

MPO Follow-up Questions

Revised: 6/1/10

1. If you were to fully account for the impact of the recession in your region, how would the % reductions in GHG/capita numbers change for each scenario in 2020?

SCAG took three distinct steps through the scenario development process, as described further below, to account for economic conditions. The first, and most direct step is accomplished through the use of a newly updated growth forecast which projects population, employment and households at all geographic levels. This data was reviewed by 195 local jurisdictions as well as a panel of demographic and economic experts and should reflect the best currently available information about the region's growth trajectory. This data set underlies all of the scenarios developed for target setting purposes. The second step involved determining policy options available to the region in the future given current economic conditions. Scenario 1, through the inclusion of a cutback in transit service, assumes continuation of current funding shortfalls. Scenarios 2-5 all assume not only recovery of lost revenue and service, but also varying levels of new investment in transportation infrastructure and policy. The final step involved the identification of which scenarios could be termed "ambitious and achievable" given economic conditions. SCAG's conclusions suggest that scenarios 2 and 3 would conform to a reasonably foreseeable economic recovery over the medium and long term.

- a. In what ways has the economy affected your region (e.g. population, jobs, unemployment, new development, foreclosures, vacancy rates, etc.)?

Growth in all facets (population, households, employment) slowed down. Also the current projected growth rate, compared to the adopted 2008 RTP is slower. SCAG has previously provided information to ARB on the recession's impacts related to job loss, building activity, port activity, and unemployment. All of these areas have been affected dramatically by the recession. Current information shows that the region has not fully emerged from recession. Among the available indicators, foreclosures are still at historically high levels, while defaults are beginning to flatten out despite continued high unemployment. Building permit issuance fell to an all time low of just under 15,000 units in 2009. Home prices are 50% below 2005 levels despite recent increases in coastal areas. Prices remain sluggish in inland valley and high desert areas where unsold inventories are high.

- b. If you have already included the impact of the recession, where is it reflected in your scenario data?

The scenarios incorporate newly updated forecast information which reflects slower growth as observed since 2008, and a slower rate of growth going forward. Further, in Scenario 1, SCAG included an increase in transit headways of 20% in Los Angeles and Orange Counties in order to proxy for current transit funding shortfalls as result of state cutbacks and lower than anticipated sales tax revenue designated by voters for transportation purposes. SCAG did not incorporate revised revenue forecasts into the scenarios, nor did we eliminate any specific projects contained in currently adopted plans. As noted above, Scenarios 2-5 all assume recovery from the recession and varying levels of new investment.

2. What factors cause the reductions in 2020 to be different from 2035, and where do they show up in your data?

The most likely factor contributing to the lesser reductions in 2035 is related to assumptions on future vehicle mix embedded in EMFAC. In particular, EMFAC 2007 shows a higher proportion of light duty passenger trucks (e.g. SUVs) in 2035 than 2020. We are unclear on whether there is substantiation for this assumption. There may be other explanations for this effect, including continuing shifts in demographics, but we suspect that the EMFAC vehicle mix is driving the results in this area. It should be noted that SCAG's scenarios 4 and 5 show slight improvements from 2020 to 2035, which can be attributed to the addition of aggressive new assumptions, including a region-wide \$.02 VMT fee.

3. What model improvements, changes in planning assumptions, or additional policies are you considering that were not used in developing your scenarios?

As has been previously described, most notably in SCAG's formally submitted technical methodology, we are developing a number of tools to aid in both strategy development and in measuring results. These tools include the enhancement to the existing trip-based model, a sustainability tool for 4-D analysis, an activity-based model (ABM) and PECAS (land use) model for sensitivity analysis. SCAG may consider a number of specific policies that were not explicitly included in the scenarios, including land use improvements on a localized, case-by-case basis, complete streets and other policies to encourage walk-bike, or a range of potential TDM measures. That said, the scenarios were designed to use general assumptions to proxy for more specific policy choices that may be considered later in strategy development. For example, the non-motorized and TDM components of the strategies simply assumed a reduction in trips, whereas policies developed as part of the SCS will specify actual implementation commitments. As such, we believe the scenarios capture the

range of potential GHG benefits from policies that may be considered or adopted in the future and that specific policies considered and included in an eventual SCS will fall within the range established by the scenarios.

a. How will they impact the direction and/or magnitude of change?

Any estimate of change relative to currently modeled scenario results at the regional scale would be premature. The array of tools available further into the process is intended to show more accurate results, as opposed to displaying more benefit. The models will be particularly useful as a planning tool and in identifying GHG reduction opportunities at the sub-regional scale.

4. Have the sensitivities of your model changed since the 2009 Model Evaluation Survey conducted for RTAC? If yes, please explain why. (i.e., are you using any new models or postprocessors to develop your scenarios that were not evaluated during the RTAC Survey?)

The model sensitivities have not changed, save for the availability of the ARB/EMFAC post-processor. It should be noted, however, that displayed results for the scenario exercise do not take into account the post processor.

5. Did you add, remove, or change the level of deployment of any transportation projects or programs in your scenarios? If so, what type of projects or programs?

Scenarios 3, 4, and 5 reflect the implementation of California High Speed Rail Phase 1 (2 lines—north: Palmdale to Union Station, south: Union Station to Anaheim) completed by 2020 and Phase 2 (Union Station through Inland Empire to San Diego) completed by 2035. Scenarios 2-5 reflect a substantial number of transportation projects funded by Los Angeles County Metro's recently approved Measure R (a project listing including a summary of funding by mode is included as Attachment 1). Scenarios 4 and 5 also included strategic decreases (20%) in transit headways in congested areas. As noted above, no scenarios removed transportation projects, though scenario 1 did proxy for the effect of transportation funding shortfalls by assuming an increase in overall transit headways in Los Angeles and Orange Counties.

6. Please provide calculations of Vehicle Miles Traveled per capita as well as Greenhouse Gas Emissions per capita in reporting results of the evaluation of your adopted RTP and alternative scenarios.

Spreadsheet is included as Attachment 2.