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 21st 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.

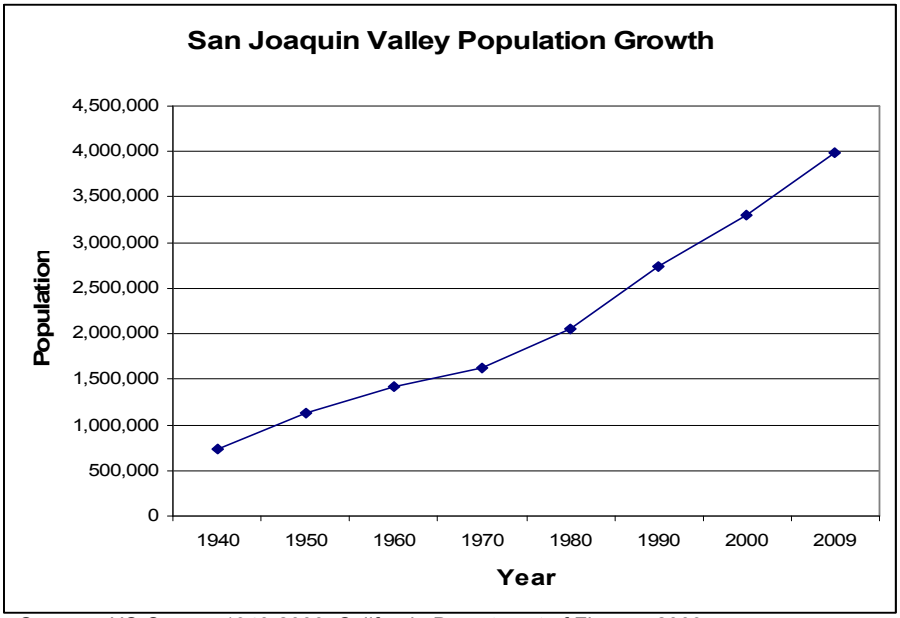
On the Valley floor, the topography is generally flat to rolling, and the climate is characterized by long, very warm summers, and short, cool winters. Precipitation is related to latitude and elevation, with the northern portions of the valley receiving approximately 12-14 inches of rain a year, while 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 1-1
San 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


San Joaquin Valley
Population Centers
SAN JOAQUIN
STANISLAUS
MERCED
MADERA
FRESNO
TULARE
KINGS
KERN
Lodi
Stockton
Manteca
Tracy
Modesto
Ceres
Turlock
Merced
Los Banos
Madera
Clovis
Fresno
Hanford
Visalia
Tulare
Porterville
Delano
Oildale
Bakersfield
California's San Joaquin Valley
Population
400,000 +
150,000 to 400,000
75,000 to 150,000
30,000 to 75,000
15,000 to 30,000
5,000 to 15,000
Highway Network
State Route 99
Interstate
Federal
State
San Joaquin Valley Location
0 10 20 30 40 Miles

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 (Iowa).

Table 1-2
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

Source: USDA, NASS, California Field Office, 2008

* In thousands

Table 1-3
Top 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

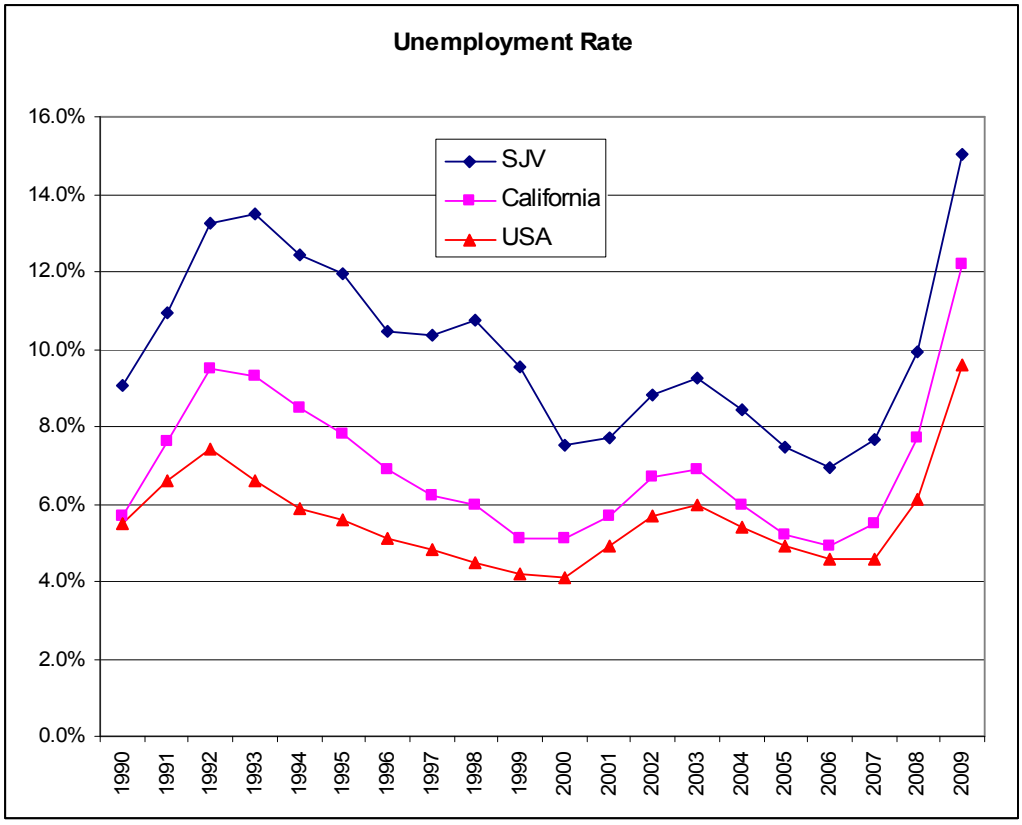
	Valley			California	
Agriculture, forestry, fishing and hunting, and mining	162,059	10.4%		355,362	2.1%
Construction	113,730	7.3%		1,222,364	7.1%
Manufacturing	128,910	8.3%		1,796,323	10.5%
Wholesale trade	58,456	3.7%		567,729	3.3%
Retail trade	179,859	11.5%		1,913,970	11.2%
Transportation and warehousing, 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]*.

Figure 1-2



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

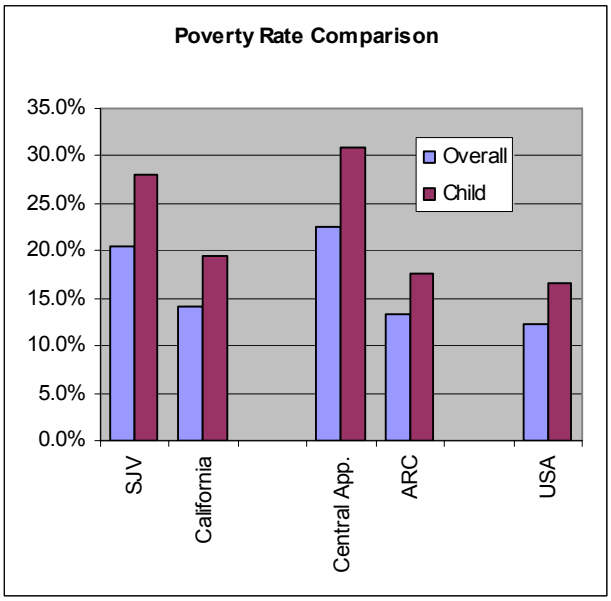
Table 1-5
Unemployment Rate – San Joaquin Valley Counties

	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

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

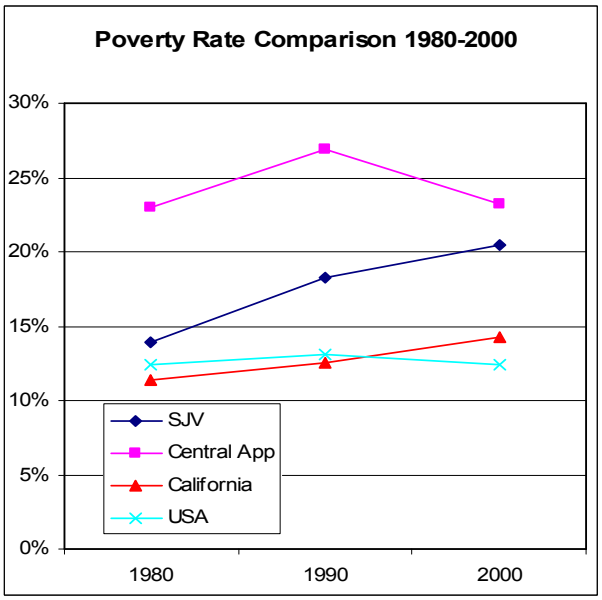
The economic plight of the San Joaquin Valley is starting to be recognized at a national level. The Congressional Research Service (CRS) completed a study in 2005 (California's San Joaquin Valley: A Region in Transition) comparing the economic conditions of the San Joaquin Valley to the Central Appalachian 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 1-3



Source: US Census Bureau 2000 via CRS

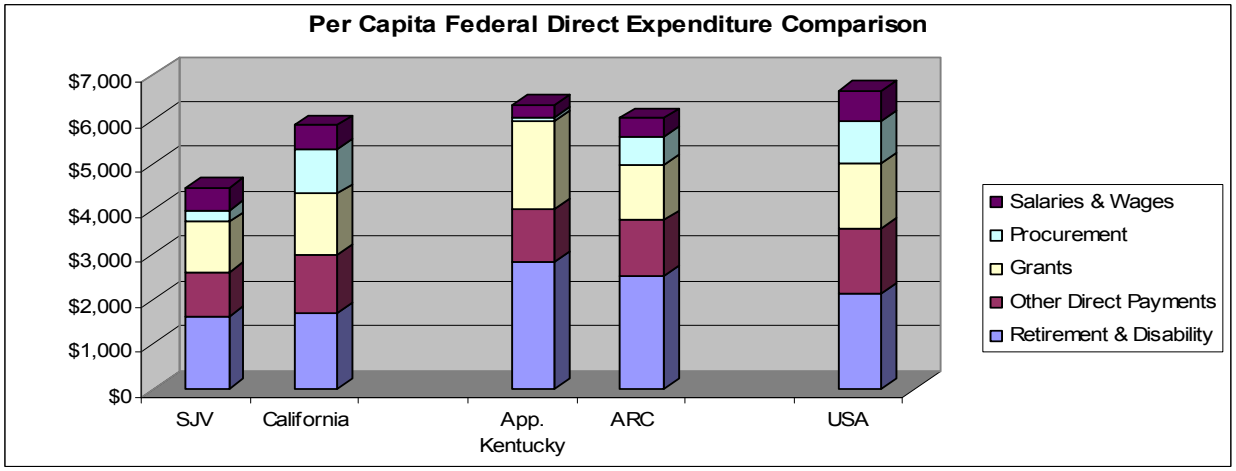
Figure 1-4



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]*.

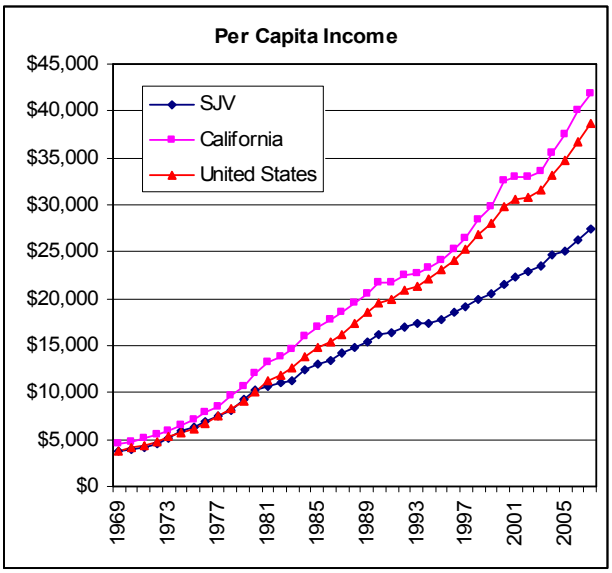
Figure 1-5



Source: CRS

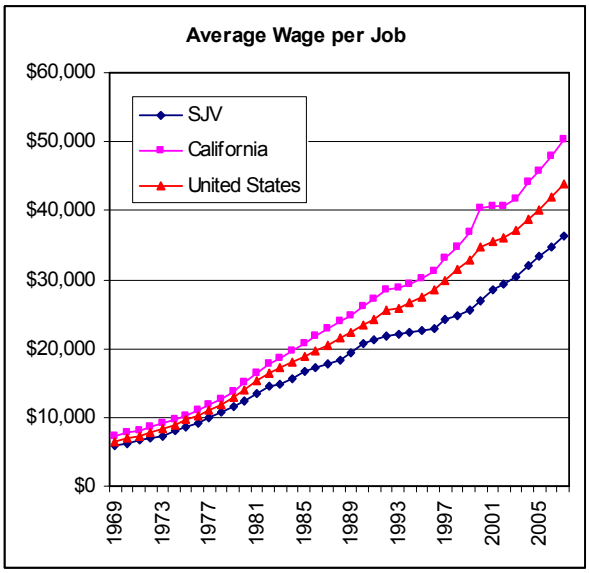
The per capita income for residents in the Valley was $27,379 in 2007 compared to $41,805 in California and $38,615 in the United States. The average wage per job in the Valley was also significantly lower than California and the United States at $36,309 in 2007 compared to $50,182 and $43,889 respectively. 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]*.

Figure 1-7



Source: Bureau of Economic Analysis

Figure 1-8



Source: Bureau of Economic Analysis

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.

Figure 1-7

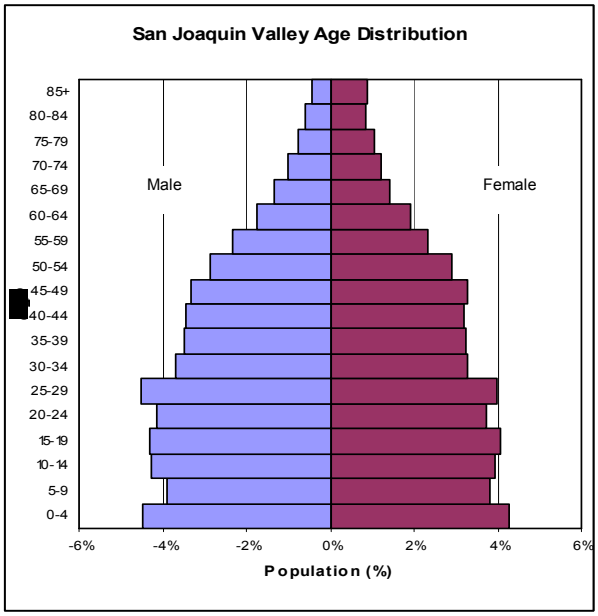
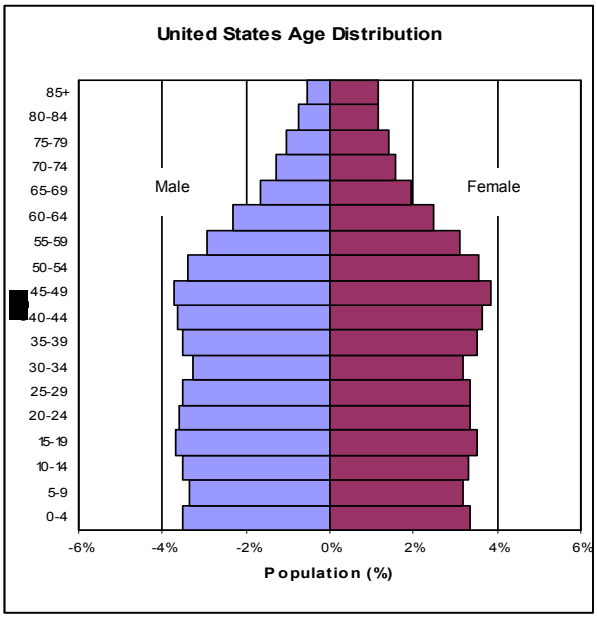


Figure 1-8



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

Figure 1-10

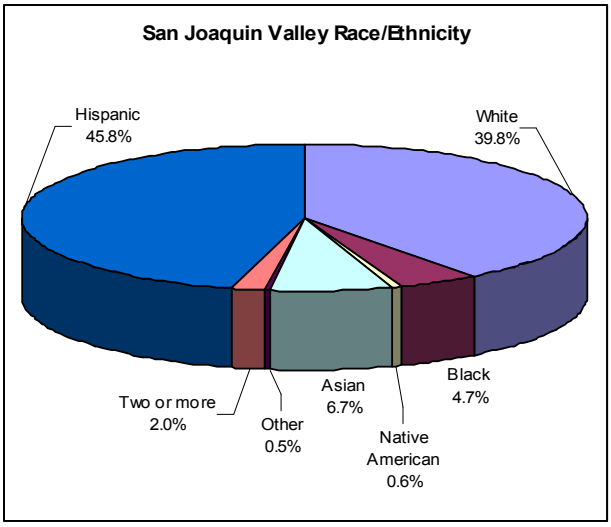
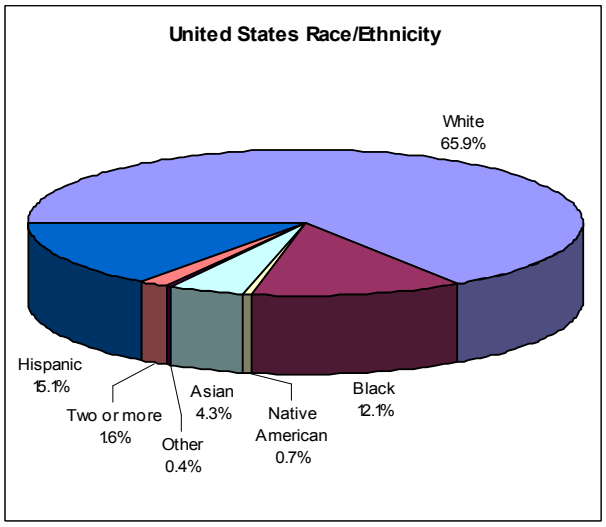


Figure 1-11



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.

Table 1-6
Educational Attainment of Persons 25 Years of Age and Older

Education Level	San Joaquin Valley		California		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%

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 inter-county 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 inter- and 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.

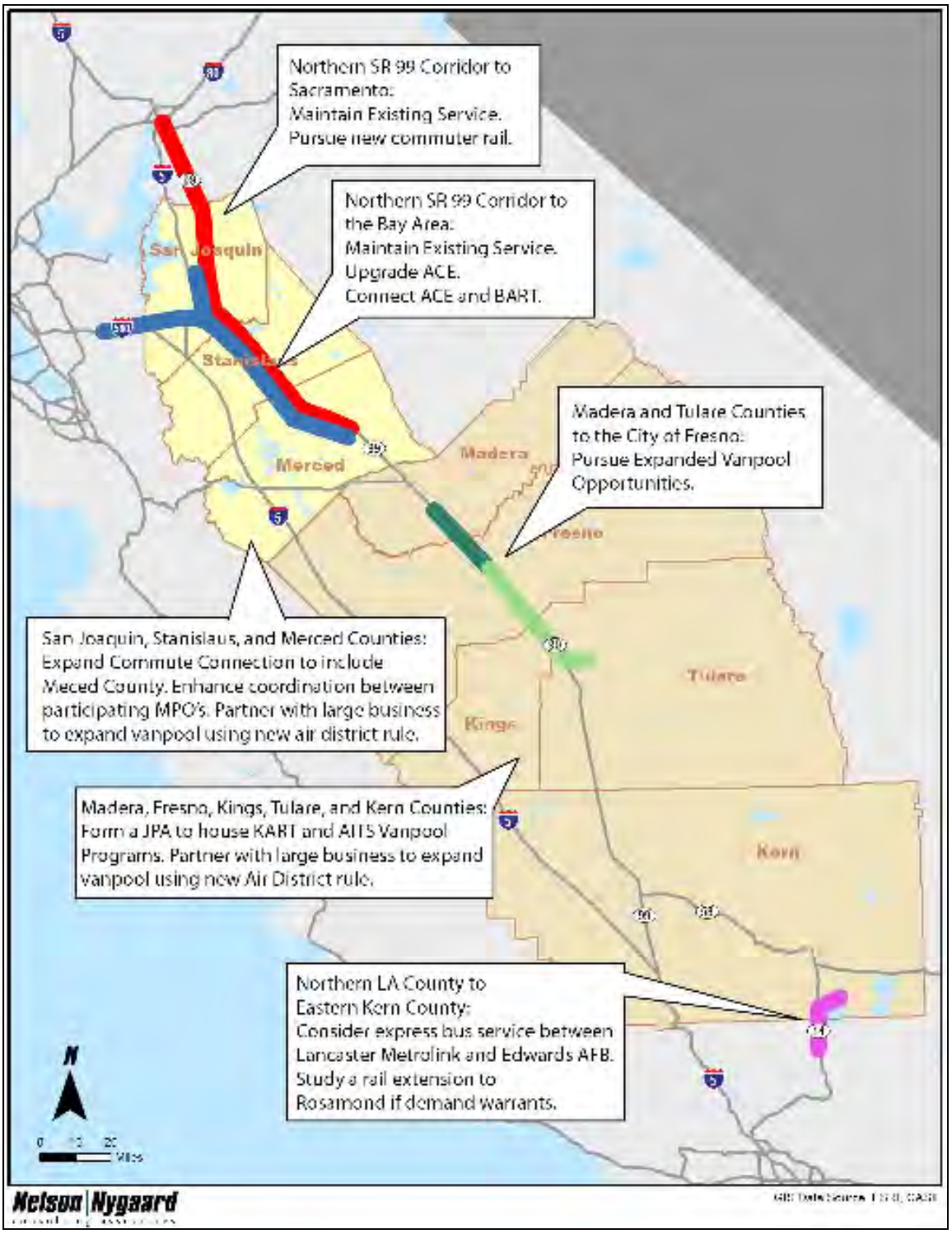
Key Travel Corridors	Description
Northern SR 99 corridor to Sacramento	Nearly 10,000 daily trips heading towards Sacramento by 2030
Northern SR 99 corridor to Bay Area	More than 50,000 daily commute trips by 2030
Madera and Visalia to Fresno	Substantial growth in commute trips to Fresno jobs
Northern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

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 ½ 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 program-level 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.

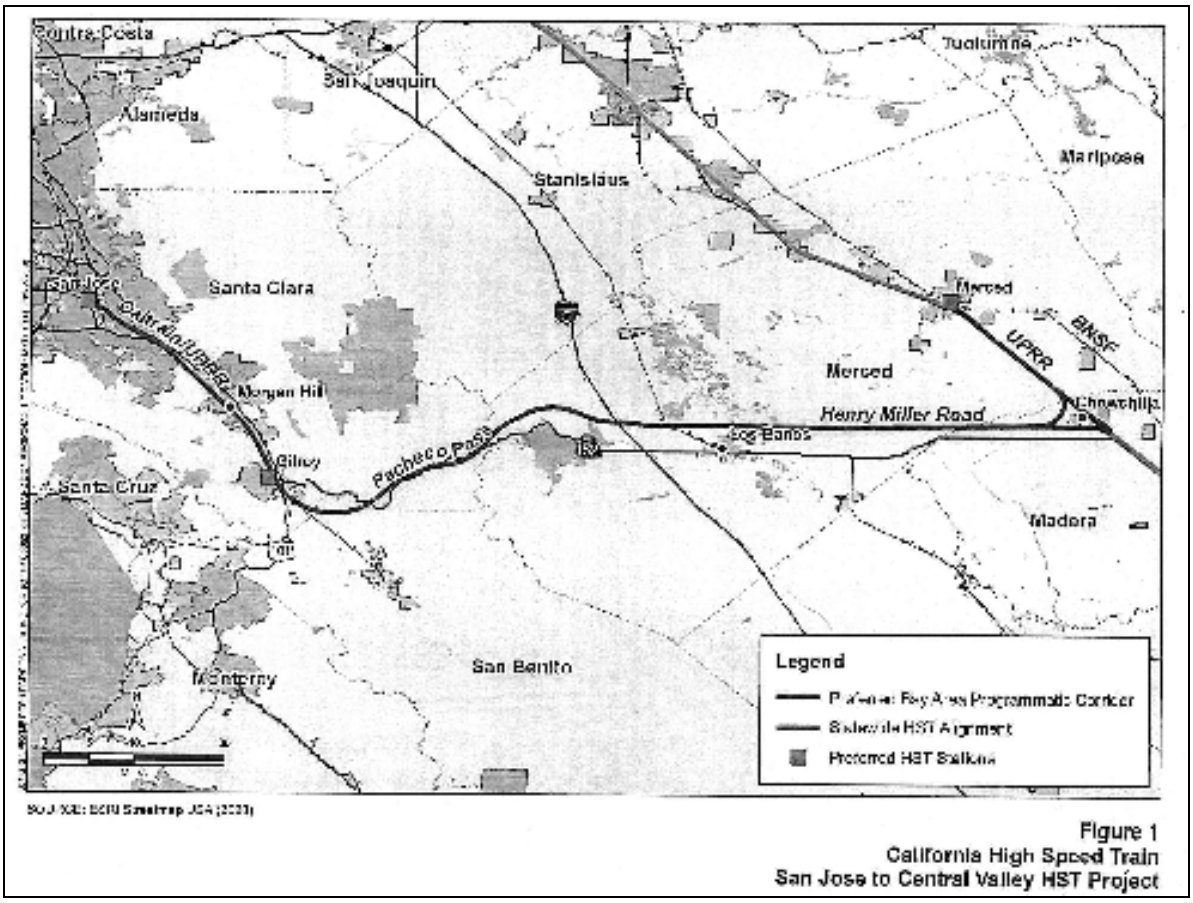


Figure 1
California High Speed Train
San Jose to Central Valley HST Project

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 would be to take advantage 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 rail network mergers and acquisitions. Many rail shippers looked for alternative shipping options during this time and found it difficult to locate enough boxcars to meet their needs. Both the Cities of Fresno and Bakersfield 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).

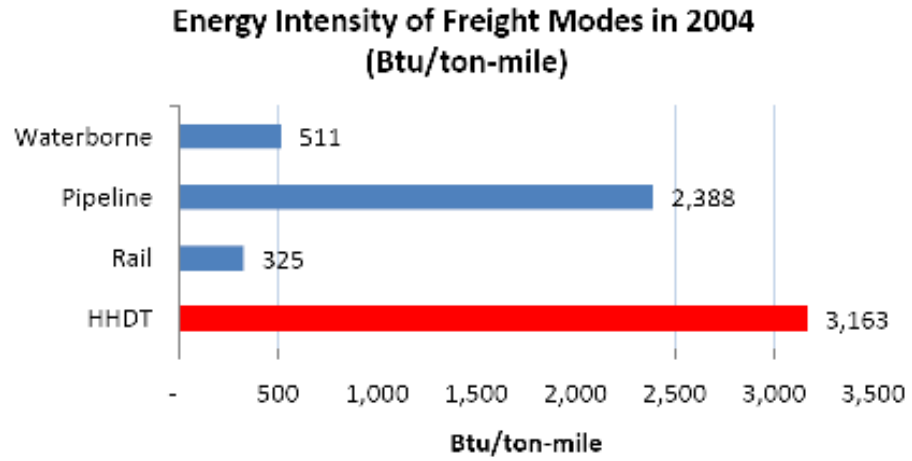
One example of out-of-state shipments includes the Rail-Ex facility in Delano. This facility ships refrigerated box cars of perishable produce from the valley non-stop to Albany, NY in 5 days.

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.



Hauling containers by rail is 10 times more energy efficient than by Heavy Duty Trucks

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 Plan*Continue 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

Fresno

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.

Stanislaus

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).

- 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 $PM_{2.5}$ 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 $PM_{2.5}$ 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 in adopting a preferred growth scenario for the San Joaquin Valley. On April 1, 2009, the 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 UPlan 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 "1st 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 pre-scheduled 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

1. 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 UPlan modeling software for development of all the scenarios.

2. 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.

3. 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.

    Outcomes

    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 www.catribalej.com 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:
        - California Association of Councils of Governments (CALCOG)
        - California State Association of Counties (CSAC)
        - League of California Cities
        - 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 UPlan 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,
     - Gather information on best practices for the Blueprint development,
     - 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 Valley 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.

2. 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 http://www.caforward.org/about/).*

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

1. 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.
2. 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.)*
3. 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).
2. 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, without 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.