



Date: September 28, 2020  
 Current Meeting: October 7, 2020  
 Board Meeting: N/A

## **BOARD MEMORANDUM**

**TO:** Santa Clara Valley Transportation Authority  
 Technical Advisory Committee

**THROUGH:** General Manager/CEO, Nuria I. Fernandez

**FROM:** Director of Planning and Programming, Deborah Dagang

**SUBJECT:** Update on SB 743 LOS-to-VMT Transition

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### **FOR INFORMATION ONLY**

#### **EXECUTIVE SUMMARY:**

- The purpose of this item is to share the latest information about the transition from Level of Service (LOS) to Vehicle Miles Traveled (VMT) in transportation analysis per California Senate Bill (SB) 743.
- This is an Information item, and no action is required by VTA Committees at this time. However, VTA Committee members may find this information useful in their roles in their own communities.
- The use of VMT for analysis of land use projects under the California Environmental Quality Act (CEQA) became mandatory on July 1, 2020, and Caltrans began requiring the use of VMT for projects that increase roadway capacity on the State Highway System on September 15, 2020.
- VTA prepared estimates of Base VMT (including jurisdictional VMT averages and “heat maps”) across Santa Clara County using the VTA travel demand model, to assist Member Agencies in setting VMT thresholds to comply with SB 743.
- VTA developed a countywide, web and Geographic Information Systems (GIS)-based VMT Evaluation Tool for Land Use Projects that Member Agencies can use in CEQA evaluation of land use projects.

#### **STRATEGIC PLAN/GOALS:**

VTA staff’s efforts highlighted in this item align well with the VTA 2017-2022 Strategic Plan.

The work to facilitate the implementation of SB 743 falls most closely under ***Business Line 3 - Transportation System Management***, and VTA's role as the Congestion Management Agency for Santa Clara County. This effort demonstrates ***Creativity*** by establishing new, innovative resources for Member Agencies to use in SB 743 implementation; it highlights VTA's ***Collaboration*** with its Member Agencies, as well as transportation and environmental consultants, developers and advocacy organizations; and it showcases VTA's ***Leadership*** in establishing a first-of-its-kind tool launched in advance of the State's SB 743 deadline.

### **BACKGROUND:**

Senate Bill (SB) 743, approved by the California Legislature in September 2013, included changes to the California Environmental Quality Act (CEQA) and Congestion Management Program (CMP) law related to the analysis of transportation impacts. The bill directed the Governor's Office of Planning and Research (OPR) to develop alternative metrics to replace the use of vehicular Level of Service (LOS) for evaluating the transportation impacts of projects under CEQA. OPR determined that the primary metric to replace the use of LOS in CEQA will be Vehicle Miles Traveled (VMT).

Between December 2013 and November 2017, OPR released four rounds of guidance on implementing SB 743. In December 2018, the California Natural Resources Agency finalized amendments to the CEQA Guidelines which included changes to implement SB 743. At the same time, OPR released an updated *Technical Advisory on Evaluating Transportation Impacts in CEQA*. These materials are available at <http://resources.ca.gov/ceqa/> and <http://opr.ca.gov/ceqa/updates/sb-743/>. The use of VMT for analysis of land use projects under CEQA became mandatory on July 1, 2020, and Caltrans began requiring the use of VMT for projects that increase roadway capacity on the State Highway System on September 15, 2020.

Santa Clara Valley Transportation Authority (VTA) staff brought information items to the Technical Advisory Committee (TAC), the Policy Advisory Committee (PAC) and the Congestion Management Program & Planning Committee (CMPP) after each round of draft guidance from OPR, and most recently brought an item to Board Committees in September 2019. VTA is bringing this item to share information on the recent milestones in the implementation of SB 743 and provide an overview of VTA and countywide efforts in this area.

### **DISCUSSION:**

The following sections summarize how SB 743 is changing transportation analysis of proposed projects; VTA and countywide efforts related to SB 743; and key countywide resources prepared by VTA to help Member Agencies.

#### **SB 743 Changes to Transportation Analysis**

For a number of years, environmental review of proposed projects under CEQA relied on vehicular LOS, a measure of vehicular delay or congestion, as a primary measure of transportation impact. Lead Agencies analyzed LOS for proposed projects, disclosed impacts if

the LOS exceeded an established threshold, and identified mitigation measures for the impacts where feasible. SB 743 initiated a major change in CEQA transportation analysis. The legislation states that “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” (21099 (b) (2)). With the implementation of SB 743, VMT is the new primary metric for CEQA transportation analysis of land use projects statewide, as well as for CEQA analysis of capacity-increasing transportation projects on the State Highway System.

State CMP law still calls for the use of vehicular LOS in monitoring the performance of key transportation facilities and in analyzing transportation impacts of proposed land use developments, in urbanized counties that have a CMP. VTA, as the Congestion Management Agency (CMA), maintains the CMP for Santa Clara County in partnership with its 16 Member Agencies. The VTA CMP establishes a minimum standard of LOS E for CMP facilities. SB 743 amends CMP law to reinstate the ability of cities and counties to designate “Infill Opportunity Zones” where the CMP LOS standard would not apply (65088.4). These zones may be established in Transit Priority Areas or high-quality transit corridors with 15-minute or better service frequencies.

SB 743 does not preclude local agencies from applying LOS in General Plan policies, zoning codes, conditions of approval, or any other planning requirements pursuant to the police power or other authority. In other words, local agencies can retain LOS for a number of purposes, including transportation impact analysis studies, but cannot apply it to CEQA analysis. Many Member Agencies have previously established LOS thresholds for local facilities and expect to continue to analyze LOS for local purposes even with the implementation of SB 743.

#### VTA and Countywide Efforts Related to SB 743 Implementation

SB 743 has significant implications for VTA as a CMA, transit agency, and CEQA Lead Agency on transit and roadway capital projects. It also has impacts on VTA’s Member Agencies as CEQA Lead Agencies on land use and transportation projects. Over the past several years, VTA staff has been taking a leadership role in helping guide the implementation of SB 743, and Member Agencies have been working with VTA and laying the groundwork for their own implementation of SB 743. It is important to remember that VTA’s authority to guide transportation analysis is tied to its CMA role. ***Each Lead Agency should consult with CEQA experts and legal counsel regarding their own CEQA practices and updates to local policies to implement SB 743.***

Countywide efforts related to SB 743 include the following:

- VTA convened a multidisciplinary LOS-to-VMT Ad Hoc Working Group of VTA and Member Agency staff (including staff from Planning, Public Works and Transportation departments) from early 2018 through mid-2020.
- VTA prepared estimates of Base VMT (including jurisdictional VMT averages and “heat maps”) across Santa Clara County using the VTA travel demand model, to assist Member Agencies in setting VMT thresholds to comply with SB 743.

- VTA developed a countywide, web and Geographic Information Systems (GIS)-based VMT Evaluation Tool for Land Use Projects that Member Agencies can use in CEQA evaluation of land use projects.
- Member Agencies have been conducting analysis and developing options for VMT thresholds, screening criteria, and analysis practices, as well as identifying what type of non-VMT transportation analysis of proposed projects will be conducted for local purposes. As of mid-September 2020, six cities in Santa Clara County have taken a City Council action to begin using VMT in CEQA transportation analysis, and other agencies are starting to use VMT on an ad hoc basis while they work on their SB 743 policies / practices for formal adoption.
- VTA staff has been participating in the Caltrans-led statewide process of determining how VMT will be applied to capacity-increasing transportation projects, and also preparing to modify VTA's CEQA practices on all transportation capital projects to implement SB 743.
- VTA staff has been sharing information about SB 743 requirements and best practices with Member Agency staff, VTA Board Committees, transportation and environmental consultants, and interested advocacy groups and other stakeholders.

VTA staff continues to be available as a resource for Member Agency staff through meetings and conference calls upon request.

### Highlights of Countywide VMT Resources Prepared by VTA

#### *2015 Base VMT Estimates from the VTA Model*

As noted above, VTA prepared estimates of Base VMT across Santa Clara County using the VTA travel demand model. These estimates were prepared for a base year of 2015, which is the latest year for which a back-cast of population, jobs and households are available from the Association of Bay Area Governments (ABAG) and for which other empirical data such as roadway traffic volumes and transit ridership are available to help calibrate and validate the model. From this modeling, VTA estimated that Residential VMT per Capita (Home-Based VMT for all trip purposes, divided by total population) across Santa Clara County is 13.33 VMT per person, per weekday. For non-residential land uses, VTA estimated that Employment VMT Per Job (Home-Based Work VMT, divided by total jobs) across Santa Clara County is 16.64 VMT per job, per weekday. At the October 2020 Board Committee meetings, VTA staff will provide other brief highlights of these Base VMT estimates, which Member Agencies are using in setting their VMT thresholds to comply with SB 743.

#### *Santa Clara Countywide VMT Evaluation Tool for Land Use Projects*

In discussions between VTA and Member Agencies in 2018, a need was identified to develop a tool that Member Agencies could use to evaluate VMT for land use projects to help implement SB 743 consistently across the county. In response to these discussions, VTA developed a countywide, web and Geographic Information Systems (GIS)-based tool, called the Santa Clara County VMT Evaluation Tool. This tool was launched on May 22, 2020 and is available at

<https://vmttool.vta.org>.

The VMT Evaluation Tool helps users conduct a baseline VMT screening evaluation for small-to medium-sized residential, office and industrial land use projects in Santa Clara County. The Tool is capable of evaluating these land uses individually, in combination with each other, and with or without local-serving retail. The Tool screens land use projects to determine whether further VMT analysis is necessary, by identifying whether projects fall within a low-VMT area according to the applicable jurisdiction's VMT threshold, and/or whether they fall within proximity to transit. The Tool estimates the project-generated VMT associated with the proposed development using VMT data from a travel demand model at the specific project location and calculates project-generated VMT after reductions from certain VMT-reducing measures have been applied. At the October 2020 Board Committee meetings, VTA staff will provide a brief walk-through of the VMT Evaluation Tool, which many VTA Member Agencies will soon be using as part of their evaluation of proposed land use projects.

More information about VTA and countywide efforts and resources on SB 743 implementation is available at <http://www.vta.org/los-vmt>.

### **CLIMATE IMPACT:**

As an Information item, this item does not have a direct impact on climate change. However, the efforts highlighted in this item have the potential to reduce Greenhouse Gas Emissions (GHG) by helping implement SB 743. One of the main objectives of SB 743 is the reduction of GHG; SB 743 changes the way proposed projects are evaluated under CEQA and emphasizes the reduction of VMT.

Prepared By: Rob Swierk  
Memo No. 7455

# Update on SB 743 LOS-to-VMT Transition

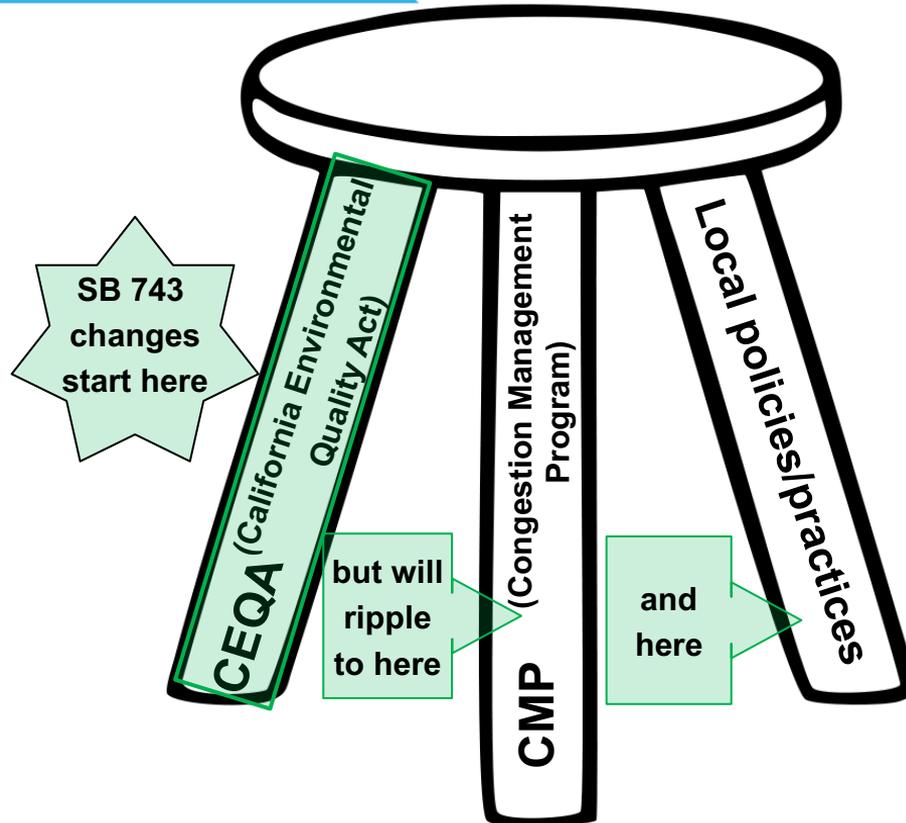
## VTA Board Committees

October 2020

# Background: LOS and VMT

- **Vehicular Level of Service (LOS)** is a way of measuring transportation performance that focuses on delay and congestion; letter scale from A to F
- **Vehicle Miles Traveled (VMT)** measures the total amount of vehicular travel across the system, rather than at specific points; usually shown as average daily VMT per person

# Background: Transportation Analysis of Development Projects



# Senate Bill 743 – Overview

SB 743 primarily changes CEQA:

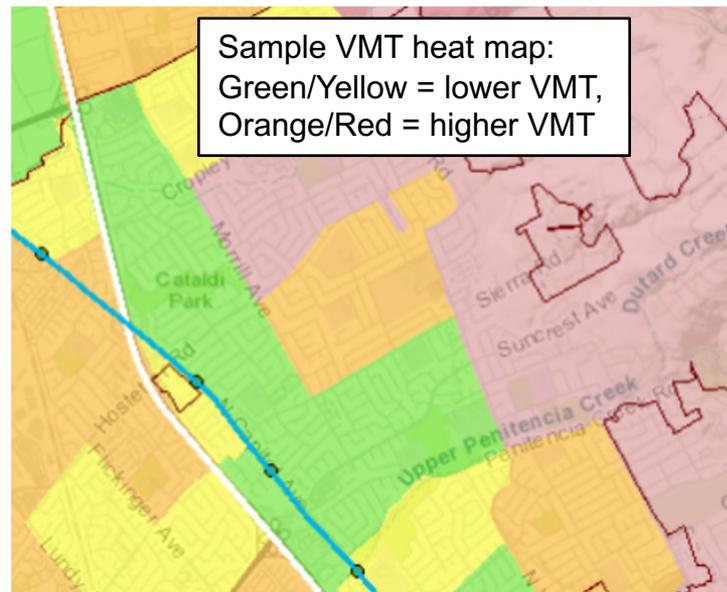
- **“Automobile delay**, as described solely by level of service or similar measures... **shall not be considered a significant impact on the environment...”**
- New primary metric is **VMT** – aligns with climate goals

Milestones:

- Dec. 2018 – CA Natural Resources Agency adopted new CEQA Guidelines
- **July 1, 2020 – Lead Agencies required to begin using VMT for analysis of land use projects in CEQA**
- September 15, 2020 - Caltrans began requiring the use of VMT for projects that increase roadway capacity on the State Highway System

# Countywide VMT Resources – Base VMT

- VTA staff has produced 2015 Base VMT estimates and “heat maps” across Santa Clara County
- VMT estimates are produced from the VTA travel demand model:
  - Land use totals provided by regional agencies and land use allocation reviewed by Member Agency staff
  - Transportation network and model calibration and validation reviewed by VTA staff
- VTA provided these to Member Agency staff in Jan/Feb 2020 to assist in their work



# Santa Clara Countywide VMT Evaluation Tool

- VTA, in coordination with Member Agencies, developed a web-based VMT Evaluation Tool to screen and evaluate VMT generated by land use projects
- Covers three main land uses (alone or in combination, with or without ancillary retail):
  - Residential
  - Office
  - Industrial
- Intended to be one part of a Lead Agency's land use evaluation process under SB 743
- The tool was launched on May 22, 2020 - at <https://vmttool.vta.org>

# Santa Clara Countywide VMT Evaluation Tool

**Valley Transportation Authority** Santa Clara Countywide VMT Evaluation Tool

USER AGREEMENT REPORT A PROBLEM/FEEDBACK

Select Project Area

Find address or place

**Select Jurisdiction**

Which jurisdiction rules do you want to follow?

**Jurisdiction**

**Select Project Location**

Zoom in to your project location. Use the map controls (Add/Remove) below to click on the parcel(s) that represent your project location. Alternatively, you can type the APN in the search box. For multiple APNs, type in one at a time and repeat this process for each new parcel. Each parcel entry will be added to your project list (maximum 25 parcels).

**Select Jurisdiction**  
In most cases, this selection will be the same as the jurisdiction in which the project is located. In unincorporated county "islands" (pockets of unincorporated Santa Clara County that are all or mostly surrounded by an incorporated city) this should be the surrounding city.

**Select Project Area screen**

**Enrich Map with Layers**

Turn layers on and off and adjust visibility to aid in parcel selection.

70608026

Esri, NASA, NGA, USGS, FEMA | Esri Community Maps Contributors, City of San Jose, County of Santa Clara, County ... Powered by Esri

# Santa Clara Countywide VMT Evaluation Tool

The screenshot displays the 'Santa Clara Countywide VMT Evaluation Tool' interface. The top navigation bar includes the Valley Transportation Authority logo, the tool name, and links for 'USER AGREEMENT' and 'REPORT A PROBLEM/FEEDBACK'. The main content area is divided into two primary sections: 'Determine Screening Inputs' and 'Land Use Info & VMT Reductions Strategies'.

**Determine Screening Inputs** (Left Panel):

- Project Information:** Fields for Project Name, Project Description, and APN Number(s) (70608026).
- Select Version of VMT Tool and Base Data:** Fields for VTA VMT Tool Version and Data Version.
- Analysis Methodology:** Section for selecting methodology.
- VMT Metric Specification for Land Use 1:** Fields for Land Use Type, VMT Metric, Jurisdictional Average for Baseline, and Threshold (% reduction from baseline year).
- VMT Metric Specification for Land Use 2:** Field for Land Use Type.

**Land Use Info & VMT Reductions Strategies** (Right Panel):

- Project Land Use Information:** Fields for Residential (Single-Family, Multi-Family), Residential Affordability (percent of all units), and Non-Residential (Office, Local Serving Retail).
- VMT Reduction Strategies:** Select and provide information for applicable VMT Reduction strategies. Items that are greyed out are not available in the chosen jurisdiction.
- Tier 1 Project Characteristics:** Includes checkboxes for PC01 Increase Residential, PC02 Increase Development, and PC03 Affordable Housing.
- Tier 2 Multimodal Infrastructure, Tier 3 Parking, and Tier 4 TDM Programs:** Additional strategy categories.

Determine Screening Inputs screen

Land Use Info & VMT Reductions screen

# Santa Clara Countywide VMT Evaluation Tool

## Santa Clara Countywide VMT Evaluation Tool Report



### Project Details

Timestamp of Analysis: September 29, 2020, 05:47:14 PM  
 Project Name: TEST  
 Project Description: Testing

### Project Location

Jurisdiction: San Jose  
 APN: 70608026 TAZ: 664

Inside Transit Priority Area (TPA)?  
 No (Fail)

### Analysis Details

Santa Clara Countywide VMT Evaluation Tool Version: 1  
 Data Version: CSJ 2015 Model  
 Analysis Methodology: Parcel Buffer Method  
 Baseline Year: 2015

### Project Land Use

**Residential:**  
 Single Family DU: \_\_\_\_\_  
 Multifamily DU: \_\_\_\_\_  
 Total DUs: 0

**Non-Residential:**  
 Office KSF: 100  
 Local Serving Retail KSF: 5  
 Industrial KSF: \_\_\_\_\_

**Residential Affordability (percent of all units):**  
 Extremely Low Income: 0 %  
 Low Income: 0 %  
 Moderate Income: 0 %

Parking: 350  
 Loading: 100

Sample Report –  
 Project Overview page

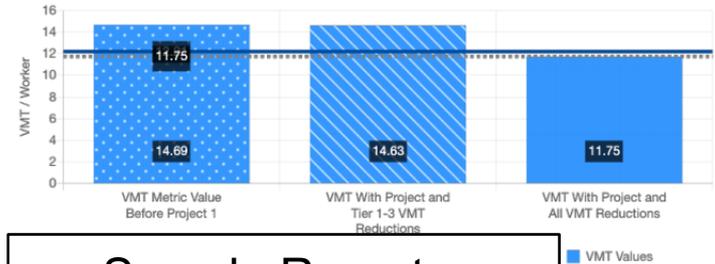
## Santa Clara Countywide VMT Evaluation Tool Report



### Office Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Office
VMT Without Project:	Home-based Work VMT per Worker
VMT Baseline Description 1:	Bay Area Regional Average
VMT Baseline Value 1:	14.37
VMT Threshold Description 1:	Regional Threshold (-15%)
Land Use 1 has been Pre-Screened by the Local Jurisdiction:	Yes, Screening Failed

	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	14.69	14.63	11.75
Low VMT Screening Analysis	No (Fail)	No (Fail)	Yes (Pass)



Sample Report –  
 Individual Land Use  
 screening page

# Summary

- Staff is bringing this item for Information because the state has passed key milestones recently, and because it may be helpful to VTA Committee members in their roles in their own communities.
- VTA has produced several countywide VMT resources that will help cities and the County with the implementation of SB 743.
- VTA Member Agencies are in the process of making the transition to VMT in their own policies and practices.
- More information is available at <https://www.vta.org/los-vmt>