Shared Services & New Initiatives Task Force

STATUS: Draft

SERVICE CONCEPT: Travel Demand Forecasting and Analysis Services

DESCRIPTION SACOG could provide travel demand forecasting (TDF) services or analysis services directly to member agencies for their projects and studies.

ORIGIN OF THE IDEA SACOG develops and maintains TDF models and data needed to run them. Local agencies currently either adapt SACOG's models, or create their own. Regardless of the approach used, agencies contract this work, mostly to local transportation consultants. This practice can be very expensive, and results in different models, assumptions, and analysis results for projects and studies, depending on who does the analysis.

CONCEPT SACOG could provide a wide range of TDF support and services, listed in increasing order of complexity and effort*:

Technical Review Support—assistance in reviewing work scope and deliverables for TDF work contracted by agencies.

TDF Data Support—assistance in developing land use or transportation network datasets required for studies undertaken by agencies. This support could also include maintenance and tracking of modeling datasets and assumptions on behalf of the agency.

Low-Level TDF Services—providing customized travel forecasts for agency studies, drawn from existing SACOG forecasts (e.g. the MTP/SCS). Analysis work (e.g. level-of-service calculations, impact assessments, mitigation measures, etc.) and reporting would be done by the agency or its consultants.

Mid-Level TDF Services—working with agency staff to develop land use and transportation scenarios for a study, and preparing travel forecasts for those scenarios. Analysis and reporting work would be done by the agency or its consultants.

High-Level TDF Services—in addition to doing data and modeling, SACOG would conduct the analysis and prepare reports for agency studies.

GEOGRAPHIC AREA OF INTEREST All agencies in the region require TDF services from time to time, and no agency (other than Caltrans or El Dorado County) is currently staffed to provide this service "in house", so the need for this service does not vary by geography. Larger agencies generally have at least one staff person familiar enough with TDF to manage consultant contracts, and to track the various versions of models which may be in play at any point in time. Smaller agencies generally have no staff familiar with TDF, and are totally reliant on consultants for this service.

SERVICE DELIVERY OPTIONS Delivery options would vary by the type of service provided. For the support and low-level TDF services, service could be provided on unit cost basis (e.g. a fixed cost per intersection or segment). For the mid- and high- level TDF services, fee-for-service would be required.

POTENTIAL BENEFITS Especially for smaller agencies, the TDF support services could fill a gap in agency staffing. Direct SACOG involvement in TDF services would provide a higher level of consistency in data and assumptions across agencies than currently exists. For most projects and studies, SACOG's TDF model is more advanced and has more capabilities than the simpler models used by most agencies and all levels of the TDF service described above (low-mid-high) would expand the use of this model.

POTENTIAL RISKS Relying on SACOG for direct travel demand analysis could result in delays, if many studies are initiated in a short timeframe and SACOG staffing is insufficient to cover all the requests simultaneously.

FINANCIAL Depending on the range of services extent of services provided, and on the number of agencies choosing these services, the savings could vary widely from very marginal to very significant, compared to current practice. Specific estimates of savings will require focused discussion with agency staff.

INTERESTED PARTIES All member agencies; consultants and firms which have historically provided TDF services.

LIST OF ISSUES TO RESOLVE Current practice allows local agencies to maintain their own land use and transportation network assumptions, largely without review by any outside agency. This practice allows agencies maximum flexibility, but sacrifices consistency and, to a degree, accountability across agencies and studies.

Local transportation consultants provide TDF service as well as analysis under contract to most agencies in the region, and in many cases, the consultants operate as extensions of agency staff for this purpose. If SACOG provides TDF support or low- or mid- level TDF services (i.e. no analysis or reports), a "hand-off" process must be developed.

SACOG's current regional model (SACSIM) is model of record for the MTP/SCS and air quality conformity processes at a regional level. Local agencies have relied on simpler modeling tools. Providing travel demand analysis as a shared service would require most agencies to transition to SACSIM, or would require SACOG to maintain different modeling platforms. Given that many agency general plans and impact fee programs are based in part on analysis results from their current models, transitioning to new platform would be difficult, and would have to be timed with other projects and studies (e.g. a general plan update, or update of a traffic impact fee).

*Cross-reference to "General Plan Services" paper