CHAPTER SIX
ECONOMIC VITALITY
The previous chapter identifies the transportation projects that make up the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Are these investments fitting the needs of the San Joaquin region? How does the plan perform in advancing the sustainability goals such as reducing greenhouse gas emissions, increasing resident access to transit and active transportation, and improving public health and economic vitality?
The Role of Transportation in Economic Vitality

The history of San Joaquin County has been shaped by transportation

From the first of the 1849 Gold Rush miners, to the completion of the transcontinental railroad, to the completion of the interstate highway system, the San Joaquin region’s story is told through transportation. That story has changed little over time. Logistics, the strategic movement of goods and services from one place to another, continue to be key to economic growth in the region. The future challenge for the area is to build successfully upon this geographic advantage in goods movement and to expand the opportunities for businesses and people in the northern San Joaquin Valley.

As the transportation system in the region continues to mature, the area is poised to embrace new technologies and offer creative, forward-looking solutions for both the movement of goods and people. In working with our partners across the mega-region area, it is clear that goods movement and economic development opportunities must be a coordinated, collective effort.

Transportation is not just logistics

The movement of people continues to have importance in San Joaquin County. Over the past four decades, San Joaquin County has been exporting a commuter workforce alongside agricultural goods and manufactured items on our freeways. These residents have brought back to the region higher wages and increased spending power, and a host of skills and capabilities that can attract new employment opportunities to the region as well.

“Smart growth is economic growth. Bringing more jobs to San Joaquin County and building upon a skilled core of workers already residing here is one more way transportation and regional policies foster economic vitality.”

Former Mayor Brent Ives, City of Tracy
Commute patterns show an untapped economic potential in the San Joaquin County workforce. Due to the lower housing costs in the region, a large number of county residents commute to neighboring counties. These commuters strain the capacity of the transportation network, leading to increased congestion, greenhouse gas emissions, and roadway maintenance costs. Many of these commuters are highly educated and are in white-collar sectors such as business, finance, computers, or engineering. Depending on the data source used, between 85,000 and 120,000 workers travel outside of San Joaquin County to work each day. By far, most commuters travel to the San Francisco Bay Area, primarily Alameda County, when compared to any other area. Because these commuters traverse the constrained Altamont Pass along the I-205/I-580 corridor, backups and delays on this route have become the norm, even as ridership on the Altamont Commuter Express has hit all-time highs.

A variety of forces may be exerting change on the commuting dynamic. San Joaquin County employment opportunities have improved dramatically over the years since the recession. Although substantially lagging other areas of California, particularly the Greater Bay Area, San Joaquin County recovered its pre-recession job high earlier than previously forecasted, and had fully recovered by 2015. Year-over-year job growth has been robust since 2014. The University of the Pacific Center for Business and Policy Research predicts job growth of just over 2 percent in the near term, with construction, services, and financial activities leading the way. Construction is still recovering from labor force growing more slowly, unemployment is predicted to continue to fall, reaching less than 7 percent by 2021.

Since the recession, domestic migration to San Joaquin County from the Bay Area has not reached pre-recession levels. Meaning, fewer workers are opting to accept long commutes in exchange for lower housing prices. Those in-migrants to the county also appear to have lower labor force participation, which may indicate retirees or self-employment (the data referenced does not track self-employed individuals). Observed data may also indicate that after a few years of commuting, more employees are switching to local jobs or tele-commuting.

We know the Greater Bay Area, and Sacramento to a lesser extent, continue to struggle with housing provision as labor force participation and employment continue to increase faster than population growth might suggest. These two regions are also prioritizing the issue of affordable housing as not only a local agency issue, but also a regional one. SJCOG will continue close coordination around demographics and commuting with its mega-region partners as part of on-going dialogue and collaboration.

Opportunities for Economic Development

Transportation has required some “self-help” taxation strategies

The recent past has shown that San Joaquin County can take its economic destiny into its own hands through thoughtful transportation investments. Measure K, the half-cent sales tax for transportation, invested over $700 million in transportation improvements within its first 20 years—many investments with the purpose of expanding economic opportunity to the region. A combination of highway improvements, rail grade separation projects, local bus improvements, and the creation of a regional passenger rail program all have had tangible effects on our economic vitality.
Mega-Region Initiatives

Although San Joaquin County continues to be identified as part of the large, eight-county Central Valley, its positioning at the northern end of that valley and proximate to the Greater San Francisco Bay Area to the west and Sacramento to the north, makes it the center of an economic powerhouse dubbed the “mega-region.” Ever increasing economic and demographic ties have made joint planning between these three regions an imperative. The executive directors of the three regional planning agencies, their elected officials, and staffs have met on a regular basis to converse and plan around topics ranging from goods movement, to regional economic development, to coordination of demographic forecasts & planning assumptions, to forums on policy issues of mutual concern. Several important projects and future initiatives have grown from these meetings.

An ongoing study, begun in 2016, to study the planning assumptions in the three-MPO’s regional plans (SJCOG, Metropolitan Transportation Commission - MTC, and Sacramento Area Council of Governments - SACOG) to look at what additional greenhouse gas reduction targets might come from joint planning efforts and to look at which assumptions carried the most risk of disrupting predicted outcomes in the plans. The final report looks at the ways the MPO’s can best present plausible future versions of their plans that can meet state goals, while providing the best possible transportation outcomes.
MTC initiated the first comprehensive look at goods movement in the mega-region area. The study, set to wrap up in mid-2019, (the Northern California Mega-Region Goods Movement Study) aims to create a shared and consistent inter-regional vision identifying how to effectively and efficiently conduct goods movement through and within the communities of northern California while maximizing benefits and minimizing costs and impacts to residents and firms. The study partners include SJCOG, SACOG, and the Association of Monterey Bay Area Governments (AMBAG), along with MTC. Study outcomes will address goods movement clusters, transportation & land-use challenges, workforce training needs, and a strategic implementation plan for five to ten critical focus areas.

The three mega-region partners, SJCOG, MTC & SACOG, have been coordinating planning assumptions and demographic forecasts over the last several years; SJCOG has set-aside funding from its SB1 Sustainable Transportation Formula Planning Grants to assist in the expansion of the current economic modeling platform utilized by the Association of Bay Area Governments (ABAG) to include San Joaquin County. This expansion will not only assist San Joaquin County in a more robust quantification of the economic benefits of its RTP, but also help the mega-region partners consider economic development as collaborative and synergistic across the entire region – policy questions, strategies, and assumptions can be tested as economic variables for their effect on the mega-region in its totality.
The City of Tracy has been characterized by some as the “Silicon Valley East.” A large proportion of Tracy residents have white-collar jobs in the San Francisco Bay Area and commute to work via Interstate 580 (I-580) and Altamont Corridor Express trains.

For the purposes of this chapter, white-collar jobs are “Management, business, science, and arts” jobs as defined by the U.S. Census Bureau’s American Community Survey (ACS).

After dipping significantly during the recession, the percentage of Tracy white-collar jobs returned to 2006 levels in 2012, ahead of countywide jobs returning to pre-recession levels in 2015. More details on employment comparisons between the City of Tracy, San Joaquin County and Santa Clara County can be found in Figures 6.1-6.4.
Figure 6.1

PERCENT OF PERSONS EMPLOYED

Source: US Census, percent of persons in civilian labor force, population age 16+ years in each industry.
TRACY, CA
(Total employed: 40,456)
- 29% Management, business, science, and arts occupations: 11,645
- 15% Production, transportation, and material moving occupations: 6,219
- 12% Natural resources, construction, and maintenance occupations: 4,867
- 27% Sales and office occupations: 10,974

SAN JOAQUIN COUNTY
(Total employed: 287,050)
- 16% Production, transportation, and material moving occupations: 46,928
- 27% Management, business, science, and arts occupations: 78,699
- 24% Sales and office occupations: 69,285
- 14% Natural resources, construction, and maintenance occupations: 38,525

SANTA CLARA COUNTY
(Total employed:
- 52% Management, business, science, and arts occupations: 482,595
- 19% Sales and office occupations: 142,132
- 8% Production, transportation, and material moving occupations...
- 6% Natural resources, construction, and maintenance occupations...

Figure 6.2
Figure 6.3
Figure 6.4
The City of Lathrop is one of Northern California’s fastest growing and most comprehensive Master Planned Communities. Its current population is over 20,000 residents. The City experienced the highest percentage of population growth of all cities in San Joaquin County with a 22.5 percent increase between 2010 and 2016. Like many of the cities in San Joaquin County, Lathrop’s geographic placement plays a role in the city’s ability to attract both business and residents. As reported by the City of Lathrop, the economic potential for the City includes the following development projects: River Islands, which includes a 325-acre employment center and is projected to create 17,000 new jobs; Mossdale Village, a 2500-unit Masterplanned community which is also planned for nearly 1 million square feet of retail/office space; and the Central Lathrop Specific Plan, site for a power center and nearly 4.5 million square feet of office commercial.
City of Lodi
The City of Lodi’s economy is anchored in the manufacturing, retail, health care, and hospitality industries. In addition, agriculture contributes to the local economy, with wine grapes being the largest crop. The 90,000 acres of vineyards produce annually a crop worth in excess of $350 million. Nearly 40 percent of California’s premium wine grapes are grown in Lodi, according to the City. The Lodi-Woodbridge area has been a respected part of California’s wine industry for over 100 years. Today, some of the State’s most important wineries rely on grapes grown in the Lodi-Woodbridge region including Robert Mondavi. Over 60 wineries grace the area.
City of Manteca
With its relatively low costs and proximity to the San Francisco Bay and Sacramento areas, the City of Manteca has attracted many commercial and industrial businesses, and is a popular place to live for commuters to the San Francisco Bay area. It is one of the fastest growing cities in the region, experiencing a 14.3 percent population increase between 2010 and 2016. The current population of Manteca is over 73,000.

Between 2006 and 2014, new residential land use activity from the City (participating in SJCOG’s Regional Traffic Impact Fee Program-RTIF) was 2,597 of the total 5,420 single-family units in the County, with multi-family residential units accounting for 250 units out of the region’s 755-unit total. In 2017 the City reported the highest single family permit activity with 619 out of the County’s 1,583 total. This strong residential growth is citywide and is accompanied by a similar increase in shopping, dining, and recreational opportunities throughout the community. The pace of both residential and commercial growth makes the City one of the most successful in terms of economic revitalization activity in the region.

City of Stockton
The City of Stockton is the largest of the seven cities in the County with a population of over 300,000 residents. Its relative size, economy, population, and land area makes its development trends of regional interest. The City has fourteen fully improved industrial and business parks, nine of which contain rail access. All industrial parks offer easy freeway access and are located within approximately five to fifteen minutes of either the airport or seaport.

The past 20 years saw a significant northward migration and expansion of commercial activity in the Stockton Area. Stockton has evolved into a multi-nucleated city with several pockets of intense office or retail development, each serving functionally in
some characteristic manner of a traditional central business district. Stockton’s economy has diversified from historically agriculture-based to include all market sectors. In fact, in 2016 alone, the City made $11,995 on business licenses.

Creating Sustainable Transportation Systems Builds San Joaquin’s Economic Competitiveness

Rail, highways, air freight, and waterways are the main ways to move goods from one place to another and San Joaquin County has been blessed with resources in all four areas. Whether it involves moving wine from a winery to overseas, fertilizer from overseas to the San Joaquin Valley, building materials from Turkey to Fresno, or milk from Merced to the East Bay, it moves through San Joaquin County. This will become more and more true over time, and recognizing the need to maintain, enhance, and sometimes overhaul our transportation options in the region will determine our success at improving economic vitality. The following are ways the San Joaquin region will continue to build upon that legacy.
Improving port access and investing in projects that increase port economic viability

Port of Stockton

In 1932, the Port of Stockton was founded as an independent governmental district. Today, the Port of Stockton is the second largest inland seaport (after Port of Portland in Oregon) and is either the fourth or fifth largest port in California (Stockton and the Port of San Diego have traded places a couple of times.) The last 10 years have seen the Port of Stockton experience its greatest growth and the potential seems limitless with new docks, the deepening of the channel, and the exploitation of the Rough and Ready Island complex.

The port has continued to add new tenants with an increase in customers and continues hold its ground with cargo volume since its record year in 2014 as the economic recovery from the recession was in full swing. The port supports 5,500 jobs and is a major employer in the region.
Access to the Port of Stockton has improved with the Port of Stockton Expressway off of State Route 4 and the completion, in early 2017, of the extension of the Crosstown Freeway, providing direct freeway access to the Port of Stockton complex. This $140 million-dollar project not only improved access and goods movement, but eliminated most truck traffic in the Boggs Track neighborhood. Prior to its construction 6,500 vehicles and 4,400 long-haul trucks, with their attendant emissions, traveled through the neighborhood daily.

Prioritizing highway improvements that bolster the economic centers

San Joaquin County is among the most truck-intensive locations in California. This is the result of excellent highway access. Interstate 5 (I-5) and Highway 99 provide outstanding north-south connections. Interstate 205 (I-205) and Highway 120 provide the southern half of the region great east-west connections. I-580 is primarily a route through the region but provides economic opportunity in the Tracy area. Highway 12 provides an east-west connection to the Bay Area in the north serving, in large part, a farm-to-market purpose.

Over the last several years, improvements to these highways include safety features on State Route 12, the widening of I-205 and enhanced acceleration and deceleration lanes. The widening of I-5 through Stockton was completed in 2016, vastly improving traffic flow and adding the first HOV lanes in San Joaquin County. Major widenings and improvements on Highway 99 were also completed in late 2016, with the opening of the reconstructed Mariposa Road interchange. While there is a benefit to reduced congestion in the region with these projects, the main value is the capacity to move trucks, which have a far greater economic value than a single occupant automobile.

Future improvements in these corridors are focused on new HOV lanes for I-205, improvements at I-5 Mossdale Wye, and operational/reconstruction projects for the Highway 99, Highway 120 interchange. In the Tracy area, reconstructed interchanges are planned at International Parkway (formerly Mountain House Parkway) at both I-580
and I-205; the need for these is primarily driven by the large numbers of logistics and warehousing facilities being added in the Cordes Ranch Business Park.

As the investments in the Plan unfold, there will be additional freeway widening but a greater reliance on operational improvements such as auxiliary lanes, longer acceleration and deceleration lanes, and improvements to accommodate Surface Transportation Assistance Act (STAA) rated trucks. Logistics remains at the heart of the San Joaquin County economy and these improvements will further the attractiveness of the region for economic growth.

**Strengthening connectivity of key regional arterials**

San Joaquin Council of Governments (SJCOG) continues to invest in regional arterial improvements that provide access to job growth sites. The completion of the Arch-Sperry Corridor widening in late 2013 is an example of this improved access; however, with continued job growth and cargo handling at the Stockton Airport and projected job growth attributable to the new Amazon facility, additional widening, operational, transit service, and trip reduction activities will be necessary to support goods movement and employee access.

Additional improvements to support existing and future job growth are planned for McKinley Avenue in Manteca, International Parkway in Tracy, Eight Mile Road in Stockton, and River Road in Ripon are just a few other locations that are calling for the same kind of investment. These locations have been master planned as future job growth corridors in San Joaquin County.

“Every resident of the SJV depends on the movement of goods for food, housing, clothing, and most other aspects of daily life.”

– 2013 San Joaquin Valley Goods Movement Plan
Stockton Metropolitan Airport for air passenger service and increased commercial service

While the Stockton Airport has struggled to attract and maintain consistent air passenger service, Alligent Air has now established and expanded service in recent years. Passenger flights now serve Las Vegas, Phoenix, and San Diego. On the cargo side, the airport is now handling three daily flights in support of three area Amazon fulfillment operations (two near Tracy) and a new Amazon warehouse near the airport. However, the airport continues to hold a large amount of untapped potential. The airport’s runways and taxiways need some additional maintenance but the terminal has undergone improvements.

As of 2017, San Joaquin County has adopted a Master Plan that will outline capital enhancements to enhance passenger service and strengthen the existing commercial and cargo activity. The current capital project list includes nearly $100 million dollars in maintained and improvements, including expansion of the terminal to accommodate international travel – a project that was added to the Measure K project list in 2016. With the continued improvement of the Arch-Sperry Corridor and Airport Way corridors, the Stockton Airport will continue to play a vital part in attracting new business opportunities and industries to the region.
While railroads are not large employers in the region, the resulting synergy of trucks, warehousing, and supply is interrelated. Rail is a critical link to the full-service transportation network that is prominent in San Joaquin County (Figure 6.5). The importance of the county’s railroad network continues to grow, with inbound commodities to the San Joaquin Valley accounting for about 29 percent of the non-through flows and originating in locations including the San Francisco Bay Area, Southern California, the Central Coast region, and outside of California. Outbound tonnage comprises about 22 percent of all non-through moves. Agricultural commodities and food products dominate the inbound and outbound tonnage for both truck and rail accounting for over one-third of the inbound and outbound truck tonnage and rail carload tonnage.

The network includes approximately 200 miles of Class I railroads owned by Union Pacific Railroad and Burlington Northern Santa Fe (BNSF). Significant rail expansion projects are further distinguishing the county as a premier location for logistics operations. In Stockton, BNSF operates an intermodal rail facility on 425 acres. The facility was updated with expanding loading/unloading track and an additional 300 truck/container parking stalls in 2016. In Lathrop, Union Pacific operates a 109-acre intermodal rail facility.

Union Pacific is planning to expand the facility to meet domestic cargo demand, with a first phase increase to 400,000 units lifted annually, and a second phase increase to 730,000 units annually. The expansion project will triple the facility’s capacity to meet goods movement needs, improving the region’s economic competitiveness.

San Joaquin County also features approximately 50 miles of short-line railroads. The Stockton Terminal and Eastern Railroad provide rail service to a variety of industries in the Stockton area, including steel, chemical, and bulk goods. It offers over 800,000 square feet of integral warehouse facilities, in addition to providing interchange services with the major railroads and the Central California Traction Company (CCT).
If an aspect of smart growth is reducing the length of work trips, then San Joaquin County needs more job growth to reduce the average work trip length. According to the 2010 Federal Census, at 31.5 miles one-way, the San Joaquin region is in the top 10 in the country when it comes to average work trip length. The future of this county is not in exporting workers to the Bay Area or Sacramento, but in building a better jobs/housing balance right in our communities. Increased investments in active transportation, compact and mixed-use development, high quality transit, and community investments will work to create an environment that attracts white-collar jobs to the region.

Making transportation investments that achieve this end are among the goals of this Plan and the investment strategies encompassed in this RTP/SCS. Examples of using transportation to catalyze these goals include a recent combined call for projects for the Measure K Bicycle/Pedestrian/Safe Routes to School program and the Smart Growth Incentive Program.
Keeping graduates in the region

Attracting and retaining college graduates to the region is vital to catalyze a shift from a local economy based on goods movement to a balanced, innovative economy. The San Joaquin region is home to the University of the Pacific and San Joaquin Delta College. Many concepts have been explored regarding how to retain graduates so they can find work in the region where they live. The role of youth, education, and business in the economic development of both the county and the San Joaquin Valley may include strategies such as offering “incubator space” for students to work as interns or even for new graduates to work within a business, nonprofit, or governmental agency. These work spaces and opportunities may help students gain direct experience in the field and position graduates for future job openings within the business or agency. Other strategies involve more active job recruitment directed toward graduates of these campuses for job openings in the region.
Direct Economic Impact of the RTP

The Center for Business and Policy Research at the University of the Pacific conducted an economic impact analysis of the four future transportation “scenarios” presented to the public and policy makers as the possible foundation for the 2018 Plan. Those comparisons are enumerated in the full report in the Technical Appendix.

The final list of projects and strategic financial investments total over 300 discrete expenditures and $11.5 billion respectively. To analyze the economic impacts of these investments, a model of the economy, called “impact analysis for planning” or IMPLAN was utilized. This model is in a sense a general accounting system of transactions between industries, businesses, and consumers that estimates the range of economic impacts. Using the IMPLAN modelling software, extremely detailed Social Accounting Matrices and Multiplier Models of the San Joaquin County economy enables an in-depth examination of the impacts of the projects.

This model, enables one to examine the impact structure of each investment. For example, in the case of a construction project, the model can trace the project expenditures through the supply chain, from the construction contractor and its employees (direct impacts), to its suppliers and to their employees and onward to further levels of suppliers, employees, and their suppliers (indirect impacts). It also examines the effects from all the associated income to employees and their household purchases (induced impacts). The model thereby allows the generation of an estimate of how the original investment is multiplied through additional activity in the economy.

The direct economic impact on the San Joaquin County economy from the $11.46 billion worth of project investments in the Plan are reported in the Figure 6.6. After excluding some $49.1 million in right-of-way acquisition costs, since they represent a transfer of assets, the remaining $11.41 billion in projects are estimated through our model to generate some 58,000 direct jobs and $3.2 billion in direct labor income over the 25-year investment planning horizon. In terms of the total change in the value of production (output), the investment equates to an $9.6 billion direct impact.
Other Impacts

This analysis shows that over the 25-year period, the Plan will generate significant employment in San Joaquin County. Over the 2018–2042 period, the Plan calls for the spending of over $11.5 billion on transportation improvement projects. The economic analysis shows this will create an average of 3,600 jobs per year in San Joaquin County. The main beneficiaries will be construction workers, placing an employment floor under this volatile sector. However, job increases will also include workers in professional, supply and service firms that support the effort. Further, workers throughout the economy will feel the impact as construction-related workers and firms increase their spending in sectors like retailing and consumer services.

These investments are more significant than just their project associated impacts, as these infrastructure investments will also enhance the County’s economic competitiveness. These are long-term benefits that will endure beyond the projects life. Among the many long-term benefits from this sort of investment are reduced travel times because of the reduced congestion these investments generate, increased labor markets that allow labor to move more efficiently through a variety of transit modes across the County, and particularly given the growing importance transportation and logistics these investments will also make its goods movement system more efficient and better position it to enhance its competitive advantage.

Therefore, despite the value and importance of the projects immediate impacts focusing on it alone omits potential effects from enhancing the County’s attractiveness as a business location, including viability for corporate headquarters, and growing high-wage job opportunities because of its increased connectivity. Benefits may also include supporting the County’s travel and tourism industry.

Finally, as it enhances accessibility, these investments should benefit the County’s overall quality of life. SJCOG is continuously working to upgrade its economic modeling capabilities to quantify these additional economic benefits to the region. Recent studies of these long-term impacts in Southern California suggest that the competitive impacts could be more than double the project construction and operation impacts alone.
CONCLUSION

This analysis demonstrates how the San Joaquin region has strong economic advantages as well as untapped potential with its existing transportation network and facilities. San Joaquin has growing economic centers, an educated job force, and a housing market that attracts residents. Transportation is the critical piece to tie all of those concepts together in a unified strategy toward economic development. As a result, the Plan moves the region in the direction of economic competitiveness through its investment strategies--both directly with added jobs and through making the region more viable for attracting and keeping businesses with quality of life amenities for working residents.