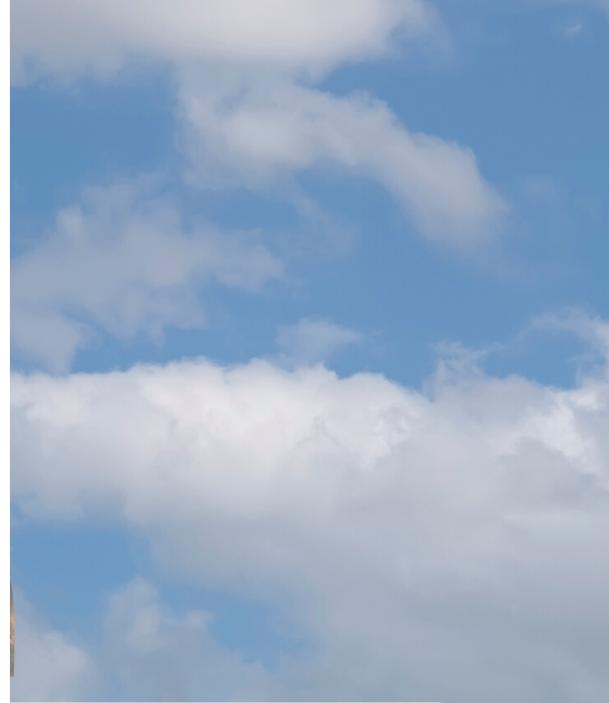


APPENDIX M1

Plan Performance Report



REGIONAL PROGRESS: Performance Indicators and the SCS

Introduction

Implementation of the transportation projects and investments for the 2022 RTP, as measured by the performance indicators outlined, results in substantial positive outcomes and benefits for the San Joaquin County region. California's Senate Bill 375, and a continuing emphasis at both the State and Federal levels for performance-based planning, have changed the landscape of how success in regional transportation planning is measured. Benefits are measured not only with respect to transportation and mobility, but across a wide range of critical issues related to air quality and health, sustainability, resource conservation, locational efficiencies, housing and employment, equity, and economic vitality. The Plan tracks twelve regional targets, some of which are also tracked for communities of concern, to measure the Plan's progress in meeting its articulated goals.

There continues to be on-going dialogue with all stakeholders to improve our understanding of how the transportation system impacts the quality of life in San Joaquin County. The public participation process has shed light on important values such as mobility choice and accessibility, travel time reliability, cost effectiveness, and environmental sustainability. The indicators in this report were largely developed through work with the RTP/SCS Working Group during development of the 2014 Plan and have been carried over to the 2018 and 2022 Plans. In choosing indicators, staff focused on a relatively short list of metrics that could be readily quantified with available tools and data, as well as compared to empirical data to provide historical context to the outcomes. Other factors influencing metric selection were whether the target could address multiple policy considerations and ease of understanding for the public outreach process.

As with the 2018 plan, SJCOG has modeled health-related metrics through a stand-alone module integrated into the Envision Tomorrow Scenario Planning tool. Health-indicators are modeled separately from air quality emissions and active transportation trip estimates for the travel demand mode. The metrics are discussed in Chapter 5 and the results are covered in more detail in Section 5.2.1 of Appendix S. SJCOG is continuing to invest in travel demand, scenario modeling, and other quantification methods to define metrics that will provide even greater insight into the ways in which policy can influence positive outcomes for San Joaquin County residents in the arenas of health, mobility, economic development, quality of life, and sustainability. New indicators will be developed as tools and techniques of analysis are improved.

Besides their use to describe the performance of the RTP, most of the indicators were utilized during the public outreach process to aid interested citizens, stakeholder groups, and advisory committees understand the policy choices and trade-offs with the alternative land-use and transportation scenarios that could be selected to form the foundation of the RTP. Appendices K and P contain additional information on the public outreach process and results.

The following table provides a listing of the performance outcomes, their definitions, the "target" for each indicator, and the data source utilized to measure the outcome. The Plan is measured against six

broad categories of indicators that support it's eight policy goals and associated 30 strategies for implementation.

Table M.1

Measure of Effectiveness	Description	Target	Data Source
Travel Related Indicators			
Vehicle Miles Traveled (VMT) per Capita	Vehicle miles traveled per person/total 2046 population	Improvement Over 2016 Baseline / Compare to 2018 Plan	SJCOG MIP Travel Demand Model
Trip Mode Share	Percent of trips by mode of travel (e.g., single occupant auto, bike, walk, transit, carpool 2+)	Improvement Over 2016 Baseline / Compare to 2018 Plan	SJCOG MIP Travel Demand Model
Average Trip Length	Total Vehicle Miles Traveled / Number of Trips for all Purposes	Improvement Over 2016 Baseline / Compare to 2018 Plan	SJCOG MIP Travel Demand Model
Transit Ridership	Number of passenger trips (Total Passenger Trips * Mode Share)	Improvement Over 2016 Baseline / Compare to 2018 Plan	SJCOG MIP Travel Demand Model
Bike and Walk Trips (Active Transportation)	Number of bike and walk trips (Total Passenger Trips * Mode Share)	Improvement Over 2016 Baseline / Compare to 2018 Plan	SJCOG MIP Travel Demand Model
Health & Environmental Indicators			
GHG Emissions per Capita	Total CO2 (GHG precursor) from passenger vehicles and light duty autos only. Targeted reduction of 12% by 2020 and 16% by 2035	Meets SB375 per capita GHG-reduction targets	SJCOG Travel Demand Model / ARB EMFAC 2014 Model
Resource Conservation Indicators			
Acres of Land Consumed	Total acres of land consumed due to new development	Improvement Over 2018 Plan	Envision Tomorrow Land Use Allocation Model
Acres of Prime Farmland Consumed	Total acres of prime farmland consumed due to new development	Improvement Over 2018 Plan	Envision Tomorrow Land Use Allocation Model
Efficiency			
Energy Usage per New Household	Average daily energy usage in new units	Improvement Over 2018 Plan	Envision Tomorrow Land Use Allocation Model
Water Consumption per New Household (Internal & External)	Average daily household water usage in new units	Improvement Over 2018 Plan	Envision Tomorrow Land Use Allocation Model
Land Use Mix	Percentage of new development that is within the FMMP Existing Urbanized Area and Net Redevelopment	Improvement Over 2018 Plan	Envision Tomorrow Land Use Allocation Model

Housing and Employment			
Housing and Employment near Major Transit Routes and Stations (SB375 defined High Quality Transit Areas)	Percent of new housing and employment located within ½ mile of major transit route (15-minute headway), bus transfer station, or ACE station	Improvement Over 2018 Plan	Envision Tomorrow Land Use Allocation Model
Residential Density	Change in residential density for new housing	Improvement Over 2018 Plan	Envision Tomorrow Land Use Allocation Model
Equity (Environmental Justice Areas vs. Non-Environmental Justice Areas) SEE CHAPTER 5 and APPENDIX P for DISCUSSION of These Indicators			
Health Risk Assessment of Roadway Pollutants	Percentage of households within 500 feet of high-volume roadway (>100,000 average daily traffic)	Improvement Over 2018 Plan	Envision Tomorrow Land Use Allocation Model
Housing Type	Percent of new housing by type (large- lot, small-lot, attached, multi-family)	Improvement Over 2018 Plan	Envision Tomorrow Land Use Allocation Model
Safety			
See Appendix “N” for Safety Performance Target Discussion on Methodology and Measurement		Meet State Target Goals	
Economic Vitality			
Job Creation	Number of direct, indirect and induced jobs	Stand-Alone Metric	University of Pacific Business Forecasting Center Estimates

2022 RTP/SCS performance indicators are included on the following table. The indicators were reorganized in the table to follow their inclusion in Chapter 5.

Plan Performance Measures Summary (2046)			
	2016 Baseline	2018 Plan	2022 Plan
Enhance the Environment for Existing and Future Generations and Conserve Energy			
Land Use Mix:			
Percent of New Growth In Existing Urbanized Area or Redeveloped (Acres)	N/A*	5.66%	55.27%
Percent of New Jobs in Existing Urbanized Area or Redeveloped	N/A*	17.55%	29.42%
Percent of New Housing Units in Existing Urbanized Area or Redeveloped	N/A*	9.45%	20.31%
Total Acres of Land Consumed	N/A*	25,599	20,326
Acres of Prime Farmland Consumed:	N/A*	7,694	4,060
Energy and Water:			
Energy Use per Household: (in Million BTUs/Year/Household)	N/A*	120	97
Water Consumption per Household: (in Gallons/Day/Household)	N/A*	308.3	417
Improve Air Quality and Reduce Greenhouse Gases:			
GHG Emissions Per Capita % Change From 2005 to 2046 (No target established)	N/A*	-21.6%	-16.8%
From 2005 to 2035 (SB 375 Target is 16%)	N/A*	-15.7%	-16.4%
Vehicle Miles of Travel (VMT) (daily per capita) - Modeled	**23.24	21.98	23.63
Vehicle Miles of Travel (daily per capita) – Adjusted for Induced Demand	N/A*	N/A*	24.92
Maximize Mobility and Accessibility			
Average Trip Length	12.63	13.00	11.86
Transit Ridership (Boardings)	50,973	30,154***	74,053
Average Travel Time (in minutes) by Mode:			
Drive Alone	33.40	34.07	32.24
Shared Ride 2 riders	22.98	25.12	24.27
Shared Ride 3+ Riders	20.78	20.98	21.34
Transit	13.70	17.24	14.24
Walk	7.80	7.54	8.93
Bike	25.30	26.41	25.21

Plan Performance Measures Summary (2046)			
	2016 Baseline	2018 Plan	2022 Plan
Preserve the Efficiency of the Existing Transportation System			
Percent of Housing Near High-Quality Transit Areas (Stops and Centers) – New Growth			
Housing	N/A	25.2%****	12.6%
Employment	N/A	39.1%****	18.6%
Total Land Consumed for New Development	N/A		
Total Acres of Land Consumed		25,599	16,574
Support Economic Vitality			
Job Creation			
Direct, Indirect and Induced Employment from Transportation (Average Annual)	NA	3,400	6,277
Improve Public Health and Build on Active Transportation			
Residential Density (Units/Net Acre) for New Growth	N/A*	8.7	9.9
Trip Mode Share			
Drive Alone	38.23%	38.76%	35.38%
Shared Ride 2	34.89%	19.78%	35.55%
Shared Ride 3	16.78%	35.35%	18.56%
Transit (Walk + Drive)	1.32%	0.74%	1.43%
Walk	7.56%	4.79%	7.52%
Bike	1.45%	0.58%	1.56%
Bike and Walk Trips	347,930	220,147***	470,213

* Metrics derived from Envision Tomorrow Model are for new development only. See Regional Progress Report section for additional information on existing conditions.

** 2016 Modeled per capita VMT / HPMS number will vary.

*** Not directly comparable due to model recalibration and base year update.

**** 2018 Plan included transit stations, lines and stops while the 2022 Plan included only stations and stops.