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Introduction



Hickman Rd Bridge, Stanislaus County

2. INTRODUCTION

The Stanislaus Council of Government's 2022 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS or 'Plan') specifies the policies, projects, and programs necessary over a 24-year period to improve, manage, and maintain the region's transportation system.

As the federally designated Metropolitan Planning Organization (MPO) and state designated Regional Transportation Planning Agency (RTPA) for the Stanislaus region, StanCOG has developed the 2022 RTP/SCS update through an integrated and formal planning process, referred to as Valley Vision Stanislaus. This process was executed in collaboration with the nine cities in the Stanislaus region and the County of Stanislaus through coordination with local, state, and federal planning partners and outreach to key stakeholders and the public.

The Plan serves as a guide for transportation investment and land use across Stanislaus County through 2046. It presents a roadmap for accommodating anticipated growth and development and identifies a transportation investment strategy for achieving regional goals that link air quality, land use, and transportation.

RTP/SCS Preferred Scenario

The 2022 RTP/SCS is based on a preferred land use and transportation scenario, referred to as Scenario D (Preferred Scenario/Neighborhood Infill), which defines a pattern of future growth for the region in established neighborhoods to transform them over time to accommodate a more diverse range of housing types as compared to Scenario A (Stay the Course). The 2022 RTP/SCS scenarios are discussed in further detail in Chapters 8 and 9.

This chapter first describes the regulatory setting and planning initiatives that govern the development of the 2022 RTP/SCS. Second, it outlines StanCOG's goals and objectives used to evaluate different transportation investment and land use scenarios and presents the performance framework used to quantify and describe the performance of the RTP/SCS. Third, it summarizes the steps StanCOG followed, including public outreach and involvement, for the 2022 RTP/SCS planning process. Lastly, it presents a summary of forecasting efforts that informed this plan.

Regulatory Setting & Planning Initiatives

This 2022 RTP/SCS sets the foundation for transportation investment and land use priorities for years 2022 through 2046. A number of federal and state statutes and regulations direct the content of the Plan and the process by which it is developed. Additionally, regional planning initiatives also affect the priorities of the Plan. A few of the key statutes, regulations, and initiatives are listed below.

On November 15, 2021, President Biden signed the Surface Transportation Authorization Act, the Infrastructure Investment and Jobs Act (IIJA), aka Bipartisan Infrastructure Law

(BIL). The IJJA/BIL followed Fixing America's Surface Transportation Act (FAST Act). Like the FAST Act, the IJJA/BIL continues the performance-based planning and programming stipulations established in the Moving Ahead for Progress in the 21st Century Act (P.L. 112-141) (MAP-21), which required MPOs to implement a performance-based approach in the scope of the Metropolitan Transportation Planning process. MPO federally required responsibilities are identified in Title 23 U.S.C. Section 134 and Title 23 Code of Federal Regulations (CFR) Part 450.300. Per 23 CFR 450.306, the scope of the metropolitan planning process is to provide for consideration and implementation of projects, strategies and services that will address the following factors:

- 1) Support the economic vitality of the metropolitan area by enabling global competitiveness, productivity, and efficiency;
- 2) Increase the safety of the transportation system for motorized and non-motorized users;
- 3) Increase the security of the transportation system for motorized and non-motorized users;
- 4) Increase accessibility and mobility of people and freight;
- 5) Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between (regional) transportation improvements and state and local planned growth and economic development patterns;
- 6) Enhance the integration and connectivity of the transportation system, across all modes, for people and freight;
- 7) Promote efficient system management & operation;
- 8) Emphasize the preservation of the existing transportation system;
- 9) Improve the resiliency and reliability of the transportation system;
- 10) Reduce or mitigate stormwater impacts of surface transportation; and
- 11) Enhance travel and tourism.

California Environmental Quality Act (CEQA). CEQA directs governmental agencies to consider cumulative regional impacts and analyze the environmental consequences of proposed projects. Development of an RTP/SCS requires a program-level Environmental Impact Report (EIR) be prepared to consider the collection of projects it contains. StanCOG is designated as the lead agency to prepare the environmental review associated with this RTP/SCS.

Title VI of the Civil Rights Act of 1964. This law prohibits discrimination on the basis of race, color or national origin by recipients of federal funds such as state and local government agencies. Additionally, Title VI imposes obligations on recipients of federal funds to take affirmative action to assure, among other things, "that no person is excluded from participation in or denied the benefits of the program or activity on the grounds of race, color, or national origin." These prohibitions against discrimination were later supported by additional state and federal actions including Presidential Executive Order 12898 on environmental justice (EJ), which requires that federal agencies and recipients

of federal funding “identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations.”

Regional Housing Need Assessment (RHNA). State housing element law assigns the responsibility of preparing the RHNA for Stanislaus County jurisdictions to StanCOG. The California Department of Housing and Community Development identified the need for an additional 34,344 housing units in the County that must be accommodated through 2031. Per SB 375, the SCS must accommodate not only the housing need as determined in the RHNA for the planning period but must also accommodate housing for the expected population over the entire life of the RTP/SCS plan. Further, the RHNA must accommodate and distribute this housing need equitably throughout the region, considering all incomes and tenure needs, while promoting infill and addressing the intraregional jobs-housing balance. The 2022 RTP/SCS was developed in parallel with StanCOG’s 6th Cycle RHNA Allocation Plan to satisfy the required housing allocations and provide a diversity of housing types within the county.

Clean Air Act Amendments (1990). Pursuant to Section 176 (c)(4) of the 1990 Federal Clean Air Act Amendments (CAAA), MPOs such as StanCOG must demonstrate that the RTP conforms to the applicable State Implementation Plan (SIP). This process is described in the Federal Transportation Air (FTA) Quality Conformity Rule. The purpose of conformity is to ensure that regional transportation planning and programming remain consistent with state and local air quality planning efforts to expeditiously achieve and/or maintain the health-based National Ambient Air Quality Standards (NAAQS). Specifically, the following activities/tests are required to be documented when making conformity determinations of regional transportation plans in the Stanislaus region:

- 1) Expeditious Implementation of Transportation Control Measures Test (Conformity Regulation, Section 93.113)
- 2) Emission Budget Test (Conformity Regulation, Section 93.118)
- 3) Transportation Plan is financially constrained (Section 93.108)
- 4) Interagency Consultation and Public Participation Procedures (Section 93.110)

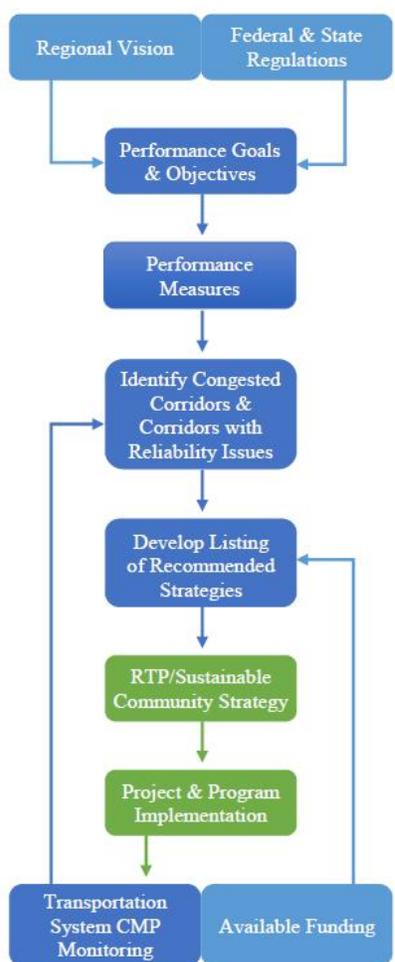
California Global Warming Solutions Act of 2006 (AB 32 and SB 32). AB 32 requires that GHG emissions within California must be at 1990 levels by the year 2020. AB 32 identifies GHGs as specific air pollutants that are responsible for global warming and climate change, and it directs the Air Resources Board (ARB) to implement the regulatory and market mechanisms necessary to achieve the specified reductions in GHG emissions. These efforts include reducing emissions through land use and transportation planning. SB 32 extends the reductions of GHG emissions required by AB 32 by specifying a GHG reduction of at least 40 percent below 1990 levels by the year 2030. SB 32 also authorizes the ARB to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. ARB is directed to carry out the process to achieve GHG emissions reductions in a manner that benefits the state’s most disadvantaged communities.

Sustainable Communities and Climate Protection Act of 2008 (SB 375). SB 375 requires that California’s 18 MPOs, including StanCOG, incorporate an integrated Sustainable Communities Strategy (SCS) as part of the RTP/SCS. Specifically, SB 375 requires the alignment of three major components within the regional transportation planning process – land use planning, transportation planning and funding, and State housing mandates – to reduce GHG emissions from cars and light trucks.

The SCS is required to be based on realistic planning assumptions; consider adopted general plans and spheres of influence; and consider natural resources and farmland. It must be consistent with both the transportation and financing elements of the RTP, and the adopted Regional Housing Needs Allocation. Finally, the SCS must be able to achieve the GHG reduction targets established by the ARB.

Federal Congestion Management Process (CMP). Federal law requires metropolitan areas with a population exceeding 200,000, known as Transportation Management Areas (TMAs), to develop a congestion management process as an ongoing process that is fully integrated into the MPO planning process. Federal law also states that “In a TMA designated as a nonattainment area for ozone or carbon monoxide pursuant to the

Federal Clean Air Act, federal funds may not be programmed for any project that will result in a significant increase in the carrying capacity for single occupant vehicles (i.e., new general purpose highway on a new location or adding general purpose lanes, with the exception of safety improvements or the elimination of bottlenecks), unless the project is addressed through a congestion management process.” The federal congestion management process must include the following elements:



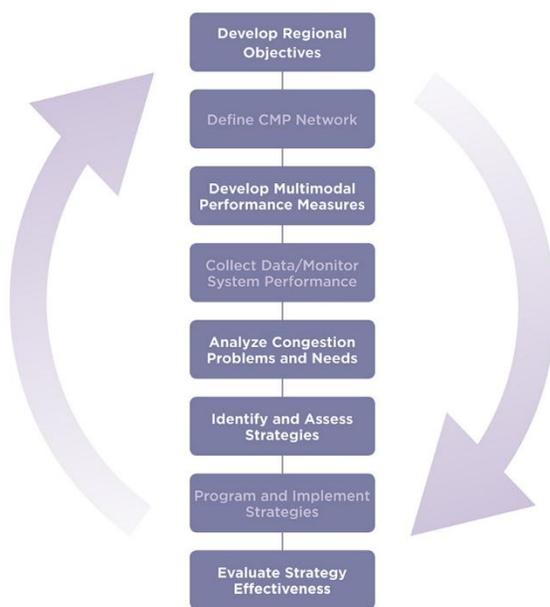
■ Elements of the CMP

1. Develop Regional Objectives
2. Define CMP Network
3. Develop Multimodal Performance Measures
4. Collect Data/Monitor System Performance
5. Analyze Congestion Problems and Needs
6. Identify and Assess Strategies
7. Program and Implement Strategies
8. Evaluate Strategy Effectiveness

As part of performance management, recipients of federal-aid highway funds, such as StanCOG, are required to make transportation investments to achieve performance targets that make progress toward the following national goals:

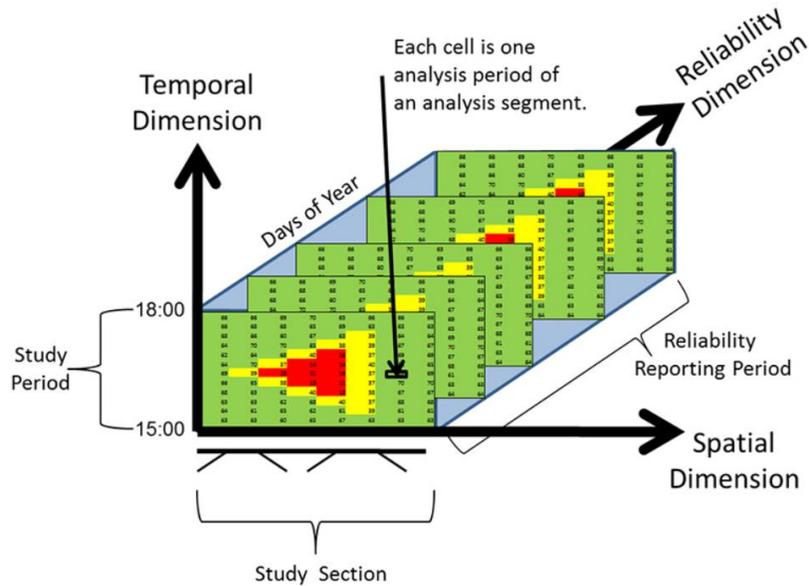
- **Congestion Reduction:** To achieve a significant reduction in congestion on the National Highway System (NHS).
- **System Reliability:** To improve the efficiency of the NHS.
- **Freight Movement and Economic Vitality:** To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- **Environmental Sustainability:** To enhance the performance of the transportation system while protecting and enhancing the natural environment.

Congestion Management Program. The Congestion Management Program is the state-mandated program (Government Code 65089) aimed at reducing congestion on highways and roads in California. The congestion management process establishes a



designated roadway network of regional significance, roadway service standards, multi-modal performance standards, and a land use analysis element to identify and mitigate multi-jurisdictional transportation impacts resulting from local land use decisions. Federal, state and local transportation funding is contingent upon local agency compliance with the congestion management process. StanCOG is the designated Congestion Management Agency for Stanislaus County. StanCOG’s congestion management process was updated and adopted in 2020 and is included in **Appendix O**.

In addition to managing recurring congestion, improving the travel time reliability of the transportation system is an important component of system preservation. Travel time reliability measures the consistency or dependability in travel times, and applies to both vehicular travel and transit systems, as well as freight carriers and air travelers. As traffic volume approaches the roadway’s capacity, it is more likely that a collision or weather event will cause delays, even when the road normally operates well. As congestion increases further, the road becomes reliably congested. Therefore, poor reliability is most associated with roadways that are not yet over capacity, but are no longer resilient enough to handle disruptions to normal operation. While travel time reliability does not directly address issues of congestion, it plays an important role in traffic management and operation activities. Knowing the reliability of a roadway or system allows travelers to make more informative decisions about the specific routes they take, or the time of day in which they make a trip.



Source: Highway Capacity Manual, Chapter 37

Travel time reliability is monitored throughout the County. Like the congestion performance measures, travel time reliability performance measures are compared to the previously reported reliability measures to track trends in the StanCOG roadway network’s reliability, and to gain insights into how capital improvement projects (as they become operational) help to improve the reliability of travel on the County’s roadway system.

Table 2.1 list the corridors with significant congestion that are addressed with projects in the 2022 RTP/SCS.



Table 2.1 – Corridors with Significant Congestion

Facility	From	To	Tier 1 Project Description	Row	Notes
CA 99	Service Rd	Hatch Rd	Construct New Interchange - Phase I	C02	
			Install ramp meters and ITS elements	C02	
CA 99	Hatch Rd	Service Rd	Install ramp meters and ITS elements	C02	
CA 99	Hatch Rd	Maze Blvd	Construct auxiliary lanes	CA28	CA28 constructs auxiliary lane and covers southern portion (from Crows Landing Rd to Hatch Rd)
CA 99	Briggsmore Ave	Kiernan Ave	Acceleration and deceleration lanes	M18	
CA 99	Kiernan Ave	Briggsmore Ave	Acceleration and deceleration lanes	M18	
CA 99	Kiernan Ave	North County Line	Install ramp meters, fiber optic and ITS elements	M15	M15 reconstructs Pelandale Ave which is located on the Northern County Line
CA 99	Service Rd	Taylor Rd	Construct auxiliary lanes	CA06	CA06 covers southern portion (Keyes Rd to Taylor Rd)
			Install ramp meters and ITS elements	S135	S135 covers Keyes interchange only
			Reconstruct existing Interchange	T26	T26 covers Taylor Rd interchange only
			Reconstruct to 8 Lane Interchange	M18	M18 covers Briggsmore Interchange only
			Regional Concept of Traffic Operations Study: SR-99 8-lane Widening w/ICM	RE19	
Whitmore Ave	Mitchell Rd	CA 99	Widen from 2 to 4 lanes	C42	C42 covers signage/stripping
Whitmore Ave	CA 99	Mitchell Rd	Widen from 2 to 4 lanes	C42	C42 covers signage/stripping
Countywide			Transportation Technology Strategy for Stanislaus County	RE20	

Goals and Objectives

The California Transportation Commission (CTC) summarized Federal and State goals and objectives in its 2017 Regional Transportation Guidelines for Metropolitan Planning Organizations publication (referred to as the Guidelines), which provides guidance for preparing an RTP/SCS. In the Guidelines, “Chapter 7 – Transportation Performance Management” outlines goals and objectives that should be considered for incorporation into an RTP/SCS. The following items are federal and state goals presented in the Guidelines.

Federal Goals:

- **Safety:** To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- **Infrastructure Condition:** To maintain the highway infrastructure asset system in a state of good repair.
- **Congestion Reduction:** To achieve a significant reduction in congestion on the National Highway System.
- **System Reliability:** To improve the efficiency of the surface transportation system
- **Freight Movement and Economic Vitality:** To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- **Environmental Sustainability:** To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- **Reduced Project Delivery Delays:** To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies’ work practices.

California Goals:

- Achieve SB 375 GHG reduction goals
- Preserve transportation infrastructure
- Improve mobility and accessibility
- Reduce GHG emissions and improve air quality
- Improve public health
- Conserve land and natural resources
- Encourage sustainable land use patterns
- Increase supply of affordable housing
- Improve jobs and housing balance
- Improve mobility and accessibility for low-income and disadvantaged communities
- Support economic development
- Increase safety and security of the transportation system for motorized and non-motorized users

StanCOG 2022 RTP/SCS Goals

To assess how well the 2022 RTP/SCS meets the needs of the Stanislaus County region, StanCOG developed a set of goals, objectives, and performance measures, with stakeholder and public input, for evaluating the policies and strategies contained within the Plan.

The goals and objectives reflect the values and the vision of the residents of the Stanislaus region and are consistent with federal and state requirements. The performance measures, which are tied to individual goals and objectives, provide an unbiased way of quantifying the different elements of the Plan.

In collaboration with the Valley Vision Stanislaus Steering Committee, StanCOG compiled the following list of goals and objectives and associated performance measures. These goals and objectives were also presented to the public for input during workshops at the onset of the Plan’s development. The Plan’s goals and related performance measures are presented in **Table 2.2**.

Table 2.2 - Goals & Objectives

Goal 1. Mobility & Accessibility
<p>Improve the ability of people and goods to move between desired locations and provide a variety of modal and mobility options.</p> <ul style="list-style-type: none"> • Average trip length • Percentage of transit/bike/walk trips per day • Peak period transit headways at major transportation hubs
Goal 2. Social Equity
<p>Promote equitable access to opportunities by ensuring all populations share in the benefits of transportation improvements and are provided a range of transportation and housing choices.</p> <ul style="list-style-type: none"> • Percent of households within 1/2 miles of transit • Percent of low-income population using improved roadways • Percent of low-income population within ½ mile by LOS D or better transit frequency • Housing-type stock • Percent of dwelling unit growth at densities of at least 20 units per acre
Goal 3. Economic and Community Vitality
<p>Foster job creation, business attraction, retention, and expansion by improving quality of life. Facilitate economic development and opportunities through infrastructure investments that support goods movement within and through the region, including but not limited to the county’s strategic freight corridors.</p> <ul style="list-style-type: none"> • Jobs-housing balance in region • Vehicle hours of travel (VHT) in StanCOG region
Goal 4. Sustainable Development Pattern
<p>Provide a mix of land uses and compact development patterns and encourage infill development to preserve agricultural land and natural resources.</p> <ul style="list-style-type: none"> • Acres of land consumed

<ul style="list-style-type: none"> • Percentage of new development as infill • Overall residential density
Goal 5. Environmental Quality
<p>Consider environmental impacts when making transportation investments and minimize impacts on clean air and natural resources. Support infrastructure investments that facilitate vehicle electrification and the provision of electrification infrastructure in public and private parking facilities and structures.</p> <ul style="list-style-type: none"> • GHG reduction of 12% per capita by 2020 and 16% by 2035 (compared to 2005) • Total centerline miles of Class I, II and III bike facilities • Percentage of transit/bike/walk trips per day • CO₂ emissions per weekday for passenger vehicles • Meet countywide emission budgets established for criteria pollutants
Goal 6. Safety & Health
<p>Operate and maintain the transportation system to ensure public safety and security; and improve the health of residents by improving air quality and providing more transportation options.</p> <ul style="list-style-type: none"> • Percentage of transit/bike/walk trips per day • Percent of households within 500' of major transportation corridor • Percent of workers taking active commute to work
Goal 7. System Preservation
<p>Maintain transportation system in a state of good repair; and protect investment by maximizing use of existing transportation facilities.</p> <ul style="list-style-type: none"> • Lane miles in need of rehabilitation
Goal 8. Smart Infrastructure
<p>Coordinate, monitor, and integrate planning and programming for intelligent transportation system (ITS), smart infrastructure, demand-responsive transportation, and automated vehicles.</p> <ul style="list-style-type: none"> • Regional Annual investment for Smart Infrastructure
Goal 9. Resiliency and Reliability
<p>Harden infrastructure to resist, absorb, recover from, or successfully adapt to adversity or a change in conditions including climate change.</p> <ul style="list-style-type: none"> • Investment in planning/education for resiliency
Goal 10. Congestion Management
<p>Maintain or reduce congestion as compared to current levels.</p> <ul style="list-style-type: none"> • Level of service • Speed (Federal Performance Rule) • Level of travel time reliability
Goal 11. Project Delivery
<p>Efficiently use available transportation funding to expedite project delivery of transportation improvements within the region for the benefit of residents of Stanislaus County and the traveling public in general.</p> <ul style="list-style-type: none"> • Federal Transportation Improvement Plan (FTIP) Project Funding Obligation Status

Together, the 2022 RTP/ SCS goals, objectives, and performance measures provided the necessary information to permit public and elected officials within the region to make informed decisions on the direction of the Plan based on an evaluation of the results. The performance measures were applied to compare the performance of the RTP/SCS scenarios and to allow for detailed comparisons between Scenario D (Preferred Scenario/Neighborhood Infill) and Scenario A (Stay the Course). The performance measure comparisons between Scenario D and Scenario A are presented in Chapter 9 and **Appendix L**.

Planning Process

StanCOG developed the 2022 RTP/SCS through extensive public outreach and involvement across the Stanislaus region's local jurisdictions (Ceres, Hughson, Modesto, Newman, Oakdale, Patterson, Riverbank, Turlock, Waterford and Stanislaus County). The overall approach in planning for the 2022 RTP/SCS was to promote an open, transparent process that encourages the ongoing and active participation of local governments and a broad range of residents and stakeholder groups.

StanCOG implemented an approach for civic engagement in accordance with the goals and procedures identified in the StanCOG's Public Participation Plan and the 2022 RTP/SCS Public Participation Plan presented in **Appendix P**. The Public Participation Plan (PPP) serves as a guide for the Stanislaus Council of Governments' (StanCOG) public involvement process as well as the continuing, comprehensive and coordinated planning process among the stakeholders to ensure effective coordination between public officials at all levels of government. The PPP seeks participation of all parties, public or private, at all stages of the transportation planning process to provide an ongoing opportunity for broad-based participation in the development and review of regional plans and programs managed and produced by StanCOG.

The four primary goals of StanCOG's public participation process are:

Goal 1: Strive for a balanced representation of all public groups, including those that are typically underrepresented in the planning process, while providing ample opportunities for public review and input with regard to all planning and programming documents.

Goal 2: Promote a culture of dialogue and partnership among residents, property owners, the business community, community based and other organizations, and public officials while educating local officials and the public in the transportation planning process.

Goal 3: Make both technical information and meeting notices involved in the planning process available in accessible formats, and provide communications and agency reports that are understandable and timely.

Goal 4: Demonstrate explicit consideration and response to public input received during the planning and programming process while treating all interested participants fairly and respectfully.

StanCOG's RTP/SCS PPP includes the following public outreach strategies:

- Outreach efforts to encourage the active participation of a broad range of stakeholder groups in the planning process;
- Informational meetings with elected officials;
- Consultation with local, state, and federal officials and other planning partners;
- At least three rounds of three community workshops that provide the public with the information and tools necessary to provide a clear understanding of the issues and policy choices;
- Outreach presentations to stakeholder groups relevant to this planning process;
- Preparation and circulation of a Draft Sustainable Communities Strategy not less than 55 days before adoption of a Final Regional Transportation Plan;
- At least two public hearings, one in a physical in-person setting, and one virtual, on the Draft Sustainable Communities Strategy in the Regional Transportation Plan; and
- A process for enabling members of the public to provide a single request to receive notices, information, and updates.

Outreach Highlights:

- Established a "Valley Vision Stanislaus" Steering Committee to provide input and direction throughout the planning process. The committee was comprised of representatives from 15 agencies/organizations within the Stanislaus region.
- Workshops were promoted via Facebook, which yielded almost 18,000 views.
- Print ads were placed in both The Modesto Bee to promote workshops in Spanish and English.
- Used the online platform, Social Pinpoint, to host a project website and updated it regularly to post relevant information. The Social Pinpoint site hosted all of the project's collaborative and interactive online features and is available in English and Spanish.
- English and Spanish language outreach materials were created and placed on the project website.
- News releases were sent to publications and online services in Stanislaus County.
- The project website was consistently updated with information, presentations, and workshop recordings.
- Translation of project materials into Spanish and translation services provided at public meetings.
- Electronic surveys were conducted at public meetings to enliven events and to promote meaningful interaction/opportunities to promote the RTP / SCS Update and collect stakeholder and public feedback.

Forecasts

The 2022 RTP/SCS relies on regional forecasts of future demographics, travel demand, and transportation funding as key components of the planning process. Land use and transportation investment decisions are based on the region's growth forecasts. **Table 2.3** presents future forecasts between 2019 and 2046 for Stanislaus County.

Table 2.3 - Future Demographic Forecast

Year	Population	Households	Employees**
2019*	543,194	173,898	183,030
2020	560,582	179,276	201,680
2025	592,113	190,782	226,059
2030	609,576	200,258	229,751
2035	625,215	208,137	234,246
2040	644,296	215,916	240,669
2045	665,867	222,845	247,796
2046*	670,411	224,290	249,452

Source: Stanislaus County Forecast Summary, University of the Pacific, 2021.

*Year 2019 and 2046 estimates were interpolated.

**Converted from a Bureau of Economic Analysis (BEA) base to a Bureau of Labor Statistics (BLS) base.

Demographics

Growth forecasts were developed specifically for the preparation of the 2022 RTP/SCS in Stanislaus County (per the Federal FAST-ACT MPO Planning Regulations and Senate Bill 375). The Stanislaus County Forecast Summary was prepared by the University of Pacific (UOP) Center for Business and Policy Research in 2021 and the resultant demographic forecasts are presented in Chapter 4.

Transportation Demand

StanCOG has developed a sub-area version of the Valley Model Improvements, Phase 2 (MIP2) travel demand model for the 2022 RTP/SCS. This sub-area version reduced the three-county travel demand model (covering the Merced, San Joaquin, and Stanislaus counties) down to a one-county model covering only the Stanislaus County area for the purposes of improving model performance and validation. The one-county StanCOG model was updated with sociodemographic detail and current roadway network refinements reflecting planned projects to support the development of the 2022 RTP/SCS. The travel demand model allows the region's future travel behavior, modal choices, transportation and transit network performance, and interregional travel demand to be estimated. The validation report for the travel demand model developed for the 2022 RTP/SCS can be found in **Appendix U**.

The Travel Demand Model also provided key inputs for the equity assessment of the RTP/SCS by helping to determine the users that would benefit or be impacted the most

from transportation investments included in the Plan. The resultant estimated future transportation demand is presented in Chapter 4.

Financial

Revenue forecasts were developed through meetings and coordination efforts with StanCOG's member agencies and Caltrans. These revenue projections satisfy federal requirements to achieve a financially constrained RTP whereby total project costs were accounted for through available and expected funding over the life of the program.

The RTP provides projections for local, state, and federal funds, and distinguishes between formula and competitive funding sources. Formula funds were projected based on previous funding cycles specific to each member agency, where the funding agency had not identified the proposed formulaic share. Competitive funding, such as grant programs, were less certain and forecasts were developed based on past performance by StanCOG's member agencies, program applicability, and an assumed capture rate based on Stanislaus County's proportion of state-maintained centerline miles of roadway. The 2022 RTP/SCS financial revenue forecast includes funding resulting from the new five-year authorization, the IIJA/BIL. It also contains the funding generated by Measure L, a Transportation Ordinance and Expenditure Plan approved by Stanislaus County voters on November 8, 2016, which raised the sales tax in Stanislaus County by one-half cent for a total period of 25 years to improve local streets and roads, improve connectivity, and reduce congestion. Stanislaus became a Self-Help County with the passage of Measure L, which has led to a notable improvement in its ability to capture additional federal and state discretionary funding. Future revenue projections are presented in Chapter 5.

Pilot Projects

StanCOG is currently partnering with the University of California, Davis (UC Davis) on several transportation pilot programs. These pilot programs were initiated to provide affordable transportation options for residents of rural disadvantaged communities in the San Joaquin Valley that are outside of current transit service areas.

The Ecosystem of Shared Mobility in the San Joaquin Valley (Ecosystem) pilot project is designed to leverage new technologies and service models to provide affordable transportation options for residents of rural disadvantaged communities in the San Joaquin Valley. The Ecosystem pilot has two components, Valley Flex and Valley Go. Valley Flex includes a smartphone trip planning application (VAMOS) and a volunteer ride-hailing service that is made available to San Joaquin and Stanislaus counties. Valley Go, also referred to as Miocar, offers electric vehicle car sharing at designated affordable housing developments in Tulare and Kern Counties.

In partnership with UC Davis, the (Ecosystem) pilot project was initially funded through a \$2.5 million grant from the California Air Resources Board (CARB). StanCOG contributed a \$56,000 local cash match and a \$50,000 in-kind match using the Measure L Community Connections program funds for Stanislaus' share of the Valley Flex Project.

The initial phases of the Valley Flex project included the implementation of the first stage of a “Mobility-as-a-Service” app, a transit trip planner smart phone application. This app, called VAMOS, is now available to the public. The Valley Flex pilot also initiated a volunteer ride-hailing service (with the support of MOVE Stanislaus) that provides free rides to residents in Riverbank who cannot access their destinations using existing transit service. As part of this service, volunteer drivers are reimbursed for their round-trip travel costs at the federal reimbursement rate.

On January 20, 2021, the StanCOG Policy Board approved the continuation and expansion of the Ecosystems project with a \$134,000 commitment of Measure L funds. The funds served as a cash match for the San Joaquin Regional Transit District’s (SJRTD) Federal Transit Administration (FTA) Integrated Mobility Innovation (IMI) Demonstration Program application for the Developing Standardized Payment Integration and Institutional Capacity for Rural Mobility-As-A-Service Project. The grant sought and was awarded funding to:

- Integrate payment capabilities in the VAMOS app allowing users to purchase their mobile transit passes directly through the app without having to download additional software or applications.
- Develop an open specification for the exchange of payment information that would allow communication between different software/technologies. This feature will provide the Stanislaus region with the potential of extending the mobile ticketing functionality allowing users to pay for electric scooter and bike sharing, electric car vehicle sharing, and micro-transit options as they are introduced into the regions.
- Draft a marketing plan and track all marketing activities. After the launch of the mobile ticketing function in VAMOS, the focus will be on marketing, communication, user engagement, and tracking those activities in San Joaquin and Stanislaus counties.
- Identify/establish a new organization to host and maintain VAMOS long-term.

The grant kicked-off in Spring of 2021 and is in progress. StanCOG is also currently considering new grant opportunities for obtaining funding to expand ValleyGo/Miocar into Stanislaus County.