

City of Encinitas SB 743 VMT Analysis Guidelines

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List of Abbreviated Terms

ADT	average daily traffic
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CEQA	California Environmental Quality Act
City	City of Encinitas
CSTDM	California Statewide Travel Demand Model
EIR	Environmental Impact Report
FHWA	Federal Highway Administration
GHG	greenhouse gas
IX	internal-to-external
LMA	Local Mobility Analysis
MXD	mixed-use development
O-D	origin-destination
OPR	Governor's Office of Planning and Research
RTP	Regional Transportation Plan
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCS	Sustainable Communities Strategy
TAZ	transportation analysis zone
TDM	transportation demand management
TSM	transportation system management
VMT	vehicle miles traveled
XI	external-to-internal
XX	external-to-external

I. VMT Analysis

The City provides guideline documents for evaluating transportation for (1) California Environmental Quality Act (CEQA) analysis and (2) discretionary/entitlement non-CEQA Local Mobility Analysis (LMA). Both guidelines are required to be reviewed to assess the potential effects of new development on the City's roadway and mobility system (see **Appendix A** for scoping information). The VMT guidelines for determining transportation CEQA impacts are presented in this document.

A. Overview

Under the CEQA, all phases of a project must be considered when evaluating its impact on the environment: planning, acquisition, development, and operation. The determination of whether a project may have a significant effect on the environment calls for a careful judgment on the part of the public agency ("Lead Agency") involved. Thresholds of significance, as defined in California Environmental Quality Act Guidelines ("CEQA Guidelines") Section 15064.7(a), may assist lead agencies in determining whether a project may cause a significant impact. In the past, CEQA review of a project's *transportation* impacts focused primarily on metrics related to vehicle delay and Level of Service (LOS). These analysis requirements involved a quantitative analysis to determine whether a project may have a significant impact on the roadway network pursuant to CEQA.

Senate Bill (SB) 743 was passed by the legislature and signed into law in the fall of 2013. This legislation led to a change in the way that transportation impacts are measured under the California Environmental Quality Act (CEQA). The California Natural Resources Agency updated the Guidelines for the Implementation of the CEQA Guidelines in December 2018. Per the CEQA Guidelines, starting on July 1, 2020, automobile delay and LOS are no longer used as the performance measure to determine the transportation impacts of land development projects under CEQA. Instead, an alternative metric that supports the goals of the SB 743 legislation is necessary. CEQA Guidelines Section 15064.3 provides requirements for determining the significance of transportation impacts and states, "This section describes specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled is the most appropriate measure of transportation impacts." VMT is a metric that accounts for the number of vehicle trips generated and the length or distance of those trips. VMT does not directly measure traffic operations but instead is a measure of network use or efficiency, especially if expressed as a function of population or employment (e.g., VMT/capita or VMT/employee). The traditional use of VMT in environmental impact analysis is to estimate mobile air pollution emissions, GHGs, and energy consumption. Note that VMT can be reported and defined in multiple ways and the VMT metric that is used for calculations in other environmental impact analysis resource areas differs from the VMT metric used for transportation impact analysis purposes.

SB 743 does not prevent an agency from continuing to analyze local mobility in terms of delay or LOS as part of other plans (e.g., general plans); studies; congestion management plans; or transportation improvement plans, but these metrics may no longer constitute the basis for CEQA transportation impacts as of July 1, 2020. CEQA requires VMT analysis for compliance with state policies to evaluate a project's potential impacts related to VMT significance criteria. Projects that have been deemed complete prior to the adoption of these VMT guidelines are not subject to the regulations herein, unless the project description has changed such that impacts need to be reassessed.



The VMT analysis will:

- Enable proposed development projects to comply with current CEQA requirements as a result of the implementation of SB 743.
- Outline the City's VMT significance thresholds, screening criteria, and methodology for conducting the transportation VMT analysis.
- Help determine if mitigation is required to offset a project's significant VMT impacts.
- Identify VMT reduction measures and strategies to mitigate potential impacts below a level of significance.
- Reduce the need to widen or build roads through effective use of the existing transportation network and maximize the use of alternative modes of travel throughout the City.

To comply with the new legislation, the City of Encinitas has identified VMT analysis methodology, established VMT thresholds for CEQA transportation impacts, and identified possible mitigation strategies.

B. Metric and Methodology for Calculating VMT

In general, transportation VMT analysis for CEQA should be conducted using the SANDAG Regional Travel Demand Model, data from the model, or another appropriate data source (coordinated with City staff). The typical VMT metrics are VMT/capita, VMT/employee, and Total VMT.

There may be special circumstances under which other tools and techniques should be used to perform VMT analysis. There are unique land uses that are not appropriately modeled using the SANDAG model, such as uses that have the majority of their activity on the weekends (the SANDAG Model produces weekday results). The applicant's consultant should coordinate with City staff if a VMT estimate tool other than the SANDAG Model is proposed for use.

Summary of Metrics by Project Type

The following summarizes the appropriate metric for various types of projects. Detailed definitions of the metrics follow.

- Residential: VMT/capita
- General Employment: VMT/employee
- Industrial Employment: VMT/employee
- **Regional Retail, Regional Recreational, or Regional Public Facilities:** Change in total VMT (using the boundary method)
- **Mixed-Use:** Each project component is evaluated per the appropriate metric based on land use type (e.g., residential, employment, and retail)
- Transportation Project: Change in total VMT (using the boundary method)
- Unique circumstances may require alternate metrics



VMT per Capita

VMT/capita is established by summing up the total daily VMT generated by residents of a geographic area and dividing it by the population of that geographic area. Total daily VMT includes all trip tours made by residents: home-based and non-home-based trip tours (i.e., all VMT for a resident for the entire day regardless of trip purpose or origin/destination).

To analyze the VMT/capita for a proposed project, the total daily VMT generated by project residents is divided by the project resident population.

SANDAG has a procedure to produce VMT/capita; however, the SANDAG procedure to produce this metric only includes VMT generated within the SANDAG region by residents of the SANDAG region. If a project is expected to produce consistent travel outside of the SANDAG region, the VMT outside of the region should be included in the analysis. To account for VMT generated by residents of the SANDAG region traveling outside of the region, the SANDAG model data should be appended with the VMT that occurs by SANDAG region residents outside of the region. The Institute of Transportation Engineers (ITE) San Diego Section has a Task Force Committee that provides recommendations for performing various transportation analyses in our region. The San Diego Section task force has produced a white paper¹ on accounting for VMT produced outside of the SANDAG region. The paper can be found on the San Diego ITE Section website at https://sandiegoite.org/tcm-task-force.

VMT per Employee

VMT/employee is established by summing the total daily VMT generated by resident employees of a geographic area and dividing it by the number of employees in that geographic area. The SANDAG ABM 2+ VMT/employee metric is for all work-related trips (i.e., commute, trips to and from work to lunch/meetings, etc.). Employees whose work location is specified as home are not included in the calculations. To analyze the VMT/employee for a proposed project, the total daily work-related VMT produced by the project's employees is divided by the total number of employees.

The procedure developed by SANDAG to calculate VMT/employee by transportation analysis zone (TAZ) only accounts for VMT generated within the SANDAG region by employees who are also residents of the SANDAG region. Employees that live outside of the region and travel into the SANDAG region for work are not accounted for because of the nature of the calculation. The ITE San Diego Section Task Force white paper also describes an approach for accounting for external VMT related to the VMT/employee metric.

Total VMT

Total VMT can be calculated by either of two methods – the Boundary Method or the Origin-Destination Method.

¹<u>https://static1.squarespace.com/static/5ab6b8a33e2d09b08935bcb1/t/6282d9a488d5197792120f5a/165274258177</u> 9/SANDAG+Model+External+VMT+Adjustment+Methodology+5-9-22.pdf



Boundary Method

Total daily VMT (Boundary Method) within a given area can be measured by multiplying the daily volume on every roadway segment by the length of every roadway segment within the area. This is called Boundary Method VMT. Examples of Total VMT (Boundary Method) are VMT within the SANDAG region, VMT within a defined planning area, or VMT within the market area to be served by the project. This metric is used to analyze regional retail, service, recreational, regional public facilities, and transportation infrastructure projects.

Origin-Destination Method

Total daily VMT (Origin-Destination Method) within a given area can be calculated directly from model outputs by multiplying the origin-destination (O-D) trip matrix by the final assignment skims (O-D Method VMT). The total VMT value should be appended to include VMT from all trips that enter or exit the SANDAG region. This metric is used to evaluate a regional project if that project is expected to draw trips from outside the region (e.g., an amusement park).

Other VMT Metrics

There may be circumstances where other types of VMT metrics may be appropriate, such as projects that draw people from outside of the SANDAG region. One of these is the VMT/service population metric. VMT/service population is established by dividing the total VMT with at least one trip end in a geographic area by the population plus employment of that geographic area. The total VMT includes all internal VMT, internal-to-external, and external-to-internal VMT (i.e., all VMT regardless of geographic boundaries). Since this metric combines VMT for residents and employees and reflects how accessible all land uses are (e.g., geographies with higher density, more shopping, and more jobs will have lower VMT/service population) it can be useful to understand a variety of project types. To analyze the VMT/service population for a proposed project, the project's total VMT (using the origin-destination method) is divided by the project population plus employment. Use of an alternate metric, such as VMT/service population, should be used only when standard metrics are not applicable and after coordinating with City staff in advance.

C. VMT Analysis for Land Use Projects

Screening Criteria for CEQA VMT Analysis

The requirements to prepare a detailed transportation VMT analysis apply to all land development projects, except those that meet at least one of the screening criteria. A project that meets at least one of the screening criteria below would be presumed to have a less than significant VMT impact due to project characteristics and/or location. **Appendix B** provides information/evidence to support these screening criteria.

Small Project Daily Vehicle Trip Screening

Per OPR's Technical Advisory, projects that generate less than 110 ADT would be presumed to have a less than significant transportation impact. Projects that can demonstrate that they would generate an ADT of less than 110 after applying trip-reduction strategies would be screened out from performing additional analysis.



Projects Located in a Transit-Accessible Area

Projects located within a half-mile radius of an existing major transit stop or an existing stop along a highquality transit corridor² may be presumed to have a less-than-significant impact absent substantial evidence to the contrary. Distance to transit shall be determined with radius or "as the crow flies" measurements and shall be measured from the edge of the transit platform. Any portion of the project site may be located within such radius to be considered. Note that the Coaster Rail Station is considered a major transit stop. A map of existing major transit stops and existing stops along high-quality transit corridors is provided in **Appendix C**.

The presumption of a less-than-significant impact near these transit stops may not be appropriate if the project:

- Has a Floor Area Ratio of less than 0.75
- Includes more parking for use by residents, customers, or employees of the project than required by the City
- Is inconsistent with SANDAG's most recent Sustainable Communities Strategy or the land use growth assumption accommodated by the Land Use Element portion of the General Plan
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units
- Does not have basic walking and biking access to transit (e.g., sidewalks connecting to transit stops)

Projects in a VMT-Efficient Area

A VMT-efficient area is any area within the City with an average VMT/capita or VMT/employee below the thresholds as compared to the baseline regional average for the TAZ it is located within, as provided on the City's VMT screening maps that are produced using current City land use data and the SANDAG model. When TAZ data is unavailable, census tract data shall be used. Note that the data on the SANDAG "San Diego Region SB 743 Maps" website³ does not reflect the latest land use information for the City. The City-specific VMT screening maps (available through consultation with City staff) should be

https://sandag.maps.arcgis.com/apps/webappviewer/index.html?id=bb8f938b625c40cea14c825835519a2b. As SANDAG updates the model to reflect development and planning throughout the region, the screening maps will be updated and may change resulting in development that may have at one time been screened to no longer be screened and vice versa. As the model is updated, earlier versions of the model will also cease to be supported by SANDAG, meaning that model runs can no longer be completed with the previous versions of the model. If a project begins the transportation study process using one version of the model that becomes unsupported during the process, the project can utilize model outputs from the older model version, as long as no additional modeling work will be done. Projects cannot complete their transportation analysis using multiple model versions.



² Major transit stop: a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. High quality transit corridor: a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute periods.

³ The VMT/Capita and VMT/Employee screening maps are created using information from the current version of the SANDAG model at the time a project notice of preparation (NOP) is produced. The SANDAG "San Diego Region SB 743 Maps" are available at:

utilized until the data provided on SANDAG's website reflects the latest City land uses, which is expected to occur with the SANDAG 2025 Regional Plan model.

Residential projects located within a VMT-efficient area may be presumed to have a less-thansignificant impact absent substantial evidence to the contrary. A VMT-efficient area for residential projects is any area with an average VMT/capita 15% below the baseline City average based on the TAZ it is located within. When TAZ data is unavailable, census tract data shall be used.

Employment projects located within a VMT-efficient area may be presumed to have a less-thansignificant impact absent substantial evidence to the contrary. A VMT-efficient area for employment projects (excluding industrial employment projects) is any area with an average VMT/employee at or below the baseline regional average based on the TAZ it is located within. When TAZ data is unavailable, census tract data shall be used.

Mixed-Use projects located within a VMT-efficient area for each of its land uses may be presumed to have a less-than-significant impact absent substantial evidence to the contrary. Refer to the appropriate section for each land use included as a part of the mixed-use project to determine the definition of a VMT-efficient area for each land use.

Locally-Serving Retail Projects

Local serving retail projects less than 50,000 square feet may be presumed to have a less than significant impact absent substantial evidence to the contrary. Local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel.

Locally-Serving Public Facilities

Public facilities that serve the surrounding community or public facilities that are passive use may be presumed to have a less-than-significant impact absent substantial evidence to the contrary. The following are considered locally serving facilities:

- Transit centers
- Public schools
- Libraries
- Post offices
- Park-and-ride lots
- Police and fire facilities
- Parks and trailheads
- Government offices
- Passive public uses, including communication and utility buildings, water sanitation, and waste management
- Other public uses as shown in Appendix D or determined by City staff



Redevelopment Projects with Lower Total VMT

A redevelopment project may be presumed to have a less-than-significant impact absent substantial evidence to the contrary if the proposed project's total project VMT is less than the existing land use's total VMT and the CEQA action includes closing the existing land use. For projects that meet one of the screening criteria for CEQA VMT analysis, a detailed VMT analysis is not necessary. The Transportation Impact Analysis must include a technical memorandum to document the screening process and findings, including attaching screening maps and/or other relevant supporting data. Additionally, the Transportation Impact Analysis must include a conclusion that the transportation impact is presumed to be less than significant in accordance with criterion b, Section XVII of Appendix G to the CEQA Guidelines.

Affordable Housing

An affordable housing project may be presumed to have a less than significant impact absent substantial evidence to the contrary if 100 percent of units are affordable.

VMT Thresholds of Significance

Projects that do not meet the above screening criteria must include a detailed evaluation of the VMT produced by the project. The significance thresholds and specific VMT metrics used to measure VMT are described by land use type below. Justification for these thresholds is provided in **Appendix B**.

- Residential: 15% below the existing citywide average
- Employment (Includes all employment types: office, commercial, hotel, industrial, etc.): At or below the regional average
- **Mixed-Use:** Each project component is evaluated per the appropriate metric based on land use type (e.g., residential, employment, and retail)
- **Regional Retail, Regional Recreational, or Regional Public Facilities:** A net increase in total regional VMT using the boundary method

Appendix D provides a list of unique project types and which land use category is appropriate for VMT analysis purposes.

Specific Plans or General Plan Amendments: The land use plan should be compared to the region overall. Comparison to the region is appropriate because large land use plans can have an effect on regional VMT (akin to how a regional retail project affects regional VMT). The significance thresholds described above apply to specific plans or General Plan Amendments. In addition, plan buildout/cumulative analysis is needed. Additional information regarding the significance thresholds presented here is provided in **Appendix B**.

VMT Analysis Procedures

For projects that are not screened and must provide a detailed evaluation of the VMT produced by the project, guidance is provided below on how to conduct transportation VMT analysis by project type. In addition, **Figure 1** displays the VMT analysis process. Note that there may be unique circumstances that require the use of tools/techniques other than the SANDAG Regional Travel Demand Model. The use of a tool other than the SANDAG Model shall be discussed, documented, and approved by City staff in advance.





Residential Projects

For projects that generate fewer than approximately 2,400 daily⁴ **unadjusted driveway trips**: Identify the location of the project on the City's VMT screening maps that are produced using current City land use data and the SANDAG model (consult City staff for appropriate map to use). The project's opening year VMT/capita will be considered the same as the VMT/capita of the TAZ in which it is located. When TAZ data is unavailable, census tract data shall be used. Compare the project's VMT/capita to the threshold to determine if the impact is significant, or input the project into the SANDAG Regional Travel Demand Model to determine the project's VMT/capita.

For projects that generate 2,400 or greater daily unadjusted driveway trips: Input the project into the SANDAG Regional Travel Demand Model to determine the project's VMT/capita. Consult City staff on version of model to use. To perform the analysis, all project land uses should be inputted, and the VMT/capita should be determined using the same method/scripts that SANDAG utilizes to calculate the VMT/capita metric. Note that there may be some circumstances where use of the screening maps or other sketch modeling tools are appropriate for larger projects.

Employment Projects

For projects that generate fewer than 2,400 daily⁵ unadjusted driveway trips: Identify the location of the project on the City's VMT screening maps that are produced using current City land use data and the SANDAG model (consult City Staff for appropriate map to use). The project's opening year VMT/Employee will be considered the same as the VMT/Employee of the TAZ in which it is located. When TAZ data is unavailable, census tract data shall be used. Alternatively, the project's VMT can be determined by inputting the project into the SANDAG Regional Travel Demand Model in the manner previously described. Compare the project's VMT/Employee to the threshold to determine if the impact is significant.

For projects that generate 2,400 or greater daily unadjusted driveway trips: Input the project into the SANDAG Regional Travel Demand Model to determine the project's VMT/Employee. Consult City staff on version of the model to use. To perform the analysis, all project land uses should be inputted, and the VMT/Employee should be determined using the same method/scripts that SANDAG utilizes to develop the VMT/Employee metric. Note that there may be some circumstances where use of the screening maps or other sketch modeling tools are appropriate for larger projects.

Retail Projects

Calculate the change to area VMT using the SANDAG Travel Demand Model (or other appropriate sketch model as coordinated with City Staff). To calculate the change in area VMT, the regional retail component of the project should be inputted into the travel demand model (year that is used to determine the VMT

⁵ 2,400 daily trips is a historical "rule of thumb" number that may be updated periodically based on the travel demand model sensitivity. Applicants should coordinate with City staff to confirm the project size at which the travel demand model should be run. As described, a variety of considerations go into the selection of which VMT modeling tool should be used.



⁴ 2,400 daily trips is a historical "rule of thumb" number that may be updated periodically based on the travel demand model sensitivity. Applicants should coordinate with City staff to confirm the project size at which the travel demand model should be run. As described, a variety of considerations go into the selection of which VMT modeling tool should be used.

thresholds). The "with project regional retail" area VMT produced by the model run is compared to the "no project" area VMT.

Mixed-Use Projects

Evaluate each individual project component per the appropriate metric based on land use type (e.g., residential, employment, and retail) as described above.

Other Projects

Input the project into the SANDAG Regional Travel Demand Model or coordinate with City staff on an appropriate sketch modeling tool to utilize for the analysis. To perform the analysis using the SANDAG model, all project land uses should be inputted, and the VMT metric that is appropriate based on the land use type should be determined using the methodology described in Section B.

VMT Reductions

If the project includes transportation demand management (TDM) measures, the reduction in VMT due to each measure shall be calculated and can be applied to the project analysis. See Section E for resources for determining the reduction in VMT due to TDM measures.

The VMT reductions associated with project TDM should be applied to the appropriate metrics based on the project land uses. If the project does not include any TDM, then no reduction is taken.

The resulting VMT values should be compared to the appropriate threshold (described previously under **VMT Thresholds of Significance**) to determine whether the project results in a significant CEQA transportation impact due to VMT.

D. VMT Analysis for Transportation Projects

Projects that result in an increase in additional motor vehicle capacity (such as constructing a new roadway or adding more vehicle travel lanes to an existing roadway) have the potential to increase vehicle travel, referred to as "induced vehicle travel."

Appendix E contains a list of transportation projects that, absent substantial evidence to the contrary, do not require an induced travel/VMT analysis since they typically do not cause substantial or measurable increases in VMT.

For all other projects, a VMT analysis must be done. To calculate the change in area VMT (boundary method), the project should be inputted into the travel demand model. The "with project" area VMT produced by the model run is compared to the "no project" area VMT. A net increase in area VMT indicates that the project has a significant impact.



E. VMT Reduction and Mitigation Measures

To mitigate VMT impacts, the project applicant must reduce VMT, which can be done by either reducing the number of automobile trips generated by the project or by reducing the distance that people drive. The following strategies are available to achieve this:

- Modify the project's built environment characteristics to reduce VMT generated by the project.
- 2. Implement TDM measures to reduce VMT generated by the project.

Strategies that reduce single-occupant automobile trips or reduce travel distances are called TDM strategies. There are several resources for determining the reduction in VMT due to TDM measures, such as the California Air Pollution Control Officers Association (CAPCOA) *Quantifying Greenhouse Gas Mitigation Measures* (2010) (Quantification Report).



CAPCOA GHG Handbook, which includes quantification of VMT reducing measures.

- CAPCOA Quantification Report
 - Original 2010 version: <u>http://www.aqmd.gov/docs/default-source/ceqa/handbook/capcoa-quantifying-greenhouse-gas-mitigation-measures.pdf</u>
 - Updated Handbook released in December 2021: <u>https://www.airquality.org/air-quality-health/climate-change/ghg-handbook-caleemod</u>

All resources above include equations that address the diminishing value or decreased effectiveness of TDM measures when those measures are used in combination. The equation below should be used by applicants to accurately quantify the effectiveness of a proposed TDM program.

Total VMT Reduction =
$$1 - (1 - P_a) * (1 - P_b) * (1 - P_c) * ...$$

where:

 P_x = percent reduction of each VMT reduction strategy

Additionally, applicants should be aware of limits to overall program effectiveness (i.e., VMT reduction) that may be achieved from TDM strategies dependent on the project's land use context. Projects that are in urban areas have a higher limit of effectiveness (i.e., they can result in higher VMT reductions) than those in suburban areas. The formula defines the particular conditions that lead to different ways that the TDM measure may be applied or how a TDM measure might be applied in different circumstances. That is, the proposed effective and appropriate TDM measures are based on the project's size, location, and land uses for varying levels of implementation.

Special attention should be given to ensuring that measures are not double-counted through the transportation analysis process. For example, if a project identifies telecommuting as a reduction strategy, care should be taken to identify the level of telecommuting that has already been assumed as part of the



travel demand model through coordination with SANDAG modeling staff or review of SANDAG model documentation available on SANDAG's website.

The City of Encinitas is considering programmatic VMT mitigation strategies that would provide a mechanism to reduce VMT citywide or regionwide and take credit for the reductions at a project level. The following are descriptions of programmatic VMT options that are being considered throughout the state:

- VMT Impact Fee Program This concept resembles a traditional impact fee program in compliance with the mitigation fee act and uses VMT as a metric. The nexus for the fee program could be a VMT reduction goal consistent with the CEQA threshold established by the City. The main difference from a fee program based on a metric such as vehicle LOS is that the VMT reduction nexus results in a capital improvement program (CIP) consisting largely of transit, bicycle, and pedestrian projects. These types of fee programs are recognized as an acceptable program to be included in CEQA analysis if they can demonstrate that the CIP projects will be fully funded and implemented.
- VMT Exchanges This concept (along with VMT banks) borrows mitigation approaches from other environmental analysis such as wetlands. The concept relies on an applicant agreeing to implement a predetermined VMT reducing infrastructure project or program or proposing a new one in exchange for applying the VMT reduction achieved to the VMT-generating land development project. The exchange program projects/programs may or may not be located near the applicant's land development project site. The concept requires a facilitating entity (such as the City) to match the VMT generator (the development project) with the VMT reducing project and ensure through substantial evidence that the VMT reduction is valid.
- VMT Banks This concept attempts to create a monetary value for VMT reduction (e.g., credits) such that an applicant could purchase VMT reduction credits. For example, a program might offer subsidized transit passes to the existing community, bank the VMT reduction achieved through converting vehicle trips to transit trips due to the passes as a credit, and sell the VMT credit to applicants that have VMT impacts.

Until such a program is explored and adopted, project site specific VMT mitigation is required to reduce significant VMT impacts.

F. Cumulative VMT Impacts

Since VMT is a composite metric that will continue to be generated over time, a key consideration for cumulative scenarios is whether the rate of VMT generation gets better or worse in the long term. If the rate is trending down over time consistent with expectations for air pollutants and GHGs, then the project-level analysis may suffice. However, the trend direction must be supported with substantial evidence. A project would result in a significant project-generated VMT impact under cumulative conditions if the applicable cumulative project-generated VMT thresholds are exceeded.

Measuring the project's effect on VMT is necessary especially under cumulative conditions to fully explain the project's impact. A project effect on VMT under cumulative conditions would be considered significant if the cumulative link-level boundary VMT/capita or VMT/employee for the San Diego region increases under the "plus project" condition compared to the "no project" condition.



Please note that the cumulative "no project" condition shall reflect the adopted Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS); as such, if a project is consistent with the regional RTP/SCS, then the cumulative impacts shall be considered less than significant.



Appendix A: Scoping Agreement Form

Project Information Form for VMT Analysis Studies

The Project Information Form (PIF) is to be completed by the applicant. The PIF is subject to change.

General Project Information and Description

Owner/Applicant Information			
Name:			
Address:			
Phone Number:			
Email:			

Project Information

Project Name:	
Project Address:	
APN:	
Land Use Designation:	Zoning Designation:

Project Description

Land Uses and Intensities		
(units, square feet, etc.):		

Consultant

Name of Firm:	
Project Manager:	Credentials:
Address:	
Telephone:	

Trip Generation

[Use the SANDAG (Not So) Brief Guide of Vehicular Trip Generation]

Total Unadjusted Daily Trips:
Internal Capture:
Alternative Modes:
Pass-By Trips:
Total Net New Project Trips (used for small project screening):
If Redevelopment, Existing Site Trip Generation:

Site Plan

Attach 11x17 copies of the project location/vicinity map and site plan containing the following:

- Driveway locations and access type
- Pedestrian access, bicycle access, and on-site pedestrian circulation



Project Information Form for VMT Analysis Studies

- Location and distance to closest existing transit stop (measure as walking distance to project entrance or middle of parcel)
- Location of any planned sidewalks or bikeways identified in the City of Encinitas Active Transportation Plan within ½ mile of the project

CEQA Transportation Analysis Screening

To determine if your project is screened from VMT analysis, review the Project Type Screening and the Project Location Screening tables below, based on recommendations provided by the Governor's Office of Planning and Research (OPR) Technical Advisory¹. If "No" is checked for any project type or land use applicable to your project, the project is not screened out and must complete VMT analysis in accordance with the analysis requirements outlined in the City of Encinitas *Mobility Analysis Guidelines (MAGs)*.

Project Type Screening

1. 2.	Select Answe (if "Yes portior	the Land Uses that apply to your project r the questions for each Land Use that applies to your project " is indicated in any land use category below, then that land use (or a of the land use) is screened from CEQA Transportation Analysis)	Screened Out	Not Screened Out
	Note: A eviden	All responses must be documented and supported by substantial ce.	Yes	No
	1.	Locally Serving Retail Project a. Is the project less than 50,000 square feet and serving the local community? The City may request a market capture study that identifies local market capture to the City's satisfaction.		
	2.	 Locally Serving Public Facility or Community Purpose Facility a. Is the project a public facility or Community Purpose Facility that serves the local community? 		
	3.	Daily Vehicle Tripsa. Does the project generate less than 110 net daily trips?		
	4.	Redevelopment Project a. Is the proposed project's total project VMT less than the existing land use's total VMT? And the CEQA action includes closing the existing land use?		

Project Location Screening

1. 2.	Select the Land Uses that apply to your project Answer the questions for each Land Use that applies to your project (if "Yes" is indicated in any land use category below, then that land use (or a portion of the land use) is screened from CEQA Transportation Analysis)	Screened Out Yes	Not Screened Out No
	1. Residential a. Is the project located in a VMT-efficient area (15% below the citywide average) using the City's VMT screening maps that are produced using current City land use data and the SANDAG model? View VMT/Capita map here: https://encinitas.maps.arcgis.com/apps/instant/portfolio/index.htm https://encinitas.maps.arcgis.com/apps/instant/portfolio/index.htm 		

¹ <u>https://opr.ca.gov/docs/20190122-743</u> Technical Advisory.pdf



Project Information Form for VMT Analysis Studies





Project Information Form for VMT Analysis Studies

3. Within a transit area

a.	Is the project within ½ mile of a major transit stop or within ½ mile
	of a stop along a high quality transit corridor, and has the following
	project characteristics?

- i. Has a Floor Area Ratio (FAR) of more than 0.75
- ii. Includes no more than the minimum parking for use by residents, customers, or employees of the project than required by the jurisdiction
- iii. Is consistent with the City of Encinitas General Plan
- iv. Does not replace affordable residential units with moderate- or high-income residential units



Appendix B: Screening Criteria and Threshold Evidence

SCREENING CRITERIA AND THRESHOLD EVIDENCE

This appendix provides context and evidence for the transportation VMT metrics screening criteria and threshold evidence.

Screening Criteria

Certain types of development projects are presumed to have less than significant impacts to the transportation system, and therefore would not be required to conduct a detailed VMT analysis, if any of the following criteria are established, based on substantial evidence.

Small Residential and Employment Projects

Small projects that would generate less than 110 average daily vehicle trips (ADT), would also not result in significant transportation impacts on the transportation system:

Evidence – The OPR Technical Advisory states that "projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant impact." This is supported by the fact that CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development, and the project is not in an environmentally sensitive area (CEQA Guidelines, § 15301(e)(2)). Typical project types for which trip generation increases relatively linearly with building footprint (e.g., general office building, single tenant office building, office park, or business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact.

Projects Located in a Transit-Accessible Area

Per OPR's Technical Advisory projects whose project site boundaries are within a half mile of a major transit stop or a major stop along a high-quality transit corridor can be screened out of VMT analysis. Within the City of Encinitas, this would apply to projects within one half mile of the Encinitas Coaster station. This presumption would not apply, however, if project-specific or location-specific information indicates that the project will still generate significant levels of VMT. The presumption of a less-than-significant impact near these transit stops may not be appropriate if the project:

- Has a Floor Area Ratio of less than 0.75
- Includes more parking for use by residents, customers, or employees of the project than required by the City
- Is inconsistent with SANDAG's most recent Sustainable Communities Strategy or the land use growth assumption accommodated by the Land Use Element portion of the General Plan
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units



• Does not have basic walking and biking access to transit (e.g., sidewalks connecting to transit stops)

Evidence – The OPR Technical Advisory states that "Proposed CEQA Guideline Section 15064.3, subdivision (b)(1), states that lead agencies generally should presume that certain projects (including residential, retail, and office projects, as well as projects that are a mix of these uses) proposed within ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor will have a less-than-significant impact on VMT. This presumption would not apply, however, if project-specific or location-specific information indicates that the project will still generate significant levels of VMT." Pub. Resources Code, § 21064.3 clarifies the definition of a major transit stop (" 'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods."). Pub. Resources Code, § 21155 clarifies the definition of a high-quality transit corridor ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.").

Projects in a VMT-Efficient Area

If a residential or employment based development is located in an area where VMT/capita or VMT/employee is at or better than the significance threshold the project is presumed to result in a less-than-significant CEQA impact.

The City of Encinitas will determine VMT-efficient areas using the City's VMT screening maps that are produced using current City land use data and the SANDAG model. As new model versions are released (e.g., ABM 2+), SANDAG will produce VMT screening maps consistent with the final OPR Technical Advisory and Updated CEQA Guidelines (December 2018) for use by its member agencies.¹

Evidence – This presumption is consistent with the Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018) (OPR Technical Advisory), which provides that, "residential and office projects that locate in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT. Maps created with data from a travel survey or travel demand model can illustrate areas that are currently below the significance threshold. Because new development in such locations would likely result in a



¹ The VMT/Capita and VMT/Employee screening maps are created using information from the current version of the SANDAG model at the time a project notice of preparation (NOP) is produced. As SANDAG updates the model to reflect development and planning throughout the region, the screening maps will be updated and may change resulting in development that may have at one time been screened to no longer be screened and vice versa. As the model is updated, earlier versions of the model will also cease to be supported by SANDAG, meaning that model runs can no longer be completed with the previous versions of the model. If a project begins the transportation study process using one version of the model that becomes unsupported during the process, the project can utilize model outputs from the older model version, as long as no additional modeling work will be done. Projects cannot complete their transportation analysis using multiple model versions.

similar level of VMT, such maps can be used to screen out residential and office projects from needing to prepare a detailed VMT analysis."

Local-Serving Retail and Similar Uses

Local-serving retail is defined in the City of Encinitas as retail that is less than 50,000 square feet of total gross floor area or retail development that is greater than 50,000 square feet that has a market area study showing a market capture area that is primarily within Encinitas or the cities that share a boundary with Encinitas.

Evidence – The OPR Technical Advisory provides that "because new retail development typically redistributes shopping trips rather than creating new trips, estimating the total change in VMT (i.e., the difference in total VMT in the area affected with and without the project) is the best way to analyze a retail project's transportation impacts." Local serving retail generally shortens trips as longer trips from regional retail are redistributed to new local retail. The OPR Technical Advisory states that stores larger than 50,000 square feet may be considered regional-serving. Since the type of retail influences whether it will be locally serving or retail serving (for example grocery, drug stores, convenience stores, etc.) and the size of these facilities may be above 50,000 square feet, an applicant can provide a market survey demonstrating that the project serves the local community if it is over 50,000 square feet.

Local-Serving Public Facilities

Similar to local-serving retail, local-serving public facilities serve the community and either produce very low VMT or divert existing trips from established local facilities.

Evidence – Similar to local serving retail, local serving public facilities would redistribute trips and would not create new trips. Thus, similar to local serving retail, trips are generally shortened as longer trips from a regional facility are redistributed to the local serving public facility. The evidence from the OPR Technical Advisory described above also applies to local-serving public facilities.

Affordable Housing Projects

Residents of affordable residential projects typically generate less VMT than residents in market rate residential projects. This pattern is particularly evident in affordable residential projects near transit. In recognition of this effect, and in accordance with the OPR Technical Advisory, deed- restricted affordable housing projects meet the City's screening criteria and would not require a VMT analysis.

Projects that provide 100% affordable housing affordable to persons with a household income equal to or less than 50 percent of the area median income as defined by California Health and Safety Code Section 50093, housing for senior citizens (as defined in Section 143.0720(e)), housing for transitional foster youth, disabled veterans, or homeless persons (as defined in 143.0720(f)) are not required to complete a VMT analysis.

Evidence – Affordable residential projects generate fewer trips than market rate residential projects. This supports the assumption that the rate of vehicle ownership is expected to be less for persons that qualify



for affordable housing. Additionally, senior citizens, transitional foster youth, disabled veterans, and homeless individuals also have low vehicle ownership rates.

Redevelopment Projects That Cause a Net Reduction in VMT

A redevelopment project that demonstrates that the total project VMT is less than the existing land use's total VMT is not required to complete a VMT analysis.

Evidence – Consistent with the OPR Technical Advisory, "[w]here a project replaces existing VMTgenerating land uses, if the replacement leads to a net overall decrease in VMT, the project would lead to a less-than-significant transportation impact. If the project leads to a net overall increase in VMT, then the thresholds described above should apply." Per CEQA, projects are considered to have a less than significant impact if they result in a net reduction in the relevant performance measure.

Thresholds

If a project is required to complete a VMT analysis, the project's impacts to the transportation system would be significant if the VMT would exceed any of the thresholds below.

Residential Projects

Threshold – 15% below City average household VMT/Capita.

Evidence – The OPR Technical Advisory provides that "residential development that would generate vehicle travel that is 15 or more percent below the existing residential VMT/capita, measured against the region or City, may indicate a less-than-significant transportation impact." Additionally, the threshold supports the overall goal of the City's climate action plan to generally reduce VMT.

Employment Projects

Threshold – At or below regional average VMT/Employee.

Evidence – The State of California Office of Planning and Research (OPR) has developed a potential threshold for consideration by local agencies that is almost exclusively based on GHG and air pollution reduction goals from the State's perspective and suggests a reduction in VMT/employee of 15% below the existing average. While this is one of the SB 743 legislative intent objectives, a less clear connection is made to the other legislative intent objectives to encourage infill development and promote active transportation. Since greenhouse gas (GHG) impacts are already addressed in other CEQA sections, utilization of a GHG reduction target as a transportation metric does not address how VMT can be used as an efficiency metric to inform the efficiency of the land use and transportation network (which is a key consideration and value for the City). Three additional concerns arise from reliance on the OPR recommendations:

• The OPR recommended threshold (of 15% below existing VMT/capita or VMT/employee) does not establish a level of VMT reduction that would result in the state meeting its air quality and GHG goals according to the California Air Resources Board (ARB) 2017 Scoping Plan-Identified



VMT Reductions and Relationship to State Climate Goals (2019). The ARB Scoping Plan utilized a Department of Finance projection that has since been updated to decrease the state population by approximately 10%, indicating that the OPR recommendation and scoping plan thresholds may over-estimate the VMT reduction due to a forecast in population which is now outdated.

- The OPR recommended threshold does not illustrate a connection to the other SB 743 objectives
 related to statewide goals to promote public health through active transportation, infill
 development, multimodal transportation networks, and a diversity of land uses. Recommending
 a reduction below baseline levels is consistent with these objectives, but the numerical value has
 not been tied to specific statewide values for each objective or goal.
- State expectations for air quality and GHG may not align with local/lead agency expectations. Using state expectations for a local lead agency threshold may create inconsistencies with local city or county general plans.

Given these considerations and an impact under CEQA begins with a change to the existing or baseline environment. The baseline VMT per resident, VMT per employee, or VMT per service population could be used to establish an efficiency metric basis for impact evaluation. Using this form of VMT would mean that future land use projects would be expected to perform no worse than existing land use projects and only projects that cause an increase in the rate of VMT generation would cause significant impacts. Since VMT will increase or fluctuate with population and employment growth, changes in economic activity, and expansion of new vehicle travel choices (i.e., Uber, Lyft, AVs, etc.), expressing VMT measurement in an efficiency metric form allows for more direct comparisons to baseline conditions when it comes to land use projects, land use plans, and transportation projects. In addition, the GHG sections also evaluate a project's impact as it relates to GHG and the City's Climate Action Plan sets citywide goals related to GHG and measures for achieving those goals.

Comparison to the regional average VMT/employee is used since employment tends to result in regional trips (i.e. people live and work in varied places around the region).

Regional Retail

Regional retail uses are retail uses that are larger than 50,000 square feet of total gross floor area and/or do not have a market study indicating that they are local-serving.

Threshold – A net increase in total regional VMT

Evidence – The OPR Technical Advisory provides that "because new retail development typically redistributes shopping trips rather than creating new trips, estimating the total change in VMT (i.e., the difference in total VMT in the area affected with and without the project) is the best way to analyze a retail project's transportation impacts...Regional-serving retail development,... which can lead to substitution of longer trips for shorter ones, may tend to have a significant impact. Where such development decreases VMT, lead agencies should consider the impact to be less-than- significant."



Appendix C: Existing Major Transit Stops and Existing High-Quality Transit Corridors





Major Transit Stop - Encinitas Station



Appendix D: Land Use Designations

The following table provides a list of unique project types and the land use type they should be considered under for SB 743 screening and analysis.

Land Use Categories

Land Use Category for SB 743 Analysis for all Project Types			
Residential Projects			
Estate, Urban, or RuralSingle Family DetachedCondominium	 Military Housing (off-base, multi-family) Mobile Home Retirement Community 		
Apartment Transitional Housing Employment Projects	Congregate/Recuperative Care Facility		
 Agriculture Hospital: General Hospital: Convalescent/Nursing Industrial/Business Park (commercial included) Science Research & Development Hotel (with convention facilities/restaurant) Motel Resort Hotel Business Hotel Industrial Park (no commercial) Industrial Plant (multiple shifts) Manufacturing/Assembly 	 Military Standard Commercial Office Large (High-Rise) Commercial Office Office Park Single Tenant Office Corporate Headquarters (without commercial) Government Offices (Use is primarily office with employees; no substantial in-person service) Medical/Dental Warehousing Storage 		
Regional Retail Projects (includes Recreational Uses): N	lot Locally-Serving		
 Super Regional Shopping Center Regional Shopping Center Community Shopping Center 	Parks: AmusementGolf Course (includes driving ranges)		



Land Use Categories

Land Use Category for SB 743 Analysis for all Project Types

Retail Projects (includes Recreational Uses): May qualify for locally-serving based on size/market study

Car Wash	Bowling Center
Gasoline	• Multi-purpose (miniature golf, video arcade,
 Sales (Dealer & Repair) 	batting cage, etc.)
Auto Repair Center	Racquetball/Health Club
Auto Parts Sales	Tennis Courts
Quick Lube	Sports Facilities (indoor/outdoor)
Tire Store	Theaters (multiplex with matinee)
Neighborhood Shopping Center	Restaurant
Commercial Shops	Financial (Bank or Savings & Loan)
 Mixed Use: Commercial (with supermarket)/ Residential: consider each land use type separately for screening 	
Regional Public Facilities: Generally Not Locally-Servin	ng
Airport: Commercial	Elementary School: Private
Airport: General Aviation	Parks: Regional (developed)
Airport: Heliports	Parks: State
Cemetery	Bus Depot
Regional Church (or Synagogue)	Truck Terminal
University (4 years)	Beach, Ocean, or Bay
Junior College (2 years)	Beach, Lake (fresh water)
High School: Private	Landfill & Recycling Center
Middle/Junior High School: Private	
Locally-Serving Public Facilities	
High School: Public	Post Office
Middle/Junior High School: Public	Department of Motor Vehicles
Elementary School: Public	Government Offices (Providing primarily in-
Day Care (Public or Private)	person customer service)
• Library	Transit Station (light rail with parking)
Park: City	Park & Ride Lots
Park: Neighborhood/County	

* Land use designations match the categories in SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region.



Appendix E: Transportation Project Screening

Transportation Project Screening Criteria

The following complete list is provided in the OPR Technical Advisory (December 2018, Pages 20-21) and refined for the City of Encinitas for transportation projects that, "would not likely lead to a substantial or measurable increase in vehicle travel, and therefore generally should not require an induced travel analysis."

- Rehabilitation, maintenance, replacement, safety, and repair projects designed to improve the condition of existing transportation assets (e.g., highways; roadways; bridges; culverts; Transportation Management System field elements such as cameras, message signs, detection, or signals; tunnels; transit systems; and assets that serve bicycle and pedestrian facilities) and that do not add additional motor vehicle capacity
- Roadside safety devices or hardware installation, such as median barriers and guardrails
- Roadway shoulder enhancements to provide "breakdown space," dedicated space for use only by transit vehicles, to provide bicycle access, or to otherwise improve safety, but which will not be used as automobile vehicle travel lanes
- Addition of an auxiliary lane of less than one mile in length designed to improve roadway safety
- Installation, removal, or reconfiguration of traffic lanes that are not for through traffic, such as left, right, and U-turn pockets, two-way left-turn lanes, or emergency breakdown lanes that are not utilized as through lanes
- Addition of roadway capacity on local or collector streets, provided the project also substantially improves conditions for pedestrians, cyclists, and, if applicable, transit
- Closing gaps in the transportation network in conformance with the Circulation Element of the General Plan where the project also substantially improves conditions for pedestrians, cyclists, and, if applicable, transit.
- Conversion of existing general purpose lanes (including ramps) to managed lanes or transit lanes, or changing lane management in a manner that would not substantially increase vehicle travel
- Addition of a new lane that is permanently restricted to use only by transit vehicles
- Reduction in number of through lanes
- Grade separation to separate vehicles from rail, transit, pedestrians or bicycles, or to replace a lane in order to separate preferential vehicles (e.g., HOV, HOT, or trucks) from general vehicles
- Installation, removal, or reconfiguration of traffic control devices, including Transit Signal Priority (TSP) features
- Installation of traffic metering systems, detection systems, cameras, changeable message signs, and other electronics designed to optimize vehicle, bicycle, or pedestrian flow
- Timing of signals to optimize vehicle, bicycle, or pedestrian flow
- Installation of roundabouts, or traffic circles
- Traffic signal modifications and new traffic signals where warrants are met by existing levels of traffic and the project improves accessibility for active transportation.
- Installation or reconfiguration of traffic calming devices
- Adoption of or increase in tolls



- Addition of tolled lanes, where tolls are sufficient to mitigate VMT increase
- Initiation of new transit service
- Conversion of streets from one-way to two-way operation with no net increase in number of traffic lanes
- Removal or relocation of off-street or on-street parking spaces
- Adoption or modification of on-street parking or loading restrictions (including meters, time limits, accessible spaces, and preferential/reserved parking permit programs)
- Addition of traffic wayfinding signage
- Rehabilitation and maintenance projects that do not add motor vehicle capacity
- Addition of new or enhanced bike or pedestrian facilities on existing streets/highways or within existing public rights-of-way
- Addition of Class I bike paths, trails, multi-use paths, or other off-road facilities that serve nonmotorized travel
- Installation of publicly available alternative fuel/charging infrastructure
- Addition of passing lanes, truck climbing lanes, or truck brake-check lanes in rural areas that do not increase overall vehicle capacity along the corridor

