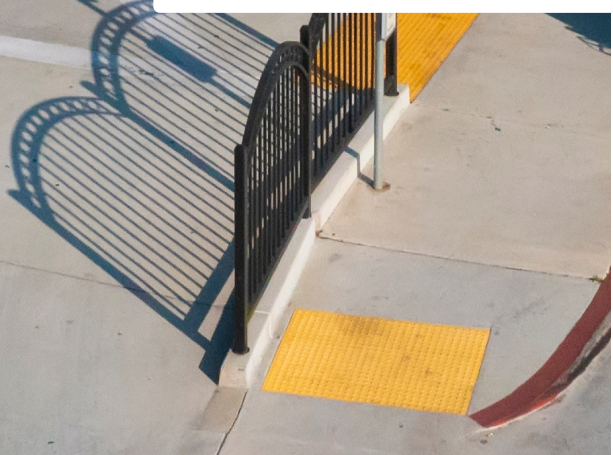
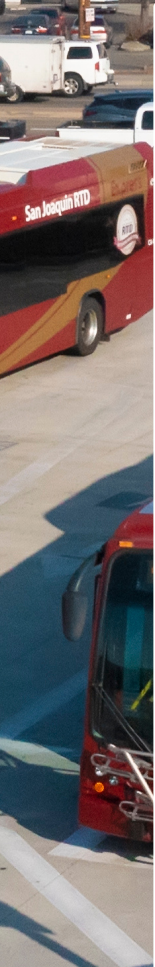


# APPENDIX L

## Modal Discussion



# MODAL DISCUSSION

## INTRODUCTION

This appendix of the 2022 RTP describes the investment strategy for the San Joaquin region. It discusses planned future projects and transportation management strategies intended to most effectively accommodate future transportation needs. The investment strategy is a balanced approach to modal development intended to fulfill the objectives and performance indicators which guide the RTP and move towards achievement of the long-term transportation goals for the region. This includes the provision of appropriate resources to operate and maintain the multi-modal system.

The 2022 Regional Transportation Plan promotes a “balanced” transportation system. It calls for significant investment and system expansion of alternative transportation modes while adding some capacity and operational improvements to the existing highway and arterial roadway network.

The investment strategy identifies enough funding over the life of the RTP to develop and construct or implement the 2022 RTP improvements.

There continues to be on-going dialogue with all stakeholders to improve our understanding of how the transportation system impacts the quality of life in San Joaquin County. The participation process has shed light on important values such as mobility choice and accessibility, travel time reliability, cost effectiveness, and environmental sensitivity. The planning process is iterative. System-wide performance indicators were developed and used to help policy makers and the community at large evaluate tradeoffs between alternative packages of transportation improvements. The performance indicators are also used as a tool to help evaluate how this RTP contributes to the quality of life in the San Joaquin region.

## REGIONAL STREETS AND HIGHWAYS ACTION ELEMENT

Several intersecting highways are pivotal to mobility in San Joaquin County. Figure 12-1 illustrates the street and highway system. On a north-south axis this includes Highway 99, the “Main Street” of the San Joaquin Valley, and Interstate 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. Without improvements, both Highway 99 and I-5 within San Joaquin County are projected to operate significantly beyond capacity, resulting in sustained peak period driving conditions and deteriorating levels of service.

Major east/west movement is handled by Route 132 at the southern tip of the county, Interstate 580 and I-205 in the south west county, and Route 120, Route 4 and Route 12. Interstates 205 and 580 serve as a gateway connection between the San Joaquin Valley and the Bay Area, and as such 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. State Route 12 operates as a freeway segment for a brief but important segment between Highway 99 and the Port of Stockton just west of I-5. Both Routes 4 and 12 connect with Bay Area counties across the San Joaquin Delta. These two-lane rural roads now handle significant commuter and interregional traffic.

Highways 26 and 88 in the central and northeast portion of the County are two-lane rural highways which 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.

As noted in Figure 12-1, several key arterial roadways link communities within the County and are essential to intra-county traffic movement. Other portions of this system in the County are designated as “J” routes, which connect to roadways in other counties. These roadways handle some of the highest traffic volumes on the local system, link downtown areas, and connect to major activity centers throughout the County.

## **Major Factors in Development of Street and Highway Investment Strategies**

### *Increased Travel Demand*

Throughout the County, major highways and several arterial streets are projected to experience increased traffic levels which meet, and in some cases substantially exceed, system capacity. Without improvement, the result will be extended morning and afternoon peak periods in existing areas of congestion, and several new areas of congestion that currently operate at adequate levels of service. Interstate 5, Highway 99, Interstate 205, Highway 120 and Highway 12 in particular are projected to experience a substantial increase in total demand. Truck traffic is also expected to increase substantially on major north-south and east-west roads connecting to adjacent highways. The Plan identifies key projects targeted to improve the most impacted portions of the highway and arterial roadway system.

## *Operational and Transportation System Management (TSM)*

Improving the ability of a highway or arterial street to efficiently move traffic without added capacity is the target of operational and TSM improvements. This includes fairly low-cost spot improvements like freeway auxiliary lanes, modified interchange ramps, improved shoulders, individual intersection improvements on surface roadways, synchronized signals, limiting left turn moments to major public street connections and turn pockets. This can also include advanced technology applications (often referred to as Intelligent Transportation Systems (ITS)) such as closed circuit television to monitor and convey real time travel conditions, changeable message signs, traffic detection equipment and traveler information systems. These hi-tech applications allow motorists to choose travel options and allow local and state agencies to more quickly respond to incidents on the roadway. A significant component of congestion is non-recurring related to incidents on the roadway system. Freeway Service Patrol programs aid motorists to minimize traffic disruption and help to clear accidents. As opportunities to add capacity reach their limit and when cost/benefit is considered, operational and TSM strategies become important investment strategies to improve traffic flow on the existing system. This Plan incorporates several such investments as part of the action element.

## *Maintaining the Integrity of the Existing System*

The operation and maintenance of the existing transportation system in San Joaquin County is a significant priority for transportation investment decisions. State and local government and transit agencies are responsible to maintain a tremendous existing investment in the street and highway system, rolling stock and travel way. In addition to roadway pavement, this includes sidewalk, drainage systems, bridges and other structures, signal systems, signage, fleets and equipment, and landscaping. The 2022 Regional Transportation Plan (RTP) calls for a significant portion of future revenues to be dedicated to maintain and operate the current system. Within the 24-year RTP period, the combined operations and maintenance investment in the existing transportation system is nearly \$4.5 billion.

### **Local Streets and Roads**

Local streets and roads are vital in the strength of the region's entire transportation system. They connect our communities and carry traffic in our region whether by automobile, bus, or bicycle. Local roadway operations and maintenance are the responsibilities of each local government in San Joaquin County and account for activities to preserve and improve local roadway conditions involving traffic operation management as well as routine maintenance, preventative maintenance, rehabilitation and reconstruction of pavement and bridges. In San Joaquin County, preservation of local road condition and performance is a priority due to the value and importance of these roadways to regional mobility and national economic vitality. Each jurisdiction uses some type of Pavement Management System (PMS) as a tool to assess operations and maintenance needs by:

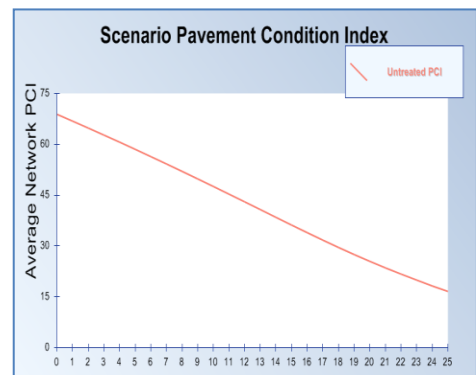
- regularly inspecting pavements to monitor condition and needs;



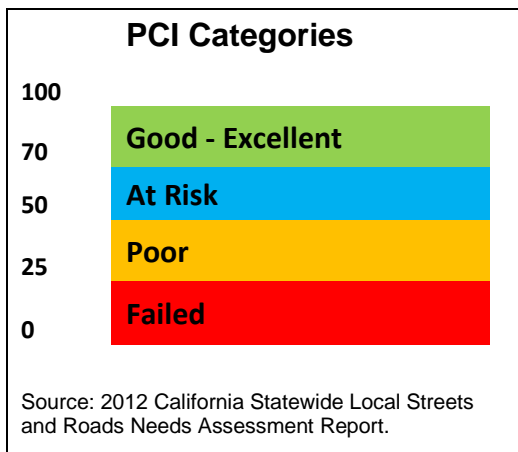
- evaluating the pavement condition with an index describing the condition from poor to excellent;
- selecting roads and streets that need treatments;
- recommending maintenance treatments;
- providing a snap-shot on their pavement condition; and
- assisting to maximize financial investments.

In San Joaquin County pavement management is performed through PMS computer software applications including Street Savers, Cartegraph, MicroPaver, and I-worq. Several jurisdiction also use these systems to manage the operations and maintenance of local bridges.

Fundamental engineering tells us that pavement deteriorates over time. With weathering, aging, and traffic loading, the pavement surface dries and shows signs of loose aggregates. This is depicted in the diagram (right) that if roads are left untreated, pavement deterioration will propagate out and become more severe with continued traffic loadings. In San Joaquin County, much of the local streets and roads are aging beyond their useful life and are in need of rehabilitation and reconstruction.



Source: City of Stockton Public Works



In 2016, under the sponsorship of the League of California Cities, County State Associate of Counties (CSAC), the California Regional Transportation Planning Agencies (RTPA), and other bodies of municipal public works agencies, updated the statewide local streets and roads needs assessment. The last update was conducted in 2014. The objective was to fully assess every two years the condition of the local system and complete the overall transportation-funding picture for California’s transportation network. The results continued to provide analyses and information such as pavement conditions and funding needs, including San

Joaquin County. A performance indicator is being used to assess the strength of pavement by using a pavement condition index or PCI from 0 (failed) to 100 (excellent). This PCI index is based upon weighted measurement of the pavement area, i.e., longer roads have more weight than short roads when calculating the average.

The 2016 study indicated the average PCI for streets and roads statewide dropped from 66 to 65. This rating is now considered to be in the “at risk” category. In San Joaquin County, the average PCI held steady at 70.

The 2016 study also indicated the 10-year needs for San Joaquin County is about \$1.4 billion for pavement and an additional \$53 million for bridge needs. This is based upon projections of individual jurisdiction pavement and bridge management systems. Using a four-percent escalation rate, SJCOG calculated the 24-year local roadway operations and maintenance needs for the San Joaquin County will total an amount to approximately \$4.8 billion. Funding for local roadway operations and maintenance in San Joaquin County is provided through the following major programs (including, but not limited to): Senate Bill 1, Regional Surface Transportation Program (RSTP), and Measure K Local Street Repair. SJCOG also calculated the total 24-year revenues projected to be available to the region for local roadway operations and maintenance is about \$4.2 billion. While these numbers suggest that roadways will deteriorate faster than local jurisdictions are able to finance maintenance, this funding level is anticipated to maintain the road condition to at least a PCI of 70.

#### Funding Needs and Projected Revenues



Source: SJCOG 25-year Revenue Projections

#### State Highways

Operations and maintenance of California’s 50,000 lane-mile state highway system is the responsibility of the California Department of Transportation (Caltrans). Caltrans manages this effort through the State Highway Operation and Protection Program (SHOPP). The SHOPP is currently divided into eight major project categories including: major damage restoration, collision reduction, mandates, bridge preservation, roadway preservation, mobility, roadside preservation, and facilities. Caltrans monitors the condition and operational effectiveness of the state highway system, including all state-owned highways and bridges, through periodic inspection, traffic studies, and system analysis. Caltrans prepares a 10-year plan for SHOPP projects based upon the needs identified by each Caltrans District across the state through this monitoring. Caltrans subsequently prepares a 4-year program of SHOPP projects every two years based upon funding approved by the California Transportation Commission (CTC) and the statewide funding priorities at that time. The CTC is required to adopt the 4-year SHOPP and ensures consistency with available state funding. Based upon actual programming in San Joaquin County from multiple past SHOPP cycles the 24-year investment in state highway operations and maintenance is projected to total over \$727 million.

## Transit

San Joaquin County features six public transit operators and two rail transit operators that combined served over six million passengers. The transit system provides mobility for people without cars such as the 11 percent of the regions families below the poverty level<sup>1</sup>, 10.6 percent of elderly<sup>1</sup>, 11 percent of disabled<sup>1</sup>, or 41 percent that are of driving age but do not have drivers licenses<sup>2</sup>. The transit system also serves as a viable alternative to driving for thousands of area residents who own cars. By reducing the number of vehicles on the roads, public transit helps to fight congestion and curb greenhouse gas emissions.

A properly maintained transit system is critical to the mobility of the region as well as keeping a competitive edge to that of the automobile. While the maintenance activities for the transit system are unique to this mode, the unending challenge to sustain the system is similar the maintenance of the roadway system. Unique to the transit system is the ongoing operating costs of fuel purchases; drivers, mechanics, dispatchers, and equipment and facility leases necessary to operate a transit system. Additionally, the cost for the replacement of buses, train cars, tracks, security upgrades, fare machines and other capital equipment far outpaces available funds. And just as with local streets and roads, delayed maintenance of the transit system leads to even costlier rehabilitation down the road.

Over the next 24 years, operating and capital replacement costs for San Joaquin County transit providers are projected to total \$3.5 billion for existing services. This includes \$2.36 billion associated with bus services and \$1.16 billion associated with rail services.

Several factors influence the rising cost of transit operations in San Joaquin County such as:

- Increased fuel costs
- Employee benefit packages
- More stringent emissions regulations on vehicle propulsion systems
- Construction and maintenance of passenger amenities (many of the bus stops are nothing more than a pole and sign)
- Capital costs to purchase vehicles or construct maintenance/storage facilities leading to decreased ongoing expenses
- Replacement of the aging vehicle fleet
- Technological improvements in fare collection and automated vehicle locating equipment

The San Joaquin Regional Transit District (RTD) is one of the region's two largest movers of intra- and interregional riders that have the greatest operating and capital replacement needs.

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<sup>1</sup> 2010 U.S. Census

<sup>2</sup> *Community Indicators of Alcohol and Drug Abuse Risk, San Joaquin County 2004*, Center for Applied Research Solutions (CARS), Inc.

RTD's operating and capital replacement needs account for \$1.9 billion, or nearly 54 percent of the region's 24-year needs.

The other of the region's largest movers of intra- and interregional riders is the San Joaquin Regional Rail Commission (SJRRRC). ACE's operating and capital replacement needs account for \$1.15 billion, or nearly 33 percent of the region's 24-year needs

### *Additional Transportation Funding*

The 2022 Regional Transportation Plan includes an augmentation of funding assumed over the life of the Plan, which is attributable to some important public decisions to invest more in transportation infrastructure. Together these new resources have significantly increased the Tier I element of the Plan providing a great opportunity to provide congestion relief, transportation options and enhanced quality of life. The key is to expand these resources on improvements which provide the greatest benefit but in a cost efficient manner.

Measure K Renewal: In November 2006, voters in San Joaquin County approved the renewal of this ½ cent sales tax dedicated to transportation in San Joaquin County by a margin of 78% approval. This adds over \$3.1 billion in transportation resources available between 2011 and 2041. Funds will be used roughly one-third for maintenance and safety, one-third for transit and alternative modes of travel, and one-third for roadway operational and capacity improvements.

Regional Transportation Impact Fee: In October 2005, all local governments in San Joaquin County and SJCOG approved a Regional Transportation Impact Fee on new development. These funds, which will be collected through the life of this Plan are targeted towards key regional highway and roadway improvements and regionally significant transit improvements.

Proposition 1B: In November 2006, voters in California approved Proposition 1B, a transportation bond program totaling over \$19.9 billion over ten years. San Joaquin County will see an increase in roadway maintenance, transit and capital improvement funds which come by formula. San Joaquin County has also received funds from several other programs which are determined on a competitive basis. To date projects throughout San Joaquin County have been awarded \$436 million in Proposition 1B competitive funds. These include over \$360 million for mainline highway projects, over \$25 million for regional roadway improvements, and over \$38 million for railroad crossing grade separations.



## **Planned Highway and Major Roadway Investments**

The 2022 RTP identifies significant capacity increases and operational improvements to more efficiently manage traffic conditions. The capacity improvements are targeted to corridors which are the most essential to mobility in the county and have gone through the congestion management process. Further revenues are directed to locations which currently experience congestion and which have existing deficiencies- addressing new needs. There are also some gaps in strategically important portions of the system that are priority targets to resolve. These include extensions of the roadway network to improve connectivity and upgrade of interchanges where lower standard facilities are no longer adequate to handle near-term travel demand.

The second priority is to address areas of congestion and deficiencies that are anticipated based on the substantial increase in travel growth projected for the county. Several portions of the highway and local arterial system will have remaining capacity fully absorbed within the next ten years and begin to experience regular and elongating daily congestion and declining levels of service.

It should be noted that as the County continues to grow it is important to provide investment in transit, Travel Demand Management, and bike and pedestrian improvements. These efforts should be coordinated with community growth and downtown and neighborhood revitalization efforts. This Plan is designed to increase modal share of these alternatives as compared to the single occupant vehicle over time. Subsequent sections of this chapter highlight the investment strategies.

This alternative means of handling future travel needs is vital because despite increases in revenue available there will not be enough funding to resolve all anticipated congestion simply by adding roadway capacity. Environmental and neighborhood concerns also will play a major role in determining the best option to improve mobility.

The planned roadway improvements will significantly decrease future congestion and take a significant step towards extending the current system in areas of major growth in the County in comparison with a “no build” option.

While enhanced mobility is important, maintaining what we already have and ensuring the current system is operating safely is equally important. Therefore the roadway investment element identifies resources to adequately operate, maintain and where necessary rehabilitate the existing roadway system. The scope of this investment is very substantial as, for example, approximately \$1 billion in the Measure K funds will be available for roadway maintenance over the life of the Measure K renewal program, and over \$100 million in Proposition 1B funds will go towards maintenance over the course of the ten-year life of the bond program.

Tables 6-1 through 6-4 in Appendix F display the Mainline Highway Improvements, Interchange Improvements, Regional Roadway Improvements, and Railroad Crossing Safety

projects. Mainline Highway, Interchange improvements, and Regional Roadway projects are illustrated in Figure L-1 below.

### *Highlights of Near Term Actions (2022-2031)*

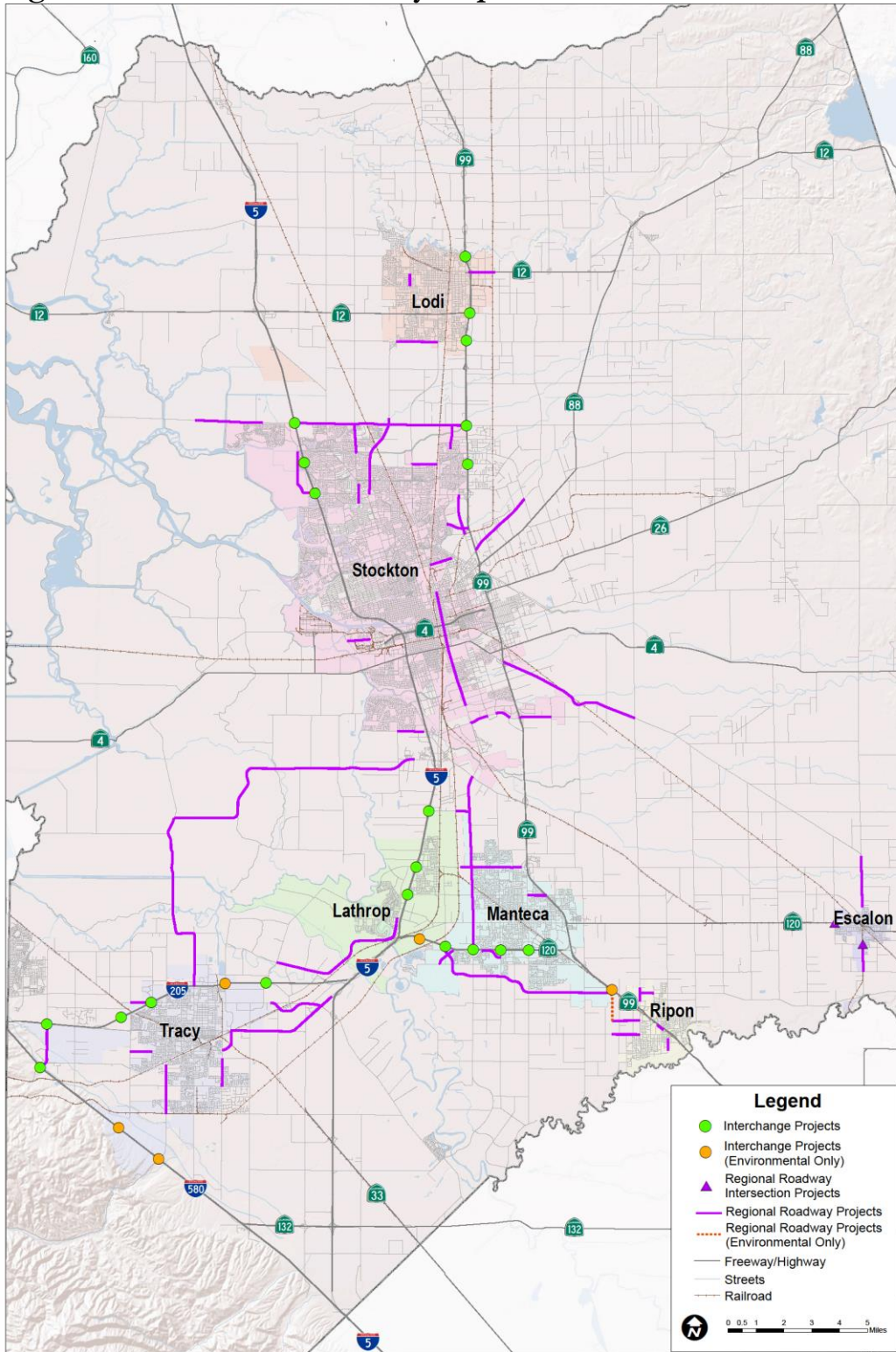
#### **Short Range Plan, 2022-2031**

- Adequately maintain existing roadway infrastructure and improve when fiscally possible.
- Safety and operational improvements on SR-12 west of I-5
- Prepare a Systems-Level Planning analysis of various transportation system alternatives using multimodal performance measures.
- Pursue ground access improvements for the Port of Stockton.
- Implement the capital improvements for highways, regional roads, and interchanges for this time period.
- Continue implementation of the congestion management process

#### **Long Range Plan, 2028-2042:**

- Maintain Existing Roadway Infrastructure at acceptable levels of service
- Implement as appropriate and feasible the recommendations of the completed studies
- Modify crucial freeway-to-freeway connectors at I-5 and Route 4, Highway 99 and Route 4, Route 120 at I-5 and SR-99
- Complete remaining widening and operational improvements to Highway 12
- Develop and implement operational and traffic management strategies on County freeway segments
- Complete identified local access interchange improvements to improve connectivity and link to the extended roadway network in areas of growth.
- Continue to enhance access at the Port of Stockton and major industrial areas to support economic development
- Continue to improve the arterial system based on subsequent preliminary engineering and traffic analysis.
- Continue implementation of the congestion management process.
- I-205 HOV lane between I-580 and I-5
- I-5 HOV lane between I-205 and Charter Way
- I-5 HOV lane between Hammer Lane and North of Eight Mile

**Figure L-1: 2014 RTP Roadway Improvements**



## TRANSIT ACTION ELEMENT

The San Joaquin Council of Governments continues to encourage and support development of a “balanced transportation system” for San Joaquin County. That support is evidenced by the devotion of a significant portion of the local transportation sales tax (30%) to support public transportation.

This Regional Transportation Plan supports transit as an essential service needed by many members of the community to maintain a minimum standard of living; it also recognizes the important role transit plays in improving our region's air quality, reducing traffic congestion, and improving the general quality of life for travelers who now face growing commutes.

This long-range Regional Transportation Plan emphasizes convenient, high quality regional transit services to meet the needs of transit users. Improved and expanded urban, intercity, and interregional bus services, which coordinate and integrate with new and improved passenger rail services, are included in this transit investment strategy as ways to improve mobility, accessibility and achieve state and federal air quality standards.

This Plan also seeks to coordinate improved public transit services with complementary and supportive land use development policies. For instance, multimodal stations can be surrounded by residential and commercial developments. In addition, these transit hubs can be conveniently served by a myriad of alternative transportation modes, such as park-and-ride lots, bicycle facilities, pedestrian amenities, trains, buses, and telecommute workstations.

### **Americans with Disabilities Act**

The Americans with Disabilities Act of 1990 (ADA) is legislation which prohibits discrimination on the basis of disability. Other Federal laws which affect the design, construction, alteration, and operation of facilities include the Architectural Barriers Act of 1968 (ABA), and the Rehabilitation Act of 1973. These laws apply to all Federally funded facilities. The ADA applies to facilities, both public (title II) and private (title III), which are not federally funded. Newly constructed and altered facilities covered by titles II and III of the ADA must be readily accessible to and usable by people with disabilities.

In July 1999, the U.S. Department of Transportation issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation system. Accessibility in Federally-assisted programs is governed by the USDOT regulations (49 CFR part 27) implementing Section 504 of the Rehabilitation Act (29 U.S.C. 794). The FHWA has specific ADA policies for statewide planning in 23 CFR 450.210(a)(1), for metropolitan planning in 23 CFR 450.316(a)(1),

Projects contained in the 2022 San Joaquin Council of Governments’ Regional Transportation Plan comply with all applicable ADA requirements.



## The Existing Transit System

Transit systems relevant to this Action Element consists of local, intercity, interregional, and dial-a-ride bus services, as well as intercity and interregional passenger rail systems currently operating in San Joaquin County. The system also includes needed services such as demand response for both those who are in need of transit for medical purposes and those in rural areas (General Public dial-a-ride).

All cities and unincorporated areas in San Joaquin County are served by a public transit system. These systems range in size and complexity. From the 130 buses operated by RTD, to the single bus operated by the City of Ripon.

There are seven types of public transit services currently operated by RTD and the cities in San Joaquin County: local fixed-route, bus rapid transit (City of Stockton only), general public dial-a-ride, specialized dial-a-ride, intercity fixed-route, interregional fixed route and on-demand. In addition, SJRRC operates two commuter rail service: the Altamont Commuter Express (ACE) and the San Joaquins. Table L-1 shows the various transit services available for each city and unincorporated areas within San Joaquin County. Figures M-2 through M-8 display the existing routes for transit service in the County.

**Table L-2 Available Transit Services in San Joaquin County**

Area	Local				Intercity	Inter-Regional	Commuter Rail
	Bus Rapid Transit	Fixed Route	General Public Dial-A-Ride	Specialized Dial-A-Ride			
Escalon		X	X	X		X	
Lathrop		X			X	X	X
Lodi		X	X	X	X	X	X
Manteca		X	X	X	X	X	X
Stockton	X	X	X	X	X	X	X
Tracy		X	X		X	X	X
Ripon			X	X	X	X	
Unincorporated Area			X	X			

### *RTD Bus Rapid Transit (BRT) Service*

RTD's Bus Rapid Transit (BRT) service, Metro Express, provides frequent, limited-stop express bus service within the Stockton Urbanized Area. The service includes improved shelters and boarding areas, fare vending machines for pre-paid fares, timed connections at the Downtown Transit Center, and traffic signal prioritization to maximize on-time performance. RTD's first Metro Express route, Route 40 on Pacific Avenue, opened in 2007, followed by Route 44 on Airport Way in 2011 and Route 43 on Hammer Lane in 2012. Route 44 also became the first fully electric BRT route in the United States in 2017. A new BRT route (Route 47), the Midtown Corridor, opened in tandem with systemwide bus route updates followed by Route 49 on the Martin Luther King Jr. corridor.

### *Intercity and Interregional Bus Service*

Interregional services have expanded by moving to larger over-the-road coaches, thereby increasing capacity. This shift has also helped to increase capacity on the intercity coaches as well. RTD provides interregional bus services to targeted employment centers in downtown Sacramento and Alameda County. Riders can connect to other transit services in these areas such as Sacramento Regional Transit District, Bay Area Rapid Transit (BART), Livermore Amador Valley Transit Authority (LAVTA), and Alameda County Transit (AC Transit).

### *RTD Intercity Fixed Route Service*

RTD's Intercity fixed route service connecting the cities of Lathrop, Manteca, Escalon, Ripon, and Tracy, to Stockton. The Intercity routes also link Stockton residents to other transit services such as the Lodi Grapeline, Delta Breeze, SCT/LINK buses at the Lodi Station in Downtown Lodi; the Tracy Tracer in downtown Tracy; Manteca Transit in downtown Manteca and Escalon eTrans. Intercity buses run limited service at peak times.

### *RTD County Hopper Deviated Fixed Route Service*

RTD's County Hopper is a flexible fixed route service connecting Ripon, Escalon, Manteca and Lathrop, to Stockton, Tracy, and Lodi. The County Hopper is a deviated fixed-route service serving San Joaquin County and providing intercity connections between Stockton, Tracy, Lodi, Manteca, Ripon, Lathrop, and Escalon. To accommodate passengers who are not able to reach their destinations within a rural area, each County Hopper can deviate from its normal route a distance of up to one mile. Advanced reservations are required.

### *RTD Metro Hopper Deviated Fixed Route Service*

RTD's Metro Hopper is a deviated fixed-route service serving popular destinations throughout the Stockton city limits. To accommodate ADA-certified passengers who are not able to reach fixed-route stops, each Hopper can deviate from its normal route a distance of up to one mile. Advanced reservations are required.

### *RTD On-Demand Service*

RTD began its Van Go! pilot program in 2019. It is an on-demand rideshare service throughout San Joaquin County provided in vehicles that are safe and accessible. The regular one-way fare is \$4.00 per person for the first five miles and \$0.50 per mile after the fifth mile. Reservations can be made on the day of travel or up to 48 hours in advance.

### *Stockton Downtown Transit Center*

The Downtown Transit Center is designed to enhance downtown transit service, improve transit access to downtown businesses and government agencies and provide a catalyst for downtown re-development activity. The transit hub is home to RTD staff and includes a boardroom, information center, passenger concourse, satellite police station, and 2,100 square feet of retail space. Additionally there are 20 bus bays that will help improve access for RTD buses in Downtown Stockton.

### *Hammer Transfer Station*

The Hammer Transfer Station (HTS) is located at Lower Sacramento and Thornton Roads and Hammer Lane and serves as the transfer point for RTD's Metro Express Routes 40 and 43, and other local fixed routes. The HTS has one on-street and three off-street bus boarding locations, as well as passenger amenities such as sheltered waiting area and fare vending machines.

### *Mall Transfer Station*

The Mall Transfer Station (MTS) is located at Yokuts Avenue and Pacific Avenue and serves as the transfer point for RTD's Metro Express Route 40 and other local fixed routes. The MTS is located between two malls and across the street from San Joaquin Delta College. There are six shelters with display kiosks.

### *Union Transfer Station*

The Union Transfer Station (UTS) is located on Union Street between First and Second Streets near the San Joaquin County Fairgrounds. The UTS provides another central location for the community to access RTD's routes. The UTS serves as a transfer point for RTD's Metro Express Routes 44 and 49 and other local fixed routes. The UTS provides passenger amenities such as a sheltered waiting area and fare vending machines.

### *Altamont Corridor Express (ACE) Rail Service*

ACE is in its third decade of providing commuter rail service between downtown Stockton and Diridon Station in downtown San Jose. Ace currently operates four morning westbound

trains and four eastbound evening trains. ACE continues to focus on improvements to individual stations. On the rail, trackage and signal improvements to upgrade service and passenger targeted services such as wi-fi access, special event trains and on-board educational programs.

An Altamont Corridor Express Joint Exercise of Powers Agreement was executed by the Alameda County Transportation Commission, the Santa Clara Valley Transportation Authority, and the San Joaquin Regional Rail Commission to oversee the Altamont Corridor Express rail service. An important feature of the ACE JPA is that it delineates the cost-sharing formula of the member agencies. With the passage of Senate Bill (SB) 1 in 2017, ACE will have funding to extend services to Modesto/Ceres by 2023 and Merced by 2027.

### *Robert J. Cabral Station*

Located in downtown Stockton, the Robert J. Cabral Station serves as the downtown transit hub for the Altamont Commuter Express (ACE) and the business offices of the San Joaquin Regional Rail Commission. The station was updated beginning in 2009. Improvements include a new façade and improved accessibility and circulation for pedestrians, bicycles, automobiles, and transit buses.

### *Amtrak San Joaquins Service*

The Amtrak San Joaquins intercity rail service, managed by the San Joaquin Joint Powers Authority (SJJPA), includes seven daily round trips with four trains stopping daily at the Cabral Station and Lodi Station (to/from Sacramento) and ten trains stopping at the BNSF station on San Joaquin Street (to/from the Bay Area). The seven round trip trains travel to and from Bakersfield on the BNSF line, making periodic stops through the San Joaquin Valley. Connecting bus service to northern California and Los Angeles and points south are also available through the San Joaquins service. The SJJPA Business Plan is updated on an annual basis. Current initiatives include the development of “Morning Express” service arriving in Sacramento by 8am to facilitate business travel, the addition of an 8<sup>th</sup> daily roundtrip, and track improvements to improve speed and reliability.

### *Escalon Transit Service*

The City of Escalon operates e-Trans flexible Fixed Route and Dial-A-Ride services. E-Trans flexible Fixed Route, Intercity Route 1, operates between the Main Street Escalon Park-n- Ride Lot and Modesto at Vintage Faire Mall on Dale Road and Veneman Avenue, five times a day each weekday. This service connects riders to the service at Jacob Myers Park in the City of Riverbank, Modesto Area Express (MAX) and the Stanislaus Regional Transit (StaRT) bus routes.





e-Trans also provides door-to-door service within the City of Escalon and the surrounding unincorporated county areas. RTD operates Van Go that provides Escalon riders with a premium demand response option serving all of San Joaquin County.

### *Lodi Grapeline*

The City of Lodi's fixed route service, known as Grapeline, initiated service in FY 1994-95 with four routes utilizing the downtown area as a hub. Additional demand has warranted its expansion to five routes plus three express routes operating in the morning and afternoon commute periods. The City also operates a general public dial-a-ride and ADA certified Elderly & Disabled passenger service called Vineline. The general public dial-a-ride provides limited service to locations just outside the City limits.

### *Tracy Fixed Route Service*

In the past, the City of Tracy used only a demand responsive system to provide its residents with local public transit service. In August 2001, Tracy began its fixed route service and the Tracer Paratransit Bus service began in December 2001. Improvements since that time, include a new transit station on Sixth Street near downtown Tracy, completed in 2010. Besides parking for 220, the station includes meeting rooms and other community facilities.

The service currently runs five buses from 6:30 a.m. to 7:30 p.m. Running in opposite directions, these buses make stops at many key public venues, including stops that allow customers to board RTD Intercity buses.

### *Manteca Transit Service*

Manteca Transit began operations on November 1, 2006. The current fleet consists of seven cutaway buses providing fixed-route and Dial-A-Ride services. The service operates Monday-Friday between the hours of 6:00 a.m. and 7:00 p.m.. On January 4, 2010, Manteca transit initiated a third transit route operating in the opposite direction of Route 2. All Manteca Transit vehicles are wheelchair accessible and bicycle racks are available on most buses.

### *Ripon Transit Service*

In March 2013, the City of Ripon began offering new expanded transit opportunities through the Blossom Express bus service. This is a Deviated Fixed Route Service which currently operates between 9:25 AM and 2:43 PM on Tuesdays and Thursdays. The route includes service to the Ripon Save Mart Shopping Center, Ripon Library, Post Office, Senior Center, as well as many other locations in the City. Additionally, the Modesto route includes service to Vintage Faire Mall, Kaiser Hospital and Clinic and Target Shopping Center. The bus is also equipped with two bicycle racks on the front of the bus for passenger use.

### *Coordinated Human Services Transportation Plan*

In 2005, Congress included provisions in the Safe, Accountable, Flexible, Efficient

Transportation Equity Act: A Legacy for Users (SAFETEA-LU) that added coordination requirements to the newly created New Freedoms program (5317), the Job Access Reverse Commute program (5316), and the Formula Program for Elderly Persons and Persons with Disabilities (5310). This was reinforced in 2015 by the Fixing America's Surface Transportation (FAST) Act. As a result, all 5317, 5316, and 5310 projects must be derived from a locally developed coordinated human service transportation plan (CTP).

RTD, the designated recipient for San Joaquin County's large urbanized area, took the lead to prepare the CTP for the county. The CTP was updated by RTD in 2021. Additional details on this plan can be found here: <http://sanjoaquinrtd.com/projects-reports/sjc-ctp/> .

### *Transit System Security Plan*

Transit operators throughout San Joaquin County identify various plans and strategies that support homeland security and safeguard the personal security of all motorized and non-motorized users. All operators receiving FTA Urbanized Area Formula Program (5307) funding are required to expend at least one percent of their 5307 funds on transportation security projects, unless the operator certifies to FTA that these expenditures are not necessary. Public transportation security projects include, increased lighting in or adjacent to public transportation systems, increased camera surveillance, emergency telephone line or lines to contact law enforcement or security personnel, and any project intended to increase the security and safety of an existing or planned public transportation system.

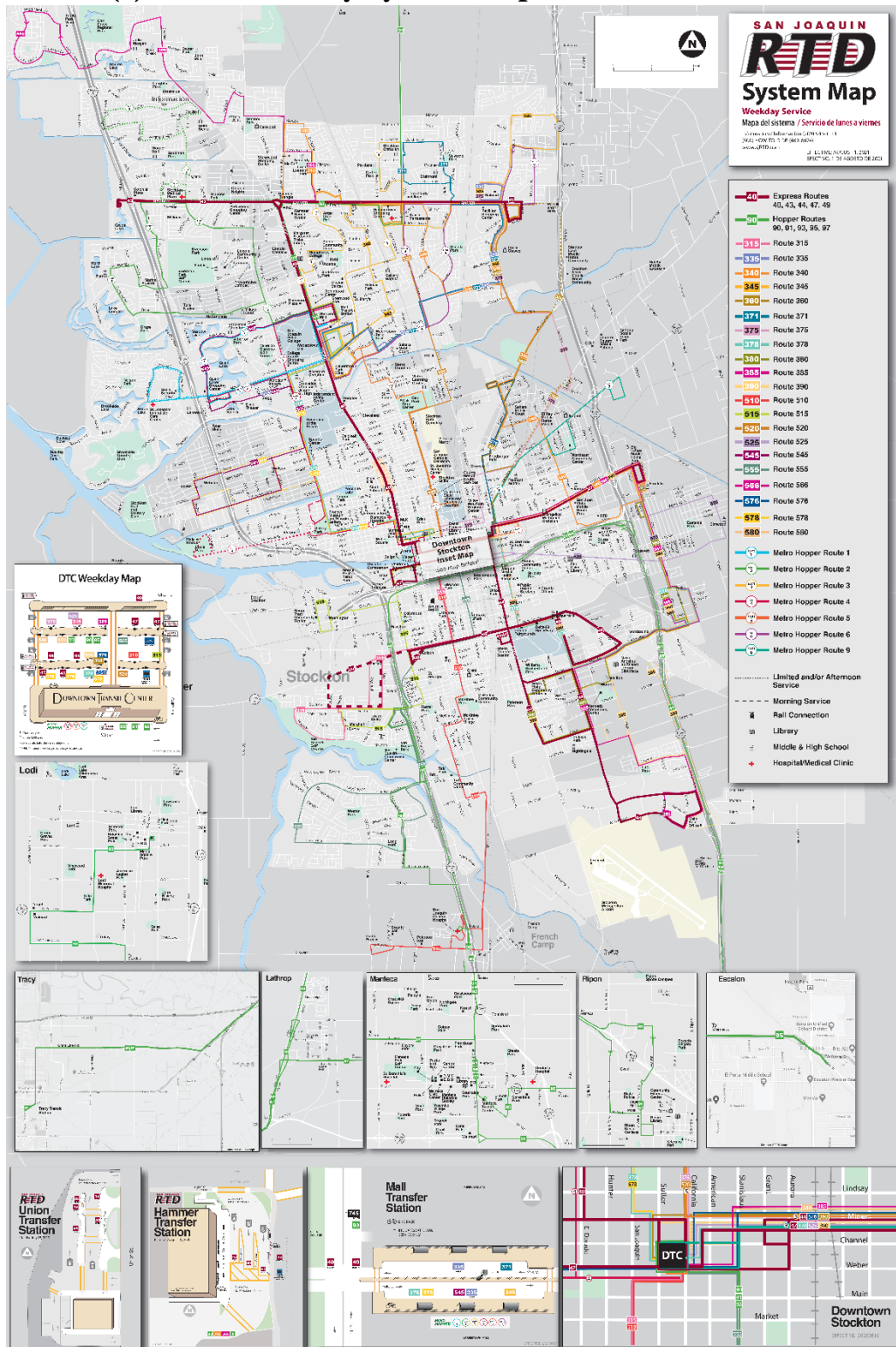
The San Joaquin Regional Rail Commission's (SJRRC) Altamont Corridor Express (ACE) Passenger Train Emergency Preparedness Plan promotes emergency preparedness by formulating and testing policies and procedures designed to prevent and plan for; control and respond to; stabilize and recover from an emergency arising from or affecting the operation of the ACE passenger rail service. SJRRC's plan assigns responsibilities and priorities, establishes tasks, sub tasks, and designates authority in the event of an emergency. This plan complies with 49 CFR Part 239, Passenger Train Emergency Preparedness. Participants to this plan include SJRRC, Herzog Transit Services, UPRR, JPB, BNSF, and Bay District Amtrak.

### *Transit Systems Performance*

COG's ongoing efforts to ensure a well performing transit system is in place was established in December 1997 with the adoption of the Transit Systems Performance Study Final Report and updated in 2016 with the adoption of the 2016 Regional Transit Systems Plan. The study, initiated by COG in an effort to respond to questions concerning the performance of the County's transit systems, developed measures of cost-effectiveness and efficiency from the operating cost and ridership perspective. The study recommended setting goals for three performance measures over a three-year period: cost/hour; passenger/hour; and subsidy/passenger. The performance indicators are reflective of each operators system and growth plans. The SJCOG Board adopted the revised Transit System Performance Objectives in September 2015.

On November 4, 1993, SJCOG requested that the Stockton Metropolitan Transit District Board request expansion of the transit district boundaries countywide. This action was followed by SB 1699 which expanded the district's boundaries countywide. Further, SJCOG wrote that "the regional plan is currently in the stage of consolidating transit systems, and the Council of Governments believes that the formation of a single transit district would make this process more efficient and expedient." SJCOG continues to support the vision of SB 1699.

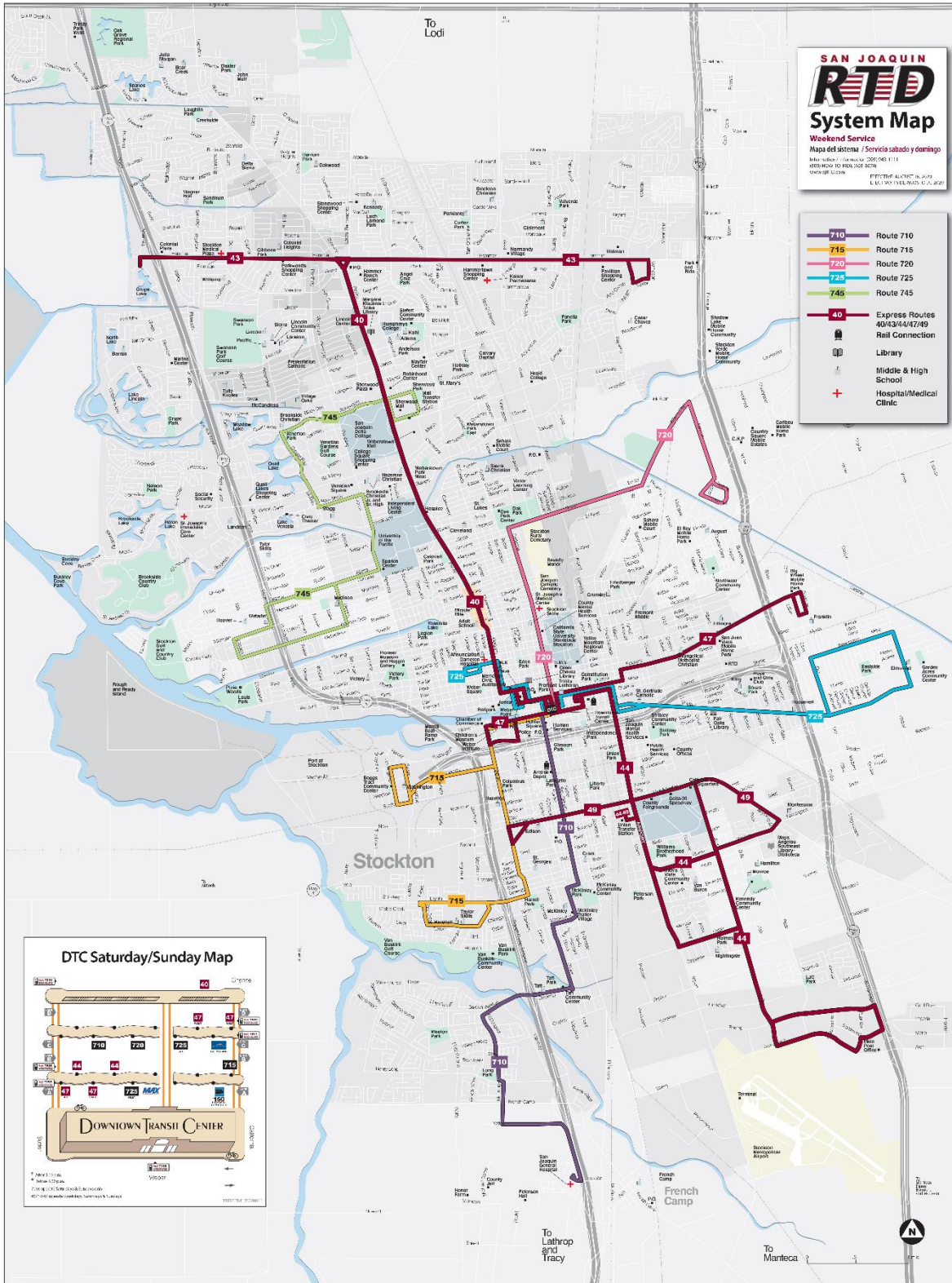
**TRANSIT SYSTEM MAPS**  
**Figure L-2 (a) RTD Weekday System Map**



If information is needed in another language, contact (209) 943-1111 / Si necesita información en otro idioma, llame a (209) 943-1111 / 如需在其他语言中获得信息，请联系 (209) 943-1111 / Yogi cov ntauab ntauw xaw tau ua lwm hom lus, hu rau (209) 943-1111 / Kung kailangan ang impormasyon sa ibang wika, makipag-uugnanya (209) 943-1111 / Nếu quý vị cần thông tin bằng một ngôn ngữ khác, vui lòng gọi số (209) 943-1111

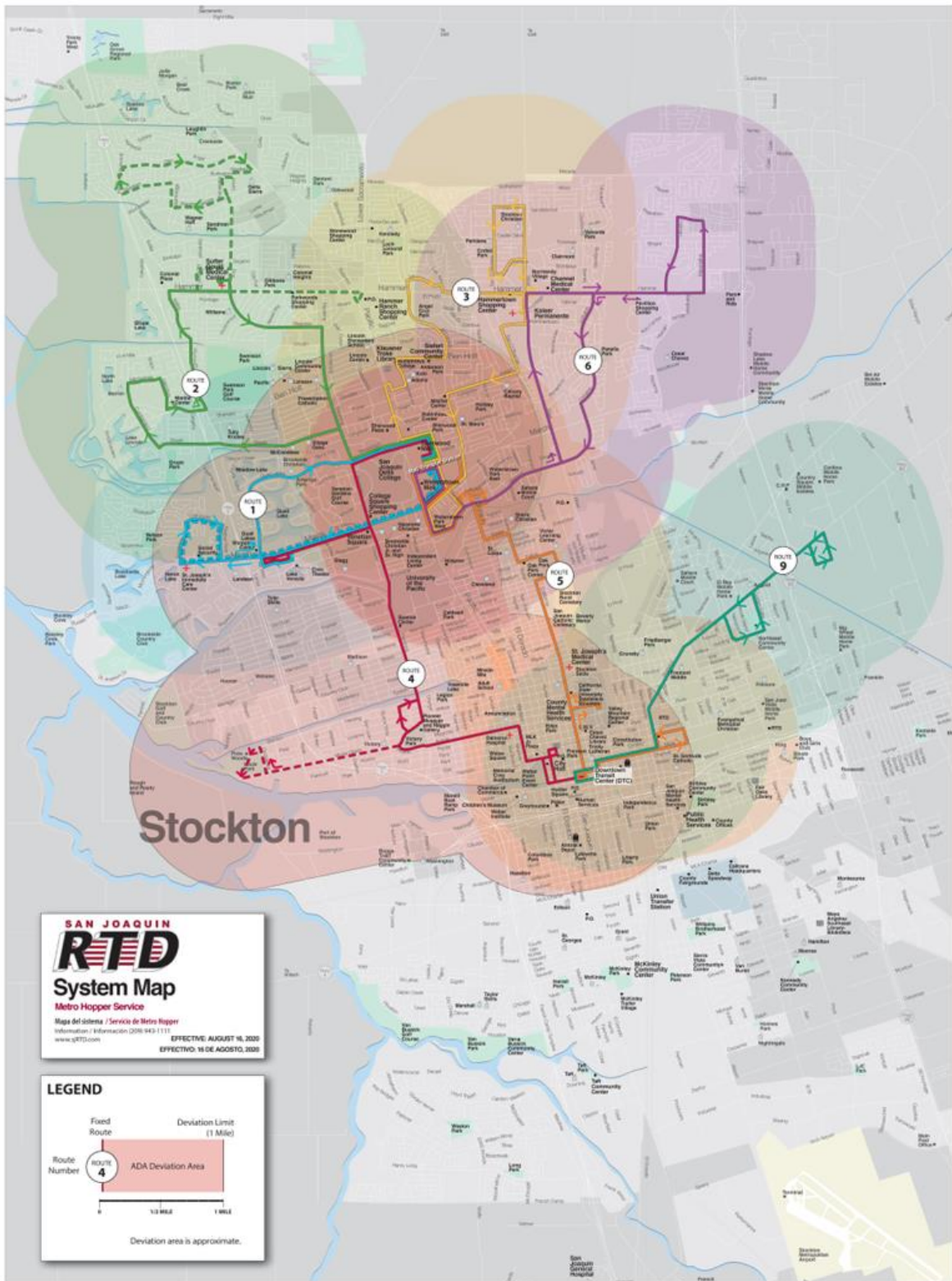


Figure L-2 (b) RTD Weekend System Map



If information is needed in another language, contact (209) 943-1111 / Si necesita información en otro idioma, llame a (209) 943-1111 / 如需更多资讯，请联系我们 (209) 943-1111 / Yag cov ntaub ntauw xav tau ua lwv hom lus, hu rau (209) 943-1111 / Kung kailangan ang impormasyon sa ibang wika, makipag-ugnayans (209) 943-1111 / Nếu quý vị cần thông tin bằng một ngôn ngữ khác, vui lòng gọi số, (209) 943-1111

Figure L-2 (c) RTD Metro Hopper Service System Map



If information is needed in another language, contact (209) 943-1111 / Si necesita información en otro idioma, llame a (209) 943-1111 / 209-943-1111 / Yag cov ntaub ntawv xav tau ua hwm hom lus, hu rau (209) 943-1111 / Kung kailangan ang impormasyon sa ibang wika, makipag-ugnayans (209) 943-1111 / Nếu quý vị cần thông tin bằng một ngôn ngữ khác, vui lòng gọi số, (209) 943-1111

Figure L-2 (d) San Joaquin RTD Commuter

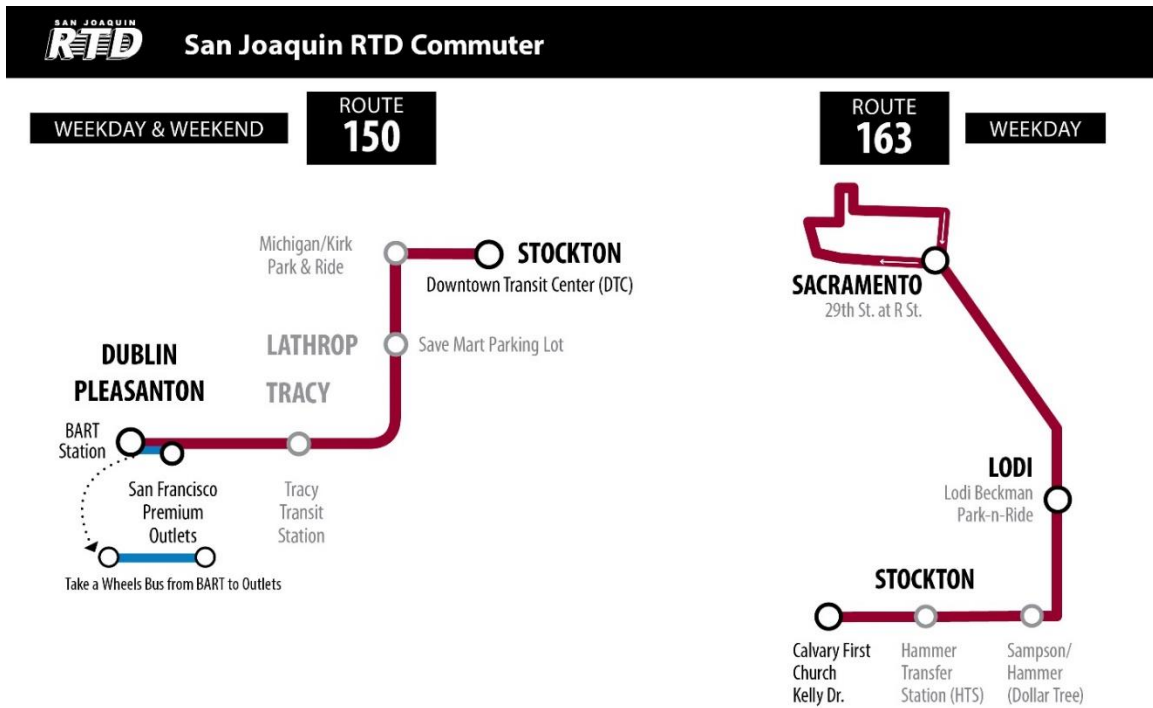




Figure L-3 Escalon Transit System Map



Figure L-4 Tracy Tracer Transit System Map

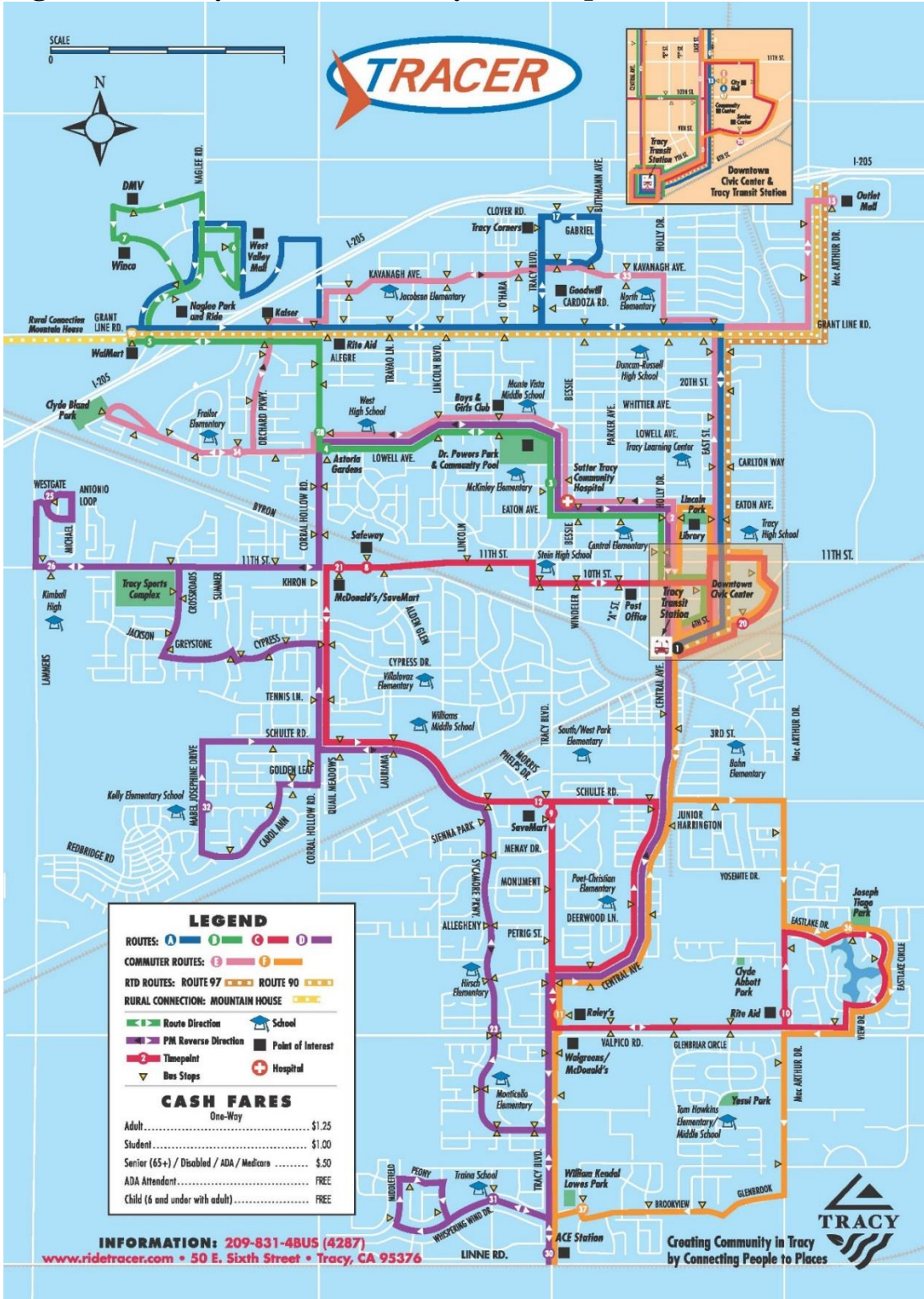




Figure L-5 Manteca Transit System Map

# manteca

# transit

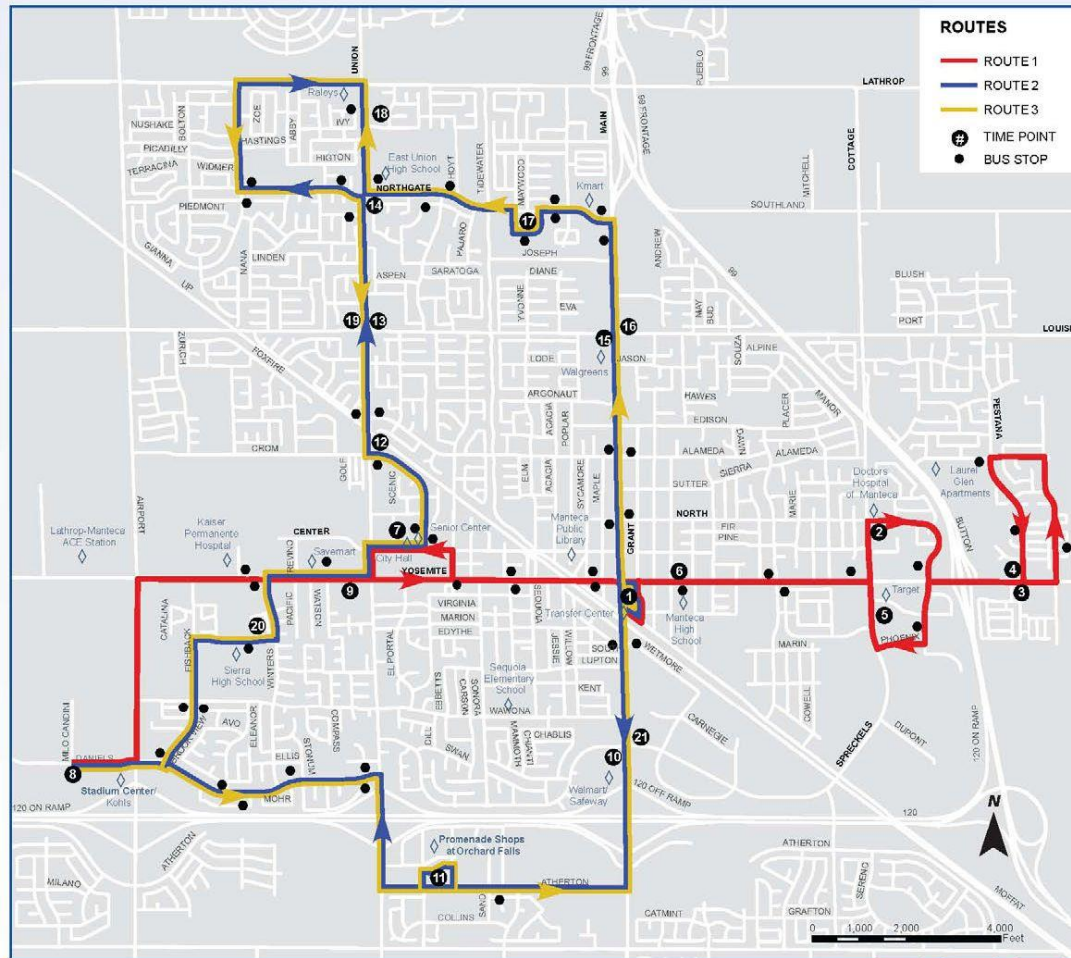




Figure L-6 (a) Lodi Grapeline Weekday Transit System Map

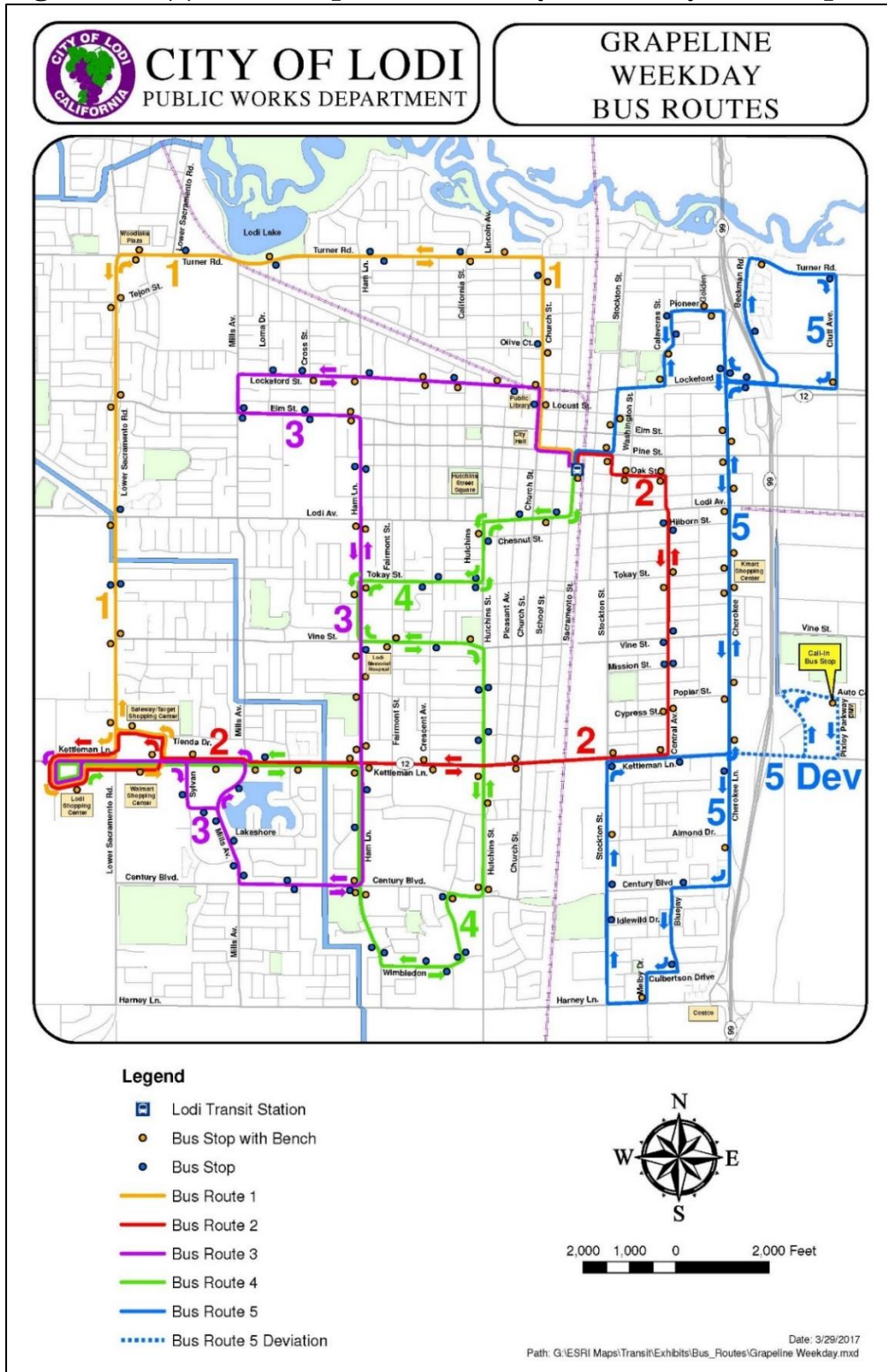


Figure L-6 (b) Lodi Grapeline Weekend Transit System Map

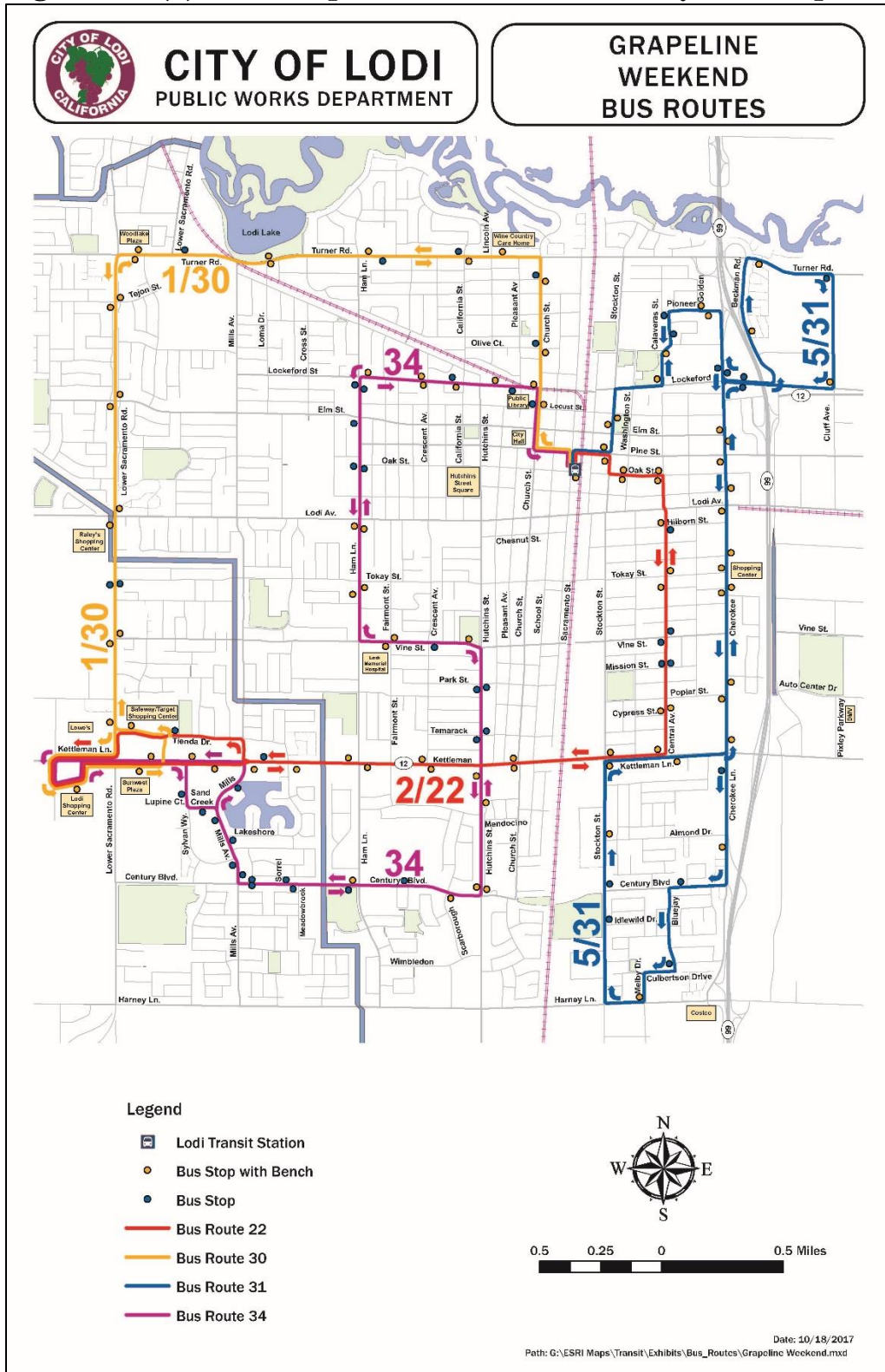


Figure L-6 (c) Lodi Grapeline Express Transit System Map

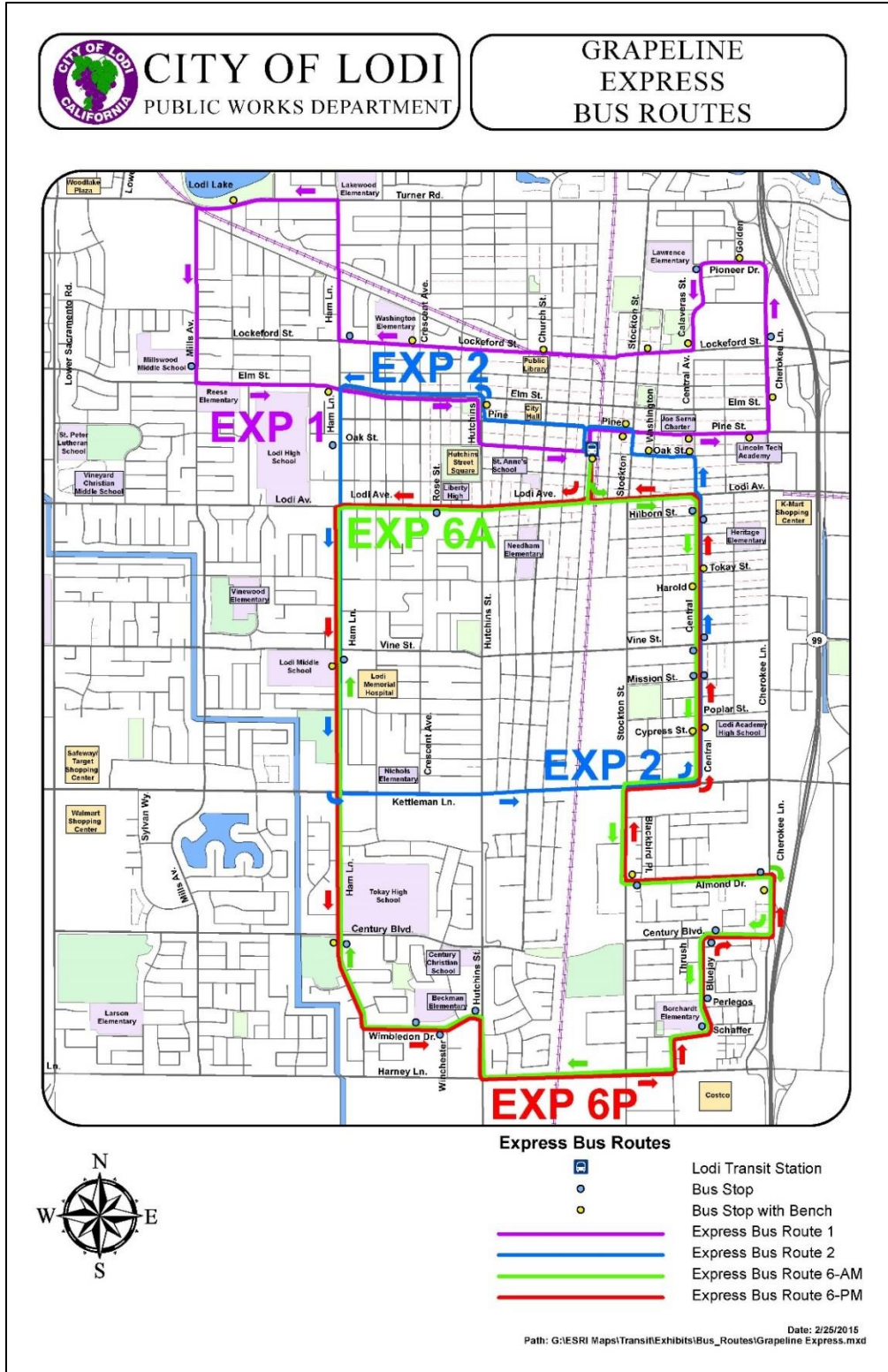
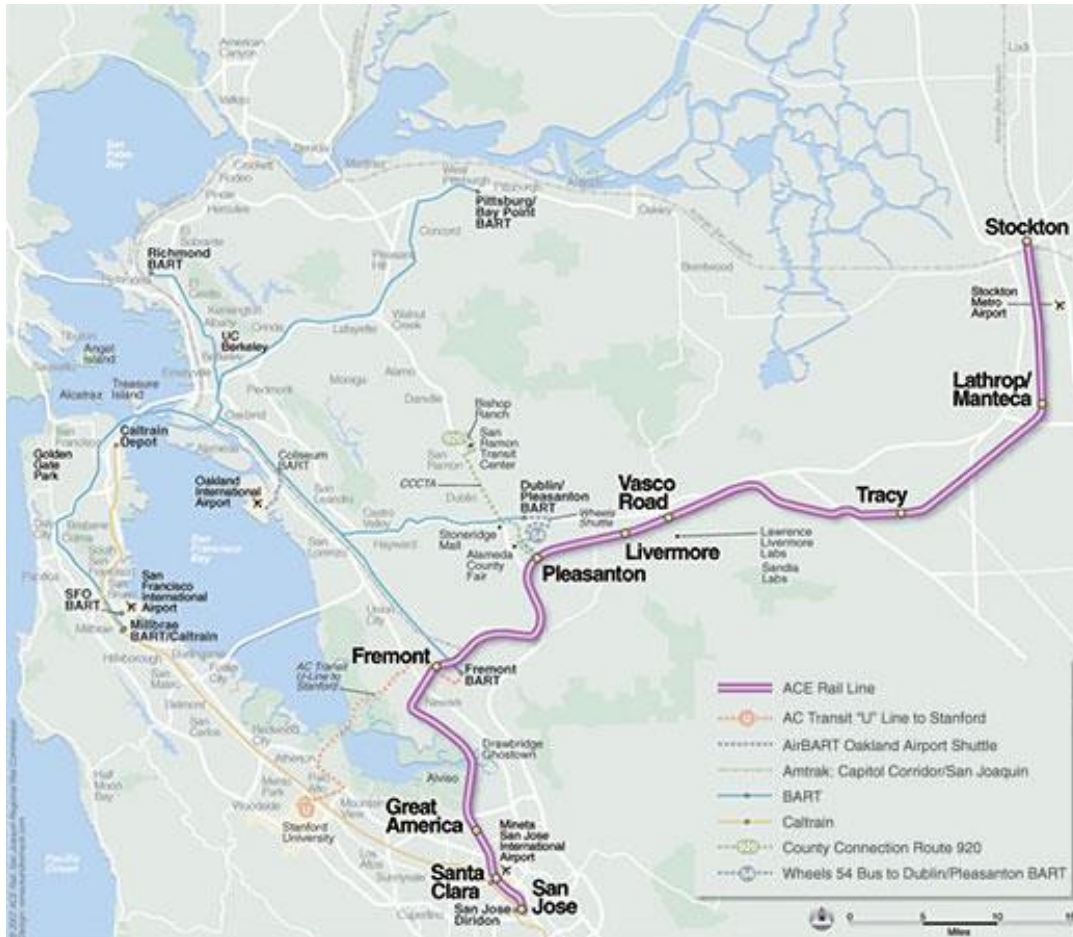






Figure L-8 Altamont Corridor Express System Map



## Needs and Issues

### *Rapid Growth and its Demand upon the Mass Transit System*

San Joaquin County is experiencing a growing market demand for intercity and interregional alternative modes of transportation. Increasing travel interaction between San Joaquin County's cities and the Bay Area, as well as the Sacramento area and San Joaquin Valley communities, has increased the need for both intercity and interregional transit service.

Where local dial-a-ride services were once sufficient for meeting the region's mobility needs, evolving transit demands now call for new and improved services. Each year COG's assessment of "Unmet Transit Needs" finds the need for expanded local, intercity, and interregional services. Sometimes these needs are not reasonable to meet from a cost-effectiveness standpoint. The challenge lies in finding a way to meet the increasing transit needs in a cost-effective manner. This can be accomplished by reducing the total cost of the system or by increasing the ridership. Reducing the cost is particularly challenging given that primary cost components are labor related. Increasing ridership seems to be the option with greatest potential for affecting a transit system's cost-effectiveness.

The availability of transit services alone will not induce individuals to leave their autos when traveling; a series of benefits, consequences (in the form of cost, congestion, and pollution), and supporting activities are also required. Studies have shown that pricing and land use (ease of access) are the two most effective means of achieving increased transit usage, congestion management, and auto-related air quality goals for the region.

### *Transportation and Air Quality*

For areas that fail to meet relevant air quality standards, federal and state clean air legislation have set auto occupancy standards to be achieved during peak commute periods. Although not specifically required, an increased reliance on transit is expected to meet such goals. The region is committed to improved public transit as a transportation control measure (TCM) as part of the Air Quality Attainment Plan, which is part of the State Implementation Plan (SIP).

Although the provision of increased transit is key to our region achieving federal and state air quality goals and standards, it must be coupled with other supportive elements such as:

- The integration of increased density developments and transit services which support the walk-to-transit and bike-to-transit trips
- The identification and support of multimodal terminals and park-and-ride lots, as well as their integration with support commercial services to allow for trip avoidance
- The expanded support for transit services within the local communities to provide for increased mobility options and access
- Local support and mandates for employee transportation allowances, parking fees, flexible work hours, and transit pass subsidies

- Local support and mandates for fleet operator alternative fuel programs
- Local support for all alternative modes including transit, rideshare, vanpools, bicycling and telecommuting

### *Financing Transit*

Securing adequate and stable funding to support existing and future public transportation system operations will continue to challenge COG and its member jurisdictions.

Local funds, including Transportation Development Act (TDA), State Transit Assistance (STA), and Measure K funds, are the primary sources of revenue for transit systems. Other important revenue sources include farebox receipts and Federal funds such as Urbanized Area (UZA) formula grants.

TDA funds are based on sales tax revenues, thereby making them subject to fluctuating economic conditions. Historically, TDA funds have grown at a slightly faster rate than inflation, signifying growth in consumption due in part to population growth. Emerging commute patterns and an increased emphasis on air quality will require that Transportation Development Act funds increasingly be used to exclusively fund public mass transit projects.

Senate Bill 716 (SB 716) (Wolk 2009) requires counties that had a population of less than 500,000 as of the 1970 census, but that have a population of 500,000 or more as of the 2000 census or at a subsequent census, would require the local transportation funds (TDA) apportioned to the urbanized areas of those counties to generally be allocated for public transit purposes and not for street and road purposes, except that cities in those counties with a population of 100,000 or fewer would be exempt from this requirement. San Joaquin County has passed the 500,000-population threshold of SB 716 and cities within San Joaquin County with a population greater than 100,000 will be required to comply with this statute by July 1, 2014 or when their future populations pass this threshold.

Measure K, the local ½ cent sales tax, is an important source of capital and operating funds for transit projects in San Joaquin County. The recent passage of the Measure K Renewal program secures funding to the year 2041. A large percentage of transit funding in San Joaquin County comes from the Measure K program.

Covering operating shortfalls is and will remain a primary concern for all transit systems.

### *Freight Rail Conflicts with ACE*

Pacific Rim trade has grown substantially in the last ten years. This has resulted in a substantial increase in freight rail traffic on the Union Pacific line over the Altamont Pass, including major portions of the rail used by ACE. This has resulted in a substantial increase in freight train/ACE passenger train conflicts and a significant decrease in on-time performance of the ACE service. As of October 2017, ACE's year-to-date on-time performance was 89.18%.



Freight rail demand is projected to continue to increase – posing greater challenges to ACE’s on-time performance standards. ACE and the Union Pacific have a current agreement to achieve 95 percent on-time performance for the passenger rail system, but future freight demands could outweigh the passenger performance goals. Based on this reality, the San Joaquin Regional Rail Commission has identified the need to purchase and directly own the majority of ACE’s service line from Stockton to Niles Junction as a top priority. This right-of-way purchase and potential track/signal upgrade is also critical to the startup of short haul rail service from the Central Valley to the Port of Oakland.

## **Current Transit Planning Activities**

### *Escalon Short Range Transit Plan*

The City of Escalon released their draft 10-year Short Range Transit Plan (SRTP) for FY 2017/18 – 2026/27 in November 2017. The draft SRTP identified the 10-year operating and capital plans as well as targeted performance measures. The draft SRTP proposed a radical revision to Escalon’s current transit operations by eliminating the existing fixed-route service to Modesto. The funds Escalon currently uses to run that service would be transferred to RTD to partially fund a new County Hopper route serving Stockton, Manteca, Escalon and Modesto. Additionally, Escalon would reduce the total hours of the Dial-a-Ride service but make it more flexible to respond to passenger needs. The draft SRTP is expected to be reviewed and approved by the City Council in January, 2018.

### *Manteca Short Range Transit Plan*

The City of Manteca completed their five year SRTP in May 2014. The update reflects the first comprehensive look at Manteca’s Transit system since 2009. The transit system has been successful in attracting riders as attested to by its 13 percent annual increase in ridership from 2009 to 2014.

The SRTP identified the 5-year operating and capital plans as well as targeted performance measures. Recommendations from the SRTP include implementing a multi-year (phased) bus stop improvement program; revising current route alignments to increase the “transit footprint” in Manteca, enhance on-time performance and maintain inter-route connectivity; extend service to provide access to ACE rail service; revise Dial-a-Ride fare policy to increase farebox recovery; and introduce fixed-route service on Saturday.

### *Tracy Tracer Short Range Transit Plan*

The City of Tracy completed an update to their SRTP in September 2009. The update provided comprehensive market research analysis of the transit system, established goals, objectives and performance standards, documented transit needs through public outreach, provided service plan and fare recommendations, plans for facility development, and

established a detailed operating and capital financial plan. The SRTP recommended modifications to routes with the opening of the Downtown Multimodal Transit Station in February 2010; increased bus frequency on Routes A&B during the peak commute periods; additional bus stops; the extension of Routes D&E to Kimball High School; and implementation of a subscription service between residential areas and the ACE station. The capital plan identified options for future bus replacements and propulsion types.

### *Ripon Short Range Transit Plan*

The City of Ripon Short Range Transit Plan (SRTP) 2010-2020 was developed and adopted in January 2011. The SRTP was funded through a Federal Transit Administration (FTA) Transit Planning Assistance grant. Groundwork for the SRTP included a 22-question community-wide transit survey mailed to nearly 4,200 households in Ripon. The SRTP provided the impetus to launch the Blossom Express fixed-route service.

The SRTP identified transit needs, funding sources, capital equipment, system evaluation/performance standards, and marketing/outreach strategies. A series of transit goals and objectives were also included in order to assist the City in maintaining acceptable levels of service. These service standards include updating the SRTP every five years; maintaining a 10 percent minimum farebox recovery standard; attaining 8 passenger trips per vehicle service hour; a 90 percent on-time performance standard for fixed route; maintaining 100,000 miles traveled between preventative accidents; and a minimum of 40,000 miles between road calls.

### *Lodi Short Range Transit Plan*

The Lodi GrapeLine Short Range Transit Plan (SRTP) was adopted in September 2013. The SRTP contained a series of recommended goals, objectives, and service standards that affect the delivery of transit service. Broad-based goals contain a series of objectives, measurements, and standards for service design and service delivery.

Service Plan goals include: extend weekday and weekend service on fixed routes; extend weekday and weekend service on the Dial-A-Ride; add the Costco/Home Depot Shopping as a scheduled stop on Route 5 and an On-Demand service to the Department of Motor Vehicles; and eliminate Route 7 as it was indicated to have the lowest ridership in the City of Lodi. Capital Plan goals include: install bus wash facility and upgrade fueling facility; bus stop improvements; develop a southwest Lodi Transit Station and expand Lodi Transit Station; install additional security cameras on vehicles and at the Lodi Transit Station; install Automatic Locator Technology on buses and real-time traveler information; and upgrade vault and farebox equipment.

### *Annual Unmet Transit Needs Planning Process*

Each year SJCOG evaluates available transit services and identifies any unmet transit needs. Recently, SJCOG along with the Social Services Transportation Advisory Council (SSTAC), through the Unmet Transit Needs (UTN) Assessment identified the need to increase the consolidated transportations service agency's (ACCESS San Joaquin) MyRide program. This program offers fuel mileage reimbursement for eligible individuals to give them greater independence to fulfill life's needs. SJCOG worked with ACCESS San Joaquin to allow eligible San Joaquin County residents to travel anywhere in Stanislaus County, and to medical appointments in Alameda and Sacramento County. ACCESS San Joaquin proactively implemented this change before the annual UTN process was complete. The level of transit service included in the Regional Transportation Plan, through ongoing coordination with the region's transit agencies, reflects the most accurate information, tempered by the level of available resources.

### *Interagency Transit Committee and Ad Hoc Committee for Transit*

SJCOG established the Interagency Transit Committee in August 2004. The committee was created to improve coordination and communication among transit operators within the County. The committee meets monthly and is comprised of representatives from each of the transit agencies and jurisdictions within San Joaquin County. Each year the committee focuses on specific goals to improve the overall transit system.

The Ad Hoc Committee for Transit was formed in February 2017 in response to the adoption of the 2016 Regional Transit Systems Plan (RTSP). The Committee, which consists of the City Managers and transit agency Chief Executive Officers who make up the SJCOG Management & Finance Advisory Committee, was formed to address questions of transit funding policy raised in the RTSP, with the Interagency Transit Committee serving as a working group to assist in this process.

## **Proposed Improvements**

Capital and operating projects include maintenance and expansion of existing transit services to the fullest extent possible.

### *Bus Service*

This Plan calls for the continuation of local, intercity and interregional bus service, and is supported by the Measure K Renewal Strategic Plan. Additionally, this plan continues the countywide Dial-A-Ride program.

Capital projects include the continued improvements to the Downtown Stockton Transit Center; buses for fleet replacement, expansion, and expansion replacement; support vehicles;

facility upgrades; maintenance and facility equipment; and passenger amenities, such as shelters and information boards.

Service modifications and additional service will be provided as the region grows and travel patterns continue to change. Targeted improvements to capture a greater percentage of “choice riders,” particularly for intercity and commute trips will be a key target market. Improved delivery of lifeline service and job access to employment centers will also be a focus. The overarching goal of finding ways to provide transit service in a cost-efficient manner that meets public needs will also continue as a key objective.

Development of the transit infrastructure to support intra-city transit is a priority for the cities of Escalon, Manteca, Tracy, and Ripon. Procurement of buses, construction of maintenance and fueling facilities will greatly reduce the operating costs when compared to leasing vehicles and facilities.

Adequate specialized transit service for older and disabled citizens and for coordinated social services transportation is an additional service goal which ties strongly to community access and quality of life issues. This specialized transit service will need to expand over the life of the Plan to accommodate an anticipated significant increase in older age adults who continue to value mobility but seek options to the automobile. An updated Coordinated Human Services Transportation Plan, previously referenced, will provide continued strategic direction to guide the future development of the social services transportation system.

The 2022 RTP project list appendix lists projects included in the bus transit action program.

### *Rail Service*

This Plan includes the operation and enhancement of the ACE rail service, providing the commuter link between northern San Joaquin Valley and the Bay Area. In the near term, the San Joaquin Regional Rail Commission is planning for the extension of service to Modesto and Ceres by 2023 and Merced by 2027. This extension, which was infused with dedicated funding by the passage of SB 1 in 2017, will also add new stations in Ripon and Manteca in San Joaquin County. Other near-term projects include purchasing longer trains to provide additional capacity and track and signaling improvements to increase speed and reliability along the corridor.

The Rail Commission, in conjunction with the San Joaquin Joint Powers Authority, is also looking to provide additional rail transit options between the San Joaquin Valley and Sacramento. Both agencies have worked with Union Pacific Railroad to secure rights to operate additional trains to Sacramento along the Sacramento Subdivision near I-5. This service would provide additional stops in Elk Grove, Sacramento City College, Midtown, North Sacramento and Natomas/Airport, and allow for potential future extensions to Yuba City/Marysville and Redding (see Figure 7).

ACE is also seeking to provide additional trains over the Altamont Pass to the Bay Area. Of paramount importance to achieve this goal is to acquire dedicated rights of way from Stockton through Niles Junction to the maximum extent possible. This could either be through purchase of its existing line or purchase and upgrade of parallel lines in combination with new dedicated track in existing Union Pacific Railroad rail right of way. ACE will also continue to develop track improvements from Niles Junction to Diridon Station in downtown San Jose in conjunction with Caltrans and the Capital Corridor passenger rail service.

Additionally, for many years Alameda County has sought the extension of BART service east of Dublin to Livermore to provide a direct connection to ACE. The construction of this extension will be costly and feasibility is still being explored.

AB 758 (authored by Assemblymember Susan Eggman and signed by the Governor in October 2017) establishes the Tri-Valley-San Joaquin Valley Regional Rail Authority for purposes of planning, developing, and delivering cost-effective and responsive transit connectivity between the Bay Area Rapid Transit District's transit system and the Altamont Corridor Express commuter rail service. This new Joint Powers Authority (JPA) is tasked with developing a feasibility report for transit connectivity between BART and ACE. A possible option is a DMU/EMU (Diesel Mobile Unit/Electric Mobile Unit) Regional Connection. Other alternatives are being considered as well.

The first step of the Joint Powers Authority is the completion of a feasibility study to evaluate the proposed new DMU service by July 1, 2019. This feasibility study will be critical in identifying specific projects (and related costs) to achieve transit connectivity. In the development of 2022 Plan (update), SJCOG (consistent with the Metropolitan Transportation Commission in the Bay Area) has not identified capital or operations funding pending the feasibility report and a possible Programmatic Environmental Impact Report. As alternatives are developed and financial resources identified, it is anticipated that the proposed project will be considered in future amendments to the Plan.

The 2022 RTP project list appendix identifies the Action Program for Rail Corridor projects.

### *Short Range Plan, 2022-2029*

#### **Bus**

- Continue to focus on cost-effectiveness and service efficiencies
- Ensure as a priority the continued provision of lifeline services for the transit dependent and transit assisted population
- Ensure that cross system coordination, such as ADA qualification, for transfer and timed connecting service is effectively developed and implemented

- Continue to expand intracity fixed route service in Escalon, Manteca, Lodi, Ripon, and Tracy, ensuring transit measures of effectiveness are applied to decisions concerning service expansion
- Incrementally develop older and disabled specialized service responding to the growing older population
- Continue to expand intercity and commuter bus service cost-effectively but with a focus on attracting choice riders and job access
- Continue to develop cleaner, more energy efficient passenger and service fleets as part of vehicle and equipment replacement cycles
- Implement safety and security measures as a top priority

## **Rail**

- Extend ACE service to Modesto/Ceres and Sacramento, including new stations in Manteca and Ripon
- Participate with other passenger rail operators to implement speed and safety improvements throughout the ACE service area
- Increase passenger rail service between Sacramento, Stockton and San Jose. Service frequencies will be increased if demand warrants, operational funding exists, and the necessary track rights agreements are executed
- Participate in newly formed Tri-Valley San Joaquin Regional Rail Authority to complete a project feasibility study and environmental determination for a new DMU/EMU service over the Altamont Pass
- Continue to develop governance, funding, and operational strategies to implement the mission of the San Joaquin Joint Powers Authority
- Expansion of Robert J. Cabral Station to accommodate more passenger rail service
- Implement planned safety and security measures as a top priority
- Continue to develop cleaner, more energy efficient locomotives and rolling stock as part of vehicle and equipment replacement cycles

## *Long Range Plan, 2029 - 2046*

Encourage each locality to develop an integrated land use and transportation planning process consistent with increasing access and use of countywide transit systems.

## **Bus**

- Continue development of intercity and interregional service with the objective of increasing transit modal share of intercity and interregional trips and as a strategy to balance VMT and population growth
- Continue to emphasize cost effective and efficient service development

- Initiate express bus service as the County HOV network is developed as a congestion management strategy
- Ensure specialized service for the older and disabled communities keeps pace with population growth in those demographic areas
- Improve transit coverage, frequency, and service span, and expand the transit network with emphasis on disadvantaged communities that include individuals who are low income, minority, people with disabilities and older adults.

## **Rail**

- Complete extension of ACE service to Merced by 2027
- Expand and improve existing passenger rail service between Sacramento, Stockton, Merced, and the San Francisco Bay Area
- Potential build out of new DMU/EMU service over the Altamont Pass, as consistent with feasibility reports and/or environmental determination prepared by the Tri-Valley San Joaquin Regional Rail Authority
- Improve connections to BART and other feeder transit services
- Upgrade and expand stations including improved passenger amenities and ITS equipment

## **AVIATION ACTION ELEMENT**

The services provided by San Joaquin County's airports address a variety of local and regional needs through providing viable mobility options for the County's citizens and businesses. The aviation system connects the traveling public and cargo movers to airports in major metropolitan areas of the State and neighboring areas of Nevada. The aviation system serves the U.S. military directly or in an auxiliary fashion as well as supporting local farmers, police, and medical services. Aviation activities also provide recreational opportunities for the citizens of San Joaquin County.

### **The Existing Aviation System**

San Joaquin County's aviation system includes six airports that are open for use by the general public. These airports are:

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



Stockton Metropolitan, Tracy Municipal and New Jerusalem airports are publicly owned, while the remaining three airports are privately owned. The characteristics of San Joaquin County's public access airports vary significantly, from size and number of operations, to their types of activities and to their expected growth and impact on the local economy. As a group, the airports combine a range of services designed to meet the passenger, business, agricultural, recreational, and emergency services needs for the region. Stockton Metro, the largest airport, is a regional facility that offers the only air cargo and commercial passenger service in the county. Tracy Municipal Airport specializes in travel to and from the Bay Area, for both business and pleasure users. Lodi Airport provides a wide variety of general aviation services, ranging from corporate business travel to parachuting instruction. Kingdon Airport offers flight training, private flight use, and supports crop-dusting services in the area south of Lodi. New Jerusalem, a bare landing strip surrounded by farm lands, serves primarily flight training users. Lodi Airpark is a family operation, owned and used primarily by a local crop-dusting business.

### *Stockton Metropolitan Airport*

Stockton Metropolitan Airport (SMA) is the largest publicly owned airport in San Joaquin County at 1,552 acres. It is located on the Southern boundary of the city of Stockton..

The airport is conveniently located between two major north-south thoroughfares; Interstate 5, 1.5 miles to the West, and State Highway 99, which borders the airport on the East side. SMA facilities include two parallel runways, high-speed taxiways, aircraft parking and storage facilities, a passenger terminal, automobile parking and commercial/industrial areas. The main primary instrument runway, 11L/29R, is used chiefly by commercial and military aircraft. Stockton Metro is seeking to increase Airport Reference Code and Runway Design Code to allow Group V aircraft; including the Boeing MD-11F, 777-200F, or 747. The secondary runway, 11R/29L, is used by small general aviation aircraft. There are six carrier gates that adjoin the 44,355 square-foot terminal building. General aviation facilities include 152 hangars and 143 tie downs. The airport has four fixed-based operators. There are approximately 178 aircraft based out of the airport, made up of single and multi-engine, jet propelled and military aircraft.



Services provided for passenger convenience include an airport terminal, three air carrier gates, 550 free parking spaces, auto rental offices, a coffee shop and restaurant, a lounge, and a gift shop. Recently, Stockton Metropolitan Airport recently opened its new passenger hold room, doubling the seating capacity to accommodate 367 individuals. The new hold room offers opportunities for future expansion of airline service.

### **Passenger Service**

Commercial passenger service is offered through Allegiant Air, which offers five weekly flights to Las Vegas, Phoenix-Mesa, and San Diego. A Mexican airline has prepared a notice of intent to start non-stop flights to Mexico.

To facilitate commercial development at the airport, airport property is now included in Foreign Trade Zone #231. This designation will be useful for businesses located within the 50-acre, master-planned business park, Airpark 599 as well as other areas surrounding the Airport. In addition, construction was completed recently to construct an arterial Street, Sperry Rd that now provides much improved access from Interstate 5 to the airport area.

### **General Aviation**

SMA is an active general aviation airport. A number of Stockton area corporations use the facility for their aircraft operations. There are numerous fixed base operators and services located at the airport. General aviation services offered include: charter services, flight schools, aircraft sales, fueling, maintenance/repair services and aircraft storage.

### **Air Cargo**

Stockton Metro is the only airport in the county with air cargo service facilities. The airport sponsors continue to market the large cargo industry to promote future residency and use of the facilities. Air Transport International, Inc. (ATI) flies in four Boeing 767 freighters daily to accommodate Amazon.com's regional distribution facilities. The Airport currently handles 1.2 million pounds of cargo on an annual basis.

### **Military Use**

Thirty-three military aircraft are based at Stockton Metro. Training exercises are still conducted with fixed wing aircraft along with non-fixed type aircraft.

### **Other Airport Activities**

As San Joaquin County's regional facility, Stockton Metro serves as a site for important public health and safety services. Among the operations that take place or are based at the airport

are: County Sheriff helicopter operations, hospital “life flight” activities, and forest and brush fire suppression aircraft operations.

### **Airport Land Use**

Stockton Metro is focused on keeping incompatible land uses outside of the highly impacted airport zones. The area around the airport is partially within the City of Stockton, and partially within the unincorporated area. Based on the general plan, land use designation for this land in both jurisdictions is primarily commercial/industrial or agricultural, designations that are compatible with airport operations. However, some areas within the high noise contours allow existing residential use and infill development.

Zoning on the airport property is Airport Multi-Use, which should encourage commercial development at the airport. The area around the Airport has all been designated for development, except the area to the south. This area has a General Plan designation of General Agriculture and a Zone Classification of General Agriculture, 40-acre minimum parcel size.

The airport property now includes the Centre Porte Business Center, along with the Airpark 599 Business Park. The Centre Porte Business Center is located on the north side of the runways, and bounded on the north by Arch-Airport Road and on the east by Rt.99. The Airpark 599 is located at the main entrance to the Airport. Both business centers are located within an established Enterprise Zone and, as part of the Stockton Metro Airport, have recently been designated a Foreign Trade Zone.

### **Ground Access**

Ground access to Stockton Metro is from three primary routes: Airport Way, I-5 via Sperry Road, and Route 99 via Arch Road. The direct access to/from Interstate 5 was completed in 2013 with the extension of Sperry Road east to Arch Road. Improvements for the French Camp/I-5 were completed in late 2014.

### *Tracy Municipal Airport*

The second largest publicly owned airport in San Joaquin County is Tracy Municipal Airport. The 310-acre airport property is located approximately four miles south of the city center. Tracy Municipal is owned by the City of Tracy and operated by the Tracy Flight Center. Fixed base operations, such as aircraft maintenance, flight school, aviation supplies, and fuel, are contracted out by the City.



The runway configuration at Tracy Municipal consists of two active runways: One is the primary while the other is considered a secondary runway. The main runway is 100 x 4002 feet long, and the secondary runway is 100 x 3438 feet long. Both runways allow for instrument approaches. Existing structures on the airport

property include hangars, tie-downs, automobile parking, and a fueling facility. There is currently one fixed base operator at the airport.

### **General Aviation**

Tracy Municipal Airport is exclusively a general aviation airport. The facility is primarily used for business, flight training, and recreational flights. There are approximately 120 aircraft based out this airport, made up of mostly single engine along with multi-engine (4) rounding out the rest.

### **Other Activities**

Tracy Municipal is used by a wide variety of aircraft: helicopters, Lear jets, hot air balloons, gyrocopters, paraplanes and crop dusters. Lear jets bring in corporate travelers, although the airport currently does not sell fuel for these planes.

### **Airport Land Use**

Due to continuing development in the southern part of the City, the Tracy Airport has experienced conflict with surrounding land uses in recent years. The most heavily impacted areas around the airport are reserved for industrial use, but these uses have not always been adequately regulated. As a consequence, there are some incompatible land uses near the Airport. Contributing to the situation is the fact that most of the land surrounding the airport is in the unincorporated area of San Joaquin County. The ability of the City to protect the airport is reduced because the City does not directly control the surrounding land uses.

### **Ground Access**

Ground access to the Airport is available on Tracy Boulevard, by way of I-205, or Eleventh Street (Business I-205) to the northeast. This route requires travelers to drive through the City of Tracy to reach the airport. No direct route from the south or southwest (by way of I-5 or I-580 to Tracy Boulevard or Line Road) exists, but travelers may take I-580 to Corral Hollow Road and drive around to the airport. Access from I-580 to Tracy Boulevard would improve access to the airport from the west and southwest.

No bus, shuttle, or rail service to the airport is available. However, the Southern Pacific rail line is 2-miles from the airport. There is a potential for rail service with shuttle connections to the airport via this rail line.

### *New Jerusalem Airport*

The New Jerusalem Airport, owned by the City of Tracy, is located about four miles southeast of the city. The airport can accommodate only small, light aircraft. The airport property covers 315 acres, though 174 acres are leased for agricultural use.

The New Jerusalem Airport is unattended and offers no services or facilities for based aircraft. The airport is essentially a 3530-foot runway with a taxiway. The runway was given a new slurry seal in 1990. In 2012, as part of the Capital Improvement Program, the City of Tracy

made various runway repairs including an overlay, repainting runway markings and securing perimeter fencing.

### *Lodi (Lind's) Airport*

Lodi Lind's Airport is a private airport located about three miles north of Lodi, on the west side of state highway 99, just south of Collierville. This airport is the most active of the privately owned public access airports in the county. Lodi Lind's can accommodate all general aviation aircraft, some business jets and even DC-3 planes.

Lodi Airport has two runways. The main runway, with an orientation of 12/30, has dimensions of 26' by 4,267'. The secondary runway, with an orientation of 8/26, is 26' by 2,070'. The runway facilities allow for an instrument approach. Buildings on the property include: an administration office, a restaurant, and hangers for 167-based aircraft, a skydiving school, and various business buildings.

Operations include charter plan services, corporate jet flights, and business flights. The Airport is also home to three agricultural services firms. In addition, the Airport offers flight support services including 24-hour fuel and aircraft maintenance.

### *Kingdon Executive Airport*

Kingdon Executive is a privately owned airport located about 3 miles southwest of Lodi and five miles northwest of Stockton. Currently general aviation business and pleasure aircraft--single engine, twin engine and small business jets, use the airport. Current facilities at Kingdon Airport include a visual approach runway, 140' x 4,000, with a 12/30 identification.

### *Lodi (Precissi) Airpark*

Lodi Airpark is located three miles south of Lodi and five miles north of Stockton, on Lower Sacramento Road. The Airport is owned by an agricultural service firm; Precissi Flying Service, which runs a crop-dusting business. While nominally open to the public, the airport provides no services except to the owner's aircraft.

The airport has two runways; one is 2,705 feet in length the other is approximately 3,500 feet. Both runways are at a 7/25 orientation. Hangars for the 9-based aircraft are also on the property. No fuel or other services are available to the public.

## **Needs and Issues**

### *Demand*

A top priority at Stockton Metro Airport is to continue to develop and expand air passenger service. As the County and the surrounding market region continues to grow over the next 25 years, it is anticipated that market conditions will support an expansion and diversification of

service. Passenger facility and terminal improvements will be developed as needed to respond to air passenger service needs.

According to reports from Tracy and Lodi Airports, demand for general aviation facilities exceeds supply. Tracy Municipal Airport maintains a waiting list for hangar space.

### *Ground Access*

Stockton Metro Airport has the greatest opportunities for expanded ground access options. Bus, and shuttle services are modes that could be, but are not currently available for airline passengers. The remaining airports are more isolated from a population center, and serve primarily general aviation needs, so the opportunities for transit services are more limited or unneeded. Stockton Metro will be much easier to reach due to the completion of Arch-Sperry Road connection to Interstate 5.

### *Airport Land Use*

Over the past decade, former agricultural areas in San Joaquin County have been developed for residential or commercial use. Since many of the region's public access airports are in agricultural areas, or in the urban fringe, much of the new growth is moving closer to the airports. Assuring that the area around the public access airports is devoted to compatible uses has become a more challenging task in this high growth environment.

The SJCOG Board of Directors assumes the responsibility as the Airport Land Use Commission (ALUC) which regulates land uses around the airport areas of influence through its Airport Land Use Compatibility Plan (ALUCP). The purpose of the ALUCP is to provide for orderly growth of each public access airport and the areas surrounding each airport. The plan's safeguards are used for the general welfare of the inhabitants within the vicinity of each airport and the public in general. The plan, adopted in 1982, was updated and amended in 1993 to be a more effective tool in protecting airport operations. An amendment to the ALUCP was approved by the SJCOG Board in 1997, which changed the land-use zones for Tracy Municipal, in accordance with Caltrans planning guidelines. In 2009 SJCOG completed a comprehensive update to the 1993 ALUCP. The update established new compatibility zones and policies for all of the County's public use airports with the exception of Stockton Metropolitan Airport. Stockton Metropolitan was not included within the 2009 update due to ongoing delays in updating the Airport's Master Plan. The Stockton Metropolitan Airport ALUCP was approved in 2016. FAA approval of the airport's proposed layout plan was received in late 2017, triggering a minor administrative update the ALUCP expected to be approved in 2018.

Noise, height and safety issues are regulated through regional standards set in the plan by SJCOG, as the ALUC. General Plans, General Plan amendments, specific plans, Environmental Impact Reports (EIRs), and development/use applications that fall within an airport's Area of Influence are reviewed and commented on to ensure compliance with the

ALUCP. A permit type-based fee is levied by the responsible jurisdiction to offset the cost, to the extent possible, of reviewing projects and maintaining the ALUC.

Even with a comprehensive ALUCP in place, as growth occurs, the physical relationship of development to the airports and the impact that this will have on the future of the airport operations and the health and safety of the public can become a concern.

## **Proposed Actions**

Proposed Actions in this Aviation Action Element are best understood if one first has an overview of Airport Financing in San Joaquin County.

Publicly owned airports in San Joaquin County receive funds for airport improvements from four sources:

- Federal Aid to Airports
- California Aid to Airports Program
- Income (various sources)
- Local subsidies

The privately-owned airports obtain all their revenues from income--lease of hangars or airport property, landing fees, airport rentals, instructional services, fuel sales, etc., although some safety projects are eligible for California Aid to Airports program funds.

Stockton Metro Airport funds the majority of its capital improvements with Federal Aid to Airports grants. For runway, taxiway or other related improvements, Federal Aviation Administration funds cover 90% of the total cost. For passenger-related improvements, the Federal Aviation Administration requires a 50% match.

Tracy and New Jerusalem also receive monies from a discretionary allocation that the California Transportation Commission makes to small and medium-sized general aviation airports. These funds are raised from the aviation fuel tax. The State of California also offers low interest loans to general aviation airports for capital improvements.

While most airport programs are funded by earmarked revenues (fuel taxes, etc.), the availability of such revenues is discretionary and does not always guarantee that funds will be secured and allocated for projects. Private airports will continue to rely solely on their ability to generate income for needed improvements. If demand for services remains strong, income is likely to cover the cost of new capital facilities.



## *Tracy and Stockton Airport Development Programs*

The 2022 RTP Project List appendix identifies the most recent development programs for the Tracy Municipal and Stockton Metropolitan Airports. They are included in this Plan as required by law. The programs are the means by which the airports seek funding from the Federal Aid to Airports program and the California Aid to Airport program.

### *Ongoing Efforts*

- Support and assist in development of additional passenger air carrier service at Stockton Metro.
- Assist Stockton Metro and Tracy Municipal in expanding facilities to meet growing general aviation demands.
- Continue to work with the privately owned airports to support their operations and to maintain compatible uses within the airport area of influence.
- Continue to work with the local jurisdictions to keep land uses around the airports in the County compatible with airport operations.

### *Short Range Plan, 2022-2029*

- Work with the Tracy Municipal Airport and Stockton Metropolitan Airport to obtain funding from the state and federal governments for their respective development programs.
- Assist RTD as needed to improve transit coverage, frequency, and service span, and expanding the transit network with emphasis on disadvantaged communities that include individuals who are low income, minority, people with disabilities or older adults.
- Administrative updates of Stockton Metropolitan Airport's ALUCP for consistency with the approved Airport Master Plan.
- Administrative updates of San Joaquin County's ALUCP.
- Assist the City of Stockton and San Joaquin County to fund and complete the French Camp Interchange improvement extension project.
- Continue to work with the Lodi Lind's Airport to support its operations and to maintain compatible uses within the airport area of influence. Of particular interest to SJCOG is the development of aviation easements and rules for their usage for privately owned and public access airports. Complete and implement the Action Plan of the Central California Aviation Systems Plan.

### *Long Range Plan, 2029-2046*

- Protect and support the expansion of general aviation service at Tracy Municipal, Stockton Metro, and Lodi Lind field. Continue to work with County airports on land use compatibility issues.
- Continue to assist Stockton Metro Airport to develop and improve its capital facilities and to grow both the air passenger and air cargo markets.
- Implement the Action Plan of the Central California Aviation Systems Plan;
- Continue to work with public access airports to increase their access to State and federal funds.

## GOODS MOVEMENT IN SAN JOAQUIN COUNTY

Goods movement throughout the San Joaquin Valley, and particularly within San Joaquin County, is a key component of the economic vitality and growth of the region. San Joaquin County is ideal for the multi-modal movement of goods throughout the region. The San Joaquin Valley region is one of the four major international trade regions in California, as noted in the 2007 State Goods Movement Action Plan (GMAP)

The goods movement industry and a cohesive transportation infrastructure are directly linked to job creation and the overall improvement of the economy. Improving the goods movement infrastructure also is pivotal to relieving congestion on freeways and increasing mobility regionally and interregional. Furthermore, private and public partnerships are essential for the betterment of the goods movement industry.

## The Existing System

San Joaquin County has a unique intermodal system consisting of a state and interstate highway system, inland port, major railroads, a metropolitan airport, and intermodal yards. These assets are as follows:

1) ***The Highway Transportation Infrastructure System*** (HIS) links San Joaquin County to major California urban markets, and is particularly critical to the field-to-market component of the extensive agricultural operations in the Valley. The San Joaquin County is a major Northern California distribution point where two primary North-South highways, I-5 and State Route 99 intersect, and are joined by the Stockton Crosstown Freeway and Highway 120 through the City of Manteca. I-5 is the main North-South route for freight movement along the West Coast from Canada to Mexico. State Route 99 is the main inland route through the center of the State which connects major cities throughout the San Joaquin Valley. I-205, which aligns with I-580 running west, is the gateway of goods movement from the San Joaquin Valley to the Greater Bay Area. Numerous trucking lines and carriers are dependent on the San Joaquin County’s ground transportation infrastructure both for through travel and the movement of goods to and from the Port of Stockton, railroad intermodal yards, and the Stockton Metropolitan Airport. The graphic entitled “Highway Freight Network Tiers – Northern California” is from the State of California’s California Freight Mobility Plan (CFMP) which shows how important the transportation infrastructure of San Joaquin County and the entire Valley is to the State of California.



2) The ***Port of Stockton***, located on the Stockton Deepwater Ship Channel, 75 nautical miles east of the Golden Gate Bridge, owns and operates a major, diversified intermodal

transportation center that encompasses more than 2000 acres of operating area and real estate. The Port has over 11,000 lineal feet of waterside docking for vessel berthing and cargo operations. There are 40 miles of rail track which can be served by the Union Pacific Railroad (UP) or the Burlington Northern Santa Fe Railroad (BNSF). On-dock rail service to more than seven million square feet of warehousing is available, including over 700,000 square feet that is waterborne transit shed warehousing. Dry bulk, break bulk, and general cargo shipments compose the largest percentage of the Port's dockside operations. Stockton's deepwater channel has a designed depth of 35 feet at mean low water based upon U.S. Army Corps data. Panamax-sized vessels with load capacity up to 45,000-ton dead weight class fully loaded and partially loaded 80,000-ton dead weight vessels can be accommodated. There is no width restriction of vessels, and ships up to 900 feet in length can navigate the Stockton Ship Channel. The Port is one mile from Interstate 5 and all interconnecting major highway systems.

3) The San Joaquin County based major railroads include the ***Burlington Northern Santa Fe (BNSF) and Union Pacific (UP) Railroads***. The UP Intermodal Terminal plays a critical role in the railroad's California service profile, and serves both the San Joaquin and Sacramento regions. In 2002, the facility was made the western US terminus for the railroad's "Blue Streak" cross-country container service. Operated in cooperation with the Norfolk Southern Railroad, this expedited service provides a major link for double-stack container trains moving eastbound and westbound via Chicago between the Port of Oakland and major transshipment terminals in eastern Pennsylvania and New Jersey. The "Blue Streak" service was expanded to handle containers moving between California and Atlanta, Georgia. The Northern California-Northeast corridor through Lathrop also connects to the Union Pacific's service connecting Los Angeles with Dallas, Texas and Memphis, Tennessee. Efforts are on the way to significantly expand the UP Intermodal Terminal operations towards Airport Way.

The BNSF facility is the result of an \$80 million investment by the company that will connect freight to BNSF's 33,000 miles of track across 28 states and Canada. The new facility contains two loading and unloading tracks, averaging 7,000 feet in length, with the capacity to hold approximately 150 intermodal railcars. Storage tracks accommodate 230 intermodal railcars and have more than 800 containers and trailer parking spaces. In addition to building the facility, BNSF established a 55-acre wildlife sanctuary for the preservation of native species and contributed more than \$9 million to intersection and roadway improvements.

Reciprocal switching agreements between both lines provide the local economy with efficient rail service.

## **Private/Public Sector Partnerships**

Formulating and maintaining private/public sector relationships is necessary to gain insights and development strategies to best respond to the challenges to improve the goods movement industry. SJCOG will continue to foster private/public sector relationships and engage in the following committees/organizations:

## *Goods Movement Task Force (GMTF)*

In 2006, SJCOG assumed the role to develop and staff the GMTF which represents a broad spectrum of public and private sector goods movement interests for promoting economic development in San Joaquin, Stanislaus, and Merced counties. The GMTF is comprised of representatives from private goods transportation companies, public sector, ports, shippers and receivers, public agencies (e.g., Caltrans, MPOs, Special Districts) with goods movement concerns to:

“Build consensus among public and private sector goods movement interests for improving the safety and efficiency of goods movement while improving mobility, air quality, social justice, the economy, and protecting the environment.”

The GMTF’s primary objectives are to:

- Improve the transportation of goods;
- Identify and resolve goods movement impediments;
- Advise the Regional Transportation Planning Agencies (RTPA’s) and other public agencies concerning specific goods movement concerns, issues, and priorities;
- Educate each other about the broad spectrum of issues that affect goods movement mobility and safety;
- Recommend specific changes to policies and practices that would improve goods movement mobility;
- Participate in RTPA transportation planning and investment decision processes;
- Identify and support implementation of promising and effective strategies to improve goods movement; and,
- Promote interregional partnerships and cooperation.

The Committee continues to meet on a bi-monthly basis.

## *Northern California Trade Corridor Coalition (NCTCC)*

The NCTCC is organization that will provide the continuity to bring both private and public sector stakeholders together. The coalition includes the Metropolitan Transportation Commission, the Sacramento Council of Governments, the Stanislaus Council of Governments, the Ports of Oakland and Stockton, and other transportation agencies. The coalition is focused on improving freight movement and logistical interconnections in Northern California and on freight policy and programs for the next federal transportation reauthorization bill.

The NCTCC’s goal is to secure the economic future by investing in the most critical improvements to the Northern California Trade Corridor. Members fully support the following efforts:

- Organize other businesses to join and support the Northern California Trade Corridor Coalition;
- Educate the business community, elected leaders and the public about the importance of the Northern California Trade Corridor; and,
- Advocate for state, federal and other resources to fund critical improvements to the Northern California Trade Corridor.

### *West Coast Corridor Coalition*

SJCOG has taken an active role with other MPOs, and the Departments of Transportation from WA, OR, and CA, in developing a WCCC.

Freight forecasts indicate that the volume of freight traffic could double by the year 2040 from increased population and economic activity. Road, rail, and marine freight transportation infrastructure on the West Coast is already under tremendous strain in terms of both capacity and safety. That is true for east-west US transportation routes originating and terminating on the West Coast, which are vital arteries for handling America's Asia-Pacific trade. It also applies to north-south road and rail infrastructure systems on the West Coast, which handle massive volumes of West Coast interstate trade and NAFTA trade. The WCCC's goal is to assist Alaska, Washington, Oregon, and California – under a proposed governing body that would combine state, local, and private interests – in coordinating combined intermodal, freight, and passenger transportation systems and in making a national case for increased investments in west coast transportation systems. The sub-committee structure is as follows:

- Goods Movement;
- Intelligent Transportation Systems;
- Federal Appropriations Requests; and,
- Administration.

## **Goods Movement Plans, Studies, and Related Efforts**

Numerous plans and studies have been conducted including the development of a truck forecasting model, the identification of rail movements to ease truck traffic on congested corridors as well as inland rail shipments to inland ports for movement of goods to coastal sea ports to ease congestion. These studies have all been done with public and private partnerships.

The results of the following plans and studies recently completed and in progress, are valuable resources to better the movement of goods.

### *California Freight Mobility Plan*

Caltrans' Division of Transportation Planning developed the California Freight Mobility Plan (CFMP) in 2014 as an update to the Goods Movement Action Plan (GMAP).

The CFMP is a statewide, long-range plan for California's freight transportation system. Developed in collaboration with our partners, the CFMP was developed by the California State Transportation Agency (CalSTA) and the California Department of Transportation (Caltrans) in consultation with the California Freight Advisory Committee (CFAC).

As the national gateway for international trade and domestic commerce, California enhances economic competitiveness by collaboratively developing and operating an integrated, multimodal freight transportation system that provides safe, sustainable, freight mobility.

### *CIRIS Project*

The potential for a rail container shuttle connecting the Ports of Stockton and Oakland is an attractive option as highways increasingly become overcrowded. The “inland port” concept allows seaport facilities to be duplicated in inland locations reducing the amount of waterfront property needed at prime seaport locations. According to a 2002 Tioga Group study, a dedicated rail shuttle between The Ports of Stockton and Oakland is technically and economically feasible with a sufficient amount of public subsidy. A combined strategy of near-term cargo opportunities, facility investments, and support for non-port rail initiatives is most likely to increase cargo volume. A follow-up study, completed in 2006, identified the feasibility and steps required to establish a pilot short haul rail system from the San Joaquin Valley to the Port of Oakland.

### *San Joaquin Valley Interregional Goods Movement Plan*

The San Joaquin Valley Interregional Goods Movement Plan identified a future preferred goods movement system for the Valley implemented through a comprehensive interregional strategy, including a list of regional improvement priorities. The planning effort occurred over a 24-month period beginning in May 2011 and included numerous stakeholders including the Federal Highway Administration, Caltrans, ports, private trucking industry, railroads, regional transportation agencies, the agricultural industry and others.

This plan recognizes that the efficient and safe movement of goods is a crucial aspect of daily life for residents and businesses alike in the San Joaquin Valley. For Valley residents, goods movement is essential to deliver food to grocery stores, consumer goods to stores, furniture and goods to offices, and packages to people's homes – even tap water depends on the timely arrival of treatment chemicals. Likewise, goods movement-dependent industries rely heavily and visibly on transportation as a key part of their operations.

The technical analysis and stakeholder outreach completed throughout the San Joaquin Valley Interregional Goods Movement Plan revealed that there are numerous challenges facing the safety and efficiency of the region's goods movement system. Many of these challenges can be grouped around six main issues: increased population and industry activity means trucks and cars vying for limited roadway access, leading to congestion and bottlenecks throughout the region; lack of transportation modal choices, environmental and community impacts of goods movement, maintain and improve connections to international markets, the importance of the East-West Corridors and last mile facilities, and build a transportation system to encourage economic development. Some issues and challenges deal with the safety or maintenance of the region's infrastructure, while others describe operational inefficiencies. These issues and challenges helped to guide the creation of performance measures and the project prioritization process that was a central part of this plan.

The San Joaquin Valley Interregional Goods Movement Plan led to two follow-up studies, the I-5/SR 99 Goods Movement Corridor Study and the Sustainable Implementation Plan, described in the next sections.

### *I-5/SR 99 Goods Movement Corridor Study*

The objective of this study is to look at strategic approaches to addressing future freight demand and to identify the most feasible options that emphasize innovative approaches. This study will examine innovative approaches that create opportunities for public-private funding partnerships (such as tolled truck-only lanes), that create incentives to the trucking industry to manage demand (through use of larger combination vehicles or novel technology solutions), efficiency improvements that rely on Intelligent Transportation Systems (ITS) or other technology options, and greater use of alternative modes such as rail. While many of these approaches have been examined in past studies, there has never been a comprehensive examination to determine which options are the most feasible, which will draw the most positive response from industry, and which will work most effectively with other plans for these two highway corridors while minimizing negative impacts on connecting roadways and adjacent communities.

### *San Joaquin Valley Goods Movement Sustainable Implementation Plan*

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

### *HOV/Ramp Metering*



In 2009 the Northern San Joaquin Valley Regional Ramp Metering and High Occupancy Vehicle (HOV) Study was completed in partnership between the San Joaquin Council of Governments, the Stanislaus Council of Governments, the Merced County Association of Governments, and Caltrans. This study assessed the impacts and benefits that HOV lanes and ramp metering would have in managing the traffic on major highways in San Joaquin, Stanislaus, and Merced counties. The outcomes of this study indicate a direct benefit to the goods movement industry.

### *Railroad Grade Crossing/ Separation Improvements*

SJCOG recognizes the need for Railroad Grade Crossing Improvements, particularly grade separations, to facilitate the movement of goods by reducing rail/roadway conflicts. Benefits accrue to both the rail traffic and the roadway traffic. Additionally, grade separations reduce congestion and improve safety for both trains and vehicles. The Measure K program places a significant emphasis on the importance and delivery of railroad crossing and full separation projects. The Measure K renewal includes over \$77 million for grade separation projects.

### *Regional Expressway Study*

The Expressway Study identifies a system of expressway routes in San Joaquin County which would improve regional connectivity, relieve congestion on freeways, and improve connectivity to adjacent counties in a cost-effective manner while supporting local land-use plans. This study focuses on expressway links between communities and to other counties, but also addresses and recognizes local expressways. These linkages must be compatible with existing and planned expressway and arterial roadways within a community and with planned freeway interchange improvements where a point of connection can be made with a freeway. The study also outlines future steps to implement the proposed system.

The outcomes of this study will have a direct benefit to the goods movement industry due to the connectivity between communities as well as the relief of congestion on the highway system. This study was completed in March of 2008.

## **Goods Movement Challenges**

San Joaquin County's strategic geographical location is the interregional hinge point of transportation and goods movement to and from the Bay Area, the San Joaquin Valley, the State of California, and the nation.

The region provides an integral link in goods movement for both the railroad and trucking industries. Highway 99 and Interstate 5 are vital north-south corridors. Highway 99, from Bakersfield to Stockton, carries more than a million vehicles a day. It is the backbone of California's goods movement infrastructure as well as the "main street" of the San Joaquin Valley. Safety and capacity improvements to Highway 99 are essential to increase economic prosperity. East-west corridors also are becoming increasingly congested and require

improvements. There is increasing demand for short and long-haul rail, especially from the Port of Stockton to the Port of Oakland as well as expanding passenger rail service.

Location is not necessarily San Joaquin County's strongest asset without the infrastructure to support it. The goods movement industry is directly related to the region's economic prosperity. Economic activity and development require mobility. The economy moves on local streets, state highways and rail, and through seaports and airports.

San Joaquin County is the fastest growing region in the San Joaquin Valley. As congestion increases and the workforce spends increasingly long periods of time commuting, it is imperative that a multi-modal approach is used to improve the transportation system in order to support and attract capital investment and foster economic development.

The Port of Stockton and the Metropolitan Airport are considered the critical assets that must be expanded upon for the good of the region's future economic growth. These assets must be made ready to attract the right companies and investment to the area. All efforts must be made to improve the transportation infrastructure to its fullest potential to support the movements of goods. In turn, this will foster economic development beyond the current market trends.

Agriculture and the food processing industry provide a stable base to the economy of San Joaquin County. However, accommodating population and economic growth pressures have resulted not only in the loss of agriculture land, but also an increase in traffic congestion on the rural roadways that facilitate the "farm to market" goods movement. This congestion also impacts the safe and timely delivery of fresh produce to market and processing plants.

Farm transportation needs also involve the need to move farming equipment along rural roadways. These roadways are usually one-lane roads with limited shoulders. Heavy, slow-moving farm equipment along these roads conflict with commuter travel requirements and creates unsafe travel conditions.

The I-205/580 highway corridor and Altamont Pass and Mococo UP rail line connections to the Bay Area are key strategic gateway connections for freight movement. Both highway and rail infrastructure development is critical to the future freight and logistics industry in this area and will be a focus of project and infrastructure proposals.

## **Proposed Capital Improvements**

Federal, State, and local funding have been identified for transportation projects that will have a direct benefit to the goods movement industry.

Street and highway improvements that will have benefits for the movement of freight are listed in the Street and Highway Investments contained in the 2022 RTP project list appendix. Rail corridor improvements that impact freight movement, such as sidings, signalizations, and improved alignments and grades, are shown in the Transit Investments, and are also contained

in the 2022 RTP project list appendix. These rail corridor enhancements are being done for the primary benefit of commuter rail services, yet it is acknowledged that they will have secondary benefits for the movement of freight on rail.

## **Proposed Actions**

### *Short-Range Plan (2022-2031):*

- Work with the GMTF Committee, as well as other goods movement related committees to identify operational and other needed improvements to facilitate goods movement in and outside of San Joaquin County;
- Work with Caltrans to implement elements of the CFMP and other state sponsored projects;
- Improve access to the Port of Stockton;
- Improve connectivity of goods movement between the Stockton Metropolitan Airport to Interstate 5 and the Port of Stockton;
- Support the Stockton Metropolitan Airport's need to establish infrastructure that will support the movement of goods from the ground to the air and from the air to the ground;
- Design, fund, and deliver Railroad Grade Safety Projects; and,
- Continue implementation of railroad improvements.

### *Long-Range Plan (2031-2046):*

- Utilize all strategies to improve the Level of Service of the regional transportation system;
- Continue to partner with other public and private sector goods movement stakeholders;
- Pursue all strategies to improve the connectivity of the primary goods movement multi-modal system (e.g., Highways, Rail, Port of Stockton, Stockton Metropolitan Airport);
- Ensure that as economic development moves forward, that the transportation infrastructure supporting those industries meets the design standards to support large trucks and access demands;
- Improve the availability of long-haul truck parking;
- Maximize the use of rail to move goods in order to provide relief to the transportation infrastructure;
- Continue to promote and fund alternative modes of public transportation in order to remove as many cars off the transportation system;

- Continue to examine and invest in transportation improvements that allows trucks to move as freely as possible on the highway system;
- Maintain the integrity and incrementally complete a Regional Expressway System;
- Pursue the Goals, Objectives and Policies of this section as opportunities to improve goods movements arise;
- As technological advances occur, use Intelligent Transportation System (ITS) methodologies to improve the movement of goods.

## ACTIVE TRANSPORTATION ACTION ELEMENT

Active transportation is any self-propelled, human-powered mode of transportation, such as walking, bicycling, or even skateboarding. These modes of transportation promote physical activity and reduce air pollution, while encouraging residents to connect with their surroundings and become less reliant on cars. San Joaquin County has an ideal terrain for using bicycles as an alternative transportation mode. The flat terrain, many rural roads and relatively mild weather make it particularly conducive to bicycle travel. For short trips, the bicycle can serve as an alternative to the automobile. Because the bicycle is non-polluting and energy efficient, it is an element in the region's multi-modal transportation system that could lead to a more efficient transportation network.

This appendix section focuses on Bicycle travel. However pedestrian travel is also a viable alternative in San Joaquin County. Urbanized downtowns and mixed-use centers can provide densities and mixes of land-use types more conducive to active transportation. In addition, smaller communities in San Joaquin County often have older residential neighborhoods located in fairly close proximity to small downtown commercial centers. Mild weather, coupled with pedestrian amenities, can make walking a viable alternative mode of travel. Often bike routes, especially the class I bike paths, are excellent paths for pedestrian travel.

### **Existing System**

Bicycle facilities generally fall into three distinct categories. There are several Class I bike and variations of Class I facilities that exist in San Joaquin County. These facilities provide a safe and reliable means of transportation for those wishing to cycle or walk to their destinations. Several jurisdictions have variations on Class II facilities, which provide optional striping scenarios to allow on-street parking. The County has a Class III variation which provides a four-foot delineated shoulder and bicycle route signing in the rural areas.

In keeping with Complete Streets concepts, when urban roads are either newly constructed or improved, a bicycle lane is often included as part of the project. Hence, many recently completed and planned in the Regional Roadway Improvements section of the project list, as well as general rehabilitation projects, include new or upgraded bicycle or pedestrian elements.

SJCOG awarded over \$7.5 million toward bicycle projects during the 20-year life span of the original Measure K. Major projects included: San Joaquin County's Bicycle Master Plan, City of Stockton's Calaveras River bike path, the Escalon High School linkage project, Lodi Lake bike path, City of Tracy bike maps, City of Manteca's Tidewater bike path, and the City of Ripon's Jack Tone bike path.

### *Bike Racks on Buses*

RTD, the regional bus service transit provider, City of Escalon Dial-a-Ride and Lodi Grapeline have installed bike racks on local, intercity and interregional buses. This feature has improved multimodal transportation options for the citizens of San Joaquin County.

### *Bike Lockers at Park and Ride Lots*

Bike lockers have been placed at several Park and Ride Lots serving interregional bus passengers.

### *Bike Facilities at Multi-Modal Stations*

RTD and the City of Tracy installed bicycle racks at their new transit stations to create a more bike friendly environment.

### *Measure K Bike Policies*

The SJCOG Board awards funding from Measure K funds to support bicycle projects and programs and is distributed between two categories. The non-competitive category award process occurs every two years and allocates 60% of Measure K bicycle revenues based on population. The competitive category award process occurs every four years with an allocation of 40% of Measure K bicycle revenues for a formal call for projects and selection process based on scoring criteria.

### *Pedestrian Enhancements*

Many pedestrian and beautification efforts have occurred or are underway including traffic calming measures, widened sidewalks, as well as pedestrian amenities such as benches and shelters, median improvements and plantings and sidewalk enhancements.

## **Needs and Issues**

### *Connectivity Issues*

To accommodate growth and as progress continues in the development of bicycle facilities in each jurisdiction, the need for linkage between cities to create an efficient network is increasing. Gap closures within cities and continuity of bike infrastructure between jurisdictions in the unincorporated county will continue to make biking a more viable alternative transportation option.

### *Maintenance Issues*

Maintenance of new bicycle facilities has always been an issue for various local agencies. Commitments for investment into new bicycle facilities cannot guarantee a continuing revenue source for upkeep, particularly for bicycle paths on separate right-of-ways. Rather than avoid bicycle improvements, however, new funding sources or ways to deal with maintenance should be pursued.

### *Attitudes*

General attitudes toward bicycling also present needs and issues. Many area residents do not view cycling as a real mode of transportation. Such attitudes are attributed to multiple factors:

- Lack of education;
- Lack of adequate signage or markings for designated bike routes;
- Many urban roads do not provide adequate space, due to lack of right-of-way, causing some cyclist to ride within the flow of traffic;
- Lack of adequate bicycle facilities, such as lockers or alternative means of securing a bicycle;
- Decentralization of employment centers, residential areas, and retail facilities.

Motorists are often unused to sharing the roadways with bicycles, leading to bike/automobile conflicts. Education regarding the transportation system must include cyclists, pedestrians, motorists, and transit passengers.

## **Current Planning Activities**

### *Local Bicycle and Pedestrian Plans*

In 2012, with funding from the Measure K Renewal, SJCOG developed the Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan. This regional plan for San Joaquin County serves as a guide to planning, developing, and managing a regional bicycle and pedestrian network. The goals of the plan include:

- Increasing bicycle and pedestrian mobility throughout San Joaquin County
- Improving bicycle, pedestrian, and school access safety
- Increasing education and awareness of bicycling and walking in San Joaquin County

- Addressing congestion near schools and on the Regional Congestion Management Program Network

Additionally, the plan identifies bikeways and pedestrian projects of regional significance and includes an implementation and funding strategy to help agencies involved in the implementation of the plan. Several jurisdictions in the County have recently or are in the process of updating their own active transportation or bicycle master plans. For instance, the city of Lodi's plan was updated in 2012, while Stockton's update was completed in 2017. As more of these plans are completed, SJCOG will consider updating the current regional plan to reflect these new planning efforts.

In order to support the priorities identified in the regional plan, SJCOG is responsible for administering, federal, state, and local funds to implement active transportation projects throughout the region.

### *CalTrans Smart Mobility Framework (SMF)*

The Caltrans Smart Mobility Framework is a key strategic tool for integrating transportation with land-use and developing multi-modal travel options. The framework provides guidance to communities looking to incorporate multi-modal concepts into their current planning initiatives. One such tool is the SMF Learning Network – a series of educational forums and webinars designed to share examples of SMF applications and encourage partnership opportunities between CalTrans and other agencies.

### *California Complete Streets Act of 2008 (AV 1358)*

This legislation requires cities and counties to identify how the jurisdiction will provide accommodation of all users of roadways during the revision of the circulation element of their general plans. General Plan guidelines, updated in 2016, provides guidance on how cities and counties can modify the circulation element to plan for a balanced, integrated, multi-modal transportation network. While the act provides no statutory requirements for regional agencies, they are encouraged to consider complete streets concepts in the programming of financial resources.

### *Active Transportation Program*

The Active Transportation Program (ATP) was created in 2013 by Senate Bill 99 and Assembly Bill 101 to promote the increased use of active modes of transportation, such as biking & walking. ATP Guidelines distribute the total annual funding capacity between three separate programs with 10% going to small urban/rural areas with populations of 200,000 or less, 40% going to Metropolitan Planning Organizations (MPO) in urban areas with populations greater than 200,000 and 50% going to a statewide program. All funding must be competitively awarded with the requirement that 25% of the funds in each program benefit disadvantaged communities. The ATP has two separate grant processes—one led by the State and the other

led by the nine large MPOs including SJCOG. To date, four funding cycles of the ATP have been completed, while the fourth cycle will be completed after the adoption of the 2022 RTP/SCS. The results of the previous ATP cycles are described below, with many of these projects being delivered in the early years of the 2022 Plan.

#### 2014 ATP Cycle 1

In 2014, the SJCOG board approved using \$50,000 in Measure K funds to provide consultant assistance to local jurisdictions for applications for the first ATP Cycle. 29 applications were submitted by San Joaquin County jurisdictions, among 770 applications statewide that requested a total of over \$1 billion.

Four projects from the City of Stockton received approximately \$3 million from the statewide portion of ATP Cycle 1, including funding for an updated Bicycle Master Plan and a new Safe Routes to School Plan that were both adopted in December 2017.

During the regional portion of ATP Cycle 1, the SJCOG Board approved eight projects from the cities of Lathrop, Lodi, Ripon, Stockton, Tracy, and the County of San Joaquin to receive a combination of \$2.97 million in ATP funds and \$1.5 million of Regional Surface Transportation Program (RSTP) funds. The SJCOG Board approved using these RSTP funds from the 25% SJCOG regional share to supplement the limited ATP funds available.

#### 2015 ATP Cycle 2

For ATP Cycle 2, no discretionary funding was available to provide consultant assistance or to supplement the regional ATP funding set aside for SJCOG. SJCOG staff offered technical assistance to local jurisdictions for the preparation of grant applications, including providing mapping support and providing assistance related to Disadvantaged Communities and census data.

16 applications from the region were part of the 617 applications statewide which competed for approximately \$180 million in Statewide ATP funds. These 617 applications requested a total of over \$1 billion. The City of Stockton and the County of San Joaquin were the only local jurisdictions to submit ATP applications for Cycle 2. The City of Stockton received \$396,000 in Statewide ATP funding for their Greater Downtown Active Transportation Plan project. During the Regional portion of ATP Cycle 2, the SJCOG approved awarding all of \$2.9 million available for the City of Stockton's Miner Avenue Complete Streets project.

#### 2017 ATP Cycle 3

During the 2017 ATP Cycle 3, eight applications from the Cities of Lodi, Stockton, Tracy, and San Joaquin County were part of the 456 applications statewide which competed for approximately \$122.8 million in statewide ATP funds. These 456 applications requested a total of nearly \$1 billion. The California Transportation Commission (CTC) did not recommend any statewide ATP Cycle 3 funding for projects in San Joaquin County. Cycle 3 was highly



competitive due to only two years of funding being available, and no San Joaquin County projects met the scoring threshold. For the regional portion, there were not enough ATP funds to fully fund the top ranked projects. As a result partially funding three of the larger projects in Stockton, along with fully funding projects in Lodi and Tracy and partially funding a project from RTD. To provide benefits throughout San Joaquin County and allow some immediate benefits for bicyclists, pedestrians, and students. The top three projects recommended in the City of Stockton were just short of being ranked high enough to receive statewide, and SJCOG recommended programming some seed money for preliminary phases would allow them to compete better for ATP Cycle 4 and other funding sources such as Measure K, Congestion Mitigation and Air Quality Improvement Program (CMAQ), Highway Safety Improvement Program (HSIP), or Cap & Trade in the future to complete the projects. Subsequently, two of the City of Stockton's projects received CMAQ funding to fully fund the projects.

#### 2017 ATP Augmentation

The passage of Senate Bill 1 directs \$100 million annually from the Road Maintenance and Rehabilitation Account to the Active Transportation Program (ATP) beginning in Fiscal Year 2017/18. The 2017 ATP Augmentation Guidelines were adopted by the CTC on June 28. The guidelines specified that MPOs use the funds to advance projects awarded through the 2017 Regional ATP Cycle 3 and to fund projects from the 2017 Regional ATP Contingency List. Because all other projects on the previously adopted contingency project list for ATP Cycle 3 had been fully funded, either through ATP funds or CMAQ funds, SJCOG staff examined the project scores of the remaining projects submitted in ATP Cycle 3 that had been resubmitted to be considered for the ATP Augmentation Funds. As a result, SJCOG recommended two of the remaining three unfunded projects be fully funded with ATP Augmentation Funds, and two of the other projects could be advanced.

#### 2019 ATP Cycle 4

During the 2019 ATP Cycle 4, 23 applications from San Joaquin County were part of the 552 applications statewide that competed for approximately \$223 million in statewide ATP funds. These applications requested a total of over \$2.2 billion. The CTC announced their staff recommendations for the statewide portion of the 2019 ATP on December 28, 2018. These recommendations included \$4,390,000 for the City of Stockton's California Street Separated Bikeway and \$2,838,000 for the Stockton Safe Routes to Schools Safety and Connectivity Improvements. The remaining applications were reviewed by a multidisciplinary advisory committee as required for the MPO Competitive Project Selection Process. Projects selected included San Joaquin County's Oro Avenue and Section Avenue Sidewalk Improvements was recommended for full funding (\$1,439,000). The remaining \$2,105,000 of funding was recommended for the next highest ranked project, the City of Stockton's Safe Routes to School Sidewalk Gap Closure Project. This amount was sufficient to fully fund the project development and right of way phases and partially fund the construction phase.

#### 2021 ATP Cycle 5

Given the strong demand for active transportation funding, the SJCOG Board elected to undertake a combined call-for-projects for ATP Cycle 5 funds, Measure K funds, and funding set aside from the Congestion Mitigation and Air Quality Improvement Program (CMAQ) for active transportation. Combining the calls-for-projects streamlined the process, and made a much larger amount of funding available for projects. A multidisciplinary scoring committee reviewed applications, and made recommendations for programming the \$18,352,000 made available.

## **Proposed Capital Improvements**

The Measure K Renewal Ordinance and Expenditure Plan as passed by the voters of San Joaquin County in 2006 includes a Bicycle, Pedestrian, and Safe Routes to School Funding Program. The Measure K Expenditure Plan specifies that 60% of the funds will be allocated according to a competitive process. The Expenditure Plan also specifies a minimum of \$65 million in federal transportation funding or Measure K funding will be made available during the life of the Measure K Renewal program for smart growth incentives to local jurisdictions in San Joaquin County. These funds will be available for infrastructure improvements that will assist local agencies in better integrating transportation and land use, such as street calming, walkable community projects, transit amenities and alternative modes of transportation. These funds will be available to enhance infill development, neighborhood revitalization and downtown improvements.

As part of the adoption of the 2017 Measure K Strategic Plan, the SJCOG Board approved a combined Call for Projects for the Measure K Bicycle, Pedestrian, and Safe Routes to School Competitive Program and the Smart Growth Incentive Program in Fall 2017. A total of \$19.63 million was made available, with \$3.85 million will be available for the Bicycle, Pedestrian, and Safe Routes to School Competitive Program, \$7.78 million for the Smart Growth Incentive Program, and \$8 million from the former Measure K debt service reserve fund that will be available for either program. In addition, SJCOG set aside \$170,000 to provide project and application development assistance to local agency project sponsors. These funds were divided with \$20,000 each to the cities of Escalon, Lathrop, Lodi, Manteca, Ripon, and Tracy, \$25,000 to the City of Stockton, and \$25,000 to the County of San Joaquin.

A total of 40 applications were received through the Call for Projects, with funding anticipated to be awarded in February 2018. This infusion of Measure K funds will allow projects to leverage local funding to compete for additional funds through the state Active Transportation Program and other funding sources.

Proposed capital bicycle and pedestrian projects for this Regional Transportation Plan are shown in Table 6-8 from appendix F. Specific projects identified include those that have recently received funding commitments or have been identified by SJCOG-member jurisdictions in capital improvement plans.

### *Short Range Plan (2022-2031)*

- Encourage SJCOG member jurisdictions to establish and implement adopted local bicycle plans, incorporate bicycle facilities into local transportation projects and consider Complete Streets design concepts.
- Continue to seek funding for bicycle projects from local, state and federal sources;
- Continue to seek funding to help maintain existing bikeways.
- Assist and encourage jurisdictions and employers to promote the use of bicycle facilities and safety.
- Update 2012 Regional Bicycle Plan as appropriate

### *Long Range Plan (2032-2046)*

- Periodically update the regional bicycle plan as appropriate;
- Continue to educate the public on the benefits of bicycle and pedestrian transportation;
- Continue to seek funding for bicycle projects and to maintain existing bike lanes from local, state and federal sources.

## TRANSPORTATION CONTROL MEASURES

Transportation Control Measures (TCM) have received tremendous amounts of attention since the passage of the State and Federal Clean Air Acts and congestion management legislation. As a result, the entire San Joaquin Valley Air basin is currently designated as a “non-attainment area” for ozone and particulate matter less than 2.5 microns in diameter (PM-2.5) and maintenance for particulate matter less than 10 microns in diameter (PM-10). According to State and Federal Clean Air Act requirements, San Joaquin County must ensure that “all feasible measures” be implemented to reduce emissions. This impacts the development and implementation of TCMs in San Joaquin County.

In San Joaquin Valley, the Air District and the Transportation Planning Agencies have jointly prepared a Transportation Control Measure Plan. The joint effort is the result of a memorandum-of-understanding signed by each of the agencies to coordinate air quality and transportation planning activities.

The Transportation Control Measure Plan includes the following measures or strategies for reducing vehicle emissions:

- Traffic Flow Improvements
- Passenger Rail and support Facilities
- Rideshare Programs
- Park and Ride Lots
- Bicycling Programs
- Trip Reduction Ordinances
- Telecommunications
- Alternate Work Schedules
- Public Transit

Transportation Control Measures being implemented in San Joaquin County are:

- Improved Public Transit
- Voluntary Ridesharing Program
- Park and Ride Lots
- Bicycle Programs
- Traffic Flow Improvements
- Railroad Grade Separations
- Passenger rail and support facilities

With one exception, these TCMs are a subset of those identified in the San Joaquin Valley Transportation Control Measure Program. The single exception is the “Railroad Grade Separations” TCM which is unique to San Joaquin County. The “Railroad Grade Separations” TCM is a replacement to the “Controls on Extended Vehicle Idling TCM” which is not being implemented due to ineffectiveness.

TCMs generally fall into one of two main categories: Transportation Demand Management (TDM) and Transportation Systems Management (TSM). TDM includes ridesharing and vanpooling, increased parking prices, decreased parking supply, park and ride lots, bus transit, rail transit, and bicycle and pedestrian facilities. The emphasis focuses on activities that will reduce the demand for the automobile as a mode of travel. These strategies involve including large employers in programs aimed at reducing the number of vehicle trips to the work place by encouraging ridesharing, limiting parking, or providing transit subsidies.

The function of the second category, TSM, is to identify strategies that will increase the efficiency of the existing transportation system without adding new travel lanes, thus reducing the amount of energy required to make the system function. Examples of TCMs are:

- Coordinated traffic signalization to minimize stop and go driving;
- Ramp metering;
- “Auxiliary lanes” designated for slow trucks on an incline;
- Intersection turning lanes;
- Railroad grade separations; and
- Replacing four way stop signs with traffic signals;

TCMs encourage vehicles to maintain a higher, constant travel speed, which has been shown to be more energy efficient and less polluting than inconsistent, variable travel speeds.

Not to be lost in the discussion of air quality are the traditional transportation benefits of mobility and congestion relief, which result from reducing demand and maintaining system efficiency. Together, the TDM and TSM strategies can help reduce the need for capacity increasing highway, street, and road projects.

This Regional Transportation Plan and associated Air Quality Conformity Document discusses air quality requirements facing San Joaquin County extensively, as well demand management strategies including bus and rail services, bicycle facilities, and railroad grade separations. This section is concerned with the remaining demand management and system management strategies that are considered Transportation Control Measures.

## **Existing System**

The Non-Motorized Transportation Control Measures relevant to this Action Element include Park and Ride Lots, Ridesharing Programs, numerous traffic flow improvement

projects, and opportunities for telecommuting and using alternative work schedules. Other Transportation Control Measures, such as public transit, transit facilities, bicycle facilities, and railroad grade crossings, have their own Action Element and are discussed elsewhere in this appendix. The Public Transit Action Element discusses bus and rail transit services. The Bicycle Action Element discusses bicycle projects and programs, and the Highway and Goods Movement Elements discuss plans for railroad grade separation projects.

### *Park and Ride Lots*

Presently there are 18 park-and-ride lots located in San Joaquin County. Each offers parking for 15 - 180 vehicles. There are three Caltrans lots, four capital lots and three lease lots funded with Measure K funds and eight developer/city/community lots with over 1,200 total spaces.

In 2007 the San Joaquin Council of Governments worked with a consultant to create a master plan for the development of park-and-ride lots in the future. This master plan serves as a guide for the development of corridor-level park-and-ride demand estimates for the future and identifies potential park-and-ride lot investment needs within the County.

### *Ridesharing (dibs)*

**dibs**, a program of the San Joaquin Council of Governments, offers smart travel planning, commuter matching, marketing services and incentives for San Joaquin County, Stanislaus County and Merced County. **dibs** focus is to reduce traffic congestion and improve air quality by motivating commuters to consider alternatives to driving alone and consider transit, biking to work, vanpooling or carpooling as viable options. To encourage behavior change, the program provides commuters with a variety of tools and services and assists employers with developing sustainable transportation plans to educate and assist employees. Program elements include a multi-modal trip planning system, emergency ride home program, vanpool incentive and employer outreach services. **dibs** is also a resource to employers required to implement Rule 9410, the trip reduction mandate established by the San Joaquin Valley Air Pollution Control District.

As of 2016-2017, **dibs** accomplishments include:

- 8,254 commuters registered in dibs trip planning system
- Commuters saved a total of \$64,796.00
- A savings of 45 metric tons of CO2 to the environment.
- A total of 126 vanpools
- 6,960 trips logged by commuters utilizing smart travel modes

### *Traffic Flow Improvements*

Traffic flow improvements include various actions and improvements aimed at reducing traffic congestion, increasing average vehicle speeds, and smoothing traffic flow. The existing system of traffic flow improvements include:

- Railroad Grade Separations
- Coordination and timing of traffic signals
- Traffic channelization and exclusive turn lanes
- Roaming tow-trucks on I-205 during peak travel times (Freeway Service Patrol)
- Message Signs used to alert travelers to adverse conditions
- Call-Boxes along State Routes and Freeways

### *Freeway Service Patrol*

As a congestion management strategy, SJCOG partners with Caltrans and the California Highway Patrol to provide Freeway Service Patrol (FSP) program on heavily congested freeway corridors and designated freeway construction zones. Typically offered during peak commute hours, the goal of FSP service is to remove disabled/stranded vehicles and obstructions on the freeways as rapidly as possible which eliminates problems that contribute to non-recurrent congestion. For FY 2016-2017, there were 5,911 total assists from service provided on I-205, I-5 and SR 99. Currently, the program provides FSP service during peak commute hours on a 16-mile section of I-205 near Tracy.

### *City of Stockton Traffic Management Center*

In the last two years, the City of Stockton has developed a Traffic Management System that coordinates traffic signals and provides real-time video information to staff for immediate response to incidents and malfunctions. Fifty-five (55) miles of fiber optic cable have been laid providing the infrastructure for connecting and coordinating signal timing at 250 intersections. More than 100 of the intersections are “on-line” and coordinated, while the remainder are in the process of being brought “on-line.” Once “on-line,” staff will be able to avert traffic congestion by adjusting signals and improving flow throughout the city.



## Needs and Issues

Transportation Control Measures are designed to reduce vehicle miles traveled, vehicle idling, or traffic congestion in order to reduce motor vehicle emissions. These measures are of great importance to the federal agencies, which will review this document. It has been determined that TCM's are an effective way of mitigating some of the contributing factors that lead to congestion. The Federal Clean Air Act Amendments require the COG to demonstrate that all federal Transportation Control Measures are being expeditiously implemented.

TCMs, while effective in reducing motor vehicle emissions, still have relatively modest air quality benefits, when compared to other air quality improvement strategies. The TCMs identified throughout this plan work best when integrated together and throughout the entire air basin. Integrating and implementing the TCMs throughout the Central California Valley can reduce vehicle emissions and help to relieve air quality problems.

## Current Activities

### *Ongoing TCM's*

The following TCM's are operational and ongoing. Current planning activities include monitoring each TCM's effectiveness and ensuring that implementation is timely.

- Commute Connection
- Freeway Service Patrol
- Changeable Message Signs
- Park and Ride Lots
- Call-Box for freeway emergencies and incidents
- Signal Coordination
- Education on alternatives

### *City of Stockton's Traffic Management Center*

Implementation of the Traffic Management Center is ongoing. More signalized intersections will be brought "on-line" and programmed for interconnection and coordination with related intersections. In addition, the City of Stockton will install additional video cameras at high volume intersections to improve monitoring and incident management. In addition to the hardware/software installation and upgrade aspects of this project, the City of Stockton is building partnerships with the County, Caltrans, and RTD to enhance the multi jurisdictional benefits of the system.

## *SJV Unified Air Pollution Control District – Heavy-Duty Engine Program*

In addition to the traditional TCM approach to reducing emissions, the San Joaquin Unified Air Pollution Control District manages the Heavy-Duty Engine Incentive Program. This program promotes the use of cleaner engines for reducing emissions from heavy-duty vehicles and equipment. Consistent with this RTP's goal of "Enhancing the Environment," and the objective to support transportation improvements that improve air quality, SJCOG will continue to support the use of the Air District's incentive programs to reduce emissions from the transportation system.

### **Proposed Improvements**

Proposed non-transit Transportation Control Measures included in this Plan are listed in the 2022 RTP project list appendix. They include the continuation of existing TCMs, as well as expansion as demand warrants and funding allows.

### **Proposed Actions**

#### *Short Range Plan (2022-2031)*

- Continue to support the Commute Connection program.
- Support the memorandum-of-understanding between transportation planning agencies and the Air District.
- Continue the implementation and expansion of the City of Stockton's Traffic Management Center.
- Encourage local jurisdictions to support land use development patterns that are amenable to transit usage, bicycling and pedestrian facilities.
- Pursue funding opportunities from the Congestion Mitigation Air Quality program, AB 2766 Motor Vehicle Emissions reductions Program, and other sources that allow allocations to Transportation Control Measures.
- Continue implementing all federal Transportation Control Measures.
- Continue operating the Freeway Service Patrol program in the I-205/I-580 corridor; expand service hours as demand warrants.
- Continue to use a multimodal scoring system that rewards projects with TCM features when evaluating and prioritizing federal funding proposals.
- Evaluate and expand, as warranted, the use of automated traveler information systems such as message signs, computer bulletin boards, traffic information broadcasting, and pre-trip routing programs.
- Install ramp-metering capabilities on interchange connections as capital modifications are made to the interchange.
- Begin negotiations with Caltrans for the expansion of the Freeway Service Patrol program.

- Continue to encourage use of transit

### *Long Range Plan (2027-2042)*

- Continue to implement the recommendations of COG studies such as the High Occupancy Vehicle Lane Plan, and the Park-and-Ride Lot Plan;
- Continue to uphold the goals, policies and objectives of this Transportation Control Measure action element.
- Continue to implement all applicable federal and state Transportation Control Measures.

## **INTELLIGENT TRANSPORTATION SYSTEMS**

The eight counties of the San Joaquin Valley: Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare oversaw the preparation of a plan to guide the implementation of Intelligent Transportation Systems (ITS). The Intelligent Transportation System (ITS) Strategic Deployment Plan (SDP) for the San Joaquin Valley Region was a 20-month study jointly funded by California Department of Transportation (the Department) and the individual counties with San Joaquin Council of Governments (SJCOG) serving as project administrator. The San Joaquin Valley region represents one of the last geographic areas in California to develop an ITS Plan. Two ITS Strategic Plans have been completed for portions of the San Joaquin Valley: Fresno County (1999) and Kern County (1997). The San Joaquin Valley ITS Strategic Deployment Plan referenced and built upon these plans. The San Joaquin Valley plan also referenced, and as appropriate, coordinated with, several other plans, including: Central Coast ITS Strategic Deployment Plan, Sacramento Area EDP, San Francisco Bay Area EDP, Sierra Nevada SDP, and the LA/Ventura SDP.



The ITS Deployment Plan outlines many of the same issues already discussed in previous chapters. Currently there are several projects targeted specifically for San Joaquin County.

These projects will fall under the focused urban area ITS. Projects include advanced warning systems, vehicles tracking, signal coordination and synchronization, advanced transit systems, and others.

Since funding has not been identified for many of the ITS projects they are listed in the Tier II category until such time as funding becomes available. (see Table 6-10)

This is the first step in creating a seamless ITS architecture that will allow future generations to add to what will amount to be a very technologically advanced transportation infrastructure.

ITS Maintenance Plan Development (Valley Wide) - An ITS Maintenance Plan for the San Joaquin Valley Strategic Deployment Plan (SJVSDP). This plan covers ongoing operations and maintenance concerns for projects identified in the SJVSDP. Fresno Council of Governments and the Kern County Council of Governments are the lead agencies in developing this plan. The ITS Maintenance plan will covers new emerging technologies and interconnectivity among valley wide projects. The Maintenance Plan also ensures consistency with the Federal ITS Architecture.

ITS Maintenance Plan Development (Local) - Refine and develop the ITS Maintenance and development Plan for the San Joaquin County ITS Plan. This plan will cover those operations mainly in the City of Stockton; however there are regionally significant projects including RTD, Caltrans, the Port of Stockton, other local jurisdictions and local safety agencies (police, fire and EMS). San Joaquin Council of Governments is the lead agency in developing this maintenance plan. This will accompany the completed deployment plan. . The ITS Maintenance plan will also cover new emerging technologies and interconnectivity among valley wide projects. The Maintenance Plan will also ensure consistency with the Regional ITS Architecture.

ITS architecture Operations and Management - Identify ITS components within projects identified in the Tier I list of projects. Coordinate and complete Memorandums of Understanding for the implementation, maintenance and management of ITS related components in all projects receiving Federal or State funding. Ensure that local agencies are developing their project in accordance with the Maintenance Plan and Architecture developed for the region. Assist local agencies in developing ITS elements within their projects

## **PROPOSED ACTIONS**

### Short Range Plan, 2022-2031

- Continue to support local in developing their ITS plans
- Continue to support the implementation of the City of Stockton' ITS plan
- Implement projects outlined in the SDP for San Joaquin County.
- Continue to search for additional funding

### Long Range Plan, 2032-2046

- Continue to develop ITS architecture to the National Standard
- Continue to uphold the goals, policies and objectives of the Regional ITS SDP
- Continue to implement all applicable federal and state ITS projects.