

APPENDIX M2

Regional Progress Report



REGIONAL PROGRESS: Selected Trends Report

This report focuses on a selection of the 2022 Regional Transportation Plan/Sustainable Communities Strategy Plan (Plan) performance indicators to provide a context for monitoring progress toward the Plan’s goals. The purpose of monitoring the indicators is to have a better understanding of what the region has looked like in the past, where the region has grown, and where the region can do better. Seeing historical trends in data allows SJCOG to compare the indicators¹ with performance metrics². This is an important step because it helps us ensure that there is progress occurring where it needs to and that we work on the areas that could use more improvement. The next several pages of this document show historical trends around the aforementioned indicators, as well as descriptions of each indicator and why it is tracked. Methodology for each graph is included in the descriptions.

Please see list of indicators below.

¹ Historical trends in line with empirical data.

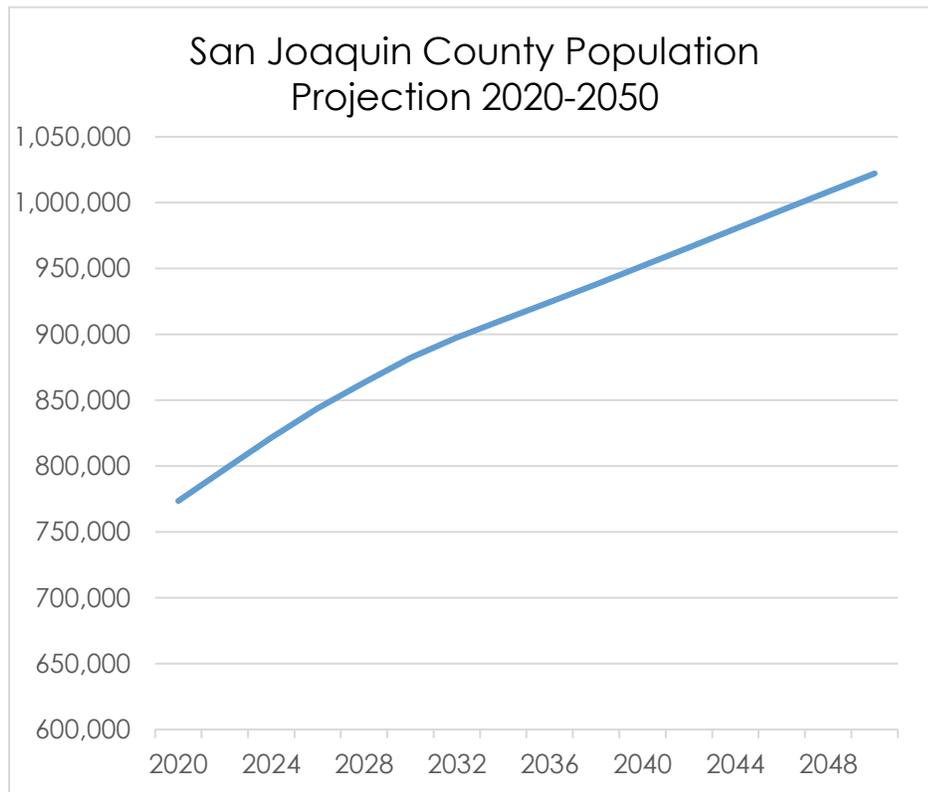
² Statistical numbers that come from the transportation model and show future projections

Measure of Effectiveness	Description	Goal	Status Since 2018 RTP/SCS Plan
Travel-Related Indicators			
Vehicle Miles Traveled (VMT) Per Capita	Vehicle miles traveled per person	Reduce VMT	Improving
Trip Mode Share	Percent of trips by mode of travel (e.g. single occupant auto, bike, walk, transit, carpool 2+ occupants)	Reduce single occupant auto, increase other modes	Single Occupant Auto and Carpool – Stable Walk and Bike – Worsening Transit – Improving (Pre-COVID-19 Pandemic)
Travel Time to Work by Percent	Percent of workers who spend a certain amount of time commuting to work	Reduce percent of workers who commute 60+ minutes one-way	Worsening (Pre-COVID-19 Pandemic)
Total Miles of Bikeways	Miles of Class I and II facilities	Increase miles of Class I and II bikeways	Improving
Safety Indicators			
Fatal collisions and Fatalities	Number fatal collisions and fatalities – auto, bike pedestrian	Reduce fatal collisions and fatalities	Improving
Resource Conservation Indicators			
Acres of Prime Farmland,	Total acres of prime farmland consumed due to development. Total acres of urban and built-up land	Reduce rate of prime farmland consumption	Improving
Acres of Urban and Built-Up Land	Total acres of urban and built-up land	Reduce rate of land consumption for development	Worsening
Water Consumption per Household	Household water usage	Reduce water consumption per household and capita	Improving
Energy Usage per Household and Capita	Household energy consumption per household and person	Reduce energy consumption per household and capita	Improving
Economic Vitality Indicators			
Job Creation	Number of jobs, employment and unemployment data	Increase number of jobs, decrease unemployment rate	Improving (Pre-COVID-19 Pandemic)
Health and Wellness Indicators			
Obesity	Percent of adults and youth that are obese	Reduce percent of adults and youth who are obese or overweight	NA

County Demographics

As of 2019, the population of San Joaquin County was approximately 762,148 people (ACS 1-year estimate) and is expected to exceed 1 million people by the year 2047. Figure 1 shows that 2021 to 2024 will be the peak years of population growth with an annual growth rate of 1.5 percent or about 12,000 new residents per year. This population growth is forecast to gradually decline to 0.7 percent annually by 2034, where it will remain through 2050. The reason for this gradual slowing in population growth is the aging of the population (the 65+ age group is forecasted to almost double in size by 2050), the reduction of the rate of household formation due to more people postponing marriage or remaining single, and the expected reduction of in-migration from the Bay Area.³ Accurate population data and up-to-date forecasts are crucial to the planning process and many indicators are tracked on a per capita basis (e.g. vehicle miles of travel and greenhouse gas emissions).

Figure 1



Source: University of the Pacific Center for Business and Policy Research, 2020

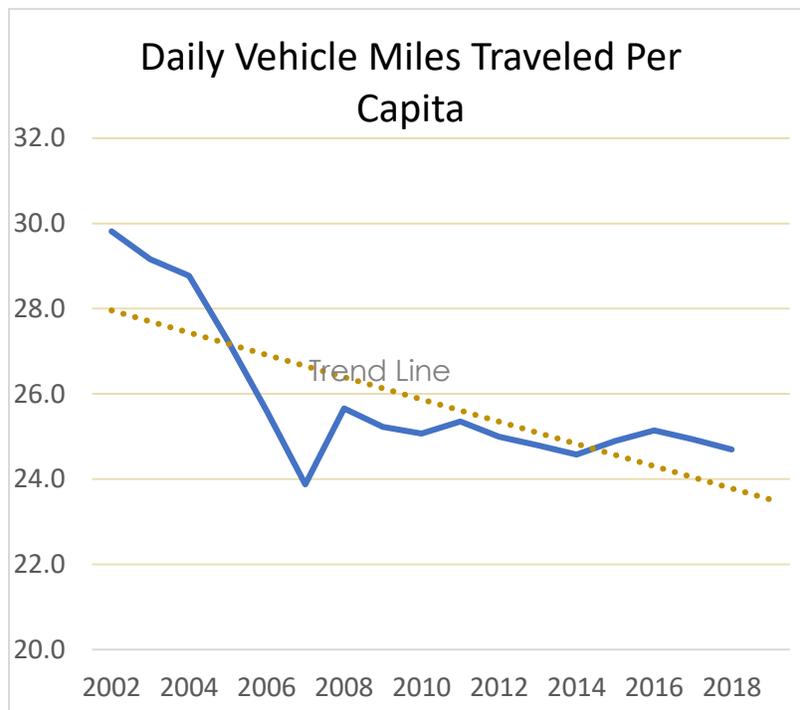
³ University of the Pacific Center for Business and Policy Research

Travel-Related Indicators

Vehicle Miles Traveled Per Capita (Goal: Reduce VMT per capita)

Vehicle miles traveled (VMT) is defined as a measurement of the total miles traveled by all vehicles in an area for a specified time period. In transit, it is the number of vehicle miles operated on a given route or line or network during a specified time period. Reducing VMT reduces the amount of pollutant emissions from vehicles and reduces transportation system maintenance costs. Daily VMT per capita (DVMT) has been trending downward since 2002 (Figure 2). The DVMT per capita took a dive at the beginning of the great recession in 2008 and has remained at low levels even during the post-recession economic recovery. This general downward trend in DVMT per capita during bad and good economic times indicates that returning to pre-recession levels is very unlikely.

Figure 2



Source: California Public Road Data, Caltrans

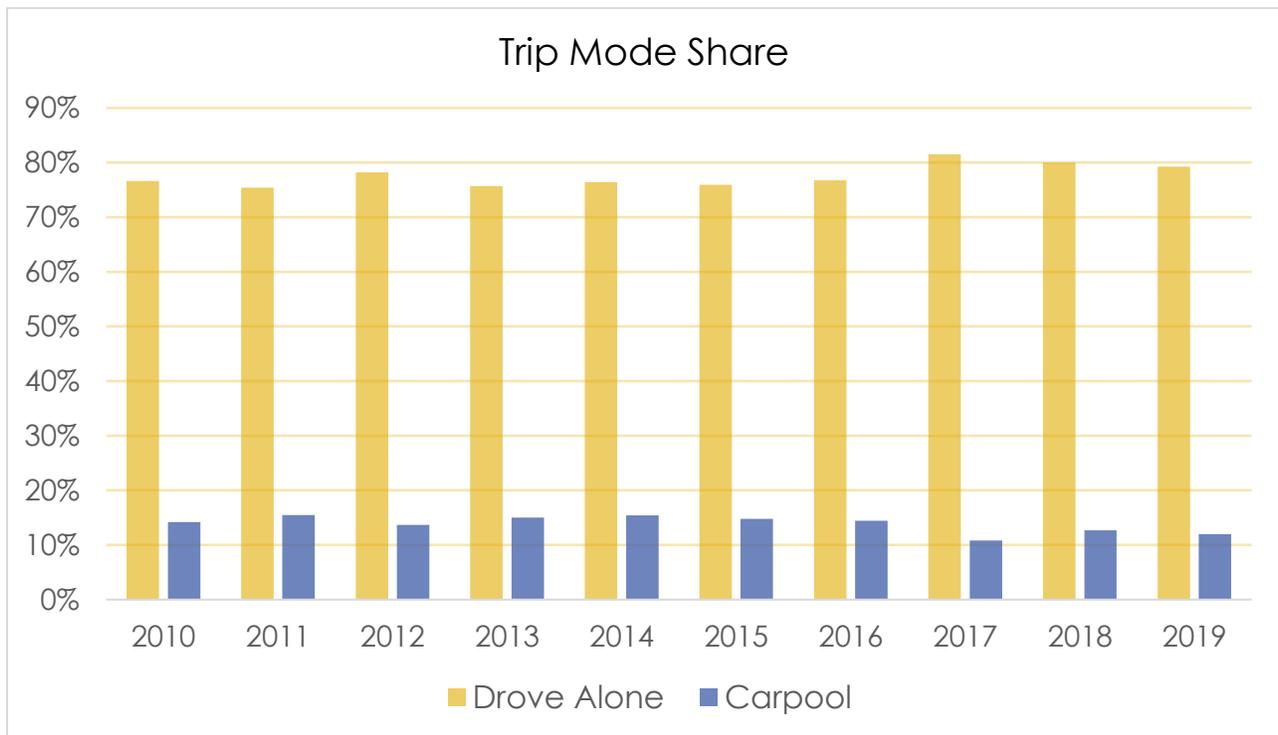
Trip Mode Share (Goal: Reduce percent single occupant auto, increase percent of other modes)

Trip mode share represents the different modes of transportation taken by San Joaquin residents to their daily destinations. High levels of single-occupant vehicles on the transportation network results in high levels of pollutant emissions from vehicles. Increasing use of other modes of transportation such as public transportation, walking and cycling results in lesser amounts of emissions or no emissions. The U.S. Census Bureau tracks mode share for workers only. The different modes tracked include drive alone trips in a car, truck, or van; carpool trips in a car, truck, or van; public transportation trips (not including taxis); bicycle trips; walking trips; and taxis, motorcycles, or other means. The primary mode of

transportation is the drive alone auto trip, followed by carpooling, though the percentage of carpool trips is still very low relative to the percentage of drive alone trips.

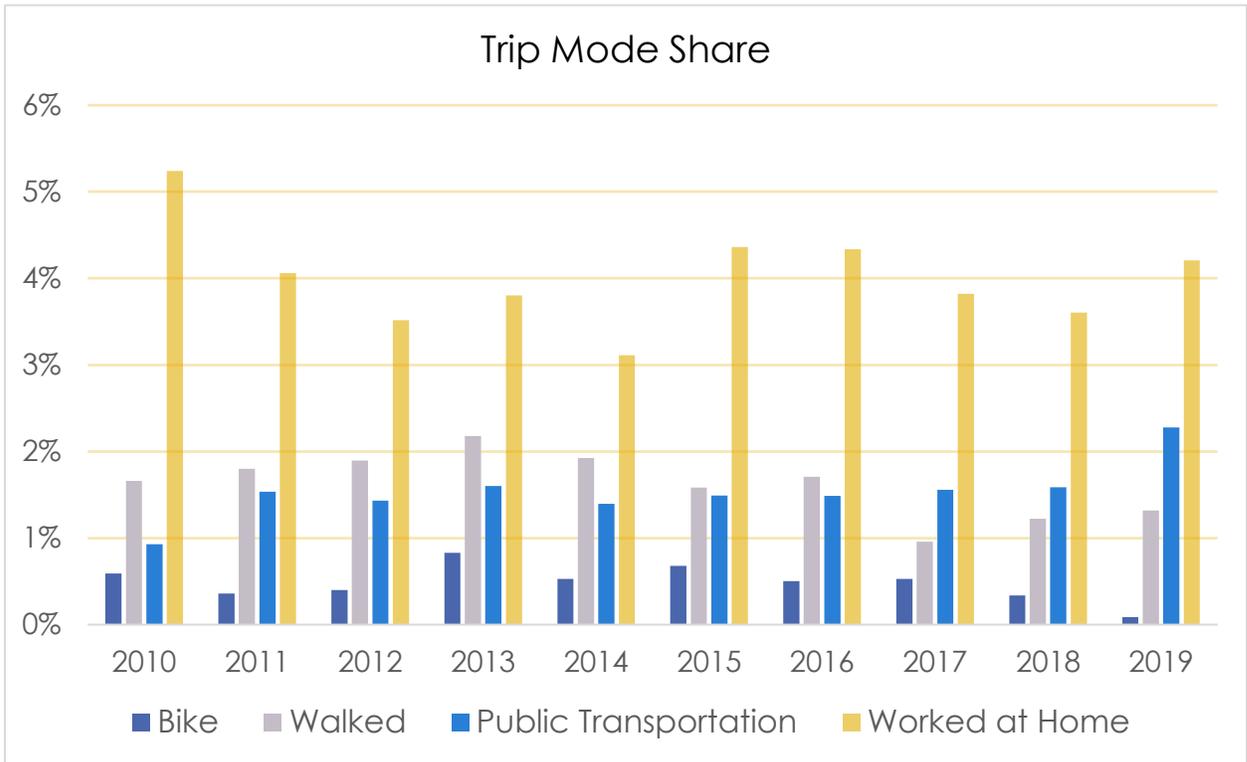
Figure 3 shows that drive alone trips has remained relatively constant. The percentage of these trips hovers around 80 percent and has for the last several years. Carpool trips remains around 14 percent of the trip mode share. Neither drive alone trips nor carpool trips have made significant increases nor decreases over the last several years. Figure 4 shows the remaining mode categories (except for the “Taxicab, Motorcycle, or Other Means” category). Since 2010, each of these categories has comprised less than three percent of the total mode share. The Bicycle and Walked categories have a downward trend since 2010 while Public Transportation has an upward trend. However, it remains to be seen whether this upward trend for Public Transportation will continue after the COVID-19 pandemic.

Figure 3



Source: U.S. Census Bureau 1-Year Estimates

Figure 4

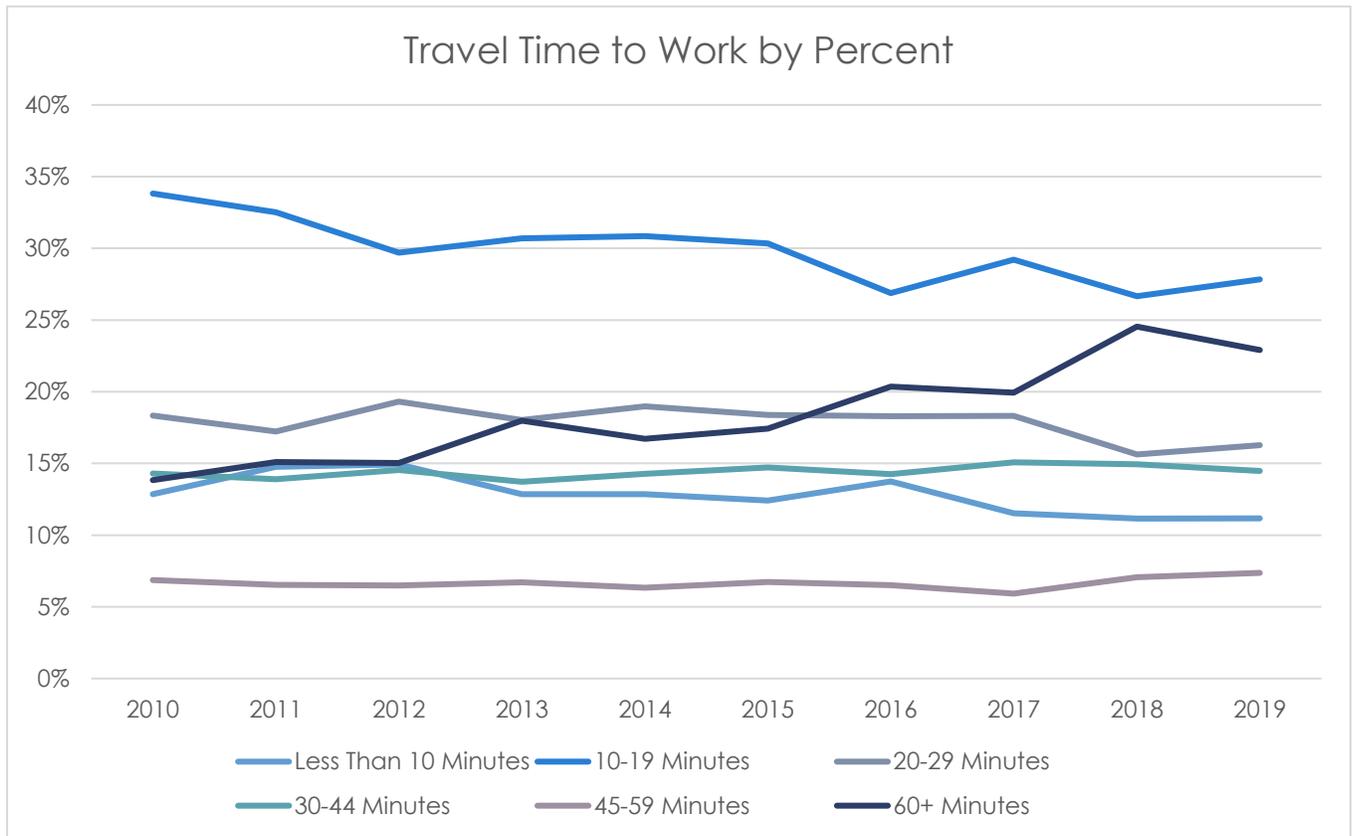


Source: U.S. Census Bureau 1-Year Estimates

Travel Time to Work by Percent (Goal: Reduce percent of workers who commute 60+ minutes one-way)

Travel time to work describes the number of minutes it takes to arrive at work from a worker's place of residence. There is a high cost when commuters take long auto trips to get to work. There is high cost to air quality due to the pollutant emissions from the vehicles. There is also a high cost to the commuter's health due to the stress of long commutes. Figure 5 below shows the historical trend in travel time in minutes. The Increasing travel time may be indicating increased traffic congestion, increased length of commute trip, or a switch to a different mode of travel that increases the travel time outside for the same length trip. Given historical commute patterns, commute times of less than 30 minutes are probably commuting within the county, while those commute times of 30+ minutes are probably out of county commuters. Figure 5 shows that those traveling 10-19 minutes represent the largest share of commuters. However, the share of these commuters has been declining since at least 2010 with a corresponding increase in the share of commuters who travel more than 60 minutes. The percent share of those who commute for more than an hour increased from 14 to 23 percent between 2010 and 2019. This trend is due to the in-migration of households of Bay Area workers who are looking for relatively cheaper housing options in San Joaquin County.

Figure 5



Source: U.S. Census Bureau 1-Year Estimates

Miles of Bikeways (Goal: Increase miles of Class I and II bikeways)

Using bikeways provides another traveling option for residents and workers and provide opportunities for physical exercise and recreation. Class 1 bikeways are usually paved multi-use paths that are separated from the roadway. Class 2 bikeways are striped lanes for bikes along the edges of the roadway. Figure 6 below compares the miles of Class 1 and Class 2 bikeways that existed in 2012 and 2020. Since 2012, there has been a 33 percent increase in Class 1 bikeway miles and a 38 percent increase in Class 2 bikeway miles.

Figure 6



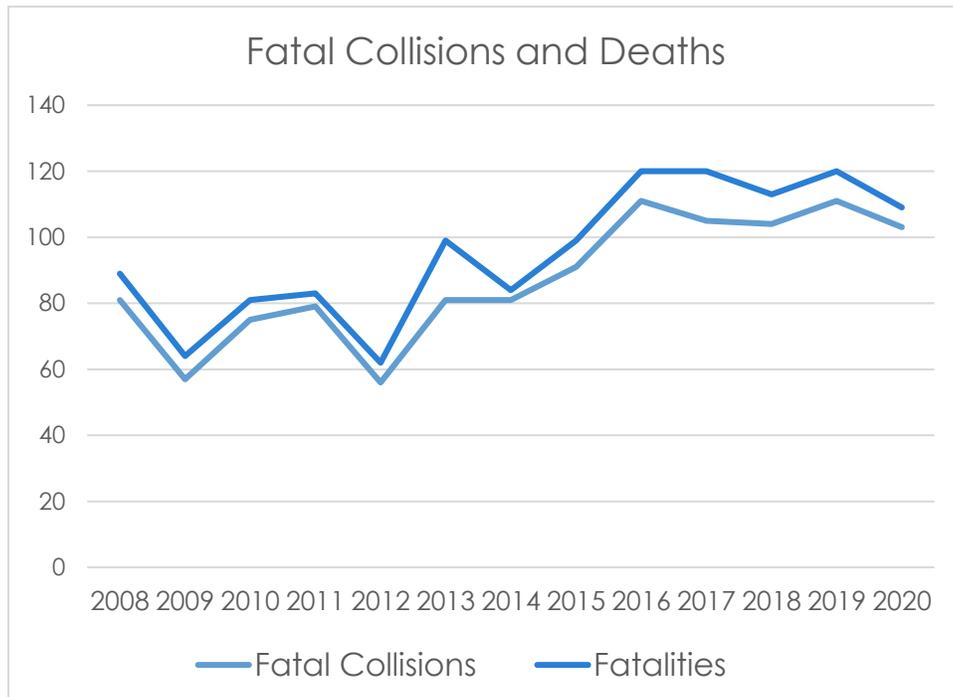
Source: San Joaquin Council of Governments

SAFETY INDICATORS

Fatal Collisions and Deaths (Goal: Reduce fatal collisions and fatalities)

Transportation planners design roadways to be safe as possible. However, due to human error, increment weather or other causes, there are fatalities on the roadways every year. Fatal collisions and deaths on the San Joaquin County’s roadways increased between 2008 and 2016 due to the end of the recession and the resulting increase in drivers and vehicle miles traveled (Figure 7). However, since 2016, the number of fatal collisions and deaths has plateaued and has been going down slightly. This Plan invests significant revenues in safety related projects and supports current State goals for this metric. Chapter 4 of the Plan discusses safety investments. A fuller discussion of the Plan’s safety performance and safety targets can be found in Appendix N.

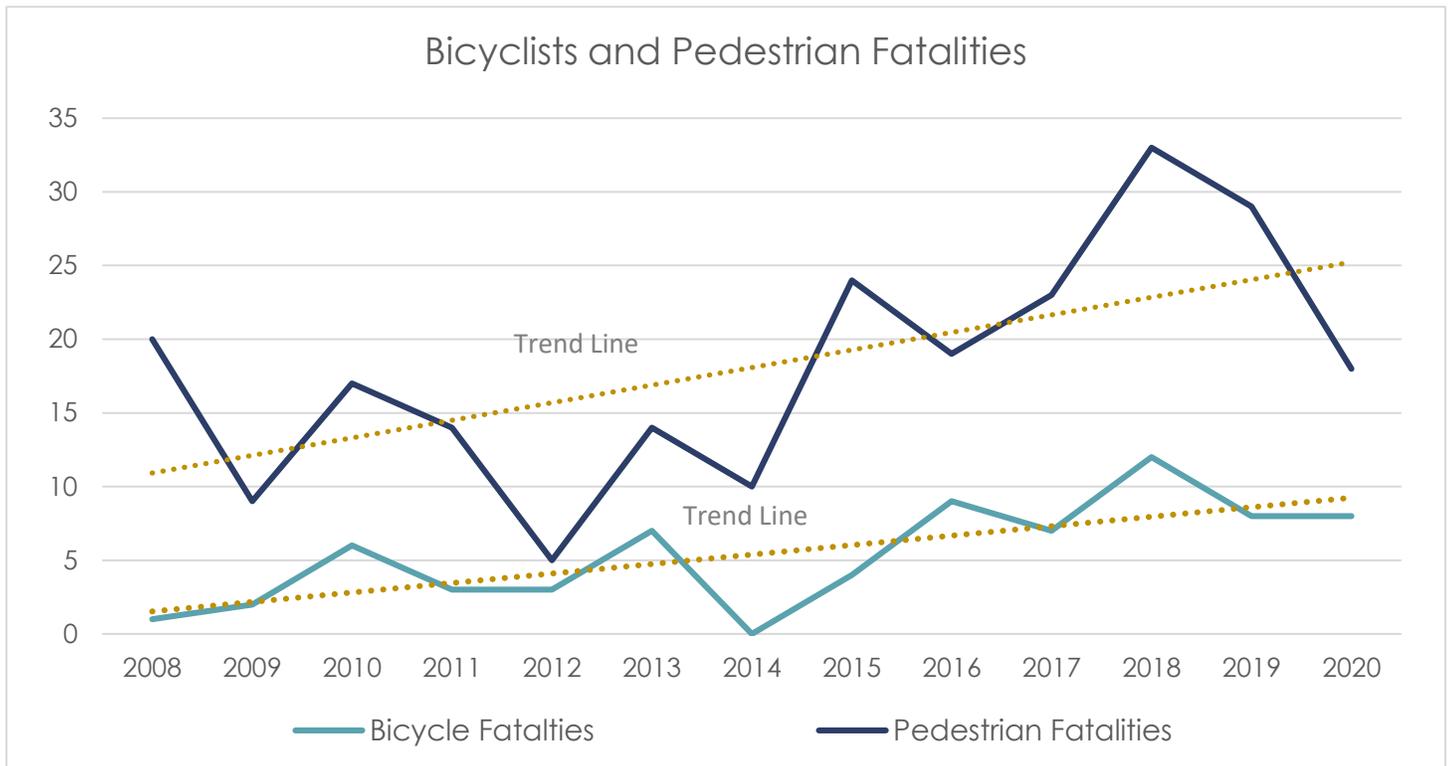
Figure 7



California Department of Highway Patrol Statewide Integrated Traffic Records System (SWITRS)

Figure 8 shows the number of bicyclists and pedestrian fatalities that are the result of collisions on the roadways in San Joaquin County. Beginning in 2008, the trendlines for both bicyclists and pedestrian fatalities have been going up but since 2018, there has been a sharp decrease in pedestrian fatalities and a lesser decrease in bicycle fatalities.

Figure 8



California Department of Highway Patrol Statewide Integrated Traffic Records System (SWITRS)

RESOURCE CONSERVATION INDICATORS

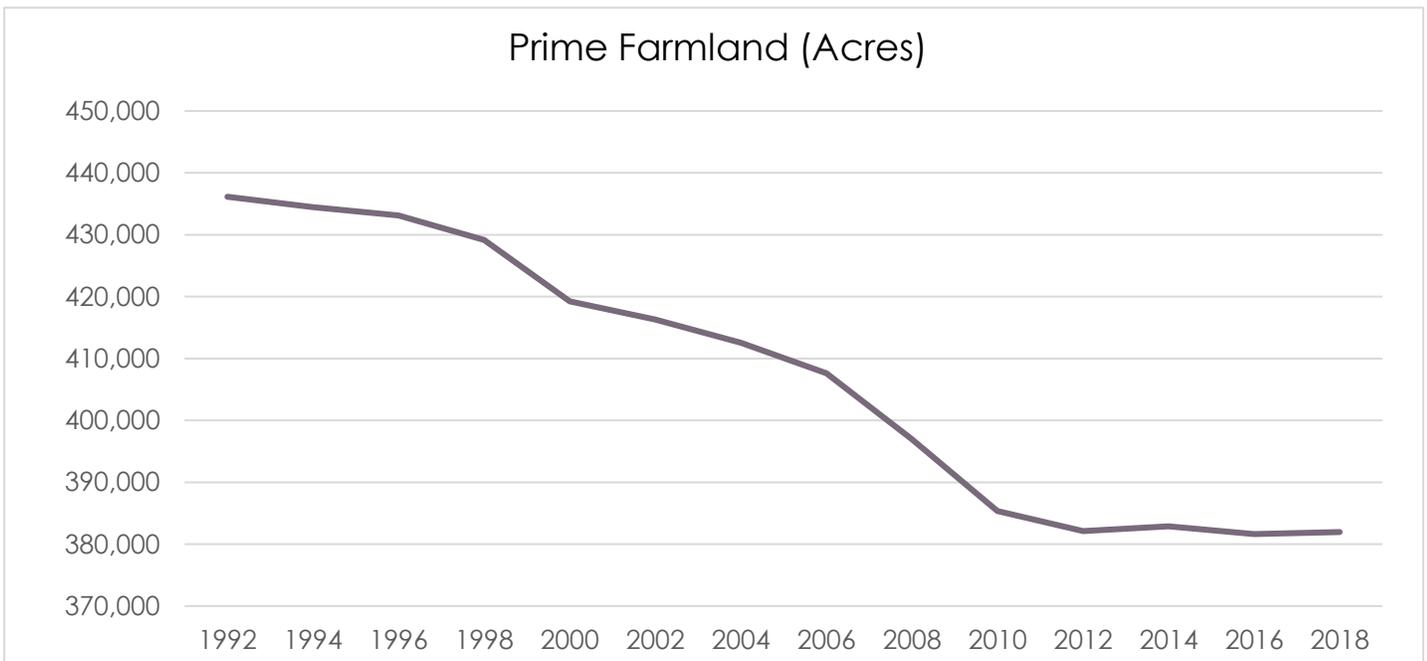
Acres of Prime Farmland Consumed (Goal: Reduce rate of prime farmland consumption)

Agriculture is still one of the major industries in San Joaquin County. Besides providing food for the county and beyond, agriculture also supports tourism such as the wineries in the Lodi vicinity. This Plan seeks to encourage efficient development patterns that maintain the county's agricultural viability. An indicator for agricultural viability is the amount of Prime farmland that exists in the county. Prime farmland is farmland with the best combination of physical and chemical features that sustains long term agricultural production.⁴ This indicator has its basis in Senate Bill 375's requirement that the metropolitan planning organization consider the best available scientific data on the impacts to resource and agricultural lands. A more compact development footprint as supported by this Plan encroaches less on prime agricultural land vital to the economy in San Joaquin County.

Figure 9 shows that Prime farmland in San Joaquin County decreased by over 50,000 acres between 1992 and 2010. However, since 2010, there has not been a decrease in Prime farmland even during the recovery period after the great recession.

⁴ California Department of Conservation, Farmland Mapping and Monitoring Program.

Figure 9



Source: California Department of Conservation, Farmland Mapping and Monitoring Program

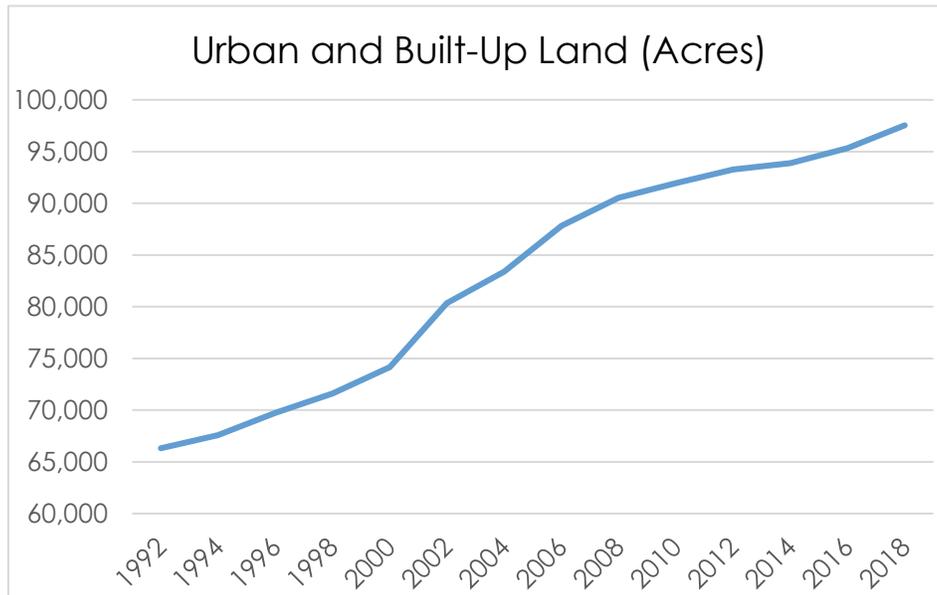
Acres of Urban/Built-Up Land (Goal: Reduce rate of land consumption by development)

Another indicator to monitor the viability of agriculture is the rate of increase of urban and built-up land. Urban and built-up land refers to the land in the county that is used for development characterized by buildings, asphalt, concrete, suburban gardens and systematic street patterns. This includes urban and non-urban development such as residential, agricultural-residential (ranchettes), commercial, industrial, agricultural facilities, transportation, communications, utilities, cemeteries and golf courses.⁵

San Joaquin Council of Governments is not a land use authority, approval of land-use development rests with local jurisdictions. SJCOG, however, regulates development in the county through its Habitat Conservation Plan (HCP) and its role as the Airport Land-Use Commission (ALUC). SJCOG also monitors development through the development of its RTP/SCS and its role in administering the Regional Transportation Impact Fee (RTIF) program. The following Figure 10 illustrates rates of change in urban and built-up land in the county. There has been development at a fairly rapid rate since at least 1992 that slowed during and after the great recession. It appears that the rapid rate of growth that characterized the county's development before 2010 is reoccurring in 2018. However, this recent growth is not causing a corresponding decrease in Prime farmland (Figure 9).

⁵ California Department of Conservation, Farmland Mapping and Monitoring Program.

Figure 10



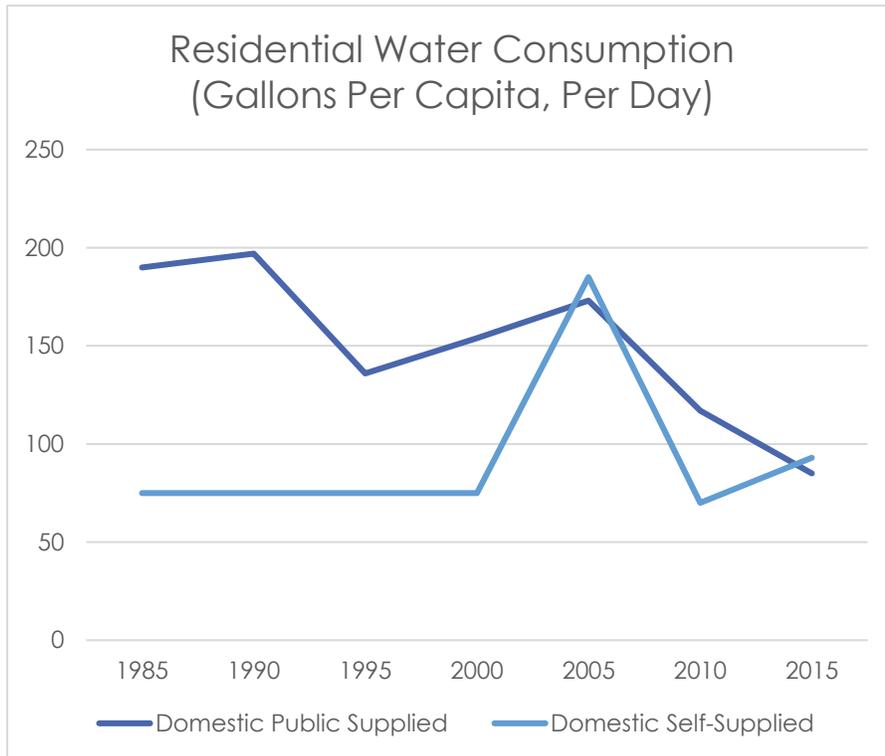
Source: California Department of Conservation, Farmland Mapping and Monitoring Program

Residential Water Consumption (Goal: Reduce water consumption per and capita)

San Joaquin County has a Mediterranean climate which means that there will be long periods of drought. More reservoirs can be built but this is no longer environmentally feasible. The only option is to encourage and reward efforts to use water more efficiently. Water consumption per capita is an indicator to measure the efficient use of water. Households use either public or private supplied water or residential self-supported water. Residential public-supplied water use is water withdrawn by public and private water suppliers that provide water to at least 25 people or have a minimum of 15 connections. Residential self-supplied water use is water withdrawn from a groundwater or surface-water source by a user rather than being obtained from a public supply.

Figure 11 below shows that residential public-supplied water consumption per capita has been decreasing since 2005 from 173 gallons per day to 85 in 2015 which is a 50 percent reduction. Residential self-supplied water consumption has generally remained steady at about 75 gallons per capita per day with increases in 2005 and 2015 (185 and 93 gallons per day).

Figure 11



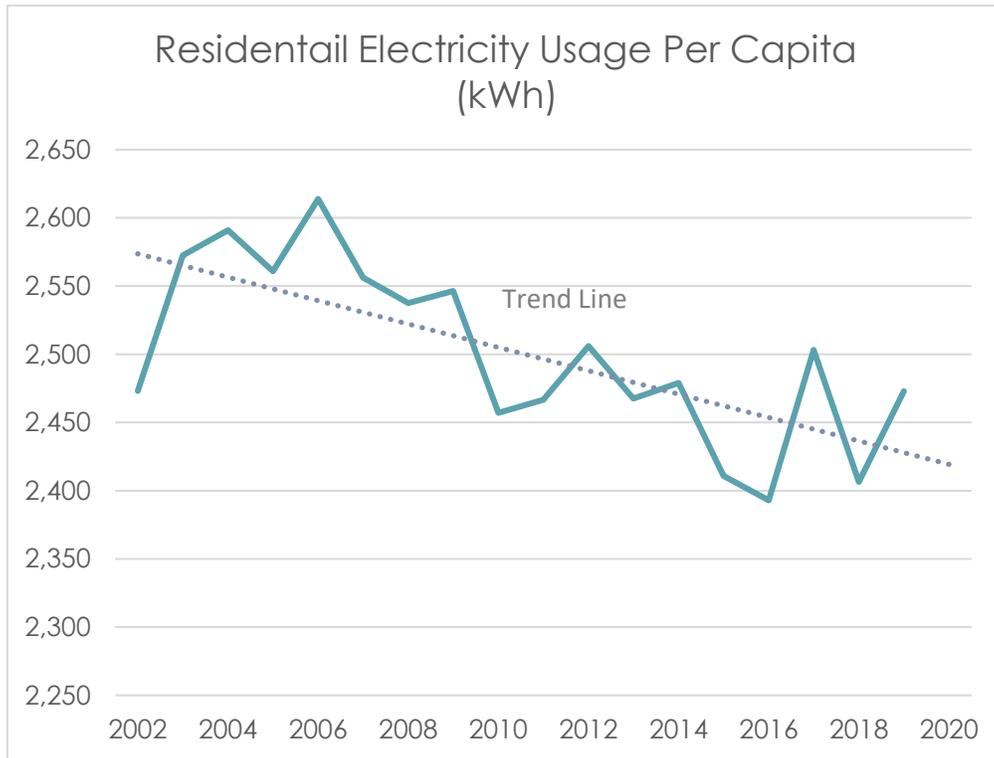
Note: Domestic Public Supplied data entry for year 2000 is an interpolation between 1995 and 2005 data.

Source: U.S. Geological Survey

Energy Per Household and Capita (Goal: Reduce energy consumption per household and capita)

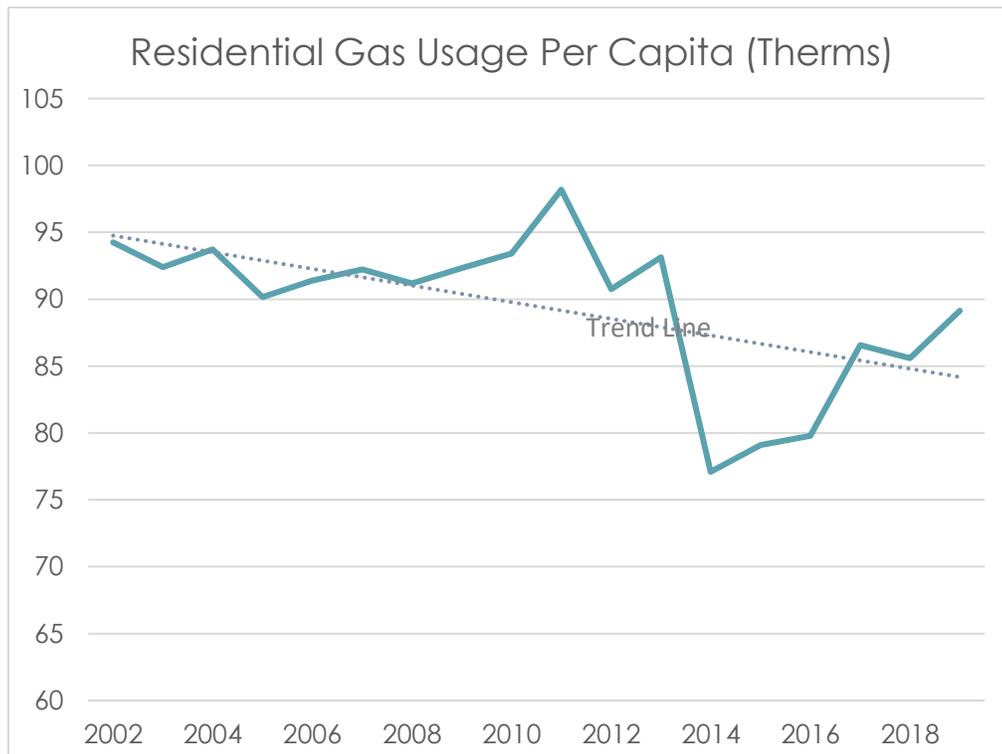
Reducing household energy results in less emissions that are the byproduct of producing the energy. SJCOG measures energy per household to better understand environmental impact, household budget, and efficiency of buildings. According to the California Energy Commission, residential usage of electricity and gas per capita has been trending downward since 2004 as shown in Figures 12 and 13. There does seem to be an uptick in residential electricity and gas usage since 2016.

Figure 12



California Energy Commission

Figure 13



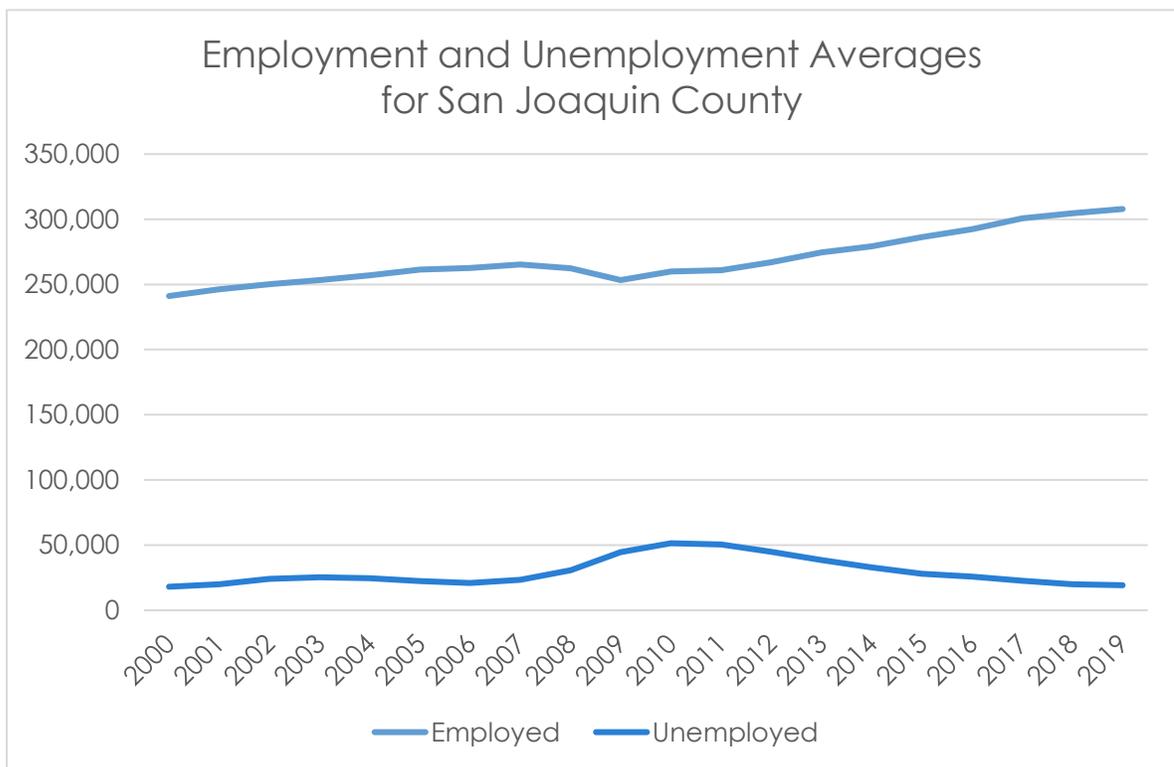
California Energy Commission

ECONOMIC VITALITY INDICATORS

Job Creation (Goal: Increase number of jobs, decrease unemployment rate)

Job creation refers to the employment and unemployment numbers for San Joaquin County. Over the last 20 years, there has been fluctuations in employment and unemployment numbers in the county (Figure 14). During 2008, San Joaquin County saw a relatively drastic drop in both employed residents and jobs, thus driving up unemployment during this time. Prior to 2008, San Joaquin County was at an all-time high in employment numbers; however, the county shed significant numbers of jobs in the great recession and did not recover these jobs until 2015. In 2016-2019 San Joaquin County again saw a peak in job numbers, rising above 300,000 with the unemployment rate decreasing to the lowest level (4.1 percent) since 2000. However, the COVID-19 pandemic has interrupted this positive trend.

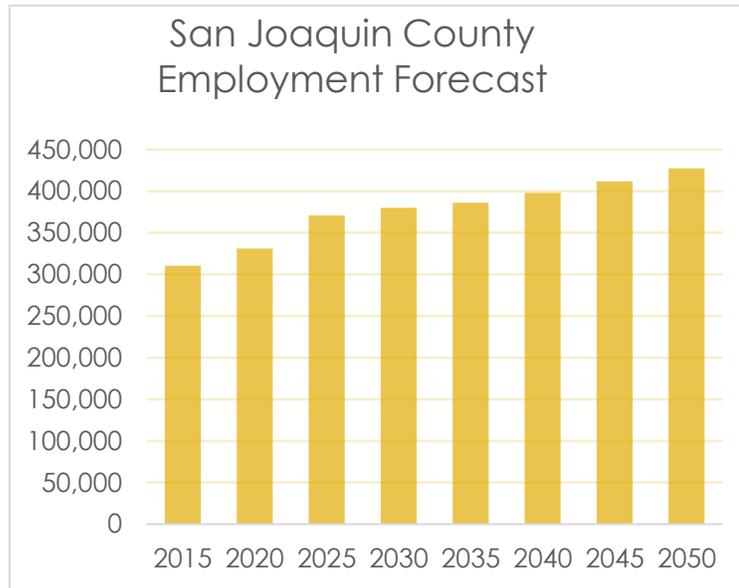
Figure 14



Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics

After the COVID-19 pandemic, employment numbers are projected to continue to rise in San Joaquin County, according to the Center for Business and Policy Research (CBPR) (Figure 15).

Figure 15



Source: University of the Pacific Center for Business and Policy Research

Not only are the employment numbers going to grow in San Joaquin County, but the number of jobs in almost all job sectors are projected to grow as well. The CBPR September 2020 Forecast (Figure 16) shows that the Transportation, Warehousing, Utilities sector and Health Care and Education sector will experience the largest amount of job growth.

Plan investments can aid economic development in San Joaquin County through not only direct investment in building transportation infrastructure, but by making the region more attractive to potential employers for goods movement and quality of life for employees. Chapter 6 and Appendix R provide additional insight into this indicator

Figure 16

	2015	2020	2025	2030	2035	2040	2045	2050
Agriculture	19,218	18,864	18,516	19,201	20,121	21,047	22,043	23,138
Construction	14,722	18,691	19,346	19,289	19,413	20,164	20,887	21,555
Financial Activities	23,180	23,839	25,904	26,603	27,488	28,648	29,903	31,284
Government	41,654	45,385	48,094	49,362	49,789	50,084	50,451	50,850
Healthcare and Education	42,404	41,113	49,649	52,189	54,873	57,847	61,091	64,758
Information	2,504	1,984	1,950	1,671	1,447	1,296	1,184	1,100
Leisure and Hospitality	23,738	21,415	29,626	30,136	30,399	30,674	31,000	31,403
Manufacturing	19,779	20,868	21,019	20,801	21,076	21,954	22,943	24,014
Other Services	17,622	17,370	19,920	19,852	19,887	20,114	20,375	20,717
Professional and Business Services	31,716	32,332	36,043	36,856	37,684	39,091	40,678	42,443
Retail Trade	32,141	30,602	33,016	32,355	32,616	33,487	34,967	36,849
Transportation, Warehousing, Utilities	27,598	45,434	54,011	58,274	58,297	60,264	62,730	65,492
Wholesale	14,023	13,020	13,669	13,241	13,035	13,231	13,496	13,784
All Industries	310,299	330,917	370,763	379,830	386,125	397,901	411,748	427,387

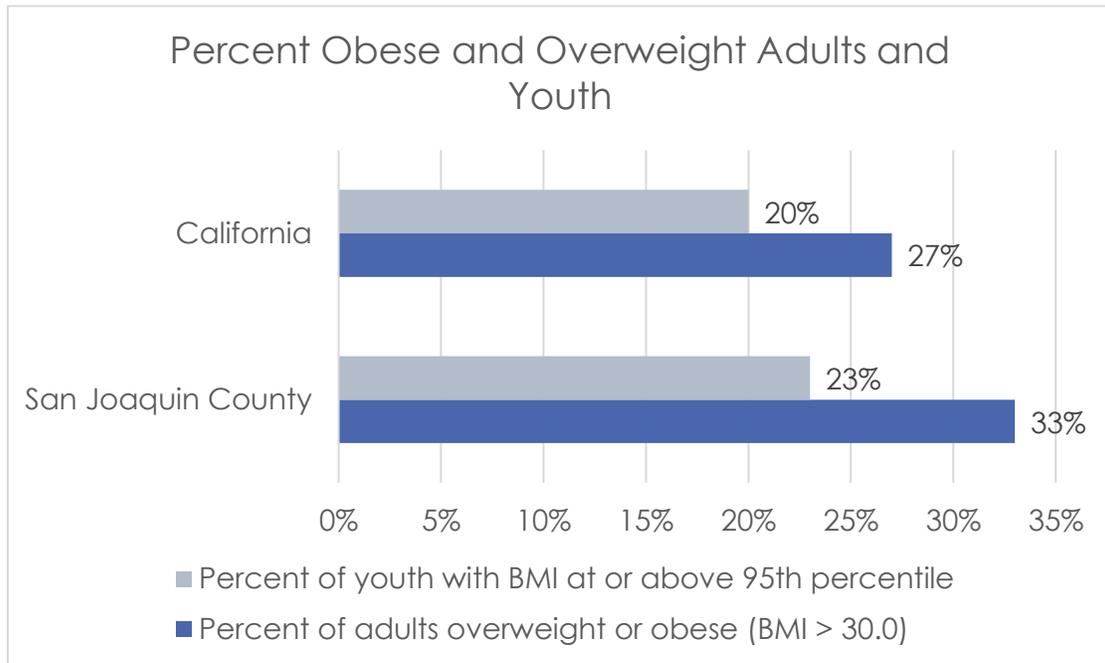
HEALTH AND WELLNESS INDICATORS

Listed below are some areas of concern for San Joaquin County and the data around obesity, physical inactivity, asthma, and air quality. The data reflects up-to-date numbers in the 2019 Community Health Needs Assessment report.

Obesity (Goal: Reduce percent of adults and youth who are obese or overweight)

Obesity leads to several serious health problems. As Figure 17 shows below, the percentage of San Joaquin County's adults (aged 20 years and older) who are obese or overweight exceeds that of California by about five percent. Adults were considered obese or overweight when they had a Body Mass Index (BMI) greater than 30.0. The chart also shows that the percentage of youth (aged 10 to 17 years) that are obese or overweight exceeds that of California by three percent. Youth were considered obese or overweight when they had a BMI-for-age at or above the 95th percentile.

Figure 17

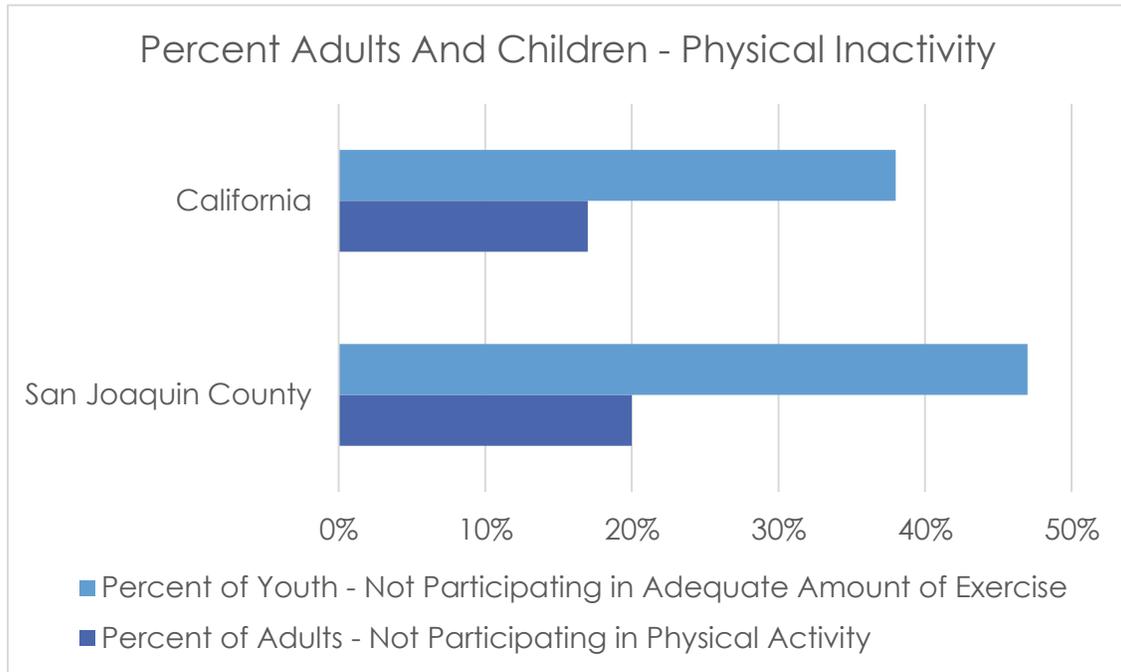


Source: San Joaquin County 2019 Community Health Needs Assessment

Physical Inactivity (Goal: Decrease the percent of adults and youth that are physically inactive)

The San Joaquin region also has higher rates of residents than California who are considered physically inactive (Figure 18). Lack of adequate physical activity is closely associated with obesity. The percent of adults (aged 20 years and older) in the San Joaquin region who do not participate in physical activity or exercise exceeds that of California by three percent. The percent of youth (aged 6 to 17) in the San Joaquin region who do not participate in adequate amount of physical activity exceeds that of California by eight percent.

Figure 18

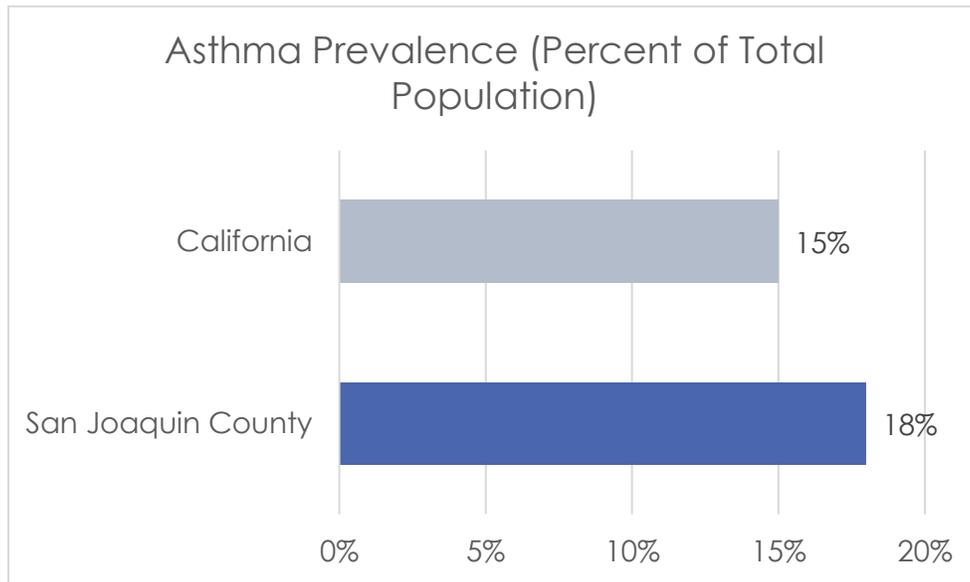


Source: San Joaquin County 2019 Community Health Needs Assessment

Asthma (Goal: Reduce percentage of San Joaquin County residents who have asthma)

Asthma is a lung condition that can be triggered by pollen and pollutants. Serious episodes of asthma can lead to death. Figure 19 shows that the percentage of residents in San Joaquin County that has asthma is three percent higher than in California.

Figure 19



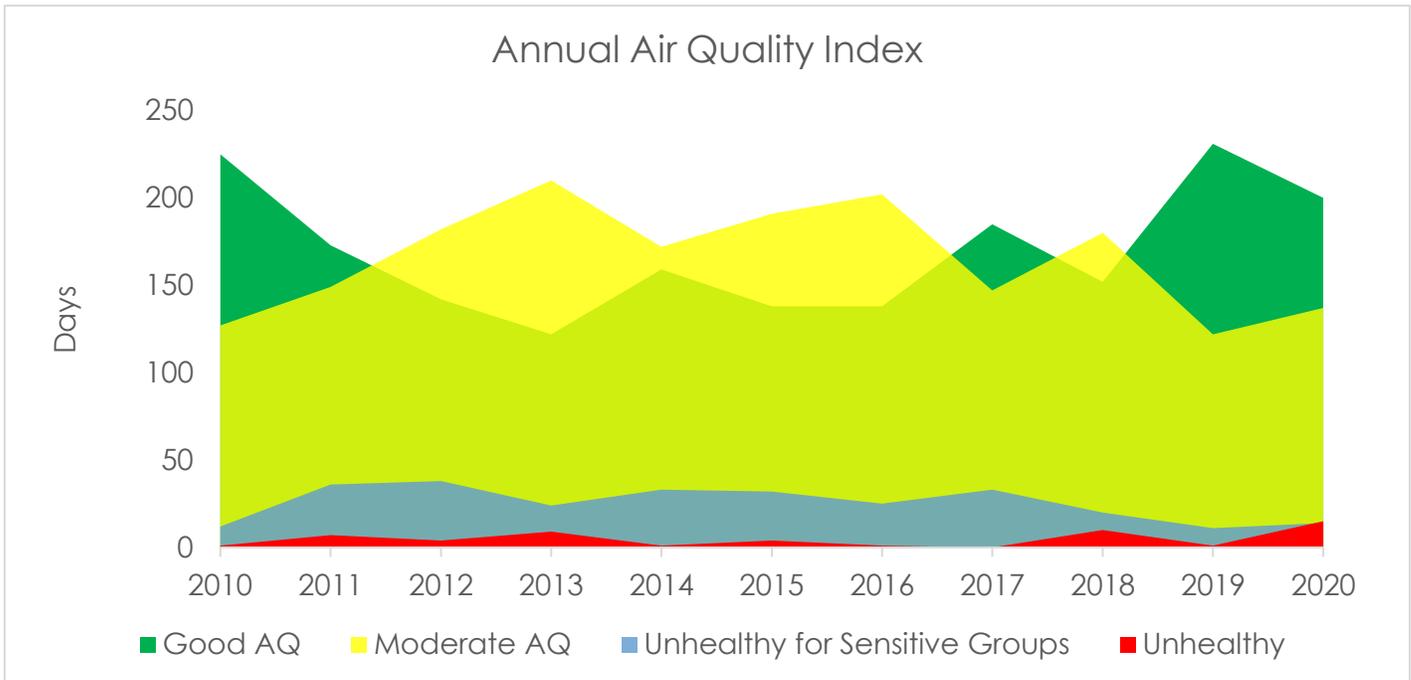
Source: San Joaquin County 2019 Community Health Needs Assessment

Air Quality (Goal: Increase the number of Good Air Quality index days per year)

Asthma and air quality are related indicators. The San Joaquin Valley is still home to some of the most polluted air in the United States. The American Lung Association State of the Air 2020 gave San Joaquin County a failing grade in high ozone days, particle pollution – 24 hour, and particle pollution – annual.⁶ Over time overall air quality has improved. As Figure 20 shows, the level of Good Air Quality Index days over the last several years has increased while Unhealthy for Sensitive Groups days has decreased. However, the number of Unhealthy days has increased due to the prevalence of wildfires during the last couple of years. The Plan meets all applicable air quality conformity requirements and complies with the Clean Air Act.

⁶ American Lung Association, State of the Air 2020, <https://www.stateoftheair.org/city-rankings/states/california/san-joaquin.html>

Figure 20



Source: U.S. Environmental Protection Agency Air Quality Index Report

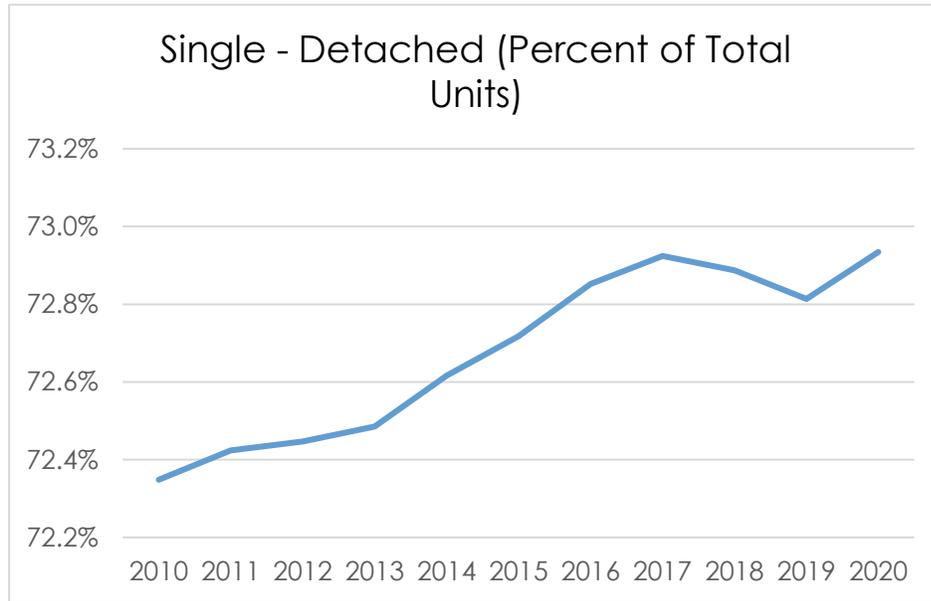
Social Equity Indicators

The following performance indicators help to assess whether all groups have access to the resources and opportunities necessary to improve the quality of their lives in San Joaquin County, as an outcome reflecting social equity in the region.

Housing Split (Goal: Increase percent of multifamily dwellings)

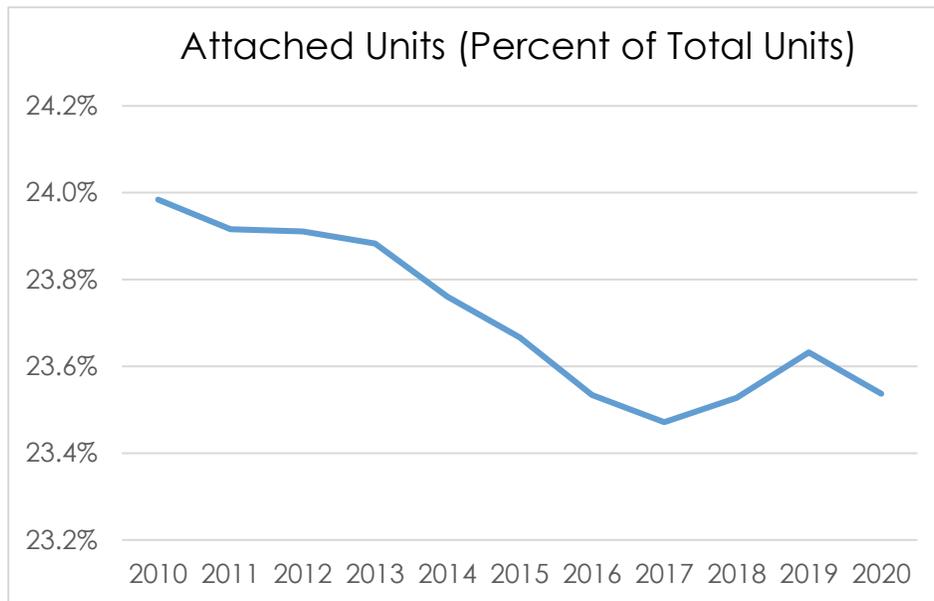
Housing split refers to the number of single-family homes versus multifamily housing. Attached multifamily is considered one or more attached homes. Lower-income households often live in attached multifamily units and the demand for these units often exceed that of supply. Attached multifamily units also use land more efficiently than detached single-family units. Since 2010, there has been a slight increase in the percentage of dwelling units that are single-family homes and a corresponding slight decrease in the percentage of dwelling units that are attached multifamily (Figures 21 and 22). During the 2017-2018 period, the percentage of dwelling units that were multifamily actually increased but started to decrease again in 2019. We will see whether what was happening during 2017-2018 will be the start of an upward trend in multifamily development in comparison to single-family.

Figure 21



Source: CA Dept. of Finance Estimates

Figure 22

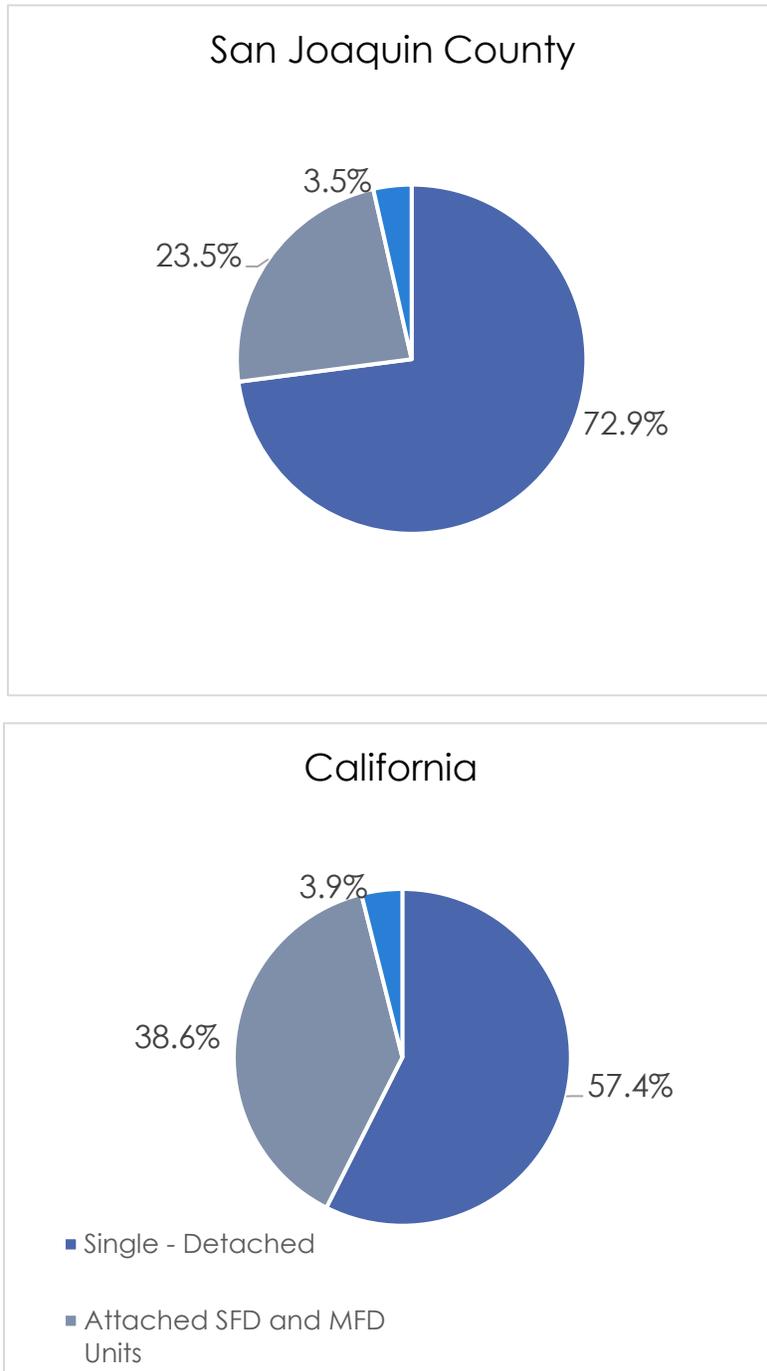


Source: CA Dept. of Finance Estimates

Figure 23 is a comparison between the housing composition of San Joaquin County with that of the entire state. When compared to California, we can see that, currently, multifamily options in San Joaquin County are not being provided on a scale relative to California. In California, almost 40 percent of the dwelling units are multifamily homes while in San Joaquin County, only 23.5 percent are

multifamily. However, during the past three years there has been a net increase in percentage of homes that are multifamily (Figure 23).

Figure 23



Source: CA Dept. of Finance Estimates

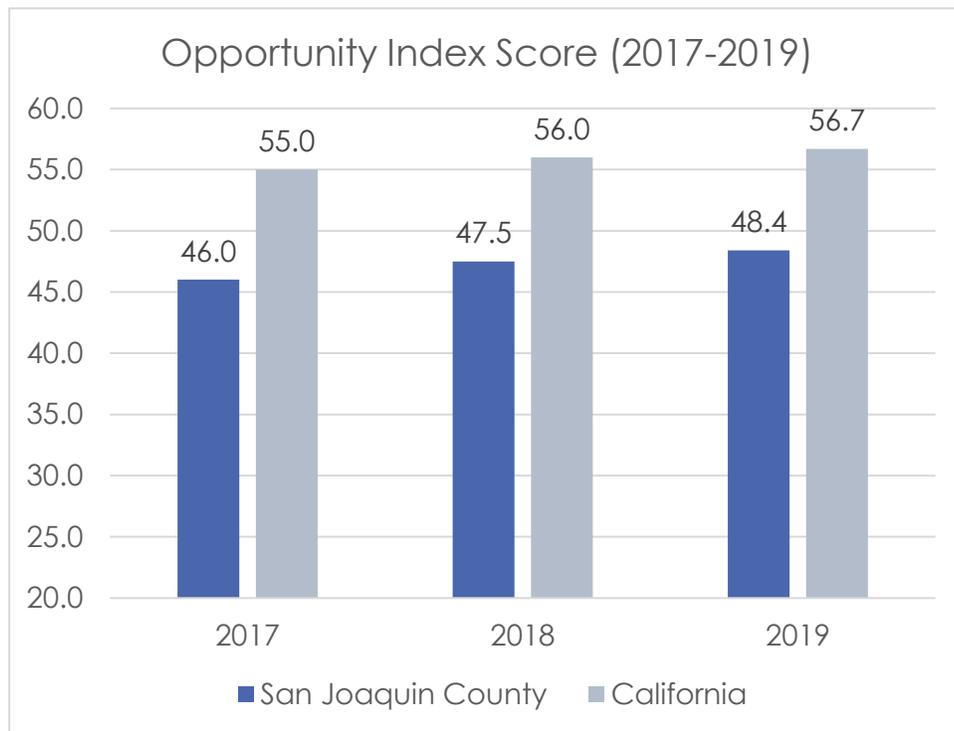
Opportunity Index (Goal: Increase Opportunity Index Score)

The Opportunity Index measures a community's well-being by using a scoring range. The scores range between 0 (indicating no opportunity) and 100 (indicating maximum opportunity). The Opportunity Index draws upon economic, educational, health, and community-related indicators of opportunity.⁷ Some of the indicators that are included are:

Dimension	Indicator
Economy	Jobs, Wages, Poverty, Income Inequality, Access to Banking Services, Affordable Housing, Broadband Internet Subscription
Education	Preschool Enrollment, High School Graduation, Postsecondary Education
Health	Low Birth Weight, Health Insurance Coverage, Deaths Related to Alcohol/Drug Use and Suicide
Community	Volunteering, Youth Disconnection, Violent Crime, Access to Primary Health Care, Access to Healthy Food, Incarceration

Figure 24 compares the Opportunity Index score for San Joaquin County and California. During the 2017-2019 period, the score for San Joaquin County has been improving and the difference with the state's score has been reduced from 9 to 8.3 points. It remains to be seen if this trend continues during and after the COVID-19 pandemic.

Figure 24



Source: Opportunity Nation, <https://opportunitynation.org/>

⁷ Opportunity Nation, Opportunity Index 2019