

2020 Metropolitan Transportation Plan / Sustainable Community Strategy: Future Transit Scenario Development Process (Presented to Transit Coordinating Committee, Wed. 8/15/2018)

This document is intended to provide the TCC:

- Background information on the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS)
- Highlight some of the major policy themes for the 2020 MTP/SCS and some examples of the connection of transit to the themes
- Information on how the future year transit scenarios will be developed for the MTP/SCS

SACOG staff would like input on:

- The proposed process for developing the future transit scenario for the MTP/SCS
- Future briefings to the TCC on this topic
- Suggestions for points of contact at operators to discuss the process or the resulting future scenario

Background on the Metropolitan Transportation Plan and Sustainable Community Strategy

The MTP/SCS for the Sacramento region is a 20-year plan that pro-actively links land use, air quality, and transportation needs. The MTP/SCS supports the Sacramento Region Blueprint, which implements smart growth principles, including housing choice, compact development, mixed-use development, natural resource conservation, use of existing assets, quality design and transportation choice. It also provides increased transportation options while reducing congestion, shortening commute times, and improving air quality. The MTP/SCS is key to the quality of life and economic health of our region.

SACOG is designated by the state and federal governments as the Metropolitan Planning Organization (MPO) and is responsible for developing a regional transportation plan (MTP) in coordination with Sacramento, Yolo, Yuba, Sutter, El Dorado and Placer counties and the 22 cities within those counties (excluding the Tahoe Basin). The plan incorporates county-wide transportation planning developed by the Placer County Transportation Planning Agency and the El Dorado County Transportation Commission, under memoranda of understanding (MOUs) between

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those agencies and SACOG. The law further requires the long-range regional transportation plan (MTP) to cover at least a 20-year planning horizon, and be updated at least every four years.

If a city, county, or public agency in the Sacramento region wants to use federal transportation funding for transportation projects or programs, those projects must be included in the MTP/SCS project list. The MTP/SCS includes transportation improvements and investments that will serve the Sacramento region's projected land use pattern and population growth. All transportation projects that are regionally significant for potential air quality impacts must also be included in the MTP/SCS. SACOG works collaboratively with local government planning and public works departments, transit service providers, air quality management districts, state and federal transportation departments, stakeholder interests, and residents across the region to develop the MTP/SCS.

The MTP also provides the basis for SACOG to fulfill its statutory role in implementation of the Clean Air Act (CAA). The CAA established health-based standards for pollutants in the air. The California Air Resources Board and local Air Quality Management Districts have primary responsibility for monitoring the status of attainment of CAA standards, enforcement of regulatory provisions, and establishment of programs to help achieve the standards. SACOG's role in implementing the CAA focuses on transportation investments and land use patterns: SACOG must demonstrate that moving into the future, vehicle emissions resulting from the combined transportation investments and growth patterns must stay below limits (called budgets) of emissions over time. If SACOG meets its CAA requirements, and other organizations responsible for other sectors meet theirs, over time the air quality standards will be met. If SACOG cannot demonstrate that over time, mobile source emissions will stay within budgets, transportation projects using state and federal funds cannot proceed.

In 2008, California passed the Sustainable Communities and Climate Protection Act, Senate Bill 375 (SB 375). This law requires MPOs to develop a Sustainable Communities Strategy (SCS) as part of the MTP, which identifies policies and strategies to reduce greenhouse gas emissions from passenger vehicles to targets set by the California Air Resources Board (ARB). Having already validated the benefits to an integrated transportation and land use planning approach in the Blueprint and earlier MTPs, SACOG views the SCS not as a separate and distinct element of the plan, but rather as integral to the entire plan. Although there are no immediate repercussions for failing to reach the SB 375 GHG reduction targets, discretionary funding from some state programs is contingent on it.

The major policy themes identified for the MTP/SCS update are:

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- 1) What growth and development pattern is needed to support and sustain regional economic development and opportunity?
- 2) What role can transportation investments play in generating economic development?
- 3) In a time of change in transportation and mobility, what near-term actions will help us adapt to change and maintain progress (e.g. autonomous vehicles, new mobility options, etc.).

In addition to the policy themes, the forecast of regional growth to the year 2040 MTP/SCS planning horizon is adopted. The combination of the policy themes and the regional growth forecasts form the “policy framework” for the 2020 MTP/SCS update. The policy framework was adopted in December 2017.

https://www.sacog.org/sites/main/files/file-attachments/18.1-mtpscsc_framework.pdf

Since adoption of the policy framework, SACOG staff have been working to develop an allocation of the regional growth to different subareas within the region. A draft of that allocation was presented for discussion at the SACOG Board committees in June 2018.

https://www.sacog.org/sites/main/files/file-attachments/5-mtp_land_use_pattern.pdf

SACOG staff have developed an approach to assess some of the future uncertainties related to new mobility options and disruptive change that has started to happen, and is likely to continue. The approach involves using forecasting tools to assess potential changes in travel behavior related to autonomous vehicles and shared mobility. This approach was presented for discussion in May 2018.

https://www.sacog.org/sites/main/files/file-attachments/8_new_mobility_options_disruptive_technologies_and_forecasting_for_mtpscsc.pdf

MTP/SCS Policy Themes & Transit

The following are some examples of how transit may relate to the major policy themes of the 2020 MTP/SCS.

- *How can transit investments in the SACOG region be developed and leveraged as part of a strategy to improve economic prosperity and opportunity?*

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- In June 2017, William Schroerer (Executive Director, East Metro Strong, Minneapolis/St. Paul)¹ and Mark Fisher (Chief Policy Officer, Indy Chamber, Indianapolis)² presented to the SACOG Board, and both emphasized the central place that transit investment played in economic development in their respective regions.
- The Amazon HQ2 RFP echoed this message, and transit accessibility was listed as a necessary community asset for the future site.³

- *How can transit adapt to recent & ongoing changes in mobility options, and to future mobility potentially dominated by autonomous vehicles?*
 - Many examples of innovation & adaptation tests in the region
 - Citrus Heights & SacRT partnering on SmART Ride
 - SacRT launching SmART Ride in other communities
 - City of West Sacramento partnering with Via
 - Civic Lab projects like the autonomous shuttle connecting from Sac State to the 65th Street LRT station.
 - Re-examination of fixed route networks
 - SacRT Forward project
 - e-Tran Comprehensive Operational Analysis
 - Similar projects in Citrus Heights, Rancho Cordova, Folsom, YCTD

¹ For more detail see: https://www.sacog.org/sites/main/files/file-attachments/sacog_presentation_st._paul.pdf

² For more detail see: https://www.sacog.org/sites/main/files/file-attachments/sacog_presentation_indianapolis.pdf

³ For more detail see: https://images-na.ssl-images-amazon.com/images/G/01/Anything/test/images/usa/RFP_3_V516043504_.pdf

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Process for Developing the Future Transit Scenarios in the 2020 MTP/SCS

Process will be similar to prior MTP/SCSs:

- 1) Start with what transit service is provided in the MTP/SCS “base year”. For this MTP/SCS update, base year is 2016. SACOG’s “base year inventories” also include land use, demographics, road and highways, traffic counts, transit boardings by line, etc.
- 2) Review transit service improvements planned for the near-term future—largely based on Short Range Transit Plans (SRTPs).
- 3) Review proposed new transit projects nominated as part of the “Call for Projects” for the 2020 MTP/SCS.
- 4) These defined future improvements or additions to base year transit service are included in a first, partial cut of a future transit scenario for the 2020 MTP/SCS. Other future transit service will be added to this “first cut”, subject to two constraints:
 - The overall “budget” or cumulative investment level identified for transit in the MTP/SCS; and
 - Opportunities to improved overall MTP/SCS performance through adding transit service.

MTP/SCS Transit Cumulative Investment

Regarding the cumulative investment levels, revenues and investment levels for the 2020 MTP/SCS have not been fully developed or adopted by the SACOG Board. The 2016 MTP/SCS cumulative investment levels are provided for information (see Table 1, below).

MTP/SCS Transit Service and Performance Outcomes

Regarding improving MTP/SCS performance, SACOG utilizes seven performance outcomes:

- Reducing vehicle-miles-traveled
- Reducing travel in heavy congestion
- Increasing use of alternative modes of travel
- Supporting for long-term economic development
- Improving movement of goods
- Improving safety and security of the transportation system
- Improving the state-of-good repair of the transportation system

For the first three performance outcomes, transit has a very direct role in improving performance. For these three performance outcomes, SACOG relies primarily on the SACSIM travel demand model for development and assessment of the future transit scenario. He following basic rules-of-thumb

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are used to identify opportunities to improve MTP/SCS performance through additional transit services:

- Where existing transit lines are productive, and productivity increases based on horizon year forecasts, horizon year transit service frequencies are increased
- Where significant growth in population or jobs is included in the horizon year growth allocation, but little or no transit service exists in the base year, new transit service is added.

Using this process in past MTP/SCSs has resulted in:

- Horizon year transit service provided, as measured by vehicle service hours per capita, increases significantly, compared to the base year.
- Horizon year transit ridership, as measured by passenger boardings per capita and transit mode share, increases significantly, compared to the base year.
- Productivity of transit service, as measured by passenger boardings or passenger miles per vehicle service hour, increases significantly, compared to the base year.

Figure 1 illustrates these improvements for the adopted 2016 MTP/SCS. This set of figures illustrates both the horizon year (2036 for the 2016 MTP/SCS), and for several interim years. For the 2020 MTP/SCS, transit performance metrics for the horizon year (2040) as well as a similar set of interim years will ultimately be produced, by the date of adoption of the plan (early 2020). For the next few months, the focus will be on the 2040 horizon year, and the 2035 interim year, which is also an SB 375 greenhouse gas reduction target year.

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Table 1. 2016 MTP/SCS Investments

Summary of MTP/SCS Investments

		TOTAL BUDGET- 2015 THROUGH 2036 (IN BILLIONS)		
Program Category		2016 MTP/SCS	2012 MTP/SCS	Total Change
1	Maintenance & Rehabilitation (Current Year \$*)	\$12.6	\$10.5	+20%
	Year of Expenditure \$	\$16.3		
	Maintain Caltrans highways & freeways, maintain local streets& roads, safety investments as part of rehabilitation projects			
2	Road Capital & Operations Projects (Current Year \$*)	\$5.8	\$6.4	-9%
	Year of Expenditure \$	\$7.7		
	New & widened roads, river crossings, interchanges, etc.			
3	System Management and Operations	\$1.5	\$0.8	+87%
	Year of Expenditure \$	\$2.1		
	Safety projects, Technology and operational improvements			
4	Transit Operations (Current Year \$*)	\$7.1	\$7.1	No change
	Year of Expenditure \$	\$9.1		
	Bus and rail operations and maintenance, Paratransit services			
5	Transit Capital (Current Year \$*)	\$3.5	\$3.3	+6%
	Year of Expenditure \$	\$4.7		
	Strategic Bus & Rail Infrastructure Expansion, Vehicle purchases			
6	Bike/Pedestrian (Current Year \$*)	\$2.8	\$2.5	+12%
	Year of Expenditure \$	\$3.6		
	Bicycle Facilities, Pedestrian Improvements, ADA retrofits			
7	Programs, Planning, Enhancements (Current Year \$*)	\$1.7	\$1.8	-6%
	Year of Expenditure \$	\$2.3		
	Project Analysis and Development, Community Design Program, Air Quality Programs, TDM & Traveler Information, Landscaping & Transportation Enhancements			
	Grand Totals (Current Year \$*)	\$35.2	\$32.4	+8%
	Year of Expenditure \$	\$45.8	\$67.7	

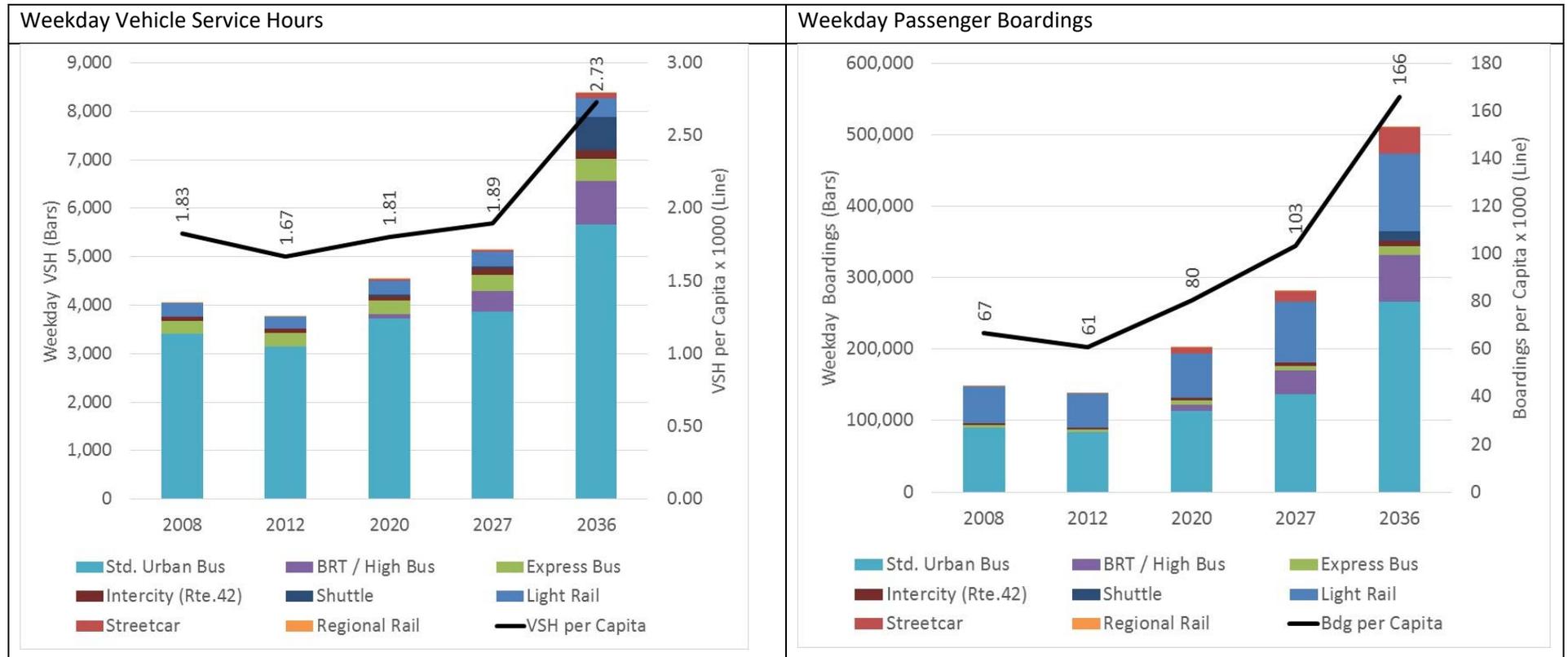
* See Appendix B-1 for documentation of how costs and revenues are calculated and noted throughout this plan in order to meet SAFETEA-LU financial reporting requirements.

For more detail on adopted 2016 MTP/SCS see:

https://www.sacog.org/sites/main/files/file-attachments/chapter_4_summary_of_budget_and_investments.pdf

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Figure 1. 2016 MTP/SCS Transit Service & Ridership Forecasts



For more detail on adopted 2016 MTP/SCS see:

https://www.sacog.org/sites/main/files/file-attachments/chapter_5c_transit_bicycling_and_walking_trends_and_performance.pdf