

VALLEYWIDE CHAPTER

INTRODUCTION

This chapter will discuss the various aspects that bring the San Joaquin Valley together as one cohesive region that is working together for common goals. The Valleywide Chapter is broken up into five sections. The five sections of this chapter summarized below.

Section 1. One Valley: The San Joaquin Valley Profile

This section describes the San Joaquin Valley's (SJV) regional characteristics to include geography, population, demographics, economy, and also discusses some information on why and how it's considered an economically distressed area.

Section 2. Valley Success in Partnering and Planning

This section provides insight into how the regional transportation planning agencies (RTPA) are coordinating together to improve air quality, develop sustainable communities' strategies, and through valleywide coordination, implement RTP/SCS initiatives and projects.

Section 3. Goods Movement

This section explains our current environment regarding new emerging technologies and systems. It also describes current goods movement studies and good movement projects that are taking place in the San Joaquin Valley, and finally touches on the future of goods movement in the SJV.

Section 4. Valley Wide Planning Efforts

This section discusses the coordinated efforts between the RTPAs in the SJV. It provides information on the San Joaquin Valley Regional Policy Council, Valley Voice efforts and other collaborative planning efforts.

Section 5. Valley Success in Implementation

This section focuses on two major success stories in the SJV, which have been the investment in passenger rail and the successful implementation of the State Route 99 Business Plan.

Just how this chapter discussed the ongoing collaboration amongst the San Joaquin Valley Regional Transportation Planning Agencies, The Valleywide Chapter was also developed in coordination with staff from each of the of the RTPA's. Staff from the San Joaquin Council of Governments, Stanislaus Council of Governments, Merced County Association of Governments, Madera County Transportation Commission, Fresno Council of Governments, Tulare County Association of Government, Kings County Associate of Governments, and the Kern Council of Governments, all contributed to this document.

1. ONE VALLEY: THE SAN JOAQUIN VALLEY PROFILE

GEOGRAPHY

The San Joaquin Valley (SJV) is the southern portion of the Great Central Valley of California [Figure 6-1]. 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.

Figure 6 - 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, while the remainder of Kern County and the other counties are in the San Joaquin Valley 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 SJV 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 SJV 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 SJV is largely rural in nature, it does contain several large cities and suburbs with a total population of a little over 4 million people (more than the population of 24 states). The eight San Joaquin Valley counties are a part of eight Metropolitan Statistical Areas (MSAs): Stockton (San Joaquin County), Modesto (Stanislaus County), Merced, Fresno-Madera, Hanford-Corcoran (Kings County), Visalia (Tulare County) and Bakersfield (Kern County). Most 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) [Figure 6-2]. Population growth has been sustained and significant [Figure 6-3]. In 1970, the eight San Joaquin Valley counties had a population of just over 1.6 million. By 2020, the population had increased 166% to over 4.3 million [Figure 6-4] people. The SJV continues to be one of the fastest growing regions in the state. The SJV accounted for 8.2% of California's total population in 1970 and has grown to account for 11% of California's total population today. By 2060, the Valley is projected to capture 12.8% of the state's population [Figure 6-4].

Figure 6 - 3: San Joaquin Valley Total Population Projections, California Department of Finance

Year	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
Geography											
Fresno County	933,249	979,625	1,026,358	1,053,955	1,096,638	1,135,837	1,170,525	1,200,150	1,226,158	1,249,858	1,272,559
Kern County	842,069	881,129	912,975	961,629	1,019,221	1,075,952	1,127,781	1,174,771	1,217,086	1,256,599	1,295,502
Kings County	152,398	149,455	154,745	159,733	165,752	171,517	176,940	181,726	185,868	189,652	192,955
Madera County	150,182	154,166	158,794	168,293	178,070	187,842	197,025	205,517	213,456	220,790	228,393
Merced County	256,785	268,843	284,761	298,184	314,690	330,805	346,085	359,888	372,461	384,691	396,956
San Joaquin County	688,464	727,038	776,068	810,495	853,661	891,642	923,341	948,975	968,662	984,240	996,241
Stanislaus County	516,583	536,530	555,955	581,308	606,128	627,883	645,069	658,448	668,224	675,118	680,311
Tulare County	442,517	463,671	480,788	496,657	516,810	535,463	551,563	565,075	575,525	584,163	591,539
San Joaquin Valley Total	3,982,247	4,160,457	4,350,444	4,530,254	4,750,970	4,956,941	5,138,329	5,294,550	5,427,440	5,545,111	5,654,456
California	37,366,938	39,007,121	39,782,419	40,808,001	41,860,549	42,718,403	43,353,414	43,785,947	44,049,015	44,176,739	44,228,057
San Joaquin Valley Population Percentage of California	10.7%	10.7%	10.9%	11.1%	11.3%	11.6%	11.9%	12.1%	12.3%	12.6%	12.8%

Sources: California Department of Finance. Demographic Research Unit.

Report P-2A: Total Population Projections, California Counties, 2010-2060 (Baseline 2019 Population Projections; Vintage 2020 Release). Sacramento: California. July 2021.

Figure 6 - 4: San Joaquin Valley Projected Population Growth as a Statewide Percentage

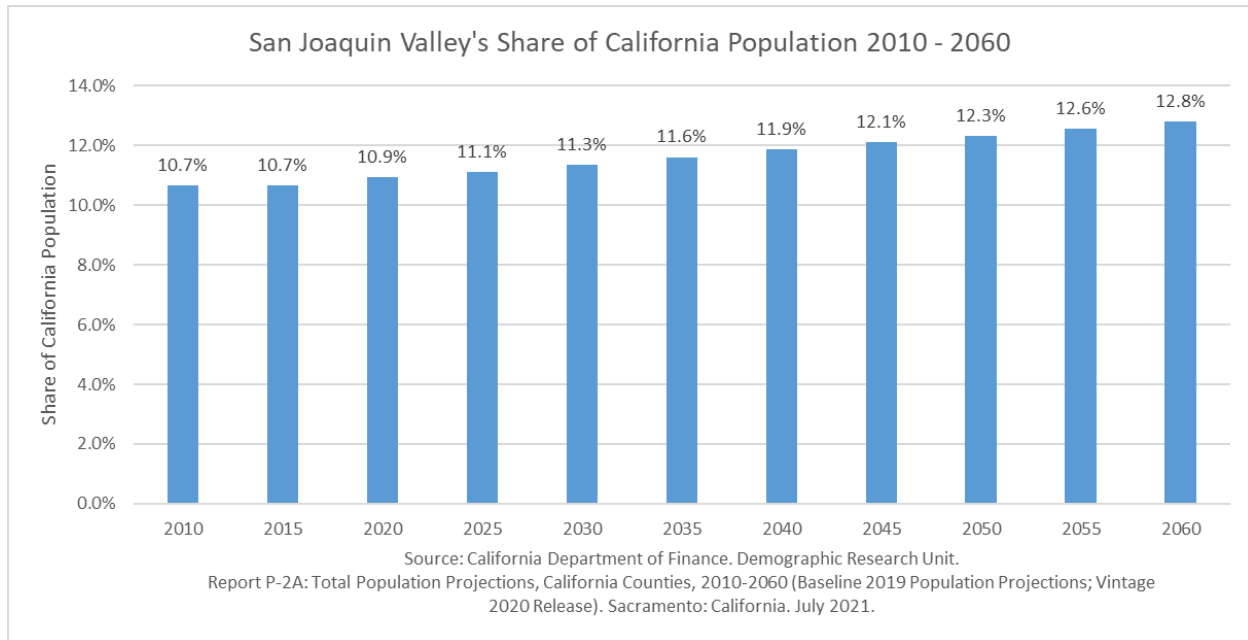
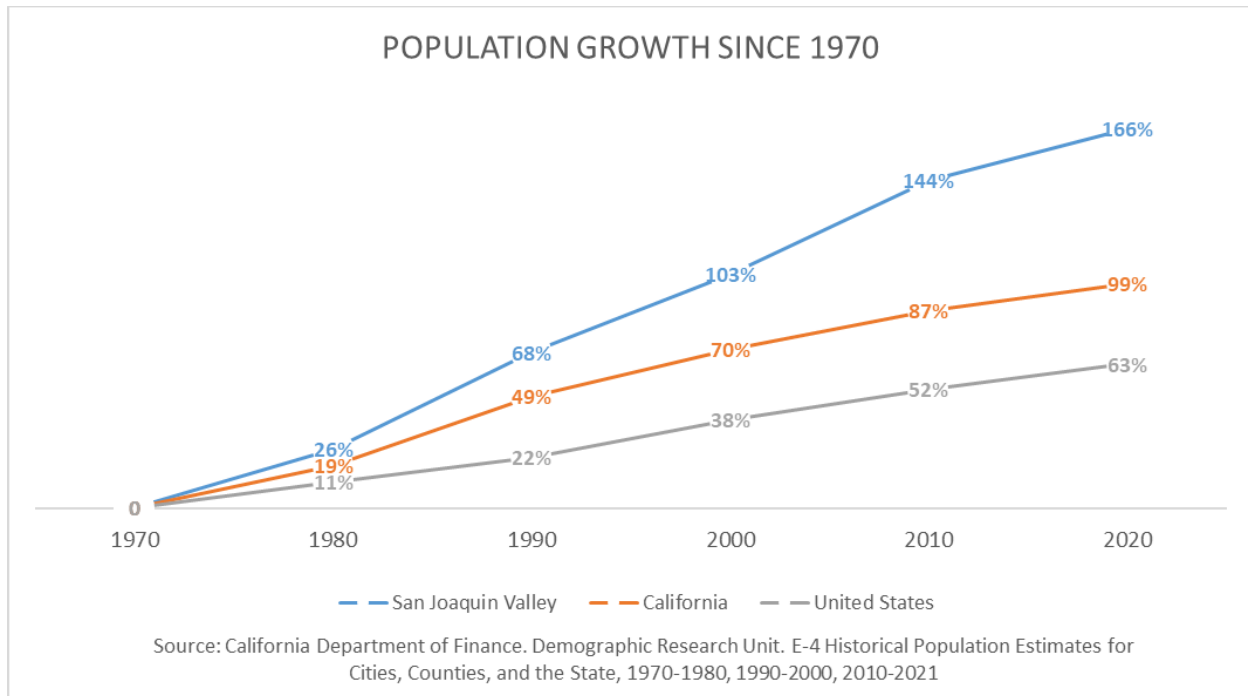


Figure 6 - 5: San Joaquin Valley Population Growth Relative to State and Federal Population Growth



Future population growth is also expected to be sustained and significant. Both ends of the SJV 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. Population in the eight SJV counties is projected to reach just over 5.6 million by 2060, using growth projections from the California State Department of Finance (DOF) [Figure 6-3]. Figure 6-5 demonstrates Valleywide population growth relative to California and the U.S. as a whole.

ECONOMY

The San Joaquin Valley is famous for agricultural production. All eight counties rank within the top 10 of California's 58 counties [Figure 6-6]. In addition, if the SJV were a state, it would be the top agricultural producing state in the country. The SJV produced \$36.5 billion in agricultural products in 2019. This amount is more than double the remainder of California and more than the next highest producing state, Iowa. [Figure 6-8].

Figure 6 - 6: Agriculture Production Value and Ranks of San Joaquin Valley Counties, 2019

Agriculture Production Value and Ranks of San Joaquin Valley Counties, 2019		
County	Rank in California	Gross Value of Agriculture Production(\$1,000)
Fresno	1	7,714,540
Kern	2	7,692,667
Tulare	3	7,508,852
Stanislaus	5	3,526,856
Merced	6	3,270,959
San Joaquin	7	2,638,145
Kings	8	2,187,693
Madera	10	1,998,826
San Joaquin Valley Total		36,538,538
California Total		61,711,823

Source: California Agricultural Statistics Review 2019-2020, California Department of Food & Agriculture

Figure 6 - 7: California Gross Value of Agriculture Production

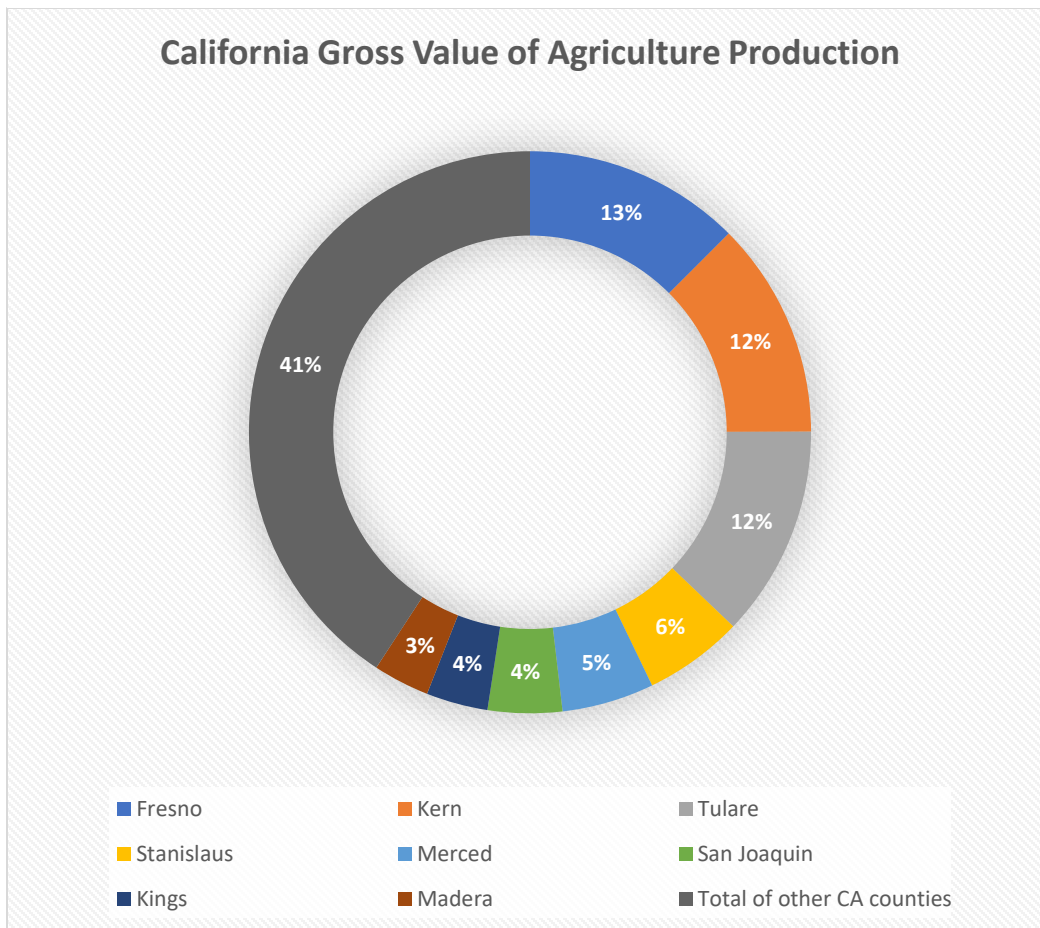
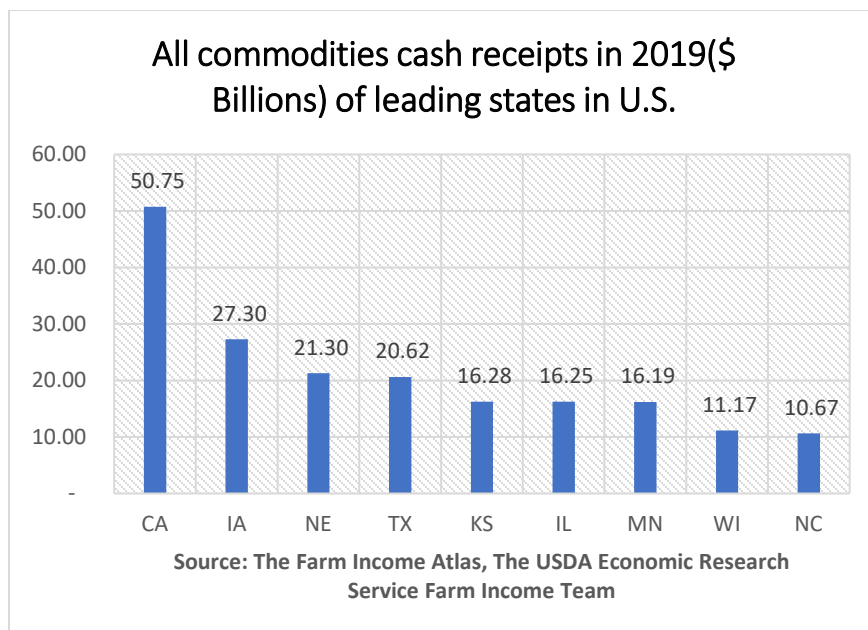


Figure 6 - 8: All Commodities Cash Receipts in 2019 of Leading States in the U.S.



Agriculture accounts for 12% of the Valley's jobs [Figure 6-9.1]. In comparison, only 2% of the state and nation's jobs are in agriculture [Figure 6-9.2]. Other major employment sectors in the Valley are education, health and social services (21.9%) and retail trade (10.9%).

Figure 6 - 9.1: San Joaquin Valley Employment by Industry

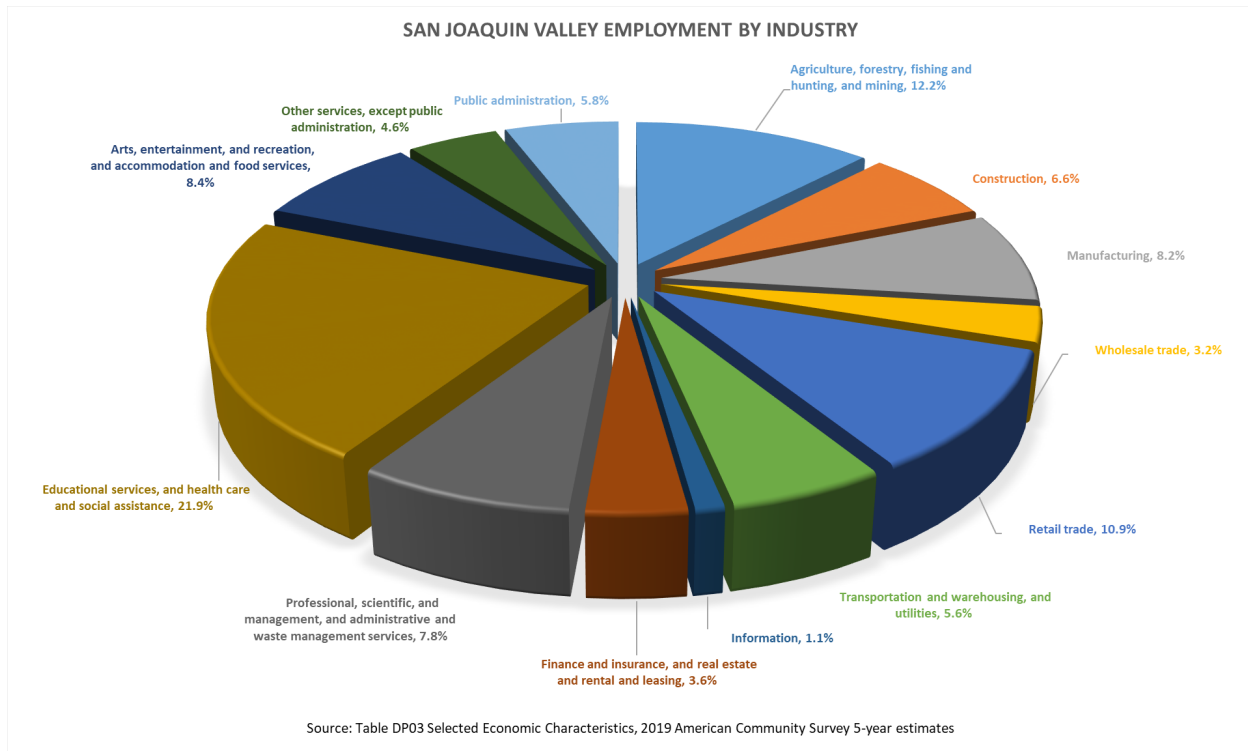


Figure 6 –9.2: Employment by Industry, Comparing San Joaquin Valley with CA and the U.S.

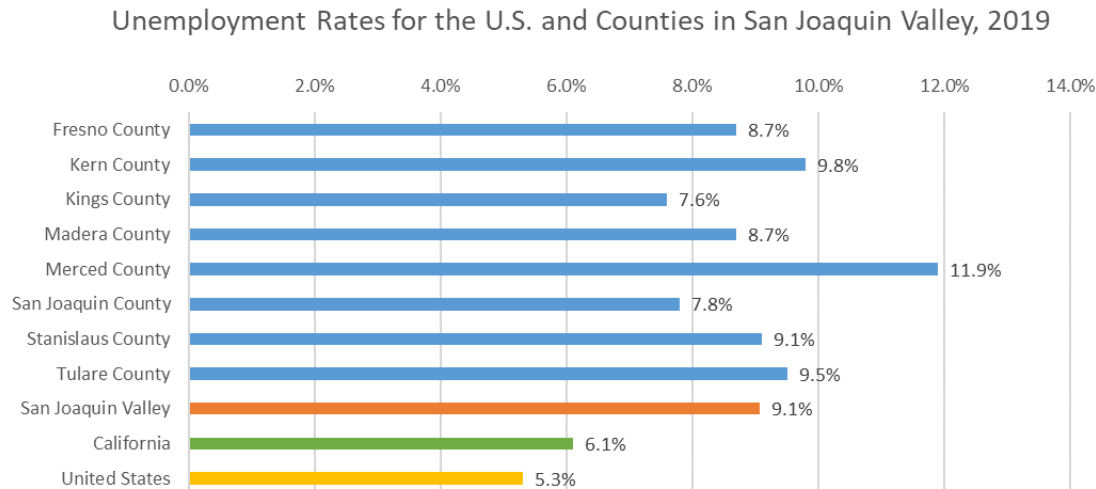
Empolymnt by Industry, comapring San Joaquin Valley with California and United States, 2019						
Industry	Region		San Joaquin Valley		California	
			Employment	Percent	Employment	Percent
Agriculture, forestry, fishing and hunting, and mining			180,439	12.2%	415,545	2.2%
Construction			98,218	6.6%	1,175,234	6.3%
Manufacturing			120,883	8.2%	1,692,820	9.1%
Wholesale trade			46,990	3.2%	525,711	2.8%
Retail trade			161,763	10.9%	1,950,499	10.5%
Transportation and warehousing, and utilities			83,506	5.6%	993,917	5.3%
Information			15,703	1.1%	539,809	2.9%
Finance and insurance, and real estate and rental and leasing			53,673	3.6%	1,116,974	6.0%
Professional, scientific, and management, and administrative and waste management services			115,429	7.8%	2,546,055	13.7%
Educational services, and health care and social assistance			324,706	21.9%	3,904,118	21.0%
Arts, entertainment, and recreation, and accommodation and food services			125,005	8.4%	1,936,179	10.4%
Other services, except public administration			68,119	4.6%	969,511	5.2%
Public administration			86,026	5.8%	824,869	4.4%
Civilian employed population 16 years and over			1,480,460	100%	18,591,241	100%

Source: Table DP03 Selected Economic Characteristics, 2019 American Community Survey 5-year estimates

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. As shown in Figure 6-10, in 2019 the Valley's unemployment rate was 9.1%, in contrast to 6.1% and 5.3% for the state and the nation, respectively.

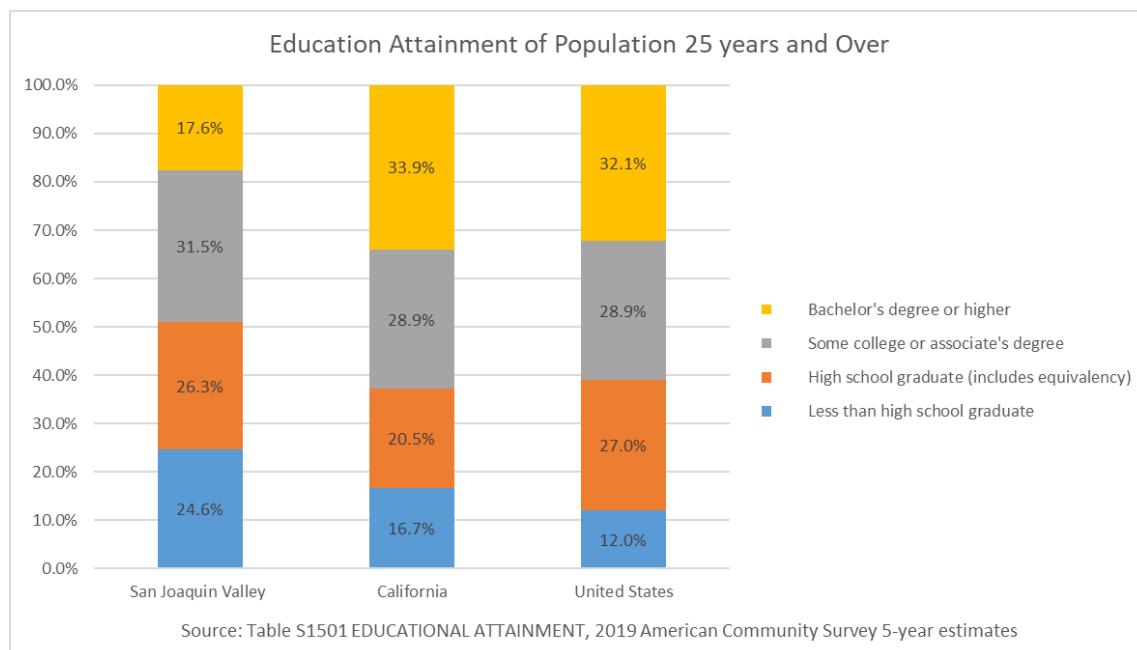
Figure 6 - 10: Unemployment Rate, Comparing San Joaquin Valley with CA and the U.S.



Source: Table DP03 Selected Economic Characteristics, 2019 American Community Survey 5-year estimates

Educational levels for SJV residents lag behind those of California and the United States. Only 17.6% of persons 25 years of age and older have a bachelor's degree or higher, compared to 33.9% and 32.1% for the state and nation, respectively [Figure 6-11]. The rate of those in the Valley who have an associate degree, or some college credits is slightly higher than the state or nation, however.

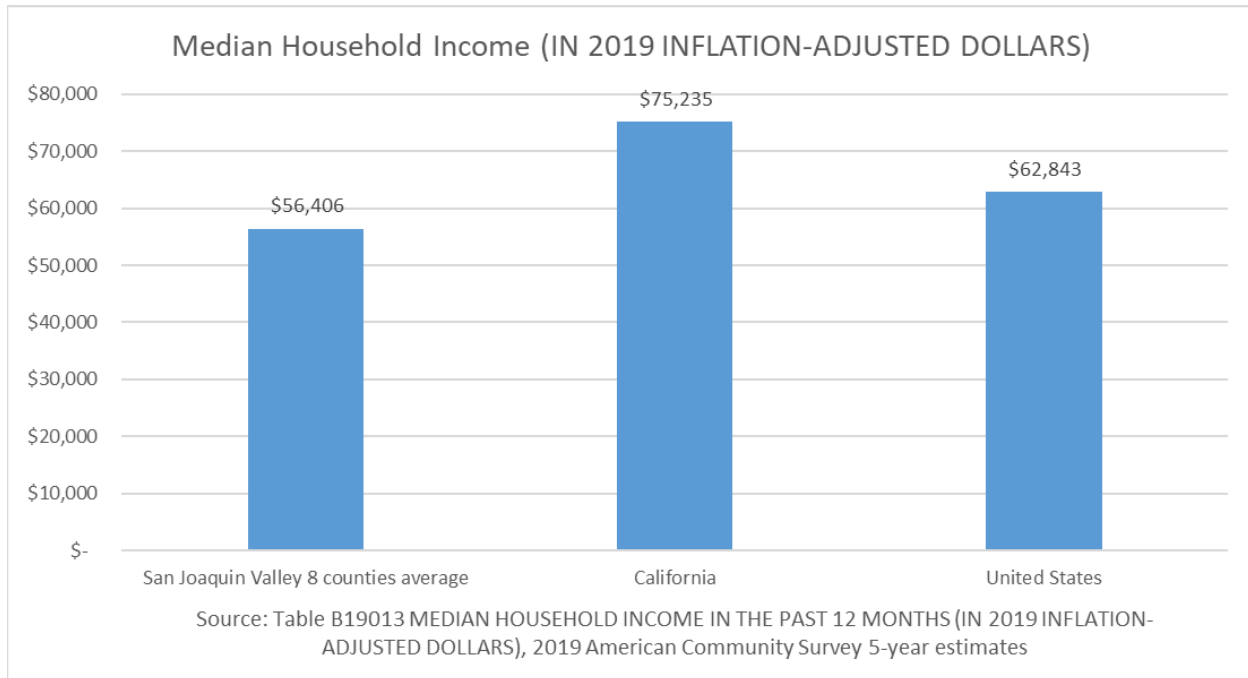
Figure 6 - 11: Education Attainment San Joaquin Valley Population 25 Years of Age and Older



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 Figure 6-12 below, the Valley's median household income of \$56,406 is far below the state and nation's averages of \$75,235 and \$62,843.

Figure 6 - 10: Education Attainment San Joaquin Valley Population 25 Years of Age and Older

Figure 6 - 11: Median Household Income

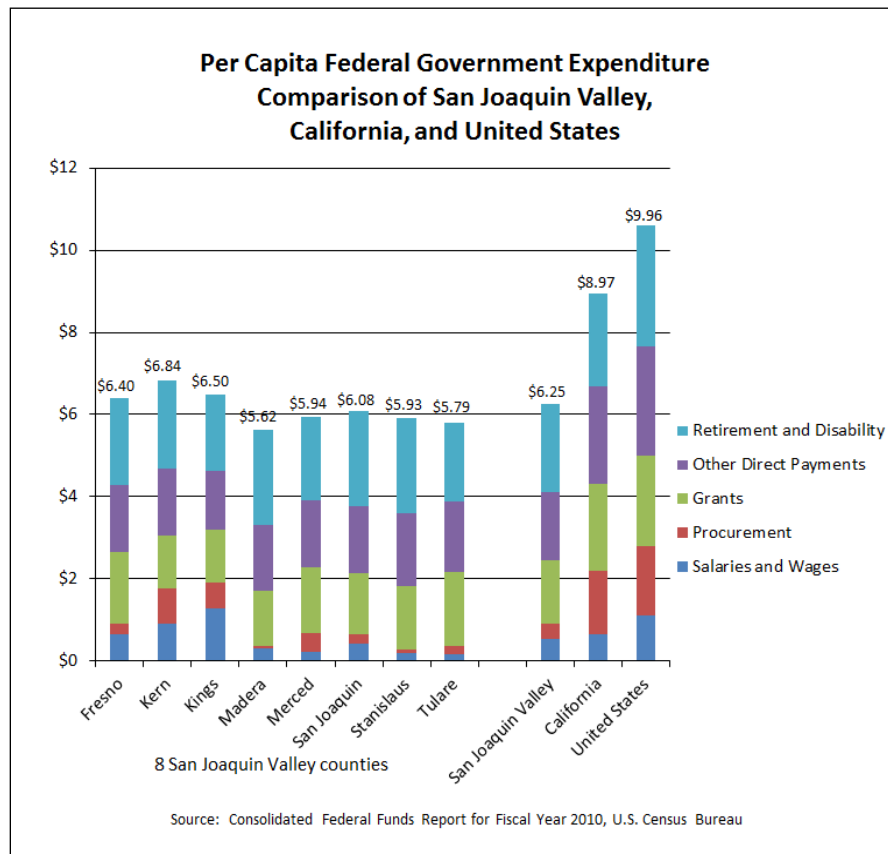


The economic plight of the San Joaquin Valley is starting to be recognized at a national level. The Congressional Research Service (CRS) completed a study in 2005 (California's San Joaquin Valley: A Region in Transition) comparing the economic conditions of the San Joaquin Valley to the Central Appalachian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

Figure 6-13 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. With the termination of the Federal Financial Statistics Program, the per capita federal government expenditure data after 2010 has been discontinued.

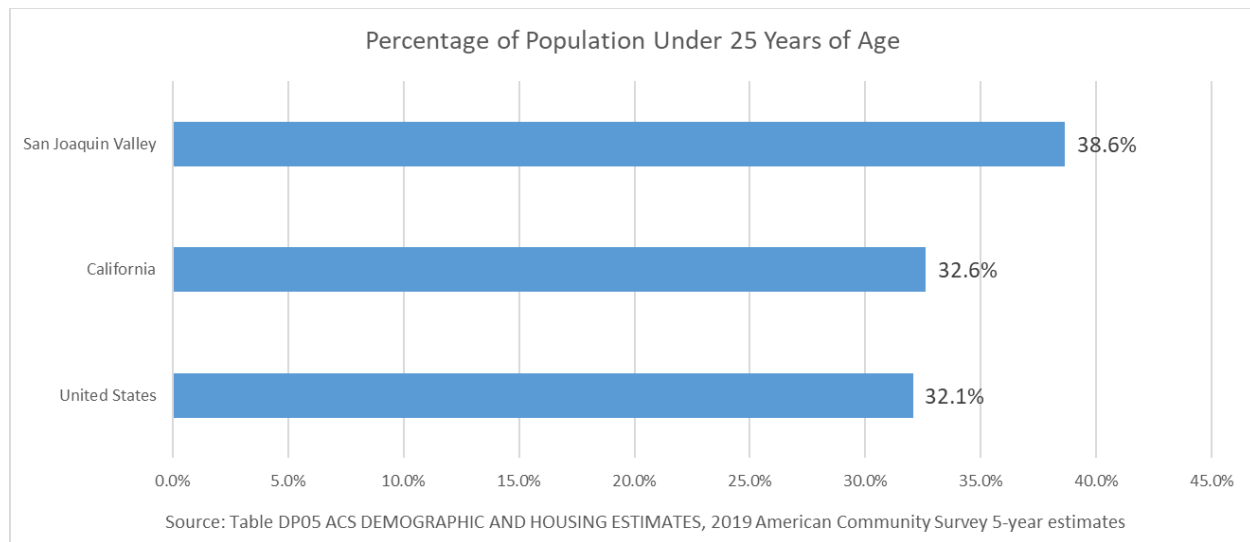
Figure 6 - 12: Federal Spending Comparison Chart



DEMOGRAPHICS

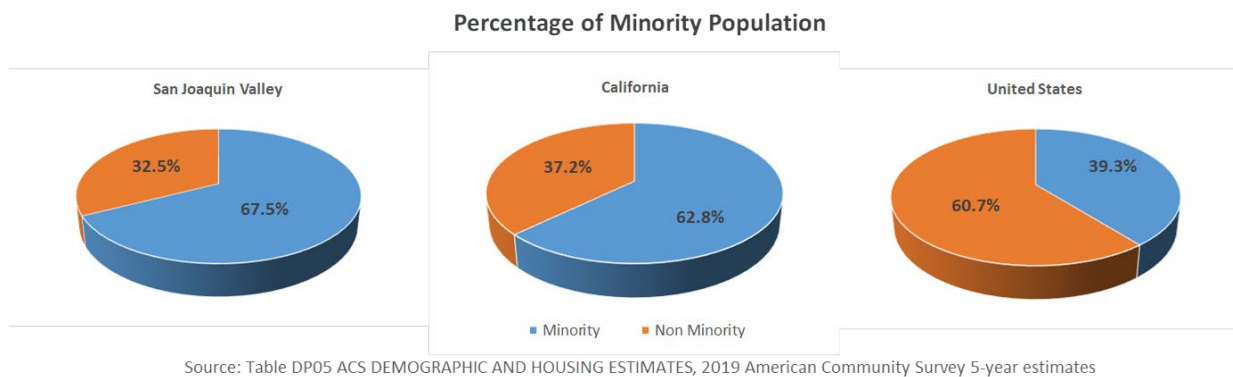
The Valley has a younger population than California as a whole and the United States. In 2019, 38.6% of Valley residents were under the age of 25 compared to 32.6% for California and 32.1% for the United States [Figure 6-14.1].

Figure 6 – 14.1: Percentage of Population Under 25 Years of Age



The residents of the Valley are more ethnically diverse than those of California and the United States. According to the 2019 American Community Survey, 67.5% of the Valley's inhabitants are minority (non-white), compared to 62.8% and 39.3% for the state and nation [Figure 6-14.2].

Figure 6-14.2: Percentage of Minority Population



2. VALLEY SUCCESS' IN PARTNERING AND PLANNING

The Valley's success' in partnering and planning has resulted in large improves for the SJV's residents. This section provides detailed insight to valleywide coordinated approaches. It is broken down into the three subsections listed below.

- Air Quality
- Sustainable Community Strategies
- Valley-Wide RTP/SCS Coordination Efforts

AIR QUALITY

Background

The San Joaquin Valley 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, there is a coordinated approach for compliance with the federal Clean Air Act. That coordinated approach is essential in meeting the San Joaquin 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 San Joaquin Valley Regional Planning Agencies (RPAs) have the potential to affect the entire the SJV. This coordination 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 of the transportation conformity process 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 (SIPs). Since coordination efforts have begun, the San Joaquin Valley RPAs have been successful in complying with conformity requirements for the 2004 TIP/RTP, 2006 TIP, 2007 TIP/RTP, 2011 TIP/RTP, and 2014 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 the San Joaquin Valley 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.

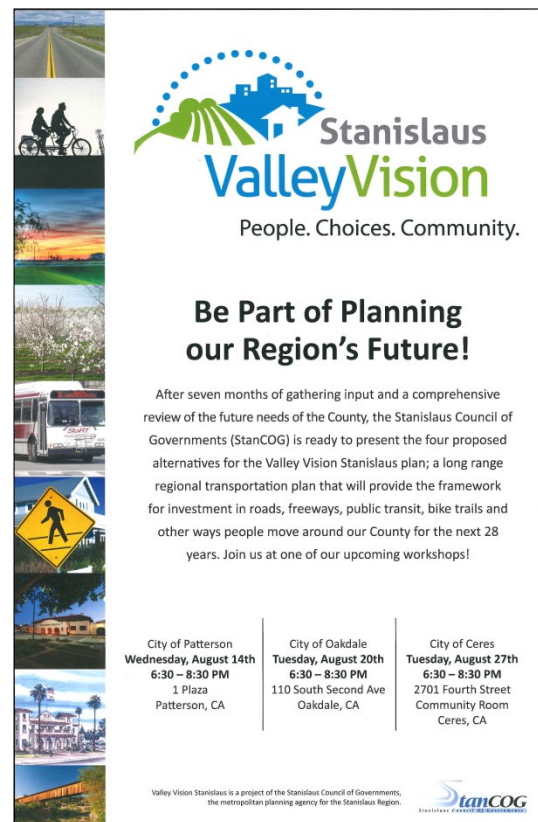
SUSTAINABLE COMMUNITIES STRATEGIES

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. In 2010, the ARB established these targets in the San Joaquin Valley as GHG reductions of 5% by 2020 and 10% by 2035. The ARB is currently in the process of setting the second round of targets for the regions. Under Senate Bill 375, each Metropolitan Planning Organization (MPO) in the State is required to develop a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP) to demonstrate that, if implemented, the SCS will attain or exceed the greenhouse emission reduction targets. If the targets cannot be met, then an Alternative Planning Strategy (APS) needs to be developed. 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 is scheduled to approve their SCS as an element of their Regional Transportation (RTP/SCS) in 2018. Referred to as the RTP/SCS, each Valley COG has developed an investment strategy that outlines their region's transportation future through 2042. 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
- Providing a range of housing choices

Figure 6 - 15: Valley Vision



The poster features a vertical strip of images on the left: a road, a person on a bicycle, a sunset, a field, a bus, a pedestrian crossing sign, a house, a city street, and a bridge. The main text area on the right includes the Stanislaus Valley Vision logo with the tagline 'People. Choices. Community.' Below this is the heading 'Be Part of Planning our Region's Future!' followed by a paragraph about the Stanislaus Council of Governments (StanCOG) presenting four proposed alternatives for the Valley Vision Stanislaus plan. At the bottom, three workshop locations are listed: City of Patterson (Wednesday, August 14th, 6:30 - 8:30 PM), City of Oakdale (Tuesday, August 20th, 6:30 - 8:30 PM), and City of Ceres (Tuesday, August 27th, 6:30 - 8:30 PM). The Stanislaus Council of Governments logo is at the bottom right.

Stanislaus Valley Vision
People. Choices. Community.

Be Part of Planning our Region's Future!

After seven months of gathering input and a comprehensive review of the future needs of the County, the Stanislaus Council of Governments (StanCOG) is ready to present the four proposed alternatives for the Valley Vision Stanislaus plan; a long range regional transportation plan that will provide the framework for investment in roads, freeways, public transit, bike trails and other ways people move around our County for the next 28 years. Join us at one of our upcoming workshops!

City of Patterson Wednesday, August 14th 6:30 – 8:30 PM 1 Plaza Patterson, CA	City of Oakdale Tuesday, August 20th 6:30 – 8:30 PM 110 South Second Ave Oakdale, CA	City of Ceres Tuesday, August 27th 6:30 – 8:30 PM 2701 Fourth Street Community Room Ceres, CA
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Valley Vision Stanislaus is a project of the Stanislaus Council of Governments, the metropolitan planning agency for the Stanislaus Region.

StanCOG
Stanislaus Council of Governments

VALLEY WIDE COORDINATION ON RTP/SCS EFFORTS

Valley Visions

While SB 375 mandated individual development of the RTP/SCS, the eight MPOs in the San Joaquin Valley have had a history of collaboration 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" in the 2014 RTP/SCS process.

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.

3. GOODS MOVEMENT

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 eight-county San Joaquin Valley (SJV) region is experiencing the demands of the modern global logistics system across a range of goods, from raw agricultural materials to consumer products. The critical role that the SJV plays in California and the nation's food supply will continue to require an effective goods movement system to distribute and export products quickly and efficiently. The growing regional population, and that population's growing expectations, will require increased attention to the safe and reliable movement of goods consistent with competing needs for infrastructure and greater sensitivity to emissions and congestion. Continued pressure on costs and profits is leading shippers and receivers to seek transportation efficiency gains wherever they can be found. Within the SJV, that goal translates to continual fine-tuning of logistics chains and transportation practices, and to a willingness to shift production and distribution facilities and activities to achieve the optimum combination. Due to its central location, relatively inexpensive land, labor force, and multimodal transportation system, the SJV has also become 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. The San Joaquin Valley is also a better location—more central to West U.S. markets—for the return of overseas manufacturing, not to mention relatively better water availability for processing than in Southern California.

Many of the agricultural products that the San Joaquin Valley produces are exported through California's rail, marine and airport systems as well as 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

Figure 6 - 16: General Electric LNG Locomotive



Figure 6 – 17: Electric Hybrid Semi-Truck Technology



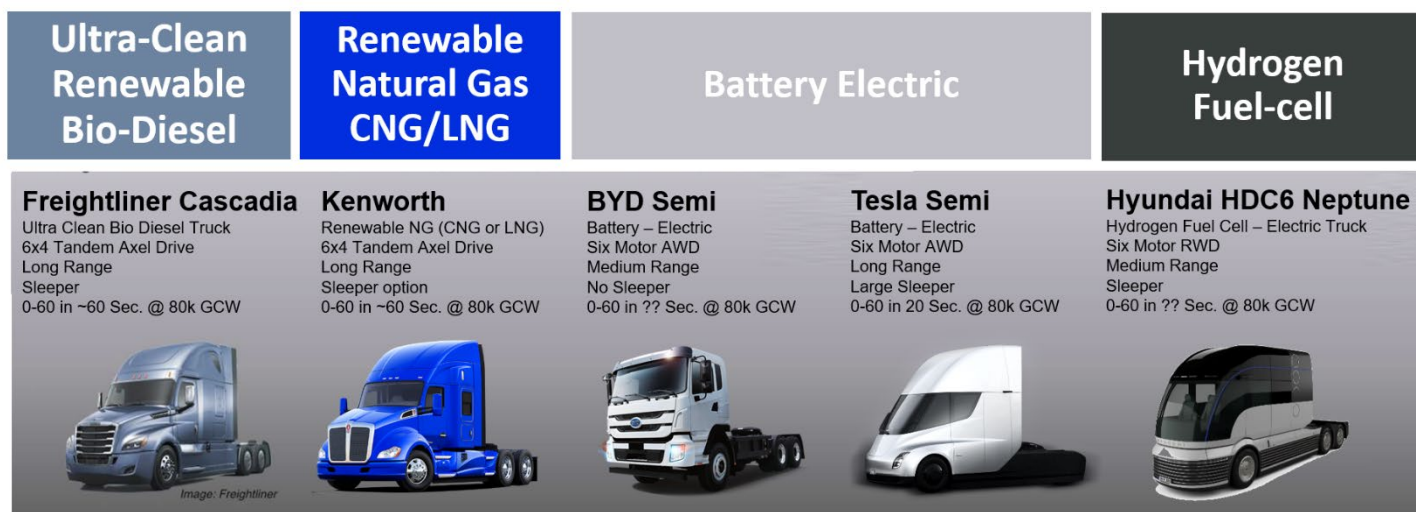
Figure 6 – 18: Federal Alt. Fuel Corridors



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 SJV is also served by the Port of Stockton, the inland terminus for Marine 580.

The San Joaquin 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, alternative fuel technology [Figures 6-16 thru 19] 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 and Congested Corridor Programs funded through Senate Bill 1.

Figure 6 - 19: Emerging Clearer Medium/Long-Haul Semi-Truck Fleet Technology



Graphic adapted from: <https://seekingalpha.com/article/4127262-tesla-semi-revisited>

EMERGING TECHNOLOGIES/SYSTEMS

In addition to new clean trucking technologies, *Figure 6-20* illustrates battery-powered, autonomous-rail vehicle technology. This emerging technology promises to be an energy-efficient, zero-emission solution developed by a Southern California start-up, Parallel Systems, initially intended to serve short-haul rail routes less than 500 miles. The firm has a pilot project in Georgia with the parent company to the San Joaquin Valley Railroad (SJVR), hauling containers on existing rail and SJVR is interested in expanding the pilot to the Valley. The technology uses safe, wireless charging buried beneath the tracks between the railroad ties, and the vehicles can stop in 1/10th the distance of a normal train.

The San Joaquin Valley will continue to coordinate with Caltrans, CARB, and SJVAPCD to explore the possibility of developing a zero-emissions freight corridor along SR 99/I-5 or the parallel railroad corridors that connects SJV distribution and shipping with the Ports of L.A./Long Beach, Oakland and all points East. *Figure 6-21* illustrates potential rail corridors connecting a conceptual network of inland rail ports in the Valley to the seaports. Note that the emission savings are based on the older diesel truck standards and may not be as beneficial for combating Ozone and Particulate matter according to a draft CARB study.¹ However, rail remains 10 times more energy efficient and less carbon emitting than trucking, while providing a significant benefit to roadway maintenance and safety. It is also important to note that the California High Speed Rail when implemented would free up capacity on the BNSF mainline for freight currently being used by Amtrak.

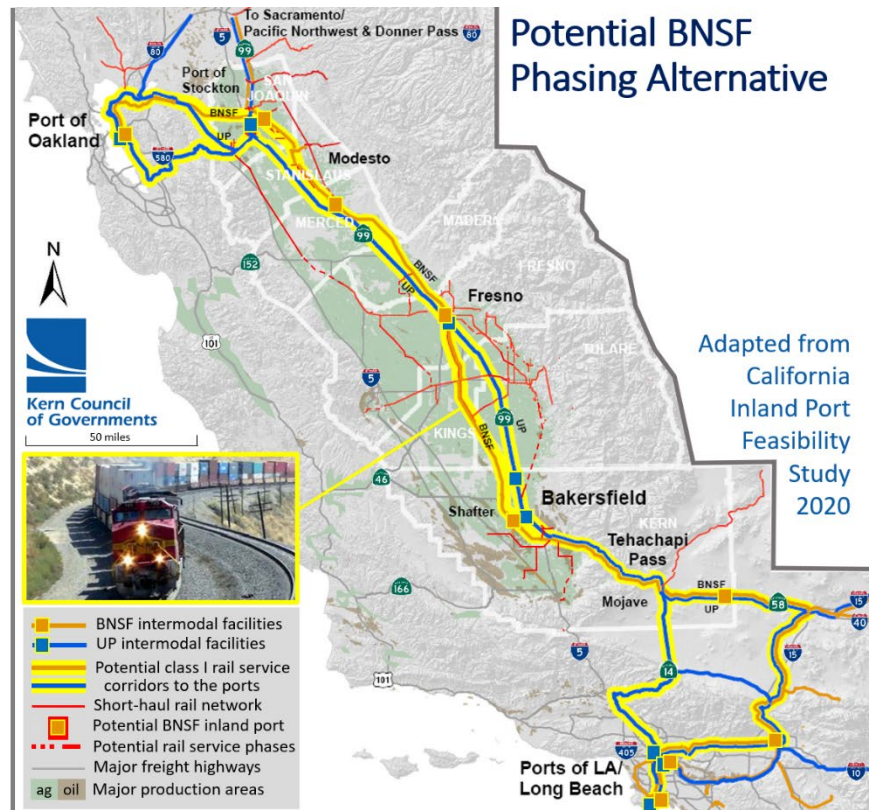
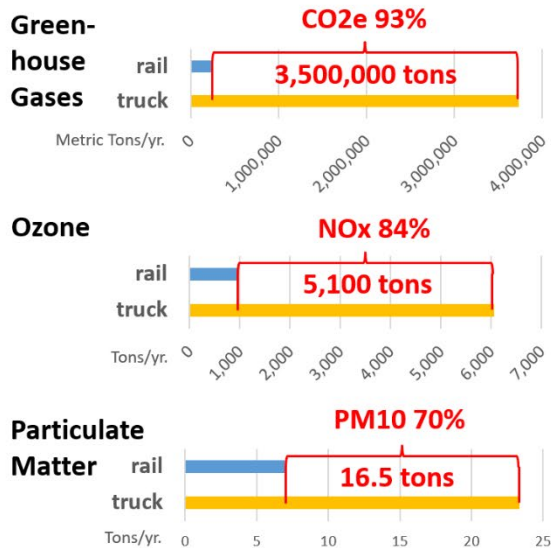
¹ CARB, Draft Truck vs. Train Emission Analysis, 2020, <https://ww2.arb.ca.gov/resources/fact-sheets/draft-truck-vs-train-emissions-analysis>

Figure 6 - 20: Parallel Systems Electric Intermodal Rail Technology



Figure 6 - 21: Potential Benefits of a California Inland Port Network for Rail Freight Shipments

Potential Rail Freight Service Annual Emission Reductions



BACKGROUND/ GOODS MOVEMENT STUDIES

Since 2007 the SJV region has coordinated on development of Goods movement plans, and identified freight flows for the region, including development of the San Joaquin Valley Truck Model tool and scenario testing. Since that time a number of goods movement studies have been completed that build on the previous work efforts and further refined the criteria and decision-making process while identifying vital goods movement networks for the multi-county region.

Previous and ongoing goods movement studies for the Valley:

- California Inland Port Study – Phase 2 (2023)
- Kern Area Regional Goods Movement Operations (KARGO) Sustainability Study – Phase 2 (2022)
- I-5 Freight Zero Emissions Route Operations (ZERO) Sustainability Study (2022)
- KARGO Sustainability Study – Phase 1 (2021)
- California Inland Port Feasibility Analysis – Phase 1 (2020)
- San Joaquin Valley I-5/SR99 Goods Movement Corridor Study (2017)
- San Joaquin Valley Goods Movement Sustainable Implementation Plan (2017)
- San Joaquin Valley Interregional Goods Movement Plan (2013)
- Updated State Route 99 Business Plan (2013)
- SR 223, 166, 119, 46 and 65 Truck Origin and Destination Studies (2011)
- East Side Business Plan (Short Haul Rail), Tulare County (2010)
- SR 58 Origin and Destination Truck Study (2009)
- Interstate 5 and State Route 99 Origin and Destination Study (2009)
- Draft San Joaquin Valley Regional Goods Movement Action Plan (2008)
- San Joaquin Valley Regional Goods Movement Action Plan (2007)
- California Interregional Intermodal System (CIRIS) Implementation Plan (2006)

Some of the recent goods movement studies are summarized below.

California Inland Port Feasibility Analysis (2020)

In a study led by the San Joaquin Valley Air Pollution Control District, a logistics consultant looked at the market for rail service between a system of inland ports and the ports in L.A./Long Beach and Oakland. The service envisioned a container unit train(s) that would travel the 500-mile route between the two seaports, make one or more stops in the San Joaquin Valley [Figure 6-21]. The study showed enough freight to support 2 to 10 trains per week with 250 containers per train, with the highest number of trains traveling between the North Valley and the L.A./Long Beach Ports. The study also showed a potential market for transporting containers between the South Valley to the Port of Oakland, creating the potential for hauling containers both directions in a service that travels between both seaports.

Key Findings of the Market and Operating Cost Analysis:

- The current shipper market is quite robust, larger than most in the industry realized
- There are relatively balanced volumes for inbound and outbound cargos
- The northern portion of the Market Shed is very large
- The Preliminary Business Model suggests that a California inland port rail system can be feasible; but it is important to note that this is dependent on a range of critical factors and assumptions
- A significant number of issues need to be addressed for the project to advance and this needs to be reviewed in the context of a Developed Business Model
- The project requires close collaboration with the railroad companies and close coordination with the State of California
- The Inland Port would produce significant public policy benefits: 1) increased economic competitiveness, especially in the Central Valley region, 2) significantly reduced greenhouse gas air emissions, and 3) reductions in congestion and wear and tear of roadways
- The Inland Port will require public policy leadership from State government, air quality districts, counties and cities and seaports
- In the end, the Inland Port project would have a range of rather substantial economic and environmental impacts for markets and populations throughout the State.

By taking a certain portion of trucks off the road from this region, significant emissions reductions can be realized. Based upon the analysis done for this study, NOx emissions would be reduced by up to 83% while greenhouse gas emissions would be reduced by up to 93%. Moving large quantities of freight via rail provides significant benefits to the air quality of the region, as shown by the emissions reduction analysis section of this report. Additionally, by taking some of these trucks off the road, congestion on key transportation corridors such as I-5, 99 and 101 would be reduced, thereby improving the flow of traffic and the safety of the roadways in these regions [Figure 6-21].

San Joaquin Valley Goods Movement Sustainable Implementation Plan (2017)

The purpose of this study was to build on the work conducted in the SJV Interregional Goods Movement Plan and take the next steps to address issues raised in the SJV Interregional Goods Movement Plan (2013). This was accomplished by designating priority first and last-mile goods movement connectors and identifying any needed improvements to the connectors; identifying truck route and parking needs and strategies; identifying priority rural corridors; developing a framework for improving and maintaining the Valleywide truck model; and coordinating all of these efforts with the Valley Regional Transportation Planning Agencies' (RTPA) Sustainable Communities Strategies (SCS) and other planning efforts at the local, state, and federal level.

This study tackled several of the issues identified in the SJV Interregional Goods Movement Plan, including:

- Identifying high-priority, first- and last-mile connectors that emphasize improved connectivity to critical economic sectors. The study also identifies connector needs and recommends a plan of improvements and an approach to funding.
- Identifying areas of concern related to truck routing and parking and identifying truck route and parking needs and proposing policies, guidelines, and improvements to ensure truck routes are well planned, provide access and maintain continuity across jurisdictional lines. The study examined parking needs and shortages and proposes options to improving information about legal parking, encouraging the development and expansion of private truck stops and parking facilities, and identifying locations for new state or public parking facilities.
- Identifying rural and connecting urban priority corridors. This information will support the process by which the State will designate critical rural and urban corridors and their inclusion in the National Priority Freight Network as required by the FAST Act.
- Recommending improvements to the SJV goods movement model and a process to ensure that it is kept up to date with the best available data inputs and freight modeling best practices. To this end, the study developed a concept for institutionalizing freight modeling to support freight planning in the Valley so that good movement considerations become a part of the core analytical capabilities in each of the Valley Councils of Government. The revised model and supporting data can then be used to generate performance measures that are consistent with Federal and state guidance and that are linked to the SJV Interregional Goods Movement Plan Vision and Goals.

Connector Needs and Strategies

Performance metric data collected for select connectors revealed multiple needs that could improve safety and efficiency on connectors throughout the regional. Examples include:

- Improved signage for both passenger and commercial vehicle traffic.
- Safety analysis and improvement.
- Signal coordination on truck routes.
- Pavement quality improvements.
- Exploring design standards for heavy truck routes and connectors.

Truck Parking Recommendations

After reviewing previous reports and discussing the issue with public agencies, truck stop operators and truck drivers, several factors were identified that contribute to the truck parking problem in the San Joaquin Valley. The following recommendations to improve conditions should be considered:

- Planning and Funding
 - Improve data collection and analysis to have a better understanding of short-term and long-term parking demand.
 - Work with law enforcement to educate and train them about improved use of safe and available parking spaces.
 - Update plans and investment programs to include truck parking solutions, both for facilities and technology for truck parking information services.
 - MPOs should consider ways to incentivize land use decisions to facilitate private-sector expansion of existing facilities or opening of new ones.
 - Surplus public properties can be converted to truck stops.
 - Funding provided by FAST could be used to construct or expand truck parking facilities and deploy tools for commercial motor vehicle drivers to find safe, available places to park and rest.
- Demand Control
 - Policies that incentivize off-peak deliveries can reduce demand for long-term parking spaces.
 - Truck circulation is a problem in some older parking facilities that are not designed for larger trucks.
 - Shippers/receivers often demand that drivers leave the facility immediately after delivery.

Recommended Next Steps

The SJV Sustainable Implementation Plan has identified a system of truck corridors and connectors and recommendations for how to proceed with improvements on these roadways to address identified needs. In order to move forward with these recommendations, implementation actions should be taken in four key areas:

1. Taking steps to secure funding for near-term opportunities;
2. Conduct additional local analysis to prioritize corridor improvements, including truck parking;
3. Establish a process for regular input on connectors, priority corridors and truck routes; and
4. Work with Caltrans to adapt the statewide freight model for Valley applications.

Figure 6-22: SJV Freight Clusters



San Joaquin Valley I-5/SR99 Goods Movement Corridor Study (2017)

Interstate 5 (I-5) and State Route 99 (SR 99) play critical and unique roles as the major goods movement facilities in the San Joaquin Valley. At present, 92 percent of goods in the SJV are carried by truck, and this is not expected to change in the near future. I-5 and SR 99 carry the highest volumes of trucks in the SJV and in some locations, among the highest volumes in the state. This is a reflection of the traditional north-south orientation of freight flows in the SJV, associated with the through routing of trucks to connect the major coastal urban areas to the north and south of the SJV, the north-south orientation of the Valley's major urban centers, and the need to access major east-west interstate connections north and south of the San Joaquin Valley itself.

I-5 is the route that is favored for long-haul movements. It carries higher levels for through traffic and there has traditionally been less development along this route. However, new developments in warehousing and distribution centers and manufacturing are taking advantage of access to I-5. Increasing traffic that is being generated within the San Joaquin Valley uses I-5 for national

connections. SR 99 runs through each of the urban areas in the SJV and includes truck traffic distributing goods to/from these areas. It also provides connections to east-west routes that support the farm-to-market traffic and connections between farms and food processing that characterize the agricultural supply chain. It is the backbone of the intra-Valley goods movement and a major route for commuters who share the road with trucks in the urban centers.

A major effort and focus of this study involved identifying major truck generators in the San Joaquin Valley. This study identified seventeen major freight clusters responsible for a large percentage of truck trips within the SJV and to and from other regions in California [Figure 6-22]. Each of these clusters consists of some combination of intermodal facilities, distribution centers, and/or large manufacturing firms. The clusters are distributed throughout the San Joaquin Valley, with four located in San Joaquin County, two in Stanislaus County, one each in Merced and Madera counties, one in Fresno County, one in Kings County, three in Tulare County, and four in Kern County.

- The San Joaquin Valley I-5/SR99 Goods Movement Corridor Study is divided into seven tasks, of which the Final Report incorporates Tasks 1, 2, 3, 4, and 7. Tasks 5 and 6 covered coordination in support of the other tasks. The Tasks covered in the Final Report are: Establish the need for streamlining goods movement.
- Name specific “pain points” and priorities for mitigation.
- Identify mitigating projects and programs.
- Identify mitigating projects and programs.
- Evaluate the feasibility of implementing projects and programs.
- Analyze potential for technical demonstration of specified technology.

GOODS MOVEMENT PROJECTS

The three key basis for selection of the projects are as follows: 1) they are located on I-5 or SR 99 corridors and would improve economic efficiency and productivity, alleviate mobility and safety related goods movement issues, as well as support the growth of agricultural and industrial land uses; 2) they are located on connectors between I-5 and SR 99 corridors and would meaningfully increase network redundancy and alleviate congestion on the SR 99 corridor, along which a majority of freight clusters are located; and/or 3) they are located on key ingress/egress routes of the San Joaquin Valley region and would likely enhance its economic opportunities of handling trade and logistics for the ports and large populations in the Bay Area and Southern California.

Information collected for the projects includes: 1) location and route, 2) project ID, 3) project title and description, 4) project type, 5) project cost, 6) timeline for implementation, and 7) source of project information. The following provides information about projects planned along I-5 and SR 99, as well as along some major east/west or north/south connectors between I-5 and SR 99 that may alleviate SR 99 congestion.

The projects with an implementation timeline of 0-5 years in each San Joaquin Valley County, including local updates since the 2017 Goods Movement Corridor Study, are as follows:

Fresno

- California High-Speed Rail Project-SR 99 Re-Alignment
- Mountain View and SR 99 Overcrossing: Widen Overcrossing and Improve Ramps
- NB SR 99 Herndon Off Ramp: Signalize & Widen Ramp
- Widen I-5 between Kings County and Merced County lines
- Widen SR 99 from 6 to 8 lanes from Central Ave to Bullard Ave.

Kern

- SR46: I-5 to Lost Hills Disadvantaged Community Safety Improvements/Gap Closure - Phase 4
- SR58, 46, 99, 14, 395, I-5 Federal Clean Transportation EV Charging/Alt. Fuel Corridors
- SR58 Centennial Corridor Gap Connector—Out of Direction Travel/VMT Reduction Project
- SR58 Tehachapi Grade Safety Improvements, Truck Climbing/Passing Lanes; HSR Realignment
- SR58 Safety Conversion of Expressway Segments to Freeway at SR 223 & California City Blvd
- Intermodal Rail Inland Port “Last-Mile” Connector Improvements (SR99, 43, 7th Standard Rd)
- Metropolitan Bakersfield Railroad Separation-of-Grade Safety Program

Madera

- SR99: 4-Lane Freeway to 6-Lane Freeway Ave 12 to Ave 17
- SR99: Madera 6 Lane
- SR99: Reconstruct Interchange
- SR99: South Madera 6 Lane
- Widen SR99: In Fresno & Madera Counties, from south of Grantland Ave UC to north of Avenue 7

Merced

- Highway 99: Livingston Widening Northbound
- Highway 99: Livingston Widening Southbound
- Widen SR 152 between SR 99 and US 101 (in Merced County)

San Joaquin

- I-5 at Louise Avenue Interchange
- I-5 at Roth Road Interchange
- Widen I-5 between SR 120 and I-205
- Widen I-5 from 1 mile north of SR 12 to SR 120
- Widen SR 99 from French Camp Rd to Mariposa Rd 6 to 8 lanes, with new interchange
- SR 99 at Austin Road Interchange

- SR 99 at Eight Mile Road Interchange
- SR 99 at Gateway Boulevard Interchange
- SR 99 at Main Street/UPRR Interchange (Ripon)
- SR 99 at Morada Interchange
- SR 99 at Raymus Expressway Interchange
- SR 99 at Turner Road Interchange Operational Improvements
- Widen SR 12 between I-5 and SR 99
- Widen SR 120 between I-5 and SR 99, with new interchange at SR 99

Stanislaus

- SR 99 Interchange Ramp and Auxiliary Lane Improvements
- SR 99 & Hammett Rd
- SR 99 & Briggsmore Interchange
- SR 99 Reconstruct Interchange at Fulkerth Road
- SR 99 Reconstruct to 8-lane Interchange - Phase II
- I-5 to Rogers Road: Interchange Improvements and Widen Sperry Ave
- Widen SR 99 from 6 to 8 lanes in Stanislaus County
- Widen SR 132 connecting SR 99 and I-580

Tulare

- State Route 99/Betty Drive Interchange

Kings County did not have any projects with an implementation timeline of 0-5 years.

Strategic Goals, Objectives, I-5/SR 99 Strategic Program

The study identified seven strategic goals with related objectives for the SJV region based on various state and regional transportation planning documents.

Strategic Goals, Objectives

- Improve Economic Competitiveness:
 - Vitalize/Revitalize commercial vehicle corridors.
 - Increase transportation choices for freight uses.
 - Improve access to key economic centers.
 - Reduce the cost of exporting products from the region, thereby increasing demand for those products and related processing/manufacturing jobs.
- Preserve Infrastructure:
 - Conduct preventative maintenance and rehabilitation on freight transportation system.
 - Maximize utilization of available supply for freight uses.
 - Manage freight demand within existing supply.
 - Preserve land for future freight uses.
- Improve Mobility and Travel Time Reliability:
 - Integrate multiple modes for freight uses.
 - Minimize congestion and increase operational efficiency for freight uses.

- Increase network redundancy for freight uses.
- Improve Safety and Security:
 - Minimize crashes and damages for freight uses.
 - Improve operations on freight transportation system.
 - Improve incident management and network resiliency on freight transportation system.
 - Stay informed about the current level of threat to security on freight transportation system.
- Improve Environment:
 - Stay informed about the current commercial vehicle environmental laws and regulations and improve their enforcement.
 - Conserve energy and natural resources for freight uses.
 - Minimize commercial vehicle emissions.
 - Improve development and implementation of mitigation measures for freight investments.
 - Improving environmental justice for freight investments.
- Use Innovative Technology and Practices:
 - Develop commercial vehicle alternate fuel technology and fueling infrastructure.
 - Develop new commercial vehicle to commercial vehicle communications technology applications.
 - Develop new commercial vehicle operator information systems.
 - Develop institutional arrangements and business relationships to optimize freight transportation system usage and costs.
- Plan and Collaborate to Fund Investments:
 - Develop freight projects list, timeline for implementation and public funding gap information.
 - Conduct studies to evaluate benefits of key freight transportation system investments.
 - Coordinate with other public agencies and private sector for freight project or service development and associated land use planning.

CONCLUSIONS/THE FUTURE OF GOODS MOVEMENT IN THE SAN JOAQUIN VALLEY

The most recent statewide, regional, and local transportation plans were used to compile a master list of goods movement related projects and programs on I-5 and SR 99 corridors in the San Joaquin Valley region. These included projects on I-5 and SR 99, key connectors between the two corridors and key ingress/egress routes of the region that connect to I-80 via Sacramento Valley, San Francisco Bay Area, Central Coast, Southern California and I-40/I-15 corridors via Tehachapi Pass.

County level analysis of truck volume and peak period travel speed data on I-5 and SR 99 showed critical mobility and reliability issues on segments and critical freight access interchanges. County

level analysis of truck involved crash severity data on I-5 and SR 99 showed critical safety and reliability issues on segments and critical freight access interchanges.

The literature review on ITS solutions for truck parking showed options for real-time parking detection technologies, compared their physical and operational capabilities, and summarized past tested public-private-partnership opportunities for truck parking.

The California Inland Ports Feasibility Analysis has identified a potential business case for container rail service between the state's major seaports and the San Joaquin Valley with as many as 10 trains per week between the Northern San Joaquin Valley to the Ports of L.A. at 30 percent market saturation. The ability to divert truck trips to rail improves GHG emissions, reduces wear and tear on the highways, improves highway safety, and delays the need for interregional goods movement related highway capacity improvements. Fresno COG is leading phase 2 of the California Inland Port Study being funded by Caltrans. One of the recommendations of the Phase 1 study was the need to form a statewide inland port authority with representatives from the seaports, the inland port interests, affected state agencies, shippers, receivers, and the railroads.

Through the cooperative efforts of the San Joaquin Valley eight-county coalition and the goods movement planning efforts, the SJV is seriously looking at all 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 movement system.

Throughout the goods movement planning process, public and private stakeholders have met and discussed the criteria and metrics for evaluating projects to enhance the socioeconomic status of the San Joaquin Valley via improvements in our transportation systems, especially the status of disadvantaged communities. During the planning process the regional planning agencies 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.

The supply chain and logistics trends of key industries, their current needs, and how they will impact goods movement in the future based on travel modeling, as well as creating simplified supply chain diagrams to illustrate the transportation system needs of industries should be expanded.

The goods movement planning processes provides the eight-county region with data-driven, multimodal project lists that reflect the combined goods movement vision of the entire of the region.

4. VALLEY WIDE PLANNING EFFORTS

SAN JOAQUIN VALLEY REGIONAL POLICY COUNCIL

The eight valley Regional Transportation Planning Agencies have a long history of successfully coordinating and collaborating to address issues of regional significance in the San Joaquin Valley. This approach was formalized with the voluntary creation of the San Joaquin Valley Regional Policy Council (Regional Policy Council).

This Council was established in 2006 to discuss and build regional consensus on issues of SJV importance. In 2009 the San Joaquin Valley Air Pollution Control District was added as a member, and in 2021 the San Joaquin Joint Powers Authority was added, resulting in ten member agencies.

The 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. This body provides a forum for our Valley to communicate and coordinate easily and effectively on issues that impact the region such as:

- Intercity Passenger Rail
- State Route 99
- Goods Movement
- Short Haul Rail
- Air Quality/Transportation Planning
- Valleywide Model Improvement Plan
- AB 32, SB 375 Implementation
- Regional Energy Planning
- Regional Transportation Plans
- Annual Policy Conference

In addition, the Regional Policy Council also fosters and supports the development of relationships between the San Joaquin Valley and the California Transportation Commission, the California Air Resources Board, the California Partnership for the San Joaquin Valley, Caltrans, Federal Highway Administration, and other state and federal agencies.

VALLEY VOICE

Valley Voice is a valley-wide advocacy program which consists of annual trips to Washington, D.C. and Sacramento.

The goals of the Valley Voice program are to:

- Communicate the Valley's legislative priorities.
- Obtain more state and federal funding for regional priorities.
- Advocate for legislation or changes to existing legislation that will benefit the valley.

The Valley Voice delegation is comprised of representatives from the San Joaquin Valley Regional Policy Council. Each year, the RTPAs develop state and federal legislative platforms that are reviewed and approved by the Regional Policy Council. The Washington, DC trip is typically scheduled in September, and the Sacramento trip is typically scheduled for February/March.

VALLEY VOICE SACRAMENTO 2021 – ISSUES

Build Out the System to Maximize Previous Investments

Aggressively pursue funding

- Complete the State highway network in our region. The Policy Council will remain diligent in competing for additional state funds, including COVID-relief stimulus, to complete gap closures to improve safety, congestion management, and goods movement projects. This includes building out SR 99 to a minimum of six lanes, consistent with the Caltrans adopted State Route 99 Business Plan, and addressing east-west connector routes such as Highways 41, 46, 120, 132, 198, and Interstate 205.
- Maintain funding eligibility for highway capacity projects to receive state funding. This includes the SB-1 competitive programs, as well as other state grant programs such as the State Transportation Improvement Program

Pragmatically Address Air Quality and Mobility Goals Through Operational Improvements

Continue to partner with the State of California to implement innovative and strategic initiatives to meet air quality goals

- Electric Zero Emission Vehicles and Infrastructure - Governor Newsom's FY 2020-21 January Budget proposes \$1 billion in zero-emission vehicle infrastructure and \$465 million in rebates for ZEV purchases. The San Joaquin Valley needs a region-wide initiative to support this effort so that the residents of our disadvantaged communities can afford the cost of electric vehicles and have access to electric vehicle charging stations.
- Create greater incentives for businesses to expand or relocate to help reduce vehicle miles traveled, given that thousands commute from the Valley into the Bay Area and LA

Basin on a daily basis. Increase broadband access and other incentives to encourage telecommuting.

- Support movement of freight by rail to ease congestion and enhance safety.
- Provide adequate funding to replace heavy duty equipment.

Transit Funding Reform

Support potential changes to the Transportation Development Act that will assist local public transportation systems with funding eligibility

- The Policy Council will continue to monitor the CTA TDA working group and support modifications to the TDA process as appropriate to ensure that transit operators are provided with flexibility to continue accessing funding to maintain and expand service.

Enhance Passenger Rail Infrastructure and Service

Provide enhanced passenger rail service connecting the San Joaquin Valley to the Bay Area and Southern California. Maintain and increase funding for commuter and intercity passenger rail.

- The Policy Council supports increases in funding from CalSTA through the State Rail Assistance and Transit Capital and Intercity Rail Program in support of all passenger rail in the San Joaquin Valley.

VALLEY VOICE WASHINGTON DC 2021 – ISSUES

State Route 99

State Route 99 – also known as the backbone of California – is a major goods movement state highway connecting southern and northern California through the major cities of the San Joaquin Valley. SR 99 is on the National Primary Freight Network and has high truck volumes. Lack of capacity for SR 99 results in congestion, fatal accidents, and poor air quality.

The Valley Voice delegation encourages Congress and the Administration to support robust federal investments for this critical corridor.

Reauthorization Policy Principles

Valley Voice supports passage of a multiyear surface transportation reauthorization such as the Infrastructure Investment and Jobs Act (IIJA). Understanding that the House is likely to consider that bill without further amendment, we urge members of our congressional delegation to make use of the budget reconciliation process to advance the following policy priorities and secure additional federal resources for our local needs:

- Investments in water infrastructure and storage capacity.
- Robust investments in emissions reduction such as the Congestion Mitigation and Air Quality
- Improvement Program (CMAQ) and Surface Transportation Block Grant (STBG) Program.
- Investments in passenger rail, electric vehicle (EV) infrastructure, clean vehicles, and climate
- resiliency programs.
- Investments in agriculture conservation, drought, and forestry programs to prevent wildfires.
- Investments in workforce development and job training.

Support Pending Federal Grant Applications

The Valley Voice delegation encourages Congress and the Administration's support for the following projects seeking federal grant assistance through programs administered by the U.S. Department of Transportation:

- State Route 99 Madera South---Operational Improvement Project
- California Inland Port Study
- North Lathrop Transfer Station and Lathrop Wye Project
- West Coast Electric Highway Corridor
- Kings County Zero---Emission Fleet Conversion Project

OTHER COLLABORATIVE PLANNING EFFORTS

For decades 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. Some impressive examples of this voluntary collaboration between the Valley RTPAs include the San Joaquin Valley Blueprint, the San Joaquin Valley Greenprint, 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 grew 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 explored 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.

San Joaquin Valley Household Travel Survey

The San Joaquin Valley Household Travel Survey (VHTS) is another joint effort by the eight Valley MPOs. According to the federal conformity requirements, the travel models used by MPOs to demonstrate air quality conformity cannot be more than 10 years old. Many models in the SJV are close to 10 years old and need an update in a couple of years. The VHTS will collect travel data needed for the model update. Such data includes household demographic information, travel patterns and trip making characteristics. Week-day travel data will be collected with a targeted number of surveys for around 6,700 household in the San Joaquin Valley. A final report with detailed travel characteristics summary for each county in the SJV will be developed at the conclusion of the project. All the survey data collected will also be delivered to the Valley MPOs for integration into their travel demand models.

California Inland Port Feasibility Analysis Preliminary Business Model

The Valley MPOs are continuously evaluating infrastructure needs and developing project priorities, strategic programs, and policies to guide goods movement planning in the region. In 2019, the Central Valley Community Foundation initiated a California Inland Port Feasibility Analysis. The outcome of this study was a California Inland Port Feasibility Analysis Preliminary Business Model report, completed on April 8, 2020 which concluded that a San Joaquin Valley inland port would support new job creation and investment growth by repositioning the economic competitiveness of the SJV with a more robust and efficient distribution system and direct rail service to and from the deep-water seaports. The costs for shippers that manage global supply chains would be reduced, and the SJV would become much more attractive to high-value manufacturing sectors.

The MPOs in the San Joaquin Valley have each contributed toward the study to help advance the project to the next phase which will analyze the feasibility of developing a new, intermodal rail spine to connect seaports to key markets via the San Joaquin Valley. This California “Inland Port”

system would cut greenhouse gases, significantly improve air quality, reduce road congestion, boost traffic safety, and advance California's extraordinarily large intra-state freight movement system, and develop a business proposition for the railroad companies and the State for action and investment.

In conclusion, the San Joaquin 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.

5. VALLEY SUCCESS IN IMPLEMENTATION

PASSENGER RAIL IN THE SAN JOAQUIN VALLEY

Passenger rail service has been an area of extensive activity for the San Joaquin Valley with two existing services currently operating and the first segment of the California High-Speed Rail System under construction, which began in Fresno in 2015. The two existing passenger rail services include the Amtrak San Joaquins route that runs the length of the San Joaquin Valley and the Altamont Corridor Express (ACE) that connects the northern San Joaquin Valley with the San Francisco Bay Area.

The Amtrak San Joaquins route provides service from the San Francisco Bay Area and Sacramento through the SJV to Bakersfield. The San Joaquins runs multiple times daily between the San Francisco Bay Area (or Sacramento) and Bakersfield, where Amtrak Thruway buses connect to 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. The seventh daily round trip of the San Joaquins was added on June 20, 2016, which was the first new round trip between Oakland and Bakersfield in 22 years.

Figure 6 - 23: Amtrak San Joaquins Route



Figure 6 – 24: Altamont Corridor Express (ACE) Route



The Altamont Corridor Express (ACE) is a commuter rail service that connects Stockton to San Jose. The ACE service is named for the Altamont Pass, through which it runs. The 86-mile (138 km) route includes ten stops, with travel time about 2 hours and 12 minutes end-to-end. ACE runs four round trips daily with annual ridership of 1.5 million passengers. 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.

After breaking ground in 2015, construction of the California High-Speed Rail is well underway in the San Joaquin Valley. The California High-Speed Rail System will be the first high-speed rail system in the nation. The California High-Speed Rail Authority (“Authority”) is proposing an Initial Operating Section (IOS) from Merced to Bakersfield. The Merced to Fresno Project Section is part of the first phase of the high-speed rail system. The Authority plans to begin operations of service by the end of 2028 at which time Merced will become the southern terminus for San Joaquin Amtrak rail service. This project section is approximately 171-miles and generally parallels the Union Pacific Railroad (UPRR) tracks and State Route 99 between Merced and Fresno with stations in downtown Merced, Madera, Fresno, Hanford and Bakersfield. The system will eventually extend to San Jose, 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.

COORDINATION

The Central Valley Rail Policy Working Group

Coordination of passenger rail service in the San Joaquin 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 SJV and the San Joaquin Valley Joint Powers Authority (SJJPA) in support of enhanced San Joaquins Amtrak service. 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
- Supporting Amtrak service expansion to 9 daily round trips in the San Joaquin Valley
- Expanding through-way bus services
- Support of the Valley Rail Sacramento Extension Project

San Joaquin Joint Powers Authority

A short-term goal for the service outlined in the 2021 SJJPA Business Plan is to increase to nine daily round trips and double trips from Stockton to Sacramento from two to four daily trips.

With the passage of Assembly Bill (AB) 1779 in August 2012, regional government agencies were authorized to form the San Joaquin Joint Powers Authority (SJJPA) to take over the administration and management of the existing Amtrak San Joaquins Rail Service from the state. The SJJPA was established in March 2013 and is comprised of ten Member Agencies that make up the SJJPA Board including: Alameda County, Contra Costa Transportation Authority, Fresno Council of Governments, Kings County Association of Governments, Madera County Transportation

Figure 6 - 25: California High-Speed Rail Statewide Rail Modernization



Commission, Merced County Association of Governments, Sacramento Regional Transit, San Joaquin Regional Rail Commission, Stanislaus Council of Governments and Tulare County Association of Governments. An Interagency Transfer Agreement between the SJJPA and the State was signed on June 29, 2015. 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 and Mass Transit 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.

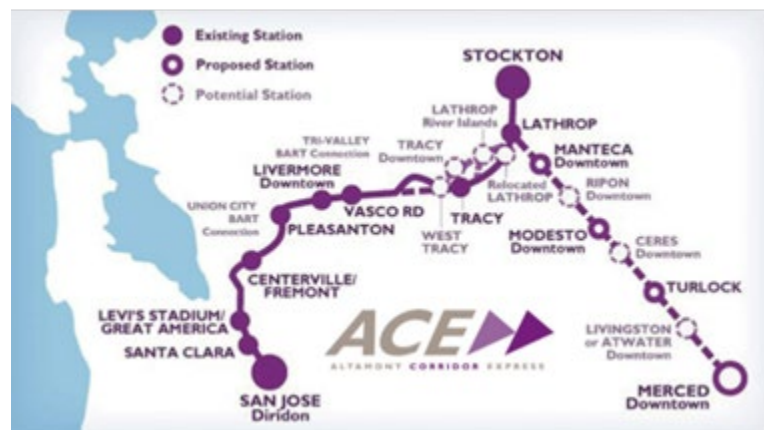
The primary role of SJJPA is the day-to-day management of the San Joaquin Amtrak System. The SJJPA will be responsible for managing the High-Speed Rail IOS for the Merced to Bakersfield Segment. Recent activities of the SJJPA have included focusing on short-term service improvements, pre of the High-Speed Rail Authority (HSRA) in the implementation of high-speed rail through the Central Valley and the San Joaquin Valley Joint Powers Authority (SJJPA) in support of enhanced San Joaquin Amtrak service. These activities have involved:

- Supporting Amtrak service expansion to 9 daily round trips in the San Joaquin Valley
- Expanding through-way bus services with a variety of transit services providers
- Advancing renewable diesel engine initiative for commuter rail emission reduction
- Relocation of the Madera's Amtrak Station
- Reducing overall run times between Bakersfield and Norther California destinations
- Launching Merced to San Jose Thruway Bus Route Pilot Program
- Strategic Integration with High-Speed Rail service
- Merced Intermodal Track Connector (MITC) Project
- Stockton Diamond Grade Separation Project
- South of Merced Planning Studies

Looking Forward

Senate Bill 132 was adopted in April 2017, assigning \$400 million for the purpose of extending the Altamont Corridor Express into Ceres and Merced by the year 2027. Senate Bill 132 aligns with the San Joaquin Regional Rail Commission (SJRR) Valley Rail Ceres-Merced Extensions planning effort, which supports 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 Ceres-Merced Extension 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 2025. The San Joaquin Valley transportation partners will also

Figure 6 – 26: ACEforward Proposed Service



continue to work with the California HSRA to support the implementation of high-speed rail within the SJV as the initial operating phases are complete and services are initiated.

The Valley Rail Sacramento Extension Project would expand Amtrak San Joaquins and Altamont Corridor Express (ACE) passenger rail services to the greater Sacramento area through the construction of six new rail stations and track improvements along the Union Pacific Railroad (UPRR) Sacramento Subdivision train tracks. The Project includes the potential implementation of two new roundtrips of San Joaquins service operating on the Sacramento, Fresno, and BNSF Stockton Subdivisions, as well as an extension of existing ACE service to the proposed Natomas Station. The Project also includes service from the proposed Natomas Station to the Ceres ACE Station included in the ACE Extension Lathrop to Ceres/Merced project. The six new stations would be constructed in the following locations: Lodi, south Sacramento (to be named the “North Elk Grove” station), City College, Midtown Sacramento, Old North Sacramento, and Natomas/Sacramento Airport (with a shuttle connection to and from the Sacramento International Airport).

Proposition 1B, Senate Bill 1 and State Route 99 Bond Program

The State Route 99 Business Plan has focused mainly on major facility improvements that would typically be funded through the State Transportation Improvement Program (STIP) or similar federally funded programs. The Business Plans establishes a strategic approach to achieving the functional goals for the corridor predicated on the Interregional Transportation Strategic Plan, Transportation Concept Reports, Corridor System Management Plans and Regional Transportation Plans. The most significant obstacle to improving State Route 99 has been insufficient funding. Neither the STIP nor the SHOPP have had funding levels adequate to maintain, much less, improve State Route 99.

California’s Proposition 1B Transportation Bond Measure of 2006 contained nearly \$20 billion in funding for transportation projects. \$1 billion for State Route 99 was included in Proposition 1B however the amount made a small dent in the nearly \$6 billion in immediate needs identified in Caltrans’ 2020 State Route 99 Business Plan. Far greater funding is needed, however, to bring the “Main Street” and the primary goods movement corridor of the San Joaquin 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.

In anticipation of the expiration of Proposition 1B, Senate Bill 1 (SB 1) the “Road Repair and Accountability Act of 2017” was signed into law in 2017. The SB 1 package augmented the SHOPP and the STIP funds and contained statewide grants. While the SHOPP was most greatly reinforced by SB 1, the STIP was also replenished. Before SB 1, the California Transportation Commission (CTC) needed to cut and delay \$1.5 billion in STIP projects due to lack of funding, including State Route 99 projects identified in the Business Plan. With the passage of SB 1 the funding is

stabilized. Grant programming in the SB 1 package includes the Trade Corridor Enhancement Program (TCEP) that distributes \$300 million annually for projects related to transportation infrastructure vital to California's trade and freight economy.

SB 1 adds \$54 billion in funding over 10 years to the state's transportation budget. Caltrans will receive half of SB 1 revenue: \$26 billion. The other half will go to local roads, transit agencies, and an expansion of the state's network of pedestrian and bicycle routes. Over 10 years, SB 1 will allocate \$15 billion to improve the condition of the state highway system, with an additional \$4 billion to fix or replace bridges and culverts. The new revenue from SB 1 gives Caltrans a massive boost in addressing safety projects, deficiencies, and deferred maintenance. Yet, according to the CTC, the program is oversubscribed by \$52.1 million for counties in the San Joaquin Valley.

Figure 6 – 27: State Route 99 Business Plan

