

**MEMORANDUM**

**TO:** Rick Curry, San Diego Association of Governments  
Mike Calandra, San Diego Association of Governments

**FROM:** Erik Ruehr, VRPA Technologies  
Chair, Transportation Capacity and Mobility Task Force  
Institute of Transportation Engineers – San Diego Section

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Institute of Transportation Engineers – San Diego Section

**DATE:** July 17, 2020

**RE:** Use of SANDAG Regional Travel Model for VMT Analysis Related to SB 743

This memo was written by Erik Ruehr and Katy Cole of the Transportation Capacity and Mobility Task Force, a task force of the Institute of Transportation Engineers – San Diego Section. Its purpose is to provide background information regarding the use of the SANDAG regional travel model for VMT analysis related to SB 743.

Senate Bill 743 (SB 743) is state legislation passed in 2013 and was adopted into the California Environmental Quality Act (CEQA) in December 2018 with a required implementation date of July 1, 2020. Many lead agencies in California have already incorporated SB 743 and all lead agencies are expected to do so by July 1. SB 743 changes the performance measure for CEQA transportation impacts of land development projects from level of service and delay to vehicle miles traveled. This means that, for the purposes of CEQA, land development projects will no longer be evaluated based on whether they create traffic congestion but will instead be evaluated on how many vehicle miles traveled they generate.

The SB 743 legislation stated that the minimum geographic area for implementation of SB 743 would include transit priority areas (i.e. areas near major transit stations) but it could be extended to a larger geographic area including the entire state. The agency chosen by the legislature to determine the geographic area for implementation and to write other details regarding implementation is the Governor's Office of Planning and Research (OPR). OPR subsequently decided that SB 743 should apply to the entire state and the CEQA adoption language incorporating SB 743 includes this requirement. OPR also provided a number of recommendations for the implementation of SB 743 described in a Technical Advisory dated December 2018.

The information above describes state requirements for the implementation of SB 743. Under CEQA, lead agencies are allowed to determine the detailed methodologies for conducting CEQA technical studies and

setting CEQA significance thresholds. The remainder of this memorandum describes the roles of the Institute of Transportation Engineers, SANDAG, and lead agencies in incorporating SB 743 into CEQA transportation analyses conducted in the San Diego region. Also included is information on a few unusual VMT analysis issues that may be applicable for certain projects.

## **INSTITUTE OF TRANSPORTATION ENGINEERS**

The Institute of Transportation Engineers (ITE) is an international organization of transportation engineers and planners. Transportation engineers and planners in the San Diego region have established the San Diego Section of ITE to coordinate local activities. The Transportation Capacity and Mobility Task Force of the ITE San Diego Section was established to provide a forum for discussion of technical issues.

Transportation engineers and planners are typically the lead authors of CEQA transportation studies. In order to provide a service to ITE members in the San Diego area, the Transportation Capacity and Mobility Task Force prepared a document known as the San Diego Regional Transportation Impact Study Guidelines dated May 2019. These regional guidelines provide recommendations for the incorporation of SB 743 in the San Diego region. The recommendations provided in the regional guidelines were provided only for informational purposes since lead agencies have the authority to determine methodologies and set significance thresholds for CEQA technical studies.

The ITE regional guidelines recommend that the SANDAG regional travel model be used in conducting VMT analyses for CEQA transportation studies. For small projects, the guidelines recommend use of maps created using information from the SANDAG regional travel model showing VMT/capita and VMT/employee by census tract. For large projects, the guidelines recommend that a model run of the SANDAG regional model be run for the analysis of each project. ITE has worked with SANDAG to agree on specific methodologies for creating the VMT/capita and VMT/employee as well as methodologies for running the regional travel demand model on a project by project basis to analyze VMT.

## **SAN DIEGO ASSOCIATION OF GOVERNMENTS (SANDAG)**

SANDAG maintains the regional travel demand mode for the San Diego region. This model is required for use in providing various transportation analyses required at the state and federal level. The SANDAG model is also used for a variety of transportation technical studies conducted for local agencies and private companies. SANDAG typically charges a fee for model runs requested by private entities.

In response to the changes in transportation analysis caused by the incorporation of SB 743, SANDAG has created methodologies for the analysis of VMT, including the VMT/capita and VMT/employee maps that the ITE guidelines recommend for the VMT analysis of small projects. Draft VMT/capita and VMT/employee maps by census tract based on ABM 1 are currently available and SANDAG is currently in the process of providing additional maps using ABM 2 to correspond to the federal Regional Transportation Plan that was approved in the fall of 2019.

Since the VMT analyses produced by the regional travel model are used predominantly by transportation engineers and planners, SANDAG has worked closely with the ITE Transportation Capacity and Mobility Task Force in creating VMT analysis methodologies and VMT analysis maps. ITE's Transportation Capacity



and Mobility Task Force has approved all the methodologies that SANDAG is currently using and the task force is working with SANDAG in determining methodologies to be used in upcoming versions of the SANDAG model.

## **LEAD AGENCIES**

Within the San Diego region, the CEQA lead agency for most land development projects is either the County of San Diego or one of the eighteen cities in the region. Other governmental agencies at the federal, state, regional, and local can also be the CEQA lead agency for land development projects.

Under CEQA, lead agencies have the authority to determine methodologies and set thresholds for CEQA technical studies. Therefore, it is up to each lead agency to decide whether the information in the ITE regional guidelines or information produced by the SANDAG model is appropriate for individual projects. However, it is clear that the lead agency is obligated to be consistent with CEQA, including the incorporation of SB 743, as described above. Beginning July 1, 2020, the use of VMT as a performance measure for CEQA transportation analyses is required. Lead agencies may determine methodologies and set thresholds for CEQA transportation analyses, but they are obligated to be able to produce substantial evidence for the decisions that they make. The information in OPR's technical advisory or ITE's regional guidelines may be used by lead agencies to assist in providing substantial evidence for their decisions regarding the incorporation of SB 743 into CEQA.

The ITE regional guidelines do not claim to be able to provide detailed methodologies and recommendations regarding VMT analyses for all land development projects. Certain projects represent unique situations beyond what is possible for analysis using the ITE guidelines or the SANDAG model. Lead agencies will need to determine how to handle these situations using analysis methodologies determined based on the unique characteristics of certain projects. Some examples are provided below.

## **VMT ANALYSIS OF UNIQUE PROJECTS OR SITUATIONS**

While there are many unique situations that may come up in VMT analysis, this section focuses on the topics of unique land uses, unique project settings, and interregional travel.

The ITE regional guidelines focus on land uses related to residential, employment, and retail land uses. There are a number of land uses that do not fall into these categories for which VMT analyses will still be needed. These include hotels, medical offices, and churches for example. Analysts can use the information in OPR's technical advisory and the ITE regional guidelines as starting points for how to do VMT analyses for unusual land use types.

Some projects may need to modify the methodology recommended in the ITE regional guidelines or develop new methodologies if the project setting has unusual characteristics that may not be captured in the SANDAG regional model, particularly when using the VMT/capita and VMT/employee maps. Some examples include the following situations:

- ◆ The project is located near a transit station (1/2 mile walking distance from the station to the project's pedestrian access point along the public right-of-way) that is not included in the model



but is expected to be open and operating by the time the project opens. In this case, project VMT may be lower than indicated in the model due to an increase in trips made by transit.

- ◆ A proposed residential project is located across the street from a new retail development that is under construction. Once the retail development is open, some portion of the retail trips made by residents may be made by walking or by driving short distances. Since the proposed retail development is new, it may not be reflected in the SANDAG regional model's VMT analysis and the model may be showing higher VMT/capita values for the residential development than would actually be expected to occur.

Most regional travel demand models, including the SANDAG model, stop at the regional boundary and do not provide information on VMT produced by outside the region. However, OPR's technical advisory indicates that interregional travel should be taken into account in VMT analysis. Since both OPR's technical advisory and the ITE regional guidelines recommend conducting VMT analysis by comparing project VMT/capita and VMT/employee to regional and/or city averages, the lack of ability to account for interregional travel in the SANDAG model is most likely insignificant. In other words, project VMT/capita and VMT/employee for interregional trips is not included in the calculation, but neither is interregional VMT included for the regional or city averages to which the project VMT is being compared.

For any unique projects or situations, including those described above, lead agencies are encouraged to develop methodologies and estimates to account for issues not covered in the ITE regional guidelines or the SANDAG regional travel demand model.

Please contact us if you have any questions. Erik Ruehr can be reached by email at [eruehr@vrpatechnologies.com](mailto:eruehr@vrpatechnologies.com) or by phone at 858/361-7151. Katy Cole can be reached by email at [k.cole@fehrandpeers.com](mailto:k.cole@fehrandpeers.com) or by phone at 619/758-3001.

