

## 4.14 Transportation

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This section describes the current transportation conditions and examines the effects of the changes in projected land use and transportation projects included in the 2018 RTP/SCS on transportation conditions in 2042. This section evaluates the impacts related to transportation such as changes in travel times, accessibility to jobs, traffic congestion, vehicle miles traveled (VMT), and transit utilization that may result from the implementation of the 2018 RTP/SCS.

### 4.14.1 Setting

The environmental setting is an assessment of existing conditions relevant to transportation. It includes a description of the highway and street system, the public transit system and services as well as “active mode” (walking and biking) facilities. San Joaquin’s airports and goods movement systems (rail, truck, port, and air) are also essential parts of the regional transportation network and the Regional Transportation Plan (RTP). This section also includes baseline data on the use of these transportation networks.

San Joaquin’s existing regional transportation networks and facilities include an intermodal system consisting of a state and interstate highway system, an inland port, bike and bus routes, rail, including passenger and freight, and commercial passenger airline service. Figures highlighting these facilities, locations, and routes are included in the 2018 RTP/SCS in Appendix L Modal Discussion.

#### a. Physical Setting

San Joaquin County’s transportation system has been designed to meet the multiple needs of both residents and businesses. Geographically near the center of the County, San Joaquin County is strategically positioned and provides key routes and linkages for the movement of goods throughout California and the rest of the United States. The County has one of the few deep-water ports within the State at the Port of Stockton, an airport which serves international markets, key highway corridors, and the hub for a number of major railroads. Given its location, San Joaquin County serves as a major transportation center not only for warehousing and distribution activities, but also as a source of more affordable housing for employees working in the Bay Area.

Several major routes traverse the County and provide important links for employees and goods to other parts of California, such as the Bay Area and Sacramento. These major routes include Interstates I-5, 205, and 580, as well as State Routes 99, 120, 12 and 4. In addition, the I-205/I-580 corridor serves as a major gateway between the Bay Area/Silicon Valley and the County.

The County also has six airports open to the public that offer a variety of aviation services. Stockton Metropolitan Airport offers general aviation services along with commercial passenger service to Las Vegas, Nevada.

A number of rail lines traverse the County and provide services for both passengers and freight. A partnership between the Union Pacific and the Burlington Northern and Santa Fe (BNSF) Corporation operates an intermodal shipping yard providing a key connection for truck-rail freight movement. Amtrak provides passenger service to the County, while Altamont Commuter Express (ACE) provides direct commuter rail service to Silicon Valley (with stops in Stockton, Lathrop, Manteca, and Tracy). Figure 15 in Section 4.13, *Noise* illustrates all rail lines going through the County.

## **b. Commute Patterns and Travel Characteristics**

Primarily due to San Joaquin County's location in California, the Central Valley has made the County a major center for distribution. Economic growth, both within the County and in areas such as Silicon Valley, Stanislaus County, and Sacramento, has led to increased commuter and freight traffic between the County and these regions. Of the 277,798 residents representing the employed workforce, approximately 83,339 commute outside of the region to their employment site.

Many work related daily trips are made in automobiles with origins beginning and ending in San Joaquin County. There are 230,784 jobs in San Joaquin County. Of those, 134,114 are occupied by San Joaquin County residents. The number of employed San Joaquin County residents that commute outside of the region for work is 131,700. 10.8% of external jobs are in Alameda County, 5.9% in Sacramento County, 5.9% in Stanislaus County, 5.7% in Santa Clara County, and 21.3% working in other counties. Of the jobs in San Joaquin County, 96,670 are filled by people residing outside of the region. The largest labor exporters to San Joaquin County are Stanislaus County (8.4%) and Sacramento County (7.2%).

Of the employed San Joaquin County residents, 39,951 car or vanpool to work on a daily basis. Other modes of travel (e.g., bus, fixed rail, motorcycle, and biking) account for 13,396 daily trips to work. 10,906 people work at home. Although carpooling and vanpooling represents 14.4 percent of all daily work related trips, 76.9 percent of all daily work related trips are made by a single occupancy vehicle. While, public transit, such as local and interregional bus lines, accounts for approximately 1.4 percent of commute trips in the County and walking and biking account for 1.9 and 0.5 percent, respectively

While public transit accounts for only a small percentage of daily trips, use of public transit had been growing until the economic recession of 2008. Transit service provision had been increasing since 2004, but the current recession has delayed implementation of continued planned increases. Air travel has continued to be important in the County. Commercial passenger air service was reestablished at Stockton Metropolitan Airport in June of 2006, which also provides air cargo services. Business air travel has increased at the Tracy Airport, and several of the other airports have experienced a strong demand for hangars and other general aviation services and facilities.

## **County Highways and Roadways**

San Joaquin County has an established network of roadways that serve the transportation needs of residents, visitors, and businesses. There are six major freeways and highways in the area: I-5, I-205, State Route (SR)-99, SR-4, SR-12, and SR-120. Interstate (I)-5 and SR-99 are the major north-south routes that lead north to Sacramento and south to Stanislaus County and the rest of the San Joaquin Valley. SR-12, SR-4, and SR-120 are east-west routes connecting between I-5 and SR-99 and beyond. Interstate 205 runs westward from I-5 and connects with I-580, which continues over the Altamont Pass and into the Bay Area.

To evaluate the functioning of the transportation system, the concept of Level of Service (LOS) is used to measure how well traffic flows on roadways. LOS A reflects uncongested vehicle operation and the free flow of traffic. At the other end, LOS F experiences long delays and severe congestion. Table 41 summarizes the LOS definitions for roadways. Performance measures related to LOS are reported later in this chapter.

**Table 41 Level of Service Definitions/Characteristics**

LOS	Description
A	Free flow conditions; individual users are virtually unaffected by the presence of other vehicles.
B	Stable flow, but the presence of other vehicles in the traffic stream becomes noticeable.
C	Stable flow, but the operation of individual users becomes affected by interaction with other vehicles.
D	Stable flow, but higher density with maneuverability restricted by congestion and reduced travel speed.
E	Operating conditions at or near the capacity level.
F	Represents forced or a breakdown in traffic flow.

Source: Highway Capacity Manual 6<sup>th</sup> Edition Transportation Research Board, 2016.

## Railroads

Rail lines in San Joaquin County are used for both passenger and freight services. Several major railways stretch through large portions of the County, including the Union Pacific and BNSF Railroads. Stockton serves as a hub for many of these railways and acts as a major distribution center for freight shipped to locations throughout California and the United States. Figure 15 in Section 4.13, *Noise*, illustrates all rail lines going through the County.

The Altamont Corridor Express (ACE), formerly the Altamont Commuter Express, is a commuter rail service in California connecting Stockton with San Jose. It is named for the Altamont Pass, an area through which it travels. The service commenced on October 19, 1998, with two trains daily in each direction (weekdays only). The frequency was 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 10 stops along its 86 miles route; present travel time is about 2 hours and 10 minutes from end-to-end. The tracks are owned by Union Pacific. The ACE transit service uses Bombardier Bi-Level Coaches and “MPI F40PH-3C” locomotives. It is managed by the San Joaquin Regional Rail Commission. ACE is exploring the possibility of expanding service into the Central Valley between Modesto and Sacramento line as well as Stockton and Pittsburg.

Within the 2018 RTP/Sustainable Communities Strategy (SCS), approximately \$604 million in passenger rail transit operations and \$554.5 million in passenger rail transit capital investments are planned. Over half of these funds are targeted for expanding the current passenger rail system.

## Airports

San Joaquin County has six public airports that serve a variety of needs including air cargo, agricultural shipping, crop-dusting, passenger and corporate flights, flight training, and recreation uses. These airports are:

- Kingdon Executive Airport—Lodi
- Lind’s Airport—Lodi
- Lodi (Precissi) Airpark
- New Jerusalem Airport—Vernalis
- Stockton Metropolitan Airport—Stockton
- Tracy Municipal Airport—Tracy

Stockton Metropolitan, Tracy Municipal, and New Jerusalem (outside Tracy) are all public airports while Lind's Airport, the Precissi Airpark, and the Kingdon Airpark are privately owned. Stockton Metropolitan Airport is the largest airport in the County, offering limited passenger service to Las Vegas via Allegiant Air. In addition to Las Vegas, Stockton Municipal Airport has commercial service to Hawaii. The Tracy Municipal Airport is used for general aviation such as business flights, flight training, and recreation uses. While Lind's Airport in Lodi is privately owned, it is one of the most active public access airports in the County. The airport accommodates general aviation aircraft, including business jets. The remaining airports are used for small aircraft including business flights and crop-dusting activities. There exists a great demand for aircraft hangar space at both Lodi and Tracy airports.

## **Bus Transit**

The SJRTD provides bus service throughout the County with the Hopper service. The Hopper provides fixed-route service to the cities of Stockton, Lathrop, and Manteca as well as to the community of French Camp. Additional intercity bus lines provide service to Tracy. SJRTD also offers dial-a-ride services for both the general public and for the elderly/disabled throughout the County. These dial-a-ride services provide transportation seven days a week during nontraditional bus hours in rural areas not served by fixed-route lines. The dial-a-ride programs provide connection services to fixed-route lines and to passenger rail (such as ACE and Amtrak).

SJRTD's Interregional Commuter Service offers bus service to passengers traveling to Alameda, Contra Costa, Santa Clara, and Sacramento counties, including feeder service to BART for employees working in San Francisco and the East Bay. The SJRTD intercity route 91 connects Ripon, Manteca, and Stockton and routes 26 and 90 connect Tracy, Lathrop, French Camp, and Stockton. Routes 93 and 23 link Stockton to Lodi. The interregional service is designed to meet the needs of commuters who travel distances greater than 50 miles one way. Greyhound and Amtrak also provide interregional bus service.

Lodi's Grapeline, the Tracy Tracer, Manteca Transit, and smaller transit services in the cities of Escalon (eTrans) and Ripon (Blossom Express) also provide bus service. 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.

Within the 2018 RTP/Sustainable Communities Strategy (SCS), approximately \$1.7 billion in passenger bus transit operations and \$681.5 million in passenger bus transit capital investments are planned. Over half of these funds are targeted for expanding passenger bus service.

## **Other Transportation Systems**

The Port of Stockton is the second largest inland seaport on the West Coast. The port is located on the Stockton Deep Water Ship Channel, 75 nautical miles east from the Golden Gate Bridge. The Port is one mile from I-5, and is near interconnecting major highway systems. Rail service for the Port is provided by two transcontinental railroads: the Union Pacific and the BNSF. The port serves as a major transportation center that encompasses a 600-acre operating area and can handle approximately 70 percent of all container ship types. The Port has berthing space for 10 vessels, 500,000 square feet of dockside transit sheds and shipside rail trackage, and 2.7 million square feet of warehousing for both dry bulk and general cargoes (including steel). Each warehouse is served by rail.

In 2012 SJCOG prepared Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan in coordination with its member agencies. The plan is compliant with the California Bicycle Transportation Act which allows all of SJCOG's member agencies to be eligible for state active transportation funding. All of SJCOG's member local agencies have developed Class I, II, or III bicycle facilities to serve bicycle travel. Most agencies including the County and the City of Stockton have long-range plans defining an envisioned future bicycle system. The total investment in active transportation infrastructure provides for over 800 miles of new Class I, II, or III bicycle lanes throughout San Joaquin County. The total revenues made available to support active transportation and complete streets represent a 13.5 percent increase over the 2014 Plan. This includes education, encouragement, and enforcement programs in support of walking and bicycling as well as planning and transit integration projects.

## Local Transportation Systems

The following provides a discussion of the existing transportation services in the cities in San Joaquin County. This includes major roadways, highways, rail service, public transit, and bikeways.

### *Escalon*

Escalon, located toward the southeastern edge of the County, is centered at the intersection of SR-120, which runs east-west, and Escalon-Bellota Road/McHenry Avenue, which runs north-south. Passing through the City in a northwest-southeast direction is the BNSF railroad, which carries both freight and Amtrak passenger trains; these trains do not make regularly scheduled stops in the City.

SR-120 and Escalon-Bellota/McHenry serve as Escalon's main arterials. Escalon is primarily a city with rural character. The City operates eTrans flexible fixed-route and demand responsive services. This service also meets the Modesto Area Express (MAX) and Stanislaus Regional Transit (StaRT) services three times per day. A park-n-ride lot is located in Escalon as part of SJRTD's San Joaquin Commuter service to Livermore Labs and for SJRTD's Hopper deviated fixed route service that goes to Manteca, Lathrop, and French Camp.

### *Lathrop*

Lathrop is located at a regional crossroads of freeway, rail, air, and local street systems in the south central section of San Joaquin County. Passing through or near the City are I-5 and I-205, SR-120 and SR- 99, as well as transcontinental lines for both the Southern Pacific and Union Pacific Railroads. All intersections of railroads and public roads in Lathrop are protected by automatic signals.

Urban development in the City lies primarily between I-5 and the Union Pacific Railroads which traverse the City in a north-south direction, but which curve toward the west in an area south of the City. Current east-west arterials include Roth Road, Lathrop Road, and Louise Avenue. Major north-south arterials are Harlan Road (along I-5) and Seventh Street (between Lathrop Road and Louise Avenue). SJRTD buses provide public transit between the City and surrounding communities. The ACE station on Yosemite Avenue provides access to three roundtrip commuter trains to destinations in Silicon Valley.

### *Lodi*

The dominant transportation feature in Lodi is SR-99, which passes through the City's eastern boundary, northward to Sacramento and southward to Stockton (and the rest of the County). Intersecting with SR-99 is SR-12/Kettleman Lane, a major east-west road providing access to

Fairfield in the west, and to eastern San Joaquin County and the Sierra Nevada Mountains in the east. Two rail services operate lines which pass through Lodi, though these do not serve the City directly. Southern Pacific Railroad (SPRR) Company operates a north-south line west of SR-99, as well as two lines which intersect the north-south line at Lockeford and Sacramento Streets. The Central California Traction Company also operates a north-south line along the City's eastern edge that connects with SPRR's north-south line, via a branch along Lodi Avenue.

Lodi's street system follows a grid pattern with major north-south arterials that include Lower Sacramento Road, Ham Lane, Hutchins Street, Church Street, Stockton Street, Central Avenue, and Cherokee Lane. East-west arterials include Turner Road, Lockeford Street, Elm Street, Pine Street, Lodi Avenue, Kettleman Lane (SR-12), and Harney Lane. Public transit is provided through Lodi's Grapeline Fixed Route and Dial-A-Ride service. The bus service is available to the general public and serves Lodi and outlying areas with five routes. Additional service is provided by SJRTD's Intercity Route 23. The SJRTD Hopper route 93 also provides serviced from Lodi to Stockton. The SJRTD Interregional Commuter Services and Greyhound Bus Lines connect Lodi with Sacramento and other areas in and around the County.

### *Manteca*

SR-99, which curves along the City's eastern border, and SR-120, dominates Manteca's circulation system. SR-120 provides access to nearby I-5, approximately 4 miles to the west. Within the Manteca planning area, SR-99 has interchanges at SR-120, East Yosemite Avenue, Lathrop Road, and French Camp Road. Between I-5 and SR-99, SR-120 has interchanges at Airport Way and Manteca Road. Major north-south arterials in the Manteca planning area are Airport Way, Union Road, Manteca Road, Austin Road, and Jack Tone Road. Major east-west arterials include Lathrop Road and Louise Avenue (which also serve as arterials in the City of Lathrop), as well as West Yosemite Avenue, Woodward Avenue, and West Ripon Road.

Manteca Transit began intra-city operations on November 1, 2006. The current fleet consists of five cutaway buses, and includes two fixed routes and Dial-A-Ride services. Within the City of Manteca, SJRTD intercity route 91 and Hopper route 27 connects Manteca with Ripon and Stockton.

Two rail lines run through Manteca. The SPRR line runs diagonally from northwest to southeast, and the Tidewater Southern line parallels the SPRR line through town, but then connects with the main Union Pacific line at French Camp in the north. The passing of trains on these tracks often lead to the obstruction of vehicular traffic on major roads in the City. The City is also served by the ACE commuter rail system with a station just across the border from Manteca on Yosemite Avenue in Lathrop.

### *Ripon*

SR-99 and the SPRR, which pass through the center of town diagonally from northwest to southeast, bisect Ripon's circulation system. Partial interchanges exist at Second Street and Wilma Avenue. Northwest of the City, at the Jack Tone Road overpass, there is a complete interchange, providing access to both the northbound and southbound directions of SR-99. There is a mainline railroad crossing at Jack Tone Road, and one spur track crosses a City street in the industrial area.

The Stanislaus River defines the City's southern edge and the only access across the river in or near the City is via the SR-99 bridge. In addition to SR-99, access to Ripon from the west is provided by West Main Street (West Ripon Road), from the east by Milgeo Avenue, and from the north by Stockton Avenue (North Ripon Road) and Manley Road. Jack Tone Road, north of West Main Street,

is an arterial roadway. Other portions of Jack Tone Road, Main Street, Second Street, and Stockton Avenue serve as minor arterials.

The City of Ripon does not operate a City bus service, but does operate a City van driven by volunteers for local, special, or regional trips (dial-a-ride). However, SJRTD Hopper route 91 connects Manteca and Ripon to Stockton.

### *Stockton*

Stockton's circulation system is the most extensive in the County with the Central Valley's two main north-south routes, I-5 and SR-99, passing through Stockton. In addition, SR-4, SR-26, and SR-88 also pass through the City in an east-west direction. SR-4, known as Charter Way, is Stockton's major east-west link between I-5 and SR-99. Other major east-west arterials in Stockton include Eight Mile Road, Hammer Lane, Benjamin Holt Drive, March Lane, Harding Way, and Oak Street. Major north-south arterials include Thornton Road, Pershing Avenue, El Dorado/Center Street, West Lane, and Airport Way.

Several major railroads converge in Stockton, including the BNSF, Southern Pacific, and Union Pacific Railroads, as well as four local rail companies. Stockton is also served by Amtrak rail passenger trains on a line between Oakland and Bakersfield, and by ACE, which provides service from Stockton to San Jose three times daily.

Public transportation in Stockton is provided by SJRTD, which serves the City and the surrounding unincorporated areas. SJRTD provides 40 fixed bus routes and a dial-a-ride demand response service. The fixed-route service provides connections throughout Stockton and San Joaquin County including links to major employers, colleges, hospitals, and downtown Stockton. SJRTD also provides dial-a-ride service for the elderly and handicapped. The recently completed SJRTD Downtown Transit Center marked the establishment of the Metro Express Service, a form of Bus Rapid Transit (BRT) that operates along the Pacific Avenue Corridor.

### *Tracy*

Tracy is located within a triangle made by three interstate highways: I-205 on the north, I-5 on the east, and I-580 from the west to the southeast. Interstates 205 and 580 merge just west of the Alameda/San Joaquin County line, and comprise a major east-west corridor to the Bay Area. Access to Tracy from I-580 is provided at Corral Hollow Road, Patterson Pass Road, and Chrisman Road. Access to the City from I-205 is provided at Patterson Pass Road, Eleventh Street, Grant Line Road, Tracy Boulevard, and MacArthur Drive. Major north-south arterials in the Tracy planning area include Corral Hollow Road, Tracy Boulevard, and MacArthur Drive. East-west arterials include Grant Line Road and Eleventh Street.

Southern Pacific operates two rail lines which cross in an "X" formation at MacArthur Drive, just south of Eleventh Street. Union Pacific operates a third line that runs parallel to Linne Road, south of Tracy. This line then bends up toward the northeast intersecting with the northwest-southeast SPRR line at the Tracy Army Defense Depot.

Public transit is provided through Tracy's Tracer Fixed Route and Paratransit service. The bus service is available to the general public and services Tracy with two routes. SJRTD Hopper route 90 services the city with connection between Stockton, Lathrop, and Tracy. SJRTD intercity route 26 provides service connecting the cities of Lathrop, Ripon, Stockton, Tracy, and Manteca.

Additional intercity and regional service is provided by SJRTD's General Public Dial-A-Ride, Elderly and Handicapped Dial-A-Ride, the San Joaquin Commuter inter-regional bus service, Greyhound Bus Lines, and Amtrak. Commuter rail transportation to San Jose and the rest of Silicon Valley as well as Lathrop, Manteca, and Stockton is provided by ACE. From the station on Tracy Boulevard, ACE provides service of three roundtrips daily

### c. Regulatory Setting

#### Federal

##### *National Environmental Policy Act*

The National Environmental Policy Act (NEPA) is implemented by regulations included in the Code of Federal Regulations (40 CFR § 1500 et seq.), which require careful consideration of the harmful effects of federal actions or plans, including projects that receive federal funds, if they may have a significant adverse effect on the environment. NEPA mandates that all federal agencies carry out their regulations, policies, and programs in accordance with NEPA's policies of environmental protection. NEPA encourages the protection of all aspects of the environment and requires federal agencies to utilize a systematic, interdisciplinary approach to agency decision-making that will ensure the integrated use of natural sciences such as geology. While NEPA compliance is not required for the project, NEPA compliance will be required for transportation improvement projects that will be financed using federal funds. Some development projects (such as low-income housing) also use federal funds and are subject to NEPA. The regulations also require projects requiring NEPA review to seek to avoid or minimize adverse effects of proposed actions, and restore and enhance environmental quality as much as possible.

##### *Fixing America's Surface Transportation Act*

Fixing America's Surface Transportation (FAST) Act was signed into law in December 2015 (Public Law 114-94) and builds on the changes in federal legislation governing transportation policy and funding since 1991 (ISTEA, NEXTEA, SAFETEA-LU and MAP-21). The FAST Act authorizes \$305 billion through fiscal year 2020 for highways, highway and motor vehicle safety, public transportation, rail and research and technology programs and provides a dedicated source of federal funds for freight projects. The FAST Act expands the scope of consideration of the metropolitan planning process to include: consideration of intercity transportation, including intercity buses, intercity bus facilities and commuter vanpool providers; improving transportation system resiliency and reliability; reducing or mitigating the stormwater impacts of surface transportation; and enhancing travel and tourism. In addition, it requires strategies to reduce the vulnerability of existing transportation infrastructure to natural disasters.

Under the FAST Act, the U.S. Department of Transportation requires that MPOs, such as AMBAG, prepare long-range transportation plans and update them every four years if they are in areas designated as "nonattainment" or "maintenance" for federal air quality standards. Before enactment of the FAST Act and its predecessor, MAP-21, the primary federal requirements regarding long-range transportation plans were included in the metropolitan transportation planning rules (23 CFR Part 450 and 49 CFR Part 613). The FAST Act makes a number of changes to the statutes that underpin these regulations. Per federal requirements, long-range transportation plans must:

- Be developed through an open and inclusive process that ensures public input; seeks out and considers the needs of those traditionally under served by existing transportation systems; and consults with resource agencies to ensure potential problems are discovered early in the planning process;
- Be developed for a period of not less than 20 years into the future; long-range transportation plans must reflect the most recent assumptions for population, travel, land use, congestion, employment and economic activity;
- Have a financially constrained element, transportation revenue assumptions must be reasonable, and the long range financial estimate must take into account construction-related inflation costs;
- Include a description of the performance measures and performance targets used in assessing the performance of the transportation system;
- Include a system performance report evaluating the condition and performance of the system with respect to performance targets adopted by the state that detail progress over time;
- Include multiple scenarios for consideration and evaluation relative to the state performance targets as well as locally-developed measures.
- Conform to the applicable federal air quality plan, called the State Implementation Plan, for ozone and other pollutants for which an area is not in attainment; and
- Consider planning factors and strategies in the local context (California Transportation Commission, 2010)

#### *Transportation Security Administration*

The Transportation Security Administration (TSA) is a component of the DHS and is responsible for security of the nation's transportation systems. With state, local, and regional partners, the TSA oversees security for highways, railroads, buses, mass transit systems, and ports. A vast majority of its resources are dedicated to aviation security and especially screening passengers and baggage.

## **State**

#### *California Environmental Quality Act*

The California Environmental Quality Act (CEQA) defines a significant impact on the environment as a substantial, or potentially substantial, adverse change in the physical conditions within the area affected by the project. Land use is a required impact assessment category under CEQA. CEQA documents generally evaluate land use in terms of compatibility with the existing land uses and consistency with local general plans and other local land use controls (zoning, specific plans, etc.).

#### *California Transportation Commission Regional Transportation Plan Guidelines*

Under Government Code Section 14522, the CTC is authorized to prepare guidelines to assist in the preparation of RTPs. The CTC's RTP guidelines suggest that projections used in the development of an RTP should be based upon available data (such as from the Bureau of the Census), use acceptable forecasting methodologies, and be consistent with the Department of Finance baseline projections for the region. The guidelines further state that the RTP should identify and discuss any differences between the agency projections and those of the Department of Finance.

The most recent update to the RTP guidelines was published in 2017, and includes new provisions for complying with Senate Bill 375 (see below), as well as new guidelines for regional travel demand

modeling. The regional travel demand model guidelines are “scaled” to different sizes of metropolitan planning organizations (MPOs). SJCOG is included in the “D” grouping of the MPOs that have populations of between 500,000 and 1 million. The guidelines for regional travel demand modeling for the “D” group, and include (among many other things) detailed guidelines and standards for validation and sensitivity testing of the model.

#### *Senate Bill 375*

Sen. Bill No. 375 (Stats. 2008, ch. 728) (SB 375) requires MPOs to prepare a Sustainable Communities Strategy (SCS) that demonstrates how the region will meet its greenhouse gas (GHG) reduction targets through integrated land use, housing and transportation planning. Specifically, the SCS must identify a transportation network that is integrated with the forecasted development pattern for the plan area and will reduce GHG emissions from automobiles and light trucks in accordance with targets set by the California Air Resources Board. The targets for SJCOG (along with other San Joaquin Valley MPOs) are a 5 percent reduction in per capita GHG emissions by 2020, and a 10 percent reduction by 2035, in both cases compared with 2005 levels.

#### *Senate Bill 743*

SB 743 changes the way that public agencies evaluate the transportation impacts of projects under CEQA, recognizing that roadway congestion, while an inconvenience to drivers, is not itself an environmental impact (see Pub. Resource Code, § 21099, subd. (b)(2)). SB 743 provides opportunities to streamline CEQA for qualifying urban infill development near major transit stops in metropolitan regions statewide. A transit-oriented infill project can be exempt from CEQA if consistent with a specific plan for which an EIR was prepared, and also consistent with the use, intensity, and policies of an SCS or Alternative Planning Strategy that is certified by the CARB as meeting its greenhouse gas reduction targets. A city or county may designate an “infill opportunity zone” by resolution if it is consistent with the general plan and any applicable specific plan, and is a transit priority area within the adopted SCS or Alternative Planning Strategy. This infill opportunity zone is then exempt from level of service standards in the congestion management plan.

Furthermore, under the bill parking impacts are no longer considered significant impacts on the environment for select development projects within infill areas with nearby frequent transit service.

In August 2014, the Governor’s Office of Planning and Research circulated its draft changes to the State CEQA Guidelines implementing SB 743 for public comment. Revised draft guidelines were released on January 20, 2016. In addition to new exemptions for projects that are consistent with specific plans, the draft SB 743 guidelines replace congestion based metrics, such as auto delay and level of service, with Vehicle Miles Traveled as the basis for determining significant impacts, unless the guidelines provide specific exceptions. Following any revisions the Governor’s Office of Planning and Research deems appropriate, it will submit the draft guidelines to the Natural Resources Agency for commencement of a formal rulemaking process.

#### *Assembly Bill 1358*

AB 1358, also known as the Complete Streets Act of 2008, amended the California Government Code Section 65302 to require that any substantive revisions to a city or county’s Circulation Element include provisions for accommodations of all roadway users, including bicyclists and pedestrians.

### *California Bicycle Transportation Act*

The California Bicycle Transportation Act of 1994 requires all cities and counties to have an adopted bicycle master plan to apply for Bicycle Transportation Account funding source.

### *California Department of Transportation (Caltrans)*

Caltrans, in conjunction with the California Highway Patrol (CHP), develops, maintains, and operates the State Highway System within San Joaquin County. San Joaquin lies within District 6, which is headquartered in Fresno.

### *California Congestion Management Program*

The Congestion Management Program (CMP) is the State mandated program (Government Code 65089) aimed at reducing congestion on highways and roads in California. The CMP establishes a designated roadway network of regional significance, roadway service standards, multi-modal performance standards and a land use analysis element to identify and mitigate multijurisdictional transportation impacts resulting from local land use decisions. Federal, State and local transportation funding is contingent upon local agency compliance with the CMP. SJCOG is the designated Congestion Management Agency for San Joaquin County.

## **Local**

### *2014 Regional Transportation Plan*

The 2014 Regional Transportation Plan (2014 RTP) was the most recent regional transportation plan adopted by SJCOG. As a foundation for this RTP, many of the policies and strategies from the 2014 RTP remain relevant and have been carried forward. RTP/SCS changes to the policies and strategies in the 2014 RTP were primarily made to ensure consistency of the 2018 RTP/SCS with SB 375 and to delete strategies that were completed since the 2014 RTP/SCS. Upon approval, the 2018 RTP/SCS will supersede all of the policies and strategies in the 2014 RTP. Therefore, the specific policies and strategies contained in the 2014 RTP are not included in this analysis.

### *Local Agency General Plans*

State law requires cities and counties to adopt general plans, which must incorporate a transportation element. A general plan's transportation element describes the acceptable operating standards, levels of service, roadway classifications, and transportation related goals and policies of the city or county. Transportation elements also typically address public transit, bicycle, and pedestrian facilities; by law, the transportation element must be compatible with the General Plan land element and must not conflict with any plan element. The performance measures used for evaluation of the RTP in this document are intended to supplement local standards by focusing explicitly on regional system performance.

### *San Joaquin County Traffic Impact Mitigation Fee*

The Traffic Impact Mitigation Fee (TIMF) is collected to finance transportation facilities needed to accommodate new or expanded development within the unincorporated areas of San Joaquin County. In January 1989, the Board of Supervisors adopted Ordinance 3452 establishing an infrastructure-financing program for the County TIMF. The Board of Supervisors has adopted changes to the TIF program by adopting resolutions.

## 4.14.2 Impact Analysis

### a. Methodology and Significance Thresholds

#### Significance Thresholds

For the purposes of this Program EIR, SJCOG has determined that adoption and/or implementation of the 2018 RTP/SCS would result in significant impacts to the transportation system, if any of the following would occur:

1. Conflict with the following measures of effectiveness for the performance of the circulation system:
  - a. Total daily hours of vehicle delay;
  - b. Total peak period Congested Vehicle Miles Travelled (CVMT);
  - c. Increase in active transportation trips
  - d. Increase in transit trips
  - e. Any increase in performance indicators a. and b. compared to future baseline without the project conditions would be considered a significant impact. Any decrease in performance measures c. and d. compared to existing future baseline without the project would be considered a significant impact.
2. Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the County congestion management agency for designated roads or highways.
3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
5. Result in inadequate emergency access.
6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

#### Methodology

Regional conditions for a number of key performance indicators form the basis for the transportation impacts analysis presented in this Program EIR. These indicators include VMT, roadway congestion (as measured by Level of Service [LOS]), vehicle hours of congestion, shares of transit and non-motorized trips, transit productivity, and miles of bicycle and pedestrian routes. These indicators have been important performance measures throughout the development of the RTP and the associated SCS, and all relate directly to the performance of the region's transportation system.

One "VMT" is one vehicle traveling on a roadway for one mile. Regardless of how many people are traveling in the vehicle, each vehicle traveling on a roadway within the region produces VMT.

For the purposes of the Program EIR, VMT is estimated and projected for a typical weekday. VMT has been a primary indicator of travel for policy-makers and transportation professionals for decades. Several features collectively make VMT a key performance measure

- First, it is relatively easy to calculate by counting traffic on roadways at different locations. It is one of the few measures of transportation performance consistently and comprehensively estimated and documented in the region.
- Second, VMT bears a strong and direct relationship to vehicle emissions, although the relationship is becoming more complex moving into the future. Electric and hybrid vehicles, along with state and federal policies pertaining to vehicle fuel efficiency and the formulation of vehicle fuels suggest that on a per VMT basis, emissions for most pollutants will decline relative to today. However, even if emissions per VMT improve, lower VMT will still mean lower emissions.
- Third, VMT can be influenced by policy in a number of different ways. By providing more attractive alternatives to driving alone, VMT can be reduced by shifting from vehicle to non-vehicle modes (i.e., from a car trip to a bike or walk trip), or from single-occupancy vehicle (SOV) trips to higher-occupancy vehicle (HOV) trips such as formal or informal carpooling or transit trip). VMT can be influenced by land use patterns as well. A better mix of residential, employment, education, and service uses in an area can allow people to accomplish their daily activities with less driving, and consequently, less VMT. Policies that aim to charge drivers user fees to cover the cost of services they use (such as parking) rather than have taxpayers and other third parties bear these costs also reduced VMT.
- Fourth, VMT correlates with travel time. The more miles driven, the more vehicles on the roadways at any given time and higher numbers of vehicles eventually result in longer travel times.

Transportation data was supplied by SJCOG based on forecasts developed using the Tri-County Valley Model Improvement Program (VMIP2) travel demand model (SJCOG Model). This three-county model (Merced, Stanislaus and San Joaquin Counties) characterizing the transportation environment was developed in accordance with and validated to state/federal standards including the 2017 California Transportation Commission RTP Guidelines.

Model inputs are listed below.

- Socioeconomic Data by Traffic Analysis Zone
- Roadway Network Characteristics by Functional Classification of Roadway
- Land Use and Accessibility for Auto Ownership Model
- Land Use, parking, Travel Demand Model (TDM), Walk and Bike for Mode Choice Model
- Transit Networks
- External Trips (inter-regional trips)

The model includes modules that incorporate household characteristics (size, number of workers, income, single-family or multi-family unit); auto ownership; trip generation; trip distribution; mode choice (e.g., single-occupant vehicle, multi-occupant vehicle, transit and active modes (walking and cycling)); and traffic assignment to the transportation network. The RTP/SCS foundation is comprised of recent household and job growth forecasts, market demand and economic studies, and transportation studies including SJCOG's Smart Growth Transit Oriented Development Plan, Goods Movement Study, and Regional Bike/Pedestrian Master Plan.

## b. Project Impacts and Mitigation Measures

This section describes generalized impacts associated with some of the projects anticipated in the 2018 RTP/SCS. Due to the programmatic nature of the 2018 RTP/SCS, a precise, project-level analysis of the specific impacts associated with individual transportation and land use projects is not possible. In general, however, implementation of proposed transportation improvements and future projects under the land use scenario envisioned by the 2018 RTP/SCS could result in transportation related impacts.

**Threshold 1:** Result in a substantial increase in VMT or Vehicle Hours of Delay (VHD) compared to future baseline without the project

**Impact T-1** DAILY HOURS OF VEHICLE DELAY AND TOTAL PEAK PERIOD CONGESTED VMT IN THE SJCOG REGION WOULD INCREASE BETWEEN FUTURE BASELINE 2015 CONDITIONS AND 2042 CONDITIONS WITH IMPLEMENTATION OF THE 2018 RTP/SCS. IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.

The 2018 RTP/SCS includes a series of individual improvement projects and programs (street and highway, transit, bicycle and trail, pedestrian and other projects) to help expand and enhance San Joaquin’s multi- modal transportation system. Table 42 provides expenditures in the 2018 RTP/SCS compared to the 2014 RTP/SCS.

**Table 42 Summary of RTP Investments**

Project Category	2018 RTP/SCS Expenditure (in millions)	2014 RTP/SCS Expenditure (in millions)	Percent Change
Roadway Operations, Maintenance, and Safety	\$4,448	\$3,875	14.8%
Transit	\$3,572	\$3,520	1.5%
Roadway Capacity (mainline, interchanges, regional roadways)	\$3,121	\$3,273	-4.6%
Active Transportation	\$320	\$282	13.5%
<b>Total</b>	<b>\$11,461</b>	<b>\$10,950</b>	<b>4.7%</b>

Source: SJCOG 2014 RTP

Table 43 shows changes in vehicle activity and system performance characteristics between 2015 and the horizon year of the plan (2042).

**Table 43 Vehicle Activity and System Performance**

Indicators & Measures	2015 Existing	2042 Plan	2015–2042 Percentage Change with Plan	2042 No Project	2042 Plan vs. No Project % Change
Total Population	726,060	1,050,218	44.65%	1,050,218	0.0%
Total VMT per Weekday (Miles, in Thousands)	17,991,590	23,273,168	29.36%	22,892,656	+1.66%
Congested Lane Miles (Level of Service E and F)	340	611	79.7%	732	-19.80%
Vehicle Hours of Delay	922,252	961,642	4.27%	1,170,789	-21.75%
<b>Other Indicators (Modeled Outcomes)</b>					
Public Transit (Daily Boardings)	22,350	30,277	35.47%	26,263	+15.28%
Bike+Walk (Non-Motorized)	149,103	219,716	47.36%	208,484	+5.39%
Single Occupancy Vehicle (SOV)	943,606	1,241,033	31.52%	1,243,783	-0.22%
High Occupancy Vehicles (HOV) 2+ per vehicle	1,305,270	1,769,721	35.58%	1,730,352	+2.28
Per Capita Vehicle Miles Traveled (VMT) (All Trips)	24.78	22.16	11.82%	21.8	+1.65%

Source: SJCOG, 2018; Caltrans Highway Performance Monitoring System (HPMS) for 2015 Existing VMT, California Public Road Data 2015

As shown in Table 43, implementation of the 2018 RTP in 2042 would not reduce VMT and levels of congestion relative to existing (2015) conditions. Overall VMT levels would rise by about one-half in 2042, reflecting San Joaquin’s substantial population gains during the 25-year period. However, this increase in absolute VMT would result in only a 4% increase in the number of hours motorists would experience congested conditions (defined by SJCOG’s RCMP Levels of Service (LOS) grades E and F.). Conversely, the number of congested lane miles measure would increase by more than 80 percent under the 2018 RTP/SCS compared to 2015 conditions.

Between 2015 and 2042 public transit boardings are projected to increase by more than one third, even though transit as a total share would remain constant to baseline conditions. The number of trips by bicycle and walking would increase by nearly 50% over baseline conditions increasing the total share of bike and walk trips from 4.87% in 2015 to 5.37% by 2042. Although the number of trips by single occupancy vehicles would increase by one-third between 2015 and 2042, the share of trips by single-occupancy vehicles is projected to decline by nearly a full percentage point. The percentage growth in high-occupancy vehicle (HOV) mode share would exceed the growth in single occupancy vehicle trips resulting in a HOV mode share of 59% - exceeding the 2015 baseline share of 58%. VMT per capita between 2015 and 2042 is projected to decrease by approximately 12 percent.

Thus, impacts on San Joaquin’s overall circulation system resulting from implementation of the proposed 2018 RTP/SCS are considered potentially significant. Measures intended to reduce vehicle travel and improve LOS are part of the 2018 RTP/SCS. These include increasing transit use ridesharing and other measures to reduce demand on the transportation system; investments in non-motorized transportation; seeking to optimize land use/transportation connection; other travel demand measures described in in local agency General Plans; and key roadway investments targeted to reduce congestion levels and improve LOS. Even with the inclusion of these projects and measures, transportation impacts under T-1 would be potentially significant.

## Mitigation Measures

For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures. These mitigation measures have been developed for the 2018 RTP/SCS program where applicable for all transportation projects. Cities in the SJCOG region can and should implement these measures, where relevant to land use projects implementing the 2018 RTP/SCS.

### *T-1(a) Reduced Vehicle Travel*

In addition to the current Tier 1 RTP projects, SJCOG shall continue to explore potential measures to reduce vehicular travel. Such measures can include, but are not limited to land-use strategies to reduce VMT, car-sharing programs, additional car and vanpool programs, and additional bicycle programs.

### *T-1(b) Evaluation of VMT*

Implementing and local agencies shall evaluate VMT as part of project specific review and identify and implement measures that reduce VMT including mixed use land uses and inclusion of alternative and active transportation facilities (bike racks, transit stops, and pedestrian amenities).

## Significance After Mitigation

If implementing agencies adopt Mitigation Measure T-1, impacts would be reduced although it is not anticipated impacts would be reduced to less than significant. Even with implementation of Mitigation Measures T-1(a) and T-1(b), substantial increases in VMT and congested lane miles would remain. Because this document evaluates impacts at the programmatic level, all project circumstances are not foreseeable. As appropriate, SJCOG will encourage implementing agencies to adopt measure T-1(a) and (b) through its Intergovernmental Review process. However, SJCOG cannot require the implementing agency to adopt these mitigation measures because such agencies are ultimately responsible to determine and adopt mitigation. Therefore, this impact remains significant and unavoidable.

**Threshold 2:** Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the County congestion management agency on designated roads or highways

**Impact T-2** IMPLEMENTATION OF THE TRANSPORTATION IMPROVEMENT PROJECTS AND THE LAND USE SCENARIO ENVISIONED BY THE 2018 RTP/SCS COULD CONFLICT WITH APPLICABLE CONGESTION MANAGEMENT PLAN PROGRAMS BY DECREASING THE LEVELS OF SERVICE OF ROADWAY OPERATIONS IN THE SJCOG PLANNING AREA. IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.

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The analysis of roadway operations takes the existing and forecasted traffic volumes on the study roadway segments and compares it to established level of service volume thresholds established in SJCOG's Regional Congestion Management Program (RCMP). RCMP roadways consist of the entire state highway system and selected local roadways of regional significance. LOS criteria takes into account variables such as traffic volumes, roadway capacity, and other considerations as appropriate. The RCMP establishes an LOS D standard for RCMP designated roadways. Facilities that exceed the LOS D threshold by operating at LOS E or F are considered deficient. LOS D numbers are

provided in Table 44 to show the percentage of lane miles nearing significance levels. Local agencies throughout San Joaquin County apply their own LOS standards for roadways in their jurisdictions.

**Table 44 Congested Lane Miles Summary**

LOS	Existing (2015)		Year 2042 No Project		Year 2042 Plan	
	Lane Miles	Percent	Lane Miles	Percent	Lane Miles	Percent
C or better	18,958	96.74%	18,492	92.77%	20,459	94.19%
D	298	1.52%	710	3.56%	651	3.00%
Deficient E - F	340	1.74%	732	3.67%	611	2.81%
<b>Total</b>	<b>19,596</b>	<b>100.00%</b>	<b>19,934</b>	<b>100.00%</b>	<b>21,721</b>	<b>100.00%</b>

Source: SJCOG, 2018

Table 44 provides a summary of roadway lane- miles within San Joaquin County that are estimated to operate at different levels of service in the various scenarios evaluated during peak hours. As shown, the proportion of deficient roadway lane-miles (i.e., operating at LOS E or F) is anticipated to increase, from about 1.74 percent under current conditions to 2.81 percent under future conditions with implementation of the 2018 RTP/SCS. This result reflects the overall increase in vehicular travel and delay discussed above. Compared to the No Project Alternative, the 2018 RTP/SCS would result in 20% less congested lane miles.

Impacts on the region’s roadway operations resulting from implementation of the proposed 2018 RTP/SCS are considered potentially significant . Measures intended to reduce vehicle travel and improve LOS are part of the 2018 RTP/SCS. These include increasing transit use ridesharing and other measures to reduce demand on the transportation system; investments in non-motorized transportation; seeking to optimize land use/transportation connection; other travel demand measures described in in local agency General Plans; and key roadway investments targeted to reduce congestion levels and improve LOS. Even with the inclusion of these projects and measures, transportation impacts under T-2 would be potentially significant.

## Mitigation Measures

SJCOG shall implement the following mitigation measures. These mitigation measures have been developed for the 2018 RTP/SCS program where applicable for all transportation projects.

### *T-2 LOS Deficient Roadways - Reduced Congestion and Alternatives*

SJCOG shall inform jurisdictions with projected LOS E and F roadway segments under the Plan of the potential need to develop a Deficiency Plan under the San Joaquin Regional Congestion Management Program at some point before 2042. SJCOG shall work with these agencies to identify and encourage changes that would increase use of alternative transportation and other means to reduce congestion.

## Significance After Mitigation

Even with implementation of Mitigation Measure T-2, it is anticipated that LOS E and F deficiencies would occur. Therefore, this impact remains significant and unavoidable..

**Threshold 3:** Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersection)

**Impact T-3** IMPLEMENTATION OF THE TRANSPORTATION IMPROVEMENT PROJECTS AND THE LAND USE SCENARIO ENVISIONED BY THE 2018 RTP/SCS COULD GENERATE NEW DESIGN FEATURE HAZARDS IN THE SJCOG PLANNING AREA. IMPACTS WOULD BE SIGNIFICANT BUT MITIGABLE.

While the 2018 RTP/SCS would not in itself result in increased hazards due to design feature (e.g., sharp curves or dangerous intersections) or increase conflicts between incompatible uses (e.g., farm equipment and other vehicular traffic), traffic hazards could result from the design of the individual projects envisioned by the Plan. Moreover, development in urban areas would increase the number of residents in the region proximate to transit and in areas with good opportunities for walking and biking, making it imperative that facilities designed for these non-automobile modes are designed to enhance the safety of transit riders, bicyclists and pedestrians.

Impacts from design features or incompatible uses due to projects included in the proposed 2018 RTP/SCS would be potentially significant.

### Mitigation Measures

For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measures. This mitigation measure has been developed for the 2018 RTP/SCS program where applicable for all transportation projects. Cities in the SJCOG region can and should implement these measures, where relevant to land use projects implementing the 2018 RTP/SCS.

#### *T-3: Safety Measures*

Implementing and local agencies shall make safety a prime objective in the design of RTP projects, and shall plan to avoid, remedy, or mitigate such impacts in the course of project-level development and environmental review, including when incorporating active transportation and transit features into roadway projects.

### Significance After Mitigation

It is anticipated that standard design practices will produce safe projects, even when incorporating active transportation and transit features into roadway projects, and with the incorporation of this impacts would be significant but mitigable.

**Threshold 4:** Result in inadequate emergency access

**Impact T-4** IMPLEMENTATION OF THE TRANSPORTATION IMPROVEMENT PROJECTS AND THE LAND USE SCENARIO ENVISIONED BY THE 2018 RTP/SCS COULD RESULT IN CONGESTION WHICH WOULD RESULT IN EMERGENCY ACCESS CONFLICTS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

While the 2018 RTP/SCS would generally enhance mobility and access to destinations (including access for emergency vehicles) as compared to the future baseline, by 2042 congestion would increase which could adversely impact emergency access. Before 2018 RTP/SCS projects are implemented by local jurisdictions, all projects as applicable would undergo further environmental and technical analysis that would include evaluation of impacts by emergency and public services.

The implementing and local agencies would use these subsequent analyses to ensure adequate access for emergency and public safety vehicles in the design of individual RTP projects. Emergency vehicles are required to be given right of way during emergencies (lights and sirens), which would continue to be true in the future, allowing emergency vehicles to avoid some congestion.

Existing regulations provide that any work within existing Caltrans rights of way would have to comply with Caltrans permitting requirements. This includes a traffic control plan that adheres to the standards set forth in the California Manual of Uniform Traffic Control Devices (MUTCD) (Caltrans 2014).<sup>14</sup> As part of these requirements, there are provisions for coordination with local emergency services, training for flagmen for emergency vehicles traveling through the work zone, temporary lane separators that have sloping sides to facilitate crossover by emergency vehicles, and vehicle storage and staging areas for emergency vehicles. Local and transit agency requirements also provide for construction work during off-peak hours, flaggers, detours, and requiring at least two points of ingress/egress to residential developments for emergency access. For these reasons, impacts associated with inadequate emergency access would be less than significant.

### Mitigation Measure

No mitigation required.

### Significance After Mitigation

Impacts would be less with significant without mitigation.

**Threshold 5:** Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities

**Impact T-5** IMPLEMENTATION OF THE TRANSPORTATION IMPROVEMENT PROJECTS AND THE LAND USE SCENARIO ENVISIONED BY THE 2018 RTP/SCS WOULD PROVIDE FOR TRANSIT AND ACTIVE TRANSPORTATION PROJECTS IN THE SJCOG PLANNING AREA TO IMPROVE PERFORMANCE AND SAFETY OF SUCH FACILITIES. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

The 2018 RTP/SCS includes a series of individual improvement projects and programs (including a substantial number of public transit, bicycle and trail, and pedestrian projects) to enhance the region's multi-modal transportation system. The transportation improvement projects listed in the 2018 RTP/SCS envisions over 800 additional Class I, II, and III bike lane miles and provides for intercity and interregional bus and rail transit investments that increase travel interaction between the region and the Bay Area, as well as the Sacramento area and San Joaquin Valley communities. These RTP projects are consistent with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. The lead agency would use subsequent analyses to ensure adequate access for transit and active mode users in the design of projects entailed by the 2018 RTP/SCS.

While the Plan would generally enhance mobility for transit and active modes, it also contains roadway projects that have the potential to create conflicts between motorists and transit riders, pedestrians and cyclists. But as discussed under Impact T-4, standard practices in the development and environmental review of transportation projects, performance and safety factors of the project,

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<sup>14</sup> Caltrans Manual on Uniform Traffic Control Devices available online at [http://www.dot.ca.gov/hq/traffops/engineering/mutcd/ca\\_mutcd2014rev1.htm](http://www.dot.ca.gov/hq/traffops/engineering/mutcd/ca_mutcd2014rev1.htm).

including active transportation features, are part of standard procedures and Best Management Practices. Potential impacts resulting from Impact T-5 would be less than significant.

### **Mitigation Measure**

No mitigation required.

### **Significance After Mitigation**

Impacts would be less with significant without mitigation.

### **c. Cumulative Impacts**

The 2018 RTP/SCS is a cumulative plan by design that integrates transportation investments with land use strategies for San Joaquin County that shares, or is connected by, common economic, social and environmental characteristics with its surrounding counties. As such, the analysis of transportation and traffic impacts presented above is a cumulative analysis compliant with the requirements of CEQA. However, the following cumulative impact analysis discussion has been prepared to evaluate whether the 2018 RTP /SCS would contribute additional traffic delays, congestion, or other such transportation impacts to areas beyond the SJCOG region. Movement within, through, and beyond the SJCOG region is necessary for commuters, personal travel and goods movement. Thus, this cumulative analysis focuses on the potential impacts on the transportation network within the adjoining counties to SJCOG; Contra Costa County to the west, Sacramento to the north, Amador and Calaveras Counties to the east, and Stanislaus County to the south.

Implementation of the 2018 RTP/SCS would result in an increase in density and land use development over the next 25 years. The No Project Alternative is expected to accommodate the same increase in total population as the proposed Plan. Under the No Project Alternative land use changes could affect jurisdictions outside the region, by setting a precedent for and/or urbanization; such impacts would be cumulatively considerable. The 2018 RTP/SCS would decrease congestion potentially making it easier for people to live and work outside the region, thereby inducing land uses changes and increasing congestion outside the region, these impacts also could be cumulatively considerable.

While the majority of the VMT would be expected to remain within the SJCOG region, some portion of the VMT would inevitably extend to areas within adjoining counties. The most reasonable assumption is that VMT to adjoining counties would be concentrated to the most heavily travelled roadways in the counties with the highest relative employment, Interstates 5 and 205, and SR 99. The increased VMT in adjoining areas would contribute to traffic delays and congestion given that increases would be on major commuter routes and heavily travelled roadways in the adjoining counties, and that these counties are also expected to experience increased population growth into the future. Thus, cumulative impacts on traffic operations would be significant and the 2018 RTP/SCS contribution to congestion and traffic in adjoining areas would be cumulatively considerable.

## 4.15 Tribal Cultural Resources

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This section evaluates potential effects on tribal cultural resources related to implementation of the 2018 RTP/SCS.

### 4.15.1 Setting

The prehistoric populations of San Joaquin County included the Miwok in the north and Northern Valley Yokuts in the south.

Miwok populations focused their settlements alongside the waterways of the Sierra Nevada north from the Cosumnes River south to the Calaveras River and in California's central valley as far west as Mount Diablo. Miwok villages were the primary political unit and consisted of as many as two dozen to several hundred individuals. Miwok subsistence relied upon hunting, fishing, and the gathering of acorns (Levy 1978).

Northern Valley Yokuts populations were concentrated along waterways in the San Joaquin River. Settlements were typically composed of single-family dwellings, sweathouses, and ceremonial structures. Subsistence revolved around water resources in the San Joaquin Valley, with a focus on salmon and acorns (Wallace 1978).

#### a. Regulatory Setting

##### Assembly Bill 52

California Assembly Bill 52 of 2014 (AB 52) was enacted on July 1, 2015 and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources:

1. "Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and meets either of the following criteria: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
2. A cultural resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. AB 52 requires that lead agencies "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

## Senate Bill 18

California Government Code §65352.3 (adopted pursuant to the requirements of SB 18) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan. The tribal organizations eligible to consult have traditional lands in a local government’s jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research’s Tribal Consultation Guidelines (2005), “The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places.”

### b. Existing Conditions

SJCOG conducted AB 52 consultation for the 2018 RTP/SCS. This consultation included written communication with the Buena Vista Rancheria Band of Me-Wuk Indians and the Lone Band of Miwok Indians to invite them to participate in the RTP/SCS Working Group. Neither tribe opted to participate.

Written communications between SJCOG and the Buena Vista Rancheria and Lone Band is provided in Appendix E.

## 4.15.2 Impact Analysis

### a. Methodology and Significance Thresholds

Appendix G of the State CEQA Guidelines identifies the following criteria for determining whether a project’s impacts would have a significant impact to tribal cultural resources:

1. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
  - b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

### b. Project Impacts and Mitigation Measures

This section describes generalized tribal cultural resources impacts associated with the 2018 RTP/SCS. Due to the programmatic nature of the 2018 RTP/SCS, a precise, project-level analysis of the specific impacts associated with individual transportation and land use projects is not possible at this time. However, all projects under the 2018 RTP/SCS that are subject to CEQA must comply with AB 52. In general, implementation of proposed transportation improvements and future projects under the land use scenario envisioned by the 2018 RTP/SCS could result in tribal cultural resources impacts as described in the following section.

**Threshold 1:** Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe

**IMPACT TCR-1 IMPLEMENTATION OF PROPOSED TRANSPORTATION IMPROVEMENTS AND FUTURE PROJECTS FACILITATED BY THE LAND USE SCENARIO ENVISIONED IN THE 2018 RTP/SCS HAVE THE POTENTIAL TO IMPACT TRIBAL CULTURAL RESOURCES. IMPACTS WOULD BE SIGNIFICANT BUT MITIGABLE.**

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Potential tribal cultural resources are likely to be present throughout the SJCOG region. Therefore, it is possible to encounter tribal cultural resources during implementation of the transportation improvement projects listed in the 2018 RTP/SCS and the land use scenario envisioned by the 2018 RTP/SCS. Effects on tribal cultural resources are highly dependent on the individual project site conditions and the characteristics of the proposed project. Impacts to tribal cultural resources may include damage or destruction of the resources. Adherence to the requirements of AB 52 would ensure consultation with local California Native Americans on a project-by-project basis and the identification of appropriate project-specific mitigation measures. If AB 52 consultation determines that a specific transportation or land use project could cause a substantial adverse change in the significance of a tribal cultural resource, the impact would be potentially significant.

## Mitigation Measures

For transportation projects under their jurisdiction, SJCOG shall implement, and transportation project sponsor agencies can and should implement, the following mitigation measure developed for the 2018 RTP/SCS program where applicable for transportation projects that would substantially impact tribal cultural resources. Municipalities in the SJCOG region can and should implement this measure, where relevant to land use projects implementing the 2018 RTP/SCS.

### *TCR-1 Tribal Cultural Resources Impact Minimization*

If the project sponsor determines that a project may cause a substantial adverse change to a tribal cultural resource, identified through project-specific AB 52 consultation, and measures are not otherwise identified in the consultation process required under PRC Section 21080.3.2, project sponsors shall implement the following measures where feasible and necessary to address site-specific impacts to avoid or minimize the significant adverse impacts:

- Avoidance and preservation of the resources in place, including, but not limited to: planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
  - Protecting the cultural character and integrity of the resource
  - Protecting the traditional use of the resource
  - Protecting the confidentiality of the resource.
  - Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

## Significance After Mitigation

Implementation of Mitigation Measure TCR-1 would reduce potential impacts to tribal cultural resources to a less than significant level.

### c. Cumulative Impacts

Tribal cultural resources are regionally specific and determined by the local tribes. However, development in the SJCOG area would increase under buildout of the 2018 RTP/SCS by increasing mobility and growth. The increase in growth in previously undisturbed areas contributes to regional impacts on tribal cultural resources. If a tribe determines that there may be tribal cultural resources at the location of a project site, tribal consultation in accordance with AB 52 would occur to ensure protection of tribal cultural resources. However, tribal territory often crosses the boundaries of multiple jurisdictions within and outside of the SJCOG region, therefore there could be several minor impacts to tribal cultural resources that together would result in a significant cumulative impacts. Therefore, the potential for cumulative impacts related to tribal cultural resources is significant and the 2018 RTP/SCS contribution would be cumulatively considerable. The mitigation measure described earlier in this section would reduce these impacts, but not to less-than-cumulatively-considerable levels.