3 Environmental Setting and Impact Analysis Approach

This section provides a general overview of the environmental setting for the 2022 RTP/SCS, including a regional setting, sub-regional setting, and a description of the regional transportation system. This section also outlines the EIR baseline and approach to direct and cumulative impact analyses. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4.0, *Environmental Impact Analysis*.

3.1 Regional Setting

Located at the center of California's vast agricultural operations, San Joaquin County is located in the San Joaquin Valley. The County encompasses over 900,000 acres (about 1,425 square miles) and is bordered by Sacramento County to the north, Stanislaus County to the south, Amador and Calaveras Counties to the east, and Contra Costa and Alameda Counties to the west. The county seat for San Joaquin County is the city of Stockton. San Joaquin County includes relatively level, agriculturally productive lands. Major landforms in the County include the foothills of the Diablo Range in the southwest, the foothills of the Sierra Nevada in the east, and the Delta in the northwest. State Route 99 (SR 99) and Interstate 5 (I-5), two of the State's major north-south freeways, pass through San Joaquin County. Interstate 205 (I-205) and Interstate 580 (I-580) provide direct connections to the San Francisco Bay Area to the west. Three transcontinental railroads (including Amtrak Service), the Stockton Metropolitan Airport, and the Port of Stockton connect the County to the State, nation, and world.

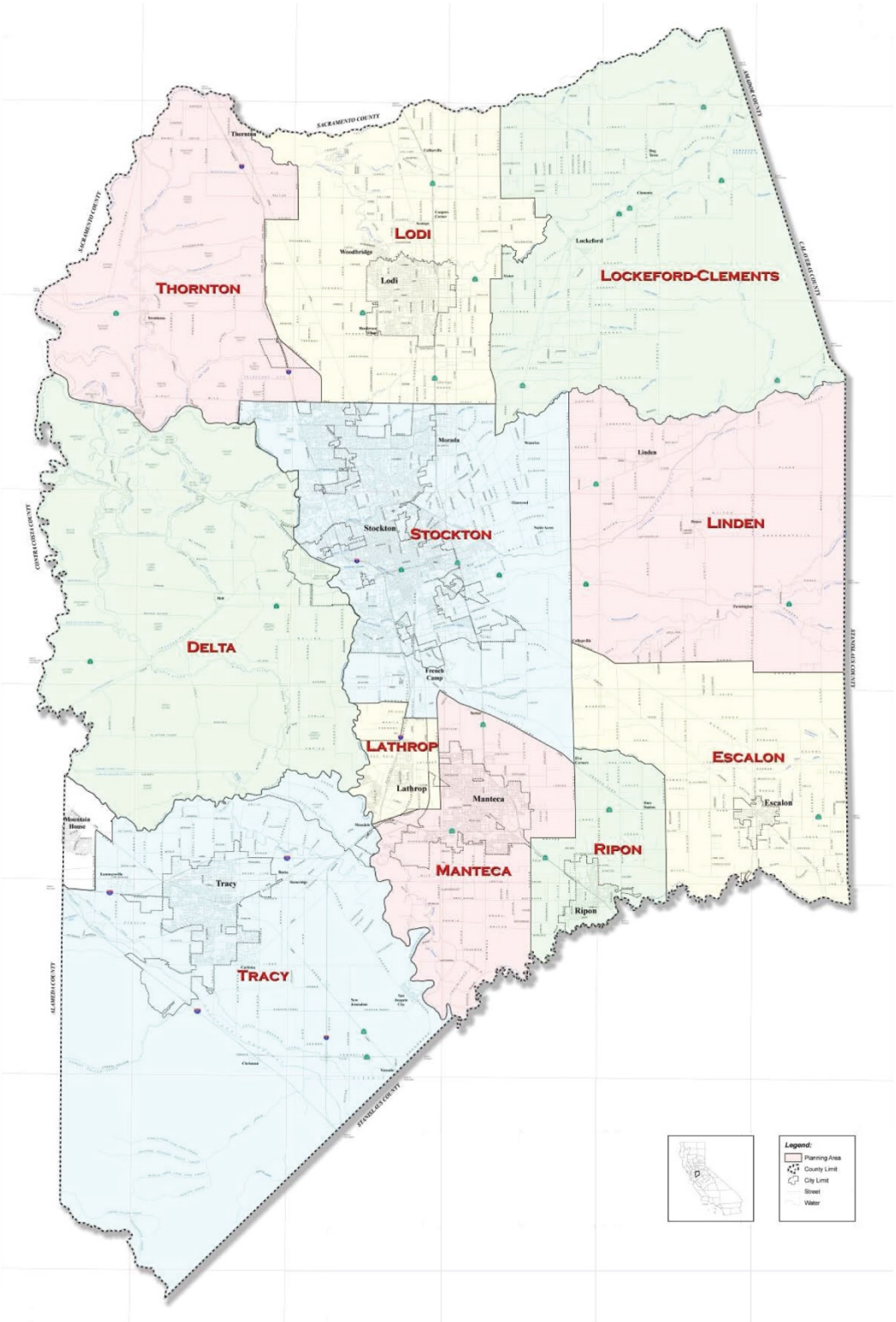
San Joaquin County's General Plan divides the County into 12 Planning Areas: the Delta, Escalon, Lathrop, Linden, Lockeford, Lodi, Manteca, Mountain House, Ripon, Stockton, Thornton, and Tracy (see Figure 3-1**)**. The General Plan Planning Areas include all lands within the County line and any additional areas in which adopted County policies may relate, not including lands in the seven incorporated cities (Escalon, Lathrop, Lodi, Manteca, Ripon, Stockton, and Tracy).

3.2 Regional Growth Setting

The County covers approximately 1,440 square miles and is predominantly flat land with some gently rolling hills. The County is bordered to the southwest by the Diablo Range and to the east by the Sierra Nevada foothills. The County contains a combination of metropolitan and rural areas with a long history of agricultural activities. San Joaquin County is considered one of the fastest growing regions in the Central Valley, with the population expected to reach over a million people by 2050.

While much of this trend continues to be the result of "spillover" from the Bay Area, the County's geographical advantages and quality of life also contribute to the growth. This growth has led to increased urbanization and the persistent challenge to meet state and federal air quality requirements.

Figure 3-1 San Joaquin County General Plan Planning Areas



Source: ***San Joaquin County, 2009***

Economically, San Joaquin County continues to grow in many segments of its economy. Downtown revitalization efforts in Stockton, Big League Dreams and Great Wolf Lodge in Manteca, and the Lodi area's success in producing world-class wines are shaping San Joaquin County into a destination for tourism and entertainment. The region also continues to be an attractive location for new warehousing and distribution centers that serve Northern California, the Bay Area, and the west coast. A centralized and diverse network of highway, rail, air, and seaport facilities support the continued development of San Joaquin County into a major goods movement region.

As San Joaquin County is transformed, these growth factors have profound effects on the ability to finance, deliver, and maintain the transportation infrastructure. The 2022 RTP/SCS aims to build on the 2018 RTP/SCS to create an efficient and effective multimodal transportation system for San Joaquin County that balances the needs for maintenance and preservation with expansion and enhancements. A conscious effort is made to design a system that both promotes mobility as well as preserves the environment. This effort is guided by a set of overarching goals.

Due primarily to the availability of housing at lower costs than surrounding communities to the north and to the west of San Joaquin County, the County is a place where many residents travel long distances for employment outside the County. Specifically, State Routes 4 and 12 link the east and west sides of the County. Each operates as a freeway segment for a brief but important segment between State Route 99 and I-5. Both routes also connect with Bay Area counties across the San Joaquin Delta and carry substantial commuter and interregional traffic.

3.3 Regional Transportation System

3.3.1 San Joaquin County

The San Joaquin County transportation system is designed to meet the multiple needs of residents and businesses. The County's central position within the state provides key routes and linkages for the movement of goods throughout California and to the rest of the United States. The County has one of the few deep-water ports within the State at the Port of Stockton, an airport that serves international markets, key highway corridors, and the hub for a number of major railroads. Given the County's location, San Joaquin County serves as a major transportation center for warehousing and distribution activities, as well as a source of more affordable housing for employees working in the Bay Area.

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

The County has six airports open to the public that offer a variety of aviation services, to various domestic and international locations. Stockton Metropolitan Airport is owned and operated by San Joaquin County and offers general aviation services along with commercial passenger service to places such as Las Vegas, Phoenix, and San Diego. The second largest airport is the Tracy Municipal Airport, which is owned and operated by the City of Tracy.

There are a number of rail lines that traverse the County and provide transportation services for both passengers and freight. A partnership between the Union Pacific and the Burlington Northern and Santa Fe (BNSF) Corporation operates an intermodal shipping yard providing a key connection for truck-rail freight movement. Amtrak provides passenger service to the County, while the

Altamont Corridor Express (ACE) provides direct commuter rail service to Silicon Valley (with stops in Stockton, Lathrop, Manteca, and Tracy).

Regional public transit is provided by San Joaquin Regional Transit District (SJRTD) bus service. The SJRTD offers fixed-route buses, intercity buses, interregional buses, and dial-a-ride services. Transit operators provide local bus services in most of the local jurisdictions throughout the county. A variety of Class I-III bicycle routes in many areas provide additional transit alternatives.

3.4 EIR Baseline, Approach for Direct and Cumulative Analyses

3.4.1 Mitigation Approach

This EIR includes proposed mitigation measures to reduce impacts and identifies agencies for implementation of those mitigation measures. SJCOG has lead agency status; and therefore, authority to enforce mitigation measures for projects for which they have discretionary authority. However, SJCOG does not have authority to require recommended mitigation measures be implemented by other implementing agencies (e.g., Caltrans, cities, transit agencies, etc.) that are responsible agencies for this 2022 RTP/SCS EIR, but for applicable, project specific review, those implementing agencies will be Lead Agency under CEQA/NEPA for future transportation and land use development projects. It is the responsibility of the lead agency implementing specific 2022 RTP/SCS projects to conduct environmental review consistent with CEQA and where applicable, incorporate mitigation measures provided herein and developed specifically for the project to reduce impacts. Project-specific environmental documents may adjust the mitigation measures identified in this EIR as necessary to respond to site-specific conditions.

3.4.2 EIR Baseline

Under CEQA, the impacts of a proposed project must be evaluated by comparing expected environmental conditions after project implementation to conditions at a point in time referred to as the baseline. State CEQA Guidelines Section 15125 states that an EIR should describe physical environmental conditions of the project as they exist at the time the Notice of Preparation (NOP) is published, or if no NOP is published, then at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant.

As the State CEQA Guidelines Section 15125 states, ordinarily the appropriate baseline will be the actual environmental conditions existing at the time of CEQA analysis, typically when the NOP is published. However, the CEQA Guidelines also contemplate times when a deviation from the use of the NOP date to establish the baseline is appropriate to present an accurate description of the expected environmental impacts of a proposed project.

This EIR evaluates impacts against existing conditions which are generally conditions existing at the time of the release of the NOP in December 2020. It was determined that a comparison to current, existing baseline conditions would provide the most relevant information for the public, responsible agencies and SJCOG decisionmakers. However, the release date of the NOP in December 2020 was during an unplanned global pandemic caused by the COVID-19 coronavirus. Beginning in March 2020, the SJCOG region was in varying stages of compliance with shelter-in-place orders directed by various county health officers. These orders modified commercial and office business operations,

employee commutes, and travel behavior, resulting in secondary effects related to vehicle miles traveled (VMT), air quality, and energy use.

As a result of the pandemic, there is insufficient transportation data to accurately establish measured or observed conditions for VMT and other transportation metrics, such as transit use, for baseline year 2020. Also, most pandemic orders, including shelter in place orders, have been lifted. Therefore, SJCOG's Regional Transportation Demand Model (RTDM) was utilized to model 2016 baseline conditions for these transportation metrics, as the model reflects more typical transportation patterns in the SJCOG region that would otherwise exist had the pandemic never occurred. For physical conditions that were not as altered by the pandemic and shelter-in-place orders, such as aesthetics, biological resources, and hydrology and water quality, the conditions for the analysis are generally as they existed in December 2020 and do not require modeling.

For some issue areas, this EIR also includes consideration of project effects against a forecast no project condition in addition to the current, existing, or modeled 2020 baseline conditions, controlling for impacts caused by population growth and other factors that would occur whether or not the 2022 RTP/SCS is adopted. This no project analysis is provided for informational purposes only. However, all impact determinations are based on a comparison to 2020 baseline conditions. Whenever this EIR refers to a baseline year, it refers to the modeled 2016 conditions or the 2020 conditions that generally existed unaltered by the COVID-19 pandemic.

3.4.3 Interim Timeframes

2046 is the horizon year of the 2022 RTP/SCS. While 2022 RTP/SCS would be implemented gradually over the planning period, this EIR does not analyze interim time frames because the four-year update cycle of the RTP/SCS prepared by SJCOG already requires short-term adjustments to the Plan. The one exception to this approach is in Section 4.7, *Greenhouse Gas Emissions/Climate Change*, which discusses years 2020, 2035, and 2046, as well as comparative baselines of 1990 and 2005, to satisfy statutory requirements and address state goals related to GHG emissions, such as SB 375 (Health & Safety Code, § 38551(b)). A summary of the scenarios considered in the GHG analysis is provided in Section 4.7.2 in Section 4.7, *Greenhouse Gas Emissions/Climate Change.*

3.4.4 Approach for Direct Impact Analysis

The programmatic nature of the 2022 RTP/SCS necessitates a general approach to the evaluation of existing conditions and impacts associated with the proposed project. As a programmatic document, this EIR presents a regionwide assessment of the impacts of the 2022 RTP/SCS. These impacts are examined for both transportation network improvements and the forecasted regional growth and land use changes. Because the EIR is a long-term document intended to guide actions over 25 years into the future, program-level and qualitative evaluation is involved. Quantitative analyses are provided where applicable with available information. During future stages in planning and implementation of specific elements of the 2022 RTP/SCS, including land development resulting from regional growth and transportation improvements identified in the 2022 RTP/SCS, project-specific CEQA documents will be prepared by the appropriate project implementation agency.

For analytical purposes, the baseline year examined throughout this EIR is 2020, except where specifically noted, as further described in Section 3.4.2 above.

3.4.5 Approach for Cumulative Analysis

CEQA defines cumulative impacts as "two or more individual effects which, when considered together, are considerable, or which can compound or increase other environmental impacts." Section 15130 of the CEQA Guidelines requires that an EIR evaluate environmental impacts that are individually limited but cumulatively considerable. These impacts can result from the proposed project alone, or together with other projects. The CEQA Guidelines state: "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present and reasonably foreseeable probable future projects" (CEQA Guidelines, Section 15355). A cumulative impact of concern under CEQA occurs when the net result of combined individual impacts compounds or increases other overall environmental impacts (CEQA Guidelines, Section 15355). In other words, cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time. CEQA does not require an analysis of incremental effects that are not cumulatively considerable nor is there a requirement to discuss impacts that do not result in part from the project evaluated in the EIR.

3.4.5.1 Cumulative Impact Methodology

Section 4 of this EIR includes an analysis of the proposed project's specific and cumulative impacts, as required by CEQA. The CEQA Guidelines require the analysis of the cumulative effects of a project in combination with other probable future projects. Section 15130 of the State CEQA Guidelines prescribes two methods for analyzing cumulative impacts: (1) use of a list of past, present, and reasonably anticipated future projects producing related or cumulative impacts; or (2) use of a summary of projections contained in an adopted general plan or related planning document.

This document is a Program EIR that analyzes the effects of the cumulative buildout of the 2022 RTP/SCS. The 2022 RTP/SCS considers the probable future projects described in method 1 above and includes a range of specific land use and transportation projects designed to meet the plan goals and current and projected future needs. The Draft EIR analyzes the cumulative impacts of these projects. The 2022 RTP/SCS also constitutes the cumulative scenario described in method 2. Therefore, the cumulative effects of all probable future circulation system improvements and land use projects in the region are included in the analysis of the proposed project's impacts. These projects are listed in Table 2-1 of this document and represent all reasonably foreseeable probable future transportation projects within San Joaquin County. Land use and growth projections for the region, which are the subject of analysis throughout this EIR, are combined with the growth projections for the adjoining counties and accounted for in SJCOG's traffic modeling. Adjoining counties are listed as follows: Contra Costa, Sacramento, Amador, Calaveras, Stanislaus, and Alameda.

The area that includes the SJCOG region and the adjoining counties is referred to in this analysis as the "cumulative impact analysis area." As shown in Table 3-1, the population for the adjoining counties is projected to grow by approximately 825,344 people by 2050.

Table 3-1 Population, Households and Employment Projections of Cumulative Impact Analysis Area, 2020-2050

	Population[2]		Households[2]		Jobs[2]	
Adjoining County	**2020**	**2050**	**2020**	**2050**	**2020**	**2050**
Contra Costa	1,156,787	1,330,012	393,100	441,800	683,800	837,400
Sacramento	1,568,626	1,937,854	532,500	673,600	1,279,100	1,559,500
Amador	37,928	44,867	14,800	16,400	23,530	29,603
Calaveras	44,255	36,164	19,200	20,800	17,998	21,236
Stanislaus	559,873	650,686	165,800	189,300	368,700	452,900
Alameda	1,680,246	1,873,476	572,800	662,800	1,485,600	1,827,300
Total	**5,047,715**	**5,873,059**	**1,698,200**	**2,004,700**	**3,858,728**	**4,727,939**

[1] Long-Term Socio Economic Forecasts by County, Department of Transportation, 2020

The RTP/SCS covers a 26-year period from 2020 to 2046 and is an update of the 2018 RTP/SCS. SJCOG does not propose any land use changes in the 2022 RTP/SCS, but rather the land use patterns envisioned by the 2022 RTP/SCS are based on the General Plan land use designations of the local agencies (the incorporated cities and the county). The forecasted allocations in the RTP are generally consistent with growth assumptions (e.g., location, density, and intensity of use) utilized in existing general plans or other local adopted plans; however, it does not utilize all available capacity in those plans.

Thus, the cumulative effects of all probable future circulation system improvements and land use projects in the region, as included in the SJCOG model, are included in the analysis of the proposed project's impacts. Therefore, in this chapter, when project-specific impacts are judged to be significant, they are also by definition considered "cumulatively considerable" incremental contributions to significant cumulative impacts (See CEQA Guidelines Section 15130(a)). Project-specific impacts assessed in this document represent the cumulative impact of all potential transportation and land use projects in the project area and surrounding regions as provided in the SJCOG model. Mitigation measures proposed for project-specific impacts also represent potentially feasible options for mitigating the proposed project's incremental contribution to significant cumulative effects (See CEQA Guidelines Section 15130(b)(5).).

In some cases, probable future projects outside the SJCOG region in neighboring counties would further contribute to significant cumulative impacts. These include the impacts of vehicle trips originating or terminating outside the region. Therefore, the 2022 RTP/SCS's traffic impact analysis includes the cumulative impact from these out-of-region trips as they are included in the traffic model the analysis is based on. The impacts of these external trips are also reflected in the EIR air quality, GHG, and energy impact analyses.

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