

BCAG SB 743 Implementation Overview

The Evolution of Transportation Impact Analysis

BACKGROUND

On September 27, 2013, Governor Jerry Brown signed SB 743 into law and started a process intended to fundamentally change transportation impact analysis as part of CEQA compliance. These changes include elimination of *auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion* as a basis for determining significant impacts. Further, parking impacts will not be considered significant impacts on the environment for select development projects within infill areas served by frequent transit service. According to the legislative intent contained in SB 743, these changes to current practice were necessary to, *"More appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions."*

IMPLEMENTATION

To implement this intent, SB 743 required the Governor's Office of Planning and Research (OPR) to update the CEQA Guidelines and establish, *"... criteria for determining the significance of transportation impacts of projects within transit priority areas."* The new criteria, *"... shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses."* Once the Secretary of the Natural Resources Agency certified the new guidelines, then *"...automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment..., except in locations specifically identified in the guidelines, if any."*

OPR and the Natural Resources Agency completed their responsibilities under SB 743 as of December 2018. They recommended vehicle miles of travel (VMT) as a replacement to vehicle LOS and made this replacement statewide effective July 1, 2020. The specific CEQA Guidelines changes (new Section 15064.3) and OPR technical guidance (*Technical Advisory on Evaluating Transportation Impacts in CEQA*, OPR, December 2018) are available from OPR at <https://opr.ca.gov/ceqa/updates/sb-743/>.

The *OPR Technical Advisory* includes specifications for VMT methodology and recommendations for significance thresholds and mitigation measures. As noted above, SB 743 requires impacts to transportation network performance to be viewed through a filter that promotes *the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses*. VMT can help identify how projects (land development and infrastructure) influence accessibility (i.e., access to places and people) and emissions so its selection is aligned with the objectives of SB 743.

Accessibility is an important planning objective in many communities but so is travel time or delay experienced by users. SB 743 does not prevent a city or county from continuing to analyze delay or LOS as part of other plans (e.g., the general plan), fee programs, on-going network monitoring, or entitlement review of projects but these metrics will no longer constitute the sole basis for CEQA impacts.

In response, many cities and counties are separating transportation impact analysis for land use projects into separate processes. One process is for entitlement review and making findings associated with the agency's general plan and other relevant development standards. Under this process, LOS is analyzed consistent with general plan expectations. The other process is for environmental review compliance under CEQA. This process includes the new VMT impact analysis as well as the analysis of impacts to transit, active transportation, safety, and construction. Adding the new VMT impact analysis to this process requires lead agencies to make multiple decisions. The BCAG SB 743 Implementation Study is designed to help lead agencies in Butte County complete the decision-making process as outlined below.

LEAD AGENCY ACTIONS

To implement SB 743, lead agencies will need to answer the implementation questions listed below.

- What is the preferred methodology for estimating and forecasting VMT considering that this metric is a required input for air quality, energy, GHG, and now transportation impact analysis in CEQA?
- What are the significance thresholds for VMT impacts under 'baseline' and 'cumulative' conditions? Does the lead agency accept the OPR Technical Advisory recommendation that land use projects and plans within metropolitan planning organization (MPO) areas can achieve a 15 percent reduction in VMT per capita or per worker compared to existing conditions?
- Does the lead agency want to take advantage of VMT impact screening?
- If the lead agency wants to follow the OPR Technical Advisory recommendations, what travel forecasting model will be used to estimate baseline VMT for citywide or regional averages?
- How will the lead agency ensure that project-scale VMT analysis is consistent with the methodology used to estimate thresholds?
- Will VMT impact screening be allowed based for residential and employment land uses based simply on location within a transit priority area (TPA) or low-VMT generating area? Will screening also be allowed for local-serving retail projects consisting of less than 50,000 square feet?
- What mitigation does the lead agency consider to be feasible for VMT impacts? If TDM is used, how will the lead agency verify its effectiveness over time since many TDM programs are building tenant dependent?

To help lead agencies answer these questions, the matrix in Attachment A presents each question along with associated options, limitations, and considerations. Lead agency decisions need to be based on

substantial evidence and this matrix provides a framework for how to assess each question based on current information and technical practices.

An important aspect of answering these questions, especially those related to setting thresholds, needs to consider VMT reduction goals that may already be established in local general plans, air quality plans, energy conservation plans or programs, climate action plans (CAPs), or greenhouse gas reduction plans. To some extent, cities and counties have already established 'acceptable VMT' growth amounts that will result from their general plan decisions about how and where to accommodate population and employment growth and what transportation network modifications will be made to support this growth. For suburban and rural areas, these decisions may result in little change in existing VMT per capita values. This outcome may create challenges for complying with the *OPR Technical Advisory* recommendation to expect at least a 15 percent reduction in existing VMT per capita as a significance threshold. Hence, a key part of the BCAG SB 743 Implementation Study is to help lead agencies answer the questions outlined above and understand how local versus state perspectives with respect to VMT reduction should be resolved.

More information about SB 743 implementation can be found at the following websites.

- OPR SB 743 Resources - <https://opr.ca.gov/ceqa/updates/sb-743/>
- Caltrans SB 743 Resources – <https://dot.ca.gov/programs/transportation-planning/office-of-smart-mobility-climate-change/sb-743>
- Fehr & Peers SB 743 Resources - <http://www.fehrandpeers.com/sb743/>.

Appendix A

Lead Agency Decision Matrix

Lead Agency Decisions	BCAG Member Agency Options	Common Limitations	Considerations
<p>What form of the VMT Metric?</p>	<ol style="list-style-type: none"> 1 Total VMT 2 Total VMT per service population¹ 3 Home-based VMT per resident 4 Home-based work VMT per employee 	<p>Metrics other than total VMT and total VMT per service population represent only partial VMT (i.e., some vehicle types and trip purposes are excluded in the models used to estimate VMT). This may be acceptable for screening purposes but not for a complete VMT impact analysis.</p>	<p>Include all forms of VMT needed for screening and complete analysis (this includes total VMT by speed bin for air quality, GHG, and energy impact analysis). The minimum set of metrics are listed below.</p> <ol style="list-style-type: none"> 1 Total VMT (by speed bin) 2 Home-based VMT per resident 3 Home-based work VMT per employee <p>As an option, Total VMT per service population can be added for land use plans and when an agency is willing to use a travel demand model for all project analysis.</p>
<p>What methodology to use in estimating and forecasting VMT?</p>	<ol style="list-style-type: none"> 1 Caltrans Statewide Travel Demand Model 2 BCAG RTP/SCS travel demand model 3 Local travel demand model 4 Sketch planning tool or spreadsheet² 	<p>Statewide and regional models have limited sensitivity and accuracy for local scale applications off the shelf. Sensitivity verification is required within the study area prior to project analysis. The BCAG model has already performed some VMT sensitivity analysis. It will also include adjustments as part of this implementation project to account for trip lengths beyond the model boundary. Sketch and spreadsheet tools do not capture the 'project effect on VMT'.</p>	<p>Use regional or local models after calibrating and validating for local project scale sensitivity/accuracy and appending trip length data for trips with external trip ends. Use these models to analyze both 'project generated VMT' and 'project effect on VMT'. Land use projects only change land supply. As such, the analysis of project effect should recognize this condition.</p>

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<p>Is use of VMT impact screening per 15064.3 desired?³</p>	<p>Projects that reduce VMT or are located within transit priority areas (TPAs) should be presumed to have a less than significant impact on VMT.</p>	<p>Screening does not provide information about the actual VMT changes associated with the project.</p>	<p>Rely on screening if consistent with applicable general plan and supported by substantial evidence.</p>
<p>What is the VMT impact significance threshold for land use projects under baseline conditions?</p>	<ol style="list-style-type: none"> 1 Lead agency discretion consistent with general plan and expectations for 'project scale' VMT reductions not accounted for in general plan EIR and supported by substantial evidence. 2 OPR 15% below baseline average for a city or region (automobiles only)⁴ 3 ARB 14.3% below baseline (2015-2018) average of jurisdiction (all vehicles) 4 ARB 16.8% below baseline (2015-2018) average of jurisdiction (automobiles only) 5 Any increase above baseline total for the study area or jurisdiction (all vehicles) 	<p>Difficult for lead agencies to determine what level of VMT change is unacceptable when viewed solely through a transportation lens.</p> <p>Uncertainty of VMT trends contributes to difficulty in setting thresholds.</p> <p>No evidence provided in OPR, ARB, or Caltrans guidance to support treating land use and transportation projects differently when it comes to threshold expectations. Transportation and retail land use projects are subject to a threshold where any increase in total VMT causes a significant impact whereas residential and office land use projects only have impacts when their VMT generation rates are not at least 15% lower than existing land uses.</p>	<p>Since VMT is already used in air quality, GHG, and energy impact analysis, lead agencies should review thresholds for those sections to help inform new thresholds exclusively for transportation purposes.</p> <p>Lead agencies should carefully consider how they value state goals for VMT/GHG reduction considering other general plan and community objectives. Translating state goals into VMT thresholds should carefully consider substantial evidence such as <i>California Air Resources Board 2017 Scoping Plan- Identified VMT Reductions and Relationships to State Climate Goals</i>, January 2019, CARB.</p> <p>Absent development of a specific VMT threshold, lead agencies may rely on those of other agencies per CEQA Guidelines Section 15064.7 but should support this decision with substantial evidence.</p>

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<p>What is the VMT impact significance threshold for land use projects under cumulative conditions?</p>	<ol style="list-style-type: none"> 1 Use a regional model to analyze the 'project's effect on VMT' based on RTP/SCS consistency (projects should not increase the total regional VMT forecast used to support the RTP/SCS air quality conformity and SB 375 GHG targets). 2 A lead agency can use the project analysis above if based on an efficiency metric form of VMT and evidence exists to demonstrate that cumulative trends in VMT rates are declining. 3 Establish a VMT reduction threshold for cumulative conditions consistent with general plan objectives especially those related to air pollution and GHG reduction. 	<p>Uncertainty of VMT trends makes a cumulative impact finding less certain.</p> <p>Land use projects change land supply and the allocation of future population and employment growth. As such cumulative analysis should maintain the same control totals of regional population and employment growth. Re-allocation of growth for cumulative analysis is new to practitioners and complicated.</p>	<p>Analyze the project's effect on land supply and VMT using an appropriate valid model. For impact findings, consider all available substantial evidence including 2018 Progress Report, California's Sustainable Communities and Climate Protection Act, November 2018, CARB and current research on the long-term effects of transportation network companies (TNCs), new mobility options, and autonomous vehicles (AVs). Specific research examples include Fehr & Peers AV effect model testing.</p>
<p>What is the VMT impact significant threshold for transportation projects under baseline conditions?</p>	<p>VMT applies to transit, active transportation, and other transportation projects. For roadway capacity projects, the CEQA Guidelines Section 15064.3(b)(2) grants lead agencies the discretion to choose their own metrics and thresholds. OPR and Caltrans recommend the use of VMT for <u>all</u> transportation projects and to treat projects that do not increase baseline VMT to be presumed to have a less than significant impact.</p>	<p>Continued use of LOS for roadway capacity projects is uncertain because of CEQA Guidelines Section 15064.3(b)(2) and 15064.7(d)(2).</p> <p>Transit, especially on-demand transit service, can generate new VMT, which should be considered as part of impact conclusions.</p>	<p>Consult CEQA legal advice about whether lead agency discretion allows continued use of LOS and whether VMT is required. VMT is required as an input to air quality, GHG, and energy impact analysis and should include induced vehicle travel effects.</p>

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<p>What VMT reduction mitigation strategies are feasible?</p>	<p>Menu of built environment and transportation demand management (TDM) mitigation strategies contained in Quantifying Greenhouse Gas Mitigation Strategies, CAPCOA, 2010. This document is currently being updated by CAPCOA with expected publication in 2021.</p>	<p>Built environment strategies require modifying the project, which may create inconsistencies with the project description and financial feasibility.</p> <p>Many TDM strategies are building tenant dependent so their use requires on-going monitoring and adjusting to account for changes in tenants and their travel behavior.</p> <p>Ad-hoc project-by-project mitigation is less effective for reducing VMT than larger scale program-based approaches such as an impact fee program.</p>	<p>Develop a VMT mitigation program using any of the following approaches.</p> <ol style="list-style-type: none"> 1 Impact fee program based on a VMT reduction nexus (see City of Los Angeles example). 2 In-lieu fee program for VMT reducing actions. 3 VMT mitigation bank or exchange program. 4 TDM ordinance applying to all employers (and potentially new residents).

Notes:

- (1) Service population includes population plus employment and may include students or visitors; it should include all independent variables that generate trips.
- (2) This method has limitations if using a citywide or regional average for a threshold.
- (3) CEQA Guidelines Section 15064.3 states that projects that would reduce VMT or are located in a TPA should be presumed to have a less than significant impact on VMT. The OPR *Technical Advisory* contains other potential screening options.
- (4) The OPR threshold was not developed through analytical or scientific study. It reflects OPR advice after reviewing various planning studies and state goals documented in the *Technical Advisory*. ARB used the OPR 15% threshold as an input to their threshold guidance and assumed that California statewide VMT would be 15% lower by 2050 compared to the 2015-2018 average. VMT from other sources (e.g., visitors and commercial driving) were not included in the ARB analysis. ARB’s analysis does not consider the 2019 update to statewide population forecasts, which reduced California’s population by about 5 million by 2050 nor the long-term influence of transportation network companies, internet shopping, work from home changes, new mobility options, or autonomous vehicles.
- (5) Caltrans endorses the OPR Technical Advisory thresholds for intergovernmental review (IGR) purposes. Local jurisdictions should consider whether state agency recommendations constitute a state threshold that must be applied in addition to their local threshold preference similar to past practices for LOS impact analysis of the state highway system.