SB 743 Implementation Decisions for the Town of Los Gatos

Prepared for:
Town of Los Gatos

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FEHR PEERS

Executive Summary

Senate Bill 743 (SB 743) fundamentally changed transportation impact analysis under the California Environmental Quality Act (CEQA).

On September 27, 2013, Governor Jerry Brown signed SB 743 into law and started a process intended to fundamentally change transportation impact analysis under the CEQA. Specifically, the legislation directed the State of California's Office of Planning and Research (OPR), which oversees CEQA compliance, to consider different metrics for identifying transportation impacts and make corresponding revisions to the CEQA Guidelines. The goal of this legislation and the pursuant change in metrics was to reform transportation impact analysis such that it was more in line with other statewide goals pertaining to infill development, reduction of greenhouse gases (GHG), and promotion of public transit and active transportation.

As a result of changes to the *CEQA Guidelines* there are several changes in general transportation impact analysis metrics, methods, and thresholds. As a lead agency, the Town of Los Gatos will need to make several policy decisions to implement these changes. This document discusses the background of the changes, and provides detailed technical information pertaining to decisions the Town will need to make. The **Summary of Decisions, Options, and Recommendations**, presented as **Appendix A** and in the matrix at the end of this Executive Summary, provides an abbreviated overview of this documents' contents and corresponding action items and decision points.

At the end or within Chapters 3 through 6, the decision options, limitations and considerations are summarized, which matches the decisions matrix (**Appendix A**). Also included in these summaries are two draft threshold recommendations. These recommendations were presented to Town Council on February 18, 2020 as the following options:

- Option 1: Rely on the OPR Technical Advisory thresholds
- Option 2: Set thresholds consistent with the General Plan future year VMT projections

Since the Town Council hearing, Caltrans released has released its draft *Transportation Impact Study Guide* (February 28, 2020) endorsing the VMT thresholds published in the OPR *Technical Advisory*. Caltrans does acknowledge that each lead agency has the discretion to set its own significance thresholds, and they will be reviewing the evidence presented by any agency that uses a threshold that differs from those in the *Technical Advisory*.

To help explain the threshold options in more detail, each section of the document package includes a description of these thresholds.

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Background

VMT replaces vehicle delay as an indicator of environmental impacts.

At its core, SB 743 removes the use of vehicle level of service (LOS) as an indicator of environmental impacts under CEQA. LOS is a traditional measure of vehicular delay, or the additional driving time encountered by drivers during congested time periods. Instead of measuring vehicle delay, OPR recommends considering a project's effect on total vehicle miles traveled (VMT).

VMT can briefly be described as the product of a project's vehicle trip generation and the average length of those trips. For instance, if a project generates 100 daily vehicle trips, each with an average length of five miles, that project generates 500 daily VMT.

VMT is related to many of the side effects created by vehicle travel. In gasoline or diesel powered vehicles, VMT is directly related to total GHG production and other tailpipe emissions. VMT also serves as an indicator of total regional congestion by measuring how much traffic a project is generating on a macroscopic scale.

However, VMT does not accurately predict changes such as increased delay at intersections near a project, or how traffic will affect roadways immediately surrounding a project, in the same way traditional traffic analysis would. It is more focused on how efficiently designed and located a land use project might be; whether the project is located near a wide variety of jobs, housing, or retail uses; and whether alternative modes of transportation are available.

As a lead agency, the Town must make several key policy decisions to comply with SB 743.

Because reporting the VMT associated with a given project or plan requires a different method than traditional traffic analysis, the Town will need to set clear guidelines and expectations for how a VMT analysis should be conducted. With the *CEQA Guidelines* expectations for an environmental impact analysis in mind, this document discusses several questions, grouped by the specific decisions about VMT metrics, VMT calculation methods, VMT significance thresholds, and VMT mitigation actions. We highlight options and limitations for each question from a technical transportation planning and engineering perspective with a particular emphasis on addressing the *CEQA Guidelines* expectations for an environmental impact analysis.

- 1. **VMT Metrics**: What form of VMT metrics could be used?
- 2. **VMT Calculation Methods**: What methods are available to use in estimating and forecasting VMT2
- 3. **VMT Impact Significance Thresholds**: Is the use of VMT impact screening desired? What is the VMT impact significance threshold for land use projects and land use plans under baseline conditions? What is the VMT impact significance threshold for land use projects

¹ Typical CEQA practice focuses on environmental effects that occur on a typical weekday, so all references to VMT in this document are intended to mean VMT that occurs on a typical weekday.



under cumulative conditions? What is the VMT impact significant threshold for transportation projects under baseline conditions?

4. **VMT Mitigation Actions**: What VMT reduction mitigation strategies are feasible?

Each of these questions is discussed in greater detail in its own section of this document, along with a section discussing other aspects of the CEQA process that may be affected by these changes. Those sections are summarized below.

VMT Metrics

VMT can be measured and expressed in multiple ways.

The first decision facing the Town is which VMT *metric* to use to express a project's transportation effects. VMT metrics fall into two general categories: absolute VMT and per capita VMT. Per capita VMT is also referred to as an efficiency metric, as it does not vary directly with project size. Based on our example above, if a project generates 100 daily trips at an average of five miles per trip, the *absolute* project generated VMT is 500 vehicle miles per day. If that project is a small office employing 25 people, the per capita VMT is 20 VMT per employee (a per capita or VMT efficiency metric).

Table ES-1 summarizes the common VMT metrics available to the Town.

| Table ES-1: Summary | y of Common VMT Metrics | | |
|--|---|---|-----------------------------------|
| VMT Metric ¹ | Definition | Recommended by OPR ² | VMT used for other CEQA Sections? |
| Total Project Generated VMT | Daily VMT of all vehicle trips, vehicle types, and trip purposes for all project land uses, presented as a total project generated VMT. | Yes, for land use plans, and discussed in Appendix 1 of the OPR <i>Technical</i> <i>Advisory</i> . | Yes |
| Total Project Generated VMT per Service Population ^{3,4} (aka Total Project Generated VMT Rate) | Daily VMT of all vehicle trips, vehicle types, and trip purposes for all project land uses, divided by the sum of residents plus employees. | No, although may be helpful for mixed-use projects and comparing land use scenarios, particularly when using a travel forecasting model. | Yes |
| Partial Home-Based VMT per Resident ⁵ (aka Home-Based VMT Rate) | VMT generated by light-duty vehicles for all trips that begin or end at a residential land use, divided by residents. | Yes, for residential projects on page 5 and Appendix 1 of OPR <i>Technical Advisory</i> . | No |

| Table ES-1: Summary | of Common VMT Metrics | | |
|--|---|---|-----------------------------------|
| VMT Metric ¹ | Definition | Recommended by OPR ² | VMT used for other CEQA Sections? |
| Partial Home-Based Work VMT per Employee ⁵ (aka Home- Based Work VMT Rate) | VMT by light-duty vehicles only for work trips (that is, trips that have one end at a workplace and one end at a residence), divided by number of employees. | Yes, for office projects on page 6 and Appendix 1 of OPR <i>Technical</i> <i>Advisory</i> . | No |
| Project's Effect on VMT within the Boundary of a Specific Area (aka Boundary VMT) | VMT that occurs within a selected geographic boundary (e.g., Town/City, County, or region) by any type of vehicle. This captures all on-road vehicle travel on a roadway network for any purpose and includes local trips as well as trips that pass through the area without stopping. | Yes, for retail projects and transportation projects on pages 5, 6 and 23 and Appendix 1 of the OPR Technical Advisory. | Yes |

- 1. Each VMT metric is an option for baseline and/or cumulative impact analysis.
- 2. With the exception of Total Project Generated VMT per Service Population, each VMT metric listed in this table are described in the OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018). See pages 5, 6 and 23, and Appendix 1 of the OPR *Technical Advisory*.
- 3. Total project generated VMT is derived from this VMT rate.
- 4. The project generated VMT accounting is similar to an origin-destination accounting used for many Climate Action Plans.
- 5. A partial VMT estimate.

Source: Fehr & Peers, 2020.

Total VMT and Partial VMT

Total VMT metrics include all types of VMT captured by a travel forecasting model, regardless of the type of vehicle or the trip's purpose. In practice, this means the metric includes visitor trips, medium-duty and heavy-duty vehicles, public transit buses, and other types of vehicle miles that might not be captured in the most common partial VMT metrics. Partial VMT refers to the use of only particular trip purposes and/or vehicle types for assessing a project's impacts. The efficiency metrics recommended by OPR for use in analyzing office and residential projects are partial VMT metrics, because they include only light-duty passenger vehicles and only trips for a specific purpose or made by a specific population.

The benefit of partial VMT metrics is that they allow for sketch-level analysis using findings from a prior model run, they are easier to understand and visualize, and for single land uses that are similar to existing development patterns they are likely reflective of the same impact patterns as would be present with analysis of total VMT. Understanding where built environment conditions lead to VMT-efficient residential and workplace activity is substantial evidence that could help support conclusions that adding similar land uses to those areas would create similar outcomes. For projects that may be subject to further scrutiny, only reporting a portion of VMT from select trip purposes and limiting the VMT to light-duty vehicles could be considered an incomplete analysis of VMT.



Project Generated VMT and Project's Effect on VMT

VMT metrics also differentiate between project generated VMT and a project's effect on VMT. Project generated VMT is similar to current transportation impact analysis practice of using daily trip generation: to estimate the daily project generated VMT, the daily trips are multiplied by the distance traveled by each daily vehicle trip. The project's effect on VMT instead evaluates the change in total on-road travel within a geographic area boundary before and after the project is built (referred to as boundary VMT in this document). An often-cited example of how a project can affect VMT is the addition of a grocery store in a food desert. Residents of a neighborhood without a grocery store have to travel a great distance to an existing grocery store. Adding the grocery store to that neighborhood will shorten many of the grocery shopping trips and reduce the VMT to/from the neighborhood. While the new store itself will "generate" many daily trips, in that there will be many cars coming in and out of the store's driveway, it will generally attract those trips *away* from other grocery stores located farther away. If the boundary VMT in the area served by all the local grocery stores were to be assessed, it is likely that the total amount of driving in that area will have decreased rather than increased.

Key Take-Aways

In deciding what form of VMT metric to use, the Town should consider the following options:

- 1. Total Project Generated VMT
- 2. Total Project Generated VMT per Service Population²
- 3. Household generated VMT per Resident (requires an activity/tour-based travel forecasting model)
- 4. Home-Based VMT per Resident (a partial VMT estimate)
- 5. Home-Based Work VMT per Employee (a partial VMT estimate)
- 6. Project's Effect on VMT within the Boundary of a Specific Area (Boundary VMT)

Metrics such as Home-Based VMT per Resident and Home-Based Work VMT per Employee represent partial VMT (i.e., some vehicle types and trip purposes are excluded from the calculation). This may be acceptable for screening purposes but not for a complete VMT impact analysis. When selecting VMT metric(s), it is useful to keep in mind that the expectations of CEQA is to disclose the potential effects of a project on the environment and the practical consideration of using the same (or different) VMT metrics for the various topic sections of an environmental analysis – transportation, air quality, GHG and energy consumption.

² Service population includes residential population plus employment and may include students or visitors; it is intended to include all independent variables used in estimating trips.

VMT Calculation Methods

VMT can be calculated using several methods.

The most common method of calculating the VMT metrics listed in **Table ES-1** is through a travel forecasting model. A travel forecasting model uses a specialized software and are designed to reflect the interactions between different land use and roadway elements in a large area. The two travel models most commonly used to assess projects in Los Gatos are the Santa Clara Valley Transportation Authority (VTA)-City/County Association of Governments of San Mateo County (C/CAG) Bi-County Model ("VTA Travel Model"), and Travel Model One ("MTC Travel Model") which is maintained by the Metropolitan Transportation Commission (MTC) and used for large-scale regional planning efforts. There is also a statewide model developed by Caltrans, though the level of analysis is at such a large scale that it is typically used to evaluate interregional travel and freight movements rather than localized land use changes.

In some cases where a travel model is not available or not appropriate, VMT can be estimated using sketch models or spreadsheet tools. VMT can also be estimated directly by multiplying the number of trips by an average trip length. Trips can be estimated using the results of local trip generation surveys or published trip generation rate data.

Key Take-Aways

Practically speaking, the use of a travel model is preferable for projects large enough to be accurately represented in that model. In areas under the Town's jurisdiction, use of the VTA Travel Model is most appropriate for this analysis. **Appendix B** summarizes the activity-based (also called tour-based) MTC Travel Model, and the trip-based VTA Travel Model, including their analytical strengths and weaknesses.

Some limitations of these methods include the following:

- Statewide and regional models have limited sensitivity and accuracy for local scale applications off the shelf.
- Regional and local models often truncate trips at model boundaries.
- Sketch and spreadsheet tools do not capture the "project effect on VMT."

For smaller projects, use of a non-model accounting method may be more appropriate due to their scale and ease of use. The Town may wish to set guidance as to which types of projects will generally be required to perform VMT analysis using a travel forecasting model, and which can be performed using non-model "Accounting Methods" (if any). One potential planning tool that may be appropriate for most small- to medium-sized projects in the forthcoming Santa Clara Countywide VMT Estimation Tool under development by the VTA.



VMT Impact Significance Thresholds

The Town has discretion to decide what constitutes a significant impact to the environment.

SB 743 changes the focus of transportation impact analysis in CEQA from measuring impacts <u>to</u> drivers, to measuring the impact <u>of</u> driving. The Town has discretion to set its significance threshold for VMT impacts, provided that the basis for that threshold is grounded in substantial evidence. With regard to establishing thresholds for VMT, lead agencies have at least four options:

- Use Screening Criteria. The concept of project screening is that some projects have characteristics that readily lead to the conclusion that they would not cause a VMT impact, and therefore could be screened out of doing a detailed VMT analysis. Some types of screening criteria include transit proximity, low-VMT area, local-serving retail, transportation projects that do not add capacity, and projects with no net VMT increase.
- 2. Rely on the OPR Technical Advisory suggestion to set thresholds consistent with state goals for air quality, GHG and energy conservation. The OPR *Technical Advisory* contains suggested VMT thresholds. The basic suggested threshold is that each project achieves a VMT level that is at least 15% below baseline conditions. In the case of the Town of Los Gatos, its "region" would most likely be the nine-county Bay Area.
- 3. Use a threshold adopted or recommended by another public agency consistent with lead agency air quality, GHG reduction, and energy conservation goals. The CEQA Guidelines offer the option for an agency to use a threshold that is adopted or recommended by another agency, as long as that decision is supported by substantial evidence.

Other state agencies, such as Caltrans and the California Air Resources Board (CARB), have technical expertise that is relevant to this topic.

Recent CARB publications have identified that new land use projects could contribute to these statewide goals by achieving total project generated VMT levels of at least 14.3% below the existing baseline (the CARB report does not specify whether this "baseline" is the regional average or some other baseline). For light-duty vehicles only, CARB cites a 16.8% reduction below baseline (2018) average VMT. However, the CARB analysis assumes that all of the regions in the state will meet the GHG reduction targets set in their Regional Transportation Plans and Sustainable Communities Strategies (RTP/SCS); thus far, indications are that not all regions are meeting those targets, and vehicular travel in California (at least prior to the COVID-19 pandemic) has been increasing rather than decreasing over the past several years. Further, the CARB analysis does not account for any future increases in the use of Transportation Network Companies (such as Uber and Lyft) or commercial delivery services, nor does it envision the potential for development of autonomous vehicles or any other emerging transportation innovations. Therefore, there is growing evidence that the VMT

reduction values from the CARB publication may not be enough to actually meet the State's GHG goals. Should current VMT generation trends persist, the threshold may need to increase to 25% below baseline (2018) average of jurisdiction (all vehicles).

Caltrans has released draft guidance endorsing the VMT thresholds published in the OPR *Technical Advisory*. Caltrans does acknowledge that each lead agency has the discretion to set its own significance thresholds, and they will be reviewing the evidence presented by any agency that uses a threshold that differs from those in the *Technical Advisory*.

Separately, Caltrans has released draft Interim Guidance on "Determining CEQA Significance for GHG Emissions for Projects on the State Highway System" that recommends that any increase in GHG emissions would constitute a significant impact. This has been referred to as the "Net Zero VMT threshold". While Caltrans has thus far signaled that this threshold would be applied only to transportation projects, it does raise a question about whether a "net zero VMT" threshold should also be applied to land use projects and plans.

4. Develop jurisdiction-specific VMT thresholds consistent with the existing General Plan. Agencies may decide to set their own thresholds, which should be supported by substantial evidence and should support the three objectives laid out in SB 743: 1) reducing GHG emissions, 2) encouraging infill development, and 3) promoting active transportation. The process of setting thresholds should consider the policies and standards set in the Regional Transportation Plan (RTP)/ Sustainable Communities Strategies (SCS), and should consider how much priority the Town wants to place on the statewide GHG reduction goals. A targeted study could determine what level of VMT in Los Gatos would be consistent with the VMT forecasts presented in Plan Bay Area and would represent the Town's "fair share" of the State's GHG reduction goals (as proposed in Town of Los Gatos' SB 743 Implementation Option 2 to set thresholds consistent with the General Plan future year VMT projections). Another option for setting a local threshold is to consider what level of VMT reduction is feasible to achieve in the local context. Setting a threshold based on the feasibility of mitigation may not be fully supported by past CEQA practices; Fehr & Peers advises consulting legal counsel and continuing to follow legal developments before adopting this approach.

Key Take-Aways

While it is difficult for a lead agency to determine what level of VMT change is unacceptable when viewed solely through a transportation lens, there are several possible options depending if the Town chooses to set a threshold based on local or state policies. Options include:

- 1. Set thresholds based on state goals
 - a. Rely on the OPR Technical Advisory suggestion to set thresholds consistent with state goals for air quality, GHG and energy conservation.
 - i. OPR 15% below baseline average of a town/city or region (light-duty vehicles only)



- b. Use a threshold adopted or recommended by another public agency consistent with lead agency air quality, GHG reduction, and energy conservation goals.
 - i. CARB 14.3% below baseline (2018) average of jurisdiction (all vehicles, presuming that MPOs meet SB 375 targets)
 - ii. CARB 16.8% below baseline (2018) average of jurisdiction (light-duty vehicles only, presuming that MPOs meet SB 375 targets)
 - iii. CARB: 25% below baseline (2018) average of jurisdiction (all vehicles, presuming that MPOs do not meet SB 375 targets).
 - iv. Net zero VMT (pending Caltrans-recommended threshold)
- 2. Set jurisdiction-specific threshold consistent with existing General Plan
 - a. Set jurisdiction specific VMT threshold based on substantial evidence
 - b. Set thresholds based on baseline VMT performance and based on substantial evidence

VMT Mitigation Actions

The nature of transportation impact mitigation under CEQA will likely change.

Mitigating a LOS impact typically involves making changes to the physical transportation system in order to accommodate additional vehicles and reduce delays. These mitigations may involve actions such as installing traffic signals, adding turn lanes, widening roads, or contributing to the construction of HOV/Express Lanes, among other options. The identification of necessary mitigations resulting from project impacts has historically led to project sponsors identifying and funding these changes to the transportation system (i.e., paying a "fair share" contribution toward funding a new traffic signal or widening an existing roadway).

The use of VMT as a metric focuses on the total *amount* of driving, rather than the driving *experience*. Four possible mitigation approaches are described in the following sections:

- VMT Cap
- VMT Based Impact Fee Program
- VMT Mitigation Bank
- VMT Mitigation Exchange

A VMT Cap can be developed and administered on a project-by-project basis, while the remaining three options (VMT Based Impact Fee Program, VMT Mitigation Bank, and VMT Mitigation Exchange) are program approaches to impact mitigation. The concept of a 'program' approach to impact mitigation is commonly used in a variety of technical subjects including transportation, air quality, GHG, and habitat. Transportation impact fee programs have been used to help mitigate cumulative vehicle level of service (LOS) impacts. What is new is developing a fee program based on VMT impacts and alternative programs – VMT Mitigation Bank and VMT Mitigation Exchange. Absent these new program-level mitigation

approaches, rural and suburban lead agencies will have limited feasible mitigation options for project sites.

Use of Vehicle Level of Service for Non-CEQA Analysis

The Town has options to continue studying a project's effects on vehicle delay.

Communities place a high value on the information about traffic and transportation presented during a project's review process. Historically, much of the transportation analysis associated with new development or proposed land use plans has occurred under the umbrella of CEQA. However, with this new process, many of these guidelines and analyses will instead occur during development review as part of the Town's overall entitlements and project review process.

The Town may decide to maintain a level of service standard in its General Plan or Transportation Element and may continue to administer programs to collect impact fees that can be used for roadway improvements. However, these will no longer be subject to CEQA-level review and litigation. Instead, this analysis and any related agreements would need to be performed and presented during entitlements or development review. Any fees assessed to help ease the effects of a given project would be required to conform to state requirements for impact fees and present an appropriate study that identifies nexus between the impact and the fee assessed.

Other Core CEQA Tenets Remain Unchanged

While this document focuses on the adoption of VMT as a metric for assessing transportation impacts, many other facets of CEQA practice remain unchanged. Transportation impact sections must still discuss other impact categories such as hazards, effects on pedestrians and cyclists, and site circulation concerns. In addition, the Town will continue to have the opportunity to comment on EIRs prepared for consideration by other lead agencies if those EIRs may affect areas in the Town's jurisdiction.

One particular consistency to note is that the option to "tier" CEQA analysis will remain. The tiering process consists of streamlining topics studied for a project if that project was assessed under a previous EIR. A classic example of this is the development of a single parcel that is consistent with a previously analyzed Specific Plan. The project need only analyze those items which were not previously analyzed. This practice will also apply to VMT analysis, provided the EIR from which the project tiers also studied VMT. In the near term, this may result in tiered projects requiring supplemental VMT analysis; however, in the future, projects that are consistent with a cleared General Plan or Specific Plan may not be required to undergo the full VMT analysis process.

Taking the Next Steps

The immediate next steps for the Town as a lead agency are to provide staff and applicants with guidance pertaining to each of the questions posed above. Fehr & Peers has presented an initial assessment of the Town's options, and has discussed each in greater detail in the body of this document; however, the



decision on how to answer each implementation question must ultimately be made by the Town. The **Summary of Decisions, Options, and Recommendations,** presented as **Appendix A** and in the matrix beginning on the next page, provides an abbreviated overview of this document's contents and corresponding action items and decision points.

It is very important to understand that the implementation of SB 743 is just beginning across the state for many lead agencies. Current CEQA practices have developed over several decades as a result of a large body of case law and periodic updates to the *CEQA Guidelines*. Because SB 743 implementation is brand new, there is not yet any case law to guide our understanding or interpretation. The following represents our current understanding of the issues and options involved, informed by our research into SB 743 and knowledge of past CEQA practice; this understanding will evolve over time as more agencies apply SB 743 concepts to their own CEQA procedures. It is recommended that legal counsel be consulted as part of this SB 743 implementation process.

| Town of Los Gatos Initial Recommendations | wMT (i.e., and the copy of the | casting Option 1: Rely on the OPR Technical Advisory Thresholds e the tool Use the Santa Clara Countywide VMT Evaluation Tool for baseline t also be VMT screening, And most likely the VTA-C/CAG Bi-County Travel Forecasting Model, Local Town of Los Gatos Travel Forecasting Model (not currently available), or Non-model "Accounting Model (not currently available), or Non-model "Accounting Model (not currently available), or Non-model "Accounting Future Year VMT Projections Most likely the VTA-C/CAG Bi-County Travel Forecasting Model, Local Town of Los Gatos Travel Forecasting Model (not currently available), or Non-model "Accounting Methods" such as sketch planning tool or spreadsheet. |
|---|--|---|
| Considerations | Total VMT metrics include all types of VMT (i.e., visitor trits) medium-duty and heavy-duty vehicles, public transit buses, and other types of vehicle miles that might not be captured in the most common partial VMT metrics) captured by a travel forecasting model, regardless of the type of vehicle or the trip's purpose. Partial VMT refers to the use of only particular trip purposes and/or vehicle types for assessing a projects' impact analysis to arrive to provide a complete picture of the expectations of a CEQA impact analysis to strive to provide a complete picture of the effects of a project on the environment are highlighted within the CEQA Guidelines. For lead agencies, VMT metrics and method should consider current practice for air quality, greenhouse gases (GHG), and energy consumption impact analysis. In general, VMT is used as an input for these other analyses and current practice is to produce VMT estimates Guidelines expectations. | Selection of an appropriate travel forecasting approach is an important step because the tool used to develop VMT thresholds must also be used to develop VMT thresholds must also be cumulative VMT impacts. Regional or local models should be calibrated and validated for local project-scale sensitivity/accuracy (including appending trip length data for trips with external trip ends) before using these models to analyze both 'project generated VMT' and 'project effect on VMT'. |
| Common Limitations | Metrics other than total project generated VMT and total project generated VMT per service population typically only represent partial VMT (i.e., some vehicle types and trip purposes are excluded in the models used to estimate VMT). The use of partial VMT may be beneficial for baseline screening of smaller projects, but for larger and more complex projects total VMT may be needed for a complete VMT impact analysis. Project-generated VMT metrics cannot capture how a project changes behavior of non-project residents or employees. | Statewide and regional models have limited sensitivity and accuracy for local scale applications off the shelf. Regional and local models often truncate trips at model boundaries. Sketch and spreadsheet tools do not capture the 'project effect on VMT'. |
| Common Options | 1. Total Project Generated VMT 2. Total Project Generated VMT per Service Population ³ 3. Household generated VMT per Resident (requires an activity/tour-based travel forecasting model) 4. Home-Based VMT per Resident (a partial VMT estimate) 5. Home-Based Work VMT per Employee (a partial VMT estimate) 6. Project's Effect on VMT using Boundary VMT for a specific area | 2. Metropolitan Transportation Commission (MTC) Regional Transportation Commission (MTC) Regional Travel Forecasting Model 3. VTA-C/CAG Bi-County Travel Forecasting Model (not currently available) 5. Non-model "Accounting Methods" such as sketch planning tool or spreadsheet* |
| Lead Agency Decisions | What form of VMT metrics could be used? | What methods are available to use in estimating and forecasting VMT? |



³ Service population includes population plus employment and may include students or visitors; it is intended to include all independent variables used in estimating trips.
⁴ Sketch planning tool or spreadsheet method has limitations if using a townwide/citywide or regional average for a threshold.

| Lead Agency Decisions | Common Options | Common Limitations | Considerations | Town of Los Gatos Initial Recommendations |
|--|---|--|--|--|
| Is use of VMT impact screening desired? ⁵ | Projects that reduce VMT or are located within transit priority areas (TRAs) should be presumed to have a less than significant impact on VMT. Additional screening options identified in the OPR <i>Technical Advisory</i> for. 1. Map based screening for residential and office projects 2. Local-Serving Retail Projects 3. Transportation projects that do not add vehicle capacity 4. Projects that would not result in a net increase of VMT | Screening does not provide information about the actual VMT changes associated with the project. | Screening most appropriate if consistent with applicable general plan and supported by substantial evidence. | Option 1: Rely on the OPR Technical Advisory Thresholds Rely on screening if consistent with applicable general plan and supported by substantial evidence demonstrating cumulative VMT is declining. For project-by-project VMT analysis with VMT screening, most projects will likely not screen out, which will require a more complete VMT analysis. Apply screening for the following project types: Small Developments Projects in Low-VMT Areas Projects in Poximity to Major Transit Stops Affordable Housing Local-Serving Retail Projects less than 10,000 square feet Transportation Projects that do not add vehicle capacity |
| | 5. Affordable housing projects 6. Small projects | | | The Santa Clara Countywide VMT Estimation Tool will be applied for screening as follows: • Low VMT generation map-based screening of residential, office, and industrial land uses, those land uses in combination with each other, and those land uses with or without local serving retail space. • A transit priority areas (TPAs)/major transit stops and high-quality transit corridor (HQTO) screen. Option 2: Set Thresholds Consistent with the General Plan Fiture Year WAT Projections Screening not used for this approach. Rather than analyzing VMT for each proposed land use project individually, projects consistent with the General Plan could be exempt from further wMT impact analysis since VMT impacts would have been analyzed in the General Plan EIR. |
| What is the VMT impact significance threshold for land use projects under baseline conditions? | 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 a town/city or region (light-duty vehicles only) ⁶ 3. CARB 14,3% below baseline (2018) average of jurisdiction (all vehicles) | Difficult for lead agencies to determine what level of VMT change is unacceptable when viewed solely through a transportation lens. Uncertainty of VMT trends contributes to difficulty in setting thresholds. Connecting a VMT reduction expectation to baseline helps to reduce uncertainty associated with future conditions. | 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. Lead agencies should carefully consider how they value state goals for VMT/GHG reduction in light of other general plan and community objectives. Translating state goals into VMT thresholds should consider substantial evidence such as California Air Resources Board 2017 Scoping Plan - Identified VMT Reductions and Relationships to State Climate Goals, January 2019, CARB. | Option 1: Rely on the OPR Technical Advisory Thresholds Specific WMT thresholds for residential, office (work-related), and retail land uses from the OPR Technical Advisory are summarized below. • Residential projects. A proposed project exceeding a level of 15 percent below existing (baseline) VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita are VMT per capita. • Office projects: A proposed project exceeding a level of 15 percent below existing (baseline) regional VMT per capita. • Office projects: A proposed project exceeding a level of 15 percent below existing (baseline) regional VMT per employee may indicate a significant transportation impact. |

⁵ 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. ⁶ The OPR and CARB thresholds do not consider the long-term influence of TNCs, internet shopping, new mobility options, or autonomous vehicles.

| Town of Los Gatos Initial Recommendations | Retail projects: A net increase in total (boundary) WMT may indicate a significant transportation impact. |
|---|---|
| Considerations | Absent development of a specific VMT threshold, lead agencies may rely on those of other state agencies. The CARB thresholds are supported by substantial evidence related to state air quality and GHG goals, but do not consider recent VMT trends or the potential influence of emerging mobility options such as autonomous vehicles (AVs). |
| Common Limitations | |
| Common Options | 4. CARB 16.8% below baseline (2018) average of jurisdiction (light-duty vehicles only) 5. Pending Caltrans-recommended threshold (net zero VMT)? |
| Lead Agency Decisions | |

7 Caltrans has released draft Interim Guidance on "Determining CEQA Significant impact. This has been referred to as the "Net Zero VMT threshold". Caltrans has thus far signaled that this threshold would be applied only to transportation projects.



| Lead Agency Decisions What is the VMT impact | Common Options | Common Limitations Uncertainty of VMT trends makes a cumulative | Considerations Analyze the project's effect on land supply and | Town of Los Gatos Initial Recommendations Option 1: Rely on the OPR Technical Advisory Thresholds | |
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| significance threshold for land use projects under cumulative conditions? | 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 (either project generated or boundary 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 tends in VMT rates are declining. 3. Establish a VMT reduction threshold for cumulative conditions consistent with long-term air pollution and GHG reduction expectations. | impact finding less certain. Ability for a lead agency to identify the project's effect on land supply and corresponding VMT. 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. Requires knowledge of the forecasting tools available to test the project's effect on land supply and VMT. | WMT using an appropriate valid model. For impact findings, consider all available substantial evidence including 2018 Progress Report, Colifornio's Sustainable Communities and Climate Protection Act, November 2018, CARB and current research on the long-term effects of transportation network companies (INCs), new mobility options, and autonomous vehicles (AVs), Specific research examples include Fehr & Peers AV effect model testing. | OPR does not present cumulative thresholds. Analyze the project's effect on land supply and VMT using an appropriately valid travel model. For impact findings, consider all available substantial evidence including California dir Resources Board 2017 Scoping Plan Identified VMT Reductions and Relationships to State Climate Gods, January 2019, and current research on the long-term effects of transportation nework companies (TNCs), new mobility options, and autonomous vehicles (AVs). The following are suggested cumulative thresholds. • Land Use Projects: • Project Effect A significant impact would occur if the project increases total regional VMT compared to cumulative no project conditions. • Land Use Plans: • Land Use Plans: • Project Effect A significant impact would occur if growth in the plan area increases total VMT in the study area compared to cumulative no project conditions. • Transportation Projects: A significant impact would occur if the project causes a net increase in total regional VMT compared to cumulative no project conditions. | |
| | | | | All land use and transportation projects: A significant impact would occur if the project is inconsistent with the Regional Transportation Plan/Sustainable Community Strategy Plan (Plan Bay Area). Option 2: Set Thresholds Consistent with the General Plan Future Year VMT Projections Use the same cumulative thresholds as Option 1. | |
| What is the VMT impact significant threshold for transportation projects under baseline conditions? | Lead agencies have discretion to choose their own metrics and thresholds for transportation project impact analysis. If VMT is selected, OPR recommends treating projects that reduce, or have no impact on, VMT to be presumed to have a less than significant impact. | Continued use of LOS is uncertain because of CEQA Guidelines Section 15064.3(b)(2) and 15064.7(d)(2). Transit, sepecially on-demand transit service, can generate new VMT, which should be considered as part of impact condusions. | Consult CEOA 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. | Option 1: Rely on the OPR Technical Advisory Thresholds • Baseline Transportation Threshold: A significant impact would occur if a project causes a net increase in total regional VMT compared to baseline conditions or opening year no project conditions. • Cumulative Transportation Threshold: A significant impact would occur if the project causes a net increase in total regional VMT compared to cumulative no project conditions. Option 2: Set Thresholds Consistent with the General Plan Future Year VMT Projections Use the same cumulative thresholds as Option 1. | |

| Lead Agency Decisions | Common Options | Common Limitations | Considerations | Town of Los Gatos Initial Recommendations |
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| What VMT reduction mitigation strategies are feasible? | Menu of built environment and transportation demand management (TDM) mitigation strategies contained in Quantifying Greenhouse Gas Mitigation Strategies, CAPCOA, 2010. | Built environment strategies require modifying the project, which may create inconsistencies with the project description and financial feasibility. TDM strategies are often building tenant dependent so their use requires on- | Develop a VMT mitigation program using any of the following approaches. 1. Impact fee program based on a VMT reduction nexus. | Option 1: Rely on the OPR Technical Advisory Thresholds Lead agencies have the discretion to select mitigation measures and alternatives to reduce VMT. Ad-hoc project-by-project mitigation is less effective for reducing VMT than larger scale program-based approaches such as an impact fee program. |
| | | going monitoring and adjusting to account for changes in build tenants and their travel behavior. | In-lieu fee program for VMT reducing actions. VMT mitigation bank or exchange program. | Option 2: Set Thresholds Consistent with the General Plan Future Year VMT Projections |
| | | Ad-hoc project-by-project mitigation is less effective for reducing VMT than larger scale program-based approaches such as an impact fee program. | TDM ordinance applying to all employers. | Lead agencies have the discretion to select mitigation measures and alternatives to reduce VMT. Ad-hoc project-by-project mitigation is less effective for reducing VMT than larger scale program-based approaches such as an impact fee program. |

