

## **Screening Questions for Project Phasing in the MTP/SCS Discussion Draft**

The Discussion Draft project list includes in total less roadway capacity projects, and less total added roadway capacity, than the current plan. This reduction reflects preliminary recommendations in the project list to re-phase some projects from the current plan to the "post-2036" timeframe. In some cases, these recommendations came from project sponsors; in others, from SACOG staff. Where SACOG staff recommended re-phasing to the post-2036 timeframe, the answers to three questions, drawn from the travel forecasts prepared for the Discussion Draft project list, guided the recommendations:

- 1) Is the roadway congested during peak demand periods, either in the base year (2012) or the planning horizon year?
- 2) Is the increase in capacity on the roadway greater than the projected increase in travel on the roadway?
- 3) Is the roadway significantly under-utilized during peak periods?

These three screening questions are by no means a comprehensive or final assessment of project performance or value. Recent information and presentations to the Board on the complexity and rigor of project benefit/cost analysis highlighted the time and resources needed to perform such project-level analysis, including time needed to develop consensus on methods. Based on the time and resources available for this update of the MTP/SCS, the simpler screening approach is a way of identifying projects which, though valuable in a longer time frame, are candidates for re-phasing in this update. The screening questions above were used to flag a relatively small subset of projects for further discussion with sponsoring agencies. These discussions are being scheduled already.

Regarding the first screening question, the logic is fairly simple: if a roadway segment is not heavily congested in the base year, and forecasts indicate that based on growth patterns and other project investments, the existing roadway is unlikely to become significantly congested in the plan horizon, that project could potentially be re-phased to the post-2036 timeframe without undue effect on congestion in the region.

Regarding the second screening question, the logic is that if a road capacity project is being built, it should serve an increased demand for travel on that roadway. The demand for travel on a roadway may be related to growth in the vicinity, and in some cases, the growth projected near a proposed road capacity project is modest enough that the actual change in travel

demand is far less than the capacity added by the proposed project. In cases where the anticipated increase in demand is significantly less than the proposed increase in capacity, the project could potentially be re-phased to the post-2036 timeframe.

The third screening question comes from a more nuanced roadway utilization concept which was introduced as a regional measure in the 2012 MTP/SCS document: optimal utilization of roadways. Normal congestion and level-of-service measures tend to focus on the prevalence of over-full roadways, or roadways where capacity is insufficient to serve the expected demand, without looking at the other side of the coin: locations where capacity provided is under-utilized, even during peak periods. This is more of an economist's view of providing roadway capacity, in which providing too much capacity is undesired-able, because it diverts resources needed to address other problems. Optimal utilization starts from the premise that during peak demand periods, roadways should be "manage-ably full"—i.e. near enough to capacity that normal operational strategies could be employed to maintain a reasonable level-of-service, though not free-flow conditions, during peak periods. The concept also recognizes that optimal utilization varies by facility type. Optimal utilization for HOV lanes, because they are intended to provide faster travel than the adjacent mixed flow lanes to provide an incentive to carpool, is well below the capacity of the HOV lane. Optimal utilization for a general purpose freeway lane, though, is at-or-about normal lane capacity. Optimal utilization for collector-and-below streets, because their main function is to provide access to residential and business land uses rather than to provide through-put capacity, is well below normal capacity for a collector street, and these roadways are expected to operate at that level even during commute periods. This concept was considered as the Discussion Draft project list was prepared, and was a factor in some of the recommendations to re-phase projects.

The table on page 3 provides examples of a few projects for which these screening questions were used, and recommended for re-phasing to post-2036 in the Discussion Draft project list.

Next steps:

- SACOG staff will be meeting with project sponsors with questions or concerns on the phasing status of their projects in the Discussion Draft project list, and will provide analysis results related to the screening questions described above. These meetings are already being scheduled starting next week.

**Sample of Project Proposed for Re-Phasing to Post-2036 in Discussion Draft Project List**

<b>2016 Project ID</b>	<b>TITLE</b>	<b>PROJECT DESCRIPTION</b>	<b>Cost (Current \$)</b>	<b>Notes</b>
SUT10330	Riego Road	In Sutter County, Riego Road from SR 99 to Power Line Road: widen Riego Road from 2 to 4 lanes.	\$9,356,000	Little current congestion; low growth in traffic forecasted
SAC20290	Franklin Boulevard Widening	In Elk Grove, from Elk Grove Blvd to Whitelock Rd.: Widen from 4 to 6 lanes.	\$3,520,000	Manageable congestion; low growth in traffic forecasted
ELD19179	Sophia Pkwy.	Widen: 4 lanes (divided) from Alexandria Rd. to Empire Rancho Rd. at the County Line.	\$5,000,000	Low projected growth in vicinity; low growth in traffic forecasted
PLA15940	Taylor Road Widening	Widen Taylor Rd. from 2 to 4 lanes from Horseshoe Bar Road to King Road.	\$425,000	Little current congestion; low growth in traffic forecasted

Source: SACOG, February 2015, Discussion Draft Project List.