail displacement impacts of increased national goods movement through the San Joaquin Valley region by funding short-haul rail service infrastructure between the SJV shippers, class I rail yards, and the ports.

### State of California

- Fund HST to complete service between Los Angeles and the Bay Area with stops in the Valley the doorstep to Yosemite and the Sierras.
- Establish the HST Heavy Maintenance facility in the San Joaquin Valley.
- Continue financial support of Amtrak service as an interim gap service during HST construction and future feeder system/back-up service for HST.
- Coordinate Amtrak with ACE and other future commuter services serving as feeder networks for HST
- Revise the California State Rail Plan 2005-06 to 2015-16 to consider HST, the San Joaquin Valley Express Study and Valley short-haul rail needs.
- Implement the San Joaquins Route Business PlanContinue cooperative planning and coordination with recommendations of the San Joaquin Valley Rail Committee.

### Regional Transportation Planning Agencies

- Participate in the San Joaquin Valley Rail Committee and support the committee recommendations.
- Monitor the planning and analysis work of the California High Speed Rail Authority and participate in the planning effort to ensure that Valley interests are appropriately reflected.
- Support state and federal actions that would increase accessibility to passenger rail service. The Central Valley passenger rail system should be designed to fully integrate the larger intermodal passenger transportation network including multimodal stations that provide convenient and direct access to all appropriate state, regional, and local modes, including, where applicable, urban commuter, inter-city and high speed rail service, regional and local bus service, airport shuttle services, and other feeder serviced that provide intermodal linkage.
- Work to coordinate passenger and freight rail activities to maximize co-benefits

## Long-Range Action Plan

### Federal Government

- Fund the re-configuration of Amtrak as a commuter/feeder rail system for the HST
- Help fund the creation of a short-haul rail system for the SJV to provide more capacity on the national system.

### State of California

- Fund the re-configuration of Amtrak as a commuter/feeder rail system for the HST
- Fund the creation and maintenance of a short-haul rail system for the SJV to promote the use of more efficient rail modes over trucks.

## **Regional Transportation Planning Agencies**

- Work to fund the creation of a HST passenger feeder rail and transit service for the SJV
- Work to fund the creation of a short haul rail backbone to the port of Oakland and the BNSF and UP rail yards in the valley.
- Work to coordinate passenger and freight rail activities to maximize co-benefits

## 4e. Airports

## <u>Fresno</u>

There are eight public use / general aviation airports in the Fresno County region: Coalinga Municipal Airport, Firebaugh Airport, Chandler Executive Airport (classified a Regional General Aviation Airport in the California Aviation system Plan), Harris Ranch Airport (classified a Limited Use Airport in the California Aviation System Plan), Mendota Airport, Reedley Municipal Airport, Selma Aerodrome, and Sierra Sky Park. Fresno Yosemite International Airport (FYI) is designated a Primary Commercial Service Hub Airport in the California Aviation System Plan and also accommodates general aviation.

Fresno County's general aviation airports provide a variety of important services to the communities within which they are located and to surrounding areas. Fresno County airports provide for recreational, business, and charter air travel; police and sheriff helicopter patrols at FYI; air cargo flights; fire suppression (air tankers), and flight and aircraft mechanical instruction.

The general aviation airports are vitally important to the communities within which they are located and to all of Fresno County for all of the reasons listed. With regard to FYI in particular, it has long been recognized there is a need to better quantify and promote the economic significance of the airport to Fresno and the entire San Joaquin Valley in order to better develop and sustain ongoing support. Caltrans Division of Aeronautics completed a Final Report in June 2003 that provided a comprehensive evaluation of the economic benefits of aviation and airports to California communities and the overall State economy. The report, prepared by Economics Research Associates, noted that aviation's overall contribution to the California economy (including direct, indirect and induced impacts) amounts to nearly 9 percent of both total state employment and total state output.

For calendar year 2008 there were a total of 1,252,751 passengers, of which 627,343 were enplanements and 625,408 were deplanements. The FYI service area consists of six counties including Fresno, Kings, Madera, Mariposa, Merced and Tulare. As population within this six county area increases it is likely that operations at FYI will increase. It has become clear that passenger usage of FYI is underutilized due to market forces generated by air fares, the automobile and alternative airports in the Bay Area, Sacramento, and Los Angeles. Total market leakage may be as high as 300,000 passengers a year or more. Reduction of this market leakage through better airline service, including additional international service, is a primary challenge at FYI. The extent to which this challenge is addressed will determine, in part, the growth in future operations at the airport.

The various short- and long-term benefits to the region, while not quantified, are nevertheless real. As noted above, there is an ongoing need to better quantify and promote the economic significance of FYI, in particular, to Fresno and the entire San Joaquin Valley in order to better develop and sustain ongoing support. Of increasing economic significance to FYI is the role and value of air cargo, notwithstanding recent declines due to state and national economic challenges. In this regard, major airports in both Southern and Northern California are experiencing significant air cargo constraints that include both facilities and operations capacity, thereby presenting an opportunity for the Fresno region.

## <u>Stanislaus</u>

The Stanislaus County region has four (4) public use airports, including one (1) commercial/general use airport, the Modesto City-County Airport, located in the City of Modesto; two (2) general use airports, Turlock Municipal, located in Merced County and Oakdale Municipal Airport, located in the City of Oakdale; and one (1) military air facility, Crows Landing Naval Auxiliary Landing Facility (CLNALF), located in Crows Landing. This facility is has been abandoned since 2000.

Based on current forecasts, the operations capacity at all airports located in the Stanislaus Region are expected to meet the future aviation needs of the public. Attracting more direct commercial aviation service to the Modesto City-County Airport has been a major challenge for the City of Modesto and Stanislaus County. Currently, air service provides passenger connections to longer distance flights via the San Francisco International Airport. The potential benefits of providing improved air service directly from Modesto include greater passenger convenience and reduced vehicle miles of travel and emissions as fewer trips are made to nearby airports in Sacramento and the Bay Area.

General aviation operations comprise the majority of local aircraft activity in Stanislaus County, and this trend is expected to continue over the next 25 years. The difficulty of general aviation airports in obtaining the funding necessary to maintain existing facilities and construct additional facilities for aircraft parking are the single most significant issue identified in StanCOG's Regional Aviation Systems Plan, 1998. Ground transportation also poses an issue for the Oakdale and Turlock Municipal Airports.

The Stanislaus Council of Governments (StanCOG) does not act as the region's Airport Land Use Commission (ALUC). The Stanislaus County ALUC works incorporation with the Merced County ALUC to develop plans to ensure future development is compatible with airport operations.

Stanislaus County is primarily an agriculture producing region and thus the movement of goods has typically been handled by trucking and rail, not by air. The Modesto City-County airport is the only airport that has cargo operations. This operation is predominately delivering cancelled checks five (5) days per week. However, StanCOG, in cooperation with the City of Modesto and Stanislaus County, supports continued study into the development of an air cargo facility located at the abandoned CLNALF to serve the agricultural and potential future high technology businesses as they move into the Stanislaus region.

## 5. Intelligent Transportation Systems

## **Background**

Intelligent Transportation Systems represent a means of applying new technological breakthroughs in detection, communications, computing and control technologies to improve the safety and performance of the surface transportation system. This can be done by using the technologies to manage the transportation system to respond to changing operating conditions, congestion or accidents. ITS technology can be applied to arterials, freeways, transit, trucks and private vehicles. ITS includes Advanced Traffic Management Systems (ATMS), Advanced Traveler Information Systems (ATIS), Advanced Public Transportation Systems (APTS), Advanced Vehicle Control Systems (AVCS) and Commercial Vehicle Operations (CVO).

Today, applications of ITS technologies allow the monitoring of traffic conditions and the dynamic adjustment of traffic signals to reduce unnecessary delay, the automated collection of transit fares and advanced detection and television cameras to detect, assess and respond to traffic accidents and incidents. In the future, ITS technologies will automate transit fare collection and parking payments, use vehicle location systems to track trains and buses to give users "real time" arrival and departure information, as well as use onboard systems to detect and avoid collisions.

Within the San Joaquin Valley, utilizing a federal planning grant, the eight counties formed an ITS committee focused on solving transportation problems within the region. The ITS vision for the San

Joaquin Valley Strategic Deployment Plan is to enhance the quality of life, mobility, and the environment through coordination, communication, and integration of ITS technology into the Valley's transportation systems. The ITS plan for this corridor includes major local elements developed by the eight counties. The plan coordinates architecture, standards and institutional issues and also provides the framework for deploying an integrated ITS.

The overall strategy for the deployment of ITS includes a number of components and user services:

- Completion of advanced traffic management of the region's freeways and certain arterial corridors, through traffic operations centers, signal synchronization, visual detection and deployment of incident management systems.
- Advanced Traveler Information Systems will provide real-time information to system users on traffic conditions, incidents, accidents, events, weather and alternative routes and modes.
- Advanced Public Transportation Systems will provide some of the technology to implement improved dispatching of transit vehicles and will enable vastly improved demand-responsive transit services.
- Improved Commercial Vehicle Operations will take place by deploying technologies that track vehicles through the Valley, providing them with improved traveler information and safety warnings.

### General Opportunities

- Build upon the existing Caltrans District 6 and District 10 Traffic Management Systems to fill gaps and complete coverage on major facilities, including expansion of their highway closures and restrictions database to include other agencies.
- Capitalize upon the extensive ITS technology testing and standards development conducted by Caltrans by using, where appropriate, Caltrans approaches for local traffic management systems.
- Build upon lessons learned from past and current transit ITS deployment experience (Fresno Area Express, Golden Empire Transit District, San Joaquin Regional Transit).
- Build upon Caltrans District 6 and District 10 experience with co-location and coordination between traffic management and Highway Patrol staff.
- Build upon the momentum and stakeholder coalition generated through the San Joaquin Valley Goods Movement Study to pursue ITS commercial vehicle projects.
- Investigate how to provide traveler information for commercial vehicle operators at truck rest stop locations.
- Investigate how ITS can support efforts to improve east-west travel between the inland areas and the coast.
- Improve visibility and access to existing Caltrans Valleywide alternate route plans.
- Use momentum from the Valleywide ITS planning effort in conjunction with federal rules (ITS architecture and standards conformity and statewide and metropolitan planning) to expand ITS action.

### Fresno County Opportunities

- Maintain momentum generated by recent ITS strategic deployment planning process, taking advantage of the level of awareness and precedent for joint action established through the previous planning effort.
- Continue efforts to improve coordination between the Caltrans District 6 and Fresno metro area traffic management centers, taking advantage of the current District 6 and Fresno fiber optic implementation projects. Utilize the Fresno-District 6 coordination efforts as a demonstration of the benefits of improved coordination between Caltrans and local traffic management centers.
- Encourage other local entities (in addition to City of Fresno) to investigate opportunities to coordinate with Caltrans District 6 fiber optic system with City of Clovis and County of Fresno.
- Support and expand upon the projects identified in the Fresno County ITS Strategic Deployment Plan that are intended to develop a regional transportation user information system (project 4.1), connections to a Valleywide or statewide information system (project 4.2), and development of common or standard electronic maps to support applications such as automatic vehicle location.

### Kern County Opportunities

- Coordinate Bakersfield area Transportation Management Center (TMC) with Caltrans' District 6 TMC via satellite.
- Look for ways to integrate the ITS capabilities being implemented at Golden Empire Transit (GET) with Bakersfield's traffic management system, including sharing information between the two centers during emergencies.
- Facilitate the transfer of lessons learned from the Golden Empire Transit (GET) ITS deployment, to other area transit operators, and look for opportunities for those agencies to better coordinate with GET using GET's ITS capabilities.
- Expand the accident reduction campaigns on Kern's rural highways.

### Kings County Opportunities

- Provide improved safety and mobility along east-west highways such as SR-198 using CMS and other ITS applications.
- Build on City of Hanford's traffic management capabilities, including coordination with Caltrans.
- Continue to develop the AVL system for Kings Area Rural Transit (KART).
- Improve safety at rural railroad crossings using ITS applications.
- Provide commercial vehicles with improved information in the I-5 corridor related to routes, facilities and parking within the County.
- Enhance the safety and capacity of Highway 43 as an alternate route to SR-99/I-5 using ITS applications.

### Madera County Opportunities

• Evaluate surveillance and automated red-light running at high accident locations in Madera

- Enhancements to emergency vehicle dispatching systems for rural areas, including improved evacuation plans for Yosemite Park that build on the additional roadway connections that are being constructed (i.e., elimination of "dead ends").
- Traveler information and/or other ITS applications that would support needed park and ride lots along Highway 99.
- Develop traveler information strategies to support the relocated Amtrak station.
- Investigate options for utilizing ITS in support of upcoming restructuring/optimization of rural demand-responsive transit service.
- Develop analysis tools for traffic accidents, such as a geographic information system, for the City of Madera.

## Merced County Opportunities

- ITS traveler information and traffic management in support of the University of California facility, red-light running enforcement and train warning and information system applications in Merced.
- Consideration of ITS traffic signal applications in support of Merced's major interchange improvements.
- Develop traveler information and other transit management strategies to improve coordination of the regional bus service ("the Bus") with the intermodal transportation center in downtown Merced.
- Investigate options for supplemental railroad crossing warning and information systems at high-volume train crossings where delays are frequent and long.

## San Joaquin County Opportunities

- Utilize ITS to support the coordination of local transit services with the new commuter rail service to the Bay Area.
- Investigate methods to further improve coordination between San Joaquin Regional Transit and Stockton and/or Caltrans District 10 TMCs.
- Build upon next bus arrival signs and automated phone system traveler information strategies at San Joaquin Regional Transit, possibly to include kiosks and Internet information.

## Stanislaus County Opportunities

- Expand on the City of Modesto/Ceres Traffic Management System (TMS) to develop an integrated Urban ATMS for the County.
- Improve interjurisdictional signal coordination.
- Build upon ITS transit applications in Stockton, Fresno and Bakersfield to provide Modesto Area Express (MAX) and local transit services with a means to improve operations and management.
- Improve safety and mobility on the Counties east-west rural highways including Highway 132 between the I-5 and SR-99 corridors using ITS applications such as Road Weather Information Systems (RWIS).

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- Utilize intermodal freight facilities to provide improved information to commercial vehicles.
- Improve mobility, coordination and information between the urbanized areas of Stockton and Modesto along the SR-99 corridor.

### **Tulare County Opportunities**

- Implement red-light running enforcement in Visalia.
- Build upon the current traffic signal system efforts to develop an urban ATMS in the areas of Visalia, Tulare and Goshen.
- Provide safe areas along rural routes to the National Parks system including improved traveler information.
- Development of an improved communication link between the Visalia/Tulare urbanized area and Caltrans District 6 to address coordination efforts along the SR-99 and SR-198 corridors.

# 6. Regional Planning

## 6a. Air Quality and Conformity

## Background

The SJV is one of the largest and most challenging air quality nonattainment areas in the United States. The SJV nonattainment area includes eight counties from San Joaquin County to Kern County on the Western border of the Sierra Nevada range. These counties represent a diverse mixture of urban and rural characteristics, yet are combined in a single nonattainment area that violates federal health standards for ozone and particulate matter. Air quality monitoring stations continue to indicate that the San Joaquin Valley is among the worst polluted regions in the country. Since the eight counties are combined into a single nonattainment area, a coordinated approach for compliance with the federal Clean Air Act is essential for both State Implementation Plan (SIP) development and conformity determinations.

## **Coordination**

On-going coordination with interagency consultation partners has been, is, and will continue to be critical to the development of positive conformity determinations, as well as the conformity budgets and transportation control measures included in air quality plan updates. As one of the few multi-jurisdictional areas in the country, the individual decisions and actions of each of the SJV Regional Planning Agencies (RPAs) have the potential to affect the entire nonattainment area. At this time, it is unclear when the RPAs within the San Joaquin Valley nonattainment area will become independent of each other with regard to air quality. The interagency consultation process is critical to completing regional conformity demonstrations, processing TIP/RTP amendments, project-level hot-spot assessments/analyses and conformity determinations, as well as other processes required by the federal transportation conformity regulation.

Involvement in SIP development, including transportation conformity budgets is essential to the receipt of federal transportation funding. SIP failures, as well as non-conformance, jeopardize not only the receipt of federal transportation funding, but also the ability for locally funded (regionally significant) transportation projects to proceed. The SJV RPAs are also involved in the air quality modeling to provide assurances that the final conformity budgets can be met. In addition, the SJV RPAs participate in air quality plan development by coordinating the local government transportation control measure process that is required by the Clean Air Act.

## Transportation Conformity

The primary goal is to assure compliance with transportation conformity regulations with respect to the requirements for Regional Transportation Plans (RTPs), Federal Transportation Improvement Programs (FTIPs), amendments, compliance with the California Environmental Quality Act (CEQA), implementation of applicable transportation control measures (TCMs), and applicable State Implementation Plans (SIP). Since coordination efforts have begun, the SJV RPAs have been successful in complying with conformity requirements for the 2004 TIP/RTP, 2006 TIP, and 2007 TIP/RTP. In addition, FHWA has determined that the SJV RPA planning processes substantially meet the SAFETEA-LU planning requirements. TIP/RTP Amendments, including coordinated amendment cycles and development of valley-wide process for PM<sub>2.5</sub> multi-jurisdictional areas until conformity budgets are established, continue to be federally approved. The SJV RPAs have also completed timely implementation documentation of local government commitments beginning with the 2006 TIP; two TCM substitutions have been processed and approved. Project-level assessments, including valley-wide procedures, have also been developed.

Continued examples of SJV RPA coordinated efforts with respect to transportation conformity include the following:

• Monitoring and testing of transportation model updates;

- Continued documentation of latest planning assumptions and compliance with the transportation conformity rule and corresponding guidance documents;
- Drafting of valley-wide procedures for RPA staff use, with detailed instructions from the execution of EMFAC to post-processing of emissions results consistent with applicable SIPS; and
- Preparation of boilerplate documentation, including draft public notices and adoption resolutions, as well as draft response to public comments.

### Modeling

Air quality model development progress is monitored to ensure that appropriate assumptions are being used in new air quality model updates. Modeling data, including defaults, emissions inventories, speeds, vehicle miles traveled, and control measure assumptions will be coordinated with the Air District and the Air Resource Board to promote accuracy of modeling output. Early communication of potential modeling problems or issues is a high priority and is presented to the appropriate modeling staff to be addressed and resolved in a timely manner.

The SJV RPAs have coordinated transportation model updates, as well as worked with both the Air District and ARB on the development of conformity budgets and EMFAC updates (i.e., EMFAC 2005 development with updated transportation data and EMFAC 2007 development, including technical comments on model updates (e.g., re-distribution of heavy-duty truck travel). These efforts have included ongoing tracking of compliance with latest planning assumptions and collaborating with the Air District and CARB on the applicable conformity budget methodology and corresponding SIP documentation. Coordination efforts will continue with Caltrans and ARB on statewide transportation models and/or networks as appropriate.

Every three to four years, CARB begins an update to the EMFAC model. EMFAC 2010 efforts will likely begin by the end of 2009. Model changes without corresponding SIP updates can result in the inability of the RPAs to demonstrate conformity. Coordination of model updates and corresponding SIP updates will continue to be vital to the SJV RPAs to assure continued conformity compliance. Protocols and programs are continually developed to facilitate the use of transportation data in air quality modeling.

### Public Policy

The SJV RPAs monitor proposed legislation, new regulations, court case decisions, and filed court cases related to air quality issues and evaluate the implications of these to the Valley RPAs. Unified positions are developed as needed.

As new federal, state, and/or local regulations are developed, they are evaluated for their impact on the SJV RPAs. If necessary, draft comments are prepared on behalf of the RPAs. Once regulations are finalized, summaries are prepared for the SJV RPAs regarding requirements and impacts. Over the past four years, quarterly updates on legal challenges and new air quality standards and requirements have been provided to the RPA Directors' Committee. Recent examples include analysis of draft SAFETEA-LU legislation, drafting of RPA comments, RPA workshops and continued assistance in achieving SAFETEA-LU compliance.

### **Summary of Future Efforts:**

- Continued coordination of interagency consultation;
- Development of Conformity SIP;
- Transportation conformity for future TIPs & RTPs;
- EMFAC 2010 and corresponding conformity budgets;
- Ozone and PM<sub>2.5</sub> air quality plan updates; and
- Continued public policy assessment.

## 6b. San Joaquin Valley Blueprint

The San Joaquin Valley has been identified by Governor Schwarzenegger's California Partnership for the San Joaquin Valley as "... one of the most vital, yet challenged regions of the state."

Rising to meet the San Joaquin Valley's most pressing issues, the eight RTPAs representing the eight counties within the SJV came together in 2005 to initiate the SJV Regional Blueprint planning process.

The goal of the SJV Regional Blueprint planning process is to address critical issues facing the vitality of the SJV (as well as the State of California and the nation) in planning for the future of the world's foremost agricultural region. The SJV Regional Blueprint will guide the future of infrastructure development, and in turn accommodate the exploding population and economic growth in the region to the year 2050.

In 2006, the SJV Regional Blueprint planning process developed the foundation for the Blueprint by creating an institutional framework and citizen outreach plan. In addition, this joint venture initiated the development of the SJV Regional Blueprint Vision. In 2007 overall goals, objectives, and performance measures were developed that will be used to evaluate the effectiveness of the Blueprint. In 2008, the Blueprint process continued to make progress with this historic and collaborative planning effort among the eight Valley COGs and their working partners. Throughout the process, the SJV Blueprint developed many relationships and reached numerous milestones. In early 2009, the Valleywide Blueprint Summit attracted over 600 attendees. At the event, the Valleywide alternative scenarios were presented to the public at large. The event was intended to solicit input on the scenarios, which would assist the San Joaquin Valley Regional Policy Council reviewed the Valley COGs' collaborative work on the Blueprint and took the following actions:

- Adopted a list of Smart Growth Principles to be used as the basis for Blueprint Planning the San Joaquin Valley; and
- Adopted Scenario B+ as the Preferred Blueprint Growth Scenario for the San Joaquin Valley to the year 2050. This preferred scenario will serve as guidance for the Valley's local jurisdictions with land use authority as they update their general plans.

Upcoming tasks include the integration of the Valley Blueprint into local city and county general plans within the Valley, which will ultimately result in a healthier, more vibrant economy, an improved transportation system through reduced congestion and viable transit options, improved air quality, and will accommodate the housing infrastructure needs of the Valley's growing population. Overall, implementation of the Valley Blueprint at the local level will create sustainable communities and make the Valley a more desirable place to live.

## Past Neglect – Hope for the Future

For many decades the San Joaquin Valley region has been neglected by both federal and state governments and has not received its fair share of revenue. That situation is now changing with federal and state policymakers recognizing the extraordinary challenges facing the San Joaquin Valley. Through executive orders issued by two presidents, the Federal Interagency Task Force for the Economic Development of the San Joaquin Valley was formed to help coordinate federal efforts within the region. Through the Interagency Task Force, multiple initiatives have been created (Regional Jobs Initiative, Financial Education Initiative, Rural Infrastructure Initiative, Operation Clean Air, Affordable Communities Initiative: Housing Trust Fund, Clean Energy Organization) which have directed much needed attention to the quality of life in the San Joaquin Valley region.

Many of the Valley's critical issues have no political or geographic boundaries, and are often made worse through parochial practices. Often, freeway congestion in one area transports air quality impacts throughout the Valley, just as land use and development policies in one area may create reactionary development in other areas. Regional collaboration is needed to address these kinds of situations.

### **State Remedies**

#### Interface of the Blueprint and the Partnership

In response to these and other issues, Governor Schwarzenegger signed an executive order in 2005 creating the *California Partnership for the San Joaquin Valley (Partnership)* a state effort to direct resources to the San Joaquin Valley region. Through the Blueprint process, regional leaders are assessing regional issues jointly with the Partnership. Collaboration with the SJV Partnership will enable pooling of statewide resources, along with enhancing the multi-agency, multi-layer momentum to create a regional voice for the San Joaquin Valley.

In November 2006, the Partnership completed the Strategic Action Plan, which detailed its goals to achieve a Prosperous Economy, Quality Environment, and Social Equity through six major initiatives and the recommendations of its ten working groups. The Partnership's ten-year Strategic Action Plan references the efforts of the Valley's COGs to enhance quality of life concerns and specifically identifies the SJV Blueprint as the implementation strategy within two of its working group lists of recommendations: Transportation and Land Use and Agriculture and Housing. The interface of the Partnership and the Blueprint planning processes will allow the Valley to improve the quality of life for all residents through integrated and collaborative planning strategies.

### Summary of Accomplishments to Date

Working in concert over the past three years, the eight COGs in the San Joaquin Valley have accomplished many goals that enabled the process to the benchmark of reaching consensus on a Valleywide preferred growth scenario. The adoption of this scenario and the associated smart growth principles by the SJV Regional Policy Council on April 1, 2009 was a major milestone. These accomplishments are even more noteworthy when one considers that each step along the way required approval or endorsement by eight separate and distinct policy boards. The sixty-two cities, eight counties and eight councils of governments are proud of the collaborative effort they have made to reach this point in the process and are committed to build upon the progress already made in the future.

In general, the major tasks undertaken can be summarized as follows:

*Institutional Framework, Project Management and Community Outreach:* In order to reach the daunting goal of coordinating eight counties in an effort to reach a unified vision for growth, the SJV Blueprint process created a program management team comprised of a program manager from the lead agency and project managers representing each of the other seven COGs. This team is responsible for coordinating local efforts as well as maintaining the regional connection. During the initial phases, activities were conducted at both the county and the regional levels. Extensive local community outreach touched thousands of community members and stakeholder groups throughout the Valley. Three major Valleywide events were conducted: the Blueprint Kickoff Workshop in June of 2006, the Blueprint Executive Forum (aimed primarily at the Valley's elected officials) in April of 2008 and a Valleywide Summit in January 2009 (where the Valleywide alternative scenarios were presented to the public at large). The adoption of an integrated Valley Vision in April of 2009 moved the process from planning to implementation.

*Land Use, Transportation and Air Quality Modeling:* The San Joaquin Valley Blueprint Project Modeling Steering Committee worked closely with UC Davis's Department of Environmental Science and Policy and the Information Center for the Environment to become familiar with the UPIan modeling software and to collect GIS and demographic data. Extensive communication was required to assemble general plan information from all 70 jurisdictions involved. Status Quo scenarios were developed in each county to provide a base case for comparison. Alternatives scenarios were also created. All county level scenarios were analyzed using land use, traffic and air quality models in order to compare the scenarios based on performance measures. A preferred concept was submitted to U.C. Davis by each county for Valleywide analysis and ultimately the selection of a preferred growth scenario for the Valley. *Individual County Planning Process:* As mentioned above, each of the eight Valley COGs conducted the Blueprint process at their local level, which included convening roundtable stakeholder groups, engaging their member agencies, and conducting outreach activities with community groups and the general public. Much time was invested in working with local agency planners in order to gain their trust and commitment so that the ultimate Blueprint will be integrated at the local level.

**Valley Planning Process:** The Valley planning process has been ongoing since the SJV Blueprint grant was first awarded in 2006. The eight COGs have been collaborating on a Valleywide basis as part of the project management team and through partnering with the Great Valley Center and their staffing of the Blueprint Regional Advisory Committee (BRAC). The SJV Air Pollution Control District has also been an active partner both financially and through in-kind contributions during the planning process. In addition, the individual COGs have worked closely with Caltrans and UC Davis on many of the technical activities.

**Document Creation, Implementation Strategy, and Blueprint Certification Process:** The SJV Blueprint has produced a variety of communication materials including websites, videos, brochures, print and electronic media advertising, and extensive project reports. Mapping exercises have produced a multitude of excellent graphic depictions which help member agencies, stakeholder groups and the general public to understand the sometimes complex concepts that are being portrayed. In fact, Fresno COG was recognized by the Central Section of the Cal Chapter of the American Planning Association with a "1<sup>st</sup> Place Outstanding Planning Award/Best Practices" award for their extensive marketing campaign and public outreach efforts in the development of the San Joaquin Valley Regional Blueprint Plan. Fresno COG developed an ambitious marketing campaign, including many innovative strategies, to reach out and include community stakeholders in the Blueprint visioning process to foster greater participation in Fresno County.

Ultimately, the Blueprint must be integrated into local general planning processes in order to ensure implementation. Now, with the legal requirements of AB 32 and SB 375, some type of certification process will need to be established so that the planning principles defined in the Blueprint will be implemented throughout the Valley. The Blueprint will also need to show compliance with AB 32.

**Modeling:** It is widely known that the traditional four-step traffic model is not sensitive to the benefits of smart growth development such as Density, Diversity, Destination & Design (often referred to as 4-D). There have been efforts to integrate a 4-D process into the traffic model to compensate for the trip/vehicle miles traveled (VMT) reduction that smart growth can create through the SJV Blueprint process. The results were encouraging, and reinforced support of smart growth planning practices in the Valley. As the San Joaquin Valley Blueprint marches into the planning implementation stage, more smart growth projects are projected to be built. The scenario-based 4-D process, which was developed during the scenario planning stage, would not be applicable in the planning implementation stage. A project-based 4-D tool will be needed to measure the travel reduction benefits of smaller scale or even individual projects.

During the scenario planning stage of the Valley Blueprint process, UPlan, a scenario modeling tool developed by UC Davis, has been used by all eight Valley COGs. It was mostly run at the county level. Since each Valley COG's traffic model uses different socio-economic categories, individual efforts were taken by each COG to translate the UPlan land use categories into the categories in each of the eight traffic models in the Valley. In the planning implementation stage, when Blueprint principles will be incorporated into local projects, more fine-grained software choices will be explored for community, neighborhood, or even project-level planning.

*Visualization Tool Development and Scenario Planning Tools:* The San Joaquin Valley Blueprint Process has been and will continue to be conducted through a "bottom-up" approach to securing local government and community support. Computer generated maps showcasing and explaining the local and Valleywide Blueprint options will be generated by UC Davis/Valley COGs and circulated to the Valley communities through public outreach efforts orchestrated by the Great Valley Center, and by each individual planning agency. Public meetings with interactive voting technology have and will be used to obtain feedback from the public and elected officials. Other technologies in use are interactive websites, media outlets for radio, television and print media, emailed updates and newsletters to established and growing distribution lists. The Valley COGs also work with a variety of community, business and government agencies throughout the region to disseminate information via presentations at their prescheduled meetings, posting articles in their newsletters, and online publications and by mailing printed documents.

*Health and Obesity Awareness:* According to the Prevention Institute, the built environment is the designated use, layout, and design of a community's physical structures - including its housing, businesses, transportation systems, and recreational resources, all of which affect patterns of living that influence health. Smart growth strategies can transform the built environment to encourage physical activity by making a community more walkable/bikeable and can provide greater access to healthy food options, thus contributing to healthier eating. To bridge land use, transportation, community design efforts and public health, a comprehensive approach to planning can be implemented that focuses on identifying priority areas where public health strategies can be incorporated within the local planning process. In the short-term, these planning efforts will help create healthier lifestyles; in the long-term, these efforts can have a measurable impact upon chronic health conditions such as obesity, diabetes, stroke and heart disease. The SJV Blueprint process will coordinate with the Central California Regional Obesity Program (CCROP) on these issues. One of the land buffer tools discussed in the Farmland Conservation study being conducted in the Valley is that of locally grown food farm at the edge of urban areas. These areas would both preserve urban boundaries and supply healthy, locally grown food.

### **Other Tasks Completed**

- GIS Data Inventory / GIS Standards A Model Steering Committee was convened by the SJV Blueprint project managers and has worked collaboratively to gather GIS data that represents the current geography and urbanization of the region. This data has been converted for use in the UC Davis developed UPIan modeling software for development of all the scenarios.
- Status Quo Scenario Development Working with the local planners of each county and the UPlan program, a growth scenario assuming existing trends was developed called the Status Quo Scenario. If growth continues as it has over the last 5-10 years, the UPlan forecasts that approximately 533,000 acres of land will be converted to urban uses.
- Vision / Value Development and Outreach During 2006, the eight SJV COGs implemented their local Citizen Participant Plan in the Blueprint Value / Vision Outreach component. Each of the SJV counties conducted public outreach to identify local values and how these values translate into a Vision for the San Joaquin Valley region to the year 2050.
- 4. Local Visioning Results To no one's surprise, there were more common values identified across the eight-county region, than unique values of any specific county:

Preserve agricultural land Create an effective transportation system ..... Improve access to quality educational opportunities ...... Create a dynamic economy with quality local jobs Provide a variety of quality affordable housing choices ...... Treasure our bountiful environment with reasonable protection ......

5. Goals and Performance Measures - With the help of the San Joaquin Valley Local Agency Planners Working Group, SJV Goals and Performance Measures have been developed and will be used throughout each component of the Blueprint process. All performance measures used by other Blueprint processes were reviewed, evaluated and selected based on the current data available and the current forecasting capabilities. While there are additional Performance Measures that could be valuable in evaluating the Scenarios, the Valley COGs currently lack the enhanced modeling capability necessary to generate them.

- 6. Engage Environmental Justice Communities, Tribal Governments, and Resource Agencies. The SJV COGs held a workshop in early 2007 with the purpose of engaging Environmental Justice Communities, Tribal Governments (both federally recognized and non-recognized tribes of Native Americans), and Resource Agencies in the SJV Regional Blueprint process. The workshop was a great success with good attendance of the targeted stakeholders. As a result of the inaugural workshop, the following has been implemented:
  - Spanish Language Workshops -SJV Region Blueprint Public Outreach Visioning workshops sessions have been conducted in Spanish to engage residents who speak Spanish as their primary language. These workshops have been well attended.
  - State Resource Agencies State Resource Agency representatives continue to be engaged in the SJV Region Blueprint Process.
  - Tribal Governments As a result of the inaugural workshop, ongoing engagement has been formalized with Tribal representatives. Numerous meetings have been held with Native American participants, including: Santa Rosa tribe, Tubatulabals, Chumash, Tejon Indians, and Tule River tribe.

### California Central Valley Tribal EJ Collaborative Grant Project

During 2007, the 8-Valley MPOs began meeting with some of the Valley tribes as part of the Blueprint process. Through a series of meetings it was determine that the 8-MPOs had a need for additional resources to outreach to local Tribes regarding transportation, land use, community development, and other Blueprint Regional planning focus. The MPOs have partnered with the Tubatulabals of Kern Valley on a California Department of Transportation (CalTrans) environmental justice (EJ) grant with the following goals.

- **Goal 1:** To build a knowledge base of Tribal related Transportation Environmental Justice issues and priorities through meetings and workshops.
- **Goal 2:** Promote tribal participation and reporting on Tribal Transportation Environmental Justice issues and other long-range planning issues through the SJV Blueprint and SJV Partnership processes through workshops, meetings, surveys.
- **Goal 3:** Promote preservation of our cultural heritage while adding certainty to the timely delivery of projects in the region by developing a Cultural Sensitivity Tribal Resource Map and protocol for tribal monitoring the SJV Eight Counties through meetings, analysis, workshops, and collaboration.
- **Goal 4:** Explore the possibility of creating a tribal coalition for the region that could encourage streamlined participation of tribal nations in government planning and delivery of projects and services through workshops, and meetings.

### <u>Outcomes</u>

In 2009, efforts began on the four major categories of grant project activities include: Public Outreach and Education, Research, Analysis, and Project Management. Public Outreach involved three workshop series that included a focus of 1) Tribal perspective of EJ and transportation planning, 2) Academic and Tribal perspectives of cultural resources, EJ, and culturally sensitive resource mapping, and 3) Regional community and transportation planning challenges and models. In these workshops, all eight MPOs and 47 California Central Valley Tribes (both federally and non-federally recognized) were invited to participate in these workshops. Overall, the outcomes resulted in improved communication and identification of both Tribal and Local government partners and planners. Written documents that include Tribal and Local governments' perspectives of transportation planning, defining and protecting cultural resources, approaches and challenges of culturally sensitive resource mapping, and academic historical overviews of California Tribes of the Central Valley (Linguistics, Anthropological, and

Ethnography). Grant web site <u>www.catribalej.com</u> was also established to post workshops information, grant updates, reports, San Joaquin Blueprint and transportation planning, and Tribal (including non-profits) funding opportunities. A contact listing of 211 grant participants and partners has been established.

### Next Steps

As of December 2009, Goal 1 has been accomplished. However, Goals 2 through 4 will require on-going dialog with both the participating Tribes and the eight Central Valley Councils of Government. Tribes have identified through workshop surveys and one-on-one meetings the following key factors in regional planning:

- Improve Tribal Participation in the Planning Process Through environmental justice and new legislation, there has been an increase need to work directly with Tribal governments and identify resources for this effort.
- Improve Tribal consultation guidelines and process at local and state level. It is important to note: each Tribe may be different in their approach and definition of consultation.
- Transportation funding limitations for California Tribes challenges with what can be place on a federally recognize Tribe's "Indian Reservation Roads Inventory (IRRI)", federal formula used by the federal Office of Management Budget (OMB) to allocate funding by area does not provide California Tribes enough funding for construction and maintenance, and misconception by legislators that all Tribes in California have profitable casino operations that should pay for their roads.
- Allotment lands (lands held in trust by the U.S. Department of Interior Bureau of Indian Affairs) are not included in present day funding formulas. As a result, allotment lands (40, 80, and 160 acres) do not have any transportation funding support.
- Sustainable ability for Tribes to have a central communication and coordinating organization for on-going Tribal regional planning.
- Mapping can help to protect cultural resources and improve planning of regional transportation. However, on-going building of trust and rapport must occur and a few mapping pilot efforts must be established. Protection of electronic data, access, and systems must also be incorporated into any culturally sensitive resource mapping efforts.
- Cultural sensitivity courses and improved knowledge of California Central Valley Tribal history should be incorporated in State and Local planning and staff development.
- Suggested Tools for the Tribes include but not limit to: on-site Native American Monitoring services, memorandum of agreements (MOA) with U.S. Forestry and Local Governments, outline for culturally sensitivity training, and basic California Central Valley Tribal history overview of Tribes to use in working with schools and local governments.
- Tribes do share similar transportation needs such as access to housing, jobs, education, and public transportation. However, many of the California Central Valley Tribes are located in very remote and rural areas. Taking a bus to a doctor's or dentist's appointment can be an all day challenge.
- Tribes continue to learn and teach their cultural and language. There is a need to promote the past and current existence of Tribal people and their languages in road or highway names, rest stop or public visitors' areas, parks, and other public viewing or information sources.

Through monthly conference call meetings and Tribal meeting follow-ups, the above key issues and challenges will be explored. On-going information sharing of San Joaquin Valley Blueprint planning process, Tribal Transportation planning, and other regional planning efforts will be included in conference call meetings, mail-outs, and web postings.

- 7. State and Federal Level Coordination
  - At the state level, the Governor's Office of Planning and Research, Caltrans, the Business Transportation and Housing Agency, and the California Department of Fish & Game have

been actively participating in the SJV Blueprint planning process. At the federal level, the Federal Highway Administration and the Federal Transit Agency have been reviewing the SJV Blueprint Planning process and providing feedback through the annual certification of the eight Valley COG's Overall Work Programs.

- 8. Interregional / Intraregional / Local Partnerships & Interregional Coordination
  - Blueprint Learning Network (BLN) The SJV COGs and their local BLN team members participate in the statewide conferences to learn from other Blueprint efforts in California. Although each of the conferences provides valuable information it is difficult to apply Blueprint practices across individual regions due to their own unique makeup.
  - Local Government Commission Blueprint representatives worked closely with the Local Government Commission (LGC) on the development the 2007 Water Workshop - *Linking Water and Land Use in the Southern Central Valley Region*. In the 2008-09 the COGs have again worked with LGC to develop a Community Image Survey that will be used to help community members and local agencies overcome any inherent fear of increasing residential densities.
  - Other regional partners:
    - o California Association of Councils of Governments (CALCOG)
    - California State Association of Counties (CSAC)
    - League of California Cities
    - o Great Valley Center
    - SJV Air Pollution Control District
    - American Planning Association (APA)
    - San Joaquin Valley Regional Association of Counties
  - Intraregional Coordination:
    - COG Directors Association- Each of the eight Valley COG Directors is a member of the COG Directors Association helping manage the Blueprint efforts.
    - BRAC The creation and engagement of the San Joaquin Valley stakeholders in the Blueprint Regional Advisory Committee (BRAC) to:
      - Become a champion of the final SJV Regional Blueprint Vision;
      - Advocate implementation of the SJV Regional Blueprint products to the local jurisdictions; and
      - Promote the SJV Regional Blueprint strategies at the state and federal levels.
  - San Joaquin Valley Local Agency Planners Working Group Having identified a need to engage the Planning Directors of the region with a regional focus, John Wright, recently retired planning director from the City of Clovis, in conjunction with the Blueprint project managers, convened 40 plus planning directors and/or their key staff to help with the Blueprint development. While thinking regionally, this committee is acting as a professional advisor in order to assure successful implementation of the Blueprint at the local level. This committee is also ensuring that the Blueprint is useful and helpful to them in implementing good planning practices. This is a win-win relationship as these are the planners that handle the development requests and will make a difference in what moves forward.
  - San Joaquin Valley Regional Policy Council -Two elected representatives from each of the eight Councils of Governments are commissioners on the San Joaquin Valley Regional Policy Council and they are charged with making Blueprint related recommendations/decisions on behalf of the entire San Joaquin Valley.
  - California Partnership for the San Joaquin Valley (Partnership) Blueprint project managers from each of the SJV COGs attend many of the ten working group and quarterly Partnership Board meetings to maintain the critical link between both efforts. The

Partnership has a scope of work, and resources well beyond that of the SJV Blueprint process. At this time the Blueprint process is primarily focused on three of the Partnership work groups: (1) Transportation (2) Land Use, Agriculture & Housing, and (3) Air Quality.

- Elected Congress Summit Blueprint project managers and the Great Valley Center developed a Blueprint Congress Summit targeted at elected officials that was convened in April, 2008. The focus of this Summit was to engage elected officials in the evaluation of the SJV Status Quo UPIan Modeling and discuss the fact that we cannot continue business as usual planning practices in the SJV and expect different results that affect every aspect of the quality of life in our Valley. A follow-up event is being planned for 2010.
- San Joaquin Valley Affordable Communities Initiative Under the San Joaquin Valley Affordable Communities Initiative, the Department of Housing and Urban Development has worked in concert with the Partnership and the Blueprint process to create the San Joaquin Valley Affordable Housing Trust. The purpose of this Trust is to:
  - Link housing policies with land use, transportation, jobs, economic development, and workforce development;
  - Establish a multi-million dollar Trust as a dedicated stream of flexible seed funding for affordable housing;
  - Create a regional organization with expertise to administer the fund, promote, guide, and assist affordable community planning and development; and
  - Support projects that demonstrate the three strategic SJV Affordable Communities Initiatives elements.
- 9. Local Coordination:
  - Local Roundtable focus groups
    - Each of the SJV COGs has established its own Roundtable group (focus groups, planners, economic development, etc.) for the following reasons:
    - Share information and learn from local experts,
    - Educate on Blueprint process,
    - Engage in each component of the Blueprint process,
    - o Gather information on best practices for the Blueprint development,
    - o Review Blueprint products as they are developed,
    - Create new collaborative relationships, and
    - Enhance existing relationships
  - Local Municipal Advisory Councils (MACs) SJV Blueprint efforts have included outreach to the MACs that represent the unincorporated areas of the counties.
  - Local Planning Commissions The Planning Commissioners of the cities have been engaged at various levels in the Blueprint process. In some counties, Planning Commissioner Summits are being scheduled to encourage regional thinking when making local decisions.
  - Local Elected Officials Each of the local Councils, Boards of Supervisors, and local COG Boards has been encouraged to be actively engaged in the Blueprint Process.
- 10. Address Goods Movement The San Joaquin Valley Goods Movement Action Plan (SJV GMAP) is a collaborative effort between the eight COGs of the San Joaquin Valley and their working partners. The SJV GMAP focuses on removing choke points of goods movement into and out of the Valley to increase statewide throughput in an effort to provide outlets for the \$20 billion of agricultural products headed to national and international markets in a timely manner.
- 11. Developed strategies to effectively engage local government land use decision makers -The SJV Regional Blueprint process utilizes every opportunity available to inform local land use decision makers on the process and why change is needed for the future. The SJV Regional Blueprint

Process Decision Making Chart highlights the iterative nature of the process with the engagement of local and regional stakeholders in every step of the process.

- 12. Strategies for higher density housing Compact land uses in the Valley are evolving because of increased housing and land costs. Planners are using this as an opportunity to encourage higher densities, mixed uses and more compact design. The Blueprint is an opportunity for all involved in local planning and decision making to encourage elected officials to embrace the local and regional benefits of more compact development. A strong desire in the Valley to preserve agricultural land is also creating land use policies to use land more efficiently.
- 13. Greenhouse Gas (GHG) Emissions / Energy / Environmental Considerations Greenhouse Gas Emissions - GHG emission reductions, specifically Carbon Dioxide (CO2), is an emerging area of Climate Change that will be addressed in response to AB 32 (2006) and SB 375 (2008) requirements. The California Air Resources Board (CARB) has adopted the 1990 emissions inventory that is the basis for the development of CARB's Climate Change Scoping Plan. The Climate Change Scoping Plan has been developed and specific requirements are delineated for all sectors in California, including local governments and metropolitan planning regions. The SJV Blueprint will address GHG integration. The California Transportation Commission has also adopted new Regional Transportation Planning Agency Guidelines that COGs will use to integrate GHG analysis in future Regional Transportation Plans. SB 375 has been chaptered into state law and the adopted Valleywide Blueprint will likely provide valuable concepts for the "Sustainable Communities Strategies" required by SB 375. Ideally, when the SCS is integrated with the planned regional transportation networks and the housing elements in local general plans, it will attempt to achieve the GHG emission reduction goals in AB 32 through reduction in vehicle miles traveled. SB 375 encourages regional cooperation among the eight counties in the SJV by allowing that two or more counties work together to develop a multiregional sustainable communities strategy. This will complement the existing efforts for the implementation of the Vallev Blueprint.
  - Energy The Partnership's Energy work group has created the San Joaquin Clean Energy Organization with the mission of leading a regional effort to develop, plan, and implement energy efficiencies and clean energy throughout the eight-county SJV region.
  - Environmental Considerations Model Farmland Conservation Program. In 2007, Fresno COG was awarded Partnership seed grant funds to create a Model Farmland Conservation Program. As the process develops with data development and analysis and achieves stakeholder buy-in, the SJV Regional Blueprint Planning process will look to integrate this information.

14. Local General Plan Development Coordination - At a time when many of the San Joaquin Valley counties and cities are feeling tremendous pressures of population growth and urbanization, local agencies have initiated updating their local General Plan documents. Wherever it has been possible the local COG's Blueprint effort has coordinated with the local general plan update process. In fact, some of the SJV COGs have been able to coordinate general plan development and Blueprint public outreach efforts to engage the public.

 RHNA (Regional Housing Needs Assessment) The SJV COGs have recently updated their local Regional Housing Needs Assessment (RHNA) Plans. With the advent of SB375, this process will be coordinated with the Regional Transportation Plan process, with updates due on an 8 year schedule. While the existing process has sometimes created conflicts in goals and policies, the evolving RHNA process will hopefully integrate with the sustainable communities strategy in an approach that will resolve potential conflicts. Over the past three and a half years, representative stakeholders from public health, education, environmental justice communities, tribal governments, local governments, resource and regulatory agencies, developers, economists, business and commercial interests, and many, many more have come to the table to address future challenges and reach consensus on a smart growth vision for the San Joaquin Valley. In January 2009, the Great Valley Center's Blueprint Summit marked the culmination of developing the Valleywide preferred growth scenario. The Summit attracted over 600 attendees from the public and private sectors to discuss the alternative growth scenarios developed through the Blueprint process and to seek their invaluable input on a desired growth scenario for the Valley. The alternative growth scenarios, along with the feedback from the Blueprint Regional Advisory Committee (BRAC) and Summit participants, was then presented to the SJV Regional Policy Council (Valley elected officials) on April 1, 2009 for their ultimate selection and adoption of a preferred growth scenario for the entire Valley. This action officially brought the third year of the San Joaquin Valley Blueprint planning process to a close, thus moving the activities into the realm of implementation.

This holistic approach to planning for the Valley's future aims to break the barriers created by geography, political boundaries, and parochial thinking. Decisions in one locale can affect change in others. For example, land use policies that fail to curb urban sprawl will contribute to reduced investment in existing areas, producing downward pressure on existing land values. It can raise the cost to municipalities to provide utilities, water, police and fire services. Increases in vehicle miles traveled (VMT) can increase stress and congestion on the roadways and worsen air quality.

As we move forward with the tasks of the fourth year of the San Joaquin Valley Regional Blueprint planning process, we are gratified by the progress we have made in collaborating across such a vast geographic area. Our common goal is to develop a Valley Vision that will lead to thoughtful planning and an enhanced quality of life for all who live here. We have met many challenges during this effort to change the way we approach the future, but we have had a tremendous amount of success in our progress. Much still remains to be done, however. In fact, some of the most important and challenging work lies ahead: turning the *vision* into a *reality* and making the transition from a planning *process* to planning *implementation*.

### Looking Forward to the Fourth Year – Ongoing and Future Tasks

- 1. Develop Valleywide Blueprint Implementation Roadmap, which will include translating Valley Blueprint principles into local implementation strategies and developing local government commitment. It will also include development of a toolkit for implementation.
- Convene meetings with local officials to discuss funding challenges of local government (and related "fiscalization of land use"). Track 'California Forward' and their efforts on governance and fiscal reform (see <u>http://www.caforward.org/about/</u>).
- 3. Develop adequate modeling tools for compliance with SB 375 (address new greenhouse gas directives, as well as to continue to use adopted methods to measure the effectiveness of the Regional Blueprint Plan)
- 4. Address the increasing of residential densities
  - a. Determine the impact of various development densities on the fiscal health of cities and counties in the San Joaquin Valley. Develop a fiscal analysis tool to determine this.
  - b. Determine the market demand for higher density residential housing projects
- 5. Identify institutional barriers, such as lending practices that may inhibit Smart Growth initiatives from being fully realized. Investigate policies, regulations and laws that may hamper or impede these initiatives.
- 6. Greenprint incorporate Model Farmland Conservation Program mapping, that includes improved information on water resources into the Blueprint for each of the Valley Counties

- 7. Work with Central California EDCs and Partnership for SJV to address jobs/housing issue. *Work on this task should reconvene in early 2010.*
- 8. Continue Blueprint's Valleywide presence by maintaining partnership with Great Valley Center for website oversight and production of one Valleywide Blueprint event
- 9. Continue extensive public outreach efforts as well as developing a Blueprint Awards Program for the Valley.

# 7. Financial Element

## 7a. Valley Interregional Funding Effort

As the Valley continues to work together on various issues, an opportunity exists to work together to ensure and maximize Interregional funding (IIP) for valley projects. In order for this to happen, the Valley RTPAs will plan cooperatively to develop a unified request for IIP funding whenever possible. By working together, all RTPAs will benefit. The following is a brief discussion of the major items related to IIP priority selection for the Valley. The draft priorities below have only been proposed for discussion at this time and have not been approved or finalized by the eight RTPAs.

## Project Priority Type

- Existing Programmed IIP Components Priority would be given to fund cost increases for existing programmed IIP components. This is consistent with Caltrans/CTC programming in the 2010 IIP. It is very unlikely that any of the Valley COGS have STIP capacity to spend on cost increases for already programmed IIP projects. A limit for regional support may be considered.
- SR-99 Business Plan/Category Two projects There are 22 Category Two projects of which 14 are 4 to 6 lane and 8 are 6 to 8 lane capacity increasing projects. (Note: Caltrans does not support IIP for interchange improvements and therefore most of 99 Business Plan Categories 3 & 4 would not qualify.)
- Other interregional corridors (Please note: the Valley has requested a grant that would outline the goods movement priorities for the Valley, focusing in particular the east-west corridors. The study outcome once adopted by the COGS would guide the priorities similar to the SR-99 Business Plan)

## Project Priority Category

- 1. Construction Priority would be given to fund cost construction component. This is consistent with Caltrans/CTC programming in the 2010 IIP and prior State Transportation Improvement Programs (STIPs).
- PS&E/ROW Many of our IIP projects will be in different stages of development. Given that many of the 99 projects will be widened using the existing median, Right-of-Way (ROW) costs are actually lower when compared to other IIP projects in the state. It should also be noted that is unlikely that ROW and construction will be programmed in the same STIP. Therefore ROW will often be programmed one STIP and the construction phase in the next STIP.
- 3. Environmental With review of planned projects over a number of STIP cycles, the Valley could recommend environmental be started for selected segments.

## 7b. Valleywide Funding Strategies

## **Current Transportation Financing Strategies and Challenges**

As California continues to grow, and add population to the world's seventh largest economy and the nearly 40 million people that will live here, California's ability to move both people and goods will become increasingly critical to our quality of life, and our ability to compete economically with the rest of the country and the world at large.

For nearly a century, California has relied on its road system "*users*" to pay fees. Historically, these fees have been the major source for financing the construction and maintenance of the State's transportation

infrastructure. However, in the last decade, the state has failed to raise those fees to keep up with its needs. Although federal and state fuel taxes are still the largest single source of revenue for transportation, such taxes are rising far more slowly than either traffic volumes or transportation system costs, and no longer come close to covering the costs of building, operating, and maintaining the transportation system. As the transportation system grows in extent and ages, an ever increasing share of expenditures is needed to operate, maintain, and renew the existing system, meaning that even less money is available for system growth... Yet, at the same time, there is clearly widespread opposition to raising fuel taxes in California to meet the estimated \$500 billion dollar shortfall in funding to meet California's transportation infrastructure needs.

There a number of reasons that California is unable to fund its transportation infrastructure needs, these include:

- The state's per gallon excise tax has not risen from 18 cents per gallon since 1994, and the federal excise tax has been at 18.4 cents per gallon since 1993.
- Because the excise tax on fuel is levied per gallon of fuel purchased and not per dollar or per mile, inflation and improved vehicle fuel efficiently combine to erode the excise tax's buying power.
- Improved fuel economy directly reduces per-mile revenues from motor fuel taxes, <u>without</u> reducing the need for new roads or wear and tear on existing ones, even as we drive many more miles per penny of revenue.
- The cost of road maintenance and construction has risen steadily by more than the consumer price index, further reducing the effectiveness of the revenue raised by the tax.
- The overall state deficit has caused a great deal of transportation funding to be diverted to cover general state costs, thus burdening transportation programs.
- The political climate is one of wariness for any kind of tax increase—even increases in transportation user fees. This perspective exists in California and the rest of the nation as well.

## Funding Transportation Projects in the San Joaquin Valley

With the above information as background, the Regional Transportation Planning Agencies in the San Joaquin Valley are charged with developing long range funding strategies that will provide the revenues necessary to build a multi-modal transportation system that will meet the long range needs of the San Joaquin Valley. In theory, there are a number of potential funding strategies, both traditional and non-traditional, that could be developed to help provide the necessary funding to construct our long range transportation infrastructure. However, each has its own unique set of challenges.

State Route 99 is a great example of a transportation facility that has monumental impact on the mobility of nearly all San Joaquin Valley residents, as it is the primary north-south transportation corridor through the San Joaquin Valley and directly impacts seven of the eight SJV counties. The following is a list of transportation funding sources, some traditional and some innovative or non-traditional, that might be considered as the eight SJV COGs grapple with finding the necessary funding for transportation projects.

## **Traditional Transportation Fund Sources**

Type of Funding	Programming Mechanism
State Fuel Excise Taxes	State Highway Account
Federal Fuel Excise Taxes	Federal Highway Trust Fund then to State Highway
	Account
Sales Taxes on Fuels	Transportation Investment Fund/Public
	Transportation Account
Truck Weight Fees	State Highway Account
Roadway Tolls/HOT Lanes	Dedicated to Specific Routes and Corridors
Local Sales Tax Measures	Expenditure Plan Specified Projects
Development Mitigation Fees	Specified Uses

### State Fuel Excise Taxes

This is the primary State generated transportation fund source for transportation improvements. Currently 18.0 cents per gallon of gasoline and diesel sold is generated, with 11.4 cents going into the State Highway Account and 6.46 cents per gallon going to cities and counties. In California, approximately \$2 billion per is generated from State fuel excise taxes per year.

### Federal Fuel Excise Taxes

This is the primary federal transportation fund source for road and highway improvements nationwide. Currently 18.4 cents per gallon of gasoline and 24.4 cents per gallon of diesel fuel goes into the Federal Highway trust Fund. These funds are typically distributed to states by formulas or grants, with California's apportionment typically over \$3 billion annually.

### Sales Tax on Fuel

California collects 7.25% sales tax on the sale of specified products, a portion of which is earmarked for transportation. In 2002, Proposition 42 was passed by voters specifying that 5% of the 7.25% sales tax per gallon of gasoline is to be earmarked for transportation and placed in the Transportation Investment Fund (TIF). State law requires that TIF are to be distributed as follows:

40% to the State Transportation Improvement Program 20% to the Public Transportation account 20% to counties 20% to cities

### Truck Weight Fees

California truck weight fees typically generate nearly \$900 million per year in revenues and are deposited in the State Highway Account where they are eligible for many uses including the STIP. There is no set annual amount targeted for the STIP.

### Roadway Tolls

In California, the ability to charge roadway tolls on State Highways can only be authorized through enabling statewide legislation. Currently, tolls are authorized on specified bridges in the San Francisco Bay area, Los Angeles area and the San Diego area. In addition, AB 680 passed in 1989 authorized Caltrans to enter into agreements with private entities for four toll corridors in California. As a result there are currently three toll corridors in southern California, but none yet in northern California. Generally, toll facilities are applicable in locations where there is enough time savings for users that they are willing to pay a toll fee for that time savings. This usually occurs where there is either daily recurring congestion

and/or there is no other reasonable travel alternative. Basically there are two categories of toll road approaches found in California: Traditional Toll Highways and High Occupancy Toll Lanes (HOT Lanes)

## Traditional Toll Highways

These are toll highway segments that require a toll to be paid for its use by all users, but exemptions or reduced fees can be authorized for certain designated users. These designated users could be high occupancy vehicles or local residents. The funds collected are typically used to maintain and improve the toll road segment. Current technology offers the opportunity to collect tolls through an electronic monitoring system for those using the toll road as a commuter route, thereby reducing the operating cost of the facility. Others would still have to pay on site for each use of the toll facility.

Thinking innovatively, there are two potential options for tolling State Route 99 in the San Joaquin Valley. Under the first option, the entire SR 99 route from its junction with I-5 in southern Kern County to Hammer Lane in San Joaquin County could be a toll facility. Under this scenario, residents of the eight San Joaquin Valley counties and the western Sierra mountain counties of Mariposa, Calaveras, Tuolumne and Amador could be authorized resident toll exemptions. Of course this approach would greatly reduce the annual revenue level, but it is likely this would be required in order for the concept to be politically acceptable to SJV residents. The second approach would be to focus the toll highway to segments with congestion lasting at least one hour during the morning or evening peak commute periods or have no competing parallel alterative road. Candidate locations are in the Stockton metro area, between Modesto and State Route 120 in Manteca, Modesto metro area, between Atwater and Ceres, Fresno metro area, and Bakersfield metro area.

## High Occupancy Toll Roads

High Occupancy Toll (HOT) lanes are a revenue generating form of High Occupancy Vehicle (HOV) lanes. HOT lanes are HOV lanes that single occupant vehicles, not otherwise eligible to use HOV lanes, can choose to use by paying a toll. HOT lanes provide users with a faster and more reliable travel alternative. Toll rates on HOT lanes tend to be variable base on the time of day and corresponding congestion, with toll rates varying widely.

## Vehicle License Fee Surcharge

The vehicle license fee surcharge is a source of funding that has been used for a number of special interest programs in recent years. In the San Joaquin Valley, counties have instituted vehicle license fee surcharges for such programs as vehicle abatement and safety call boxes. In addition, the San Joaquin Valley Air Pollution Control District has been authorized to levy a vehicle license fee surcharge for programs to achieve air quality emission reductions. In total, there are approximately 3.2 million registered vehicles in the eight county San Joaquin Valley region.

## Vehicle Use Mileage Fee

Vehicle use mileage fee is another user fee that could be applied with the San Joaquin Valley. This mileage fee could be collected in several ways, but the simplest from an administrative perspective, would be to collect the fee each year as part of the annual vehicle registration process. Under this approach, each year the registered owner would report their beginning of year mileage and their end of year mileage when registering their vehicle. The challenge would come in developing some method of mileage verification.

## Local Sales Tax Measures

Currently, there are four SJV counties (San Joaquin, Madera, Fresno & Tulare) that have local sales tax measures in place that are dedicated solely to transportation. Over time, these sales tax measures have proven very effective to those counties who have been able to institute one. The challenge is that

passage requires a supermajority (66%) of voters to support, and that can be a very difficult threshold for more politically conservative counties to attain.

### **Development Mitigation Fees**

Development mitigation fees are assessed to new development (residential, commercial, industrial, etc.). The fees are used for "mitigation" of impacts generated by that specific development. Mitigation fess can be used for a variety of purposes (transportation, education, air quality, flood control, etc.) provided there is a logical "nexus" or connection between the development and the impacts generated.

### Possible Transition to Direct User Charges

Motor fuel taxes can continue to provide a great deal of needed revenue for a decade or two. But several types of more efficient and equitable user charges are ready to be phased in. For example, current technology has the potential to enable government agencies to institute vehicle miles traveled (VMT) charges as flat per mile fees. If there was public support, gradually public agencies could charge higher rates on some roads and lower rates on others to reflect more accurately than do fuel taxes, the costs of providing facilities over different terrain or of different quality. This approach would end cross subsidies of some travelers by others and make travel more efficient by encouraging the use of less congested roads. Unlike gasoline taxes, more direct road user charges also could vary with time of day, encouraging some travelers to make a larger proportion of their trips outside of peak periods, easing rush hour traffic.

In the short term, direct user fees could simply replace fuel taxes in a revenue-neutral switch, but they are attractive, in part, because they can become more lucrative as travel increases, while allowing charges to be distributed more fairly among road users. Initially, some vehicle operators might be allowed to continue paying motor fuel taxes rather than newer direct charges, but eventually gas and diesel taxes would be phased out.

Appendix C: Level of Service (LOS) Criteria

TABLE C-1 LEVEL OF SERVICE CRITERIA – ROADWAY SEGMENTS												
Eacility Type	Facility Type   Number of   Daily Volume Threshold											
r donity rype	Lanes	LOS <sup>1</sup> A	LOS B	LOS C	LOS D	LOS E						
Freeway	4	25,600	40,800	60,000	73,600	80,000						
	6	36,000	60,000	84,000	100,800	120,000						
	8	48,000	80,000	112,000	134,400	160,000						
Class A Expressway	4	18,000	30,000	42,000	50,400	60,000						
	6	27,000	45,000	63,000	75,600	90,000						
Class B Expressway	4	15,000	25,000	35,000	42,000	50,000						
	6	22,500	37,500	52,500	63,000	75,000						
Class C Expressway	4	12,000	20,000	28,000	33,600	40,000						
	6	18,000	30,000	42,000	50,400	60,000						
Majors/Arterials	2	1,400	3,800	6,800	11,800	20,000						
	3	7,560	12,690	17,820	21,330	27,000						
	4	10,080	16,920	23,760	28,440	36,000						
	5	12,600	21,150	29,700	35,550	45,000						
	6	15,120	25,380	35,640	42,660	54,000						
Collectors	2	700	1,900	3,400	5,900	10,000						
	4	5,600	9,400	13,200	15,800	20,000						
Notes: <sup>1</sup> LOS = Level of Servi Source: <i>Traffic Analysis of Star</i>	ce nislaus County Circu	Ilation Element (	Dowling Associa	ates, Inc., Noven	nber 2005)							

TABLE C-2 STANISLAUS COUNTY – CAPACITY BY FACILITY TYPE											
Number of Lanes											
Classification	2	4	6	8							
Freeway		2,000	2,000	2,000							
Class A Expressway		1,500	1,500								
Class B Expressway		1,250	1,250								
Class C Expressway		1,000	1,000								
Majors/Arterials	1,000	900	900								
Collectors	500	500									
Notes: Volumes provided are in vehicles per hour per lane (vphpl)   Source: Traffic Analysis of Stanislaus County Circulation Element (Dowling Associates, Inc., November 2005)											

Eacility Type Number of Daily Volume Threshold											
гасшту туре	Lanes	LOS <sup>1</sup> A	LOS B	LOS C	LOS D	LOS E					
Freeway	4 6+	0.32 0.30	0.51 0.50	0.75 0.70	0.92 0.84	1.00 1.00					
Expressways	4+	0.30	0.50	0.70	0.84	1.00					
Majors/Arterials	2 4+	0.07 0.28	0.19 0.47	0.34 0.66	0.59 0.79	1.00 1.00					
Collectors	2 4	0.07 0.28	0.19 0.47	0.34 0.66	0.59 0.79	1.00 1.00					
Notes: 1 V/C = Volume to capacity ratio   2 LOS = Level of Service   Source: Traffic Analysis of Stanislaus County Circulation Element (Dowling Associates, Inc., November 2005)											

Appendix D: Roadway Segment Level of Service (LOS)

TABLE D-1 ROADWAY SEGMENT LEVEL OF SERVICE - BASE YEAR CONDITIONS												
ID	Boadway	Seg	ment To		Number	Δ	Level of S	Service Th	resholds <sup>2</sup> D	E	V/C	1.05
1	7th Street	Morgan Rd	K Street	17.200	2	1.400	3.800	6.800	11.800	20.000	0.86	E
2	9th Street	Carpenter Rd	River Rd	24,000	4	10,080	16,920	23,760	28,440	36,000	0.67	D
3	Bangs Ave	Dale Rd	SR 108 (McHenry Ave)	6,200	2	700	1,900	3,400	5,900	10,000	0.62	Е
4	Beckwith Rd	SR 99	Modesto GP Boundary	9,000	2	1,400	3,800	6,800	11,800	20,000	0.45	D
5	Blue Gum Ave	Poust Rd Sick Rd	Rosemore Ave	19,070	2	1,400	3,800	6,800	11,800	20,000	0.95	E
7	Briggsmore Ave	Oakdale Rd	Roselle Ave	27.000	2	1.400	3.800	6.800	11.800	20.000	1.35	F
8	Briggsmore Ave	Roselle Ave	Claus Rd	16,850	2	1,400	3,800	6,800	11,800	20,000	0.84	Е
9	Briggsmore Ave	Claus Rd	Modesto GP Boundary	11,230	4	10,080	16,920	23,760	28,440	36,000	0.31	В
10	Carpenter Rd	SR 99	Maze Blvd	31,200	4	10,080	16,920	23,760	28,440	36,000	0.87	E
11	Carpenter Rd	Maze Blvd	Paradise Rd	17,200	2	1,400	3,800	6,800	11,800	20,000	0.86	E
12			Gravson Bd	3 849	2	1,400	3,000	6,800	11,800	20,000	0.07	C C
14	Christofferson Pkwy	Berkeley Ave	Geer Rd	10,300	4	12,000	20,000	28,000	33,600	40,000	0.26	A
15	Claratina Ave	SR 108 (McHenry Ave)	Coffee Rd	12,250	2	1,400	3,800	6,800	11,800	20,000	0.61	E
16	Claribel Rd	SR 108 (McHenry Ave)	Oakdale Rd	12,500	2	1,400	3,800	6,800	11,800	20,000	0.63	E
17	Claus Rd	Briggsmore Ave	Sylvan Ave	19,300	2	1,400	3,800	6,800	11,800	20,000	0.97	E
18	Cottee Rd Crows Landing Bd	Mable Rd 7th Street	Claribel Rd	20,700	2	1,400	3,800	6,800	11,800	20,000	1.04	P D
20	Crows Landing Rd	SB 99	Whitmore Ave	24 000	4	10.080	16,920	23 760	28 440	36,000	0.40	D
21	Crows Landing Rd	Service Rd	Grayson Rd	8,430	2	1,400	3,800	6,800	11,800	20,000	0.42	D
22	Dakota Ave	North Ave	Salida Blvd	5,488	2	1,400	3,800	6,800	11,800	20,000	0.27	С
23	Dale Rd	Standiford Ave	Pelandale Ave	21,700	4	10,080	16,920	23,760	28,440	36,000	0.60	С
24	Dale Rd	Pelandale Ave	SR 219 (Kiernan Ave)	10,230	4	10,080	16,920	23,760	28,440	36,000	0.28	B
25	East Ave	Santa Fe Ave	Turlock City Limit	6,400	2	1,400	3,800	6,800	11,800	20,000	0.32	C
20	Faith Home Rd	Gravson Rd	N of River Xing	3.600	4	1.400	3.800	6.800	11.800	20.000	0.92	B
28	Fulkerth Rd	Dianne Rd	SR 99	7,660	4	10,080	16,920	23,760	28,440	36,000	0.21	A
29	Golden State Blvd	West Main St	Berkeley Ave	10,200	4	12,000	20,000	28,000	33,600	40,000	0.26	Α
30	Grayson Rd	Ustick Rd	Mitchell Rd	3,064	2	1,400	3,800	6,800	11,800	20,000	0.15	В
31	Hatch Rd	Carpenter Rd	Crows Landing Rd	10,140	2	1,400	3,800	6,800	11,800	20,000	0.51	D
32	Hatch Rd	Crows Landing Rd	SR 99 Mitchell Dd	17,460	2	1,400	3,800	6,800	11,800	20,000	0.87	E
33	Hatch Rd	SR 99 Mitchell Bd	Santa Fe Ave	24,000	4	1 400	3 800	6 800	28,440	20,000	0.67	D
35	Hatch Rd	Santa Fe Ave	Geer Rd	9.560	2	1,100	3.800	6.800	11.800	20,000	0.48	D
36	Keyes Rd	Faith Home Rd	SR 99	7,600	2	1,400	3,800	6,800	11,800	20,000	0.38	D
37	Mitchell Rd	Yosemite Blvd	Modesto GP Boundary	23,100	4	10,080	16,920	23,760	28,440	36,000	0.64	С
38	Mitchell Rd	Service Rd	SR 99	24,000	4	10,080	16,920	23,760	28,440	36,000	0.67	D
39	Monte Vista Ave	Olive Ave	Berkeley Ave	11,240	2	1,400	3,800	6,800	11,800	20,000	0.56	D
40	Norgan nu Oakdale Bd	Claribel Bd	Claratina Ave	11,000	2	1,400	3,800	6,800	11,800	20,000	0.55	D
42	Oakdale Rd	Claratina Ave	Sylvan Ave	23,000	3	7,560	12,690	17,820	21,330	27,000	0.85	E
43	Oakdale Rd	Sylvan Ave	Floyd Ave	32,203	4	10,080	16,920	23,760	28,440	36,000	0.89	E
44	Oakdale Rd	Floyd Ave	Briggsmore Ave	37,280	5	12,600	21,150	29,700	35,550	45,000	0.83	E
45	Olive Ave	Canal Dr	Wayside Rd	8,810	2	1,400	3,800	6,800	11,800	20,000	0.44	D
46	Paradise Rd	Sutter Ave	Carpenter Rd Medeste CR Roundany	13,000	2	1,400	3,800	6,800	11,800	20,000	0.65	E
48	Prescott Rd	Briggsmore Ave	Modesto GP Boundary	24 000	4	10.080	16,920	23 760	28 440	36,000	0.55	D
49	Roselle Ave	Floyd Ave	Claribel Rd	8,000	2	1,400	3,800	6,800	11,800	20,000	0.40	D
50	Rosemore Ave	Kansas Ave	Blue Gum Ave	3,412	2	700	1,900	3,400	5,900	10,000	0.34	D
51	Santa Fe Ave	Hatch Rd	7th Street	8,100	2	1,400	3,800	6,800	11,800	20,000	0.41	D
52	Scenic Drive	Hose Ave	Oakdale Hd	30,000	4	10,080	16,920	23,760	28,440	36,000	0.83	E
53 54	Service Bd	Central Ave	Mitchell Rd	19,200 9.430	2	1,400	3,800	0,800 6,800	11,800	20,000	0.96	D
55	Sperry Ave	SR 33	Ward Ave	7,150	2	1,400	3,800	6,800	11,800	20,000	0.36	D
56	Standiford Ave	Dale Rd	Prescott Rd	34,400	4	10,080	16,920	23,760	28,440	36,000	0.96	E
57	Standiford Ave	Prescott Rd	Oakdale Rd	36,000	4	10,080	16,920	23,760	28,440	36,000	1.00	E
58	Sylvan Rd	Roselle Ave	Claus Rd	16,340	2	1,400	3,800	6,800	11,800	20,000	0.82	E
59	Taylor Ru Taylor Bd	Golden State Blud	SB 99	8,000 12,000	2	700	1,900	3,400	5,900	10,000	1.20	E
61	Tully Rd	Standiford Ave	Pelandale Ave	17 000	4	10.080	16,920	23 760	28 440	36,000	0.47	C
62	Tully Rd	Pelandale Ave	Modesto GP Boundary	6,025	2	1,400	3,800	6,800	11,800	20,000	0.30	Č
63	W. Main St	Tegner Rd	Walnut Rd	16,080	2	1,400	3,800	6,800	11,800	20,000	0.80	E
64	Washington Rd	Linwood Ave	Monte Vista Ave	1,500	2	1,400	3,800	6,800	11,800	20,000	0.08	В
65	Whitmore Ave	Ustick Rd	Morgan Rd	12,000	2	1,400	3,800	6,800	11,800	20,000	0.60	E
67		Mountain View Pd	Santa Fe Ave	0,160 5,700	2	1,400	3,800	6,800 6,800	11,800	20,000	0.31	0
68	I-5	Merced Co Line	Stuhr Rd	39 000	4	25 600	40 800	60 000	73 600	80 000	0.29	B
69	I-5	Stuhr Rd	Fink Rd	39,000	4	25,600	40,800	60,000	73,600	80,000	0.49	B
70	I-5	Fink Rd	Sperry Ave	42,000	4	25,600	40,800	60,000	73,600	80,000	0.53	С
71	I-5	Sperry Ave	Westley Rest Area	44,740	4	25,600	40,800	60,000	73,600	80,000	0.56	C
72	I-5	Westley Rest Area	San Joaquin Co. Line	40,858	4	25,600	40,800	60,000	73,600	80,000	0.51	C
73	SR 4	San Joaquin Co. Line Milton Rd	Calaveras Co Line	4,850 5,500	2	1,400	3,800	6,800 6,800	11,800	20,000	0.24	0
75	SR 33 (N St)	Merced Co. Line	North of Newman	4,139	2	1.400	3.800	6,800	11.800	20.000	0.20	C
76	SR 33	North of Newman	Crows Landing Rd	5,042	2	1,400	3,800	6,800	11,800	20,000	0.25	Č

	TABLE D-1 ROADWAY SEGMENT LEVEL OF SERVICE - BASE YEAR CONDITIONS												
		Sec	ment		Number		Level of S	Service Th	resholds <sup>2</sup>				
ID	Roadway	From	То	ADT <sup>1</sup>	of Lanes	Α	В	C	D	Е	V/C	LOS	
77	SR 33	Crows Landing Rd	Poppy Ave	3.650	2	1.400	3.800	6.800	11.800	20.000	0.18	В	
78	SR 33 (2nd St)	Poppy Ave	M Street	3,903	4	10,080	16,920	23,760	28,440	36,000	0.11	Α	
79	SR 33	Ward Ave	Westley	5,042	2	1,400	3,800	6,800	11,800	20,000	0.25	С	
80	SR 99	Merced Co. Line	SR 165	64,000	6	36,000	60,000	84,000	100,800	120,000	0.53	С	
81	SR 99	SR 165	W. Main St	75,000	6	36,000	60,000	84,000	100,800	120,000	0.63	С	
82	SR 99	W. Main St	Fulkerth Rd	85,000	6	36,000	60,000	84,000	100,800	120,000	0.71	D	
83	SR 99	Fulkerth Rd	Monte Vista Ave	79,200	6	36,000	60,000	84,000	100,800	120,000	0.66	С	
84	SR 99	Monte Vista Ave	Taylor Rd	109,000	6	36,000	60,000	84,000	100,800	120,000	0.91	E	
85	SR 99	Taylor Rd	Mitchell Rd	101,000	6	36,000	60,000	84,000	100,800	120,000	0.84	E	
86	SR 99	Mitchell Rd	Whitmore Ave	114,833	6	36,000	60,000	84,000	100,800	120,000	0.96	E	
87	SR 99	Whitmore Ave	Hatch Rd	111,000	6	36,000	60,000	84,000	100,800	120,000	0.93	E	
88	SR 99	Hatch Ro	Crows Landing Rd	118,500	6	36,000	60,000	84,000	100,800	120,000	0.99	E .	
89	SR 99	Crows Landing Rd		124,000	6	36,000	60,000	84,000	100,800	120,000	1.03		
90	SR 99	H 51	SR 132	138,364	6	36,000	60,000	84,000	100,800	120,000	1.15		
91		Kancas Avo	Priggsmore Ave	124,000	6	30,000	60,000	84,000	100,000	120,000	1.10		
92	SR 99	Riggsmore Ave	Beckwith Bd	114,000	6	36,000	60,000	84,000	100,800	120,000	0.95	F	
94	SR 99	Beckwith Bd	Pelandale Ave	115,000	6	36,000	60,000	84,000	100,800	120,000	0.95	F	
95	SB 99	Pelandale Ave	SB 219 (Kiernan Ave)	127 608	6	36,000	60,000	84 000	100,000	120,000	1.06	F	
96	SR 99	SB 219 (Kiernan Ave)	San Joaquin Co. Line	116.000	6	36.000	60.000	84.000	100,800	120,000	0.97	Ē	
97	SR 108 (Needham St)	K St	McHenry Ave	27,495	4	10.080	16,920	23,760	28,440	36.000	0.76	 D	
98	SR 108 (EB - K St)	9th St	Needham St	5.300	3	7.560	12.690	17.820	21.330	27.000	0.20	Ā	
99	SR 108 (WB - L St)	Needham St	9th St	4,950	3	7,560	12,690	17,820	21,330	27,000	0.18	Α	
100	SR 108 (Needham St)	L St	McHenry Ave	13,240	4	10,080	16,920	23,760	28,440	36,000	0.37	В	
101	SR 108 (McHenry Ave)	Needham St	Briggsmore Ave	42,108	4	10,080	16,920	23,760	28,440	36,000	1.17	F	
102	SR 108 (McHenry Ave)	Briggsmore Ave	Coralwood Rd	41,000	6	15,120	25,380	35,640	42,660	54,000	0.76	D	
103	SR 108 (McHenry Ave)	Coralwood Rd	SR 219 (Kiernan Ave)	23,618	4	10,080	16,920	23,760	28,440	36,000	0.66	С	
104	SR 108 (McHenry Ave)	SR 219 (Kiernan Ave)	Ladd Rd	17,900	2	1,400	3,800	6,800	11,800	20,000	0.90	E	
105	SR 108 (Patterson Rd)	McHenry Ave	Coffee Rd	27,000	2	1,400	3,800	6,800	11,800	20,000	1.35	F	
106	SR 108 (Patterson Rd)	Coffee Rd	Oakdale Rd	27,000	2	1,400	3,800	6,800	11,800	20,000	1.35	F	
107	SR 108	Oakdale Rd	First St	22,000	2	1,400	3,800	6,800	11,800	20,000	1.10	F	
108	SR 108 (Atchison St)	First St	Claus Rd	22,000	2	1,400	3,800	6,800	11,800	20,000	1.10	F	
109	SR 108	Claus Rd	Willowood Dr	18,800	2	1,400	3,800	6,800	11,800	20,000	0.94	E	
110	SR 108 (F St)	Willowood Dr	SR 120 (Yosemite Ave)	27,800	2	1,400	3,800	6,800	11,800	20,000	1.39	F	
111	SR 120	San Joaquin Co. Line	Valley Home Rd	28,000	2	1,400	3,800	6,800	11,800	20,000	1.40	F	
112	SR 120	Valley Home Rd	Stanislaus River	26,073	2	1,400	3,800	6,800	11,800	20,000	1.30	F	
113	SR 120 (Yosemile Ave)	Stanislaus River	A SL	23,171	3	10,000	16,000	17,820	21,330	27,000	0.86		
114	SR 120 (TUSEITILE AVE)		Sh 100 (F SI)	20,000	4	10,000	16,920	23,760	20,440	36,000	0.70	D C	
115	SR 120 (F SI)	Maag Rd	Stearns Bd	19 08/	4	1 400	3 800	6 800	11 800	20,000	0.56	F	
117	SR 120 (1 30)	Stearns Rd	Dillwood Bd	19,004	2	1,400	3,800	6,800	11,000	20,000	0.95	F	
118	SB 120	Dillwood Bd	Orange Blossom Bd	22 000	2	1,400	3,800	6,800	11,800	20,000	1 10	F	
119	SR 120	Orange Blossom Bd	Lancaster Rd	21,100	2	1,400	3.800	6.800	11,800	20.000	1.06	F	
120	SR 120	Lancaster Rd	Kennedy Rd	14,000	2	1,400	3,800	6,800	11,800	20,000	0.70	Е	
121	SR 120	Kennedy Rd	Tuolumne Co. Line	13,200	2	1,400	3,800	6,800	11,800	20,000	0.66	Е	
122	SR 132	San Joaquin Co. Line	Carpenter Rd	12,945	2	1,400	3,800	6,800	11,800	20,000	0.65	Е	
123	SR 132 (Maze Blvd)	Carpenter Rd	SR 99	14,151	2	1,400	3,800	6,800	11,800	20,000	0.71	Е	
124	SR 132 (L St)	SR 99	9th St	13,220	4	10,080	16,920	23,760	28,440	36,000	0.37	В	
125	SR 132 (9th St)	L St	D St	18,000	4	10,080	16,920	23,760	28,440	36,000	0.50	С	
126	SR 132	9th St/D St	La Loma Ave	19,972	4	10,080	16,920	23,760	28,440	36,000	0.55	С	
127	SR 132 (Yosemite Blvd)	La Loma Ave	Riverside Dr	19,977	4	10,080	16,920	23,760	28,440	36,000	0.55	С	
128	SR 132 (Yosemite Blvd)	Riverside Dr	Claus Rd	17,932	2	1,400	3,800	6,800	11,800	20,000	0.90	E	
129	SH 132 (Yosemite Blvd)	Claus Rd	Santa Fe Ave	10,100	2	1,400	3,800	6,800	11,800	20,000	0.51	D	
130	SH 132 (Yosemite Blvd)	Santa Fe Ave	Root Rd	9,168	2	1,400	3,800	6,800	11,800	20,000	0.46	D	
131	SR 132 (Yosemite Blvd)	Hoot Hd	Geer-Albers Rd	10,373	2	1,400	3,800	6,800	11,800	20,000	0.52	D	
132	SH 132	Hickman Rd	Hoberts Ferry Rd	1,994	2	1,400	3,800	6,800	11,800	20,000	0.10	В	
133	SR 132	HUDERIS FERRY HO	La Grange Ko	2,200	2	1,400	3,800	6,800	11,800	20,000	0.11	В	
134	OR 132		Marcad Co. Line	1,539	2	1,400	3,800	0,800	11,800	20,000	0.08	B	
135	SP 210 (Kioman Ave)	SD 00	Niercea Co. Line	17,505	2	1,400	3,800	0,800	11,800	20,000	0.88	E	
100	SR 219 (Kieman Ave)	Sick Bd	Stoddard Bd	20,000	2	1,400	3,000	6,000	11 000	20,000	0.70	F	
132	SR 219 (Kiernan Ave)	Stoddard Rd	SB 108 (McHenry Ave)	14,400	2	1 400	3,000	6 800	11 800	20,000	0.72	F	
100			Sit ioo (monenty AVe)	17,000	ے ا	1,700	0,000	0,000	11,000	20,000	0.70	-	

Notes: 1 Average Daily Traffic

<sup>2</sup> Level of Service (LOS) based on Stanislaus County General Plan thresholds derived from the Highway Capacity Manual (Transportation Research Board, 2000) shown in Appendix C. Bold font and gray shading indicates unacceptable roadway operations based on the operating jurisdiction's LOS standard, per the local General Plans and Caltrans Transportation Concept Reports

Tan shading indicates a roadway segment with estimated base year traffic volume; base year count data not available.

TABLE D-2 ROADWAY SEGMENT LEVEL OF SERVICE - YEAR 2035 NO PROJECT CONDITIONS												
15	Boodwoy	Seg	ment		Number	٨	Level of S	Service Th	resholds <sup>2</sup>	F	N/C	1.05
1	7th Street	Morgan Bd	K Street	21 100	2	1 400	3 800	6 800	11 800	20 000	1.06	F
2	9th Street	Carpenter Rd	River Rd	41,500	4	10,080	16,920	23,760	28,440	36,000	1.15	F
3	Bangs Ave	Dale Rd	SR 108 (McHenry Ave)	9,800	2	700	1,900	3,400	5,900	10,000	0.98	E
4	Beckwith Rd	SR 99	Modesto GP Boundary	20,900	2	1,400	3,800	6,800	11,800	20,000	1.05	F
5	Blue Gum Ave	Poust Rd Sick Rd	Rosemore Ave	28,800	2	1,400	3,800	6,800	11,800	20,000	1.44	F
7	Briggsmore Ave	Oakdale Bd	Boselle Ave	38 700	4	15,000	25,000	35,000	42 000	40,000	0.77	D F
8	Briggsmore Ave	Roselle Ave	Claus Rd	28,800	4	15,000	25,000	35,000	42,000	50,000	0.58	C
9	Briggsmore Ave	Claus Rd	Modesto GP Boundary	22,500	4	10,080	16,920	23,760	28,440	36,000	0.63	С
10	Carpenter Rd	SR 99	Maze Blvd	38,800	4	10,080	16,920	23,760	28,440	36,000	1.08	F
11	Carpenter Rd	Maze Blvd Paradisa Pd	Paradise Rd	21,300	2	1,400	3,800	6,800	11,800	20,000	1.065	F
13	Carpenter Ru	Whitmore Ave	Gravson Bd	8 000	2	1,400	3,800	6,800	11,800	20,000	0.40	D
14	Christofferson Pkwy	Berkeley Ave	Geer Rd	23,900	4	12,000	20,000	28,000	33,600	40,000	0.60	C
15	Claratina Ave	SR 108 (McHenry Ave)	Coffee Rd	19,300	2	1,400	3,800	6,800	11,800	20,000	0.97	E
16	Claribel Rd	SR 108 (McHenry Ave)	Oakdale Rd	22,000	2	1,400	3,800	6,800	11,800	20,000	1.10	F
17	Claus Rd	Briggsmore Ave	Sylvan Ave	28,600	2	1,400	3,800	6,800	11,800	20,000	1.43	F
19	Crows Landing Rd	7th Street	SR 99	8.600	2	1,400	3,800	6.800	11,800	20,000	0.43	D
20	Crows Landing Rd	SR 99	Whitmore Ave	27,900	4	10,080	16,920	23,760	28,440	36,000	0.78	D
21	Crows Landing Rd	Service Rd	Grayson Rd	10,600	2	1,400	3,800	6,800	11,800	20,000	0.53	D
22	Dakota Ave	North Ave	Salida Blvd	24,000	2	1,400	3,800	6,800	11,800	20,000	1.20	F
23	Dale Rd	Standiford Ave	Pelandale Ave	28,000	4	10,080	16,920	23,760	28,440	36,000	0.78	D
24	Fast Ave	Santa Fe Ave	Turlock City Limit	7 600	4	1 400	3 800	6 800	11 800	20,000	0.05	D
26	El Vista Ave	Briggsmore Ave	Yosemite Blvd	41,700	4	10,080	16,920	23,760	28,440	36,000	1.16	F
27	Faith Home Rd	Grayson Rd	N of River Xing	5,100	2	1,400	3,800	6,800	11,800	20,000	0.26	С
28	Fulkerth Rd	Dianne Rd	SR 99	16,900	4	10,080	16,920	23,760	28,440	36,000	0.47	В
29	Golden State Blvd	West Main St	Berkeley Ave	10,200	4	12,000	20,000	28,000	33,600	40,000	0.26	A
31	Hatch Rd	Carpenter Bd	Crows Landing Rd	13 500	2	1,400	3,800	6,800	11,800	20,000	0.27	E
32	Hatch Rd	Crows Landing Rd	SR 99	18,700	2	1,400	3,800	6,800	11,800	20,000	0.94	E
33	Hatch Rd	SR 99	Mitchell Rd	30,900	4	10,080	16,920	23,760	28,440	36,000	0.86	Е
34	Hatch Rd	Mitchell Rd	Santa Fe Ave	14,600	2	1,400	3,800	6,800	11,800	20,000	0.73	E
35	Hatch Rd	Santa Fe Ave	Geer Rd	16,500	2	1,400	3,800	6,800	11,800	20,000	0.83	E
30	Mitchell Rd	Yosemite Blvd	Modesto GP Boundary	27 000	4	10 080	16,920	23 760	28 440	20,000	0.70	D
38	Mitchell Rd	Service Rd	SR 99	27,100	4	10,080	16,920	23,760	28,440	36,000	0.75	D
39	Monte Vista Ave	Olive Ave	Berkeley Ave	14,700	2	1,400	3,800	6,800	11,800	20,000	0.74	Е
40	Morgan Rd	7th Street	Grayson Rd	14,400	2	1,400	3,800	6,800	11,800	20,000	0.72	E
41	Oakdale Rd	Claribel Rd	Claratina Ave	19,800	2	1,400	3,800	6,800	11,800	20,000	0.99	E
42	Oakdale Rd Oakdale Bd	Sylvan Ave	Sylvan Ave	32,100	3	10.080	16,920	23 760	21,330	27,000	1.19	F
44	Oakdale Rd	Floyd Ave	Briggsmore Ave	46,400	5	12,600	21,150	29,700	35,550	45,000	1.03	F
45	Olive Ave	Canal Dr	Wayside Rd	11,000	2	1,400	3,800	6,800	11,800	20,000	0.55	D
46	Paradise Rd	Sutter Ave	Carpenter Rd	14,400	2	1,400	3,800	6,800	11,800	20,000	0.72	E
47	Paradise Rd	Carpenter Rd	Modesto GP Boundary	12,400	2	1,400	3,800	6,800	11,800	20,000	0.62	E
48	Prescott Rd Boselle Ave	Elove Ave	Claribel Bd	29,600	4	10,080	3 800	6 800	28,440	36,000	0.82	F
50	Rosemore Ave	Kansas Ave	Blue Gum Ave	5.800	2	700	1.900	3.400	5.900	10.000	0.58	D
51	Santa Fe Ave	Hatch Rd	7th Street	13,900	2	1,400	3,800	6,800	11,800	20,000	0.70	E
52	Scenic Drive	Rose Ave	Oakdale Rd	41,100	4	10,080	16,920	23,760	28,440	36,000	1.14	F
53	Scenic Drive	Oakdale Rd	Claus Rd	26,100	2	1,400	3,800	6,800	11,800	20,000	1.31	F
54	Service H0	SB 33	Ward Ave	9,400	2	1,400	3,800	6,800 6,800	11,800	20,000	0.47	D D
56	Standiford Ave	Dale Rd	Prescott Rd	37,600	4	10.080	16.920	23,760	28,440	36.000	1.04	F
57	Standiford Ave	Prescott Rd	Oakdale Rd	36,000	4	10,080	16,920	23,760	28,440	36,000	1.00	E
58	Sylvan Rd	Roselle Ave	Claus Rd	27,000	2	1,400	3,800	6,800	11,800	20,000	1.35	F
59	Taylor Rd	Berkeley Ave	Geer Rd	9,700	2	700	1,900	3,400	5,900	10,000	0.97	E
60	Laylor Rd Tully Bd	Golden State Blvd	SK 99 Pelandale Ave	22,800	2	700	1,900	3,400	5,900	10,000	2.28	F
62	Tully Rd	Pelandale Ave	Modesto GP Boundary	16,400	2	1,400	3.800	6.800	11.800	20,000	0.75	E
63	W. Main St	Tegner Rd	Walnut Rd	18,900	2	1,400	3,800	6,800	11,800	20,000	0.95	E
64	Washington Rd	Linwood Ave	Monte Vista Ave	3,200	2	1,400	3,800	6,800	11,800	20,000	0.16	В
65	Whitmore Ave	Ustick Rd	Morgan Rd	15,900	2	1,400	3,800	6,800	11,800	20,000	0.80	E
66 67	whitmore Ave	Mountain View Pd	Faith Home Rd	10,700	2	1,400	3,800	6,800	11,800	20,000	0.54	D
68	I-5	Merced Co. Line	Sana re Ave	51,300	4	25.600	40,800	60,000	73,600	80,000	0.43	C
69	1-5	Stuhr Rd	Fink Rd	53,100	4	25,600	40,800	60,000	73,600	80,000	0.66	C
70	I-5	Fink Rd	Sperry Ave	59,700	4	25,600	40,800	60,000	73,600	80,000	0.75	С
71	1-5	Sperry Ave	Westley Rest Area	62,600	4	25,600	40,800	60,000	73,600	80,000	0.78	D
72	I-5 SP 4	westley Kest Area	San Joaquin Co. Line	57,900	4	25,600	40,800	60,000	/3,600	80,000	0.72	C C
74	SR 4	Milton Rd	Calaveras Co Line	7 100	2	1,400	3,800	6 800	11 800	20,000	0.33	D
75	SR 33 (N St)	Merced Co. Line	North of Newman	14,900	2	1,400	3,800	6,800	11,800	20,000	0.75	E
76	SR 33	North of Newman	Crows Landing Rd	11,900	2	1,400	3,800	6,800	11,800	20,000	0.60	E

	TABLE D-2 ROADWAY SEGMENT LEVEL OF SERVICE - YEAR 2035 NO PROJECT CONDITIONS												
		Sec		Number			Service Th	resholds <sup>2</sup>					
ID	Roadway	From	То		of Lanes	Α	B	C	D	Е	V/C	LOS	
77	SB 33	Crows Landing Bd	Poppy Ave	8 700	2	1 400	3 800	6 800	11 800	20 000	0 44	D	
78	SR 33 (2nd St)	Poppy Ave	M Street	9,100	4	10.080	16.920	23,760	28,440	36.000	0.25	A	
79	SR 33	Ward Ave	Westley	11,700	2	1,400	3,800	6,800	11,800	20,000	0.59	D	
80	SR 99	Merced Co. Line	SR 165	96,900	6	36,000	60,000	84,000	100,800	120,000	0.81	D	
81	SR 99	SR 165	W. Main St	110,900	6	36,000	60,000	84,000	100,800	120,000	0.92	E	
82	SR 99	W. Main St	Fulkerth Rd	122,700	6	36,000	60,000	84,000	100,800	120,000	1.02	F	
83	SR 99	Fulkerth Rd	Monte Vista Ave	122,200	6	36,000	60,000	84,000	100,800	120,000	1.02	F	
84	SR 99	Monte Vista Ave	Taylor Rd	153,900	6	36,000	60,000	84,000	100,800	120,000	1.28	F	
85	SR 99	Taylor Rd	Mitchell Rd	139,400	6	36,000	60,000	84,000	100,800	120,000	1.16	F	
86	SR 99	Mitchell Rd	Whitmore Ave	159,100	6	36,000	60,000	84,000	100,800	120,000	1.33	F	
87	SR 99	Whitmore Ave	Hatch Rd	153,500	6	36,000	60,000	84,000	100,800	120,000	1.28	F	
88	SR 99	Hatch Rd	Crows Landing Rd	152,900	6	36,000	60,000	84,000	100,800	120,000	1.27	F	
89	SR 99	Crows Landing Rd	H St	160,800	6	36,000	60,000	84,000	100,800	120,000	1.34	F	
90	SR 99	H St	SR 132	1/1,000	6	36,000	60,000	84,000	100,800	120,000	1.43	F	
91	SR 99	SR 132	Ransas Ave	166,000	6	36,000	60,000	84,000	100,800	120,000	1.30		
92	SR 00	Riggsmore Ave	Bockwith Bd	132 100	6	36,000	60,000	84,000	100,000	120,000	1.39	F	
94	SR 99	Beckwith Bd	Pelandale Ave	140,300	6	36,000	60,000	84 000	100,000	120,000	1.10	F	
95	SB 99	Pelandale Ave	SB 219 (Kiernan Ave)	157 700	6	36,000	60,000	84 000	100,000	120,000	1.31	F	
96	SR 99	SB 219 (Kiernan Ave)	San Joaquin Co. Line	149,400	6	36.000	60.000	84.000	100,800	120,000	1.25	F	
97	SR 108 (Needham St)	K St	McHenry Ave	33,100	4	10.080	16,920	23,760	28,440	36.000	0.92	E	
98	SR 108 (EB - K St)	9th St	Needham St	8,300	3	7,560	12,690	17,820	21,330	27,000	0.31	B	
99	SR 108 (WB - L St)	Needham St	9th St	7,800	3	7,560	12,690	17,820	21,330	27,000	0.29	В	
100	SR 108 (Needham St)	L St	McHenry Ave	18,300	4	10,080	16,920	23,760	28,440	36,000	0.51	С	
101	SR 108 (McHenry Ave)	Needham St	Briggsmore Ave	47,900	4	10,080	16,920	23,760	28,440	36,000	1.33	F	
102	SR 108 (McHenry Ave)	Briggsmore Ave	Coralwood Rd	51,000	6	15,120	25,380	35,640	42,660	54,000	0.94	E	
103	SR 108 (McHenry Ave)	Coralwood Rd	SR 219 (Kiernan Ave)	38,200	4	10,080	16,920	23,760	28,440	36,000	1.06	F	
104	SR 108 (McHenry Ave)	SR 219 (Kiernan Ave)	Ladd Rd	22,000	2	1,400	3,800	6,800	11,800	20,000	1.10	F	
105	SR 108 (Patterson Rd)	McHenry Ave	Coffee Rd	32,700	2	1,400	3,800	6,800	11,800	20,000	1.64	F	
106	SR 108 (Patterson Rd)	Coffee Rd	Oakdale Rd	31,000	2	1,400	3,800	6,800	11,800	20,000	1.55	F	
107	SR 108 SR 108 (Atobioon St)	Uakdale Rd	FIRST St	25,500	2	1,400	3,800	6,800	11,800	20,000	1.28	F	
108	SR 108 (Alchison SI)	FIISL SL Claus Pd	Villowood Dr	28,100	2	1,400	3,800	6,800	11,800	20,000	1.41		
110	SR 108 (F St)	Willowood Dr	SB 120 (Vocemite Ave)	23,800	2	1,400	3,800	6,800	11,800	20,000	1.19	F	
111	SR 120	San Joaquin Co. Line	Valley Home Bd	29 900	2	1 400	3,800	6,800	11,800	20,000	1.00	F	
112	SB 120	Valley Home Bd	Stanislaus Biver	33 700	2	1 400	3,800	6,800	11,800	20,000	1.69	F	
113	SR 120 (Yosemite Ave)	Stanislaus River	A St	26,400	3	7,560	12.690	17.820	21,330	27.000	0.98	Ē	
114	SR 120 (Yosemite Ave)	A St	SR 108 (F St)	31,300	4	10,080	16,920	23,760	28,440	36,000	0.87	E	
115	SR 120 (F St)	SR 108	Maag Rd	24,400	4	10,080	16,920	23,760	28,440	36,000	0.68	D	
116	SR 120 (F St)	Maag Rd	Stearns Rd	19,400	2	1,400	3,800	6,800	11,800	20,000	0.97	E	
117	SR 120	Stearns Rd	Dillwood Rd	20,000	2	1,400	3,800	6,800	11,800	20,000	1.00	Е	
118	SR 120	Dillwood Rd	Orange Blossom Rd	23,200	2	1,400	3,800	6,800	11,800	20,000	1.16	F	
119	SR 120	Orange Blossom Rd	Lancaster Rd	22,800	2	1,400	3,800	6,800	11,800	20,000	1.14	F	
120	SR 120	Lancaster Rd	Kennedy Rd	15,900	2	1,400	3,800	6,800	11,800	20,000	0.80	E	
121	SR 120	Kennedy Rd	Tuolumne Co. Line	17,900	2	1,400	3,800	6,800	11,800	20,000	0.90	E	
122	SR 132	San Joaquin Co. Line	Carpenter Rd	20,700	2	1,400	3,800	6,800	11,800	20,000	1.04	F	
123	SR 132 (Maze Blvd)	Carpenter Rd	SR 99	19,900	2	1,400	3,800	6,800	11,800	20,000	1.00	E	
124	SR 132 (L SI)	SR 99	9th St	19,000	4	10,080	10,920	23,760	28,440	36,000	0.53		
120	SR 132 (9(1) SI)	L SI Oth St/D St		24,900	4	10,080	16,920	23,760	28,440	36,000	0.69	D	
120	SP 132 (Vacamita Plud)		La Loma Ave	20,700	4	10,000	16,920	23,760	20,440	36,000	0.56	C	
127	SR 132 (Vosemite Blvd)	Riverside Dr	Claus Bd	23,800	4	1 400	3 800	6 800	11 800	20,000	1 19	F	
129	SB 132 (Yosemite Blvd)	Claus Bd	Santa Fe Ave	13 700	2	1,400	3 800	6 800	11,800	20,000	0.69	Ē	
130	SR 132 (Yosemite Blvd)	Santa Fe Ave	Root Rd	9,500	2	1,400	3,800	6,800	11.800	20,000	0.48	P	
131	SR 132 (Yosemite Blvd)	Root Rd	Geer-Albers Rd	11,600	2	1,400	3,800	6,800	11,800	20,000	0.58	D	
132	SR 132	Hickman Rd	Roberts Ferry Rd	5,300	2	1,400	3,800	6,800	11,800	20,000	0.27	C	
133	SR 132	Roberts Ferry Rd	La Grange Rd	2,600	2	1,400	3,800	6,800	11,800	20,000	0.13	В	
134	SR 132	La Grange Rd	Tuolumne Co. Line	2,100	2	1,400	3,800	6,800	11,800	20,000	0.11	В	
135	SR 165 (Lander Ave)	SR 99	Merced Co. Line	21 <u>,</u> 800	2	1,400	3,800	6,800	11 <u>,</u> 800	20,000	1.09	F	
136	SR 219 (Kiernan Ave)	SR 99	Sisk Rd	44,300	4	10,080	16,920	23,760	28,440	36,000	1.23	F	
137	SR 219 (Kiernan Ave)	Sisk Rd	Stoddard Rd	25,900	4	10,080	16,920	23,760	28,440	36,000	0.72	D	
138	SR 219 (Kiernan Ave)	Stoddard Rd	SR 108 (McHenry Ave)	16,200	2	1,400	3,800	6,800	11,800	20,000	0.81	E	

Notes:<sup>1</sup> Average Daily Traffic

<sup>2</sup> Level of Service (LOS) based on Stanislaus County General Plan thresholds derived from the Highway Capacity Manual (Transportation Research Board, 2000) shown in Appendix C. Bold font and gray shading indicates unacceptable roadway operations based on the operating jurisdiction's LOS standard, per the local General Plans and Caltrans Transportation Concept Reports

Tan shading indicates a roadway segment with estimated base year traffic volume; base year count data not available.
TABLE D-3 ROADWAY SEGMENT LEVEL OF SERVICE - YEAR 2035 PLUS PROJECT CONDITIONS												
ID	Boadway	Seg	ment To		Number	Δ	Level of S	Service Thi	resholds <sup>2</sup>	F	V/C	1.05
1	7th Street	Morgan Rd	K Street	18,200	2	1.400	3.800	6.800	11.800	20.000	0.91	E
2	9th Street	Carpenter Rd	River Rd	35,000	4	10,080	16,920	23,760	28,440	36,000	0.97	E
3	Bangs Ave	Dale Rd	SR 108 (McHenry Ave)	7,200	2	700	1,900	3,400	5,900	10,000	0.72	E
4	Beckwith Rd	SR 99	Modesto GP Boundary	24,200	4	10,080	16,920	23,760	28,440	36,000	0.67	D
5	Blue Gum Ave Briggsmore Ave	Poust Ro Sisk Bd	Rosemore Ave	20,400	4	10,080	30,000	42 000	28,440	36,000	0.57	F
7	Briggsmore Ave	Oakdale Rd	Roselle Ave	37,300	4	15,000	25,000	35,000	42,000	50,000	0.30	D
8	Briggsmore Ave	Roselle Ave	Claus Rd	28,300	4	15,000	25,000	35,000	42,000	50,000	0.57	С
9	Briggsmore Ave	Claus Rd	Modesto GP Boundary	11,200	6	15,120	25,380	35,640	42,660	54,000	0.21	A
10	Carpenter Rd	SR 99	Maze Blvd	37,300	4	10,080	16,920	23,760	28,440	36,000	1.04	F
11	Carpenter Rd	Maze BIVO Paradise Bd	Paradise Rd Hatch Bd	23,000	2	1,400	3,800	6,800	11,800	20,000	1.15	F
13	Central Avenue	Whitmore Ave	Gravson Rd	7.100	4	10,000	16.920	23.760	28.440	36.000	0.00	A
14	Christofferson Pkwy	Berkeley Ave	Geer Rd	23,500	4	12,000	20,000	28,000	33,600	40,000	0.59	С
15	Claratina Ave	SR 108 (McHenry Ave)	Coffee Rd	45,700	6	22,500	37,500	52,500	63,000	75,000	0.61	С
16	Claribel Rd	SR 108 (McHenry Ave)	Oakdale Rd	27,400	4	10,080	16,920	23,760	28,440	36,000	0.76	D
1/	Claus Ro Coffee Bd	Mable Bd	Claribel Bd	25 900	0 2	27,000	45,000	6 800	11 800	20,000	1.30	F
19	Crows Landing Rd	7th Street	SR 99	11,300	6	15,120	25,380	35,640	42,660	54,000	0.21	A
20	Crows Landing Rd	SR 99	Whitmore Ave	28,700	6	15,120	25,380	35,640	42,660	54,000	0.53	С
21	Crows Landing Rd	Service Rd	Grayson Rd	13,900	2	1,400	3,800	6,800	11,800	20,000	0.70	E
22	Dakota Ave	North Ave	Salida Blvd	14,600	2	1,400	3,800	6,800	11,800	20,000	0.73	E
23	Dale Rd	Standiford Ave	SB 219 (Kiernan Ave)	32,100	6	15,120	25,380	35,640	42,660	54,000 54,000	0.59	0
25	East Ave	Santa Fe Ave	Turlock City Limit	8.300	2	1.400	3.800	6.800	11.800	20.000	0.30	D
26	El Vista Ave	Briggsmore Ave	Yosemite Blvd	40,600	4	10,080	16,920	23,760	28,440	36,000	1.13	F
27	Faith Home Rd	Grayson Rd	N of River Xing	6,400	2	1,400	3,800	6,800	11,800	20,000	0.32	С
28	Fulkerth Rd	Dianne Rd	SR 99	11,500	4	10,080	16,920	23,760	28,440	36,000	0.32	B
29	Golden State Blvd	West Main St	Berkeley Ave	10,200	4	12,000	20,000	28,000	33,600	40,000	0.26	A
31	Hatch Rd	Carpenter Rd	Crows Landing Rd	11.500	2	1.400	3.800	6.800	11.800	20.000	0.13	D
32	Hatch Rd	Crows Landing Rd	SR 99	18,500	2	1,400	3,800	6,800	11,800	20,000	0.93	E
33	Hatch Rd	SR 99	Mitchell Rd	27,200	4	10,080	16,920	23,760	28,440	36,000	0.76	D
34	Hatch Rd	Mitchell Rd	Santa Fe Ave	13,600	2	1,400	3,800	6,800	11,800	20,000	0.68	E
35	Hatch Rd Koves Bd	Santa Fe Ave	Geer Rd	15,400	2	1,400	3,800	6,800	11,800	20,000	0.77	<u>Е</u> р
37	Mitchell Rd	Yosemite Blvd	Modesto GP Boundary	35.400	6	15.120	25.380	35.640	42.660	54.000	0.66	C
38	Mitchell Rd	Service Rd	SR 99	30,900	6	15,120	25,380	35,640	42,660	54,000	0.57	С
39	Monte Vista Ave	Olive Ave	Berkeley Ave	17,500	4	10,080	16,920	23,760	28,440	36,000	0.49	С
40	Morgan Rd	7th Street	Grayson Rd	11,600	4	10,080	16,920	23,760	28,440	36,000	0.32	B
41	Oakdale Rd Oakdale Rd	Claribel Rd	Sylvan Ave	38 200	2	1,400	25 380	6,800 35,640	42 660	20,000	0.78	D
43	Oakdale Rd	Svlvan Ave	Flovd Ave	48.400	6	15,120	25,380	35.640	42.660	54.000	0.90	E
44	Oakdale Rd	Floyd Ave	Briggsmore Ave	51,400	6	15,120	25,380	35,640	42,660	54,000	0.95	E
45	Olive Ave	Canal Dr	Wayside Rd	11,500	4	10,080	16,920	23,760	28,440	36,000	0.32	В
46	Paradise Rd	Sutter Ave	Carpenter Rd	25,600	4	10,080	16,920	23,760	28,440	36,000	0.71	D
47	Paradise Rd Prescott Rd	Carpenter Rd Briggsmore Ave	Modesto GP Boundary	15,200	2	1,400	3,800	0,800	28.440	20,000	0.76	D
49	Roselle Ave	Flovd Ave	Claribel Rd	15.500	4	10,080	16,920	23,760	28,440	36.000	0.43	B
50	Rosemore Ave	Kansas Ave	Blue Gum Ave	5,800	2	700	1,900	3,400	5,900	10,000	0.58	D
51	Santa Fe Ave	Hatch Rd	7th Street	13,400	2	1,400	3,800	6,800	11,800	20,000	0.67	E
52	Scenic Drive	Rose Ave	Oakdale Rd	35,700	4	10,080	16,920	23,760	28,440	36,000	0.99	E
53 54	Service Bd	Central Ave	Mitchell Rd	29,100 12 700	4	12 000	20 000	23,760	∠8,440 33 600	30,000 40,000	0.81	B
55	Sperry Ave	SR 33	Ward Ave	12,300	4	10,080	16,920	23,760	28,440	36,000	0.34	B
56	Standiford Ave	Dale Rd	Prescott Rd	37,600	6	15,120	25,380	35,640	42,660	54,000	0.70	D
57	Standiford Ave	Prescott Rd	Oakdale Rd	36,600	4	10,080	16,920	23,760	28,440	36,000	1.02	F
58	Sylvan Rd	Roselle Ave	Claus Rd	28,900	4	10,080	16,920	23,760	28,440	36,000	0.80	E
59 60	Taylor Ru Taylor Bd	Golden State Blvd	SB 99	9,800 33,400	2	10.080	16 920	3,400	28 440	36,000	0.98	F
61	Tully Rd	Standiford Ave	Pelandale Ave	23.600	4	10,080	16,920	23,760	28,440	36.000	0.66	C
62	Tully Rd	Pelandale Ave	Modesto GP Boundary	15,300	2	1,400	3,800	6,800	11,800	20,000	0.77	E
63	W. Main St	Tegner Rd	Walnut Rd	16,700	6	15,120	25,380	35,640	42,660	54,000	0.31	В
64	Washington Rd	Linwood Ave	Monte Vista Ave	7,500	4	12,000	20,000	28,000	33,600	40,000	0.19	A
66		Uslick Ka Mitchell Rd	Iviorgan Ro Faith Home Rd	12 500	4	10,080	16,920	23,760	28,440	36,000	0.46	R
67	Whitmore Ave	Mountain View Rd	Santa Fe Ave	8,700	2	1,400	3.800	6.800	11,800	20.000	0.44	D
68	I-5	Merced Co. Line	Stuhr Rd	51,300	4	25,600	40,800	60,000	73,600	80,000	0.64	С
69	I-5	Stuhr Rd	Fink Rd	51,800	4	25,600	40,800	60,000	73,600	80,000	0.65	С
70	1-5	Fink Rd	Sperry Ave	58,500	4	25,600	40,800	60,000	73,600	80,000	0.73	С
/1 72	I-5 I-5	Sperry Ave	San Joaquin Co. Lino	60,700 57 700	4	25,600	40,800	60,000	73,600	80,000	0.76	0
73	SR 4	San Joaquin Co Tine	Milton Rd	6.500	4	1.400	3.800	6.800	11.800	20.000	0.33	C
74	SR 4	Milton Rd	Calaveras Co. Line	7,100	2	1,400	3,800	6,800	11,800	20,000	0.36	D
75	SR 33 (N St)	Merced Co. Line	North of Newman	17,800	2	1,400	3,800	6,800	11,800	20,000	0.89	E
76	SR 33	North of Newman	Crows Landing Rd	13,600	2	1,400	3,800	6,800	11,800	20,000	0.68	E

	TABLE D-3 ROADWAY SEGMENT LEVEL OF SERVICE - YEAR 2035 PLUS PROJECT CONDITIONS											
		Seg	ment		Number		Level of S	Service Th	resholds <sup>2</sup>			
ID	Roadway	From	То	ADT <sup>1</sup>	of Lanes	Α	В	С	D	E	V/C	LOS
77	SR 33	Crows Landing Rd	Poppy Ave	7,400	2	1,400	3,800	6,800	11,800	20,000	0.37	D
78	SR 33 (2nd St)	Poppy Ave Ward Ave	Westley	7,800	4	10,080	3 800	6 800	28,440	36,000	0.22	A
80	SR 99	Merced Co. Line	SB 165	97 300	6	36,000	60,000	84 000	100 800	120,000	0.30	D
81	SR 99	SR 165	W. Main St	113.100	6	36.000	60.000	84.000	100,800	120,000	0.94	E
82	SR 99	W. Main St	Fulkerth Rd	124,100	6	36,000	60,000	84,000	100,800	120,000	1.03	F
83	SR 99	Fulkerth Rd	Monte Vista Ave	119,700	6	36,000	60,000	84,000	100,800	120,000	1.00	E
84	SR 99	Monte Vista Ave	Taylor Rd	147,900	6	36,000	60,000	84,000	100,800	120,000	1.23	F
85	SR 99	Taylor Rd	Mitchell Rd	146,000	6	36,000	60,000	84,000	100,800	120,000	1.22	F
86	SR 99	Mitchell Rd	Whitmore Ave	1/0,000	8	48,000	80,000	112,000	134,400	160,000	1.06	F
8/	SR 99 SR 99	Hatch Bd	Crows Landing Bd	167,700	8 8	48,000	80,000	112,000	134,400	160,000	1.04	F
89	SR 99	Crows Landing Rd	H St	172 900	8	48,000	80,000	112,000	134,400	160,000	1.05	F
90	SR 99	H St	SB 132	183,600	8	48.000	80.000	112,000	134,400	160,000	1.15	F
91	SR 99	SR 132	Kansas Ave	175,100	8	48,000	80,000	112,000	134,400	160,000	1.09	F
92	SR 99	Kansas Ave	Briggsmore Ave	188,600	8	48,000	80,000	112,000	134,400	160,000	1.18	F
93	SR 99	Briggsmore Ave	Beckwith Rd	158,200	8	48,000	80,000	112,000	134,400	160,000	0.99	E
94	SR 99	Beckwith Rd	Pelandale Ave	150,500	8	48,000	80,000	112,000	134,400	160,000	0.94	E
95	SR 99	Pelandale Ave	SR 219 (Kiernan Ave)	179,100	8	48,000	80,000	112,000	134,400	160,000	1.12	F
96	SR 99	SR 219 (Kiernan Ave)	San Joaquin Co. Line	170,300	8	48,000	80,000	112,000	134,400	160,000	1.06	F
97	SR 108 (Needham St)	K St	McHenry Ave	31,800	4	10,080	16,920	23,760	28,440	36,000	0.88	E A
90	SR 100 (ED - K SI)	9til St Needham St	Oth St	5,000	3	7,560	12,090	17,020	21,330	27,000	0.21	A
100	SR 108 (Needham St)	I St	McHenry Ave	19,200	4	10.080	16 920	23 760	28,440	36,000	0.19	C C
101	SR 108 (McHenry Ave)	Needham St	Briggsmore Ave	47.800	4	10,080	16,920	23,760	28,440	36.000	1.33	F
102	SR 108 (McHenry Ave)	Briggsmore Ave	Coralwood Rd	50,500	6	15.120	25.380	35.640	42.660	54.000	0.94	E
103	SR 108 (McHenry Ave)	Coralwood Rd	SR 219 (Kiernan Ave)	46,300	6	15,120	25,380	35,640	42,660	54,000	0.86	E
104	SR 108 (McHenry Ave)	SR 219 (Kiernan Ave)	Ladd Rd	24,300	2	1,400	3,800	6,800	11,800	20,000	1.22	F
105	SR 108 (Patterson Rd)	McHenry Ave	Coffee Rd	29,300	2	1,400	3,800	6,800	11,800	20,000	1.47	F
106	SR 108 (Patterson Rd)	Coffee Rd	Oakdale Rd	29,200	2	1,400	3,800	6,800	11,800	20,000	1.46	F
107	SR 108	Oakdale Rd	First St	24,000	2	1,400	3,800	6,800	11,800	20,000	1.20	F
108	SR 108 (Atchison St)	FIRST ST Claus Rd	Claus Rd Willowood Dr	24,900	2	1,400	3,800	6,800	11,800	20,000	1.25	F
110	SR 108 (F St)	Willowood Dr	SB 120 (Vosemite Ave)	31 700	2	1,400	3,800	6,800	11,800	20,000	1.00	F
111	SR 120	San Joaquin Co Line	Valley Home Bd	29,200	2	1 400	3,800	6 800	11,800	20,000	1.55	F
112	SR 120	Vallev Home Rd	Stanislaus River	31.800	2	1,400	3.800	6.800	11.800	20.000	1.59	F
113	SR 120 (Yosemite Ave)	Stanislaus River	A St	25,800	3	7,560	12,690	17,820	21,330	27,000	0.96	E
114	SR 120 (Yosemite Ave)	A St	SR 108 (F St)	30,200	4	10,080	16,920	23,760	28,440	36,000	0.84	E
115	SR 120 (F St)	SR 108	Maag Rd	23,500	4	10,080	16,920	23,760	28,440	36,000	0.65	С
116	SR 120 (F St)	Maag Rd	Stearns Rd	19,100	4	10,080	16,920	23,760	28,440	36,000	0.53	С
117	SR 120	Stearns Rd	Dillwood Rd	19,100	2	1,400	3,800	6,800	11,800	20,000	0.96	E
118	SR 120	Dillwood Rd	Orange Blossom Rd	22,000	2	1,400	3,800	6,800	11,800	20,000	1.10	
120	SR 120	Lancaster Bd	Kennedy Bd	21,100	2	1,400	3,000	6,800	11,000	20,000	0.84	F
121	SR 120	Kennedy Rd	Tuolumne Co. Line	17,900	2	1 400	3,800	6 800	11,800	20,000	0.90	E
122	SR 132	San Joaquin Co. Line	Carpenter Rd	21,200	2	1,400	3,800	6,800	11,800	20,000	1.06	F
123	SR 132 (Maze Blvd)	Carpenter Rd	SR 99	14,200	2	1,400	3,800	6,800	11,800	20,000	0.71	E
124	SR 132 (L St)	SR 99	9th St	13,200	4	10,080	16,920	23,760	28,440	36,000	0.37	В
125	SR 132 (9th St)	L St	D St	18,000	4	10,080	16,920	23,760	28,440	36,000	0.50	С
126	SR 132	9th St/D St	La Loma Ave	21,000	4	10,080	16,920	23,760	28,440	36,000	0.58	C
127	SR 132 (Yosemite Blvd)	La Loma Ave	Riverside Dr	21,200	4	10,080	16,920	23,760	28,440	36,000	0.59	C
128	SR 132 (Yosemite Blvd) SR 132 (Vosemite Blvd)	Riverside Dr	Claus Ro Santa Eo Avo	21,100	2	1,400	3,800	6,800	11,800	20,000	1.06	F
130	SR 132 (Yosemite Blvd)	Santa Fe Ave	Boot Rd	9 200	2	1 400	3 800	6 800	11 800	20,000	0.02	D
131	SR 132 (Yosemite Blvd)	Root Rd	Geer-Albers Rd	10,400	2	1,400	3,800	6.800	11,800	20,000	0.52	D
132	SR 132	Hickman Rd	Roberts Ferry Rd	4,500	2	1,400	3,800	6,800	11,800	20,000	0.23	C
133	SR 132	Roberts Ferry Rd	La Grange Rd	2,600	2	1,400	3,800	6,800	11,800	20,000	0.13	В
134	SR 132	La Grange Rd	Tuolumne Co. Line	2,100	2	1,400	3,800	6,800	11,800	20,000	0.11	В
135	SR 165 (Lander Ave)	SR 99	Merced Co. Line	23,900	2	1,400	3,800	6,800	11,800	20,000	1.20	F
136	SR 219 (Kiernan Ave)	SR 99	Sisk Rd	36,200	6	15,120	25,380	35,640	42,660	54,000	0.67	D
137	SH 219 (Kiernan Ave)	Sisk Rd	Stoddard Rd	24,300	4	10,080	16,920	23,760	28,440	36,000	0.68	D
138	Claratina Ave	Siuddard Hd	SH 108 (MicHenry Ave)	24,500	4	15,000	25,000	35,000	42,000	50,000	0.49	В В
140	Claratina Ave	Oakdale Bd	Boselle Ave	32 500	6	15 120	25,380	35 640	42 660	54 000	0.55	C
141	North County Corridor	McHenry Ave	SR 108/120	20,700	4	18,000	30,000	42,000	50,400	60,000	0.35	В
142	SR 132	SR 99	Dakota Ave	30,100	4	18,000	30,000	42,000	50,400	60,000	0.50	Ċ
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Notes: 1 Average Daily Traffic

<sup>2</sup> Level of Service (LOS) based on Stanislaus County General Plan thresholds derived from the Highway Capacity Manual (Transportation Research Board, 2000) shown in Appendix C. **Bold** font and gray shading indicates unacceptable roadway operations based on the operating jurisdiction's LOS standard, per the local General Plans and Caltrans Transportation Concept Reports

Tan shading indicates a roadway segment with estimated base year traffic volume; base year count data not available.

Yellow shading indicates a new roadway facility included in the 2011 RTP.

Green shading indicates a capacity enhancement per the 2011 RTP project list.

TABLE D-4 ROADWAY SEGMENT LEVEL OF SERVICE SUMMARY													
		Seg	ment	Number of Lanes 2006					2035 No I	Project <sup>1</sup>	2035 Plus Project <sup>2</sup>		
ID	Roadway	From	То	2006	2035 NP <sup>1</sup>	2035 PP <sup>2</sup>	ADT <sup>3</sup>	LOS <sup>4</sup>	ADT	LOS	ADT	LOS	
1	7th Street	Morgan Rd	K Street	2	2	2	17,200	E	21,100	F	18,200	E	
2	9th Street	Carpenter Rd	River Rd	4	4	4	24,000	D	41,500	F	35,000	E	
3	Bangs Ave	Dale Rd	SR 108 (McHenry Ave)	2	2	2	6,200	E	9,800		7,200	E	
4	Beckwilli Ro Blue Gum Ave	Poust Bd	Rosemore Ave	2	2	4	9,000	F	20,900	 	24,200	C	
6	Briggsmore Ave	Sisk Rd	Oakdale Rd	4	4	6	46,000	F	46,000	F	59,000	E	
7	Briggsmore Ave	Oakdale Rd	Roselle Ave	2	4	4	27,000	F	38,700	D	37,300	D	
8	Briggsmore Ave	Roselle Ave	Claus Rd	2	4	4	16,850	E	28,800	С	28,300	С	
9	Briggsmore Ave	Claus Rd	Modesto GP Boundary	4	4	6	11,230	B	22,500	C	11,200	A	
10	Carpenter Rd	SR 99 Maze Blvd	Paradise Bd	4	4	4	17 200	F	21,300	F	23,000	F	
12	Carpenter Rd	Paradise Rd	Hatch Rd	2	2	6	17,350	E	30,200	F	35,900	C	
13	Central Avenue	Whitmore Ave	Grayson Rd	2	2	4	3,849	С	8,000	D	7,100	Α	
14	Christofferson Pkwy	Berkeley Ave	Geer Rd	4	4	4	10,300	A	23,900	С	23,500	С	
15	Claratina Ave	SR 108 (McHenry Ave)	Coffee Rd	2	2	6	12,250	E	19,300	<u> </u>	45,700	C	
16	Claribel Rd	SR 108 (McHenry Ave)	Oakdale Rd	2	2	4	12,500	E	22,000	F	27,400	D	
18	Coffee Bd	Mable Rd	Claribel Rd	2	2	2	20 700	F	28,000	 F	25,900	F	
19	Crows Landing Rd	7th Street	SR 99	2	2	6	8.000	D	8,600	D	11,300	A	
20	Crows Landing Rd	SR 99	Whitmore Ave	4	4	6	24,000	D	27,900	D	28,700	С	
21	Crows Landing Rd	Service Rd	Grayson Rd	2	2	2	8,430	D	10,600	D	13,900	E	
22	Dakota Ave	North Ave	Salida Blvd	2	2	2	5,488	C	24,000	F	14,600	E	
23	Dale Rd	Standiford Ave	Pelandale Ave	4	4	6	21,700	C	28,000	D	32,100	C	
24	Dale Ko Fast Ave	Santa Fe Ave	SH 219 (Klernan Ave)	4 2	4	6	6400	С В	23,400		28,400		
26	El Vista Ave	Briggsmore Ave	Yosemite Blvd	4	4	4	33.000	E	41.700	F	40.600	F	
27	Faith Home Rd	Grayson Rd	N of River Xing	2	2	2	3,600	B	5,100	C	6,400	C	
28	Fulkerth Rd	Dianne Rd	SR 99	4	4	4	7,660	Α	16,900	В	11,500	В	
29	Golden State Blvd	West Main St	Berkeley Ave	4	4	4	10,200	Α	10,200	А	10,200	А	
30	Grayson Rd	Ustick Rd	Mitchell Rd	2	2	4	3,064	В	5,300	C	4,800	A	
31	Hatch Rd	Carpenter Rd	Crows Landing Rd	2	2	2	10,140	D	13,500	E	11,500	D	
32	Hatch Rd	Crows Landing Rd	SK 99 Mitchell Bd	2	2	2	24 000	D	18,700	E	18,500	E D	
34	Hatch Rd	Mitchell Bd	Santa Fe Ave	2	2	2	10 050	D	14 600		13 600	E	
35	Hatch Rd	Santa Fe Ave	Geer Rd	2	2	2	9,560	D	16,500	E	15,400	E	
36	Keyes Rd	Faith Home Rd	SR 99	2	2	2	7,600	D	13,900	E	10,100	D	
37	Mitchell Rd	Yosemite Blvd	Modesto GP Boundary	4	4	6	23,100	С	27,100	D	30,900	С	
38	Mitchell Rd	Service Rd	SR 99	4	4	6	24,000	D	27,000	D	35,400	C	
39	Monte Vista Ave	Olive Ave	Berkeley Ave	2	2	4	11,240	D	14,700	<u> </u>	17,500	C	
40	Norgan Ru Oakdale Bd	Claribel Bd	Claratina Ave	2	2	4	11,000	D	19,800	 F	15 500	F	
42	Oakdale Rd	Claratina Ave	Svlvan Ave	3	3	6	23.000	E	32,100	 F	38.200	 D	
43	Oakdale Rd	Sylvan Ave	Floyd Ave	4	4	6	32,203	E	44,000	F	48,400	E	
44	Oakdale Rd	Floyd Ave	Briggsmore Ave	5	5	6	37,280	E	46,400	F	51,400	E	
45	Olive Ave	Canal Dr	Wayside Rd	2	2	4	8,810	D	11,000	D	11,500	В	
46	Paradise Rd	Sutter Ave	Carpenter Rd	2	2	4	13,000	E	14,400		25,600	D	
47 48	Prescott Rd		Modesto GP Boundary	2 4	2 4	2 4	24 000	ם	29 600	F	24 000		
49	Roselle Ave	Floyd Ave	Claribel Rd	2	2	4	8.000	D	16.400	E	15.500	B	
50	Rosemore Ave	Kansas Ave	Blue Gum Ave	2	2	2	3,412	D	5,800	D	5,800	D	
51	Santa Fe Ave	Hatch Rd	7th Street	2	2	2	8,100	D	13,900	E	13,400	E	
52	Scenic Drive	Rose Ave	Oakdale Rd	4	4	4	30,000	E	41,100	F	35,700	E	
53	Scenic Drive	Oakdale Rd	Claus Hd	2	2	4	19,200	E	26,100	F	29,100	E	
55 55	Sperry Ave	SB 33	Ward Ave	2	2	4	9,430	ח	9,400	D	12,700	B	
56	Standiford Ave	Dale Rd	Prescott Rd	4	4	6	34.400	E	37.600	F	37.600	D	
57	Standiford Ave	Prescott Rd	Oakdale Rd	4	4	4	36,000	E	36,000	E	36,600	F	
58	Sylvan Rd	Roselle Ave	Claus Rd	2	2	4	16,340	E	27,000	F	28,900	E	
59	Taylor Rd	Berkeley Ave	Geer Rd	2	2	2	8,000	E	9,700	E	9,800	E	
60	Laylor Rd	Golden State Blvd	SR 99	2	2	4	12,000	F	22,800	F	33,400	E	
62	Tully Ra	Pelandale Ave	relatioale AVe	4	4	4	6.025		20,900 16.400	E	23,600	5	
63	W. Main St	Tegner Rd	Walnut Rd	2	2	6	16.080	E	18.900	E	16,700	B	
64	Washington Rd	Linwood Ave	Monte Vista Ave	2	2	4	1,500	B	3,200	B	7,500	A	
65	Whitmore Ave	Ustick Rd	Morgan Rd	2	2	4	12,000	E	15,900	E	16,600	В	
66	Whitmore Ave	Mitchell Rd	Faith Home Rd	2	2	4	6,160	С	10,700	D	12,500	В	
67	Whitmore Ave	Mountain View Rd	Santa Fe Ave	2	2	2	5,700	C	8,500	D	8,700	D	
68	1-5	Nerced Co. Line	Stuhr Hd	4	4	4	39,000	В	51,300	C	51,300	C	
09 70	I-5	Fink Rd		4 4	4	4 4	39,000	D C	53,100 59,700	с С	58 500	U C	
71	I-5	Sperry Ave	Westley Rest Area	4	4	4	44.740	c	62.600	D	60.700	D	
72	I-5	Westley Rest Area	San Joaquin Co. Line	4	4	4	40,858	C	57,900	C	57,700	C	
73	SR 4	San Joaquin Co. Line	Milton Rd	2	2	2	4,850	С	6,500	С	6,500	С	
74	SR 4	Milton Rd	Calaveras Co. Line	2	2	2	5,500	С	7,100	D	7,100	D	
75	SH 33 (N St)	Merced Co. Line	North of Newman	2	2	2	4,139	C	14,900	E	17,800	E	
76	SH 33	North of Newman	Grows Landing Rd	2	2	2	5,042	C	11,900	E	13,600	E	

			ROADWAY SEGMEN	TABLE D	)-4 OF SERVIC	E SUMMA	RY						
		Sea	ment	Number of Lanes 2006					2035 No	Project <sup>1</sup>	2035 Plus Project <sup>2</sup>		
п	Boadway	From	То	2006	2035 NP <sup>1</sup>	2035 PP <sup>2</sup>	ADT <sup>3</sup>	LOS <sup>4</sup>	ADT	LOS	ADT	LOS	
77	SR 33 SR 33 (2nd St)	Crows Landing Rd	Poppy Ave	2	2	2	3,650	B	8,700	D	7,400	D	
79	SR 33	Ward Ave	Westley	2	2	2	5.042	C	11.700	D	10.000	D	
80	SR 99	Merced Co. Line	SR 165	6	6	6	64,000	C	96,900	D	97,300	D	
81	SR 99	SR 165	W. Main St	6	6	6	75,000	C	110,900	Е	113,100	Е	
82	SR 99	W. Main St	Fulkerth Rd	6	6	6	85,000	D	122,700	F	124,100	F	
83	SR 99	Fulkerth Rd	Monte Vista Ave	6	6	6	79,200	С	122,200	F	119,700	E	
84	SR 99	Monte Vista Ave	Taylor Rd	6	6	6	109,000	E	153,900	F	147,900	F	
85	SR 99	Taylor Rd	Mitchell Rd	6	6	6	101,000	E	139,400	F	146,000	F	
86	SR 99	Mitchell Rd	Whitmore Ave	6	6	8	114,833	E	159,100	F	170,000	F	
87	SR 99	Whitmore Ave	Hatch Rd	6	6	8	111,000	E	153,500	F	166,900	F	
88	SR 99	Hatch Rd	Crows Landing Rd	6	6	8	118,500	<u> </u>	152,900	<u> </u>	167,700	F	
89	SR 99	Crows Landing Rd	H St SD 100	6	6	8	124,000		160,800		1/2,900	F	
90	SP 00	П ЭL СР 122	Sh 132 Kansas Avo	6	6	0	122,000		162,000		175 100		
91	SB 00	Sn 132 Kansas Avo	Riggsmore Ave	6	6	0 8	134,000		166,000		188 600	 	
93	SR 99	Briggsmore Ave	Beckwith Bd	6	6	8	114,000	F	132 100	F	158 200	F	
94	SR 99	Beckwith Bd	Pelandale Ave	6	6	8	115,000	E	140,300	F	150,500	E	
95	SR 99	Pelandale Ave	SR 219 (Kiernan Ave)	6	6	8	127.608	F	157.700	F	179,100	F	
96	SR 99	SR 219 (Kiernan Ave)	San Joaquin Co. Line	6	6	8	116,000	Е	149,400	F	170,300	F	
97	SR 108 (Needham St)	K St	McHenry Ave	4	4	4	27,495	D	33,100	E	31,800	E	
98	SR 108 (EB - K St)	9th St	Needham St	3	3	3	5,300	Α	8,300	В	5,800	А	
99	SR 108 (WB - L St)	Needham St	9th St	3	3	3	4,950	А	7,800	В	5,200	Α	
100	SR 108 (Needham St)	L St	McHenry Ave	4	4	4	13,240	В	18,300	С	19,800	С	
101	SR 108 (McHenry Ave)	Needham St	Briggsmore Ave	4	4	4	42,108	F	47,900	F	47,800	F	
102	SR 108 (McHenry Ave)	Briggsmore Ave	Coralwood Rd	6	6	6	41,000	D	51,000	E	50,500	E	
103	SR 108 (McHenry Ave)	Coralwood Rd	SR 219 (Kiernan Ave)	4	4	6	23,618	<u> </u>	38,200	F	46,300	E	
104	SR 108 (McHenry Ave)	SR 219 (Kiernan Ave)	Ladd Rd	2	2	2	17,900	<u> </u>	22,000	F	24,300	F	
105	SR 108 (Patterson Rd)	Nichenry Ave	Cottee Rd	2	2	2	27,000		32,700		29,300	- F	
105	SR 108 (Pallerson Rd)	Collee Ro Oakdala Pd	Cakoale Ro	2	2	2	27,000		31,000		29,200		
107	SR 108 (Atchicon St)	Firet St	Claus Bd	2	2	2	22,000		25,500		24,000	F	
100	SB 108	Claus Bd	Willowood Dr	2	2	2	18,800	F	23,800	F	21 100	F	
110	SB 108 (E St)	Willowood Dr	SB 120 (Yosemite Ave)	2	2	2	27 800		32,500	F	31 700	F	
111	SR 120	San Joaquin Co. Line	Valley Home Rd	2	2	2	28.000	F	29,900	F	29,200	F	
112	SR 120	Valley Home Rd	Stanislaus River	2	2	2	26,073	F	33,700	F	31,800	F	
113	SR 120 (Yosemite Ave)	Stanislaus River	A St	3	3	3	23,171	Е	26,400	Е	25,800	Е	
114	SR 120 (Yosemite Ave)	A St	SR 108 (F St)	4	4	4	28,000	D	31,300	E	30,200	Е	
115	SR 120 (F St)	SR 108	Maag Rd	4	4	4	21,000	С	24,400	D	23,500	С	
116	SR 120 (F St)	Maag Rd	Stearns Rd	2	2	4	19,084	E	19,400	E	19,100	С	
117	SR 120	Stearns Rd	Dillwood Rd	2	2	2	19,084	E	20,000	E	19,100	E	
118	SR 120	Dillwood Rd	Orange Blossom Rd	2	2	2	22,000	F	23,200	F	22,000	F	
119	SR 120	Orange Blossom Rd	Lancaster Rd	2	2	2	21,100	F	22,800		21,100	F	
120	SR 120	Lancasier K0	Tuolumpo Co. Line	2	2	2	14,000	E	17,000	E	17,000	E	
121	SR 132	San Joaquin Co. Lino	Carpenter Rd	2	2	2	12 0/5	F	20 700	F	21 200	F	
123	SR 132 (Maze Blvd)	Carpenter Rd	SR 99	2	2	2	14 151	F	19,900	F	14 200	F	
124	SR 132 (L St)	SR 99	9th St	4	4	4	13,220	B	19,000	C	13,200	B	
125	SR 132 (9th St)	L St	D St	4	4	4	18,000	Č	24,900	D	18,000	C	
126	SR 132	9th St/D St	La Loma Ave	4	4	4	19,972	C	20,700	С	21,000	С	
127	SR 132 (Yosemite Blvd)	La Loma Ave	Riverside Dr	4	4	4	19,977	С	21,900	С	21,200	С	
128	SR 132 (Yosemite Blvd)	Riverside Dr	Claus Rd	2	2	2	17,932	E	23,800	F	21,100	F	
129	SR 132 (Yosemite Blvd)	Claus Rd	Santa Fe Ave	2	2	2	10,100	D	13,700	E	12,300	E	
130	SR 132 (Yosemite Blvd)	Santa Fe Ave	Root Rd	2	2	2	9,168	D	9,500	D	9,200	D	
131	SR 132 (Yosemite Blvd)	Root Rd	Geer-Albers Rd	2	2	2	10,373	D	11,600	D	10,400	D	
132	SR 132	Hickman Rd	Roberts Ferry Rd	2	2	2	1,994	B	5,300	C	4,500	C	
133	SR 132	Roberts Ferry Rd	La Grange Rd	2	2	2	2,200	B	2,600	B	2,600	В	
134	SR 132 SR 165 (Londor Ave)	La Grange Ko	Norood Co. Line	2	2	2	1,539	B	2,100	B	2,100	B	
100	SP 210 (Kioman Ave)	SD 00	Nierceu CO. LITTE	2	2	2	17,505	E	∠1,800 44,200	F	23,900	P	
130	SR 219 (Kiernan Ave)	Sisk Bd	Stoddard Bd	2	4	0 	14 400	F	25 900	P	24,300	- 0	
138	SR 219 (Kiernan Ave)	Stoddard Rd	SR 108 (McHenry Ave)	2	2	4	14,000	Ē	16,200	E	24,500	B	
139	Claratina Ave	Coffee Rd	Oakdale Rd	0	0	6	,000	-	,200	-	41,600	c	
140	Claratina Ave	Oakdale Rd	Roselle Ave	0	0	6					32,500	Č	
141	North County Corridor	McHenry Ave	SR 108/120	0	0	4					20,700	В	
142	SR 132	SR 99	Dakota Ave	0	0	4					30,100	С	

Notes:1 Year 2035 No Project scenario includes only those limited roadway improvements that can be assumed to occur without the 2011 RTP.

<sup>2</sup> Year 2035 Plus Project scenario includes all 2011 RTP Tier I Projects in place by 2035.

<sup>3</sup> Average Daily Traffic

<sup>4</sup> Level of Service (LOS) based on Stanislaus County General Plan thresholds derived from the *Highway Capacity Manual* (Transportation Research Board, 2000) shown in Appendix C. **Bold** font and gray shading indicates unacceptable roadway operations based on the operating jurisdiction's LOS standard, per the local General Plans and Caltrans Transportation Concept Reports

Tan shading indicates a roadway segment with estimated base year traffic volume; base year count data not available.

Yellow shading indicates a new roadway facility included in the 2011 RTP.

Green shading indicates a capacity enhancement per the 2011 RTP project list.

Appendix E: Transit Service Maps





TRANSIT FACILITIES -StaRT SYSTEM FIGURE E.1







TRANSIT FACILITIES -MAX SYSTEM FIGURE E.2







#### TRANSIT FACILITIES -OTHER TRANSIT SYSTEMS FIGURE E.3

Appendix F: Bicycle Network Map



#### LEGEND

- Class I Bike Path
- Class II Bike Lane
- Class III Bike Route
- Class II or Class III



Appendix G: Revenue Estimates

# 2011 StanCOG Regional Transportation Plan Revenue Estimates Through 2035

	REVENUE SOURCES	FY 2009/10	FY 2010/11	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21
	Transportation Sales Tax Measure			\$35,000,000	\$36,050,000	\$37,131,500	\$38,245,445	\$39,392,808	\$40,574,593	\$41,791,830	\$43,045,585	\$44,336,953	\$45,667,061
	Local funding (Gas Tax, Prop 42, Development Impact Fees, General Fund)	\$12,800,000	\$13,184,000	\$13,579,520	\$13,986,906	\$14,406,513	\$14,838,708	\$15,283,869	\$15,742,385	\$16,214,657	\$16,701,097	\$17,202,130	\$17,718,194
LOCAL	Transit Fares	\$1,980,000	\$2,039,400	\$2,100,582	\$2,163,599	\$2,228,507	\$2,295,363	\$2,364,224	\$2,435,150	\$2,508,205	\$2,583,451	\$2,660,954	\$2,740,783
	Local Transportation Funds (LTF)	\$15,300,000	\$15,759,000	\$16,231,770	\$16,718,723	\$17,220,285	\$17,736,893	\$18,269,000	\$18,817,070	\$19,381,582	\$19,963,030	\$20,561,921	\$21,178,778
	Local Transportation Funds (LTF Non Motorized)	\$555,052	\$571,703	\$588,854	\$606,520	\$624,716	\$643,457	\$662,761	\$682,644	\$703,123	\$724,217	\$745,943	\$768,321
	LOCAL TOTAL	\$30,635,052	\$31,554,103	\$67,500,726	\$69,525,748	\$71,611,521	\$73,759,866	\$75,972,662	\$78,251,842	\$80,599,397	\$83,017,379	\$85,507,901	\$88,073,138
	State Highway Operations and Protection Program (SHOPP)	\$12,600,000	\$12,978,000	\$13,367,340	\$13,768,360	\$14,181,411	\$14,606,853	\$15,045,059	\$15,496,411	\$15,961,303	\$16,440,142	\$16,933,346	\$17,441,347
	State Transportation Improvement Program (STIP)												
	Regional (RTIP)	\$9,053,000	\$606,000	\$606,000	\$3,250,000	\$4,186,126	\$4,311,710	\$4,441,061	\$4,574,293	\$4,711,522	\$4,852,867	\$4,998,453	\$5,148,407
	Regional (STIP-TE)	\$18,000	\$490,000	\$1,395,000	\$740,000	\$797,014	\$820,924	\$845,552	\$870,919	\$897,046	\$923,958	\$951,676	\$980,227
TE	Interregional (ITIP) Highway/Road				\$3,500,000	\$3,605,000	\$3,713,150	\$3,824,545	\$3,939,281	\$4,057,459	\$4,179,183	\$4,304,559	\$4,433,695
ST/	Public Transit Account - Eligible Rail and Transit Projects							\$275,000	\$283,250	\$291,748	\$300,500	\$309,515	\$318,800
	Interregional (ITIP) Transportation Enhancements	\$1,166,000	\$96,000	\$476,000	\$1,584,000	\$723,472	\$745,176	\$767,531	\$790,557	\$814,274	\$838,702	\$863,863	\$889,779
	State Transit Assistance (STA)	\$2,996,758	\$3,086,661	\$3,179,261	\$3,274,638	\$3,372,878	\$3,474,064	\$3,578,286	\$3,685,634	\$3,796,203	\$3,910,089	\$4,027,392	\$4,148,214
	State and/or Federal Aviation (Federal aid to airports/California aid to airports)	\$550,000	\$561,000	\$572,220	\$583,664	\$595,338	\$607,244	\$619,389	\$631,777	\$644,413	\$657,301	\$670,447	\$683,856
	STATE TOTAL	\$26,383,758	\$17,817,661	\$19,595,821	\$26,700,663	\$27,461,238	\$28,279,122	\$29,396,423	\$30,272,122	\$31,173,968	\$32,102,743	\$33,059,252	\$34,044,325
	Federal Transit Formula												
SIT	Urbanized Area Formula Program (5307)	\$12,734,578	\$12,090,400	\$10,543,400	\$9,928,100	\$11,497,073	\$11,841,985	\$12,197,245	\$12,563,162	\$12,940,057	\$13,328,259	\$13,728,106	\$14,139,950
AN	Nonurbanized Area Formula Program (5311)	\$4,493,487	\$4,266,184	\$3,720,314	\$3,503,201	\$4,056,824	\$4,178,529	\$4,303,885	\$4,433,001	\$4,565,992	\$4,702,971	\$4,844,060	\$4,989,382
Ë	Subtotal of Federal Transit Formula	\$17,228,065	\$16,356,584	\$14,263,714	\$13,431,301	\$15,553,897	\$16,020,514	\$16,501,130	\$16,996,164	\$17,506,048	\$18,031,230	\$18,572,167	\$19,129,332
IAL	Federal Transit Non-Formula (5309a, 5309b, 5309c)	\$691,306	\$656,336	\$572,356	\$538,954	\$624,127	\$642,851	\$662,136	\$682,000	\$702,460	\$723,534	\$745,240	\$767,597
DEF	SAFETEA LU Job Access & Reverse Commute (5316), New Freedom (5317)	\$272,884	\$259,080	\$225,930	\$212,745	\$246,366	\$253,757	\$261,370	\$269,211	\$277,287	\$285,606	\$294,174	\$302,999
	Subtotal of Federal Transit Non-Formula	\$964,189	\$915,416	\$798,286	\$751,699	\$870,493	\$896,607	\$923,506	\$951,211	\$979,747	\$1,009,140	\$1,039,414	\$1,070,596
	Federal Transit Total	\$18,192,254	\$17,272,000	\$15,062,000	\$14,183,000	\$16,424,390	\$16,917,122	\$17,424,635	\$17,947,374	\$18,485,796	\$19,040,370	\$19,611,581	\$20,199,928
	Federal Highway												
	Congestion Mitigation and Air Quality (CMAQ)	\$6,160,711	\$6,345,533	\$6,535,899	\$6,731,975	\$6,933,935	\$7,141,953	\$7,356,211	\$7,576,898	\$7,804,205	\$8,038,331	\$8,279,481	\$8,527,865
(A)	Regional Surface Transportation Program (RSTP)	\$5,059,644	\$5,211,433	\$5,367,776	\$5,528,809	\$5,694,674	\$5,865,514	\$6,041,479	\$6,222,724	\$6,409,405	\$6,601,688	\$6,799,738	\$7,003,730
NHK	Highway Safety Improvement Program (HSIP)				\$146,930	\$151,337	\$155,878	\$160,554	\$165,370	\$170,332	\$175,442	\$180,705	\$186,126
Ĕ	Highway Bridge Program (HBP)	\$4,143,204	\$31,311,290	\$6,276,570	\$6,464,867	\$6,658,813	\$6,858,578	\$7,064,335	\$7,276,265	\$7,494,553	\$7,719,390	\$7,950,971	\$8,189,501
AL	Safe Routes to School (SR2S)			\$228,050	\$234,892	\$241,938	\$249,196	\$256,672	\$264,372	\$272,304	\$280,473	\$288,887	\$297,554
ER	Rail/Highway Grade Crossing Protection (USC Section 130)				\$293,833	\$302,648	\$311,728	\$321,080	\$330,712	\$340,633	\$350,852	\$361,378	\$372,219
ED I	Federal Demonstration Project	\$3,600,000	\$1,569,833	\$1,569,833	\$1,569,833	\$1,569,833	\$1,616,928	\$1,665,436	\$1,715,399	\$1,766,861	\$1,819,867	\$1,874,463	\$1,930,697
	Federal Highway Total	\$18,963,559	\$44,438,089	\$19,978,128	\$20,971,140	\$21,553,179	\$22,199,774	\$22,865,768	\$23,551,741	\$24,258,293	\$24,986,042	\$25,735,623	\$26,507,692
	FEDERAL (Highway and Transit) TOTAL	\$37,155,813	\$61,710,089	\$35,040,128	\$35,154,140	\$37,977,569	\$39,116,896	\$40,290,403	\$41,499,115	\$42,744,089	\$44,026,411	\$45,347,204	\$46,707,620
	REVENUE TOTAL	\$94,174,623	\$111,081,853	\$122,136,675	\$131,380,551	\$137,050,328	\$141,155,884	\$145,659,488	\$150,023,079	\$154,517,454	\$159,146,533	\$163,914,356	\$168,825,083

# 2011 StanCOG Regional Transportation Plan Revenue Estimates Through 2035

FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	FY 2028/29	FY 2029/30	FY 2030/31	FY 2031/32	FY 2032/33	FY 2033/34	FY 2034/35	TOTAL
\$47,037,073	\$48,448,185	\$49,901,631	\$51,398,680	\$52,940,640	\$54,528,860	\$56,164,725	\$57,849,667	\$59,585,157	\$61,372,712					\$940,463,107
\$18,249,739	\$18,797,232	\$19,361,148	\$19,941,983	\$20,540,242	\$21,156,450	\$21,791,143	\$22,444,877	\$23,118,224	\$23,811,771	\$24,526,124	\$25,261,907	\$26,019,765	\$26,800,357	\$493,478,941
\$2,823,007	\$2,907,697	\$2,994,928	\$3,084,775	\$3,177,319	\$3,272,638	\$3,370,817	\$3,471,942	\$3,576,100	\$3,683,383	\$3,793,885	\$3,907,701	\$4,024,932	\$4,145,680	\$76,335,024
\$21,814,142	\$22,468,566	\$23,142,623	\$23,836,901	\$24,552,009	\$25,288,569	\$26,047,226	\$26,828,643	\$27,633,502	\$28,462,507	\$29,316,382	\$30,195,874	\$31,101,750	\$32,034,802	\$589,861,546
\$791,371	\$815,112	\$839,566	\$864,753	\$890,695	\$917,416	\$944,938	\$973,287	\$1,002,485	\$1,032,560	\$1,063,537	\$1,095,443	\$1,128,306	\$1,162,155	\$21,398,934
<b>\$90,715,332</b>	\$93,436,792	\$96,239,896	\$99,127,092	\$102,100,905	\$105,163,932	\$108,318,850	\$111,568,416	\$114,915,468	\$118,362,932	\$58,699,927	\$60,460,925	\$62,274,753	\$64,142,995	\$2,121,537,552
\$17,964,587	\$18,503,525	\$19,058,631	\$19,630,389	\$20,219,301	\$20,825,880	\$21,450,657	\$22,094,176	\$22,757,002	\$23,439,712	\$24,142,903	\$24,867,190	\$25,613,206	\$26,381,602	\$485,768,332
\$5,302,859	\$5,461,945	\$5,625,803	\$5,794,577	\$5,968,415	\$6,147,467	\$6,331,891	\$6,521,848	\$6,717,503	\$6,919,028	\$7,126,599	\$7,340,397	\$7,560,609	\$7,787,427	\$141,345,810
\$1,009,633	\$1,039,922	\$1,071,120	\$1,103,254	\$1,136,351	\$1,170,442	\$1,205,555	\$1,241,722	\$1,278,973	\$1,317,343	\$1,356,863	\$1,397,569	\$1,439,496	\$1,482,681	\$26,981,241
\$4,566,706	\$4,703,707	\$4,844,819	\$4,990,163	\$5,139,868	\$5,294,064	\$5,452,886	\$5,616,473	\$5,784,967	\$5,958,516	\$6,137,271	\$6,321,389	\$6,511,031	\$6,706,362	\$113,585,093
\$328,364	\$338,215	\$348,362	\$358,813	\$369,577	\$380,664	\$392,084	\$403,847	\$415,962	\$428,441	\$441,294	\$454,533	\$468,169	\$482,214	\$7,389,353
\$916,473	\$943,967	\$972,286	\$1,001,454	\$1,031,498	\$1,062,443	\$1,094,316	\$1,127,146	\$1,160,960	\$1,195,789	\$1,231,663	\$1,268,613	\$1,306,671	\$1,345,871	\$25,414,506
\$4,272,660	\$4,400,840	\$4,532,865	\$4,668,851	\$4,808,917	\$4,953,184	\$5,101,780	\$5,254,833	\$5,412,478	\$5,574,853	\$5,742,098	\$5,914,361	\$6,091,792	\$6,274,546	\$115,534,138
\$697,533	\$711,484	\$725,713	\$740,228	\$755,032	\$770,133	\$785,535	\$801,246	\$817,271	\$833,616	\$850,289	\$867,295	\$884,640	\$902,333	\$18,518,998
\$35,058,816	\$36,103,606	\$37,179,599	\$38,287,730	\$39,428,959	\$40,604,278	\$41,814,705	\$43,061,291	\$44,345,117	\$45,667,298	\$47,028,980	\$48,431,347	\$49,875,614	\$51,363,036	\$934,537,471
														-
\$14,564,148	\$15,001,073	\$15,451,105	\$15,914,638	\$16,392,077	\$16,883,839	\$17,390,354	\$17,912,065	\$18,449,427	\$19,002,910	\$19,572,997	\$20,160,187	\$20,764,993	\$21,387,942	\$396,380,070
\$5,139,064	\$5,293,236	\$5,452,033	\$5,615,594	\$5,784,061	\$5,957,583	\$6,136,311	\$6,320,400	\$6,510,012	\$6,705,312	\$6,906,472	\$7,113,666	\$7,327,076	\$7,546,888	\$139,865,539
\$19,703,212	\$20,294,308	\$20,903,137	\$21,530,232	\$22,176,138	\$22,841,423	\$23,526,665	\$24,232,465	\$24,959,439	\$25,708,222	\$26,479,469	\$27,273,853	\$28,092,069	\$28,934,831	\$536,245,609
\$790,625	\$814,344	\$838,774	\$863,937	\$889,856	\$916,551	\$944,048	\$972,369	\$1,001,540	\$1,031,587	\$1,062,534	\$1,094,410	\$1,127,242	\$1,161,060	\$21,517,775
\$312,089	\$321,452	\$331,095	\$341,028	\$351,259	\$361,797	\$372,650	\$383,830	\$395,345	\$407,205	\$419,421	\$432,004	\$444,964	\$458,313	\$8,493,859
\$1,102,714	\$1,135,795	\$1,169,869	\$1,204,965	\$1,241,114	\$1,278,348	\$1,316,698	\$1,356,199	\$1,396,885	\$1,438,792	\$1,481,956	\$1,526,414	\$1,572,207	\$1,619,373	\$30,011,634
\$20,805,926	\$21,430,104	\$22,073,007	\$22,735,197	\$23,417,253	\$24,119,770	\$24,843,364	\$25,588,664	\$26,356,324	\$27,147,014	\$27,961,425	\$28,800,267	\$29,664,275	\$30,554,204	\$566,257,243
								-			-		-	-
\$8,783,701	\$9,047,212	\$9,318,628	\$9,598,187	\$9,886,133	\$10,182,717	\$10,488,198	\$10,802,844	\$11,126,930	\$11,460,738	\$11,804,560	\$12,158,697	\$12,523,457	\$12,899,161	\$237,514,159
\$7,213,842	\$7,430,257	\$7,653,165	\$7,882,760	\$8,119,243	\$8,362,820	\$8,613,705	\$8,872,116	\$9,138,280	\$9,412,428	\$9,694,801	\$9,985,645	\$10,285,214	\$10,593,771	\$195,064,661
\$191,710	\$197,461	\$203,385	\$209,486	\$215,771	\$222,244	\$228,911	\$235,779	\$242,852	\$250,138	\$257,642	\$265,371	\$273,332	\$281,532	\$4,768,286
\$8,435,186	\$8,688,241	\$8,948,888	\$9,217,355	\$9,493,876	\$9,778,692	\$10,072,053	\$10,374,214	\$10,685,441	\$11,006,004	\$11,336,184	\$11,676,270	\$12,026,558	\$12,387,354	\$251,534,652
\$306,480	\$315,675	\$325,145	\$334,899	\$344,946	\$355,294	\$365,953	\$376,932	\$388,240	\$399,887	\$411,884	\$424,240	\$436,967	\$450,076	\$7,850,957
\$383,386	\$394,887	\$406,734	\$418,936	\$431,504	\$444,449	\$457,783	\$471,516	\$485,662	\$500,232	\$515,239	\$530,696	\$546,617	\$563,015	\$9,535,739
\$1,988,618	\$2,048,276	\$2,109,725	\$2,173,016	\$2,238,207	\$2,305,353	\$2,374,514	\$2,445,749	\$2,519,122	\$2,594,695	\$2,672,536	\$2,752,712	\$2,835,294	\$2,920,352	\$56,247,156
\$27,302,922	\$28,122,010	\$28,965,670	\$29,834,640	\$30,729,680	\$31,651,570	\$32,601,117	\$33,579,151	\$34,586,525	\$35,624,121	\$36,692,845	\$37,793,630	\$38,927,439	\$40,095,262	\$762,515,609
<b>\$48,108,848</b>	\$49,552,114	\$51,038,677	\$52,569,837	\$54,146,933	\$55,771,341	\$57,444,481	\$59,167,815	\$60,942,850	\$62,771,135	\$64,654,269	\$66,593,897	\$68,591,714	\$70,649,466	\$1,328,772,852
\$173,882,996	\$179,092,511	\$184,458,172	\$189,984,660	\$195,676,797	\$201,539,551	\$207,578,036	\$213,797,522	\$220,203,435	\$226,801,365	\$170,383,177	\$175,486,169	\$180,742,081	\$186,155,497	\$4,384,847,875

Appendix H: RTP Planning Process

# **RTP PLANNING PROCESS**

#### FEASIBLE APPROACHES AND SOLUTIONS

The 2011 RTP update process incorporates the following specific elements to ensure the RTP document includes feasible approaches and solutions that are beneficial to StanCOG's long-range vision *(Excellence in Regional Planning).* 

- A thorough review and update of existing goals, objectives, policies and program-level performance measures to guide the RTP process
- Close coordination with Caltrans District 10 and the StanCOG standing Advisory Committees and ad-hoc committees created for the RTP process
- Close coordination with the San Joaquin Valley Air Basin (SJVAB) and its linkages with the eight Valley MPOs and their conformity analysis process for RTPs and TIPs
- Incorporation of "smart growth" principles, where feasible, in recommending improvements to the transportation system, emphasizing non-auto modes, improved connectivity, compact development, and access and facility improvements to promote biking, walking, and transit
- Consideration of "blueprint planning" and GHG issues as they relate to Stanislaus County. This effort will review the requirements of California Assembly Bill 32 (California Global Warming Solutions Act) and monitor efforts by the California Air Resources Board (CARB) to establish caps on greenhouse gas emissions levels and direct efforts within the regulatory framework to achieve future targets.

Note: The recently adopted "Addendum to the 2007 Regional Transportation Guidelines" provided guidance on the modeling requirements and strategies to follow in preparing RTPs. The following strategies have specific application to Stanislaus County as part of this RTP update.

- An emphasis on transportation investments in areas where desired land uses as indicated in a city or County general plan may result in vehicle miles traveled (VMT) reduction or other lower impact use (smart growth design and/or Blueprint planning)
- An emphasis on the potential reduction in GHG for counties that include policies that support development within the County to protect agricultural, forest and resource lands.
- An emphasis on transportation projects that increase connectivity or provide other means to reduce VMT (multi-modal emphasis)
- Compliance with CEQA in the development of a "Programmatic Environmental Impact Report (EIR) will be maintained.
- Matching short-term (0-12 years), and long-term (13 -25 years)) project priorities with available funding. This process identifies the "purpose and need" for projects to make sure the most desirable projects are recommended for funding in the RTIP, ITIP and FTIP.
- Meeting "unmet transit needs," particularly as it involves the elderly and persons with disabilities

#### **CONSISTENCY WITH REGIONAL TRANSPORTATION GUIDELINES**

The 2011 StanCOG RTP provides consistency with the new 2007 guidelines through adherence to and incorporation of the following elements:

• Inclusion of program-level, outcome-based, performance measures to help monitor the transportation system and aid in project selection and prioritization.

- An inclusive public involvement process that identifies how and where people can get involved in the RTP planning process. (Appendix 1A)
- Consistency with the California Transportation Plan (CTP) Policies, and the California Strategic Highway Safety Plan Challenge Areas.
- A policy element that addresses state, regional and local issues and the goals, objectives and actions, by mode, to address the issues.
- An action element that identifies the State and Regional planning process and provides for transportation improvements by mode.
- A financial element that identifies funding sources, projected short-range and long-range revenues, RTP costs for transportation system operation, maintenance, preservation, and new capital investments.
- Close linkages to the Regional Transportation Improvement Program (RTIP), the Interregional Transportation Improvement Program (ITIP) and the Federal Transportation Improvement Program (FTIP).
- Coordination with Stanislaus County resource agencies and commercial trucking interests.

#### PURPOSE OF THE PLAN

As defined by the 2007 RTP Guidelines, the purpose of the regional transportation plan is to accomplish the following objectives:

- Provide an assessment of the current modes of transportation and the potential of new travel options within the region
- Predict the future needs for all modes
- Identify and document specific actions necessary to address the region's mobility and accessibility needs
- Identify guidance and documentation of public policy decisions by local, regional, state and federal officials regarding transportation expenditures and financing
- Provide information for the development of the Federal Transportation Improvement Program (FTIP), the Regional Transportation Improvement Program (RTIP), and the Interregional Transportation Improvement Program (ITIP)
- Help identify project purpose and needs
- Provide estimates of emissions impacts for demonstrating conformity with the air quality standards identified in the State Implementation Plan (SIP)
- Promote consistency between the CTP, the RTP and other transportation plans developed by cities, counties, districts, private organizations, tribal governments, and state and federal agencies in responding to statewide and interregional transportation issues and needs
- Provide a forum for; (1) participation and cooperation and (2) to facilitate partnerships that reconcile transportation issues which transcend regional boundaries
- Involve the public, federal, State and local agencies, as well as local elected officials, early in the transportation planning process so as to include them in discussions and decisions on the social, economic, air quality and environmental issues related to transportation

StanCOG prepared this 2011 RTP update based on these objectives consistent with the 2007 RTP Guidelines (adopted September 20, 2007).

#### **REPORT ORGANIZATION**

The RTP is divided into 4 Chapters as described below.

*I. Executive Summary* - Describes demographic changes that have occurred in the County since the 2007 RTP Update, and sets the stage for fiscal constraint and system planning consistent with the 2007 RTP guidelines, the RTIP, FTIP and the ITIP.

**2. Regional Trends** - Identifies the existing and future deficiencies of the Stanislaus County transportation system by mode. It includes a description of the methodology used to develop future traffic projections and to analyze traffic operations and volume to capacity ratios under existing and future conditions. All modes are included. Regional policies are addressed.

**3.** *Financial Plan* - Lists the costs and revenues for each transportation mode. Transportation improvements that fall outside of the RTP 25-year horizon for funding are listed as Tier 2 projects ("unfunded") and represent improvements desired by the County and cities but that do not have funding identified over the life of the RTP (by 2035).

The Financial Element will show consistency with the four-year STIP fund estimate adopted by the California Transportation Commission (CTC), the RTP goals, policies, and objectives, and the projects included in the RTIP and the ITIP.

**4. Transportation Plan** - Describes the State and regional transportation planning processes, as well as the process undertaken to evaluate various improvement options. The Transportation Plan summarizes plan assumptions, past accomplishments, modal alternatives, and the purpose, need, and scope of recommended projects. Specific improvements are listed by mode for both short-range and long-range regional circulation system needs.

**5. Environmental Impact Report** - Describes the environmental review processes and procedures, and consultation process followed by the County in evaluating the program level impacts of the RTP. This 2011 RTP includes a Program Level EIR and mitigation measures.

6. Appendices - Provide additional information to support technical information in the RTP.

#### COORDINATION WITH OTHER PLANS AND STUDIES

During development of the 2011 RTP update, existing plans both regional and local, policy documents and studies addressing transportation in Stanislaus County were reviewed. These documents are listed below:

- Stanislaus County 2007 Regional Transportation Plan 2007
- General Plans for Stanislaus County and the nine incorporated cities
- Stanislaus County Non-Motorized Transportation Plan 2008
- Stanislaus Council of Governments Public Transit Human Services Coordination Plan –2008
- Stanislaus County Transit Needs Assessment 2009
- Stanislaus County Regional Expressway Study 1990

#### PUBLIC PARTICIPATION

To encourage public participation in the transportation planning process and for compliance with federal and state regulations, StanCOG sets forth and formalizes its public participation plan. Involvement by

citizens and interest groups is encouraged at both the planning and project levels. This involvement includes individual contact, public meetings, and public notices of review periods, workshops, public surveys, public hearings, and advisory committees. These procedures are consistent with the 2007 RTP Guidelines.

#### PROJECT INITIATION MEETING

The Stanislaus Council of Governments (StanCOG) hosted a kick-off meeting for the 2011 Regional Transportation Plan (RTP) on Friday, September 18, 2009 from 10 am to 11:30 am. The purpose of the meeting was to inform the stakeholders in Stanislaus County of the RTP framework and process, public outreach, coordination efforts, and environmental requirements to provide a forum for discussion and communication. The following information summarizes the most important agenda items.

#### Introduction

Vince Harris, StanCOG Director, advised attendees that the RTP is a cooperative effort between the County, cities, Caltrans, business interests, resource agencies, and citizens. The 2011 RTP serves as the basis for the future transportation network in Stanislaus County and is intended for everyone in the region

#### Coordination with Eight Valley Partners

Tanisha Taylor from SJCOG discussed the RTP framework and its relationship between the eight Valley County partners. The San Joaquin Valley Air Basin is designated as a non-attainment region and includes eight counties from San Joaquin in the north to Kern in the south. Interagency coordination is on going between the eight Valley COGs, Caltrans Districts 6 and District 10. Tanisha advised that all eight Valley MPOs will be updating their RTPs; RTIP and EIRs during the same time period. The 2011 RTP extends the horizon year from 2030 in the previous 2007 RTP to 2035 in the new document. In addition, AB 32 requires that emissions from projects are quantified Emission targets for the region will be made by CARB in September 2010.

#### **Overview of RTP Planning Process**

The project manager from StanCOG (Jaylen French) provided an overview of the RTP planning process and the RTPs relationship to AB 32 & SB 375. The following information was presented:

- 2011 RTP update will lay the groundwork for 2015 RTP
- 2015 RTP update will being immediately after 2011 RTP is adopted to address new requirements associated with AB 32, SB 375
- CARB emission targets from AB 32 will not be set before 2011 RTP is adopted
- SB 375 implements AB 32 for land use and transportation integration
- San Joaquin Valley Blueprint is on-going and recommendations will be incorporated into the RTP
- The Blueprint and Regional Expressway Plan also set the groundwork for 2011 RTP update
- It is important that RTP project list is financially constrained, not just a wish list
- The 2011 RTP considers planning for all modes of the transportation system within the County
- The recently completed (2008) Non-motorized Transportation Plan will be reviewed as part of the RTP update.

#### The Roles and Responsibilities

The StanCOG Ad-Hoc Committees were discussed by Jaylen French. He advised that two ad-hoc committees were established specifically for the RTP process. The first is the Committee of Planning Directors with representatives from all jurisdictions in Stanislaus County. The second is the Committee of Public Works Directors also with representatives from all jurisdictions. In addition, all standing

committees will be involved in the planning process including the BPAC (Bicycle Pedestrian Advisory Committee).

#### **RTP Focus**

The Consultant team provided an overview of the RTP focus and update process. The following items were discussed:

- The RTP is a 25-year document and will have a horizon year of 2035
- Projects must be included in the RTP to receive State and federal funding
- The RTP update will be based on 2007 RTP guidelines. These guidelines are currently undergoing revision but are not anticipated to be available prior to adoption of the 2011 RTP.
- The 2011 RTP will be "balanced" and address multiple modes, not just roadway widening for vehicles. Road rehabilitation is elevated in priority.
- Information from the Non-Motorized Transportation Plan and Public Transit Human Services Coordination Plan will be reviewed for inclusion in the RTP update
- RTP project lists will be divided into Tier I and Tier II
- Tier I projects that have funding identified over the life of the RTP (by 2035)
- Tier II projects that are desired and needed but do not have funding identified
- The Consultant and StanCOG will meet with each jurisdiction individually to determine project prioritization and local funding options
- The RTP will be consistent with all local general plans and land use and transportation goals and policies from the Regional Expressway Study

#### Regional Expressway Analysis

The Consultant provided the following information concerning the Regional Expressway Study:

- The Original Regional Expressway Study is now about 20 years old
- As part of the RTP update, there will be an update of the Regional Expressway Plan beginning with a review of policies and plans from the 1990 effort.
- The Regional Expressway Plan needs to be revised to reflect changes to general plans throughout the county
- The RTP and Regional Expressway Study are good ways to step back and look at the region as a whole
- As a result of recommendations for roadway expansion and recent legislation regarding greenhouse gas issues, it is important that expressway facilities will need to be multi-modal, include infrastructure for all modes, and be multi-jurisdictional
- County representatives emphasized the importance of ensuring local projects connect with the region.

#### Environmental Process

The Consultant also provided the following information on the environmental process and documentation for the RTP and Expressway Study:

- The RTP is a CEQA project and will require an EIR—the highest level of environmental assessment
- The EIR will be prepared early in 2010 with a draft being released in March/April
- The EIR analyzes what is here now and what is coming in the next 25 years. It also sets the stage for and provides recommended mitigation measures for projects recommended in the RTP
- The EIR will emphasize greenhouse gases as required by AB 32, SB 375, and SB 97
- The EIR will not address an SCS or APS because CARB targets have not been established as yet

• There will be a broad-level analysis of greenhouse gases for Tier 1 projects

#### Public Outreach

The public outreach efforts for the 2011 RTP included the following components:

- Four public workshops conducted in November in Patterson, Modesto, Turlock, and Oakdale
- A follow up workshop in January for EIR Scoping with a public workshop during the 45 day review period
- Creation of a database of all stakeholders and members of the public wanting to be involved in project. The database included the Stanislaus County League of Women Voters, United Way of Stanislaus County and San Joaquin Rail Commission.
- The use of multiple media outlets to increase public awareness including radio, television, newspaper, news releases, phone, and the internet
- A project hotline for public comment
- A summary report on public participation was distributed through the StanCOG newsletter
- A rough draft project list and GIS maps were made available to the public at the various workshops to solicit and receive their comments.

#### COORDINATION WITH STANISLUAS COUNTY RESOURCE AGENCIES

The Draft RTP and CEQA environmental document and checklist is distributed to various governmental and Resource agencies through the State Clearinghouse process. Agencies are either provided a review copy of documents or they receive a copy of the Notice of Availability saying where the documents can be viewed (in person and on the internet).

#### **COORDINATION WITH NATIVE AMERICAN GOVERNMENTS**

There are no officially designated tribal governments within Stanislaus County.

Appendix I: Public Workshops Summary Report



## PUBLIC WORKSHOPS SUMMARY REPORT December 3, 2009

Patterson Monday, November 9, 2009 Patterson Library, Patterson, Calif.

Modesto Wednesday, November 18, 2009 Doubletree Hotel, Modesto, Calif.

Oakdale Thursday, November 19, 2009 Oakdale Community Center, Oakdale, Calif.

Turlock Monday, November 23, 2009 Turlock Youth Center, Turlock, Calif.









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## EXECUTIVE SUMMARY

The Stanislaus Council of Governments (StanCOG) as part of the Regional Transportation Plan update process held four public workshops throughout the county. The workshops were held in Patterson on November 9, 2009; in Modesto on November 18, 2009; in Oakdale on November 19, 2009; and in Turlock on November 23, 2009.

StanCOG is updating the Regional Transportation Plan (RTP) for the Stanislaus County region. The workshops provided members of the public and other interested parties an opportunity to provide comments, concerns or suggestions as part of the update process.

The workshops were publicized through a postcard invitation sent by first-class U.S. mail, a public notice (advertisement) in English, a public notice (advertisement) in Spanish, a news release to print and broadcast media that serve the Stanislaus County region, personal phone calls and visits, and the StanCOG Web site.

One hundred nine persons signed in at the workshops—79 members of the public. The workshops were conducted in a four-part format: 1) a brief introductory presentation, 2) workshop table sessions, 3) reports from table groups, and 4) a closing summary by the StanCOG Project Manager.

Informational display boards and exhibits were available. Attendees were also provided with a print program, comment sheets, project lists of Tier I Projects and Tier II Projects, and a public participation demographic survey. Large maps of the County and the cities and communities of the county showing potential projects were provided for comment, discussion and markup.

Personnel from StanCOG and from the consultant team staffed each of the four workshops.

Eighteen comment sheets were received. Comments and suggestions were also gathered by the facilitators at the workshop tables at each of the four workshops.

Appendices to this report include copies of all documents publicizing the workshops, documents distributed at the workshops, sign-in sheets, and exhibits.









## Chapter 1: Introduction

#### 1.1 Four Public Workshops Were Held

The Stanislaus Council of Governments (StanCOG) held four public workshops throughout the county. The workshops were held in Patterson on Monday, November 9, 2009; in Modesto on Wednesday, November 18, 2009; in Oakdale on Thursday, November 19, 2009; and in Turlock on Monday, November 23, 2009. All four workshops were held from 6:30 p.m. to 8:00 p.m.



#### 1.2 Announcement of the Public Workshops

The workshops were publicized through a jumbo postcard invitation sent by first-class U. S. mail to approximately 905 public agencies, emergency responders, transit agencies, civic and community groups, chambers of commerce, environmental groups, and other interested public parties.

A public notice (advertisement) in English was placed in *The Modesto Bee* and *Patterson Irrigator* on October 29, 2009; *The Turlock* Journal on October 31, 2009; *Waterford News, Hughson Chronicle,* and *Westside Connector* on November 3, 2009; *The Oakdale Leader, Riverbank News,* and *Ceres Courier* on November 4, 2009; and *Westside Connector* on November 5 (2<sup>nd</sup> time). A Spanish-language notice (advertisement) was placed in *Vida en el Valle* on November 4, 2009. [See Appendix B for copies of the public notices.]

A news release was sent on November 3, 2009, to print and broadcast media (mainstream and alternative) that serve the Stanislaus County region. [See Appendix B for a copy of the news release.]

Information about the public workshops and the RTP process was posted on the StanCOG website and sent to each city's website, the public libraries in Stanislaus County, and the California State University, Stanislaus website.

Judith Buethe Communications' (JBC) Associate Project Manager visited each of the four locations and walked downtown areas where she personally invited government officials/staff and businesses to participate in the workshops and gave them an invitation.

JBC's Associate Project Manager also placed telephone calls to key individuals and organizations inviting them to attend, e.g., elected officials of the County and Cities of Ceres, Hughson, Modesto, Newman, Oakdale, Patterson, Riverbank, Turlock, and Waterford; the Community Service Districts of Denair, Empire, Hilman, Keyes, Knights Ferry, Salida, South Modesto, and Valley Home; the Municipal Advisory Councils; civic and community groups; business groups, such as the Stanislaus County Farm Bureau,

California Trucking Association, and Chambers of Commerce throughout the County; schools, and others.

#### 1.3 Purpose and Goals of the Public Workshops

StanCOG is updating the Regional Transportation Plan (RTP) for the Stanislaus County region. Public participation is an important element of the RTP, as the RTP affects each resident of the county locally. Therefore, public input into the process was very important. The workshops were intended to provide members of the public and other interested parties an opportunity to provide comments, concerns, or suggestions, which would then become part of the public record and be considered as StanCOG and its project team prepare the RTP.

#### 1.4 Format of the Public Workshops

One hundred nine persons signed in at the workshops—79 members of the public. The workshops were conducted in a four-part format as a presentation followed by workshop table sessions, reports from table groups, and a closing summary by Jaylen French, StanCOG Project Manager.

Exhibits were placed in the room to provide information on the RTP process, schedule, and how members of the public could stay involved. Attendees were provided with a list of potential projects, and large maps were at each table. Discussion by the group at each table was facilitated by a member of the StanCOG staff and/or the project team. Attendees were encouraged to submit written comments on comment sheets that were supplied to draw on or otherwise comment on the maps. Project team members from StanCOG and from the consultant team were available to explain the displays, answer questions, and receive public input.



## Chapter 2: Workshop Proceedings

## 2.1 Workshop Proceedings

Each workshop began at 6:30 p.m., when the Public Outreach Coordinator opened the meeting, explained what to expect during the course of the evening, reviewed housekeeping details, and asked how attendees heard about the meeting, e.g., newspaper ad, direct mail, contact by a friend or colleague. At the Patterson, Modesto, and Oakdale workshops, Vince Harris, Executive Director of StanCOG, welcomed the group, encouraged attendees to participate in the process, introduced elected officials, and introduced Jaylen French, Associate Planner and Project Manager for StanCOG. Carlos Yamzon, Senior Planner of StanCOG, represented StanCOG in the opening remarks in Oakdale.

Mr. French gave a PowerPoint presentation that explained:

- what StanCOG is
- why the workshops were being held
- how the RTP affects individuals and groups
- what an RTP is
- when it is done, how the RTP process is accomplished
- what the overall concepts of an RTP are (fiscal constraint and system planning)
- that an Environmental Impact Report will be prepared, and
- what the next steps are.

Mr. French also invited questions.



A facilitator from StanCOG and/or the consultant team was assigned to each of the tables. Attendees were welcome to sit wherever they chose. After introductions at each table, each facilitator explained that the group's task was to assist with the RTP five-step process of preparing a draft project list; preparing revenue projections; creating goals, objectives, policies, and performance measures; preparing a final project list; and beginning to prepare an environmental impact report. The facilitator then explained the table exhibits and the project listings and encouraged discussion on transportation-related issues. Participants were asked to consider local needs, county-wide needs, and multi-modal transportation. They were also asked to consider what is most/least important to them, what the County and its cities need more of/less of, air quality, public transit, seasonal issues, and issues pertinent to agriculture and other businesses. Participants were also encouraged to illustrate their ideas on the maps.



Following the table sessions, each table leader reported on the group's discussion to the entire assemblage.

Mr. French closed each workshop by reiterating the major steps of the RTP process, providing information on next steps, and encouraging attendees to rejoin the entire group of workshop attendees at a meeting to be held in Modesto in January to which all workshop participants would be invited.

## 2.2 Workshop attendance

Attendance at each of the workshops included the following numbers of individuals and who or what kind of organization they represented, if any:

City	Individual	Individual	Civic			
	Businesses	Persons	Organizations	Government	Staff	Total
Patterson	2	3	3	12	7	27
Modesto	5	12	5	7	7	36
Oakdale	1	7	1	2	8	19
Turlock	4	6	1	9	7	27
Totals	12	28	10	30	29	109



# **2.3 Questions Asked/Comments Made at Workshop General Sessions**

Following are questions asked/comments made, if any, following Mr. French's presentations during the workshop general sessions.

#### PATTERSON, November 9, 2009

The group moved directly to the workshop table sessions.

MODESTO, November 18, 2009

The group moved directly to the workshop table sessions.



#### OAKDALE, November 19, 2009

Several questions were asked of the workshop organizers or comments were made, as follows:

- 1. How will aviation resources be identified?
- 2. Environmental effects should be the top priority, e.g.,
  - a. Valley's ag resources.
  - b. Consider groundwater being used in each area and the fact that paving inhibits groundwater recharge.
  - c. A freeway on the west side would have major environmental impacts and remove 1/6 of the water typically used by Modesto.
  - d. City vs. agricultural use.
  - e. Global warming.
  - f. Soil characteristics in this area are unusual and must be available for food production.
  - g. Who is looking ahead for future generations?
- 3. Who represents agricultural in this planning exercise?
- 4. A land trust in Stanislaus County is a way to keep land in agriculture.
- 5. Some decisions regarding the NCC project are quite unbelievable, especially the broad corridor being studied.

- 6. Reference to 4-way stop signs at Claribel. No improvements to Claribel were required when Crossroads was built. How are traffic projections being made? Why not maximize existing facilities, e.g., Claribel?
- 7. Need to ensure that RTP corresponds with non-motorized plan adopted by StanCOG. Plan now. Provide options. Use permeable pavement (10 feet of AC) for bicycles. Consider the huge air quality impacts.
- 8. Does StanCOG make recommendations back to communities?
- 9. What is the process being followed? What comes next?
- 10. Opportunities for input will be provided when the Draft Environmental Impact Report becomes available.
- 11. We need to be looking to European examples for preserving farmland.
- 12. Need a map with bicycle routes.
- 13. An expressway could help Oakdale get its town back and lessen the number of safety issues.

#### TURLOCK, November 23, 2009

The group moved directly to the workshop table sessions.

## **2.4 Table Sessions**

Following are outcomes of the table sessions facilitated by a project team staff member with members of the public.

#### 2.4.1 Table Sessions: Patterson, Patterson Public Library, November 9, 2009

#### Table Facilitator: Rich Ledbetter, Fehr & Peers

#### Major Concepts



- The proposed improvements to West Main Street need to be removed. This facility should not be widened to three lanes nor become the main connection through Patterson.
- The Patterson airport may be closed in the future. The area needs access to the airport at Crows Landing.
- The General Plan process in Patterson and Turlock will identify the Fulkerth/Zacharias Road corridor as the preferred connection between Interstate 5, Patterson, Modesto, and Turlock. This corridor will require a major new interchange at Interstate 5, a new bridge crossing of the San Joaquin River, and a crossing of SR 33. The Fulkerth corridor is lined with many dairies that may pose a right-of-way issue.
- Improvements are needed to M Street. These improvements have been funded.
- The water treatment plan footprint needs to be extended both north and south as shown on the map.
- The Patterson city staff members will be revising their list of Tier 1 projects to include longerterm projects reasonably fundable by 2035.

#### Table Facilitator: Ray Weiss, ESA

#### Major Concepts

- Passenger air service is needed at the Crows Landing Airport.
- Safety issue: the intersection at Las Palmas Road and 2<sup>nd</sup> St needs to be widened for trucks and the traffic light moved to accommodate the improvements.
- A traffic light is needed at Sperry Road and Las Palmas Road.
- Sperry between Ward and Interstate 5 needs to be widened to four lanes.
- Extend pedestrian and bike facilities on Sperry Road to Interstate 5.
- Add an alternative east/west route from West Main Street/Jennings Road along Orange Avenue connecting to Ward Avenue at the intersection with SR-33 across the railroad tracks. Or, use the southern connection from Jennings Road to SR-33.
- Repave Camino Peadones from 1<sup>st</sup> Street to Sycamore and add a traffic light west of 1<sup>st</sup> Street.
- Need a pedestrian/bicycle bridge over SR 33 at Puente near M Street.
- Add sidewalks on 2<sup>nd</sup> St between Olive and Puente.
- Provide bike trail access to Creekside School from Puente.
- Add an alternative East/West route to access the shopping center and Interstate 5. Sperry Road is too congested for this purpose.
- Provide a train connection to the Interstate 5 corridor.

#### Table Facilitator: Carlos Yamzon, StanCOG

#### Major Concepts

- Need new interchange at Zacharias Road and Interstate 5.
- Provide an alternative east/west route along Zacharias Road to Eucalyptus Avenue to Monte Vista Avenue into Modesto.
- Do not widen West Main Street to three lanes to the San Joaquin River (unanimous recommendation).
- Complete improvements to M Street intersection across RR tracks at SR-33.
- Provide a possible alternative east/west route along Eucalyptus Avenue Avenue to Fulkerth Road through Modesto.

#### Table Facilitator: Jaylen French, StanCOG

#### **Comments from Dave Applegate, Planning Commissioner**

- The M Street improvements are funded and will be completed.
- SR-33 is a possible freight route between Patterson and Interstate 5.
- The existing RR tracks and right-of-way should be considered for passenger rail service.
- The Interstate 5/Sperry Road interchange needs to be improved.
- A possible bridge replacement is needed over the San Joaquin River at West Main Street.

#### Major Concepts:

Connectivity from west side of county to east side:



- South County Corridor or similar additional (in addition to West Main) connection to west side could be very beneficial.
  - o For Newman, instead of utilizing West Main; might utilize River Road.
- A loop system around the city utilizing existing West Main, forking at the river with a north and a south connection flanking the city. The southern portion would also access Newman.
  - o Widen Zacharias Road Road and make new interchange at Interstate 5.
- At some point, the west side will need a parallel road to West Main; it might be Monte Vista Avenue or Fulkerth Road or River. However, it was the consensus that West Main should be widened to its full extent prior to development of this road.
  - Another river crossing will be needed in the future.
  - o Did the county include the bridge crossing at West Main and the river?

#### Traffic:

- Turlock is planning/building a 2,000-acre Industrial Park on West Main. This will affect the traffic on West Main for the City of Patterson as trucks access Interstate 5. See comments above.
- Keep the [Patterson] traffic circle as free of cars as possible.
- Three key projects
  - Interstate 5 connection to Sperry Road
  - o 2<sup>nd</sup> Street/Sperry Road
  - o M Street/Ward

#### **Opportunities:**

- Use existing (ample) rail lines within the City and the western portion of the County to move goods.
- Emphasize tie into Ace/HSR up Interstate 5 to Tracy.
- Include bike projects on Delta Mendota canals throughout city.
- Rehab streets before proposing new ones.

# 2.4.2 Table Sessions: Modesto, Doubletree Hotel, November 18, 2009

#### Table Facilitator: Rich Ledbetter, Fehr & Peers

#### Major Concepts and Suggestions

#### Traffic Circulation/Safety

- A traffic signal is needed at Tully/Claribel Road.
- The traffic signal proposed at Claribel Road/Coffee Road should move up in priority from 2011 to 2010.
- Add a right-turn lane at the Coffee Road/Claratina Avenue intersection.
- The roundabout at Coffee Road/Claratina Avenue is too small.
- A left-turn lane is needed northbound on Oakdale Road/Claratina Avenue.
- The traffic signal at Coffee Road/Claribel Road is needed now.
- Install a traffic signal at Rosell/Claribel Road.



• Gravel mining companies need turn/merge lanes on SR 132 near Hawkins Road. In addition, slow-moving vehicle turnouts would be beneficial.

#### Capacity Enhancements

- Extend Claratina Road from Palandale to Claus Road.
- Gravel mining companies need turn/merge lanes on SR 132 near Hawkins Road. In addition, slow-moving vehicle turnouts would be beneficial.
- · Improvements to SR 132 to Interstate 5 are needed before the NCC improvements.
- Make Kiernan Road be the NCC alignment.
- Improve the interchange at Kiernan/SR 99 follow Alternative 2.
- The NCC alignment north of Kiernan from Hammett Road goes through prime farmland. <u>Do not</u> <u>use</u>. Make Kiernan/Claribel work!
- Include urban transition areas in GP for road improvements. Do not use farm land.
- Do not extend Hammett Road to Dale Road. Make it Tier 2 or eliminate entirely.
- Keep Patterson Road open across RR tracks.
- Warnerville Road should be the preferred route for the NCC south of Oakdale.

#### Other Comments

- Contact the Friends of Tuolumne when bridge permits are issued for the Tuolumne River improvements on SR 132.
- Include urban transition areas in GP for road improvements. Do not use farm land.

#### Table Facilitator: Ray Weiss, ESA

#### Major Concepts and Suggestions

#### Capacity Enhancements

- Improvements on B Street between 9<sup>th</sup> and 12<sup>th</sup> may not be needed if traffic is removed.
- The widening of D Street between 5<sup>th</sup> and Yosemite Boulevard is okay.
- The roadway extension of Tuolumne to SR 132 is <u>not</u> okay.
- Add a bridge on Garner Road over the Tuolumne River.
- The Friends of Tuolumne are concerned about the road extension and widening of Tuolumne to Yosemite. Discussions in 2002 with Caltrans indicated the road would not be extended. Traffic through the nearby park and safety are issues.

#### Non-Auto Modes

Hickman Bridge in Waterford needs a wide pedestrian lane.

#### Table Facilitator: Carlos Yamzon, StanCOG

Major Concepts and Suggestions

Table Facilitator: Jaylen French, StanCOG

Major Concepts and Suggestions

Loop System



- An internal loop system is needed around the Modesto/Ceres area based on the 1990 Regional Expressway Study.
- External loops are needed around the County, for example:
  - o North: NCC
  - o East: Geer/Albers, jog around Turlock
  - South: West Main (or nearby)
  - West: Carpenter or further west, also use Crows Landing as an additional north/south connector
- It is a good idea to install another bridge over the Stanislaus River, west of SR 99 as part of the loop system.

#### Land Use

 Danny Gottlieb, Agriculturist, strongly believes that SR 132 should be the priority east/west transportation improvement, before the NCC. Scores of businesses are using the Beard Industrial Park that use SR 132, not NCC. Transportation improvements should be preserved and protected; the County does not need to expand, but needs to improve existing areas.

#### **Opportunities**

Use the Crows Landing Air Facility for jobs, air travel, etc. Good opportunity for the County.

#### 2.4.3 Table Sessions: Oakdale, Oakdale Community Center, November 19, 2009

Participants combined tables in Oakdale. Two citizens, Charles Turner and Bill Strand, offered the following comments relative to the non-auto improvements needed in Oakdale and the County.

#### Major Concepts and Suggestions

Non-Auto Improvements

- · Non-auto improvements need to match improvements in the 2008 Non-motorized Plan.
- · Crows Landing Road needs Class I facility from Carpenter Road to River Road/Marshall Road.
- West Main improvements need Class III designation from San Joaquin River to Carpenter Road.
- Class I needed on Santa Fe from SR-132 to East Avenue.
- · Class I on Parker Road from Carpenter Road to Santa Fe.
- · Class I adjacent to SR-219 to McHenry Avenue.
- Class I adjacent to NCC. The NCC alignment B (McHenry Avenue to SR-120/108) needs Class I facility.
- Class I facility along Stanislaus River from Railroad Avenue east to Stearns Road in Oakdale.
- · Class I on Dale Road to SR-108 S. of SR-219.
- · Class II on Taylor between Turlock and Oakdale.
- · Class II on McHenry from Ladd Road to Stanislaus River.
- · Class II on Roselle Avenue from Floyd Avenue to Claribel Road.

#### Capacity Enhancements

- Widen existing facilities such as Claribel Road before the NCC.
- Need NCC to move regional traffic, not local.





#### Table Facilitator: Jaylen French, StanCOG

#### Capacity Enhancements

- Why create a new road, of which the need is in question, when you have existing roadways that have not yet been improved to maximum capacity?
- NCC is needed to move regional traffic through the County; it is not intended for local trips, e.g., east side of Modesto to west side of Modesto. It is to move people from outside the region, through the region, without clogging up the core areas of cities like Oakdale and Riverbank.

#### Land Use

• Need to protect agricultural land; afraid large roadways like NCC will consume more agricultural land (from the road and related development) than the roadway is worth.

#### 2.4.4 Table Sessions: Turlock, Turlock Youth Center, November 23, 2009

#### Table Facilitator: Rich Ledbetter, Fehr & Peers

#### Major Concepts and Suggestions

#### Capacity Enhancements

- Extend West Main Street using existing roads to connect to Interstate 5, thus bypassing downtown Patterson (Elm Street to Eucalyptus Avenue to Zacharias Road to Interstate 5).
- Widen Taylor to three lanes, Geer Road to SR-99.

#### Circulation/Safety

- Improvements to the intersection at West Main Street/Claribel Road are a high priority.
- Review circulation at schools in Turlock and Oakdale.
- Add traffic signal at Taylor Road near SR-99.
- Improve the intersection at Linwood Avenue/RR Tracks. The intersection is currently stop controlled.
- Improve intersection at Taylor Road/SR-99.

#### Non-Auto Modes

• Add bike lanes on Albers Road between Turlock and SR-219.

#### Table Facilitator: Ray Weiss, ESA

#### Major Concepts and Suggestions

#### Capacity Enhancements

- Widen West Main Street from proposed three lanes to four-to-six lanes between Mitchell Road and Washington Road.
- Widen Washington Road four-to-six lanes from Fulkerth Road Road to Taylor Road.
- Widen Waring Road four-to-six lanes between Hawkeye Avenue to Taylor Road as a new extension to the New Collector (Hawkeye to Linwood Avenue).
- Widen Berkeley Avenue north of Taylor Road.
- Extend West Main to Interstate 5 using alignment north of Patterson city limit.

#### Table Facilitator: Brian Grattidge, ESA

#### Major Concepts and Suggestions

#### Capacity Enhancements

Extend Canal Drive Collector to Golden State Boulevard.

#### Maintenance/Rehabilitation

- Rehab Canal Drive from Golden State Boulevard to Olive Avenue.
- Rehab Monte Vista Avenue Avenue. Dels Lane to Geer Road.
- Improve Main Street through City of Turlock.
- Reconstruct Daubenberger Road from East to Hawkeye Avenue.

#### Non-Auto Modes

· Add bike lanes to Christoffersen Parkway from Geer Road east.

#### Land Use

• Proposed new collector on Waring Road goes through agricultural land; use Vincent or Santa Fe instead.

#### Table Facilitator: Jim Schoeffling, StanCOG

#### Major Concepts and Suggestions

#### Capacity Enhancements

- Provide South County Corridor/leverage into the Merced Interchange project at Bradbury, and upgrade Washington around Turlock to West Main Street.
- Provide new interchange at SR-99/Bradbury.
- Provide Tuolumne River overcrossing.
- Negative on Golden State Expressway--Monte Vista Avenue to Berkeley.
- May need a connector from the North to the South County Corridor.
- Patterson supports the West Main Street parkway.

#### Traffic Circulation/Safety

- Provide safety improvements at Taylor Interchange.
- Need to improve circulation at schools.

#### Land Use

• Provide development in Southwest area of Turlock.

#### Non-Auto Modes

• Provide bike trails to connect schools with CSU, Stanislaus.

#### Table Facilitator: Jaylen French, StanCOG

#### Major Concepts and Suggestions

• There is a need for northern access point to Monte Vista Avenue Crossings Shopping Center; may connect to Christopherson.







- An interchange is needed south of the City, south of Linwood.
- The realignment of S-165 to Merced County would provide ample space for an interchange.
- There is a future need for a loop system, especially for the east and north sides of town (to access SR-99). Widen and extend Waring Road (eastern portion) and Taylor Road (northern portion).

# **2.5 Comment Sheets**

Comment sheets were available to all attendees, and 18 comment sheets were submitted as follows at each of the workshop locations:

Patterson	1
Modesto	15
Oakdale	0
Turlock	2



Information from the comment sheets is listed below. Copies of the original comment sheets are shown in Appendix E.

## PATTERSON, November 9, 2009

### Jeff Lustgerten

Great job facilitating a lively and functional workshop. I generally support the Tier 1 projects in Patterson and vicinity, with exception of W. Main widening (Carpenter to SJ River) and Pas Palmas (River to 33). Prefer a northern corridor which connects at Zacharias Road and goes all the way to the Interstate 5. Make sure the M St./33 intersection is realigned and signaled. Look at improving Sperry Rd. interchange at Interstate 5.

## MODESTO, November 18, 2009

## Susan Aced

- 1. Projections on the NCC have been based on a population that does not exist and has been erroneously compiled.
- 2. Our economy, especially in Stanislaus County, is very depressed. How could our planners consider a freeway costing billions when an alternate should (could) be considered by using the Kiernan Avenue/Claribel Road corridor?

## William Alexander

I thought it went well. Very informative.

## Allison Boucher

#### Friends of the Tuolumne, Inc.

Any road building, widening, or extending in the Gateway Park at the 9<sup>th</sup> Street Bridge is an <u>unacceptable</u> use and <u>infringement</u> of park land. No roads s/b built through the park! Waterford – foot bridge at Appling Rd. is an excellent idea and inexpensive in the big picture. Hwy 132 needs slow moving vehicle turnouts <u>and</u> merge lanes for the gravel mining company trucks as they try to enter Hwy 132.


*Please send an email: What is the bike trail planned in Waterford Reinway Ave. to Riverbank Park? City of Modesto Airport – Is any plan considering development toward to river? If so – don't.* 

## Judy Flodman

Make Kiernan work! Much better use of taxpayers money. Thank you.

### **Marianne Fosnaugh**

Make Kiernan/Claribel work for NCC. No roundabouts! Do interchange 99 & Kiernan – now. Traffic signal: Coffee & Claribel – now.



## Doug Joe

Make your plan regional \_\_\_\_\_ the northern and southern counties.

## Irene Joe

Make Kiernan work! Please keep in mind people whose lives are impacted by your decisions. There are lots of right-of-ways purchased yrs ago in other areas. Those roads should be completed first. I understand the need for regional transportation, but use existing roadways. It would be more cost effective! The corridors should not be going through neighborhoods or farmland.

## **Doris Kurtz**

Funding for these enormous projects just isn't feasible now or in the near future. Expanding existing roads makes more sense than some massive endeavors being proposed. Make Claribel/Kiernan work.

## **Davie Landers**

Informative.

## Janet Neal

NCC west of McHenry should be along Kiernan or south of Kiernan, not north of Kiernan/Claribel Rds. Improve Kiernan Interchange to max possible now, so will handle traffic for 20+ years. Hammett Interchange should be Tier 2 or later—not needed for a long time. Continue Claratina to Claus (not stop at \$\$). Make Kiernan and Claribel work by improving sooner with widening and stoplights.

## **James Robinson**

Do not improve 99/Hammett Rd. Interchange. Improve Kiernan Rd/99 Interchange to at least Alternative 2. Widen Kiernan to McHenry as an expressway. Use Kiernan/Claribel for the NCC. Make Kiernan/Claribel work!!!

## Joyce Robinson

*Improve Kiernan Interchange to Caltrans Alt. #2 project and continue 219 down Claribel (adopt as 108) to 120. Avoid Hammett Road Extension/Development to Dale Road and that as NCC* 

route to McHenry. Use Kiernan (219) instead. Do not improve Hammett Interchange. Put traffic lights and intersect improvements at Coffee, Roselle, Tully, Carver, Dale Roads. Improve Pelandale/Claratina to Claus Road. Improve Bangs Road to Claus Road. Use urban transitional zone or Claribel Road. Keep prime farm land undeveloped.

## **Bob Taylor**

DeBuduo & Defendis Ins. [No text.]

### Martin J. Zonlilt AARP

AARP encourages implementation of the recent "Transit needs Assessment," especially as its recommendation for transit coordination for seniors and handicapped.

## OAKDALE, November 19, 2009

No comment sheets were received.

## TURLOCK, November 23, 2009

Michelle Fagundes Turlock Unified School District

Great projects on lists. Thank you for taking the time to listen to our ideas and concerns.

### Bill Lyons, Jr. Mapes Ranch

Very open staff. Public was welcomed to help set priorities on how transportation funds spent. Jaylen French explaining the Regional Transportation Plan did a good job.







# Section 2.6 Summary of Changes

### Indirect Inclusions

The Regional Transportation Plan (RTP), as the name indicates is a long-range regional transportation planning document. The RTP must be based on the 'latest planning assumptions', in this case the general plans and other planning documents of each of the cities within Stanislaus County and the county. StanCOG, as the federally-recognized Metropolitan Planning Organization (MPO), is in charge of preparing the document every four (4) years.

The RTP also must be fiscally constrained, meaning only those projects that can reasonably assume full funding prior to construction can be included in Tier I of the RTP. In large part, transportation projects are the responsibility of the local agencies, therefore, the local agencies dictate the projects that are included in the RTP. StanCOG can advocate for projects and even include projects of which it controls funding; but for the most part, the lists are created by compiling the agencies' lists.

StanCOG has compiled all of the comments received from the four (4) public workshops held in November and has created this report. This report (and the comments within) will be shared with each of the local agencies for consideration at their discretion. It is our intent that each agency reviews these comments and incorporates the applicable comments into their planning process and ultimately their General Plans. Then, in subsequent RTP updates, these projects can be included as the 'latest planning assumptions'.

### Direct Inclusions

Several regional transportation-related concepts were raised at the workshops. The following is a list and summary of each of these comments. *StanCOG staff will address each of these in the narrative of the RTP document as important regional concepts.* 

### North County Corridor (NCC)

Two positions were presented at the workshops, one in favor and one opposed.

Those who spoke against the NCC stated that the need for the roadway is in question, that existing roadways should be used to their maximum extent prior to creating new roadways and that a new roadway of this scale would destroy an excessive amount of agricultural land.

Those who spoke in favor of the NCC stated that this roadway is needed to move regional traffic, not local traffic and to relieve congestion in city cores such as Riverbank and Oakdale.

### South county Corridor (SCC)

Several comments were received regarding the need to increase the mobility from the east side of the county to the rest of the county. Many felt that a South County Corridor system would increase access to the rest of the county.

### Loops Systems

The desire for loop systems was raised in four different areas: around the entire County, around the Modesto/Ceres area, around the City of Turlock and around the Patterson/Newman area. This concept addresses increasing mobility to various areas and relieving congestion in city cores.

### Non-Motorized Plan

A comment was made that the RTP should incorporate all non-motorized projects from the recently adopted Stanislaus County Non-Motorized Transportation Plan.

### Direct Project Inclusions

The following is a list of the projects that were added in the RTP based on comments received from the four public workshops.

- **§** Crows Landing Air Facility, General Aviation Airport, was added to Tier II
  - "The Patterson Airport may be closed in the future. The area needs access to the Airport at Crows Landing." Patterson Public Workshop, 11.9.09 [pg. 8]
  - "Use the Crows Landing Air Facility for jobs, air travel, etc. Good opportunity for the County." – Modesto Public Workshop, 11.18.09 [pg. 12]
  - Passenger air service is needed at the Crows Landing Airport." Patterson Public Workshop, 11.9.09 [pg. 9]

### **§** SR-132 Connectivity Project was added to Tier I

 "Improvements to SR-132 to I-5 are needed before the NCC improvements" – Modesto Public Workshop, 11.18.09 [pg. 11]

### **§** Traffic Signal at Las Palmas Ave and Sperry Road was added to Tier I

 "A traffic light is needed at Sperry Road and Las Palmas Road." – Patterson Public Workshop, 11.9.09 [pg.9]

### **§** Intersection Improvements at Las Palmas Ave and 2<sup>nd</sup> Street was added to Tier I

 "Safety issue: the intersection at Las Palmas Road and 2<sup>nd</sup> Street needs to be widened for trucks and the traffic light moved to accommodate the improvements. – Patterson Public Workshop, 11.9.09 [pg.9]

### **§** Sperry Road widening project was added to Tier I

• "Sperry between Ward and Interstate 5 needs to be widened to four lanes." – Patterson Public Workshop, 11.9.09 [pg.9]

### **§** Zacharias Road Interchange at I-5 was added to Tier II

• "Need new interchange at Zacharias Road and Interstate 5." – Patterson Public Workshop, 11.9.09 [pg.9]

### **§** Sperry Road Interchange Reconstruction Project at I-5 was added to Tier I

• "The Interstate 5/Sperry Road Interchange needs to be improved" – Patterson Public Workshop, 11.9.09 [pg.9]

### **§** Traffic Signal at Roselle Ave and Claribel Road was added to Tier I

 "Install a traffic signal at Roselle/Claribel Road." – Modesto Public Workshop, 11.18.09 [pg.10]

## **§** Several Bicycle improvements tied to Roadway projects were included in Tier I

 "Two citizens, Charles Turner and Bill Strand, offered [several] comments relative to the non-auto improvements needed in Oakdale and the County." -- Oakdale Public Workshop, 11.19.09 [pg.12]

# <u>Appendix A – Exhibits, PowerPoint Presentation and Room</u> Layouts



TRANSP

# **RTP Process**

- Prepare Draft Project List
- Prepare Revenue Projections
- Create Goals, Objectives, Policies, Performance Measures
- Prepare Final Project List
- Prepare Environmental Impact Report



# How Can You Stay Involved

- Come to another workshop.
- Come to the final workshop in January.
- Visit the StanCOG Web site.
- Come to a StanCOG Board meeting.



## **PowerPoint Presentation**













# Appendix B - Noticing

A public notice (advertisement) in English was placed in

- The Modesto Bee and Patterson Irrigator on October 29, 2009;
- The Turlock Journal on October 31, 2009;
- Waterford News, Hughson Chronicle, and Westside Connector on November 3, 2009;
- The Oakdale Leader, Riverbank News, and Ceres Courier on November 4, 2009;
- Westside Connector on November 5 (2<sup>nd</sup> time).

A Spanish-language notice (advertisement) was placed in *Vida en el Valle* on November 4, 2009





### **News Release**



CONTACT: Cindy Malekos StanCOG Public Information Officer (209) 525.4600 FOR IMMEDIATE RELEASE: November 3, 2009

## StanCOG Regional Transportation Plan Workshops Four Workshops to be Held in November

(Modesto, CA)—Members of the public are invited to four workshops being held by the Stanislaus Council of Governments (StanCOG), which is updating the Regional Transportation Plan (RTP) for the Stanislaus County region. The four workshops will be held in Patterson, Modesto, Oakdale, and Turlock as follows:

## Monday, November 9, 2009

6:30 p.m. – 8:00 p.m. Patterson Library 48 N. Salado Avenue Patterson, Calif.

## Thursday, November 19, 2009

6:30 p.m. – 8:00 p.m. Oakdale Community Center 110 S. Second Avenue Oakdale, Calif.

## Wednesday, November 18, 2009

6:30 p.m. – 8:00 p.m. Doubletree Hotel 1150 Ninth Street Modesto, Calif.

## Monday, November 23, 2009

6:30 p.m. – 8:00 p.m. Turlock Youth Center 1030 East Avenue Turlock, Calif.

The Regional Transportation Plan (RTP) is the region's blueprint for future transportation improvements and investments based on specific transportation goals, objectives and policies defined by the community and its elected officials.

Attendees at the public workshops will help StanCOG and the region's leaders set priorities for the transportation system over the next twenty-five years.

The purpose of the RTP, as stated in the 2007 California 2007 RTP Guidelines, is "to encourage and promote the safe and efficient management, operation and development of a regional intermodal transportation system that will serve the mobility of goods and people."

Major tasks items of the RTP process include preparing a draft project list; preparing revenue projections; creating goals, objectives, policies, and performance measures; preparing a final project list; and preparing an Environmental Impact Report.

Summaries of the public input from the four workshops will be integrated into a report that will be presented to members of the public for comment at a public meeting in January.

For more information, members of the public are welcome to call the Project Hotline at (209) 464-8707, Ext 101; (877) 464-4350 toll-free; or e-mail <u>Hotline@buethecommunications.com</u>. Other written comments and inquiries about the plan may be addressed to Public Outreach Coordinator, StanCOG RTP, P.O. Box 773, Stockton, CA 95201-0773.

# # #

The Modesto Bee | Several area road-planning meetings ahead

Page 1 of 1

# The Modesto Bee

modbee.com

Print This Article

Posted on Sat, Nov. 07, 2009

Several area road-planning meetings ahead

Bee Staff Reports

last updated: November 07, 2009 12:51:46 AM

People with interest in local road planning have an array of meetings to choose from in coming days, covering issues ranging from crosswalks to Salida overpasses to the North County Corridor.

Monday marks the first of four public workshops on the Stanislaus Council of Governments' Regional Transportation Plan, a blueprint for future improvements across the county.

The workshop will be held at the Patterson Library, 48 N. Salado Ave., followed by sessions on Nov. 18 at Modesto's DoubleTree Hotel, 1150 Ninth St., Nov. 19 at the Oakdale Community Center, 110 S. Second Ave. and Nov. 23 at the Turlock Youth Center, 1030 East Ave.

All workshops run from 6:30 to 8 p.m.; input will be compiled in a new transportation plan to be unveiled in January. For more information, call the agency's public outreach coordinator at 464-8707, ext. 101.

On Tuesday, state Department of Transportation officials will host an open house inviting comments on rebuilding two of Salida's Highway 99 interchanges.

Caltrans is seeking opinions on upgrades to the Kiernan Avenue and Hammett Road exits and onramps, as well as improvements to nearby intersections. The meeting is scheduled from 6 to 8 p.m. in the Salida Library, 4835 Sisk Road. For more information, call Caltrans' project manager at 525-6545.

A monthly meeting of agencies collaborating on the North County Corridor is scheduled for 4:30 p.m. Thursday in StanCOG's third-floor boardroom at 1111 I St., Modesto.

Officials are studying possible alignments for the 26-mile expressway from Salida to east of Oakdale, focusing on the portion east of Mo- desto's McHenry Avenue. For more information, see <u>www.stancounty.com/publicworks/ncc</u>-main.shtm or call 525-7547.

Following the North County Corridor meeting is StanCOG's monthly policy board meeting, scheduled to start at 6 p.m., also in StanCOG's boardroom. The agency has not yet released its agenda.

For more information, see www.stancog.org/policy-board.shtm.

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http://www.modbee.com/2384/v-print/story/924026.html

1/27/2010

### Invitation postcard (6"x11")



### WHAT IS THE RTP?

The RTP is the region's blueprint for future transportation improvements and investments based on specific transportation gnals, objectives, and policies defined by the community and its elected officials.

### WHY PARTICIPATE?

Your participation at one or more of the public workshops will help StanCOG and our region's leaders set priorities for the future and determine where and how transportation funds are spent.

### WHAT WILL HAPPEN AT THE WORKSHOPS?

First, you will hear a brief presentation about the regional transportation planning process. There, we'll roll up our sleeves and break into smaller groups to receive your comments and discuss what is most important to our region in planning for our future transportation needs.

### WHAT HAPPENS NEXT?

Summaries of the public input from all four workshops will be integrated into a report that will be presented to you and other members of the public for comment at a public meeting in early January.

### CONTACT

For more information, call the Project Hotline at (209) 464-8707, Ext. 101; (877) 464-4350 toll-free; or e-mail Harline puethecommunications.com. You may also address your written comments and inquiries about the plan to Public Outreach Coordinator, StanCOG RTP, P.O. Box 773, Stockton, CA 95201-0773.

### SPECIAL ACCOMMODATIONS

4) you implane meteod in commodulationi - Jar a sumple. Americans Sign Languarde an other interpreter accessible waiting. Jacobiometration in absensite formatic - plotte - all (200) 464-8705. Err. 101, or (877) 464-4330. Strunted helde cognited, por since pilot habber can Marry Ann Ramanda at (200) 877-4350.

### QUE ES EL RTP?

El RTP es el plan preliminar para futuras mejoras e inversiones en transporte regional basado en metas, objetivos y políticas específicas de transporte de acuerdo a lo que ha decidido la comunidad y sus autoridades.

### QUE SE GANA CON PARTICIPAR?

Sa participación durante uno o nais talleres públicos ayudará a StanCOG y a los líderes de nuestra región a establecer prioridades para el luturo y determinar donde y cómo se gasten los fondos de transporte.

### **JOUÉ PASARA EN LOS TALLERES?**

Primero, usited escachará una liveve presentación sobre el proceso de transporte regional. Luego, nos arremanganos las camisas y non dividimos en pequeños grupos para escuchar su opinión y hablar sobre qué es lo más importante a tumar en cuenta para las futaras necesidades de transporte en nuestra región.

### ¿QUE VIENE DESPUES?

Un returnen de las opiniones del público recopiladas en los cuatro talleres será integrado en un informe individual. Éste le será presentado a usted y a otros miembros de la comanidad durante una audiencia pública a principios de enero donde se pediran comemarios.

### COMUNIQUESE CON NOSOTROS

Para mayor información llame a la Linea Dedicada del Proyecto (209) 464-8707, exten-tión 101; larga distancia sin recargo al (877) 464-4330; o envie un correo electrónico a hotline@buethecemenunications.com. Poede Usted también dirigir sus concentratios y preguntas sobre el plan al Coordinador de Acercamiento Publico, StanCOG RTP, P.O. Box 773, Stockton, CA 95201-0773.

### Situaciones Especiales

Starred necessia menesim espectas -por ejemple, un morprese de seitas estadoundema a sero Jengyuge, acherito espesial, decampena dei en Remain alternistice - di vase Banae al (200) 464-870°. Est 101, 6 (877) 464-4350, 9 autobladhe español, por feror pilo habite con Harr Ann Ramardo al (200) 8°--4350.

# <u>Appendix C – Handouts</u>

## Public Participation Survey side one and two

Public Participation Survey
the following questions. The data that you provide will enable and communities affected by the Regional Transportation Plan. an "X" which best describe you and return the survey to the meeting on is voluntary.
Disability □Yes □No
🗌 African American
🗋 Hispanic
□ Other
Income
□ Less than \$22,050
□ \$22.050 and Over

	esta de la Participación Pública
Por favor tome un momento para comple que StanCOG identifique a los residente Regional. Por favor marque las cajas apr al coordinador de la junta. La presentaci	etar las siguientes preguntas. Los datos que usted suminstra permitirá es impactados y las comunidades afectadas por el Plan de Transporte ropiadas con una "X" a lo que más le describe y devuelve la encuesta ión de esta información es voluntaria.
Sexo	Incapacidad
Femenio Masculino	□ Si □ No
Raza	
Asiático/Isleño Pacífico	Africano Americano
Indio Americano/Nativo de Alaska	□ Hispano
Norteamericano (no Hispano)	Otro
Edad	Ingresos
☐ Menores de 40 años	☐ Menos de \$22,050
□ 40 años y más	□ \$22,050 y más
Idioma	

	2011 🖷
	Comment Sheet
Name (Please print):	Date:
Mailing address:	
Resident, Business, Org	inization, etc.:
Phone:	Email:
Comments:	

### Example Agenda



Appendix J: Environmental Justice Maps





PERCENT OF POPULATION WITH FEMALE HEAD-OF-HOUSEHOLD **FIGURE J.1** 





PERCENT OF POPULATION **OVER 65 YEARS OF AGE FIGURE J.2** 





PERCENT OF POPULATION QUALIFYING DISABLED **FIGURE J.3** 





PERCENT OF POPULATION **BELOW POVERTY LEVEL FIGURE J.4** 





PERCENT OF POPULATION MINORITY **FIGURE J.5**  Appendix K: 2008 State Transportation Improvement Program (STIP)

### 2008 State Transportation Improvement Program

Current Official STIP - (STIP funds, RIP and IIP only)

### **Stanislaus County**

### State Funds by Fiscal Year & Component (IIP & RIP Funds Only)

		PPNO / EA		PR				PROG				(Programmed	n Thousands	s)					
DIST	CO RI	CTIPS ID E ELEMENT	RESPONSIBLE AGENCY - PROJECT TITLE LOCATION/DESCRIPTION	FUND <u>PEND VOTE</u> SOURCE	<u>VOTED FI</u> LAST DATE	UNDS / TOTAL	AMOUNT	08/09	09/10	10/11	11/12	12/13 1	13/14	R/W	CON	PA&ED	PS&E	R/W ENG	ENG
10 PM: KP:	STA	0019C 4A2624 114-0000-0133 Local Assistance	Turlock, City of - Countryside Median Landscaping - In Turlock, on Countryside Drive from Tuolumne Road to Fulkerth Road. Landscape median island.	RIP	05/14/09	8	87	83							79	4	4		
				TOTAL		8	87	83							79	4	4		
10 PM KP:	STA	0019D 4A2634 114-0000-0134 Local Assistance	Turlock, City of - Golden State Boulevard Landscaping - In Turlock, on Golden State Boulevard from Christofferson Parkway to Monte Vista Avenue. Landscape median island	RIP	05/14/09	48	379	16			331				331	8	40		
_				TOTAL:		48	379	16	_	_	331		_	_	331	8	40		_
10 PM: KP:	STA	0219 4A3144 114-0000-0150 Local Assistance	Riverbank, City of - Oakdale Rd Beautification/Morrill Rd - Claribel Rd - In Riverbank, on Oakdale Road from Morrill Road to Claribel Road Landscape beautification	RIP	05/14/09	40	348	348							308		40		
			Description	TOTAL		40	348	348							308		40		
10 PM: KP:	STA	0220 114-0000-0151 Local Assistance	Stanislaus County - Claribel Rd Class I Bike Path - In Riverbank, on Claribel Road from SR 108 McHenry Ave. SR 219 Kierman Ave. to Clarible Rd intersection and Oakdale Rd. Construct 8 ft wide Class I bike	RIP			840			100		740			740	25	75		
_				TOTAL:	-		840			100		740			740	25	75	-	_
10 PM: KP:	STA	0221 114-0000-0152 Local Assistance	Patterson, City of - Roundabout Landscaping & Splitter Islands - In Patterson, at El Circula, Salado Avenue and South Del Puerto Avenue. Landscape existing roundabouts, and replace painted islands	RIP			158		18		140				140	3	15		
			existing roundabouts, and replace painted Islands	TOTAL:			158		18		140				140	3	15		_
10 PM KP:	STA	0222 4A3204 114-0000-0153 Local Assistance	Turlock, City of - Landscape Median on Golden State Bivd In Turlock, on Golden State Boulevard from Christoffersen Parkway to Roberts Road	RIP	05/14/09	22	487	22			465				465		22		
			approximately 5 miles. Lanoscape median	TOTAL		22	487	22			465				465	1	22		
10 PM: KP:	STA	0224 4A3224 114-0000-0155 Local Assistance	Turlock, City of - Landscape Median on Christoffersen Pkwy - In Turlock, on Christoffersen Parkway from Geer Road to North Olive Avenue	RIP	05/14/09	19	409	19		390					390		19		
			approximately ,5 miles. Lanuscape median.	TOTAL:		19	409	19		390	-				390		19		_
10 PM KP:	STA	0225 4A3214 114-0000-0156 Local Assistance	Turlock, City of - Landscape Median Golden State Blvd/1700 Ft South - In Turlock, on Golden State Boulevard from Monte Vista Avenue to 1,700 feet south anonyminately 5 miles. Landscape median	RIP	05/14/09	22	481	22			459				459		22		
			south approximately to miles. Candodate median	TOTAL		22	481	22			459		_		459	-	22	_	
10 PM: KP:	STA	0228 0S800 114-0000-0158 Capital Outlay	Stanislaus Council of Governments - North County Corridor - Near Salida and Escalon, from Route 99 to Route 120. Construct 24 miles of new expressway.	RIP	08/28/08	6,200	6,200	6,200								6,200			
_				TOTAL:		6,200	6,200	6,200					-		_	6,200			
10 PM: KP:	STA	0230 114-0000-0160 Local Assistance	Stanislaus County - Widen Claribel Rd from SR 108 & 219 to Oakdale Rd - In Modesto, on Claribel Road from Route 108 to Oakdale Road. Widen to two lanes in each direction with two way left turn lane	RIP			3,250					3,250			3,250				
-				TOTAL			3,250					3,250			3,250	L			
_																			

### 2008 State Transportation Improvement Program

### Current Official STIP - (STIP funds, RIP and IIP only)

### Stanislaus County

### State Funds by Fiscal Year & Component (IIP & RIP Funds Only)

	PPNO / EA								(	Programm	ogrammed Dollars in Thousands)							
DIST CO RTE	ELEMENT	LOCATION/DESCRIPTION	SOURCE	LAST DATE	TOTAL	AMOUNT	08/09	09/10	10/11	11/12	12/13	13/14 R/W	CON	PA&ED	PS&E	R/W ENG	ENG	
10 STA PM: KP:	9953 114-0000-0014 Local Assistance	Stanislaus Council of Governments - Planning, Programming and Monitoring - Planning, Programming and Monitoring,	RIP	08/13/09	2,087	4,063	606	606	606	606	764		4,063					
			TOTAL:		2,087	4,063	606	606	606	606	764		4,063	_				
10 STA 132 PM: R12 4 / R16.2 KP: R18 2 / 23.7	0944M 403500 114-0000-0022 Capital Outlay	Caltrans - Route 132 Expressway - In Modesto, on Route 132 from N. Dakota Avenue to Route 99. Construct 4 Iane expressway and improve Route 99 interchange. (TCRP #109)	RIP			5,762								3,992	1,770			
S			TOTAL:			5,762								3,992	1,770			
10 STA 132 PM: R5.8 / R2 4 KP: R9.3 / R3.9	7855 0A5100 114-0000-0054 Capital Outlay	Caltrans - SR-132 West Widening - Near Vernalis from Route 132/33 Overhead to San Joaquin River Bridge. Construct 4-lane divided expressway.	RIP			500								500				
-			TOTAL:			500								500				
10 STA 219 PM KP:	9940C 0A872 114-0000-0141 Capital Outlay	Caltrans - SR 219 Widening, Phase 2 - Near Salida, on Route 219 from Morrow Road to Route 108. Widen to 4 lanes	RIP			27,207		8,447				14,760	) 4,947		2,000	2,000	3,500	
			TOTAL.			27,207		8,447				14,76	4,947		2,000	2,000	3,500	
10 STA 99 PM: R2.3 / R22.6 KP:R3.7 / R36.4	0195 0S780 114-0000-0147 Capital Outlay	Caltrans - Stanislaus 99 Corridor Bridge Enhancement - In Turlock, Ceres, Modesto, and Saida, at various locations from Linwood Ave overcrossing to Route 219 East Bridge Road	IIP			2,156			96	476	1,584		1,075	96	474	2	509	
			TOTAL:			2 156			96	476	1,584		1.075	96	474	2	509	
	Total Stanisla	us County: 15 Projects	RIP:		8,446	50,171	7,316	9,071	1,096	2,001	4,754	14,76	15,172	10,732	4,007	2,000	3,500	
			Total:		8,446	2,156 52,327	7,316	9,071	96 1,192	476 2,477	6,338	14,76	1,075 16,247	96 10,828	4/4	2,002	4,009	



# Appendix L: 2008 State Highway Operation and Protection Program (SHOPP)

### 2008 SHOPP February 25, 2010 Close-Out Includes Prop 1B Bond Projects and Excludes GARVEE Projects and Federal ER Funds

(\$1,000)

Dist	County	Route	Post Miles	Location/Description	EA	PPNO	Prog Code	FY	R	w	1	Con	Vote Fund Type	PA	& ED	PS	<u>&amp; E</u>	RW	Sup	Con	Sup	Tota	Sup
10	San Joaquin	12	12,4/13,0	Near Lodi, at De Vries Road, Install signals and add left turn lanes,	0Q890	0236	201.010	2008/09	\$	21	\$	772	\$ 772 STP	s	133	\$	342	\$	15	\$	267	\$	757
10	San Joaquin	12	0 1/R4 4	Near Terminous, on Bouldin Island, from Mokelumne River Bridge to Potato Slough Bridge, Rehabilitate roadway.	0G800	7352	201,120	2010/11	\$ 2	2,404	\$	35,000	\$ - NH	\$	1,833	\$ 2	2,017	\$	158	\$	5,282	\$	9,290
10	San Joaquin	12		Near Isleton, at the Mokelumne River Bridge. Replace control house,	0J920	7353	201_110	2011/12	\$	3	\$	3,595	\$ - HBRR-S	\$	410	\$	704	\$	1	\$	344	\$	1,459
10	San Joaquin	12		Near Terminous, at Little Potato Slough Bridge; also near Manteca, at the connector from west Route 120 to northbound Route 5, Replace bearing pads and	0G350	7364	201.110	2011/12	\$	9	\$	2,490	\$ - HBRR-S	\$	801	\$	541	\$	•	S	489	\$	1,831
10	San Joaquin	205	2.4	Near Tracy, at Hansen Road, Repair bridge structural elements.	0N400	0245	201_119	2008/09			\$	1,553	\$ 1,553 HBRR-S	\$	5	\$	60	\$	2	\$	150	\$	217
10	San Joaquin	26	1 4/2 1	In Stockton, at Cardinal Avenue, Install traffic signals,	0N980	0117	201.010	2009/10	\$	3	\$	668	\$ - STP	\$	151	\$	309	\$	24	\$	186	\$	670
10	San Joaquin	26	1.1	Near Stockton, at Route 99. Repair girders.	0U720	0258	201.130	2009/10			\$	400	\$ 400 NH	\$	20	\$	40	\$	10	\$	200	\$	270
10	San Joaquin	26	18,5/19.0	Near Linden, at Shelly Road, Realign two curves and replace Sandstone Creek Bridge.	0T160	0264	201_010	2011/12	\$	1,031	\$	2,789	\$ - STP	\$	576	\$	904	\$	145	\$	804	\$	2,429
10	San Joaquin	26	4.6/6.0	West of Linden, from Nord Avenue to Thompson Road, Install two-way left turn lane	0E930	7453	201_010	2009/10	S	5,590	\$	3,039	\$ - STP	\$	1,917	\$	1,389	\$	978	\$	817	\$	5,101
10	San Joaquin	4	5_4/R8.2 ·	West of Stockton, from east of Middle River to Trapper Road, Realign curve,	0H04U	7025	201 010	2008/09	\$	801	\$	20,106	\$ 20,106 ARRA-SH	\$		\$	2,137	\$	515	\$	4,107	\$	6,759
10	San Joaquin	5	6.3	Near Tracy, south of Route 33 Replace failed culvert,	0T950	0244	201,130	2008/09	S	10	\$	490	\$ 490 NH	\$	10	\$	15	\$	10	\$	30	\$	65
10	San Joaquin	99	0_0/1_7	In and near Ripon, from the Stanislaus County line to Milgeo Avenue; also in Stanislaus County (PM 824.3/R24.8). Upgrade median barrier.	0L630	0005	201.020	2009/10			\$	4,984	\$ 4,984 STP	\$	277	\$	1,243	\$	20	\$	1,717	\$	3,257
10	San Joaquin	99	36.7	Near Galt, at Collier Road. Repair bridge structural elements	0N390	0107	201.119	2008/09			\$	453	\$ 453 HBRR-S	\$	5	\$	60	\$	2	\$	100	\$	167
10	San Joaquin	99	27,3/27,7	Near Lodi, at Armstrong Road. Required planting mitigation for EA 0F300,	CN910	0122	201_010	2008/09	\$	3	\$	621	\$ 621 STP	\$	156	\$	307	\$	79	\$	184	\$	726
10	San Joaquin	VAR		In San Joaquin County, on Routes 4, 5, 132 and 580 at all ramp gore areas, Construct traffic monitoring stations.	0K330	7161B	201.315	2010/11	\$	28	\$	3,142	\$ - NH	\$	1	\$	370	\$	47	\$	577	\$	995
10	San Joaquin	VAR		In San Joaquin County, on Routes 99, 120 and 205 at all ramp gore areas. Install traffic monitoring stations.	0K320	7612	201.315	2010/11	\$	28	\$	2,864	\$ - NH	s	1	\$	364	\$	47	\$	578	\$	990
10	Stanislaus	108	28 7/29.4	Near Modesto, at McHenry Avenue and Patterson Road, Install signals and widen intersection.	0N440	0066	201.010	2008/09	S	112	\$	1,599	\$ 1,599 STP	\$	407	\$	440	\$	101	\$	387	\$	1,335
10	Stanislaus	120	11.0/T18,2	Near Knights Ferry, from Lancaster Road to the Tuloumne County line. Construct centerline rumble strip.	0Q380	0257	201.010	2009/10			\$	250	\$ - STP	\$	86	\$	65	\$	23	\$	111	\$	285
10	Stanislaus	33	23.4	Near Westley, at Ingram Creek Bridge. Rehabilitate bridge (scour).	2A290	0032	201 111	2009/10	s	27	s	1,984	\$ - HBRR-S	s	172	\$	1,003	\$	159	\$	630	\$	1,964
10	Stanislaus	33	0,5/14.5	In Newman, from Inyo Street to south of Jensen Road; also in Patterson from south of Sperry Road to Van Ormer rail road grade crossing Rehabiliate	0G770	9182	201_121	2008/09			\$	5,154	\$ 5,154 ARRA-SH	\$	22	\$	762	\$	10	\$	718	\$	1,512

### 2008 SHOPP February 25, 2010 Close-Out Includes Prop 1B Bond Projects and Excludes GARVEE Projects and Federal ER Funds

(\$1,000)

Dist	County	Route	Post Miles	Location/Description	EA	PPNO	Prog Code	FY	RW	1	Co	on	Vo	ote Fund Ty	pe P/	& ED	PS	<u>8 E</u>	<u>RW</u>	Sup	Con	Sup	Tota	Sup
10	Stanislaus	99	R15_1/R15_7	In Modesto, between Tuolumne Boulevard and G Street, Widen median shoulder and install rumble	0M970	0098	201_010	2008/09			\$	297	\$	297 STP	\$	84	\$	137	\$	29	\$	119	\$	369
10	Stanislaus	99	R13,3	Near Ceres, at Hatch Road, Repair failed slip-out damage	0T850	0243	201_130	2008/09			\$	400	\$	400 NH	\$	10	\$	10	\$	5	\$	40	\$	65
10	Stanislaus	99	R15_1/R17 0	in and near Modesto, from Tuolumne Boulevard to Kansas Avenue, Rehabilitate roadway,	0A671	9421	201_120	2010/11	\$	324	\$	7,518	\$	- NH	\$	621	\$	2,046	\$	84	\$2	,095	\$	4,846
10	Stanislaus	99	R21 9/R22 3	In Salida, at Kiernan Avenue. Reconstruct interchange.	0K700	9464	201,310	2008/09	\$	9	\$	1,412	\$	1,412 NH	\$	1	\$	389	\$	43	S	382	\$	815
10	Tuolumne	108	5.7/6.2	Near Sonora, from Via Este to Draper Mine Road Left turn channelization	0H320	0131	201_010	2008/09	\$ 3	234	\$	1,331	\$	1,331 STP	\$	994	\$	765	\$	333	\$	364	S	2,456
10	Tuolumne	49	23.1/23.6	East of Sonora, from Fraguero to Mormon Creek Road, Realign curve,	0J150	0084	201.010	2008/09	\$1,1	033	\$	2,529	\$	2,529 STP	\$	844	\$	741	\$	352	\$	871	\$	2,808
10	Tuolumne	49	0,5/0,8	Near Moccasin, north of the Mariposa County line. Pave turnouts at curves and widen shoulders.	0K840	0092	201 010	2009/10			\$	305	\$	- STP	\$	137	\$	253	\$	5	\$	195	\$	590
10	Tuolumne	49	20.4	Near Sonora, at Parrots Ferry Road, Install traffic signal and lighting.	0N990	0118	201,010	2008/09			\$	328	\$	328 STP	\$	398	\$	290	\$	8	S	193	\$	889
11	Imperial	111	61,2/65,4	Near Bombay Beach, 4,2 miles south of Riverside - County line to Riverside County line, Install median rumble strips,	29900	0506	201.010	2009/10			\$	380	\$	- STP	\$	15	\$	50	S	5	\$	50	\$	120
11	Imperial	8	R31 3	Near El Centro, at Sunbeam Rest Areas; also on Route 111 near Calipatria at Two Rivers Rest Areas (PM 29.4), Upgrade Safety Roadside Rest Areas	26150	0518	201 250	2008/09:2	- 44 - C		\$	4,721	\$	4,721 NH	\$	407	\$	1,200	\$	10	\$	,305	\$:	2;922
11	Imperial	8	R4,9/R7,2	Near Mountain Spring, at Devils Canyon Bridge #58- 294L and at Myer Creek Bridge #58-270R Seismic Retrofit	26400	0521	201_113	2009/10 :	÷.		\$	7,485	\$	- HBRR-S	\$	208	\$	240	\$	27	\$	676	\$	1,151
11	Imperial	8	88.7/89.3	Near Winterhaven, at Imperial Safety Roadside Rest Area. Construct Safety Roadside Rest Area.	25190	0973B	201.260	2011/12	\$	679	\$	7,687	\$	- NH	\$	370	\$	1,036	\$	40	\$	,185	\$	2,631
11	Imperial	86	4_4/4.7	In El Centro, at McCabe Road. Install traffic signal, modify curbs, and upgrade signing and pavement delineation.	28810	0502	201.010	2008/09	\$	9	\$	550	\$	550 STP	\$	22	\$	225	5	20	\$	205	\$	472
11	Imperial	86	60.5	Near Westmorland and Calipatria, at Tesla Wash Bridge on Route 111 at Z Drain Bridge。Scour mitigation	28960	0842	201.111	2010/11			\$	10,400	\$	- HBRR-S	\$	814	. \$	1,131	\$	2	\$	1,069	\$	3,016
11	Imperial	86		Near El Centro, at El Centro Maintenance Station. Relocate maintenance station	07670	0972	201,352	2011/12	\$2	,625	S	9,158	\$	- ST-CASł	\$	1,090	) \$	1,750	\$	300	s	1,578	\$	4,718
11	San Diego			In Boulevard near the Campo Indian Reservation, at Boulevard Maintenance Station. Remediate hydrocarbon contarrination (L5703)	28150	0720	201,330	2008/09			\$	573	\$	573 NH	\$	26	\$\$	62	\$	26	\$	100	\$	214
11	San Diego			In El Cajon, at Bostonia maintenance station ( 5702), Remediation of hydrocarbon contamination,	28160	0721	201.330	2008/09			\$	500	\$	500 NH	\$	- 25	5\$	50	\$	35	\$	40	\$	150
11	San Diego			In the city of San Diego, at at the Kearney Mesa Material Lab (L5506). Upgrade material lab facility.	28770	0729	201,354	2010/11			\$	3,248	\$	- ST-CASI	- \$	242	2 \$	850	\$	5	\$	630	\$	1,727
11	San Diego	15	1,8/R6.9	In the city of San Diego, from Market Street to Murphy Creek Bridge, Rehabilitate bridge decks,	29140	0903	201.119	2008/09			S	900	\$	900 HBRR-S	\$		\$	150	\$	5	\$	150	\$	305
11	San Diego	15	51,4/54,3	In San Diego County, at Rainbow Creek Nutrients TMDL, Construct infiltration devices and bioswales,	28220	0907	201_335	2010/11			\$	3,935	\$	– NH	\$	5 134	4 \$	442	\$	21	\$	744	\$	1,341





Appendix M: Tier I Project Lists

### StanCOG 2011 Regional Transportation Plan Tier I ROADWAY Projects

			Project Details			Purpose/Need						
	Location	Project Limits	Description	Total Cost	Construction Year	Funding Source	System Preserv.	Capacity Enhance.	Safety	Alt. Mode		
	Stanislaus	Council of Governments				-						
ST01	SR-132	SR-132 Connectivity to SR-99	Construct full I/C at SR- 132W/SR-99, Construct 2-4 lane Expressway (SR-99 to 14th St) including improved intersections on SR-132E/D St, Construct extensions of 5th and 6th St couplets (Maze Blvd to SR-132E/D St), and construct full SR-132E I/C	\$377,009,300	2028	STIP, IIP, Tax Measure, Demo		x				
ST02	SR-99	Mitchell Rd to Hatch Rd	Widen 6 to 8 lanes	\$263,877,200	2027	STIP, IIP, Tax Measure		х				
ST03	SR-99	Hatch Rd to Tuolumne Rd	Widen 6 to 8 lanes	\$144,706,900	2027	STIP, IIP, Tax Measure		×				
ST04	SR-99	Tuolumne Rd to Kansas Ave	Widen 6 to 8 lanes	\$170,243,400	2027	STIP, IIP, Tax Measure		х				
ST05	SR-99	Kansas Ave to Carpenter Rd	Widen 6 to 8 lanes	\$102,146,000	2027	STIP, IIP, Tax Measure		×				
ST06	SR-99	Carpenter Rd to San Joaquin County Line	Widen 6 to 8 lanes	\$124,277,700	2027	STIP, IIP, Tax Measure		х				
			Total State	\$1,182,260,500								
	Sta	anislaus County										
SC01	SR-99	SR-99 & Kiernan Ave (SR-219)	Interchange Replacement	\$66,150,500	2015	STIP, PFF		x				
SC02	SR-99	SR-99 & Hammett Rd	Interchange Replacement	\$95,524,200	2015	STIP, PFF		Х				
SC03	North County Corridor	SR-99 to SR-120/108	Construct 2-6 Lane Expressway	\$553,693,600	2020	STIP, IIP, PFF, Tax Measure, Demo		x				
SC04	McHenry Ave	McHenry Ave @ Stanislaus River Bridge	Seismic Bridge Replacement	\$10,746,500	2015	HBP, PFF	х	×	x			
SC05	Various Locations	Various Locations	Install Traffic Signal/Intersection Improvements	\$62,597,700	2010-2029	CMAQ, PFF	x		x			
SC09	Geer-Albers Rd	Claribel Rd to Milnes Rd	Widen to 3 lanes	\$4,111,900	2022	PFF		Х				
SC10	Hatch Rd	Faith Home Rd to Clinton Rd	Widen to 3 lanes	\$2,605,900	2010	PFF		х	х			
SC11	McHenry Ave	Ladd Rd to Hogue Rd	Widen to 5 lanes	\$4,349,700	2011	STIP, PFF		Х				
SC12	Crows Landing Rd	San Joaquin River Bridge	Seismic Bridge Replacement - 3-lane Bridge	\$17,139,300	2013	HBP/LSSRP, PFF	x	x	x			

### StanCOG 2011 Regional Transportation Plan Tier I ROADWAY Projects

		Purpose/Need								
SC13	Geer Rd	Geer Rd @ Tuolumne River Bridge	Seismic Bridge Retrofit	\$1,639,100	2012	HBP/LSSRP	х		x	
SC14	Hickman Rd	Hickman Rd @ Tuolumne River	Seismic Bridge Replacement	\$15,070,600	2014	HBP/LSSRP	x		х	
SC15	Hills Ferry Rd	Hills Ferry Rd @ San Joaquin River	Seismic Bridge Retrofit - Mandatory	\$5,829,100	2013	HBP/LSSRP	х		x	
SC16	Pete Miller Rd	Pete Miller Rd @ Delta Mendota Canal Bridge	Seismic Bridge Retrofit	\$1,056,800	2015	HBP/LSSRP	х		х	
SC17	Santa Fe Ave	Santa Fe Ave @ Tuolumne River Bridge	Seismic Bridge Replacement	\$26,269,200	2015	HBP/LSSRP, PFF	x	x	x	
SC18	Seventh St	Seventh St @ Tuolumne River Bridge	Seismic Bridge Replacement; 4 Iane bridge with pedestrian access	\$35,666,400	2016	HBP	x	x	x	x
SC25	Claribel Rd	McHenry Ave to Oakdale Rd	Widen to 5 lanes	\$15,875,400	2013	STIP, PFF		Х		
SC26	Kiernan Ave (SR 219)	Phase II: Dale Rd to McHenry Ave	Widen to 4-lane Expressway	\$46,987,300	2012	STIP		х		
SC27	Kilburn Rd	Kilburn Rd @ Orestimba Creek Bridge	Replace Bridge (Critical)	\$2,627,000	2015	HBP			x	
SC41	Carpenter Rd	Whitmore Ave to Keyes Rd	Widen to 3 lanes	\$5,534,500	2016	PFF		х		
SC42	Carpenter Rd	Keyes Rd to Monte Vista Ave	Widen to 3 lanes	\$3,783,900	2018	PFF		х		
SC43	Carpenter Rd	Monte Vista Ave to W. Main St	Widen to 3 lanes	\$3,737,500	2020	PFF		х		
SC44	Crows Landing Rd	Keyes Rd to Monte Vista Ave	Widen to 3 lanes	\$2,459,800	2016	PFF		х		
SC45	Crows Landing Rd	Monte Vista Ave to W. Main St	Widen to 3 lanes	\$2,459,800	2016	PFF		х		
SC46	Crows Landing Rd	W. Main St to Harding Rd	Widen to 3 lanes	\$2,533,600	2017	PFF		х		
SC47	Crows Landing Rd	Harding Rd to Carpenter Rd	Widen to 3 lanes	\$3,091,100	2019	PFF		Х		
SC48	Crows Landing Rd	Carpenter Rd to River Rd/ Marshall Rd	Widen to 3 lanes	\$1,425,800	2021	PFF		х		
SC49	Crows Landing Rd	River Rd/Marshall Rd to SR-33	Widen to 3 lanes	\$15,112,300	2024	PFF		x		
SC50	Geer-Albers Rd	Taylor Rd to Santa Fe Ave	Widen to 3 lanes	\$4,550,600	2016	PFF		Х		
SC51	Geer-Albers Rd	Santa Fe Ave to Hatch Rd	Widen to 3 lanes	\$3,927,000	2017	PFF		Х	l	
SC52	Geer-Albers Rd	Hatch Rd to SR-132	Widen to 3 lanes	\$3,628,600	2019	PFF		Х	I	
SC53	Geer-Albers Rd	SR-132 to Milnes Rd	Widen to 3 lanes	\$10,696,400	2028	PFF		Х		
SC54	McHenry Ave	Hogue Rd to San Joaquin County Line	Widen to 5 lanes	\$8,891,600	2013	STIP, PFF		x		
SC55	Santa Fe Ave	Keyes Rd to Geer Rd	Widen to 3 lanes	\$4,405,700	2022	PFF		х		
SC56	Santa Fe Ave	Geer to Hughson City Limit	Widen to 3 lanes	\$3,116,000	2024	PFF		х		
SC57	Santa Fe Ave	Hatch to Tuolumne River	Widen to 3 lanes	\$2,809,900	2026	PFF		х		
	Project Details							Purpose/N	leed	
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SC58	W. Main St	San Joaquin River to Carpenter Rd	Widen to 3 lanes	\$5,398,600	2020	PFF		x		
SC59	W. Main St	Carpenter Rd to Crows Landing Rd	Widen to 3 lanes	\$3,443,700	2016	PFF		x		
SC60	W. Main St	Crows Landing Rd to Mitchell Rd	Widen to 3 lanes	\$5,288,500	2016	PFF		x		
SC61	W. Main St	Mitchell Rd to Washington Rd	Widen to 3 lanes	\$3,783,900	2018	PFF		x		
SC62	Various Locations	Various Locations	Roadway Rehabilitation	\$2,300,000	2010-2014	RSTP	x			
			Total County	\$1,070,319,000						
	l	City of Ceres								
C01	Various Locations	Various Locations	Install Traffic Signals	\$11,341,400	2010 - 2030	CMAQ	x		x	
C08	Various Locations	Various Locations	Reconstruct Major Streets (Annual Basis)	\$20,979,000	2025	RSTP	x			
C09	Various Locations	Various Locations	Reconstruct various Alleys (Annual Basis)	\$522,400	2025	Prop 1B	x			
C10	SR-99	Mitchell Rd/Service Rd	Construct New Interchange, Phase I	\$23,881,100	2015	PFF, STIP		x		
C11	SR-99	Mitchell Rd/Service Rd	Construct New Interchange, Phase II	\$121,812,600	2020	PFF, STIP		x		
C12	Central Ave	Hatch Rd to Grayson Rd	Widen from 2 to 4 lanes	\$11,145,400	2025	PFF		x		
C13	Grayson Rd	Ustick Rd to Central Ave	Widen from 2 to 4 lanes	\$2,752,000	2030	PFF		x		
C14	Mitchell Rd	River Rd to Service Rd	Widen to 4 lanes	\$10,705,500	2025	PFF, STIP		х		
C15	Mitchell Rd	Service Rd to Grayson Rd	Widen to 6 lanes, Phase I	\$693,300	2025	PFF, STIP		х		
C16	Morgan Rd	7th St to Grayson Rd	Widen from 2 to 4 lanes	\$1,361,200	2020	PFF		x		
C17	Service Rd	Central Ave to Mitchell Rd	Widen from 2 to 4-lane expressway, Phase I	\$6,659,600	2025	PFF		x		
C18	Whitmore Ave	Ustick Rd to Faith Home Rd	Widen from 2 to 4 lanes	\$3,400,800	2020	PFF		х		
			Total City of Ceres	\$215,254,300			-			
	Ci	ity of Hughson								
H01	Various Locations	Various Locations	Various Intersection Improvements	\$5,926,500	2010 - 2022	RSTP, CMAQ	x			
H02	Locust St	Dominic Ave to Euclid Ave	Construct new 2-lane Minor Collector	\$1,107,400	2020	RSTP, Dev. Impact Fees		x		
Н03	Tully Rd	Tully Rd at Irrigation Canal Bridge	Widen bridge over Irrigation Canal to 3-lanes	\$802,400	2025	RSTP, Dev. Impact Fees		x		
H07	7th St	Whitmore Ave to Santa Fe Ave	Improve to 2-lane Major Collector	\$1,344,000	2019	RSTP, Dev. Impact Fees		x		

			Project Details	·				Purpose/N	leed	
H08	Fox Rd	Fox Glen Dr to Geer Rd	Improve to 2-lane Constrained Major Collector	\$1,815,200	2023	RSTP, Dev. Impact Fees		x		
H10	Tully Rd	Santa Fe Ave to Whitmore Ave	Improvements to 2-lane Arterial	\$1,125,600	2013	RSTP		x		
H11	Euclid Ave	Hatch Rd to Whitmore Ave	Construct 2-lane Major Collector	\$1,957,200	2018	Dev. Impact Fees		x		
H12	Mountain View Rd	Hatch Rd to Santa Fe Ave	Construct new 2-lane street extension	\$950,100	2017	Dev. Impact Fees, Prop 42, RDA		x		
H13	Various Locations	Various Locations	Roadway Rehabilitation	\$165,000	2010-2014	RSTP	х			
			Total City of Hughson	\$15,193,400						
	Ci	ity of Modesto								
M01	SR-99	SR-99 & Pelandale Interchange	Reconstruct to 8-lane Interchange	\$69,092,800	2014	STIP, RSTP, CFF		x		
<i>M</i> 02	SR-99	SR-99 & Standiford Interchange	Reconstruct to 8-lane Interchange	\$40,117,700	2025	STIP, RSTP, CFF		x		
М03	SR-132	SR-99 to West of Dakota/Nebraska	Construct 2-4-lane Freeway (Maze Blvd/L St to Dakota Ave) including I/C Modifications at SR-99	\$110,738,800	2020	STIP, CFF, Demo		x		
M05	Various Locations	Various Locations	Roadway Rehabilitation	\$24,648,600	2011 - 2014	RSTP	x			
M10	Rosemore Ave	Kansas Ave to Blue Gum Ave	Widen Roadway to 2-lane collector and Rehabilitation	\$1,669,400	2014	RSTP	x	x		
M11	Morton Blvd	Tuolumne Blvd to Yosemite Blvd (SR-132)	Widen from 2 to 4 lanes	\$4,844,600	2015	RSTP		x		
M12	Blue Gum Ave	Poust Rd to Rosemore Ave	Widen from 2 to 4 lanes	\$4,179,200	2015	RSTP		x		
M13	Claratina Ave	Coffee Rd to Oakdale Rd	Widen from 2 to 6 lanes	\$7,508,300	2015	CFF, RSTP		x		
M14	Oakdale Rd	Sylvan Ave to Floyd Ave	Widen from 4 to 6 lanes	\$8,012,600	2015	CFF, RSTP		х		
M15	Dale Rd	Kiernan Ave to Ladd Rd	Widen from 2 to 4 lanes	\$11,553,900	2025	CFF, RSTP		х		
M16	E. Briggsmore Ave	Claus Rd to GP Boundary	Widen from 4 to 6 lanes	\$8,664,600	2015	CFF, RSTP		х		
M17	Dale Rd	Pelandale Ave to Standiford Ave	Widen from 2 to 6 lanes	\$9,786,500	2015	CFF, RSTP		x		
M18	Various Locations	Various Locations	Various Intersection Improvements	\$79,890,300	2010 - 2025	CMAQ	х			
M19	Dale Rd	Pelandale Ave to Kiernan Ave	Widen from 2 to 6 lanes	\$10,975,800	2015	CFF/CFD		x		
M20	Oakdale Rd	Sylvan Ave to Claratina Ave	Widen from 4 to 6 lanes	\$11,964,500	2015	RSTP, CFF		x		
M21	Oakdale Rd	Floyd Ave to Briggsmore Ave	Widen from 4 to 6 lanes	\$12,113,500	2015	RSTP, CFF		x		
M22	Sylvan Ave	Roselle Ave to Claus Rd	Widen from 2 to 4 lanes	\$12,678,000	2015	RSTP, CFF		Х		

			Project Details	,				Purpose/N	leed	
M23	New Road between Finney and Dakota	Beckwith Rd to Murphy Rd	Construct 4-lane Minor Arterial	\$18,477,900	2020	CFF, DEVELOPER		x		
M24	Pelandale/Claratina Expressway	Oakdale Rd to Roselle Ave	Extend as 6-lane Arterial	\$16,023,800	2015	CFF		x		
M25	Pelandale/Claratina Expressway	McHenry Ave to Coffee Rd	Widen from 2 to 6-lane Expressway	\$17,910,800	2015	RSTP, CFF		x		
M26	Standiford Ave	Dale Rd to Prescott Rd	Widen from 4 to 6 lanes	\$19,316,500	2015	RSTP, CFF		х		
M28	Paradise Rd	Carpenter Rd to Sutter Ave	Widen from 2 to 4 lanes	\$9,618,400	2015	RSTP, CFF		х		
M29	Roselle Ave	Floyd Ave to Claribel Rd	Widen from 2 to 4 lanes	\$29,660,300	2015	RSTP, CFF		x		
M30	Beckwith Rd	SR 99 to GP Boundary	Widen from 2 to 4 lanes	\$30,173,700	2025	RSTP, CFF		x		
M31	Briggsmore Ave	Prescott Rd to Oakdale Rd	Widen from 4 to 6 lanes	\$47,001,800	2015	CFF		х		
M36	Woodland Ave	Carpenter Rd to Kearney Ave	Widen to 4 lanes	\$17,074,300	2020	RSTP		x		
M37	Floyd Ave	Oakdale Rd to 1,000 feet west of Oakdale Rd	Widen from 2 to 4 lanes	\$24,916,300	2020	RSTP, CFF		x		
М38	Crows Landing Rd	SR-99 to 7th St	Widen from 4 to 6 lanes	\$9,243,200	2025	RSTP, CFF		х		
M39	Tully Rd	Pelandale Ave to GP Boundary	Widen from 4 to 6 lanes	\$13,887,800	2025	RSTP, CFF		x		
M40	Carpenter Rd	Hatch Rd to Paradise Rd	Widen to 6 lane expressway	\$16,776,300	2025	RSTP, CFF		x		
M41	McHenry Ave	Standiford Ave to GP Boundary	Widen from 4 to 6 lanes	\$16,785,900	2025	STIP		x		
M42	Claus Rd	Briggsmore Ave to Sylvan Ave	Widen from 2 to 6 lane	\$20,764,300	2025	RSTP, CFF		x		
M43	Mitchell Rd	Yosemite Blvd (SR-132) to Modesto GP Boundary	Widen from 4 to 6 lanes	\$21,929,300	2025	RSTP, CFF		х		
M44	Claus Rd	Sylvan Ave to Claribel Rd	Widen from 2 to 6-lane expressway	\$23,560,300	2025	RSTP, CFF		x		
M45	Crows Landing Rd	Whitmore Ave to SR-99	Widen from 4 to 6 lanes	\$31,212,900	2025	RSTP, CFF		х		
M46	Scenic Dr	Oakdale Rd to Claus Rd	Widen from 2 to 4 lanes	\$18,632,600	2025	RSTP, CFF		х		
			Total City of Modesto	\$831,405,500					I	
	Ci	ity of Newman								
N01	Various Locations	Various Locations	Reconstruct Roadways	\$581,400	2010 - 2020	RSTP	х			
N02	Various Locations	Various Locations	Install Traffic Signals	\$709,100	2013	CMAQ, CFF, Developer	x		x	
N03	SR-33 (North)	Yolo St to 2,700' N	Install 4 Lane Arterial Roadway Improvements	\$5,453,900	2020	CFF, Developer		x		
			Total City of Newman	\$6,744,400						

			Project Details					Purpose/I	Need	
	C	ity of Oakdale								
001	Various Locations	Various Locations	Install Traffic Signals and Various Intersection Improvements	\$1,072,200	2010-2015	CMAQ	х			
002	Warnerville Rd	Yosemite Ave to Kaufman Rd	Construct New 4-lane Roadway	\$4,371,000	2012	CFF, Grants		х		
003	Kaufman Rd	Greger St to Patterson Rd	Widen Roadway to 4-lanes	\$2,813,800	2013	CFF, Grants		х		
005	D St	Rodeo to Stearns Rd	Construct New 2-lane Roadway	\$2,892,200	2014	CFF, Grants, STIP		x		
006	Sierra Rd	5th St to Stearns Rd	Widen Roadways to 4-lanes	\$3,298,300	2020	CFF, RSTP		x		
007	F St	Maag Ave to Stearns Rd	Widen Roadway to 5-lanes	\$2,824,000	2015	CFF, RSTP		х		
O08	Orsi Rd	Sierra Rd to F St	Construct New 2-lane Roadway	\$2,326,100	2015	CFF, STIP, Developer		x		
010	Stearns Rd	A St to F St	Widen Roadway to 4-lanes	\$1,284,500	2014	CFF, Developer		x		
011	Stearns Rd	F St to Sierra Rd	Widen Roadway to 4-lanes	\$2,020,100	2015	CFF, Developer		x		
012	Various Locations	Various Locations	Roadway Rehabilitation	\$555,000	2010-2014	RSTP	x			
			Total City of Oakdale	\$23,457,200						
	Ci	ty of Patterson								
P01	Sperry Ave	Ward Ave to SR-33	Widen to 4-lanes; Realign and Reconstruct Roadway	\$7,164,400	2015	Dev. Fees, RSTP		x		
P02	Various Locations	Various Locations	Install Traffic Signals and Various Intersection Improvements	\$14,668,100	2010 - 2020	Dev. Fees, CMAQ	х		x	
P03	Sperry Ave	S. 1st St to Locust Ave	Construct new 3-lane Roadway Segment	\$5,970,300	2015	Dev. Fees, RSTP		x		
P04	I-5	I-5 & Sperry Rd	Reconstruct Sperry Ave Interchange. Widen Sperry Ave (Rogers Rd to I-5)	\$13,842,400	2020	Dev. Fees, STIP		x		
P05	Various Locations	Various Locations	Roadway Rehabilitation	\$495,000	2010-2014	RSTP	x			
			Total City of Patterson	\$42,140,200						

			Project Details					Purpose/N	leed	
	City	y of Riverbank								
R01	Various Locations	Various Locations	Install Traffic Signals and Various Intersection Improvements	\$15,210,900	2010 - 2030	Dev. Fees, CMAQ	x		х	
R08	Atchison St (SR-108)	Atchison St (SR-108) & 1st St	Construct right-hand turn lane on SB First St Approach	\$1,925,700	2025	Dev. Fees, Traffic Impact Fees	x	x		
R09	Various Locations	Various Locations	Reconstruct Roadway and Extend Curb, Gutter and Sidewalk	\$94,552,300	2010 - 2025	RSTP, Dev. Fees	x			
			Total City of Riverbank	\$111,688,900						
	Ci	ty of Turlock								
T01	SR-99	SR-99 & Fulkerth Rd	Reconstruct Interchange	\$13,842,400	2020	CMAQ, Dev. Fees, RSTP, STIP	x	x		
T02	Fulkerth Rd	Dianne to SR-99	Widen from 2 to 5-lane Arterial	\$336,400	2020	Dev. Fees, RSTP		х		
T03	W. Main St	Tegner Rd to Walnut Rd	Widen existing 2-5 lanes to 6- lane Arterial	\$1,811,100	2018	Dev. Fees, RSTP		х		
T04	W. Main St	Washington Rd to Tegner Rd	Widen from 2-lane to 4-lane Arterial	\$2,443,900	2018	Dev. Fees, RSTP		х		
T05	Fulkerth Rd	Tegner Rd to Dianne Dr	Widen from 2-lane to 4-lane Arterial	\$634,200	2018	Dev. Fees, RSTP		х		
T06	Monte Vista Ave	Olive Ave to Berkeley Ave	Install Median; Add one (1) Iane	\$1,439,700	2020	Dev. Fees, RSTP		х		
T07	Fulkerth Rd	Washington Rd to Tegner Rd	Widen from 2-lane to 4-lane Arterial	\$3,736,900	2018	Dev. Fees, RSTP		x		
T08	Washington Rd	Linwood Ave to Fulkerth Rd	Widen from 2-lane to 4-lane Arterial	\$2,378,200	2025	Dev. Fees, RSTP		x		
T09	Tegner Rd	Linwood Ave to W. Main St	Construct new 2-lane Industrial Collector	\$474,800	2020	Dev. Fees, RSTP		x		
T10	W. Canal Dr	SR-99 to Tegner Rd	Construct new 2-lane Collector	\$2,256,900	2016	Dev. Fees, RSTP		x		
T11	N. Olive Ave	Tuolumne Rd to Tornell Rd	Widen from 2-lane to 4-lane Arterial	\$827,800	2020	Dev. Fees		x		
T12	N. Olive Ave	Canal Dr to Wayside Rd	Widen from 2-lane to 4-lane Arterial	\$931,600	2020	Dev. Fees		x		
T13	N. Olive Ave	Wayside Dr to North Ave	Widen from 2-lane to 4-lane Arterial	\$970,400	2020	Dev. Fees		x		
T14	W. Linwood Ave	Walnut Rd to Lander Ave	Widen from 2-lane to 3-lane Collector	\$672,800	2020	Dev. Fees, RSTP		x		

			Project Details	,				Purpose/N	leed	
T15	W. Linwood Ave	Walnut Rd to Washington Rd	Widen from 2-lane to 3-lane Collector	\$4,597,500	2025	Dev. Fees, RSTP		x		
T16	W. Canal Dr	Washington Rd to Kilroy Rd	Construct new 2-lane Collector	\$2,740,100	2018	Dev. Fees, RSTP		×		
T17	East Ave	Golden State Blvd to Daubenberger Rd	Widen from 2-lane to 4-lane Arterial	\$6,511,100	2030	Dev. Fees, RSTP		×		
T18	Golden State Blvd	Taylor Rd to Monte Vista Ave	Complete 6-lane Boulevard	\$3,617,100	2020	Dev. Fees, RSTP		x		
T19	Golden State Blvd	Monte Vista Ave to Fulkerth Rd	Complete 6-lane Boulevard	\$3,135,300	2020	Dev. Fees, RSTP		x		
T20	N. Kilroy Ave	W. Main St to W. Canal Dr	Construct new Collector	\$812,000	2025	Dev. Fees, RSTP		×		
T21	Tegner Rd	Monte Vista Ave to Fulkerth Rd	Complete 2-lane Industrial Collector	\$736,800	2015	Dev. Fees, RSTP		x		
T22	Tegner Rd	Fulkerth Rd to north of Pedretti Park	Construct new 2-lane Industrial Collector	\$1,088,100	2020	Dev. Fees, RSTP		x		
T23	Taylor Rd	Tegner Rd to Golden State Blvd	Widen from 2-lane to 4-lane Collector	\$552,400	2020	Dev. Fees, RSTP		×		
T24	S. Kilroy Ave	Spengler Way to W. Linwood Ave	Construct new Industrial Collector	\$1,020,600	2025	Dev. Fees, RSTP		x		
T25	Taylor Rd	Golden State Blvd to SR-99	Widen from 2-lane to 4-lane Arterial	\$152,500	2025	Dev. Fees, RSTP		x		
T26	W. Main St	Walnut Rd to SR-99	Widen from 5-lane to 6-lane Arterial	\$19,256,500	2025	Dev. Fees, RSTP		x		
T27	Tegner Rd	W. Main St to Fulkerth Rd	Construct new 2-lane Industrial Collector	\$3,055,100	2020	Dev. Fees, RSTP		x		
T28	Various Locations	Various Locations	Install Traffic Signals and Various Intersection Improvements	\$4,105,100	2010 - 20205	CMAQ, Dev. Fees, STIP	x		x	
T29	SR-99	Lander Ave (SR-165) to S. City Limits	Construct New Interchange	\$39,103,200	2028	CMAQ, Dev. Fees, STIP	х	x		
T30	SR-99	W. Main St	Construct New Interchange	\$20,861,200	2025	CMAQ, Dev. Fees, STIP	х	x		
T31	SR-99	Taylor Rd	Reconstruct existing Interchange	\$8,407,100	2025	CMAQ, Dev. Fees, STIP	х	x		
T32	SR-99	Tuolumne Rd	Construct New Overpass	\$10,592,200	2018	CMAQ, Dev. Fees, STIP	х	x		
T33	Washington Rd	Fulkerth Rd to Monte Vista Ave	Construct 4-lane Expressway	\$2,921,900	2025	Dev. Fees, RSTP		x		
T34	Golden State Blvd	Golden State Blvd & Taylor Rd	Widen Intersection from 2 to 4 lanes	\$2,939,900	2025	Dev. Fees, RSTP		x		
T35	Various Locations	Various Locations	Roadway Rehabilitation	\$1,875,000	2010-2014	RSTP	x			
			Total City of Turlock	\$170,837,800						

			Project Details					Purpose/N	leed	
	City	y of Waterford								
W01	Various Locations	Various Locations	Curb, Gutter, Sidewalk; and Bike/ Pedestrian Improvements	\$1,591,400	2011	CMAQ, TE	х			x
W02	Various Locations	Various Locations	Install Traffic Signals and Various Intersection Improvements	\$3,664,700	2010 - 2030	CMAQ, RSTP, HSIP	x		x	
W03	Reinway Ave; Kadota Ave; and Welch St	Safe Routes to School Projects	Curb, Gutter and Sidewalk; and Bike/Pedestrian Improvements	\$506,800	2017	SR2S	х			x
W04	Various Locations	Various Locations	Roadway Rehabilitation	\$210,000	2010-2014	RSTP	х			
			Total City of Waterford	\$5,972,900						
	Stanislaus C	ouncil of Governments								
ST07	Various Locations	Various Locations	Transportation Enhancement Activities	\$4,480,000	2010-2014	STIP				
ST08	StanCOG	Various	Planning and Monitoring Activities	\$3,183,000	2010-2014	RSTP, STIP, FTA				
		Total StanCOG (	Non-Capacity Enhancements)	\$7,663,000		· · · · · · · · · · · · · · · · · · ·				
		То	tal Tier I Roadway Costs	\$3,682,937,100						





TIER 1 ROADWAY IMPROVEMENTS -INSET "1" OAKDALE AND RIVERBANK FIGURE M-1.1







**INSET "2" MODESTO** FIGURE M-1.2





### TIER 1 ROADWAY IMPROVEMENTS -INSET "3" CERES AND HUGHSON FIGURE M-1.3





### TIER 1 ROADWAY IMPROVEMENTS -INSET "4" PATTERSON FIGURE M-1.4





TIER 1 ROADWAY IMPROVEMENTS -INSET "5" TURLOCK FIGURE M-1.5





TIER 1 ROADWAY IMPROVEMENTS -INSET "6" WATERFORD, INSET "7" NEWMAN AND MAIN COUNTY FIGURE M-1.6

		Project Details	•				Purpose/I	leed	
	Location	Description	Total Cost	Construct. Year	Funding Source	System Preserv.	Capacity Enhance.	Safety	Alt. Mode
	Countywide								
CW01	All Agencies	Planning and Technical Studies for Rail service	\$5,000,000	2015	FTA, FRA, CBTPG				
		Total Countywide	\$5,000,000						
	Countywide								
ST09	StanCOG	Regional Rideshare and Vanpool Program	\$1,000,000	2010-2014	CMAQ				
		Total StanCOG	\$1,000,000						
	Stanislaus County								
SC65	StaRT	Various Construction Projects	\$7,600,500	2010-2019	Prop 1B, CMAQ, 5311		x		x
SC66	StaRT	Rebuild and Replaces Transit Buses	\$13,417,800	2010-2028	CMAQ, Prop 1B, LTF	х			x
SC67	StaRT	Capital Purchases (Buses, Electronic Fareboxes, Camera Systems, Bus Stop Facilities, etc.)	\$8,404,100	2010-2025	Prop 1B, ARRA, 5311, LTF, OHS, CMAQ	x			x
SC68	Various Locations	Install and Implement Technology Systems to Improve Transit Operations	\$741,100	2010-2011	Prop 1B, CMAQ	х			х
SC86	StaRT	Operating Costs	\$15,560,000	2010-2014	Fares, 5311, LTF				х
		Total County	\$45,723,500						
	City of Ceres								1
C29	Various Locations	Capital Purchases and Installation (Busses and	\$2,199,600	2010-2035	Prop 1B, LTF		X		Х
C31	Various Locations	Bus Turn-outs	\$345,100	2035	LTF			Х	Х
C32	CAT	Transit Plan - Study for future routes in newly annexed areas, new schools & transit center	\$47,800	2015	LTF				x
C35	САТ	Operating Costs	\$5,050,000	2010-2014	Fares, LTF				x
		Total City of Ceres	\$7,642,500						

		Project Details					Purpose/I	Veed	
	City of Modesto								
M157	Modesto Area Express (MAX)	Various Construct Projects	\$21,218,000	2010-2030	CMAQ, FTA, LTF		x		х
M158	МАХ	Capital Purchases (Buses, Shop Trucks and Support Equipment, Bus Stop Facilities, etc.)	\$165,415,000	2010-2030	CMAQ, FTA, LTF	х	x		x
M160	MAX	Rehabilitation, Maintenance and Preventive Maintenance - Equipment, Vehicles, Bus Stops, etc.	\$164,898,500	2010-2030	FTA, LTF	х			х
M162	MAX	Federally Mandated Training and Education	\$744,200	2030	FTA, LTF				х
M167	MAX	Transit Enhancements	\$1,860,300	2030	FTA, LTF				х
M168	МАХ	Upgrade to Fareboxes, AVL systems, Computer Systems and other Technology Improvements	\$11,161,800	2030	CMAQ, FTA, LTF	х			х
M170	MAX	Lease Transit Administrative Facility	\$2,790,500	2030	FTA, LTF				х
		Total City of Modesto	\$368,088,300						
	City of Turlock								
T58	City of Turlock BLAST	Various Construct Projects	\$6,567,400	2010-2015	FTA/LTF		X		х
T58 T59	City of Turlock BLAST BLAST	Various Construct Projects Capital Purchases (Busses, Bus Stop and Station Improvements, Support Equipment, etc.)	\$6,567,400 \$17,684,600	2010-2015 2010-2030	FTA/LTF FTA/LTF	x	x x		x x
T58 T59 T73	City of Turlock BLAST BLAST BLAST	Various Construct Projects Capital Purchases (Busses, Bus Stop and Station Improvements, Support Equipment, etc.) Federally Mandated Training and Education	\$6,567,400 \$17,684,600 \$279,100	2010-2015 2010-2030 2030	FTA/LTF FTA/LTF FTA/LTF	x	x		x x x
T58 T59 T73 T74	City of Turlock BLAST BLAST BLAST BLAST	Various Construct Projects Capital Purchases (Busses, Bus Stop and Station Improvements, Support Equipment, etc.) Federally Mandated Training and Education Maintenance on Vehicles and Facilities	\$6,567,400 \$17,684,600 \$279,100 \$3,534,700	2010-2015 2010-2030 2030 2010-2030	FTA/LTF FTA/LTF FTA/LTF FTA/LTF	x 	x x		x x x x x x
T58 T59 T73 T74 T78	City of Turlock BLAST BLAST BLAST BLAST BLAST	Various Construct Projects Capital Purchases (Busses, Bus Stop and Station Improvements, Support Equipment, etc.) Federally Mandated Training and Education Maintenance on Vehicles and Facilities Transit Enhancements	\$6,567,400 \$17,684,600 \$279,100 \$3,534,700 \$744,200	2010-2015 2010-2030 2030 2010-2030 2030	FTA/LTF FTA/LTF FTA/LTF FTA/LTF FTA/LTF	x	x		x x x x x x x
T58 T59 T73 T74 T78 T79	City of Turlock BLAST BLAST BLAST BLAST BLAST BLAST	Various Construct Projects Capital Purchases (Busses, Bus Stop and Station Improvements, Support Equipment, etc.) Federally Mandated Training and Education Maintenance on Vehicles and Facilities Transit Enhancements Upgrade to Fareboxes, AVL systems, Computer Systems and other Technology Improvements	\$6,567,400 \$17,684,600 \$279,100 \$3,534,700 \$744,200 \$744,200	2010-2015 2010-2030 2030 2010-2030 2030 2030	FTA/LTF FTA/LTF FTA/LTF FTA/LTF FTA/LTF FTA/LTF	x 	x x		x x x x x x x x
T58 T59 T73 T74 T78 T79 T81	City of Turlock BLAST BLAST BLAST BLAST BLAST BLAST BLAST	Various Construct Projects Capital Purchases (Busses, Bus Stop and Station Improvements, Support Equipment, etc.) Federally Mandated Training and Education Maintenance on Vehicles and Facilities Transit Enhancements Upgrade to Fareboxes, AVL systems, Computer Systems and other Technology Improvements Operating Costs	\$6,567,400 \$17,684,600 \$279,100 \$3,534,700 \$744,200 \$744,200 \$8,130,200	2010-2015 2010-2030 2030 2010-2030 2030 2030 2030 2010-2014	FTA/LTF FTA/LTF FTA/LTF FTA/LTF FTA/LTF FTA/LTF FTA/LTF Fares, 5307, 5309, LTF	x 	x x		x x x x x x x x x x
T58 T59 T73 T74 T78 T79 T81	City of Turlock BLAST BLAST BLAST BLAST BLAST BLAST BLAST BLAST	Various Construct Projects Capital Purchases (Busses, Bus Stop and Station Improvements, Support Equipment, etc.) Federally Mandated Training and Education Maintenance on Vehicles and Facilities Transit Enhancements Upgrade to Fareboxes, AVL systems, Computer Systems and other Technology Improvements Operating Costs Total City of Turlock	\$6,567,400 \$17,684,600 \$279,100 \$3,534,700 \$744,200 \$744,200 \$8,130,200 <b>\$37,684,400</b>	2010-2015 2010-2030 2030 2010-2030 2030 2030 2010-2014	FTA/LTF FTA/LTF FTA/LTF FTA/LTF FTA/LTF FTA/LTF FTA/LTF Fares, 5307, 5309, LTF	X X	X X		x x x x x x x x x

			Project Details					Purpose	/Need	
	Location	Project Limits	Description	Total Cost	Construct. Year	Funding Source	System Preserv.	Capacity Enhance.	Safety	Alt. Mode
	Stan	islaus County								
SC63	Claribel Rd	Oakdale Rd to McHenry Ave	Add Class I bike path in conjunction with Claribel roadway widening	\$1,890,900	2013	CMAQ, STIP, TE, PFF		x		x
SC64	Pirrone Rd	Hammett Rd to Pelandale Rd	Add Class II bike lanes	\$281,400	2013	TE, CMAQ		x		x
			Total County	\$2,172,300						
	Ci	ty of Ceres								
C19	Hatch Rd	Payne Ave to Central Ave	Hatch Rd Bike/Ped Project - Phase III	\$257,500	2010	CMAQ		x		x
C20	Hatch Rd	Richland Ave to Central Ave	Construct Bike/Ped Facility (3 phases)	\$265,300	2011	CMAQ		x		x
C21	Mitchell Rd	TID Lateral from Hatch Rd to Fowler Rd	Mitchell Rd Bike/Ped Project - Phase I	\$281,400	2013	CMAQ		x		x
C22	Mitchell Rd	TID Lateral from Fowler Rd to Whitmore Ave	Mitchell Rd Bike/Ped Project - Phase II	\$298,600	2015	CMAQ		x		x
C23	Mitchell Rd	TID Lateral From Whitmore Ave to Roeding Rd	Mitchell Rd Bike/Ped Project - Phase III	\$316,700	2017	CMAQ		x		x
C24	Mitchell Rd	TID Lateral from Roeding Rd to Service Rd	Mitchell Rd Bike/Ped Project - Phase IV	\$326,200	2018	CMAQ		x		x
C25	Hatch Rd	East Gate Blvd. to Faith Home Rd	Hatch Rd TID Bike/Ped Project - Phase IV	\$401,200	2025	CMAQ		x		x
C26	Various Locations	Various Locations	Misc. Bike/Pedestrian Facility Projects	\$346,100	2020	CMAQ		x		x
C27	Mitchell Rd	TID Lateral from Service Rd to Rhode Rd	Mitchell Rd Bike/Ped Project - Phase V	\$8,028,800	2030	CMAQ		x		x
			Total City of Ceres	\$10,521,800						

			Project Details		•			Purpose	/Need	
	City	of Hughson								
H14	Various Locations	Various Locations	Construct Class I, Class II, Class III Bikeway Improvements (Per Master Plan)	\$164,000	2012	BTA, CMAQ		x		x
H15	Hatch Rd	Santa Fe Ave to Geer Rd	Construct Class I Bike Path	\$675,400	2013	CMAQ		x		х
H16	Whitmore Ave and 7th St	Whitmore Ave (600' E) and 7th St (600' S)	Curb, Gutter and Sidewalk, Pedestrian Improvements	\$1,507,100	2014	CMAQ	х			х
H17	Various Locations	Various Locations	Sidewalk In-Fill and Streetscape Improvements (ADA)	\$2,243,200	2010 - 2015	CMAQ	х			x
			Total City of Hughson	\$4,589,700						
	City	of Modesto								
M85	Various Locations	Various Locations	Bicycle/Pedestrian Improvements at Railroad crossing	\$141,400	2010-2015	CMAQ, CFF	х			x
M87	Various Locations	Various Locations	Bicycle Improvements - Signage/striping	\$2,465,900	2010 - 2030	CMAQ, CFF	х			x
M112	Various Locations	Various Locations	Bicycle Lane Widening	\$613,700	2015 - 2025	CMAQ, CFF		х		x
M126	MID Canal System	MID Lateral 5 and 6	Construction Improvements - Class I Trail along MID Lateral 5 & 6	\$27,684,700	2020	CMAQ, CFF		x		x
M127	Hetch Hetchy ROW	Semallon Dr to Riverbank	Trail Improvements - Class I Bikeway	\$27,684,700	2020	CMAQ, CFF	х			x
M155	Virginia Corridor	Briggsmore Ave to San Joaquin County Line	Trail Improvements	\$48,141,200	2025	CMAQ, PROP 84, DEMO	x			x
M156	Tuolumne River Restoration Project	Mitchell Rd to Carpenter Rd	Trail Improvements	\$51,350,700	2025	CMAQ, PROP 84, DEMO	х			x
			Total City of Modesto	\$158,082,300						

			Project Details				Purpose	/Need	
	City	of Newman							
N04	Canal School Rd	Inyo Ave to Sherman Pkwy	Construct Class I Bike Lane	\$1,019,600	2012	CMAQ	х		х
		L	Total City of Newman	\$1,019,600					
	City	of Oakdale							
013	Valley View Multi- Use Trail, Phase I	Kerr Park to Stanislaus River	Construct Class I Bike Lane	\$437,100	2012	CMAQ	х		x
014	Cottle's Trail Multi- Use Trail	A St to the Oakdale Plaza Shopping Center	Construct Class I Bike Lane	\$506,500	2013	CMAQ	x		x
			Total City of Oakdale	\$943,600					
	City o	of Patterson							
P06	Various Locations	Various Locations	Construct Class I and Class II Bike Lanes	\$48,400	2012	CMAQ	х		x
			Total City of Newman	\$48,400					
	City c	of Riverbank							
R15	Stanislaus River Crossing	Stanislaus River Crossing	Pedestrian Bridge over Stanislaus River	\$7,313,100	2035	Dev. Fees, Traffic Impact Fees, BTA		x	x
R16	Hetch Hetchy Trail	Hetch Hetchy Trail	Construct Class I Bike/Ped Trail	\$1,178,100	2025	Dev. Fees, Traffic Impact Fees, BTA	x		x
R17	Stanislaus River Park Trail	Stanislaus River Park Trail	Construct Class I Bike/Ped Trail	\$857,100	2025	Dev. Fees	x		x
			Total City of Riverbank	\$9,348,300					
	City	of Turlock							
T46	Various Locations	Various Locations	Construct Class I Bike Paths	\$3,625,700	2015-2035	BTA, SysDev, CMAQ, RSTP	х		x
T49	Canal Rd & Diane Rd	Canal Rd & Diane Rd	Construct Bicycle Parking Area	\$258,800	2035	BTA, SysDev, CMAQ, RSTP			x
T51	Various Locations	Various Locations	Construct Class II Bike Lanes	\$2,267,700	2020-2025	BTA, SysDev, CMAQ, RSTP	x		x
			Total City of Turlock	\$6,152,200		· · · · · · · · · · · · · · · · · · ·			

			Project Details					Purpose	e/Need	
	City c	of Waterford								
W05	Hickman Rd	Yosemite Blvd to Bridge (Overlook Park, SW corner of Intersection)	Curb, Gutter and Sidewalk; Bike/Pedestrian and Roadside Rest Improvements	\$1,304,800	2018	CMAQ, TE, EEMP, BTA	x			х
W06	Tuolumne Pedestrian Bridge	Appling Rd over Tuolumne River	Construct new pedestrian bridge	\$2,076,400	2020	CMAQ, BTA			x	х
W07	WID Canal Bike/Ped Trail	Tim Bell Rd to MID Canal Terminus (Phase I)	Install Class I Bike Path - Phase I	\$734,300	2022	CMAQ, BTA		x		х
			Total City of Waterford	\$4,115,500						
		Total Tier I Bik	e and Pedestrian Costs	\$196,993,700						

		Project Details					Purpose	/Need	
	Location	Description	Total Cost	Construction Year	Funding Source	System Preserv.	Capacity Enhance.	Safety	Alt. Mode
	City of Modesto								
M172	Modesto City-County Airport	Terminal Program NEPA	\$382,500	2012	FAA, PFC	Х			
M173	Modesto City-County Airport	Utility Master Plan (Sign Plan/Elec./Util. Study)	\$206,000	2010	FAA, PFC	x			
M174	Modesto City-County Airport	Rehab/Expand NW Term. Apron (Const)	\$1,236,000	2010	FAA, PFC		Х		
M175	Modesto City-County Airport	Terminal Expansion (Design)	\$1,725,500	2012	FAA, PFC		х		
M176	Modesto City-County Airport	Enhance Airport Storm Drain System (Design)	\$446,800	2011	FAA, PFC				
M177	Modesto City-County Airport	Terminal Expansion (Const. Phase-1)	\$8,626,800	2012	FAA, PFC		Х		
M178	Modesto City-County Airport	Enhance Airport Storm Drain System (const. Phase-1)	\$1,150,300	2012	FAA, PFC		x		
M179	Modesto City-County Airport	Terminal Expansion (const. Phase-2)	\$8,885,600	2013	FAA, PFC		Х		
M180	Modesto City-County Airport	Enhance Airport Storm Drain System (const. Phase-2)	\$1,184,800	2013	FAA, PFC		x		
M181	Modesto City-County Airport	Construct Maintenance Building (Design)	\$579,700	2014	FAA, PFC	Х		Х	
M182	Modesto City-County Airport	Construct ARFF Building (Design)	\$579,700	2014	FAA, PFC	х		Х	
M183	Modesto City-County Airport	Rehab Runway (Airfield Pavement Maintenance, Design)	\$231,900	2014	FAA, PFC	х			
		Total City of Modesto	\$25,235,600						
	City of Oakdale								
015	Oakdale Municipal Airport	Fencing and Security Cameras	\$546,400	2012	FAA, State			Х	
016	Oakdale Municipal Airport	Runway/Taxi Maintenance and Upgrades	\$546,400	2012	FAA, State	х			
		Total City of Oakdale	\$1,092,800						
	City of Turlock								
T81	Turlock Municipal Airport	Airfield: Slurry and Restripe Runways	\$82,400	2010	FAA/State	х			Х
T82	Turlock Municipal Airport	Navigational Aids: Install AWOS	\$154,500	2010	FAA/State				Х
T83	Turlock Municipal Airport	Install Obstruction lights on utility poles	\$1,100	2010	FAA/State				Х
T84	Turlock Municipal Airport	Apron and Taxiway rehabilitation and drainage improvements	\$1,648,000	2010	FAA/State	х			х
T85	Turlock Municipal Airport	Improve access road	\$185,400	2010	FAA/State				х
T86	Turlock Municipal Airport	Construct 20 new hangars	\$643,800	2010	FAA/State				х
T87	Turlock Municipal Airport	Construct additional vehicular parking	\$77,300	2010	FAA/State				х
T88	Turlock Municipal Airport	Install perimeter fencing and gates	\$442,900	2010	FAA/State				х
T89	Turlock Municipal Airport	Relocate runway 12-30 & build new entry/exit connector taxiways	\$3,186,400	2013	FAA/State				x

		Project Details					Purpose	/Need	
T90	Turlock Municipal Airport	Develop Pavement Maintenance Plan	\$11,300	2013	FAA/State	х			х
T94	Turlock Municipal Airport	Install MITL on formal runway and new taxiways	\$40,600	2013	FAA/State				х
T95	Turlock Municipal Airport	Install airfield signage	\$135,100	2013	FAA/State				х
T96	Turlock Municipal Airport	Install 12,000-gallon fuel tank	\$202,600	2013	FAA/State				Х
T97	Turlock Municipal Airport	Construct pollution abatement facility	\$202,600	2013	FAA/State				Х
T98	Turlock Municipal Airport	Construct 20 new hangars	\$703,500	2013	FAA/State				Х
T99	Turlock Municipal Airport	Extend fire protection system	\$405,200	2013	FAA/State				Х
T100	Turlock Municipal Airport	Airfield electrical service infrastructure	\$168,900	2013	FAA/State				х
T101	Turlock Municipal Airport	Additional drainage improvements	\$1,409,200	2013	FAA/State				х
T102	Turlock Municipal Airport	Extend runway 12-30	\$692,200	2020	FAA/State				х
T103	Turlock Municipal Airport	Extend entry/exit connector taxiways	\$519,100	2020	FAA/State				Х
T104	Turlock Municipal Airport	Relocate PAPIs	\$16,700	2020	FAA/State				Х
T105	Turlock Municipal Airport	Relocate REILs	\$16,700	2020	FAA/State				Х
T106	Turlock Municipal Airport	Extend MITL	\$49,900	2020	FAA/State				Х
T107	Turlock Municipal Airport	Extend MIRL	\$33,300	2020	FAA/State				Х
T108	Turlock Municipal Airport	Install 12,000-gallon fuel tank	\$249,200	2020	FAA/State				Х
T109	Turlock Municipal Airport	Construct 20 new hangars	\$865,200	2020	FAA/State				Х
T110	Turlock Municipal Airport	Construct new terminal/administration building facility	\$519,100	2020	FAA/State				х
T111	Turlock Municipal Airport	Construct maintenance/storage building	\$103,900	2020	FAA/State				Х
		Total City of Turlock	\$13,070,200						
		Total Tier I Aviation Costs	\$39,398,600						

Appendix N: Tier II Project Lists

		Project Details				Purpose/Need       vstem     Capacity     Safety     Alt. N       eserv.     X     X     X       x     x     X     X			
Location	Project Limits	Description	Total Cost	Construction Year	System Preserv.	Capacity Enhance.	Safety	Alt. Mode	
Stani	islaus County								
North County Corridor	SR-99 to McHenry Ave	Construct 4-8 Lane Expressway	\$1,488,235,700	2030		х			
SR-99	SR-99 & Hammett Rd	Interchange Ramp and Auxiliary Lane Improvements	\$27,684,700	2020		x			
		Total County	\$1,515,920,400						
Ci	ty of Ceres								
Crows Landing Rd	Crows Landing Rd & Grayson Rd	Install Traffic Signals	\$415,300	2020		х			
Crows Landing Rd	Crows Landing Rd & Hackett Rd	Install Traffic Signals	\$427,800	2021		x			
Crows Landing Rd	Service Rd to Grayson Rd	Widen from 2 to 4 lanes	\$4,526,500	2030		х			
Faith Home Rd	Grayson Rd to N of River Crossing	New 6-lane expressway	\$44,625,900	2030		х			
Grayson Rd	Grayson Rd & Central Ave	Install Traffic Signals	\$1,174,900	2022		х			
Grayson Rd	Grayson Rd & Morgan Rd	Install Traffic Signals	\$1,210,100	2023		Х			
Hatch Rd	Hatch Rd & Faith Home Rd	Install Traffic Signals	\$701,100	2024		х			
Hatch Rd	Herndon Rd to Faith Home	Widen from 4 to 6-lane	\$32,319,300	2030		х			
SR-99	Hatch Rd & SR-99	Construct new Overpass	\$55,808,900	2030		х			
Mitchell Rd	SR-99 to Grayson Rd	Widen to 6 lanes, Phase II	\$3,956,600	2030		x			
Service Rd	Central Ave to Mitchell Rd to Faith Home Rd	Widen from 2 to 4-lane expressway, Phase li	\$29,485,700	2030		x			
SR-99	Service Rd to Grayson Rd	Construct New Interchange, Phase III	\$71,106,100	2030					
Roeding Rd	Roeding Rd & Faith Home Rd	Install Traffic Signals	\$722,200	2025		х			
Whitmore Ave	Whitmore Ave & Boothe Rd	Install Traffic Signals	\$743,800	2026		x			
Whitmore Ave	Whitmore Ave & Faith Home Rd	Install Traffic Signals	\$766,100	2027		x			
		Total City of Ceres	\$247,990,300						

		Project Details	ľ		Purpo		
City	of Hughson						
Santa Fe Ave	Hatch Rd to N. City Limit	Widen to 4-lane Expressway	\$13,174,500	2017	x		
Santa Fe Ave	N. City Limit to S. City Limit	Widen to 4-lane Arterial	\$9,374,100	2017	x		
Hatch Rd	Santa Fe Ave to Geer Rd	Widen to 4-lane Expressway	\$26,617,400	2018	x		
		Total City of Hughson	\$49,166,000				
City	of Modesto						
SR-99	SR-99 & Briggsmore Interchange	Reconstruct to 8-lane Interchange	\$104,306,000	2025	x		
Hatch Rd	Crows Landing Rd to SR-99	Widen to 4 lane expressway	\$31,623,000	2025	x		
Hatch Rd	Carpenter Rd to Crows Landing Rd	Widen to 4 lane expressway	\$39,545,200	2025	x		
El Vista Ave/Oakdale Rd	Briggsmore Ave to Yosemite Blvd	Widen from 4 to 6 lanes	\$47,858,200	2025	x		
Morse Rd	Shoemake Ave to new Brink Ave	Construct 4-lane road	\$17,361,700	2025	x		
Carpenter Rd	Whitmore Ave to Hatch Rd	Widen to 6-lane expressway	\$18,873,300	2025	x		
Tully Rd	Standiford St to Pelandale Ave	Widen from 4 to 6 lanes	\$9,628,300	2025	x		
Shoemake Ave	Morse Rd to Brink Ave	Widen from 2 to 4-lane expressway	\$20,485,100	2025	x		
Oakdale Rd	Claribel Rd to Claratina Ave	Widen from 2 to 6 lanes	\$14,251,800	2025	x		
Prescott Rd	Bangs Ave to GP City Limits	Construct 2 to 4 lanes	\$15,661,300	2025	x		
Yosemite Blvd (SR- 132)	Sante Fe Ave to City Limit	Widen from 4 to 6 lanes	\$5,861,700	2025	x		
Dakota Ave	North Ave to Salida Blvd	Widen from 2 to 6 lanes	\$36,543,800	2020	X		
Whitmore Ave	Carpenter Rd to Morgan Rd	Widen from 2 to 4 lanes	\$40,993,900	2020	x		

		Project Details			Purpose	e/Need	
Carpenter Rd	Maze Blvd (SR-132) to SR-99	Widen to 6-lane Expressway	\$32,749,900	2020	х		
Carpenter Rd	Paradise Rd to Maze Blvd (SR-132)	Widen to 6-lane Arterial	\$21,256,900	2020	x		
Maze Blvd	MID Lateral #5 to SR-99	Widen from 2 to 4 lanes	\$27,201,500	2015	Х		
Briggsmore Ave	Oakdale Rd to Roselle Ave	Widen from 4 to 6-lane Expressway	\$21,090,400	2015	×		
Paradise Rd	Carpenter Rd to GP Boundary (see Modesto General Plan)	Widen from 2 to 4 lanes	\$16,748,800	2015	x		
Briggsmore Ave	Roselle Ave to Claus Rd	Widen from 4 to 6-lane Expressway	\$17,403,600	2015	×		
Claratina Ave	Roselle Ave to BNSF RR	Construct 4-lane Arterial	\$15,907,700	2015	X		
Morgan Rd	Hatch Rd to Whitmore Ave	Widen Roadway to 4-lanes	\$12,685,200	2015	x		
Maze Blvd	Morse Rd to MID Lateral #5	Widen from 2 to 4 lanes	\$13,857,300	2015	x		
Coffee Rd	Mable Ave to Claribel Rd	Widen from 2 to 4 lanes	\$14,365,900	2015	Х		
Morse Rd	California Ave to Brink Ave	Widen from 2 to 4 lanes	\$11,119,100	2015	x		
Lincoln Ave	Yosemite Blvd (SR-132) to Scenic Dr	Widen from 2 to 4 lanes	\$10,626,200	2015	x		
Lakewood Ave	Scenic Dr to Briggsmore Ave	Widen from 2 to 4 lanes	\$8,944,000	2015	x		
Norseman Dr	Yosemite Blvd (SR-132) to End	Construct two-lane Collector	\$5,281,600	2015	x		
Nebraska Ave	Maze Blvd (SR-132) to Service Rd	Widen Roadway to 4-lanes	\$2,367,100	2015	×		
Mariposa Rd	Yosemite Blvd (SR-132) to Beavercreek Ct	Widening at intersections	\$1,432,900	2015	×		
SR 132 East	SR-99 to Santa Fe Ave	Improved connection to SR- 99	\$128,376,600	2025	x		
9th St	Carpenter Rd to River Rd	Widen from 4 to 6 lanes	\$25,354,400	2025	Х		
Scenic Dr	Rose Ave to Oakdale Rd	Widen to 6 lanes	\$19,102,500	2020			
Sylvan Ave	Oakdale Rd to Roselle Ave	Widen from 4 to 6 lanes	\$21,870,900	2020	x		
McHenry Ave	Approx. Coralwood Rd to Claratina Ave - West side	Widen from 6 to 8 lanes	\$16,207,600	2025	x		
McHenry Ave	Briggsmore Ave to Needham St	Widen from 4 to 6 lanes	\$29,851,400	2015	x		

		Project Details	·		Purpose/Need			
Briggsmore Extension - East	Claus Rd to Albers Rd	New 4-lane expressway	\$21,256,300	2020		x		
Claus Rd	Briggsmore Ave to Claribel Rd	New 6-lane expressway	\$16,448,300	2025		х		
Standiford Ave/ Sylvan Ave	Prescott Rd to Oakdale Rd	Widen from 4 to 6 lanes	\$17,972,800	2025		х		
Briggsmore Ave	Sisk Rd to Claus Rd	Widen to 6 lanes	\$40,689,000	2025		х		
Carpenter Rd	Maze Blvd (SR 132) to Hatch Rd	Widen to 4 lanes	\$24,391,600	2025		х		
Claribel Rd	McHenry Ave to Claus Rd	Widen to 4 lanes	\$40,117,700	2025		х		
Claus Rd	Yosemite Blvd (SR 132) to Claribel Rd	Widen to 4 lanes	\$12,837,700	2025		х		
Parker Rd ALT to Briggsmore Ave	East of Claus Rd to Albers Rd	New 4/5-lane expressway	\$19,256,500	2025		х		
7th St	Morgan Rd to K St	Widen from 2 to 4 lanes (Excluding bridge)	\$14,442,400	2025		x		
Brink Rd	Finney Rd to Carpenter Rd	Widen from 2 to 4 lanes	\$34,092,100	2020		x		
Lincoln/Lakewood Bridge	Lincoln/Lakewood Rd @ Dry Creek Bridge	Construct a new bridge Crossing over Dry Creek	\$7,221,500	2025		x		
		Total City of Modesto	\$1,021,214,700					
Cit	y of Newman							
Inyo Ave	L St to Canal School Rd	Reconstruct Roadway	\$3,367,700	2020		Х	х	
Canal School Rd	Inyo Ave to Hills Ferry Rd	Reconstruct Roadway	\$2,686,000	2020		Х	Х	
Hills Ferry Rd	Driskell Ave to Brookhaven Dr	Reconstruct Roadway	\$2,686,000	2020		х	x	
SR-33 (South)	Inyo Ave to 1,750' S	Install 4 Lane Arterial Roadway Improvements	\$3,925,000	2020		x	x	
		Total City of Newman	\$12,664,700					
Cit	ty of Oakdale							
Yosemite Ave	Warnerville Rd to Patterson Rd	Widen Roadway to 4 lanes	\$3,541,100	2020		х		
Orsi Rd	Sierra Rd to Warnerville Rd	Construct New 2-lane Roadway	\$7,783,000	2025		х		
Crane Rd	Greger St to Patterson Rd	Widen Roadway to 5-lanes	\$5,616,500	2025		x		
Walnut St	Willow Glen Ave to Crane Rd	Construct New 2-lane Roadway	\$2,964,200	2020		х		

		Project Details	·		Purpose	Purpose/Need		
J St	Orsi Rd to Stearns Rd	Construct New 2-lane Roadway	\$2,224,200	2025	x			
Crane Rd	Crane Rd & Patterson Rd	Install Traffic Signal	\$401,200	2025	Х			
Orsi Rd	Orsi Rd & J St	Install Traffic Signal	\$401,200	2025	X			
Crane Rd	West Bridge to F St	Widen Roadway to 4 lanes	\$5,896,900	2020	X			
Crane Rd	Crane Rd @ Stanislaus River	Construct Crane Rd Bridge	\$40,178,100	2030	x			
Lexington Ave	Crane Rd to Yosemite Ave	Construct New 4-Iane Roadway	\$7,433,800	2030	x			
Yosemite Ave	Lexington Ave	Install Traffic Signal	\$744,200	2030	х			
Crane Rd	Lexington Ave	Install Traffic Signal	\$465,100	2030	Х			
Lexington Ave	Yosemite Ave to Stearns Rd	Construct New 4-Iane Roadway	\$5,391,500	2035	x			
Willowood Dr	Extend from Greger St to Patterson Rd	Construct New 2-lane Roadway	\$6,418,900	2025	x			
Poplar St	Extend from Lee Ave to Crane Rd	Construct New 2-lane Roadway	\$3,460,600	2020	x			
Various Locations	Various Intersections	Six (6) new Traffic Signals	\$3,019,300	2035	X			
North County Corridor	Various Locations	Associated Improvements	\$20,909,800	2030	x			
		Total City of Oakdale	\$116,849,600		L L			
City	of Patterson							
I-5	San Joaquin County Line to Sperry Ave	Widen 4-6 lanes (San Joaquin CL to Sperry Ave)	\$152,039,700	2035	x			
Zacharias Rd	Raines Rd to I-5	Extend Zacharias Rd west and construct new Interchange at I-5	\$111,617,700	2030	x			
North Expressway	Las Palmas Ave to San Joaquin River	Construct new 4-lane expressway to Las Palmas Ave at San Joaquin River	\$65,793,000	2025	x			
Rogers Rd	Delta Mendota to Zacharias Rd	Widen from 2 to 4 lanes	\$11,073,900	2020	x			
Rogers Rd	South of Sperry Ave	New 5-lane Collector Street	\$9,689,700	2020	x			
Park Center Dr	South of Sperry Ave	New 3-lane Collector Street	\$5,970,300	2015	x			
Baldwin Rd	Keystone Pacific Pkwy to Zacharias Rd	Widen 2 to 4 lanes	\$5,970,300	2015	x			

		Project Details	·		Purpose/Need		
Ward Ave	SR 33 to Patterson City Limits	Widen 2 to 4 lanes and realign intersection	\$23,532,000	2020	х		
SR 33	Within Patterson City Limits	Widen 3 to 5 lanes within Patterson City Limits.	\$69,761,100	2030	х		
M St	Ward Ave to 1st St	Widen to 4-lanes	\$16,047,100	2025	х		
Orange Ave	Locust Ave to Sycamore Ave.	Widen from 2 to 3 lanes (Add center turn lane)	\$27,684,700	2020	x		
South Expressway	S of Las Palmas from W of San Joaquin River to Sperry Rd & I-5 Interchange	Construct new 4-lane Expressway	\$38,818,700	2035	x		
		Total City of Patterson	\$537,998,200				
Cit	y of Turlock						
East Ave	Santa Fe Ave to Turlock City Limit	New 4/5-lane expressway	\$40,926,500	2030	x		
Golden State Blvd	Monte Vista Ave to Berkeley Rd	New 4-lane expressway	\$44,542,300	2035	х		
Taylor Rd	Washington Rd to Golden State Blvd	Construct 4-lane expressway	\$7,100,800	2030	х		
Lander Ave	Simmons Rd to SR-99	Widen from 2-lane to 4-lane Arterial	\$1,143,000	2035	x		
E. Linwood Ave	Berkeley Ave to Johnson Rd	Construct new 4-lane expressway	\$14,384,500	2035	x		
E. Linwood Ave	Golden State Blvd to Waring Rd	Widen from 2 to 4-Lane Collector	\$3,682,300	2030	x		
Monte Vista Ave	Washington Rd to SR-99	Widen from 2-lane to 4-lane Arterial	\$420,900	2020	x		
Monte Vista Ave	Berkeley Ave to Quincy Rd	Widen from 2 to 4-lane Arterial	\$6,124,800	2035	x		
Waring Rd	Hawkeye Ave to Linwood Ave	Construct new 2-lane Collector	\$7,116,800	2035	x		
Tegner Rd	Tegner Rd & Spengler Way	Install Traffic Signal, Widen Approaches	\$321,000	2025	x	x	
Taylor Rd	Golden State Blvd to Berkeley Ave	Widen to 4-lanes	\$39,508,800	2035	x		
		Total City of Turlock	\$165,271,700		 		

		Project Details	·			Purpose/	Need	
Ci	ty of Waterford							
Church St	Main St to Rose Ct	Curb, Gutter, Sidewalk; Right- of-Way; and Drainage	\$826,500	2026	x			
S Western Ave	Washington Rd to Riverside Rd	Curb, Gutter, Sidewalk; and Right-of-Way	\$58,000	2014	х			
F St	F St & La Gallina Ave	Re-align and Reconstruct Intersection	\$1,315,200	2028			x	
Skyline Blvd	Yosemite Blvd to Bentley St	Re-construct; Curb, Gutter, Sidewalk, Drainage Improvements	\$2,709,200	2029	х			
Hickman Rd	Hickman Rd @ Waterford Bridge	Hickman Bridge Replacement (Waterford Portion)	\$107,600	2019	x			
C St, Covey St	Covey St from Tim Bell Rd to C St; C St from Covey St to Welch St	Reconstruct; Curb, Gutter, Sidewalk; and Right-of-Way	\$401,200	2025				
Pasadena Ave	Yosemite Blvd (SR 132) to Kadota Ave	Curb, Gutter, Sidewalk; Right- of-Way; and Overlay	\$389,500	2024	х			
Kadota Ave	Reinway Ave to Pasadena Ave	Curb, Gutter, Sidewalk; and Right-of-Way	\$558,100	2030				
Riverside Rd	Western Ave to Yosemite Blvd (SR 132)	Reconstruct; SD Facilities, Guard Rail	\$808,800	2035	х			
		\$7,174,100					·	
	Tota	al Tier II Roadway Costs	\$3,674,249,700					

	Project Details				Purpose/I	Veed	
Location	Description	Total Cost	Construct. Year	System Preserv.	Capacity Enhance.	Safety	Alt. Mode
Stanislaus County							
ACE / HSR Rail Overlay	Construct Stanislaus County Commuter Rail line to connect San Joaquin County to Stanislaus County.	\$0	2035				x
Stanislaus County	Construct California High Speed Rail Line through Stansislaus County (Merced to Sacramento Link)	\$0	2035				x
	Total County	\$0					
City of Modesto							
Union Pacific Corridor (City of Modesto)	Construct North-bound and South-bound commuter express lines for connection to ACE service	\$21,566,000	2035				x
Downtown City of Modesto	Construct a passenger rail station to house Commuter express rail and eventually HSR.	\$107,829,600	2035				x
	Total Modesto	\$129,395,600					
	Total Tier II Transit Costs	\$129,395,600					

		Project Details				Purpose/	Need	
Location	Project Limits	Description	Total Cost	Construction Year	System Preserv.	Capacity Enhance.	Safety	Alt. Mode
Stanis	slaus County							
Various Locations	Various Locations	Install 'Share the Road' signs on various County Roads	\$84,500	2013			x	x
		Total County	\$84,500					
Cit	y of Ceres							
Hatch Rd	Morgan Rd to Herndon Rd	Construct Bike/Ped Facility (3 phase project)	\$1,604,800	2025				x
TID Lateral #2	Ustick Rd to Mitchell Rd	Bicycle/Pedestrian Facility	\$3,289,700	2025				х
El Camino Ave	Whitmore Ave to Service Rd	Signage/Striping	\$7,800	2015				x
Herndon Rd	Joyce Rd to Whitmore Ave	Signage/Striping or widening	\$16,800	2015				x
Joyce Rd	Bystrum Rd to Herndon Rd	Signage/Striping	\$6,000	2015				х
Mitchell Rd	Hatch Rd to Tenaya Rd	Signage/Striping or widening	\$304,900	2025				x
Mitchell Rd	Service Rd to Hatch Rd	Signage/Striping	\$16,100	2025				x
Roeding Rd	Ceres Main Canal to 6th St	Signage/Striping	\$4,200	2015				x
Rhode Drive	Mitchell Rd to Esmar Rd	Signage/Striping	\$4,200	2020				x
Rhode Drive	Esmar Rd to Nunes Rd	Signage/Striping or widening	\$110,800	2020				x
Whitmore Ave	Mitchell Rd to Blaker Rd	Signage/Striping	\$9,000	2015				х
Whitmore Ave	Blaker Rd to Fiesta Way	Widening	\$650,600	2020				х
Mitchell Rd	Service Rd to Rhode Rd	Widening	\$23,900	2015				x
Whitmore Ave	300' w/o Morgan Rd to Crows Landing Rd	Signage/Striping or widening	\$128,400	2025				x
		Total City of Ceres	\$6,177,200					

Project Details				Purpose/Need				
City	of Oakdale							
Valley View Multi- Use Trail, Phase II	Kerr Park to Valley View Park	Construct Class I Bike Lane	\$1,229,900	2016				х
		Total City of Oakdale	\$1,229,900					
City	of Patterson							
Sperry Ave	Ward Ave to Rogers Rd	Install Class I Bikeway	\$2,747,800	2020				Х
Total City of Patterson \$2,747,800								
City	of Turlock							
Monte Vista Ave	Olive Ave to Berkeley Ave	Class II Bike Lanes	\$217,400	2020				Х
Fulkerth Rd	Washington Rd to Tegner Rd	Class II Bike Lanes	\$528,400	2035				x
W. Canal Dr	SR-99 to Tegner Rd	Class II Bike Lanes	\$1,268,100	2035				х
W. Linwood Ave	Walnut Rd to Lander Ave	Class II Bike Lanes	\$528,400	2035				х
Tegner Rd	Monte Vista Ave to Fulkerth Rd	Class II Bike Lanes	\$338,600	2035				x
Tegner Rd	W. Main St to Fulkerth Rd	Class II Bike Lanes	\$339,200	2020				х
Dianne Rd	W. Main St to Fulkerth Rd	Class II Bike Lanes	\$339,200	2020				х
Walnut Rd	W. Linwood Ave to Canal Dr	Class II Bike Lanes	\$234,000	2020				х
Waring Rd	Hawkeye Ave to Linwood Ave	Class II Bike Lanes	\$509,000	2035				x
E. Tuolumne Rd	Quincy Rd to Daubenberger Rd	Class II Bike Lanes	\$261,000	2035				x
Taylor Rd	Crowell Rd to McKenna Rd	Class II Bike Lanes	\$692,600	2015				x
Total City of Turlock \$5,255,900								
City of	of Waterford							
Tuolumne River Bike/Ped Trail	Reinway Ave to Riverwalk Park	Install Class I Bike Path	\$2,202,900	2022				х
WID Canal Bike/Ped Trail	Western Ave to Kadota Ave	Install Class I Bike Path - Phase II	\$311,600	2024				х
WID Canal Bike/Ped Trail	Kadota Ave to Rienway Ave	Install Class I Bike Path - Phase III	\$418,800	2034				x
Total City of Waterford \$2,933								
Total Tier II Bike and Pedestrian Costs			\$18,428,600					

#### **APPENDIX N-4**

Project Details				Purpose/Need			
Location	Description	Total Cost	Construction Year	System Preserv.	Capacity Enhance.	Safety	Alt. Mode
Stanislaus County							
Crows Landing Air Facility	Crows Landing Air Facility Runway Improvements	\$1,060,900	2011				x
	Total County	\$1,060,900					
City of Modesto							
Modesto City-County Airport	Construct T-Hangar Unit	\$707,400	2025				
Modesto City-County Airport	Construct T-Hangar Unit	\$707,400	2025				
Modesto City-County Airport	Construct Air Cargo Building	\$232,700	2025				
Modesto City-County Airport	Construct T-Hangar Unit	\$1,414,800	2025				
	Construct new entrance for general aviation and						
Modesto City-County Airport	park use; Two-lane roadway, drainage, road	\$1,267,800	2025				
	lighting, perimeter fence						
	Total City of Modesto	\$4,330,100					
City of Turlock							
Turlock Municipal Airport	Acquire aviation easement over 3 acres (northwest)	\$0	2020				
Turlock Municipal Airport	Acquire aviation easement over 3 acres (southeast)	\$0	2020				
	Total City of Turlock	\$0					
	Total Tier II Aviation Costs	\$5,391,000					

Appendix O: Truck Volumes on Stanislaus County State Highways

TRUCK VOLUMES ON STANISLAUS COUNTY STATE HIGHWAYS				
Route	Limits (Mile Post)	Truck Volume and Percentage Of Total Traffic		
I-5	NA			
I-5	NA			
I-5	NA			
SR 33	Crows Landing /Fink Road (6.83)	375 (9.5%)		
SR 99	Taylor Road (6.75)	13,366 (16.3%)		
SR 99	Back - Modesto, Hatch Road/9 <sup>th</sup> Street (13.26)	13,396 (12.5%)		
SR 99	Ahead – Modesto, Hatch Road/9 <sup>th</sup> Street (13.26)	13,376 (12.0%)		
SR 99	Modesto, Jct. SR 132 (16.12)	17,415 (13.5%)		
SR 99	Modesto, Carpenter Road (18.52)	18,090 (13.5)		
SR 99	Back - Salida, Jct. SR 219 (22.55)	15,525 (13.5%)		
SR 99	Ahead – Salida, Jct. SR 219 (22.55)	15,660 (13.5%)		
SR 108	@Jct. SR 132 (22.43)	332 (3.2%)		
SR 108	Modesto, K Street @ Needham Avenue (22.8)	588 (3.4%)		
SR 108	Modesto, Briggsmore Avenue (24.8)	1,248 (3.4%)		
SR 108	Back – Jct. SR 219 West (27.6)	916 (4.2%)		
SR 108	Ahead – Jct. SR 219 West (27.6)	1,666 (7.0%)		
SR 108	Oakdale, East Jct. SR 120 (38.2)	1,145 (5.0%)		
SR 120	Back - Valley Home Road (3.16)	968 (8.0%)		
SR 120	Ahead – Valley Home Road (3.16)	3,230 (15.6%)		
SR 120	Back – Oakdale, West Jct. SR 108 (5.1)	2,691 (13.0%)		
SR 120	Ahead – Oakdale, West Jct. SR 108 (5.1	1,582 (7.0%)		
SR 120	Stanislaus/Tuolumne County Line (18.1)	1,660 (11.8%)		
SR 132	Back – Modesto, Jct. SR 99 (14.7)	1,956 (12.0%)		
SR 132	Ahead – Modesto, Jct SR 99 (14.7)	1,782 (11.8%)		
SR 132	El Vista Avenue (17.1)	2,391 (9.8%)		
SR 132	Back – Hickman Road/F Street (28.0)	956 (12.1%)		
SR 132	Ahead – Hickman Road/F Street (28.0)	536 (9.4%)		
SR 132	Roberts Ferry Road (35.9)	198 (6.6%)		
Source: Caltrans 2007 Truck Volumes				

Appendix P: Airport Master Record
**U.S. DEPARTMENT OF TRANSPORTATION** PRINT DATE: 10/30/2009 AIRPORT MASTER RECORD FEDERAL AVIATION ADMINISTRATION AFD EFF 10/22/2009 Form Approved OMB 2120-0015 > 1 ASSOC CITY: MODESTO 4 STATE: CA LOC ID: MOD FAA SITE NR: 01896.\*A 5 COUNTY: STANISLAUS CA > 2 AIRPORT NAME: MODESTO CITY-CO-HARRY SHAM FLD 7 SECT AERO CHT: SAN FRANCISCO 3 CBD TO AIRPORT (NM): 02 SE 6 REGION/ADO: AWP/SFO SERVICES BASED AIRCRAFT GENERAL 90 SINGLE ENG: 143 10 OWNERSHIP: ЪŪ > 70 FUEL: 100LL A A1+ > 11 OWNER: CITY OF MODESTO 91 MULTI ENG: 24 >71 AIRFRAME RPRS: MAJOR 92 JET: 8 > 12 ADDRESS PO BOX 642 > 72 PWR PLANT RPRS: MAJOR MODESTO, CA 95353 175 TOTAL: > 13 PHONE NR: > 73 BOTTLE OXYGEN: NONE 209-577-5318 93 HELICOPTERS: 7 JEROME THIELE > 74 BULK OXYGEN: HIGH/LOW > 14 MANAGER: 94 GLIDERS: 0 > 15 ADDRESS: 617 AIRPORT WAY 75 TSNT STORAGE: HGR. TIE 0 MODESTO, CA 95354-3916 76 OTHER SERVICES: 95 MILITARY: > 16 PHONE NR 209-577-5318 AFRT, AVNCS, CARGO, CHTR, INSTR, RNTL, SALES 96 ULTRA-LIGHT: 2 > 17 ATTENDANCE SCHEDULE: **OPERATIONS** ALL ALL ALL FACILITIES 100 AIR CARRIER: 5.544 > 80 ARPT BCN: CG 102 AIR TAXI: 10.496 DUSK-DAWN > 81 ARPT LGT SKED 103 G A LOCAL: 21,026 > 82 UNICOM: 122.950 104 G A ITNRNT: 36,720 18 AIRPORT USE: PUBLIC 83 WIND INDICATOR: YES-L 105 MILITARY: 164 19 ARPT LAT: 37-37-32 9420N ESTIMATED 84 SEGMENTED CIRCLE: YES 20 ARPT LONG: 120-57-15.9170W TOTAL: 73.950 85 CONTROL TWR: YES 21 ARPT ELEV: 97 SURVEYED **OPERATIONS FOR 12** 86 FSS: RANCHO MURIETA 22 ACREAGE 435 87 FSS ON ARPT: MONTHS ENDING 12/31/2008 NO > 23 RIGHT TRAFFIC: 28R. 10R 88 FSS PHONE NR: > 24 NON-COMM LANDING: NO 89 TOLL FREE NR: 1-800-WX-BRIEF 25 NPIAS/FED AGREEMENTS:NGY II A S 05/1973 > 26 FAR 139 INDEX: RUNWAY DATA > 30 RUNWAY IDENT: 10R/28L 10L/28R > 31 LENGTH: 5,911 3,459 > 32 WDTH: 150 100 > 33 SURF TYPE-COND: ASPH-G ASPH-G > 34 SURF TREATMENT: GRVD 35 GROSS WT: SW 60,0 30.0 36 (IN THSDS) DW 200.0 37 DTW 350.0 WTDD 38 > 39 PCN: LIGHTING/APCH AIDS MED HIGH >40 EDGE INTENSITY: - 1 -1 BSC - G / BSC - G PIR - G / PIR - G >42 RWY MARK TYPE-COND P2L / P2L V4L / > 43 VGSI: 40 / 29 50 / 44 THR CROSSING HGT: 3.50 / 3.00 45 VISUAL GLIDE ANGLE: 3.00 / N - N / N - NN-N / N-N >46 CNTRLN-TDZ -N/-N -N/-N >47 RVR-RVV: N/N >48 REIL: Y/N > 49 APCH LIGHTS: / MALSR **OBSTRUCTION DATA** B(V) / B(V) 50 FAR 77 CATEGORY: B(V) / PIR >51 DISPLACED THR: TREE / TREE > 52 CTLG OBSTN: TREE / ROAD > 53 OBSTN MARKED/LGTD: > 54 HGT ABOVE RWY END: 56 / 47 73 / 14 1,340 / 1,700 > 55 DIST FROM RWY END: 2,700 / 1,600 > 56 CNTRLN OFFSET: 75L / 50R 450R / 0B 57 OBSTN CLNC SLOPE: 20:1 / 31:1 34:1 / 50:1 58 CLOSE-IN OBSTN: N / N N / N DECLARED DISTANCES > 60 TAKE OFF RUN AVBL (TORA): > 61 TAKE OFF DIST AVBL (TODA): ч > 62 ACLT STOP DIST AVBL (ASDA): >63 LNDG DIST AVBL (LDA): (>) ARPT MGR PLEASE ADVISE FSS IN ITEM 86 WHEN CHANGES OCCUR TO ITEMS PRECEDED BY > > 110 REMARKS: A 024 OVERNGT TIEDOWN FEE A 026 PPR 48 HRS FOR ACR OPNS WITH MORE THAN 30 PSGR SEATS 0800-1700 WKDAYS CALL AMGR (209) 577-5318. RWY 10R/28L <RWY 10R-28L CLSD TO ACFT OVER 12500 LBS GWT A 035 A 081 MIRL RY 10R/28L AND PAPI RYS 10R & 28L UNAVBL WHEN ATCT CLSD. THIS AIRPORT HAS BEEN SURVEYED BY THE NATIONAL GEODETIC SURVEY. A 110 IN THE INTEREST OF NOISE ABATEMENT: TUBO JETS DISCONTINUE OPNS 2400-0500 LCL & PARK ON NE RAMP. A 110-1 <ALL PURE JET AND LARGE ACFT LMTD TO PRKG AND SVC AT NE RAMP ONLY. A 110-2 F) 113 LAST INFO REQ: 111 INSPECTOR: 112 LAST INSP: 02/03/2009 (

U.S. DEPARTMENT OF TRANS	PORTATION TRATION	AIRPORT MASTER RECORD		PRINT DATE: 10/30/2009 AFD EFF 10/22/2009 Form Approved OMB 2120-0015
> 1 ASSOC CITY: *****CONTIN > 2 AIRPORT NAME:	VUED*****	4 STATE: CA	LOC ID: MOD 5 COUNTY:	FAA SITE NR: 01896,*A
3 CBD TO AIRPORT (NM):		6 REGION/ADO: AWP/SFO	7 SECT AERO CHT:	
GENERAL		SERVICES		BASED AIRGRAFT
10 OWNERSHIP:		> 70 FUEL:		90 SINGLE ENG:
> 11 OWNER:				91 MULTI ENG:
> 12 ADDRESS:		> 71 AIRFRAME RPRS:		92 JET:
		> 72 PWR PLANT RPRS:		
> 13 PHONE NR:		> 73 BOTTLE OXYGEN:		rome.
> 14 MANAGER:		> 74 BULK OXYGEN:		93 HELICOPTERS:
> 15 ADDRESS:		75 TSNT STORAGE:		94 GLIDERS:
		76 OTHER SERVICES:		95 MILITARY:
> 16 PHONE NR:				96 ULTRA-LIGHT:
> 17 ATTENDANCE SCHEDULE:				
				OPERATIONS
		FACILITIES	<u>i</u>	100 AIR CARRIER:
		> 80 ARPT BCN:		102 AIR TAXI:
		> 81 ARPT LGT SKED:		103 G A LOCAL:
		> 82 UNICOM:		104 G A ITNRNT:
		> 83 WIND INDICATOR:		105 MILITARY:
20 ABBT LONG		84 SEGMENTED CIRCLE:		TOTAL
		85 CONTROL TWR:		
		86 FSS:		OPERATIONS FOR 12
22 AUREAUE.		87 FSS ON ARPT:		MONTHS ENDING
		88 FSS PHONE NR:		
		89 TOLL FREE NR:		
23 INFIAO/FED AGREEMEN 13:				
20 FAR 139 INDEX:				
RUNWAY DATA				
> 30 RUNWAY IDENT:				
> 31 LENGTH:				
> 32 WIDTH:				
> 33 SURF TYPE-COND:				
> 34 SURF TREATMENT:				
35 GROSS WT: SW				
36 (IN THSDS) DW				
37 DTW				
38 DDTW				
>39 PCN:				
>40 EDGE INTENSITY	1.	1.3.2.1		
>42 RWY MARK TYPE-COND	- 1 -	- / -	- / -	- 1 -
>43 VGSI	1	/	/	
44 THP CROSSING HOT	1	1	1	1
45 VISUAL GLIDE ANGLE	1	/	1	1
AS CNTRIN-TDZ:	- 1 -	- / -	- / -	- / -
> 47 P//P-P/A/	- / -	- / -	- / -	- / -
> 47 RVIN-RVV.	1	1	1	/
AD ADOULIOUTS	1	1	1	1
249 APOR LIGHTS.				
OBSTRUCTION DATA	1	1		T.
50 FAR 77 CATEGORY:	1	1	1	1
> 51 DISPLACED THR:		1	\$	1
> 52 CTLG OBSTN:		1	4	1
> 53 OBSTN MARKED/LGTD:	1		1	1
> 54 HGT ABOVE RWY END:	1	1	1	1
> 55 DIST FROM RWY END:	1			1
> 56 CNTRLN OFFSET:		4		1
57 OBSTN CLNC SLOPE:	/	/		1
58 CLOSE-IN OBSTN:	1	1	1	1
DECLARED DISTANCES				1
> 60 TAKE OFF RUN AVBL (TORA)	1	1	1	4
>61 TAKE OFF DIST AVBL (TODA):	1	/	1	1
>62 ACLT STOP DIST AVBL (ASDA)	1	1	/	1
>63 LNDG DIST AVBL (LDA)	/	/	1	T
(				
(>) ARPT MGR PLEASE ADVISE FSS	IN ITEM 86 WHEN CH	ANGES OCCUR TO ITEMS PRECEDED	D BY >	
> 110 REMARKS				
A 110-3 BIRDS ON AND IN VICI	NITY OF ARPT.	000 500 4555		
A 110-4 AVIATION WX AVBL W	HEN ATCT OPNL CAL	209-526-4555.		
A 110-5 MIRL RY 10R/28L AND	PAPI RY 10R & 28L U	NAVEL WHEN TWR CLSD.		
A 110-6 NOISE ABATEMENT PF	ROCEDURES: PILOTS	ARE REQUESTED TO USE LGTD RW	Y UNLY	
A 110-7 RWY 10R/28L NOT CE	RTIFICATED FOR FAR	-139.		
A 110-8 RY 10R/28L WIND CON	IE LGT OTS INDEFLY.			
	112 LACT INCO.	02/03/2009 1131 ACT I	NEO REO:	
(ITIMOFLOTOR. ( F )	HZ LAGT MOF.		···· writing with	

U.S. DEPARTMENT OF TRA FEDERAL AVIATION ADMIN	NSPORTATION ISTRATION	AIRPORT MAS	TER RECORD	PRINT DATE: <b>AFD EFF</b> Form Approved O	10/30/2009 10/22/2009 MB 2120-0015
>1 ASSOC CITY: OAKDAL >2 AIRPORT NAME: OAKDAL		4 STATE: CA	LOC ID: 027 5 COUNTY:	7 FAA SITE N STANISLAUS CA	<b>R</b> : 01970.*A
<ul> <li>2 AIRPORT NAME: OAKDAL</li> <li>3 CBD TO AIRPORT (NM): 03 SE</li> <li>GENERAL</li> <li>10 OWNERSHIP: PU</li> <li>11 OWNER: CITY OF OAK</li> <li>12 ADDRESS: 455 SOUTH F OAKDALE, C.</li> <li>13 PHONE NR: 209-845-3600</li> <li>14 MANAGER: DAVID MEYE</li> <li>15 ADDRESS: 455 SOUTH F OAKDALE, C.</li> <li>16 PHONE NR: 209-845-3607</li> <li>16 PHONE NR: 209-845-3607</li> <li>17 ATTENDANCE SCHEDULE: ALL ALL DALC</li> <li>18 AIRPORT USE: PUE</li> <li>19 ARPT LAT: 37-4</li> <li>20 ARPT LONG: 120</li> </ul>	DALE IFTH AVENUE A 95361 RS IFTH AVENUE A 95361 ST ST ST ST ST ST ST	6 REGION/ADO: AN State of the second state of	5 COUNTY: MP/SFO 7 SECT AERO ERVICES MAJOR MAJOR MAJOR HIGH HIGH HIGH TIE INTL, SALES CG DUSK-DAVWN 122,800 YES-L LE: YES	STANISLAUS CA D CHT: SAN FRANCISCO BASED AIR 90 SINGLE ENG: 91 MULTI ENG: 92 JET: TOTAL: 93 HELICOPTERS: 94 GLIDERS: 95 MILITARY: 96 ULTRA-LIGHT: 00 AIR CARRIER: 102 AIR TAXI: 103 G A LOCAL: 104 G A ITNRNT: 105 MILITARY: TOTAL:	SRAFT         52           4         0           56         0           0         0           0         0           0         0           9,125         8,030           0         0           17,885         0
21 ARPT ELEV: 237 22 ACREAGE: 117 > 23 RIGHT TRAFFIC: NO > 24 NON-COMM LANDING: NO 25 NPIAS/FED AGREEMENTS:NG > 28 FAR 139 INDEX:	SURVEYED	85 CONTROL TWR: 86 FSS: 87 FSS ON ARPT: 88 FSS PHONE NR: 89 TOLL FREE NR:	RANCHO MURIETA NO 1-800-WX-BRIEF	OPERATIONS FOR 12 MONTHS ENDING	04/04/2008
RUNWAY DATA           > 30 RUNWAY IDENT:           > 31 LENGTH:           > 32 WIDTH:           > 33 SURF TYPE-COND:           > 34 SURF TYPE-COND:           > 34 SURF TREATMENT:           35 GROSS WT:           36 (IN THSDS)           37           > 39 PCN:           LIGHTING/APCH AIDS           > 40 EDGE INTENSITY:           > 42 RWY MARK TYPE-COND:           > 43 VGSI:           44 THR CROSSING HGT:           45 VISUAL GLIDE ANGLE:           > 46 CNTRLN-TDZ:           > 47 EVE-ENVC	10/28 3,013 75 ASPH-G 20.0 MED NPI - G / NPI - V2L / 22 / 2.50 / N - N / N - N - N / - N	G - / / / - / - /		/ / - / - / - / / - / / -	
<ul> <li>&gt;48 REIL:</li> <li>&gt;49 APCH LIGHTS:</li> <li><u>OBSTRUCTION DATA</u></li> <li>50 FAR 77 CATEGORY:</li> <li>&gt;51 DISPLACED THR:</li> <li>&gt;52 CTLG OBSTN:</li> <li>&gt;54 HGT ABOVE RWY END:</li> <li>&gt;55 DIST FROM RWY END:</li> <li>&gt;56 CNTRLN OFFSET:</li> <li>57 OBSTN CLNC SLOPE:</li> <li>58 CLOSE-IN OBSTN:</li> <li><u>DECLARED DISTANCES</u></li> <li>&gt;60 TAKE OFF RUN AVBL (TOA):</li> <li>&gt;61 TAKE OFF DIST AVBL (ASDA)</li> <li>&gt;63 LINDG DIST AVBL (LDA):</li> </ul>	N / N / A(NP) / A(V) / / / 50:1 / 50:1 N / N / / /	** ********			
(>) ARPT MGR PLEASE ADVISE FS > 110 REMARKS: A 014 PUBLIC WORKS MAIL A 017 NIGHTS ON CALL 1-8 A 081 ACTVT MIRL RY 10/2 A 110-1 APRON ON SOUTH S 111 INSPECTOR: (S)	ITEM 86 WHEN CHAN NTENANCE CONTACT: DA 00-868-8750. 3 - CTAF. IDE OF RY DAMAGED & U 112 LAST INSP:	IGES OCCUR TO ITEMS P IVE MEYERS (209) 845-36 INUSABLE. 04/04/2008 1	RECEDED BY > 00; CELL (209) 840-1934 13 LAST INFO REQ:		

U.S. DEPARTMENT OF TRANSI FEDERAL AVIATION ADMINIST	PORTATION RATION	AIRPORT MASTE		PRINT DATE: AFD EFF Form Approved ON	04/16/2010 <b>04/08/2010</b> /IB 2120-0015
> 1 ASSOC CITY: TURLOCK > 2 AIRPORT NAME: TURLOCK M 3 CBD TO AIRPORT (NM): 08 E	IUNI	4 STATE: CA 6 REGION/ADO: AWP/	LOC ID: 015 5 COUNTY: SFO 7 SECT AERO	FAA SITE NF MERCED CA CHT: SAN FRANCISCO	₹: 02376.*A
GENERAL           10 OWNERSHIP:         PU           > 11 OWNER:         CITY OF TURLO           > 12 ADDRESS:         156 S. BROADW           TURLOCK, CA 9         TURLOCK, CA 9           > 13 PHONE NR:         209-668-5542           > 14 MANAGER:         TODD SMITH           > 15 ADDRESS:         2606 OPPELT W           TURLOCK, CA 9         TURLOCK, CA 9           > 16 PHONE NR:         209-648-0805           > 17 ATTENDANCE SCHEDULE:         VICHONE NR	CK AY 5380 AY 5380	> 70 FUEL: 100LL > 71 AIRFRAME RPRS: MA > 72 PWR PLANT RPRS: MA > 73 BOTTLE OXYGEN: NC > 74 BULK OXYGEN: NC 75 TSNT STORAGE: THE 76 OTHER SERVICES: CHTR, INSTR, RNTL	JOR JOR JOR NE NE	BASED AIRC 90 SINGLE ENG: 91 MULTI ENG: 92 JET: TOTAL: 93 HELICOPTERS: 94 GLIDERS: 95 MILITARY: 96 ULTRA-LIGHT:	<b>RAFT</b> 52 3 0 55 2 0 0 0 0 0
ALLALLALL18 AIRPORT USE:PUBLIO19 ARPT LAT:37-29-020 ARPT LONG:120-4121 ARPT ELEV:159 E322 ACREAGE:320> 23 RIGHT TRAFFIC:NO> 24 NON-COMM LANDING:NO25 NPIAS/FED AGREEMENTS:NR> 26 FAR 139 INDEX:	C 12.3000N ESTIMATED -50.0000W STIMATED	<ul> <li>80 ARPT BCN:</li> <li>81 ARPT LGT SKED:</li> <li>82 UNICOM:</li> <li>83 WIND INDICATOR:</li> <li>84 SEGMENTED CIRCLE:</li> <li>85 CONTROL TWR:</li> <li>86 FSS:</li> <li>87 FSS ON ARPT:</li> <li>88 FSS PHONE NR:</li> <li>89 TOLL FREE NR:</li> </ul>	ILITIES CG DUSK-DAWN 122.800 YES-L YES NONE RANCHO MURIETA NO 1-800-WX-BRIEF	100 AIR CARRIER: 102 AIR TAXI: 103 G A LOCAL: 104 G A ITNRNT: 105 MILITARY: TOTAL: OPERATIONS FOR 12 MONTHS ENDING	0 0 8,200 2,200 0 10,400 05/01/2009
RUNWAY DATA         > 30 RUNWAY IDENT:         > 31 LENGTH:         > 33 SURF TYPE-COND:         > 34 SURF TREATMENT:         35 GROSS WT:         35 GROSS WT:         SG (IN THSDS)         DW         37       DTW         38       DDTW         > 39 PCN:         LIGHTING/APCH AIDS         > 40 EDGE INTENSITY:         > 42 RWY MARK TYPE-COND:         > 43 VGSI:         44 THR CROSSING HGT:         45 VISUAL GLIDE ANGLE:         > 46 CNTRLN-TDZ:         > 47 RVR-RVV:         > 48 REIL:         > 49 APCH LIGHTS:         OBSTRUCTION DATA         50 FAR 77 CATEGORY:         > 51 DISH ACED THP:	12/30 2,985 50 ASPH-G 12.0 NSTD BSC - F / BSC - / / N - N / N - N - N / N - N / N / /	-F - / - / - / - / - / - / - / - / - / -	- / / / / / / / / / / / / / / /		
<ul> <li>&gt; 51 DISPLACED THR:</li> <li>&gt; 52 CTLG OBSTN:</li> <li>&gt; 53 OBSTN MARKED/LGTD:</li> <li>&gt; 54 HGT ABOVE RWY END:</li> <li>&gt; 55 DIST FROM RWY END:</li> <li>&gt; 56 CNTRLN OFFSET:</li> <li>57 OBSTN CLNC SLOPE:</li> <li>58 CLOSE-IN OBSTN:</li> <li>DECLARED DISTANCES</li> <li>&gt; 60 TAKE OFF RUN AVBL (TORA):</li> <li>&gt; 61 TAKE OFF DIST AVBL (TODA):</li> <li>&gt; 62 ACLT STOP DIST AVBL (ASDA):</li> <li>&gt; 63 LNDG DIST AVBL (LDA):</li> <li>(&gt;) ARPT MGR PLEASE ADVISE FSS II</li> </ul>	TREE / 40 / 800 / 130R / 15:1 / 50:1 N / N / / /	/ / / / / / / / / / / / / / / / / / /	           CEDED BY >		
> 110 REMARKS:           A 014         ON SITE MGR: OTIS ME           A 040         RWY 12/30 NSTD LIRL; L           A 070         FUEL AVBL 24 HRS.           A 081         ACTVT LIRL RY 12/30 - 0           1111 INSPECTOR:         (S)	RCER 209-632-3244 AT GTS 20 FT FM EDGE O CTAF. 112 LAST INSP:	TENDED 9:00 AM - 5:00 PM F RY. 05/01/2009 113	LAST INFO REQ: 06/30/19	983	

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION	AIRPORT MASTER RECORD	PRINT DATE: 04/16/2010 AFD EFF 04/08/2010 Form Approved OMB 2120-0015	
>1 ASSOC CITY: TURLOCK >2 AIRPORT NAME: TURLOCK AIRPARK 3 CBD TO AIRPORT (NM): 02 S	4 STATE: CA LOC ID: 9CL0 5 COUNTY: ST 6 REGION/ADO: AWP/SFO 7 SECT AERO CH	FAA SITE NR: 02378.*A ANISLAUS CA T: SAN FRANCISCO	
GENERAL         10 OWNERSHIP:       PRIVATE         > 11 OWNER:       TURLOCK AIRPARK INC         > 12 ADDRESS:       2050 MIRA FLORES DRIVE         TURLOCK, CA 95380       TURLOCK, CA 95380         > 13 PHONE NR:       209-667-2822         > 14 MANAGER:       > 15 ADDRESS:		BASED AIRCRAFT           90 SINGLE ENG:         12           91 MULTI ENG:         0           92 JET:         0           TOTAL:         12           93 HELICOPTERS:         0           94 GLIDERS:         0           95 MULTADY:         0	
> 16 PHONE NR: > 17 ATTENDANCE SCHEDULE:		95 MILITARY: 0 96 ULTRA-LIGHT: 20	
ALL MON-SAT 0700-1800	- FACILITIES > 80 ARPT BCN: > 81 ARPT LGT SKED: RDO REQ > 82 UNICOM:	-	
18 AIRPORT USE:         PRIVATE           19 ARPT LAT:         37-28-14.7660N ESTIMATE           20 ARPT LONG:         120-50-38.7380W           21 ARPT ELEV:         100 ESTIMATED           22 ACREAGE:         62           > 23 RIGHT TRAFFIC:         NO           > 24 NON-COMM LANDING:         YES	<ul> <li>&gt; 83 WIND INDICATOR: YES</li> <li>D 84 SEGMENTED CIRCLE: NONE</li> <li>85 CONTROL TWR: NONE</li> <li>86 FSS: RANCHO MURIETA</li> <li>87 FSS ON ARPT: NO</li> <li>88 FSS PHONE NR:</li> <li>89 TOLL FREE NR: 1-800-WX-BRIEF</li> </ul>		
RUNWAY DATA           > 30 RUNWAY IDENT:         13/31           > 31 LENGTH:         2,075           > 32 WIDTH:         60           > 33 SURF TYPE-COND:         ASPH-P			
LIGHTING/APCH AIDS > 40 EDGE INTENSITY: > 42 RWY MARK TYPE-COND: BSC - P / BS	С-Р -11-	- 1 -	
OBSTRUCTION DATA         /           50 FAR 77 CATEGORY:         /           > 51 DISPLACED THR:         440 / 30           > 52 CTLG OBSTN:         ROAD / AN           > 53 OBSTN MARKED/LGTD:         LM /           > 54 HGT ABOVE RWY END:         32 / 60           > 55 DIST FROM RWY END:         200 / 2,0	0 / / 7 / / 7 / / / 00 / /	/ / / / / / /	
<ul> <li>(&gt;) ARPT MGR PLEASE ADVISE FSS IN ITEM 86 WHEN CH</li> <li>&gt; 110 REMARKS:</li> <li>A 049 RWY 31 LDIN LIGHTS ARE AMBER.</li> <li>A 052 RWY 31 TV ANT 2000' FROM AER 31.</li> </ul>	ANGES OCCUR TO ITEMS PRECEDED BY >		
A 057RWY 13 APCH RATIO 16:1 TO EA DSPLCD TA 058RWY 13 +15' POLES MKD & LGTD AT END OA 058RWY 31 +15' ROAD 5' FROM RWY END.A 081FOR RWY LGTS CALL TURLOCK AIRPORTA 110-11300 SE RWY 13/31 USEABE RWY DUE TO 0	IR RWY 13 & 31. FRWY 200' APART STARTING CNTRLN. +5' FENCE 50-150' F 21.7. DESTRUCTIONS.	ROM THR. +15' SHRUBS 50-60' FROM THR.	
111 INSPECTOR: ( N ) 112 LAST INSP:	07/15/1985 113 LAST INFO REQ: 05/07/1994		

Appendix Q: Proposed Intelligent Transportation Systems (ITS) Improvements for Stanislaus County

CO.	ROUTE	POSTMILE	ITS	DIR
STA	005	0.110	CMS	NB
STA	005	0.110	TMS	NB
STA	005	0.610	RWIS	N/A
STA	005	1.110	CMS	SB
STA	005	1.110	TMS	SB
STA	005	2.110	CMS	NB
STA	005	2.110	TMS	NB
STA	005	2.610	RWIS	N/A
STA	005	3.110	CMS	SB
STA	005	3.110	TMS	SB
STA	005	4.110	CMS	NB
STA	005	4.110	TMS	NB
STA	005	4.610	RWIS	N/A
STA	005	5.110	CMS	SB
STA	005	5.110	TMS	SB
STA	005	6.110	CMS	NB
STA	005	6.110	TMS	NB
STA	005	6.610	CMS	SB
STA	005	7.110	TMS	SB
STA	005	7.110	BWIS	N/A
STA	005	8.110	CMS	NB
STA	005	8 110	TMS	NB
STA	005	8 610	BWIS	N/A
STA	005	9 110	CMS	SB
STA	005	9 1 1 0	TMS	SB
STA	005	10 110	CMS	NB
STA	005	10 110	TMS	NB
STA	005	10.610	BWIS	N/A
STA	005	11 110	CMS	SB
STA	005	11 110	TMS	SB
STA	005	12 110	CMS	NB
STA	005	12 110	TMS	NB
STA	005	12 610	BWIS	N/A
STA	005	13 110	CMS	SB
STA	005	13 110	TMS	SB
STA	005	14.110	CMS	NB
STA	005	14 110	TMS	NB
STA	005	14 610	BWIS	N/A
STA	005	15.110	CMS	SB
STA	005	15 110	TMS	SB
STA	005	15 800	CMS	NB
STA	005	15 800	TMS	NB
STA	005	15 800	BWIS	N/A
STA	005	15 800	CCTV	NB
STA	005	15 800	CMS	SR
STA	005	15 800	TMS	SR
STA	005	16 110	CMS	NR
STA	005	16 110	TMS	NR
STA	005	16 610	RWIS	N/A
STA	005	17 110	CMS	SR
STA	005	17.110	TMS	SB

CO.	ROUTE	POSTMILE	ITS	DIR
STA	005	18.110	CMS	NB
STA	005	18.110	TMS	NB
STA	005	18.610	RWIS	N/A
STA	005	19.110	CMS	SB
STA	005	19.110	TMS	SB
STA	005	20.110	CMS	NB
STA	005	20.110	TMS	NB
STA	005	20.610	RWIS	N/A
STA	005	21.110	CMS	SB
STA	005	21.110	TMS	SB
STA	005	22.110	CMS	NB
STA	005	22.110	TMS	NB
STA	005	22.610	RWIS	N/A
STA	005	24.110	CMS	NB
STA	005	24.110	TMS	NB
STA	005	24.610	RWIS	N/A
STA	005	25.110	CMS	SB
STA	005	25.110	TMS	SB
STA	099	R001.450	RWIS	N/A
STA	099	R002.284	CMS	SB
STA	099	R002.284	TMS	SB
STA	099	R003.840	CMS	NB
STA	099	R003.840	TMS	NB
STA	099	R004.340	RWIS	N/A
STA	099	R004.840	CMS	SB
STA	099	R004.840	TMS	SB
STA	099	R005.860	CMS	NB
STA	099	R005.860	TMS	NB
STA	099	R006.360	RWIS	N/A
STA	099	R008.307	CMS	NB
STA	099	R010.900	RWIS	N/A
STA	099	R011.400	CMS	SB
STA	099	R011.400	TMS	SB
STA	099	R011.700	CMS	NB
STA	099	R011.700	TMS	NB
STA	099	R011.700	CCTV	NB
STA	099	R013.350	RWIS	N/A
STA	099	R013.850	CMS	SB
STA	099	R013.850	TMS	SB
STA	099	R013.850	CCTV	SB
STA	099	R014.840	CMS	NB
STA	099	R014.840	TMS	NB
SIA	099	R014.840	CCTV	NB
SIA	099	R014.850	CMS	SB
SIA	099	R014.850	IMS	SB
SIA	099	R014.850	CCIV	SB
SIA	099	H015.340	IMS	NB
SIA	099	R015.840	RWIS	N/A
STA	099	HU15.850	UMS	SB
SIA	099	HU15.850	IMS	SB
SIA	099	HU16.610		NR

CO.	ROUTE	POSTMILE	ITS	DIR
STA	099	R016.610	TMS	NB
STA	099	R016.610	CCTV	NB
STA	099	R017.111	RWIS	N/A
STA	099	R017.610	CMS	NB
STA	099	R017.610	TMS	NB
STA	099	R017.610	CCTV	NB
STA	099	R017.610	CMS	SB
STA	099	R017.610	TMS	SB
STA	099	R017.610	CCTV	SB
STA	099	R018.110	TMS	NB
STA	099	M018.610	RWIS	N/A
STA	099	M018.610	TMS	NB/SB
STA	099	M019.220	CMS	NB
STA	099	M019.220	TMS	NB
STA	099	M019.250	RWIS	N/A
STA	099	M019.750	CMS	SB
STA	099	M019.750	TMS	SB
STA	099	M019.750	CCTV	SB
STA	099	R020.500	CMS	NB
STA	099	R020.500	TMS	NB
STA	099	R020.500	CCTV	NB
STA	099	R020.860	CMS	SB
STA	099	R020.860	TMS	SB
STA	099	R020.860	CCTV	SB
STA	099	R020.860	HAR	N/A
STA	099	R021.280	TMS	NB
STA	099	R021.280	CCTV	NB
STA	099	R021.360	CMS	SB
STA	099	R021.360	TMS	SB
STA	099	R021.360	CCTV	SB
STA	099	R021.780	TMS	NB
STA	099	R022.050	CMS	NB
STA	099	R022.050	CCTV	NB
STA	099	R022.280	TMS	NB
STA	099	R022.400	RWIS	N/A
STA	099	R022.550	TMS	NB
STA	099	R022.550	TMS	SB
STA	099	R022.780	TMS	NB
STA	099	R024.050	TMS	NB
STA	099	R024.050	TMS	SB
STA	132	000.10	CMS	EB
STA	132	000.10	TMS	EB
STA	132	000.600	RWIS	N/A
STA	132	001.10	CMS	WB
STA	132	001.10	TMS	WB
STA	132	13.700	CMS	EB
STA	132	13.700	TMS	EB
STA	132	13.700	CCTV	EB
STA	132	14.830	CMS	WB
STA	132	14.830	TMS	WB
STA	132	14.830	CCTV	WB

CO.	ROUTE	POSTMILE	ITS	DIR
STA	165	000.400	CMS	NB
STA	165	000.400	TMS	NB
STA	165	000.400	CCTV	NB
STA	219	000.500	CMS	WB
STA	219	002.500	CMS	EB
STA	219	002.500	CCTV	EB
STA	219	002.500	RWIS	EB
STA	219	002.500	TMS	EB
STA	219	002.500	CMS	WB
STA	219	002.500	CCTV	WB
STA	219	002.500	RWIS	WB
STA	219	002.500	TMS	WB
STA	219	003.880	CMS	EB
STA	219	004.360	CCTV	EB
STA	219	004.360	RWIS	EB
STA	219	004.360	TMS	EB
STA	219	004.500	CMS	WB
CMS -	TMS - Traffic	RWIS - Roadside Weather		

Changeable Monitoring Stations

TMS - Traffic RWIS - Roadside Weather CCTV - Close Circuit Info System ΤV

## Appendix R: California Transportation Plan (CTP) Executive Summary



EXECUTIVE SUMMARY

The California Department of Transportation (Department) is updating the *California Transportation Plan (CTP) 2025* adopted in June 2006. This updated CTP 2030 Addendum (Addendum) addresses the new requirements for statewide planning established by the Safe, Accountable, Flexible, Efficient Transportation Equity Act - A Legacy for Users or SAFETEA-LU.

This legislation authorizes and funds federal transit and highway programs through Fiscal Year 2009. Signed into law (Public Law 109-59) on August 10, 2005, SAFETEA-LU provides \$23.4 billion in federal funds to California. Much of SAFETEA-LU echoes the previous two federal transportation program authorizations, the recent Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) passed in 1998, and the earlier Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). However, there are some significant changes that impact the current CTP.

While SAFETEA-LU maintains the overall structure of TEA-21, it departs from previous authorizations in a number of ways. The Department held an initial "Consultation Meeting" in January 2007 with stakeholders to discuss changes to the CTP directed by SAFETEA-LU. Those changes that affect State planning and policy issues are summarized here and described in more detail in the following discussions. Together with a description of California's compliance with each mandate, they informed the development of this Addendum.

The goal of this CTP 2030 (Addendum) is to enhance and preserve the State's valuable natural resources, while avoiding costly project overruns and delays in planning and developing transportation infrastructure. SAFETEA-LU provides a "historic opportunity" for the State to achieve that goal. Over the past few years there has been a compelling nationwide call for public agencies to become better stewards of the environment. SAFETEA-LU has now ratified this call by directing states to consult and compare transportation related plans, maps, and data with federal, State, tribal, and local agencies responsible for land use management, natural environmental resources. protection. conservation. and historic preservation.

The State of California has been a national leader in documenting environmental impacts caused by transportation projects and taking actions appropriate to its stewardship role. SAFETEA-LU now provides an opportunity for California to redouble its efforts to become a "real steward" of the environment. It directs those in the transportation sector to address issues collaboratively with partners in the resources arena and to partner on solutions that respond to public expectations.

The real challenge ahead at both the State and the regional planning level is

consultation and comparison of plans, maps, and data with natural resources and environmental agencies, and the resulting mitigation and consultation that may be required. The key will be determining how to mainstream the consideration of environmental issues during early planning the early planning process in order to adequately address consultation, comparison, and mitigation requirements.

The other challenge is linking transportation planning with project level requirements under National Environmental Protection Act (NEPA) in order to promote early consultation and comparison of existing plans, maps, and data across agencies. Once again, the key for making this linkage will be determining how to mainstream the consideration of environmental issues early in the planning process.

Therefore this Addendum is directed at engaging transportation stakeholders in an open dialogue with resource agencies to identify the "first steps" in the expansion of consultation and comparison efforts and in a discussion of potential environmental mitigation measures. Future plan updates will build upon this Addendum's foundation. The more detailed "follow-on" policies and strategies for these consultation, comparison, and mitigation efforts will then be addressed in the next full update of the California Transportation Plan to be initiated in 2008, and in subsequent updates.

The focus of the remaining sections of this Addendum is to address provisions of SAFETEA-LU that extend or broaden already existing State policies and strategies articulated in the CTP 2025. These provisions include: delegating NEPA responsibilities for California; expanding stakeholder engagement with an emphasis on visualization techniques; providing access to the statewide plan and update process on the Internet; promoting the consistency of transportation plans and transportation improvements with State and local planned growth and economic development patterns; adding security and safety as new stand-alone planning factors; including operations and management strategies to ensure the preservation and most efficient use of the existing transportation system; and reaffirming consultation with non-metropolitan local officials and federally recognized Native American Tribal Governments (Tribal Governments) in the development of the longrange statewide transportation plan and State Transportation Improvement Program (STIP).

#### A crosscutting and collaborative plan for the future

#### The CTP 2035 is a plan for all Californians

that addresses transportation as a focal point for sustainability and quality of life. The plan will provide a long-range framework for statewide transportation needs: defining goals, policies, and strategies to achieve our collective vision for California's future. Crosscutting and collaborative. this plan will also link the Three Es: a prosperous Economy, a quality Environment, and social Equity.

#### An efficient transportation system stimulates the economy by supporting job creation, business expansion, and economic development.

#### **The Vision**

#### The Three Es of Sustainability



#### A balanced transportation system provides for the safety and mobility of all users. including pedestrians, bicyclists, transit riders,

and motorists. The plan will clearly recognize that active transportation modes contribute directly to public health and to the health of our environment.

A green transportation system enhances and preserves our natural resources while reducing transportation's impact on our climate.

- California's Transportation Challenges
- 52 million people by 2035
- Aging population
- Goods movement in a global economy
- · Climate change
- Aging infrastructure
- · Stable funding · Preserving natural resources
- · Low-density development
- · Energy supply

#### Addressing **Climate Change**

transportation plan

2035

- Reduce greenhouse gas emissions contributed by transportation
- A Recognize the connections between transportation and land use

 Encourage partnerships to develop adaptation strategies that address sea level rise



Transportation is responsible for up to 38% of greenhouse gas emissions

- ▲ Support long-range community visions for sustainable and efficient land use development
- Promote housing development in association with transit

**Growing Greener** 

Provide incentives to encourage local jurisdictions to grow their communities in ways that support mobility options (walking, bicycling, and transit) and reduce the need to drive

Balance community values and transportation needs to create solutions that are sensitive to their context

Other 62%

- and directed by recent legislation A Participate in the
- Strategic Growth Council-the Governor's effort for State agencies to coordinate activities in the planning and development of sustainable communities
- ▲ Encourage interaction with local jurisdictions through a context sensitive solutions process

#### **Investing Strategically**

Providina

**Mobility Choices** 

▲ Integrate the needs

active modes into

using a "complete

streets" approach

▲ Create more oppor-

tunities for bicycling

and walking to both

and reduce our

carbon footprint

▲ Improve safety for

and abilities

must Land Use/Demand Mom's/Value Pric

or and Pressounds System Monitoring and Evaluation

PREVENTION AND SAFETY

travelers of all ages

Mobility

amework

improve public health

of those traveling by

transportation projects

**MEETING THE CHALLENGES THROUGH 2035** 

- Use a comprehensive, multimodal, and innovative funding approach (see Mobility Pyramid inset) that invests in multiple strategies to yield the highest results
- Measure results by monitoring and evaluating transportation system performance
- Integrate and coordinate all travel modes through corridor system management planning to increase transportation options and improve travel times
- Focus on cost-effective strategies, such as intelligent transportation systems, that employ proven methods and technology to improve performance



#### Indicators of Success

Current efforts that can help measure the success of the CTP

- The Galifornia Regional Blueprint Progress Report An effort to measure regional progress in improving communities through integrated planning
- A Smart Mobility Framework An effort to assess how well transportation plans, programs, and projects meet the principles of smart mobility through:

Location Efficiency Reliability Health and Safety Stewardship

#### Links to Resources

Climate Change www.climatechange.ca.gov/ Complete Streets Context Sensitive Solutions www.dol.ca.gov/hg/tpp/ offices/ocp/css.html

Regional Blueprint Planning www.calblueprint.dot.ca.gov Smart Mobility Framowork www.dot.ca.gov/hu/tpp/ offices/ocp/anif.html

Strategic Growth Council www.oor.ca.gov/

"We are not going to reduce greenhouse gas emissions until we tackle the connectivity between land use and transportation." Will Kempton, Director, Caltrans

Building **Partnerships** 

▲ Take advantage of opportunities for discussion and consensus on efficient land use and transportation planning supported by the State's **Regional Blueprint** Planning program

Appendix S: Glossary

## **GLOSSARY OF RTP TERMS**

#### AB 32

Assembly Bill 32, the Global Warming Solutions Act of 2006 requires the State to reduce greenhouse gas emissions to 1990 levels by 2020.

#### ACE

The Altamont Commuter Express (ACE) provides an alternative means of reaching the Bay Area by offering commuter rail service through the Altamont Pass. **ADA** Americans with Disabilities Act

#### ADT

Average Daily Traffic (average traffic volume on a road segment or facility in a 24 hour period)

#### Air Cargo

Revenue producing items in domestic or international commerce, composed of freight, express mail, and regular mail, but excluding passenger baggage.

#### **Air Carrier**

An aviation operator who provides regular round-trips per week between two or more points and publishes flight schedules that specify the times, days of the week, and places between which such flights are performed. The air carrier at the Modesto City- County Airport is United Express.

#### Alternative Fuels

Low-polluting fuels that are used to propel a vehicle instead of high-sulfur diesel or gasoline. Examples include methanol, ethanol, propane, compressed natural gas, liquid natural gas, low-sulfur or "clean" diesel, and electricity.

#### Amtrak

A federal governmental agency that provides intercity railroad passenger service Amtrak also provides commuter rail passenger service by contract.

#### **Annual Service Miles**

The number of miles that all transit vehicles travel each year in scheduled transit service operations, or when carrying passengers in door-to-door (or demandresponsive) transit service.

#### **Bikeway Classifications**

As defined by the Caltrans Highway Design Manual: Class I Bike Path: A paved path within an exclusive right-of-way. Class II Bike Lane: Signed and striped lanes within a street right-of-way. Class III Bike Route: Preferred routes on existing streets identified by signs only.

#### BRT

Bus Rapid Transit (typically a travel corridor that allows buses to operate at higher speeds in their own right of way without conflicts with autos)

#### BTA

**Bicycle Transportation Account** 

#### CAA

Clean Air Act. Federal legislation which establishes criteria for attaining and maintaining the federal air quality standards for allowable concentrations and exposure limits for various air pollutants. The legislation also provides emission standards for specific vehicles and fuels.

#### CAC

Citizen Advisory Committee

#### Caltrans

California Department of Transportation

#### CARB

California Air Resources Board

#### Carpool

Two or more people sharing the use and cost of privately owned automobiles.

#### CCAA

California Clean Air Act passed in 1988 that provides the basis for air quality planning and regulation independent of federal regulations.

#### CCI

Construction Cost Index measures the inflation rate in the cost of major construction projects.

#### CHP

California Highway Patrol

#### **CHSRA**

California High-Speed Rail Authority

#### CMIA

Corridor Mobility Improvement Account. A \$4.5 billion congestion relief component of the nearly \$19.9 billion Proposition 1B Infrastructure Bonds approved by voters in November 2006.

#### СМА

Congestion Management Agency. A countywide agency responsible for preparing and implementing a Congestion Management Program (CMP). StanCOG is the CMA for the Stanislaus region.

#### CMAQ

Congestion Mitigation and Air Quality Program. A category of funds contained in TEA-21 for projects and activities that reduce congestion and improve air quality in regions not yet attaining federal air quality standards.

#### CMP

Congestion Management Process. Required of every county in California with a population of 50,000 or more to qualify for certain state and federal funds. CMPs set performance standards for roads and public transit, and show how local agencies will attempt to meet those standards. The CMP is required to be adopted by the CMA and must be consistent with the adopted Regional Transportation Plan (RTP).

#### **Community Plan**

More specific versions of the General Plans, generally dealing with smaller geographical areas, but having the same force of law. See General Plan.

#### **Commuter Rail**

Conventional rail passenger service within a metropolitan area, usually operating over existing, inter-city railroad tracks.

#### Conformity

A demonstration of whether a federally-supported activity is consistent with the State Implementation Plan (SIP) — per Section 176 (c) of the Clean Air Act.

#### Congestion

Congestion is usually defined as travel time or delay in excess of that normally experienced under freeflow traffic conditions.

#### Corridor

A broad geographical band that follows a general directional flow connecting major trip origins and destinations. A corridor may contain a number of streets, highways and transit route alignments.

#### COG

Council of Governments

#### CPI

Consumer Price Index developed by the Bureau of Labor Statistics of the U.S. Department of Labor to provide a measurement of the inflation rate in the general economy of a given metropolitan area.

#### CSTA

Consolidated Transit Service Agency

#### СТС

California Transportation Commission

#### CVO

**Commercial Vehicle Operations** 

#### DAR

Dial-A-Ride (transit service that is pre-arranged by phone or application)

#### **Deficient Segment**

As used in the RTP, a portion of freeway experiencing a Level of Service where demand exceeds capacity.

#### **Demand- Responsive Service**

Transit service that is provided in response to a pre-ordered or telephone reservation.

#### **Development Impact Fee**

A fee charged to private developers, usually on a per dwelling unit or per square foot basis, to help pay for infrastructure improvements necessitated as a result of the development.

#### DOF

California Department of Finance (State agency that maintains population and demographic information for the State)

#### DOT

Department of Transportation

#### EIR

Environmental Impact Report. A detailed statement prepared under the California Environmental Quality Act (CEQA) describing and analyzing the significant environmental effects of a project and discussing ways to mitigate or avoid the effects.

#### EMP

Environmental Mitigation Program. Provides funding for the mitigation of local and regional transportation projects and additional funding for activities that help implement the region's habitat preservation plans

#### **Environmental Justice (EJ)**

The fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws and policies.

#### Expressway

Similar to a freeway but with signal-controlled intersections.

#### FAA

Federal Aviation Administration:

#### **Farebox Recovery Ratio**

Measure of the proportion of operating expenses covered by passenger fares. The ratio divides the farebox revenue by the total operating expenses.

#### **Farebox Revenue**

Value of cash, tickets, and pass receipts given by passengers for payment for rides on public transit.

#### **Fare Structure**

The various fees charged to use transit typically delineated by age, type of service, trip length and/or time of day.

#### FHWA

Federal Highway Administration:

#### **Fixed-Route Service**

Service provided on a regular, fixed-schedule basis along a specific route with vehicles stopping to pick up and deliver passengers to specific locations.

#### Freeway

Multilane divided roadway, grade separated from other roadways, with fully controled access and egress.

#### FTA

Federal Transit Administration:

#### FY

Fiscal Year (usually July 1 through June 30 of each year)

#### FFY

Federal Fiscal Year (usually October 1 through September 30 of each year)

#### Gas Tax

The tax applied on each gallon of fuel sold. Currently, the federal tax is18.3 cents per gallon and the state tax is 18 cents per gallon tax.

#### **General Plan**

A policy document required of cities and counties by state law which describes a jurisdiction's future development in text and map form. All land use decisions must derive from the GP. The General Plan must contain seven mandatory elements: Land Use, Circulation, Housing, Conservation, Open Space, Noise, and Safety.

#### GHG

Greenhouse gas. Gases that effect global climate change. They include: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

#### GIS

Geographic Information System.

#### **Grade Separation**

A vertical separation between intersecting roads and or railway tracks.

#### GRH

Guaranteed Ride Home Program which provides a free taxicab ride or 24-hour car rental to those whocarpool, vanpool, use premium bus service or bike to work

#### HCM

Highway Capacity Manual

#### Heavy Rail

Railroad services that operate in a mixed-user environment on conventional railroad tracks.

#### Household

All people living in a housing unit, regardless of whether they are related to each other. Housing units include houses, apartments, and mobile homes.

#### HOV

High Occupancy Vehicle that carries more than one passenger. Examples include carpools, vanpools, shuttles, and buses.

#### **HOV Lane**

Exclusive road or traffic lane limited to HOVs that typically has a higher operating speed and lower traffic volumes than a general purpose or mixed flow lane.

#### HSR

High-Speed Rail is railroad passenger service that, as defined by California state law, operates at maximum speeds of over 200 miles per hour.

#### HTF

Highway Trust Fund (Federal funding program for transportation)

#### **Inter-city Rail**

Railroad passenger service which primarily serves longer trips such as those between major cities or regions.

#### Intermodal

Passenger or freight transportation services which involve or use more than one type of transportation facility (or mode).

#### ITS

Intelligent Transportation Systems use transportation technologies, management tools, and electronic services to improve operational efficiencies.

#### JARC

Jobs Access Reverse Commute. The SAFETEA-LU formula fund program which provides support for capital or operating costs for transportation services and facilities designed to facilitate reverse commute employment related travel for persons of limited means.

#### LOS

Level of Service. A qualitative measure describing operational conditions within a traffic stream and motorists' perception of those conditions. LOS ratings typically range from LOS A, which represents free flow conditions, to LOS F, which is characterized by forced flow, heavy congestion, stop and go traffic, and long queues.

#### Mixed-Use

The combining of commercial, office, and residential land uses to provide easy pedestrian access and reduce the public's dependence on the automobile.

#### Mode

One of various forms of transportation, including automobile, transit, bicycle, and walking.

#### Mode Split

The percent of trips that use each of the various travel modes.

#### MPO

Metropolitan Planning Organization is the federally-designated agency that is responsible for regional transportation planning in each metropolitan area. StanCOG is the MPO for the Stanislaus region.

#### **Non-attainment Area**

A geographic area identified by the U.S. Environmental Protection Agency (EPA) and/or the California Air Resources Board (CARB) as not meeting either the national or California Ambient Air Quality Standards for a given pollutant.

#### Paratransit

The range of demand-responsive (or on-request) transit providing service from a trip origin to trip destination.

#### Park and Ride

A travel option where commuters park their personal vehicles in a publicly provided lot or other location, and continue their trip via carpool, vanpool, or transit.

#### PΒ

Policy Board

#### PSR

Project Study Report. A preliminary engineering report which documents agreement on the scope, a set of reasonable and feasible alternatives, schedule, and estimated cost of a project so that the project can be included in a future State Transportation Improvement Program (STIP).

#### **Public Transportation**

Travel by bus, rail, or other vehicle, either publicly or privately owned, which provides general or specialized service on a regular or continuing basis.

#### **Reverse Commute**

Travel in the direction opposite to the main flow of peak period commute traffic.

#### RHNA

Regional Housing Needs Assessment (required as part of the General Plan housing element update)

#### ROW

Right-of-Way. The land required for the construction and operation of a transportation facility.

#### RTIP

Regional Transportation Improvement Program (RTIP). A listing of major highway and transit projects including project costs, funding sources, and development schedules.

#### RTP

Regional Transportation Plan. A minimum 20-year plan that is required by state and federal law to guide the development of the region's transportation system.

#### RTPA

Regional Transportation Planning Agency. A state-designated agency responsible for preparing the RTP and the RTIP and administering state transportation funds. StanCOG is the RTPA in the Stanislaus region.

#### Safe Routes to School

A state and federal program which funds education, encouragement campaigns, and infrastructure improvements to help reduce the amount of traffic congestion around schools.

#### SAFETEA-LU

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users. Federal legislation signed into law on August 10, 2005 authorizing \$244.1 billion for Federal surface transportation programs for highways, highway safety, and transit for the 5-year period 2005-2009.

#### SB45

Senate Bill 45, commonly referred to as the STIP Reform Bill, created the Procedures for Administering Local Grant Projects in the State Transportation Improvement Program (STIP) and responsibilities of Regional Transportation Planning Agencies.

#### SB 375

California Senate legislation that implements the requirements of AB 32 in transportation planning documents.

#### SCS

Sustainable Communities Strategy (A SCS is an integrated land use and transportation plan that can be modeled to quantitatively demonstrate its compliance with GHG emission reduction goals).

#### SIP

State Implementation Plan. A document that shows the steps planned to meet federal air quality standards.

#### SJV

San Joaquin Valley

#### SJVAPCD

San Joaquin Valley Air Pollution Control District is the governmental agency that regulates sources of air pollution within Stanislaus County.

#### SHOPP

State Highway Operation and Protection Program. Caltrans' three-year program to address traffic safety, roadway rehabilitation, roadside rehabilitation, or operations needs on the state highway system.

#### Smart Growth

A compact, efficient, and environmentally-sensitive pattern of development that provides people with additional travel, housing, and employment choices by focusing future growth away from rural areas and closer to existing and planned job centers and public facilities, while preserving open space and natural resources.

#### SOV

Single occupant vehicle

#### SSTAC

Social Services Transit Advisory Committee (committee that makes recommendations to StanCOG on transit operations and improvements)

#### StanCOG

Stanislaus Council of Governments

#### STIP

State Transportation Improvement Program. A multi-year program of major transportation projects to be funded by the state. The CTC adopts the STIP every two years based on projects proposed in RTIPs and from Caltrans.

#### STP

Surface Transportation Program. A federal program originally established in the federal ISTEA legislation which provides flexible funding allocated by regional agencies like StanCOG for a range of projects including highways, transit, local streets and roads, and bicycles.

#### Sustainability (3Es)

Environmental Quality; Economic Vitality; Social Equity

#### TAC

**Technical Advisory Committee** 

#### TAZ

Traffic Analysis Zone (geographical partition for analyzing travel demand model statistics)

#### тсм

Transportation Control Measure. A transportation strategy intended both to reduce vehicle miles traveled (VMT) and to make VMT more efficient. TCMs include transportation system management (TSM) and transportation demand management (TDM) elements. Examples include carpooling, transit, and computer-optimized traffic signals.

#### TDA

Transportation Development Act. TDA funds are generated from a tax of one-quarter of one percent on all retail sales in each county and are used for transit, specialized transit for disabled persons, and bicycle and pedestrian purposes.

#### TCRP

Transportation Congestion Relief Program

#### TDM

Transportation Demand Management. Programs to reduce demand by automobiles on the transportation system, such as telecommuting, flextime, bicycling, walking, transit use, staggered work hours, and ridesharing.

#### Tier I

Improvement projects that are fully fundable by 2035

#### Tier II

Improvement projects desired but not fundable by 2035

#### TSM

Transportation System Management. Strategies that maximize the number of persons traveling in a corridor or facility. These strategies include traffic flow improvements, ramp metering, and park-and-ride lots.

#### U.S. DOT

United States Department of Transportation

#### U.S. EPA

United States Environmental Protection Agency

#### Vanpool

A vehicle operating as a ridesharing arrangement, providing transportation to a group of individuals traveling directly between their homes and a regular destination within the same geographic area.

#### V/C Ratio

Volume to Capacity Ratio. The volume of traffic divided by the capacity of a transportation facility.

#### VMT

Vehicle Miles Traveled. The total number of miles traveled on all roadways by all vehicles. Can be measured daily, weekly, monthly or yearly.

Appendix T: Response to Comments

## REGIONAL TRANSPORTATION PLAN Response to Comments

## Summary

StanCOG has evaluated each comment identified from the received letters (attached). The rest of this Appendix provides the written responses to those comments.

## **Responses to Comments**

Responses to comments presented below correspond with the letters presented previously in this Appendix. StanCOG thanks all commenting parties for their contributions.

## Letter A. Federal Highway Administration, California Division.

## Response to Comment A

*Commenter inquires if Level-of-Service information in RTP is the same as used in Appendix C and D.* 

Yes, the Level-of-Service (LOS) Criteria used for the Congestion Management Process are based on the same Daily LOS Criteria and Thresholds used for the RTP.

Commenter states that it is difficult to ascertain how the January 2010 CMP was used in developing the Draft 2010 RTP.

Comment noted. A clarifying statement will be added to the CMP discussion in Chapter 4 of the RTP.

Commenter states that Environmental Justice (EJ) information found throughout the RTP should be compiled in one centralized discussion to make information easier to follow.

Comment noted. The EJ information throughout the document will be compiled and added to the Environmental Justice section (Chapter 4) of the RTP.

Commenter inquires if the information-gathering public workshops for the RTP were accessible to EJ communities and the transportation disadvantaged.

The intent of the public outreach effort was to reach as many people within the region as possible. Staff held two series of workshops; the first series consisted of four public workshops throughout the County. Workshops were held in four cities, one in each 'quadrant' of the county (north, east, south, west). In this series we held workshops in both urbanized and more rural communities. In addition, three of the four workshops were held in downtowns (libraries or community centers), accessible by transit. We also conducted a second series of workshops consisting of one workshop, in downtown Modesto, within walking distance of the City's transit center. All workshops were located on the ground floor and generally accessible to all choosing to attend.

## Letter B. United Stated Environmental Protection Agency, Region IX.

## Response to Comment B

Commenter states that their agency did not complete a comprehensive review of the StanCOG 2011 RTP, but are submitting comments per the requirements of SAFETEA-LU, the Federal Transportation Authorization Bill. It is stated that comments may not be incorporated into the 2011 RTP, but that concepts and principles identified could be considered for future RTPs.

Commenter suggests the RTP address reducing transportation related emissions through smart growth and travel demand management strategies.

Smart growth and TDM strategies are addressed throughout the RTP (Chapters 1 and 4).

Commenter suggests using performance measures to inform and guide planning efforts and to forecast, evaluate and monitor the degree to which the transportation system accomplishes transportation goals.

The 2011 RTP uses a series of performance measures to assess the benefit received through the implementation of transportation projects. The performance measures will be monitored using various sources of state and local data as well as the StanCOG Travel Demand Model. Performance Measures include; Vehicle hours of delay, Travel time, mode-choice ratios, collision rates, pavement condition, VMT, transit ridership.

Commenter suggests stating in the RTP, how the San Joaquin Valley Blueprint efforts have been incorporated to 1) more efficiently use existing infrastructure by using ITS or improving transit, 2) improve movement of goods and people that causes the least environmental harm, and 3) avoid high quality resources and habitat.

The San Joaquin Valley Blueprint effort is addressed throughout the RTP and also in Appendix B, San Joaquin Valleywide Chapter. There is much discussion in the RTP about the potential transportation, air quality, and quality of life benefits of implementing the Blueprint. It should be stated that currently efforts from the Blueprint are beginning to be incorporated into agency Planning efforts (the blueprint effort has just begun the implementation phase); further Blueprint discussion will take place in the 2015 RTP, once the implementation phase is complete. The

2015 RTP will also include a Sustainable Communities Strategy (SCS). It is assumed that Blueprint efforts will provide the foundation for the SCS.

Commenter states that the COG should work closely with the local agencies to integrate HSR planning into the transportation network.

StanCOG's local agencies are currently incorporating the HSR into their planning efforts, the City of Modesto chief among them. The RTP addresses this effort and discusses the various possibilities of rail in our region. There are specific references to existing rail services (Chapter 2) as well as potential future rail services (Chapter 4). In addition, Appendix B, San Joaquin Valleywide Chapter addresses the issue from a valleywide perspective.

Commenter recommends including a discussion of both short- and long-term TDM strategies and more aggressive potential future solutions.

The RTP addresses near-term TDM strategies and addresses the work being performed for the Blueprint. StanCOG will further analyze long-term and potential future solutions in the 2015 RTP.

Commenter suggests avoiding high value resource areas at the regional level as opposed to waiting until project implementation.

The RTP EIR used resource data to determine the effects on high value resources and established mitigation measures to alleviate the damage. As Blueprint takes effect and as SCS efforts get underway a concerted effort will be made to avoid with greater success the high-value resource areas. These efforts will be in full effect for the 2015 RTP.

# *Commenter inquires how outside resource plans were incorporated into the RTP planning process.*

Many documents from local, state and federal agencies were consulted during the development of the RTP, including resources, land-use planning and transportation planning documents. The specific resources reviewed for the RTP are listed in Appendix H (pages 3-6). In addition, other legislative and regulatory references were consulted including AB 32 and SB 375, California Governor's Strategic Growth Plan, 2030 California Transportation Plan (CTP) and Interregional Blueprint, Stanislaus County Measure E, a local land-use growth initiative (Chapter 4, RTP).

## Letter C. Janet B. Neal.

## Response to Comment C

Commenter states that the graphic representation of the key Tier 1 projects shown in Figure 3-2 of the Draft EIR is incorrect in the depiction of the western terminus of the North County Corridor.

It is agreed that there is on-going debate about the future alignment of the North County Corridor (NCC). At this time, StanCOG staff, in the RTP, has shown the potential Kiernan Avenue alignment for this project westerly of SR-108/McHenry Ave. The RTP is intended as a long-term planning document, and as such, cannot necessarily determine the final alignment of various projects such as the NCC. Therefore, we have shown the most practical potential alignment, as understood by StanCOG staff in communication with the various agencies involved in the planning of this project.

Commenter states that the cost of the North County Corridor is immense compared to other projects proposed. Commenter states that the cost could be reduced if the western terminus is changed.

The estimated cost of the project, including the escalation rate for development in a future year, is consistent with the graphic representation of the project, i.e. the project will utilize the Kiernan Avenue alignment westerly of SR-108/McHenry Ave.

# Letter D. Caltrans Head Quarters, Office of Regional and Interagency Planning.

## Response to Comment D

Commenter requests the inclusion of a statement ensuring that the first four years of the projected fund estimate is consistent with the 4-year STIP.

This comment is noted. A clarifying statement will be included in Chapter 3 of the RTP.

Commenter recommends including more specific listing of state agencies, local agencies and private interests that were involved in the development of the Plan.

Appendix I provides a comprehensive listing of agencies and private interests that were notified and participated in the development of the RTP though the public workshops. In addition, Appendix H provides a summary of the RTP planning process including a discussion on regional coordination with agency partners. Also, Appendix A provides a summary of StanCOGs Standing and Ad Hoc Committee structure used to develop, review and approve planning efforts.

Commenter recommends expanding the environmental discussion to the positive benefits of land use and smart growth activities on environmental and natural resources (i.e. farmland).

This comment is noted. Additional language will be added to the RTP to this affect.

Commenter suggests including a statement in the RTP regarding the EIR and the comparison to the CSWAP.

This comment is noted. A statement will be added to the RTP to this affect.

Commenter suggests providing additional references to the Appendices in the appropriate RTP chapters.

This comment is noted. Where appropriate the RTP will further reference the appendices to provide more information to the reader.

Commenter suggests including specific page number references of the appendices in the RTP checklist to ease review of the document.

This comment is noted. Where appropriate page numbers will be referenced to demonstrate where applicable information can be found, as opposed to a more vague reference to the Appendix.

## Letter E. City of Modesto.

### Response to Comment E

Comments were in regards to the Environmental Impact Report (EIR) and will be addressed in the Response to Comments chapter (Chapter 4) of the Final EIR (FEIR).

## Letter F. City of Turlock.

### Response to Comment F

Commenter does not agree with list of 'Projects of Regional Significance' found on page 50 of the RTP, feeling the document provides no explanation of why these projects were chosen. Commenter suggests using the established list of Regionally Significant projects developed as part of the 2010 CMP update.

The intent of this section in the RTP was to inform the average reader, at a glance, of the large capacity increasing projects in the region. No criteria were used to establish the list; it was simply intended to showcase potentially significant projects to many travelers in the region. The wording for the section was a bad choice as this has been confused with the 'projects of regional significance' found in the CMP. The inclusion of all 'regionally significant' roadway projects found in the CMP may deemphasize the projects that particularly impact regional travel patterns. Therefore, the header for this section shall be modified to 'Projects to Support Interregional Travel'. In addition, SR-165 (Lander Avenue) Interchange project will be added to the list

Commenter requests that STIP funding be included to the funding source for the SR-99/Fulkerth Interchange improvement project (within the project list).

This comment is noted. STIP shall be added as a funding source for said project.

## Letter G. Stanislaus County Environmental Review Committee.

## Response to Comment G

Commenter states that Stanislaus County supports the Stanislaus Council of Governments' efforts in developing the Regional Transportation Plan.

This comment is noted.

## Letter H. California Energy Commission.

## Response to Comment H

Commenter would like to assist in reducing the energy usage for the project and refers to Appendix F of CEQA for how to achieve energy conservation.

Energy use is addressed in Section 4.1, Energy and Climate Change, of the EIR. The methodology for the analysis in that section includes consideration of the guidelines in Appendix F.

## Letter I. Native American Heritage Commission.

## Response to Comment I

Commenter provides background as to the requirements of CEQA to evaluate historic and archaeological resources and states that comments from the NAHC follow.

This comment is noted.

# Letter J. Stanislaus County Department of Environmental Resources, Solid Waste Management Division.

## Response to Comment J

Commenter introduces the letter and states that based on the review, comments are provided.

This comment is noted.