

Valleywide Information

San Joaquin Valley Regional Overview

June 2014

One Valley: The 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 in 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, distribution centers, 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 population of 24 states). 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 2012, the population had increased 149% to over 4 million [Exhibit 1-3]. 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 11% of California's total population now. By 2050, the Valley is projected to capture 15% of the state's population [Exhibit 1-4].

San Joaquin Valley **Population** SAN JOAQUIN Centers California's San Joaquin Stockton Valley Manteca STANISLAUS Tracy Modesto Ceres Turlock MERCED Merced Los Banos Clovis Fresno Population Hanford Visalia ° 400,000 + 150,000 to 400,000 75,000 to 150,000 30,000 to 75,000 Tulare 15,000 to 30,000 5,000 to 15,000 Porterville Source: CA Dept. of Finance, 2012 Highway Network State Route 99 Delano Interstate Federal State Oildale Bakersfield San Joaquin Valley Location 10 20 30 40 Miles Interstate System

Exhibit 1-2

4

Exhibit 1-3
San Joaquin Valley Population Growth by County

	1970	1980	1990	2000	2012	2020	2030	2040	2050
Fresno	413,329	514,621	667,490	799,407	945,711	1,071,728	1,241,773	1,397,138	1,509,715
Kern	330,234	403,089	544,981	661,645	850,006	1,057,440	1,341,278	1,618,681	1,858,455
Kings	66,717	73,728	101,469	129,461	152,419	176,647	205,627	235,129	260,500
Madera	41,519	63,116	88,090	123,109	152,074	185,056	229,277	278,011	323,469
Merced	104,629	134,560	178,403	210,554	258,736	301,376	366,352	436,188	496,787
San Joaquin	291,073	347,342	480,628	563,598	695,750	810,845	1,004,147	1,213,708	1,379,333
Stanislaus	194,506	265,900	370,522	446,997	519,940	589,156	674,859	759,027	861,984
Tulare	188,322	245,738	311,921	368,021	450,840	526,718	630,303	722,838	784,334
Total San Joaquin Valley	1,630,329	2,048,094	2,743,504	3,302,792	4,025,476	4,718,966	5,693,615	6,660,720	7,474,577
California	19,971,069	23,667,764	29,760,021	33,871,648	37,678,563	40,643,643	44,279,354	47,690,186	50,365,074
% of San Joaquin Valley of out California	8.2%	8.7%	9.2%	9.8%	10.7%	11.6%	12.9%	14.0%	14.8%

Sources: U.S. Census 1970-2010, California Department of Finance 2020-2050

Exhibit 1-4

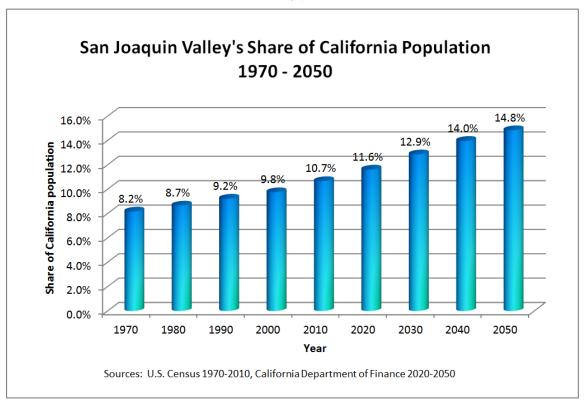
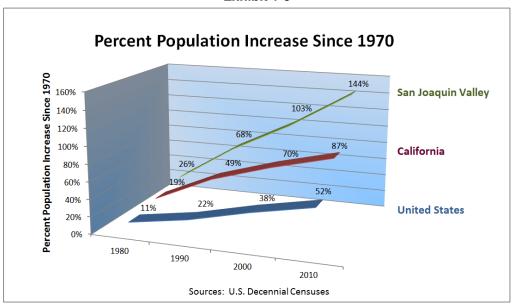


Exhibit 1-5



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 reach nearly7.5 million by the year 2050, using growth projections from the California State Department of Finance (DOF) [Exhibit 1-3].

Economy

The San Joaquin Valley is famous for agricultural production. All eight counties rank within the top twelve of California's 58 counties. In addition, if the Valley were a state, it would be the top agricultural producing state in the country. The Valley produced \$25.4 billion in agricultural products in 2008. This amount is over double the remainder of California and more than the next highest producing state, lowa [Exhibit 1-7].

Exhibit 1-6

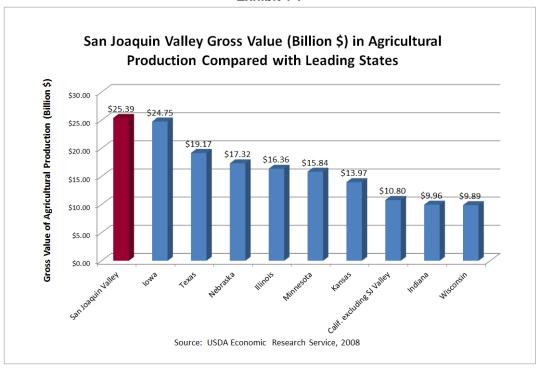
San Joaquin Valley Counties Rank in Gross Value of Agricultural Production Among all California Counties

1	Fresno	\$6.886 billion
2	Tulare	\$5.629 billion
3	Kern	\$5.365 billion
5	Merced	\$3.259 billion
6	Stanislaus	\$3.070 billion
7	San Joaquin	\$2.247 billion
8	Kings	\$2.220 billion
12	Madera	\$1.570 billion

Source: California County Agricultural

Commissioners' Reports, 2011

Exhibit 1-7



Agriculture accounts for 12% of the Valley's jobs [Exhibit 1-8]. In comparison, only 3% and 2% of the state and nation's jobs are in agriculture [Exhibit 1-9]. Other major employment sectors in the Valley are education, health and social services (21.5%) and retail trade (11.3%).

Exhibit 1-8

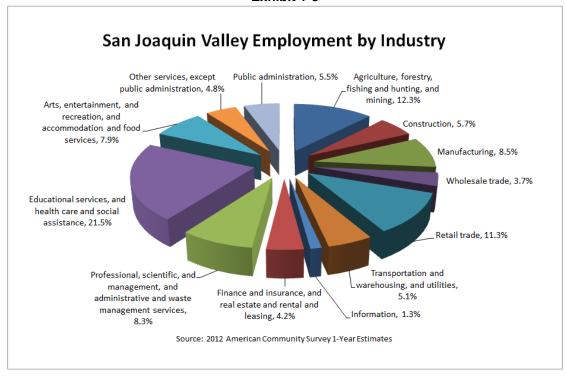


Exhibit 1-9
EMPLOYMENT BY INDUSTRY

Industry	San Joaquin Valley		California		United States	
Agriculture, forestry, fishing and hunting, and mining	187,439	12.3%	412,318	2.5%	2,830,729	2.0%
Construction	86,743	5.7%	983,602	5.9%	8,802,312	6.2%
Manufacturing	129,388	8.5%	1,660,819	9.9%	14,988,864	10.5%
Wholesale trade	55,747	3.7%	503,594	3.0%	3,785,841	2.6%
Retail trade	171,575	11.3%	1,892,209	11.3%	16,639,780	11.6%
Transportation and warehousing, and utilities	77,522	5.1%	769,009	4.6%	7,020,960	4.9%
Information	19,498	1.3%	475,122	2.8%	2,975,482	2.1%
Finance and insurance, and real estate and rental and leasing	63,437	4.2%	1,058,597	6.3%	9,414,894	6.6%
Professional, scientific, and management, and administrative and waste management services	126,130	8.3%	2,140,616	12.8%	15,591,744	10.9%
Educational services, and health care and social assistance	326,927	21.5%	3,518,296	21.0%	33,113,097	23.2%
Arts, entertainment, and recreation, and accommodation and food services	120,223	7.9%	1,701,284	10.1%	13,697,912	9.6%
Other services, except public administration	72,582	4.8%	916,873	5.5%	7,118,937	5.0%
Public administration	84,440	5.5%	745,722	4.4%	6,941,135	4.9%
TOTAL Civilian employed population 16 years and over	1,521,651	100.0%	16,778,061	100.0%	142,921,687	100.0%

Source: 2012 American Community Survey 1-Year Estimates

Economically Distressed Area

Unemployment Rate

8.0% 6.0% 4.0% 2.0% 0.0%

The San Joaquin Valley is one of the most economically distressed regions in the United States. High unemployment rates have historically plagued the Valley. As shown in Exhibit 1-10, in 2012 the Valley's unemployment rate was 15.3%, in contrast to 11.4% and 9.4% for the state and that nation, respectively.

Unemployment Rate

16.0%
14.0%
12.0%
10.0%
11.4%

Exhibit 1-10

9.4%

Educational levels for Valley residents lag behind those of California and the United States. Only 24.3% of persons 25 years of age and older have a college degree, compared to 38.8% and 37.1% for the state and nation, respectively [Exhibit 1-11].

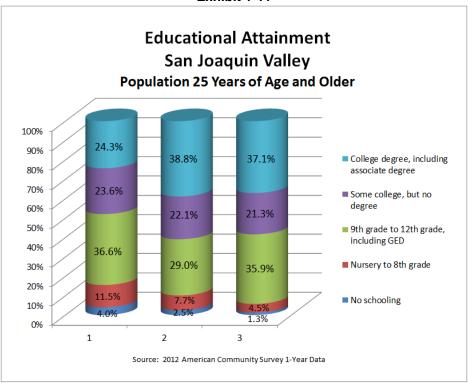
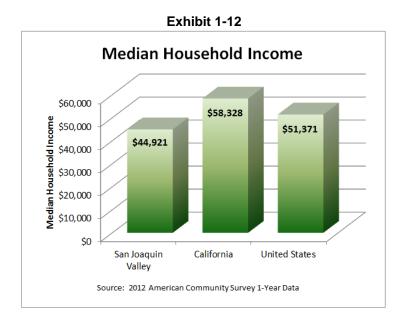


Exhibit 1-11

With the Valley's mix of employment types, high unemployment, and low educational attainment levels, the Valley is plagued with a low median household income. As shown on Exhibit 1-12 below, the Valley's median household income of \$45,000 is far below the state and nation's averages of \$58,000 and \$51,000.



9

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.

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.

Exhibit 1-13 below indicated that in 2010, the per capita federal government expenditure for the Valley and each of its eight counties was still far below that of California and the United States.

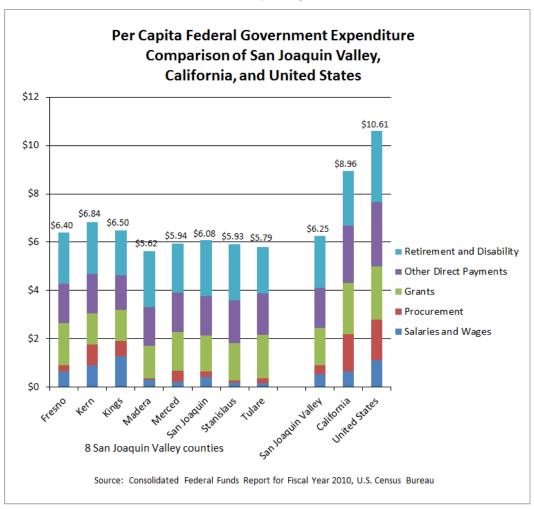


Exhibit 1-13

Demographics

The Valley has a younger population than California as a whole and the United States. In 2010, 41.0% of Valley residents were under the age of 25 compared to 35.5% for California and 34.0% for the United States [Exhibit 1-14].

Percent of Population Under 25 Years of Age Percent of Population Under 25 Years of Age 45.0% 40.0% 41.0% 35.0% 35.5% 34.0% 30.0% 25.0% 20.0% 15.0% 10.0% 5.0% 0.0% California **United States** San Joaquin Valley Source: 2010 U.S. Census

Exhibit 1-14

The residents of the Valley are more ethnically diverse than those of California and the United States. According to the 2010 U.S. Census, 63.5% of the Valley's inhabitants are minority (non-white), compared to 59.9% and 36.6% for the state and nation [Exhibit 1-15].

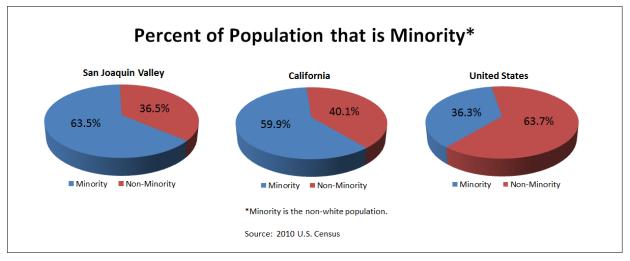


Exhibit 1-15

Valley Success in Partnering and Planning

Air Quality

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. That coordinated approach is essential in meeting the Valley's goal to provide clean air to all residents.

Coordination

On-going coordination with federal, state, and local partners has been, is, and will continue to be critical to the meeting the goal of providing clean air to all San Joaquin Valley residents. As one of the few multi-jurisdictional planning 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 San Joaquin Valley. The process is critical to documenting compliance with the Federal Clean Air Act, as well as enabling the expenditures that build and maintain transportation infrastructure; investments which provide valuable jobs to San Joaquin Valley residents.

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, 2007 TIP/RTP, and 2011 TIP/RTP. In addition, FHWA has determined that the SJV RPA planning processes substantially meet the federal planning requirements. TIP/RTP Amendments, including coordinated amendment cycles and development of valley-wide process to be federally approved.

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.

Sustainable Communities Strategies

Introduction

California's Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act, SB 375, Chapter 728, Statutes of 2008) supports the State's climate action goals to reduce greenhouse gas (GHG) emissions through coordinated transportation and land use planning with the goal of more sustainable communities.

Under the Sustainable Communities Act, the California Air Resources Board (ARB) sets regional targets for GHG emissions reductions from passenger vehicle use. The ARB established these targets in the San Joaquin Valley as GHG reductions of 5% by 2020 and 10% by 2035. Under Senate Bill 375, each Metropolitan Planning Organization (MPO) in the State must have a Sustainable Communities Strategy (SCS) that demonstrates the respective region's ability to attain and exceed these GHG emission-reduction targets. The SCS outlines the plan for integrating the transportation network and related strategies with an overall land use pattern that accounts for projected growth, housing needs, changing demographics, and forecasted transportation needs among all modes of travel.

For the San Joaquin Valley, each MPO in scheduled to approve their SCS as an element of their Regional Transportation (RTP/SCS) in 2014. Referred to as the RTP/SCS, each Valley COG has developed an investment strategy that outlines their region's transportation future through 2040. Each RTP/SCS in the Valley goes in-depth into the projects, policies, and strategies that will achieve compliance with state laws while delivering a financially constrained plan matching forecasted revenues with transportation demands. Some achievements of the collective RTP/SCS include:

- Provision of transportation and travel choices
- Improving safety, mobility, efficiency of the transportation system
- · Maximizing economic competitiveness/economic vitality
- Facilitating goods movement
- Building healthy and active communities
- Improving the environment

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Valleywide Coordination on RTP/SCS

Valley Visions

While SB 375 mandated individual development of the RTP/SCS, the eight San Joaquin Valley Councils of Government decided also to collaborate in this process to share information, best practices, and foster consistent approaches to RTP/SCS development. The eight COGs participated in a joint grant proposal to the California's Strategic Growth Council for Proposition 84 funding. The grant was funded and launched as "Valley Visions."

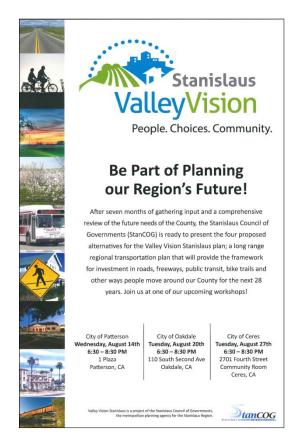
Valley Visions was implemented as a series of planning efforts underway throughout the San Joaquin Valley. It took a big-picture look at how the Central Valley grows over time in a way that uses resources efficiently, protects existing communities, conserves farmland and open space, and supports the Central Valley economy, ultimately reducing future greenhouse gas emissions. The Valley Visions logo was provided to each COG to use and customize to their region if they wanted.

One of the tasks identified in the successful grant proposal was enhancement of the eight COG's individual public outreach efforts



with a valleywide campaign. The project scope for this task included templates/written materials for customization, a media campaign to engage residents and publicize outreach efforts (social media, newspapers, radio and/or TV), and to assist with the development of SB 375 required workshops and hearings.





Of particular note was an informational video on the SCS process provided in three languages: English, Spanish, and Hmong and the media campaign that was active during the months of August, September, and October 2013. The videos were made available on YouTube, with links on the Valley Visions web page (www.valley-visions.org).



Valley Visions is yet another example showcasing the successes in valleywide collaboration. The eight counties of the San Joaquin Valley coordinated some aspects of these planning efforts and maximized resources, while each area's Metropolitan Planning Organization (MPO) developed a separate plan. This effort helped the Valley COGs brand a consistent message about sustainability.

Goods Movement

Introduction

In the Statewide Goods Movement Action Plan, the California Department of Transportation (Caltrans) designated the Valley as one of the State's four major international trade corridors. The Valley is the leading agricultural producer in the world, and it also supports major food processing industries. Portions of the Valley continue to be major oil and gas producers. Due to its central location, relatively inexpensive land, labor force, and multimodal transportation system, the Valley also is becoming a major distribution point for international exports and consumer products. Prior to the recession, the Valley was the fastest growing population center in California and is poised to return to this position as the economy recovers.

Many of the agricultural products that the Valley produces are exported through California's marine and airport systems using the highway and roadway systems to move commodities from farm, to processor/packer, to market. While Interstate 5 and State Route 99 are the two primary north/south transportation arteries, SR 99 is the transportation backbone of the San Joaquin Valley and is served by many significant east-west corridors such as SR-58, SR -120, SR-180, I-580 to 205, SR-152, SR-198, and SR-46.

The Valley, as a region, needs to effectively plan for efficient goods movement and successfully partner with the private sector, state and Federal agencies to make necessary investments. A failure to effectively plan and invest could result in congested and poorly maintained highways, lost economic opportunities due to inadequate access to markets, land use conflicts between logistics-oriented business and growing communities, and poor air quality due to diesel emissions. Emphasis on system-wide efficiency and a comprehensive goods movement system seem to have become key elements of competitive funding. It is anticipated these trends will continue to shape transportation policy and that future funding may emulate the approach of the state's Trade Corridor Improvement Fund (TCIF), tying transportation funding to trade corridors and movement of goods.

Background

In 2007, The San Joaquin Valley Regional Planning Agencies developed the *San Joaquin Valley Regional Goods Movement Action Plan (2007)*. The purpose of the plan was to provide a knowledge base for the understanding of freight and goods movement issues facing the San Joaquin Valley. The plan identified freight flows for the region, and developed the San Joaquin Valley Truck Model tool and scenario testing.

Previous goods movement works efforts for the Valley:

- San Joaquin Valley Regional Goods Movement Action Plan, 2007
- Draft San Joaquin Valley Regional Goods Movement Action Plan, 2008
- California Interregional Intermodal System (CIRIS) Implementation Plan 2006
- SR 58 Origin and Destination Study
- State Route 99 Business Plan
- Interstate 5 and State Route 99 Origin and Destination Study, 2009
- East Side Business Plan (Short Haul Rail), Tulare County, 2010
- SR 223, 166, 119, 46 and 65 Truck Origin and Destination Studies, 2011

In fiscal year 2010-2011, the eight Valley RPAs received a funding award for a Caltrans Partnership Planning grant for the San Joaquin Valley Interregional Goods Movement Plan. The Plan will build on previous work efforts and further refine the criteria and decision-making process while identifying vital goods movement networks for the multi-county region.

San Joaquin Valley Interregional Goods Movement Plan

This San Joaquin Valley Interregional Goods Movement Plan is intended to take the next steps to develop and implement the region's freight transportation vision. This effort, more than the prior phases of the Valley Goods Movement Study, is focused on developing actionable project recommendations and implementation plans. There are many project concepts that have been developed over the last decade that include strategies, such as short-haul intermodal rail services, short sea container barge services, mainline rail capacity projects, SR 99 capacity and operational improvements, east-west highway improvements, and a host of other innovate goods movement systems ideas. Not all of these can be funded, and not all are of the highest priority. At the conclusion of this planning effort, it is important that the Valley goods movement stakeholders prioritize this project list based on clear criteria that reflect the region's goals and objectives. The projects need to be market-based, and at least some need to demonstrate state and national benefits.

The San Joaquin Valley Goods Movement System

Through this data driven 18

month process, the final plan anticipated in May 2013 will include an investment plan of project improvements and strategies that will increase the efficiency and reliability of the Valley's goods movement system. This multi-modal project list and strategies will build on the regional strengths, while identifying a funding and implementation strategy. Transportation improvements and investments in the multimodal infrastructure will support economic growth in higher-value crops, logistics and warehousing/ distributions facilities, light manufacturing, oil production, and export products. Goods movement improvements can reduce congestion and delays



for California businesses, carriers, and shippers and provide more reliable access to domestic and international markets. These improvements will increase productivity, profits, growth, and competitiveness within the San Joaquin Valley.

San Joaquin Valley Goods Movement Key Findings

The San Joaquin Valley is the sixth fastest growing region in the United States and is projected to nearly double in population by 2040.

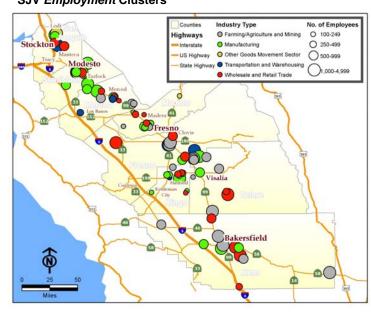
SJV Employment Clusters

Population and employment centers within the SJV are generally located adjacent to major highway facilities such as SR 99, I-5, SR 152, SR-198, and SR 41. Access to major population centers is critical for the movement of goods, not only for local deliveries of consumer products but to access warehousing and distribution facilities and services for transportation operators.

In 2010, there were about 1.2 million people employed across all sectors in the San Joaquin Valley. Of this total, over 44 percent (564,000 jobs) are associated with goods movement-dependent industries. By 2040, goods movement-dependent jobs are expected to increase by over 45 percent (nearly 250,000 jobs).

The highway and local road system is the primary freight infrastructure for the region, and trucking is the dominant freight mode. There are over 31,420 roadway miles in the San Joaquin Valley. There are over 2,700 miles of truck routes in the 8-County study region, with over 80 percent designated STAA National Truck Routes.

Rail freight operations and facilities in the study area are primarily owned by the Union Pacific (UP) and Burlington Northern Santa Fe (BNSF). The region also has several short-line operations, including 417 miles of the San Joaquin Valley Railroad (SJVR). However, there currently is no intraregional service within the SJV. The air cargo system in the San Joaquin Valley is comprised of



Truck Tonnage in the SJV, 2007



seven airports - all of which offer limited commercial passenger airline and air cargo service.

Truck is the dominant goods movement mode in the San Joaquin Valley. Nearly 500 million tons of goods moved by all modes on the San Joaquin Valley goods movement system in 2007. Over 90% of this (425 million tons) was moved by truck.

Industries depend heavily on intra-regional movements within the San Joaquin Valley, both between Counties and within the same County. 53% of all truck tonnage is intra-regional with raw agricultural products (such as animal feed or cereal grains) and mining materials (such as stone and sand) playing a prominent role.

Contrary to truck traffic, nearly all SJV rail traffic moves to or from other states.

Products moved by air continue to use airports outside of the San Joaquin Valley. Airports in the San Joaquin Valley collectively account for less than one percent of all air cargo handled by California's civilian airports.

The Port of Stockton is primarily a bulk commodity port and in 2010 handled nearly 1.4 million tons of bulk and break-bulk commodities.

Many prominent industries in the San Joaquin Valley (such as food processing) rely on the transportation system to receive raw materials and to deliver goods to market. For example, tomato processing facilities located throughout the SJV provide about 76% of all tomato processing capacity in California.

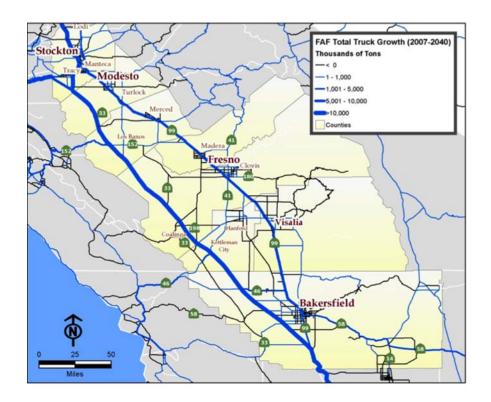
Sacramento/North Inbound: 18,047,917 tons Outbound: 17,139,326 tons Bay Area Inbound: 2,796,115 tons Outbound: 2,456,824 tons Outbound: 22,817,734 tons Outside of State bound: 22,865,331 tons utbound: 20,046,837 tons Intra-SJV 224,736,613 tons Central Coast Inbound: 22 420 627 tons Outbound: 19.850.667 tons Southern California Total Inbound/Outbound Truck Flows Inbound: 20,583,597 tons Outbound: 19,329,757 tons San Joaquin Valley Central Coast Southern California (Los Angeles - Long Beach - San Diego) Eastern California Sacramento and North San Jose - San Francisco - Oakland 180 Zones outside California

SJV Trading Partner Truck Tonnage Distribution

Between 2007 and 2040, freight moving on the SJV goods movement system is anticipated to grow substantially, reaching over 800 million tons by 2040. Similar to 2007, trucks are projected to carry the majority of all goods by 2040. In fact, trucks are projected to carry 93% (750 million tons) of this tonnage, while rail is projected to carry 7% (50 million tons). Air and water modes will continue to play a role in delivering specific types of commodities, but will continue to command less than 1% of the total commodity flow volume.

The region has several critical goods movement corridors (most notably I-5 and SR-99) that carry the highest volumes of trucks within the San Joaquin Valley. However, there are also many corridors and local roads that, though carrying smaller total volumes of trucks, are still vital to the region's goods movement. East-West corridors throughout the SJV (including SR 152, SR 58, SR 198 and SR 46) are especially important, as are numerous smaller facilities (such as farm to market roads and County roadways) that connect single industrial sites, farms, agricultural processing centers, or other freight-generating activities to the Statewide and National freight system.

Growth in Truck Flows in the SJV, 2007-2040 (FAF3)



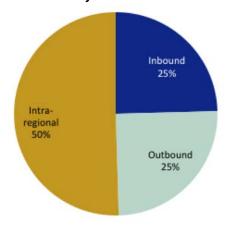
2040 Anticipated Highway Performance



Movement of freight between counties in the San Joaquin Valley (intra-regional) will continue as the dominant pattern of goods movement. Intra-regional movement will be responsible for over 50% of the total expected tonnage (nearly 400 million tons) in the San Joaquin Valley in 2040. Between 2007 and 2040, outbound tonnage will increase at a greater rate (90%) than inbound tonnage (60%), indicating a growing importance of outbound shipments from the SJV.

Inbound carload rail flows will experience marginal declines by 2040 due to declines in cereal grains, animal feed, and fertilizers. Contrarily, outbound carload tonnage will increase over 100%, largely due to increasing demand for prepared foodstuffs, alcoholic beverages (including wine), and other agricultural products. Rail intermodal flows will increase substantially by 2040, both inbound and outbound, led by outbound intermodal tonnage associated with mixed freight (including consumer products, shipped using domestic trailers or containers). Growing warehousing and distribution hubs, as well as SJV manufacturing facilities may be beneficiaries of this increased demand.

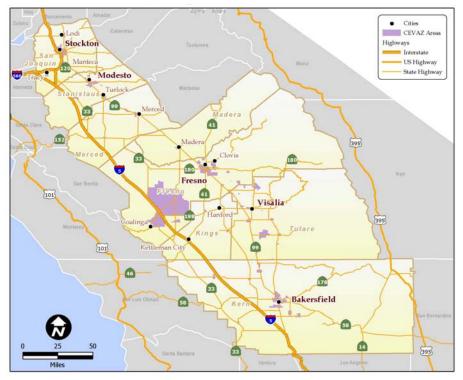
Inbound, Outbound and Intra-Regional Commodity Distribution – 2007 to 2040



Air cargo has not been a growth industry in California over the past decade, and there is little indication that air cargo volumes will soon rise.

Goods movement activities contribute to the SJV's air quality concerns. Poor air quality –a serious issue in the SJV, is partially caused by exhaust emissions from trucks, rail, and equipment involved in freight movement. The San Joaquin Valley Air Pollution Control District estimates that trucks emit 10% of the Valley's directly emitted particulate matter (PM_{2.5}).

High – CEVAZ (Most Vulnerable) Population Clusters in the SJV



Congestion on roadways in the

San Joaquin Valley results in economic impacts and in public health consequences. Traffic congestion translates to economic losses, wasted fuel, and also contributes to localized emissions "hot spots" from increased emissions due to idling engines. Increased emissions can lead to negative impacts to public health – including respiratory ailments, reduced lung function, a weakened immune system and headaches. In the SJV, traffic volumes on portions of SR 99, SR 120, SR 58, SR 41, and I-5 already exceed the capacity of the facility. Projections are for rapidly increasing vehicle and truck volumes by 2040, which will likely exacerbate existing congestion throughout the Valley.

The Future of Goods Movement in the Valley

Through planning efforts such as the eight-county San Joaquin Valley Goods Movement Plan, the Valley is seriously looking at all of the existing conditions, growth implications and environmental impacts on our communities to develop a strategic and comprehensive understanding and strategies for implementing an efficient goods system.

Public and private stakeholders have met and discussed throughout the Goods Movement planning process the criteria and metrics for evaluating projects to enhance the socioeconomic status of the San Joaquin Valley via improvements in our transportation systems.

SJV Goods Movement Advisory Committee Meeting in Tulare CA



The San Joaquin Valley Interregional Goods Movement plan focused on several outcomes and processes:

- Worked with regional freight stakeholders from throughout the SJV to understand the issues, challenges, bottlenecks, and opportunities of the Valley's multi-modal goods movement system, including a three-tiered stakeholder outreach process to public, private, and other freight system stakeholders.
- Assessed supply chain and logistics trends of key industries, their current needs, and how they will
 impact goods movement in the future, including creating simplified supply chain diagrams to illustrate
 the transportation system needs of industries.
- Created a prioritized investment plan of multimodal project improvements and strategies to increase
 the efficiency and reliability of the region's goods movement system, including evaluation using the
 valleywide truck model, IMPLAN economic input-output software, and other tools to quantify the
 environmental, economic, and mobility benefits of each project / strategy.
- Contributed to economic development, strong industries, and environmental health throughout the entire San Joaquin Valley.

The culmination of the Goods Movement Plan is a stand-alone, data-driven, multimodal project list that reflects the combined goods movement vision of the entire eight-county region. The outcomes and priorities identified in the Plan are being integrated into the MAP 21 required National Primary Freight Network, the Valley has two members on the California Freight Advisory Committee, and our planning efforts are being integrated into the California Freight Mobility Plan.

Advocacy

San Joaquin Valley Regional Policy Council

The voluntary creation of the San Joaquin Valley Regional Policy Council (Regional Policy Council) in 2006 is a key partnership that exemplifies the Regional Transportation Planning Agencies' approach to working on regional issues.

This sixteen member Regional Policy Council was established to discuss and build regional consensus on issues of Valley importance. The Regional Policy Council consists of two elected officials and one alternate appointed from each of the eight regional planning agencies' governing boards in the San Joaquin Valley. The Regional Policy Council is positioned to have a unique and potentially pivotal position in further Valley collaborative efforts and improving the quality of life for all Valley residents.

The Regional Policy Council provides guidance on common interregional policy issues and also represents the San Joaquin Valley at public forms such as the California Transportation Commission, the Governor and his administration, as well as State and Federal legislative bodies that require a common voice. Issues of common interest, include:

- Intercity Rail
- State Route 99 Coordination
- Joint Funding Strategies
- San Joaquin Valley Interregional Goods Movement
- Short Haul Rail (SB 325 Implementation)
- Air Quality Transportation Planning Coordination
- Relationship Development with External Agencies & Entities
- San Joaquin Valley Regional Blueprint Planning
- Valley Legislative Affairs Committee
- Valleywide Model Improvement Plan
- Coordination with the California Partnership for the San Joaquin Valley
- Proposition 84, Sustainable Communities Implementation

- Regional Energy Planning
- Regional Transportation Plans
- Fall Policy Conference
- San Joaquin Valley Websites
- Coordination of the Policy Council and Executive Directors' Committee

Valley Legislative Affairs Committee

The San Joaquin Valley Regional Transportation Planning Agencies have established a staff-level Valley Legislative Affairs Committee (VLAC), consisting of staff from the San Joaquin Valley Regional Transportation Planning Agencies. The VLAC track pertinent legislation, updates the RTPA Directors, and makes recommendations when warranted to the San Joaquin Valley Regional Policy Council. The Regional Policy Council is made up of two elected officials from each of the eight RTPAs and provides a forum for elected officials to discuss topics and build consensus on issues of Valleywide importance. Every year, State and Federal legislative platforms are developed to provide guidance to the RTPAs. The annual "Valley Voice" advocacy trips are coordinated by the VLAC. The latest Washington D.C. trip was held in September 2011 and the Sacramento trip was conducted in March 2013. The next trip to Washington D.C. is scheduled for September 2013.

Other Collaborative Planning Efforts

For over the last fifteen years the Valley RTPAs have explored the mutual benefits and economies of scale in working together on voluntary planning efforts. Oftentimes the funding for these projects is the result of a successful grant application that is submitted on behalf of all the Valley RTPAs. Developing the themes and consensus for the grant application requires a high level of coordinated effort between the Executive Directors and the governing boards.

Several impressive examples of this voluntary collaboration between the Valley RTPAs include the San Joaquin Valley Blueprint, the San Joaquin Valley Greenprint, the San Joaquin Valley Express Transit Study, and the San Joaquin Valley Tribal Transportation Environmental Justice Study. Each of the above named studies represents countless hours of conference calls, face to face meetings, working with Valleywide and local stakeholders, and often times retaining a subject matter consultant(s) between the Valley RTPAs to develop a specific product.

The San Joaquin Valley Blueprint is an outstanding example of this voluntary collaborative planning effort. A commitment to work together and submit a grant application in 2006, has since grown into a seven year cooperative valleywide and regional planning effort to identify smart growth strategies for the Valley communities. This planning effort involved all levels of government and the opportunity for local citizens in all eight counties to participate. From this unprecedented level of outreach, several other planning efforts have emerged and continue to gain momentum. As a counterpart to the San Joaquin Valley Blueprint, the San Joaquin Valley Greenprint continues to explore how to best preserve the vast productive acres of farmland and vital habitat in the region.

As part of the latter Blueprint effort, the Valley RTPAs worked with several other agencies to create the Blueprint Awards program. This award program began in 2010 and is used to recognize the outstanding achievements, the greater aesthetics or progressive details as demonstrated in a sustainable development project.

The Valley RTPAs in the recent years were successful in obtaining a grant for the purpose of assisting Valley jurisdictions with populations of 50,000 or less persons to implement smart growth principles into their local planning documents. Jurisdictions in the eight counties were divided into northern, central, and southern counties and well respected local consultant firms were retained in the three regions to provide technical services. This effort highlights a coordinated voluntary effort in which the Valley RTPAs came together on behalf of the smaller population member agencies.

Aside from regional planning, the RTPAs have explored Valleywide transit and strategies to improve regional planning with our Tribal Governments. The goal of the SJV Express Transit Study was to identify recommendations for inter-county commuter-express transportation services within the SJV region and non-Valley urbanized population centers. The Tribal Transportation Environmental Justice Collaborative Project invited 47 California Central Valley Tribes to participate with the Valley RTPAs and explore long-range planning issues and environmental justice priorities.

The Valley RTPAs work on specific studies often times when key information is unavailable. Recent examples include the San Joaquin Valley Demographic Forecast 2010 to 2050 Study and the Market Demand Analyses for Higher Density Housing in the San Joaquin Valley. These two technical data driven projects included a high level of subject experts from the private real estate and larger economics field. The Valley RTPAs made a coordinated effort to work with subject matter experts to ensure that the final end products were creditable with the high level of validity.

The Valley RTPAs continue to work very closely with the San Joaquin Valley Partnership. The San Joaquin Valley Partnership consists of members appointed by the Governor, California Cabinet Secretaries, and civic leaders that work with several work groups that explore economic development to water.

In conclusion, the Valley Regional Transportation Planning Agencies have a strong history of working together on other collaborative voluntary planning efforts and will continue to do so as resources allow.

Valley Success in Implementation

Passenger Rail

Passenger Rail in the Central Valley

Background

Passenger rail service has been an area of extensive activity for the Central Valley with two existing services currently operating and the first segment of the California High Speed Rail System scheduled to begin construction in 2014. The two existing passenger rail services include the AMTRAK San Joaquin route that runs the length of the Central Valley and the Altamont Corridor Express (ACE) that connects the northern Central Valley with the San Francisco Bay Area.

The AMTRAK San Joaquin route provides service from the San Francisco Bay Area and Sacramento through the Central Valley to Bakersfield. Over 1.1 million passengers traveled on the San Joaquin route in 2012. The San Joaquin runs multiple times daily between the San Francisco Bay Area (or Sacramento) and Bakersfield, where Amtrak Thruway buses connect to great Southern California destinations. Other stops along the way include Stockton, Modesto, Merced, Martinez and Fresno. Thruway bus connections to San Francisco are made at Emeryville.

AMTRAK San Joaquin Service San Joaquin San Joaquin San Joaquin ROUTE Kings Kern

Altamont Corridor Express (ACE)



The Altamont Corridor Express (ACE) provides commuter rail service from the City of Stockton in San Joaquin County to the City of San Jose in Santa Clara County. ACE runs four round trips daily with average weekday ridership over 4,000 passengers totaling a million passengers per year. ACE trains depart Stockton in the morning with return departures from San Jose in the afternoon. ACE service has ten stations through San Joaquin, Alameda, and Santa Clara County with bus connections to other transit including Bay Area Rapid Transit (BART) in Pleasanton.

The California High-Speed Rail System will be the first high-speed rail system in the nation. By 2029, the system will run from San Francisco to the Los Angeles basin in under three hours at speeds capable of over 200 miles per hour. The system will eventually extend to Sacramento and



San Diego, totaling 800 miles with up to 24 stations. In addition, the Authority is working with regional partners to implement a statewide rail modernization plan that will invest billions of dollars in local and regional rail lines to meet the state's 21st century transportation needs. The initial 60-mile segment of high-speed rail construction from Fresno to the Tulare-Kern County line near Bakersfield is scheduled to begin construction in 2014.

Coordination

Central Valley Rail Policy Working Group

Coordination of passenger rail service in the Central Valley has involved a significant number of stakeholders from the local, state, and federal agencies to the private railroads and public. The Central Valley Rail Policy Working Group consists of 20 agencies and has been involved in coordinated planning for passenger rail service between Merced and Sacramento since 2006. Recent activities of the Central Valley Rail Policy Working Group have included support of the High Speed Rail Authority (HSRA) in the implementation of high-speed rail through the Central Valley. These activities have involved:

- Partnering with the HSRA throughout the project development process
- Providing guidance on local issues, development plans, and policies
- Assisting in developing and evaluating alternatives
- Participation in public involvement activities and events
- Serving as liaisons to local communities



San Joaquin JPA

With the passage of Assembly Bill (AB) 1779 in August 2012, regional government agencies were enabled to form the San Joaquin Joint Powers Authority (SJJPA) to take over the administration and management of the existing San Joaquin Rail Service from the state. The SJJPA was established in

March 2013 and is comprised of ten member agencies including the San Joaquin Regional Rail Commission, Sacramento Regional Transit, Stanislaus Council of Governments, Merced County Association of Governments, Contra Costa Transportation Authority, Tulare County Association of Governments, Madera County Transportation Commission, Alameda County, Fresno Council of Governments, and Kings County Association of Governments. Under the provisions of AB 1779, the state will continue to provide the funding necessary for service operations, administration and marketing. Furthermore, Caltrans Division of Rail will remain responsible for the development of the Statewide Rail Plan and the coordination and integration between the three state-supported intercity passenger rail services.

Looking Forward

In 2013 the San Joaquin Regional Rail Commission (SJRRC) initiated ACEforward, a planning effort to support both the enhancement of exiting ACE service between Stockton and San Jose as well as extend ACE service to Manteca, Modesto, Turlock and Merced. The ACEforward effort has involved extensive coordination through the Central Valley Rail Policy Working Group with the hope to realize portions of the ACE service extension to Merced by as early as 2020. The Central Valley transportation partners will also continue to work with the California HSRA to support the implementation of high-speed rail within the Central Valley as the initial operating phases are complete and services are initiated.

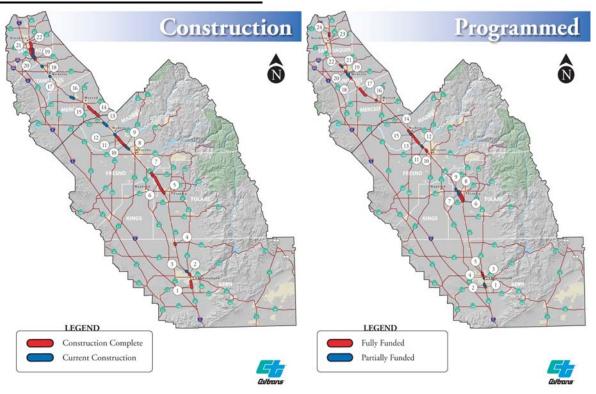
ACEforward Proposed Service



Proposition 1B and State Route 99 Bond Program

The \$1 billion for State Route 99 included in Proposition 1B made 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 at least 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. As the Proposition 1B program nears its sunset date, the recent update of the SR 99 business plan paints a clear picture of the continuing needs for upgrading and improving the roadway and interchanges.

State Route 99 Business Plan





Major Capacity Increasing Improvements

(Capital Costs Greater than \$8 million)

In 2013, Caltrans and the 8 Valley MPOs completed the second update to the 99 Business Plan. Here are the highlights:

- \$1Billion funded by Proposition 1B
- Construction/Complete 20 Projects -\$1.3 Billion funded
- Programed/Partially Funded 24 Projects -\$1.4 Billion funded
- Candidates Remaining 19 Major Projects -\$3.5 Billion unfunded
- New Emphasis on operational improvements including: carpool facilities / ramp metering, reduced truck congestion , 511 Travel Info System, CalVans public vanpool service, privately subsidized express bus service saving 1.4M VMT/yr, new park & ride lots.