CHAPTER 1

INTRODUCTION
CREATING A SUSTAINABLE COMMUNITIES STRATEGY FOR THE SAN JOAQUIN REGION

This chapter describes the geographic and regulatory setting of the San Joaquin region. It provides projections on population, housing, and employment. It describes the region in terms of its transportation system and economic assets, including the movement of goods by roadways, water, air, and rail. It also gives a short overview of how the Regional Transportation Plan/Sustainability Communities Strategy (referred to as the Plan) achieves sustainability goals through regional collaborations on regional solutions.
Regional and Geographic Setting

San Joaquin County remains one of the fastest-growing regions in California (Figure 1.4). The County’s geographical advantages and quality of life contribute to the growth. San Joaquin County ranks within the top nine of the fastest-growing regions within the state’s 58 counties. As compared to the nation’s growth rate of 0.9 percent, San Joaquin County’s population will grow approximately 1.5 percent annually.

By the year 2040, the population of San Joaquin County will reach approximately 1,070,500 people.
Figure 1.4 Projections

Population Projections

Employment Projections

Household Projections
San Joaquin County encompasses approximately 921,600 acres and is the home of 702,600 residents. In addition to the unincorporated area, the region’s incorporated cities are Escalon, Lathrop, Lodi, Manteca, Ripon, Stockton, and Tracy. The county seat is the City of Stockton with a current population of 297,984.

Economically, San Joaquin County continues to grow in many segments of its economy. Downtown revitalization efforts in Stockton, Big League Dreams in Manteca, and the Lodi area’s success in producing world-class wines are shaping San Joaquin County into a destination for tourism and entertainment.

The region also continues to be an attractive location for new warehousing and distribution centers that serve Northern California, the Bay Area, and the West Coast. A centralized and diverse network of highway, rail, air and seaport facilities support the continued development of San Joaquin County into a major goods movement region.

There are approximately 207,000 jobs in San Joaquin County. Job creation will continue at a steady pace where San Joaquin County will be supporting nearly 300,000 jobs by the year 2040. With over $2 billion in gross value of production in 2011, agriculture continues to be one of the largest-producing industries in San Joaquin County. Additional examples of economic growth include the City of Stockton’s downtown revitalization efforts and the emergence of anchor retailer stores such as Bass Pro Shop in Manteca and Costco in Lodi. The new Amazon Fulfillment Center in the City of Tracy is also representative of the future economic potential in San Joaquin County.
Due primarily to the availability of housing at lower costs than surrounding communities to the north and to the west of San Joaquin County, the county is a place where many residents travel long distances for employment outside the county. Of the 233,200 residents representing the employed workforce, approximately 114,610 commute outside of the region to their employment sites. The future housing market will continue to grow at a stable rate to accommodate future growth. Currently, the region supports an estimated 219,500 households. Forecasts suggest that by 2040 the housing market will need to grow to accommodate just over 100,000 additional households. As San Joaquin County transforms, these growth factors have profound effects on the ability to finance, deliver, and maintain the transportation infrastructure.

Transportation System

Due to its strategic location, maintaining and improving the operational integrity of San Joaquin County’s centralized and diverse network of highway, rail, air, and seaport is essential.
Roadway Network
San Joaquin County’s roadway network currently includes 7,114 lane miles. On a north–south axis, this includes State Route 99, the “Main Street” of the San Joaquin Valley, and Interstate 5 (I-5), a corridor of statewide and national significance. Within the last 10 years, each route has experienced dramatic traffic growth and levels of congestion. Each route also carries truck traffic at volumes much higher than the statewide average for the highway system, making them vital to goods movement.

State Route 132 handles major east-west movement at the southern tip of the county. Other highway corridors that facilitate goods movement include Interstates 580 (I-580) and 205 (I-205) in the southwest region of the county, as well as State Route 120, State Route 4, and State Route 12. Interstates 205 and 580 serve as the gateway connection between the San Joaquin Valley and the Bay Area, and are critical to interregional travel and commerce. Each, however, has experienced increased travel movement much beyond the statewide average. I-205 in particular remains one of the most impacted travel routes in the county. State Routes 4 and 12 are primarily two-lane conventional highways linking the east and west sides of the county. SR 4 operates as a freeway segment for a brief but important segment between State Route 99 and I-5. Both routes also connect with Bay Area counties across the San Joaquin Delta and carry significant commuter and interregional traffic.
Highways 26 and 88 in the central and northeast portion of the county are two-lane rural highways that link to Calaveras and Amador Counties. Each roadway has also experienced significant traffic volume increases, partly due to recreational traffic but also resulting from rapid growth occurring in these neighboring counties to the east.

By the year 2040, an additional 594 lane miles will be essential additions to the roadway system, along with non-capacity increasing operational improvement strategies.

**Public Transit System**

The Altamont Corridor Express (ACE), formerly the Altamont Commuter Express, is a commuter rail service in California connecting Stockton with San Jose. The service name came from the Altamont Pass, the area through which it travels. The service commenced on October 19, 1998, with two trains daily in each direction (weekdays only).

The frequency increased in November 2009 to three trains daily in each direction and then increased to four trains daily in each direction in September 2012. There are ten stops along its 86-mile route; present travel time is about 2 hours and 10 minutes from end-to-end. The ACE transit service uses Bombardier Bilevel coaches and MPI F40PH-3C locomotives, which run on tracks owned by Union Pacific Railroad (UPRR). The San Joaquin Regional Rail Commission manages ACE; it is exploring the possibility of expanding service into the central valley between Modesto and Sacramento as well as Stockton and Pittsburg.

Bus-related transit services in San Joaquin County have grown dramatically over the past 20 years. The region is currently served by the San Joaquin Regional Transit District, Lodi’s Grapeline, the Tracy Tracer,
Manteca Transit, and smaller transit services in the cities of Escalon (eTrans) and Ripon (Blossom Express). The combination of services supports local transit systems, bus rapid transit, intercity and interregional bus transit services, and needed services such as demand response for both those who are in need of transit for medical purposes and those in the rural areas of the county.

**Goods Movement**

The movement of goods and people is the primary function of a highly accessible highway and regional roadway transportation system that links San Joaquin County to major destinations (Figure 1.5). The region is a major Northern California transition point where two primary north–south highways, I-5 and State Route 99, run through the county. These major highways are joined by the Stockton Crosstown Freeway (State Route 4) and State Route 120 through Manteca. I-5 is the main north-south route for transportation along the west coast from Canada to Mexico. State Route 99 is the main inland route through California connecting the major cities in the San Joaquin Valley. This highway infrastructure positions San Joaquin County as a cost-effective location for large companies interested in operating west coast distribution centers. Interstates 580 and 205 provide direct access to the Bay Area and connections to I-5 and State Route 99.

**Figure 1.5 San Joaquin County is central in the Northern CA Megaregion**
Truck traffic in the county is concentrated along the I-5 and State Route 99 north–south corridors. I-5 between Tracy and Lathrop averages 40,000 trucks per day, by far the most truck traffic in the county. North of Lathrop up through Stockton, I-5 averages between 25,000 and 30,000 trucks per day. State Route 99 follows a comparable pattern with traffic at its greatest, around 11,000 average trucks per day, in the region from Stockton south to the Stanislaus County line. The I-205 and I-580 corridors are also principal areas of truck traffic in the county, with average daily truck traffic around 12,000 and 5,000 on these routes, respectively.

The region’s economic assets include but are not limited to the following:

**Movement of Goods by Water**

The Port of Stockton is 72 nautical miles due east of the Golden Gate Bridge on the Stockton Deepwater Shipping Channel. The port’s operations span 2,000 acres, including 11,000 lineal feet of waterside docking with shipside rail, 1.1 million square feet of dockside transit sheds, and 7.7 million square feet of warehousing. It is categorized as one of the principal ports of the United States by the US Army Corps of Engineers. In the past decade, the port’s commodity tonnage has averaged nearly 2.5 million annually of which more than 95 percent was in overseas trade.

The Port of Stockton boasts first class warehouse storage and handling facilities for both dry and liquid bulk materials, facilities and equipment to handle break-bulk, and containerized cargoes by land or sea. The Port of Stockton is situated in the hub of four major freeways, two transcontinental railroads, an international waterway, and a regional airport; it is centrally located to provide the optimum service for shipment and storage of product and cargo. All of these components place the port in an ideal position for domestic and international distribution.
The Stockton Metropolitan Airport supports passenger, private, military, and air cargo operations (Figure 1.6). It is located on the southern boundary of the City of Stockton in the heart of California’s Central Valley. Situated on 1,449 acres of land, the Stockton Metropolitan Airport has an 8,650-foot-long, 150-foot-wide primary ILS runway, with a takeoff distance available of 11,037 feet. The Stockton Metropolitan Airport also has a 4,458-foot-long, 75-foot-wide general aviation runway. Six air carrier gates adjoin the 44,355-square-foot terminal building.

Rail is a critical link to the full-service transportation network available in San Joaquin County. The network includes approximately 200 miles of Class I railroads owned by UPRR and Burlington Northern Santa Fe (BNSF). San Joaquin County also features approximately 50 miles of short-line railroads, the Stockton Terminal and Eastern Railroad and the Central California Traction Company (CCT). Additionally, the California Northern Railroad (CFNR) operates the former Southern Pacific West Side line between Tracy and Los Banos in Merced County.

Figure 1.6 San Joaquin County Airports
Regulatory Setting

A number of state and federal requirements govern the Plan. A few of the major requirements are summarized below.

MAP-21

MAP-21 requires the federally designated metropolitan planning organizations (which is San Joaquin Council of Governments (SJCOG) for the San Joaquin region) to develop regional planning documents that incorporate the metropolitan planning process and consider the following eight federal planning factors:

1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

2) Increase the safety of the transportation system for motorized and non-motorized users.

3) Increase the security of the transportation system for motorized and non-motorized users.

4) Increase the accessibility and mobility of people and for freight.

5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.

6) Enhance the integration and connectivity of the transportation system, across and between modes, people and freight.

7) Promote efficient system management and operation.

8) Emphasize the preservation of the existing transportation system.

BNSF's Stockton and UPRR's Lathrop intermodal freight transfer terminals are two of only 12 such facilities in California and two of only three inland facilities in the Central Valley.
Federal Clean Air Act

The act provides regulations for air emissions from stationary and mobile sources. The law authorizes the US Environmental Protection Agency to establish National Ambient Air Quality Standards (NAAQS) to protect public health and welfare and to regulate emissions of hazardous air pollutants. The Plan must forecast transportation emissions and must demonstrate emissions are within the established State Implementation Plan (SIP) budget limits for ozone, PM2.5, PM10, and carbon monoxide. The Plan’s compliance with these requirements is documented in the Regional Transportation Plan/Sustainable Communities Strategy Air Quality Conformity Determination.

Title VI of the Civil Rights Act of 1964

This law set a standard that authoritatively outlawed discrimination in the conduct of all federal activities. It reads as follows: “No person in the United States shall, on the ground of race, color, or national origin be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program of activity receiving Federal financial assistance.”

People concerned that everyone within the US deserves equal protection under the country’s federal laws created the term “environmental justice.” President Clinton issued Executive Order 12898 in 1994 in response to this concern. The order directs each federal agency to review its procedures and to make environmental justice part of its mission by identifying and addressing the effects of all programs, policies, and activities on minority and low-income populations.

The Federal Highway Administration (FHWA) has set policies for integrating environmental justice principles into existing operations to address disproportionate, adverse effects on low-income and minority populations.
All federally funded transportation plans, projects, and decisions must involve an environmental justice assessment process that explicitly considers adverse effects or the potential of adverse effects on the environmental justice population. The Plan has an environmental justice analysis that documents the degree to which, to the extent possible, all people, regardless of race, color, national origin, or income, are protected from disproportionate negative or adverse impacts due to the program of projects listed in the Plan. In addition, this analysis also describes whether all neighborhoods have reasonable shares of the benefits from the proposed program.

**Senate Bill 375**

With the passage of Senate Bill (SB) 375 in 2008, metropolitan planning organizations were required to develop a Sustainable Communities Strategy (SCS). An SCS must demonstrate an ambitious, yet achievable, approach to how land use development and transportation can work together to meet greenhouse gas emissions reduction targets for cars and light trucks. These targets set by the California Air Resources Board call for the region to reduce per capita emissions 5 percent by 2020 and 10 percent by 2035. If a metropolitan planning organization is unable to meet the targets through the SCS, then an alternative planning strategy demonstrating how targets could be achieved must be developed.

As the metropolitan planning organization for San Joaquin County, the SJCOG has developed its first Regional Transportation Plan (RTP) that incorporates an SCS. This document refers to the San Joaquin RTP/SCS simply as “the Plan” throughout.
It is important to note that while the RTP builds the SCS as a new element along with the traditional policy element, action element, and financial element, this is not the first plan with sustainability features. San Joaquin’s RTP has always embodied policies and strategies committed toward sustainability through air quality measures, environmental preservation and conservation objectives, and growth management strategies. The Plan will guide the San Joaquin region toward a more sustainable future by integrating land use, housing, and transportation planning to build more sustainable communities. Some characteristics of these communities include location in compact development with a focus on infill development, and access to travel options including transit and bike/pedestrian facilities. Sustainability also requires efficiently located communities to better utilize public infrastructure and resources while minimizing impacts to prime farmland.

The most significant change resulting from SB 375 is the creation of California Environmental Quality Act (CEQA) streamlining incentives to assist and encourage residential and mixed-use housing projects consistent with the SCS and, in particular, in transit priority areas. CEQA benefits available under SB 375 are for residential and residential mixed-use projects that are consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in the SCS.

**California Environmental Quality Act**

The Plan must also comply with CEQA, which requires that governmental agencies consider the cumulative regional impact and analyze the environmental consequences of the project. Recognizing the Plan is a program-level EIR which comprises a package of projects within a single program, the SJCOG is responsible as the lead agency to prepare the environmental review of the program of projects.

**Delta Reform Act**

Enacted in November 2009, this act created the Delta Stewardship Council charged with developing, adopting, and implementing the Delta Plan. This plan serves to address strategies of providing reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystems. The Delta Stewardship Council is also responsible for advising local and regional agencies regarding consistency of their planning documents to the
Delta Plan. The act requires that “covered actions,” as defined by the act, and which include plans, programs, or projects within the primary or secondary zones of the Delta, be consistent with the Delta Plan. The SJCOG is required to ensure consistency of the Plan to the adopted Delta Plan. Local project exemptions from Delta Plan requirements are possible if there is a determination that they are consistent with the Plan.

A Regional Plan with Local Input

This Plan embodies local visions through local input and a highly collaborative approach. Local experts in the fields of housing, land use, environment, and public works participated in the Plan development through a formal advisory committee or through other avenues of public feedback (e.g., workshops, online input through social media or web surveys, public comment opportunities at SJCOG committees and Board meetings). These interests provided perspectives on economic development, environmental preservation, air quality, public health, environmental justice, and farmland conversation/preservation that all helped to reshape existing RTP goals, policies, and objectives. A series of public workshops to get feedback from the public also guided the direction of transportation investments for the region within the context of San Joaquin’s future population, employment, and housing growth. All of this feedback helped shape the transportation vision of the future.

In addition, emphasis on local land use control surfaced throughout the civic engagement process. The Plan is a transportation investment strategy through 2040, identifying transportation needs to keep pace with anticipated growth and development as well as advancing various sustainability goals. It identifies the funding for these transportation projects in its financial element. While conceptual land use scenarios are essential in building the transportation system and then determining reasonable funding expectations, the Plan does not permit or deny any development projects currently under review or future proposals.

The elements of that vision for sustainability helped to refine the following overarching goals that guide the Plan:

A. Enhance the Environment for Existing and Future Generations and Conserve Energy
B. Maximize Mobility and Accessibility
C. Increase Safety and Security
D. Preserve the Efficiency of the Existing Transportation System
E. Support Economic Vitality
F. Promote Interagency Coordination and Public Participation for Transportation Decision-Making and Planning Efforts
G. Maximize Cost-Effectiveness
H. Improve the Quality of Life for Residents

The San Joaquin Council of Governments does not have local land use authority nor does the Plan mandate any changes to local zoning or general plans.
Aligning Sustainability Goals with a Transportation Investment Strategy

The Plan aligns the sustainability goals with transportation investment strategies by focusing on the following building blocks:

- Identifies land use patterns that encourage infill development and compact development.
- Makes provisions for new residential development growth that makes shifts from single-family development to more multi-family development.
- Emphasizes focus on a multimodal strategy of investments that de-emphasizes highway or roadway expansion but still delivers a system to reduce vehicle miles travelled and peak hour traffic congestion.
- Provides specifically a multimodal transportation network of bus and rail transit, freeway/highway/local roadways, bikeways, walkways, and streetscape projects within available financial resources.
- Increases transit operational efficiency through investments in bus and rail transit service that includes more frequency of transit service for all income levels as well as expanded transit service.
- Promotes transit-oriented development and, furthermore, provides for intermodal connections near or within transit-oriented development such as park-and-ride lots and bicycle lanes/paths.
- Invests in high-tech applications or projects that allow motorists to choose travel options and allow local and state agencies to more quickly respond to incidents on the roadway.
- Underscores the importance of maintenance through recognition that routine and preventative maintenance is an integral piece toward transportation efficiency.
- Increases active transportation project investments to facilitate public health and active communities.
- Encourages new housing and jobs in urbanized areas to better integrate housing, land use, and transportation facilities.
- Creates and sustains jobs, both directly and indirectly.
- Invests in infrastructure that improves access to intermodal facilities, airports, the Port of Stockton, and commercial hubs key to goods movement.
Regional Collaboration Leads to Regional Solutions

The Plan demonstrates that the region can meet and exceed the greenhouse gas targets imposed under SB 375. It further shows that those targets can be achieved with land use patterns focused on compact development that more effectively link transportation systems.

Just as importantly, the Plan is one of place-making. It harnesses the region’s collaborative spirit to create places that enable people to live close to where they work. It encourages healthy and active communities, and at the same time, attracts and maintains businesses that can rely on an optimized transportation system to move and receive goods.

Through extensive civic engagement and involvement of local jurisdictions, businesses, environmental, and housing experts, the Plan builds a transportation future where transportation infrastructure can coexist with the goals of habitat conservation, farmland preservation, efficient energy consumption, and economic vitality.