LOS Engineering, Inc.
Traffic and Transportation

11622 El Camino Real, Suite 100, San Diego, CA 92130
Phone 619-890-1253, Email: justin@losengineering.com

April 2, 2024

Mr. Raul Armenta, PE, TE
Public Works
200 Civic Cener Way
El Cajon, CA 92027

Subject: Trip Generation and Vehicle Miles Traveled Screening Analysis for a Five Lot Residential Subdivision west of Avocado Avenue (TSM 2022-0008)

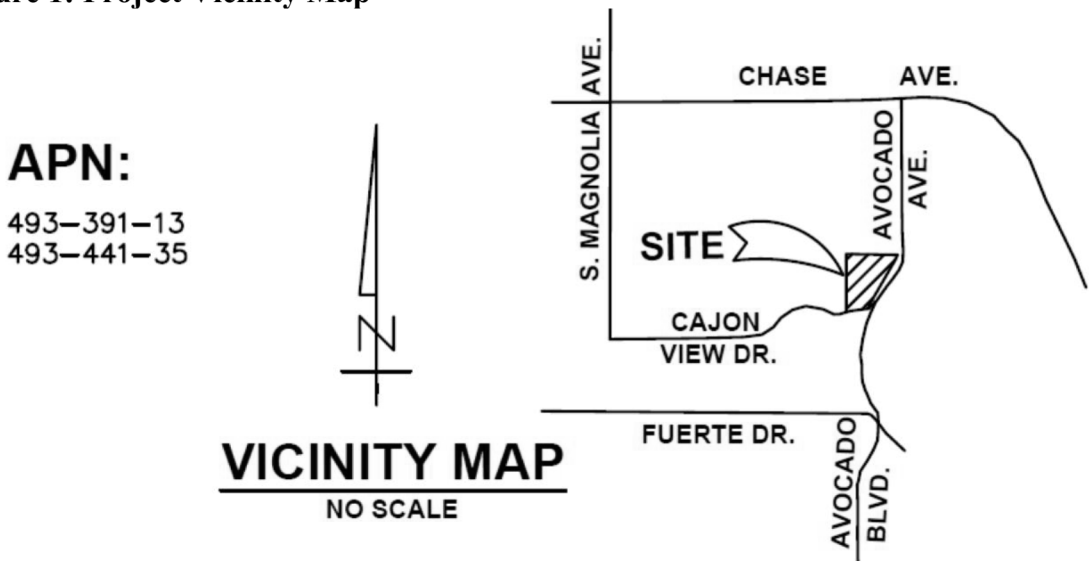
Dear Mr. Armenta:

LOS Engineering, Inc. is pleased to present this trip generation and Vehicle Miles Traveled (VMT) screening analysis to satisfy the California Environmental Quality Act (CEQA) guidelines that utilize VMT as the measure of effectiveness for determining transportation impacts.

PROJECT DESCRIPTION

The proposed five-lot residential subdivision is located west of Avocado Ave as shown on the vicinity map in **Figure 1**. The tentative subdivision map is included in **Attachment A**.

Figure 1: Project Vicinity Map



Source: Walsh Engineering & Surveying, Inc.

The proposed five-lot residential subdivision is shown in **Figure 2**. On-site circulation (Street A) will connect to the existing Cajon View Dr that extends east into the city to S. Magnolia Ave and west to Avocado Ave. Avocado Ave has a non-traversable raised concrete median limiting access to right-in/right-out movements to/from Cajon View Dr.

Figure 2: Site Plan

Source: Walsh Engineering & Surveying, Inc.

PROJECT TRIP GENERATION

The project traffic generation was calculated using SANDAG trip rates from the *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, April 2002. The existing site is vacant. The project is proposed to include five (5) single family dwelling units. The project trip generation is calculated at 50 daily trips, 4 AM peak hour trips (1 inbound and 3 outbound), and 5 PM peak hour trips (3 inbound and 2 outbound) as shown in **Table 1**.

Table 1: Project Trip Generation

Proposed							AM				PM	
Land Use	Rate	Size & Units	ADT	%	Split		IN	OUT	%	Split	IN	OUT
Residential - Single Family	10 /DU	5 DU	**50**	8%	0.3	0.7	**1**	**3**	10%	0.7 0.3	**3**	**2**

Source: SANDAG *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region,* April 2002.

DU - Dwelling Unit; ADT-Average Daily Traffic; Split-percent inbound and outbound.

TRAFFIC IMPACT STUDY CRITERIA

The criteria for the need to prepare a Traffic Impact Study are documented in the San Diego Institute of Transportation Engineers (ITE) document *Guidelines for Transportation Impact Studies in the San Diego Region*, dated May 2019. The San Diego ITE guidelines state:

> "A roadway analysis should be prepared for all projects which generate traffic greater than 1,000 total average daily driveway trips (ADT) or 100 peak-hour trips. If a proposed project is not in conformance with the land use and/or transportation element of the general or community plan, use threshold rates of 500 ADT or 50 peak-hour trips."

Excerpts from the San Diego ITE guidelines are included in **Attachment B**.

As shown previously in Table 1, the project is calculated to generate 50 daily trips, 4 AM peak hour trips, and 5 PM peak hour trips. Based on the San Diego ITE guidelines, a roadway analysis is not required because the project's trip generation is less than either the 1,000 ADT or 100 peak hour trip thresholds or the 500 ADT or 50 peak hour trip thresholds.

VEHICLE MILES TRAVELED

The California Governor's Office of Planning and Research (OPR) has identified VMT as the CEQA metric to evaluate a project's potential transportation impacts. Senate Bill 743 (SB 743) shifted the transportation impact measure of effectiveness from Level of Service (LOS) to VMT. As part of the State's CEQA Guidelines, the changes included the elimination of vehicular delay and LOS for determining significant transportation impacts.

OPR outlines the following criteria for determining potential VMT impacts for small projects (excerpts included in **Attachment C**):

> "Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact."

The project with a calculated trip generation of 50 trips per day is less than the Office of Planning and Research threshold of 110 trips per day; therefore, according to the Office of Planning and Research Guidelines, the project is presumed to have a less-than-significant VMT traffic impact and VMT mitigation measures are not required.

CONCLUSION

The purpose of this trip generation and VMT screening analysis was to determine if the project would have a potential transportation impact based on CEQA guidelines.

The project is proposed to include five (5) single family dwelling units. The project trip generation is calculated at 50 daily trips, 4 AM peak hour trips (1 inbound and 3 outbound), and 5 PM peak hour trips (3 inbound and 2 outbound).

Based on the San Diego ITE guidelines, a roadway analysis is not required because the project's trip generation is less than either the 1,000 ADT or 100 peak hour trip thresholds or the 500 ADT or 50 peak hour trip thresholds.

The project with a calculated trip generation of 50 trips per day is less than the Office of Planning and Research threshold of 110 trips per day; therefore, according to the Office of Planning and Research Guidelines, the project is presumed to have a less-than-significant VMT traffic impact and VMT mitigation measures are not required.

Sincerely,
LOS Engineering, Inc.

Justin Rasas

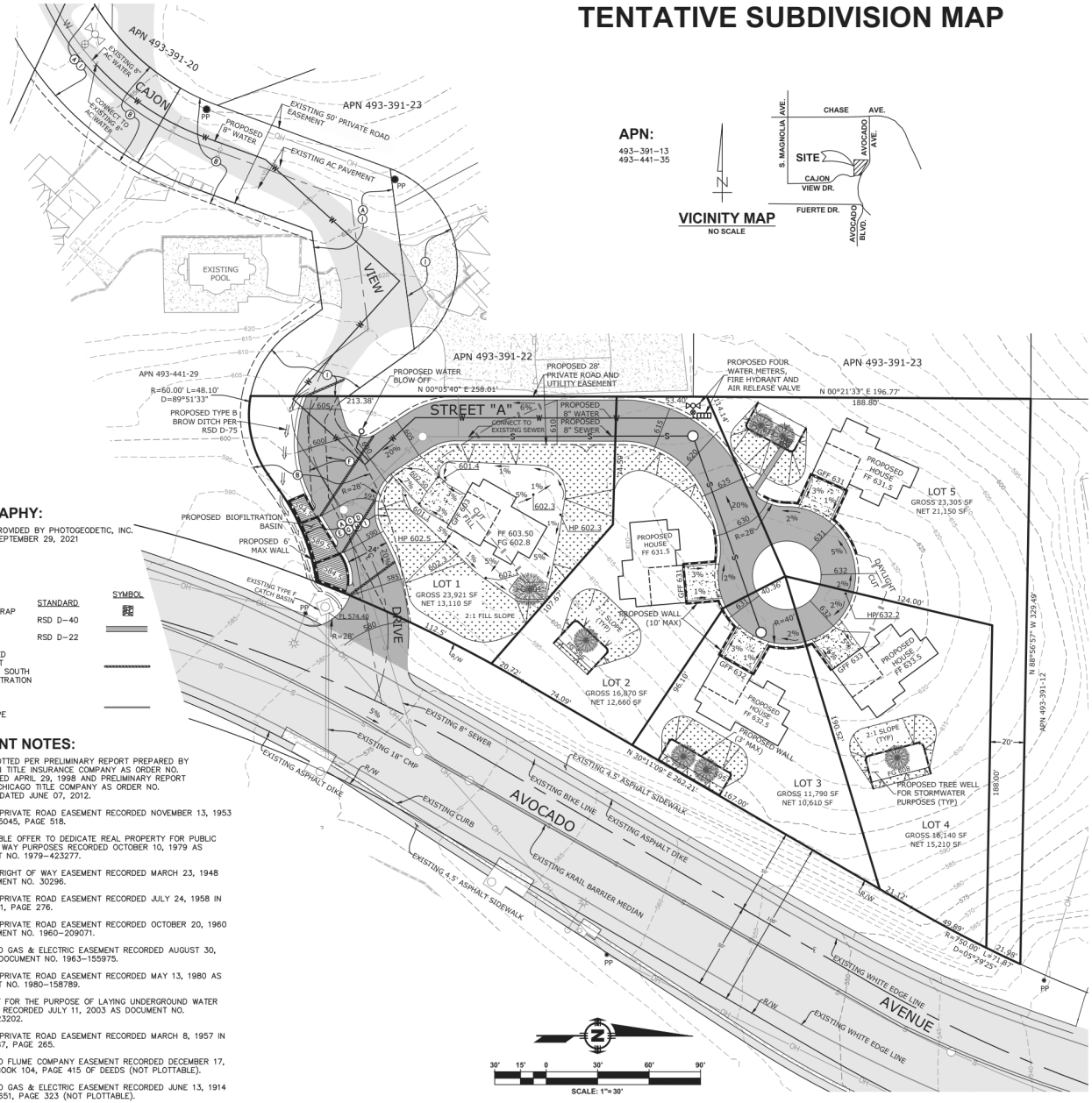
Justin Rasas, PE (RCE 60690), TE (2135), PTOE (1267)
Principal and Officer of LOS Engineering, Inc.

Job 2314
Attachments

ATTACHMENT A

Tentative Subdivision Map

TENTATIVE SUBDIVISION MAP



APN:

493-391-13
493-441-35

VICINITY MAP
NO SCALE

TOPOGRAPHY:

TOPOGRAPHY PROVIDED BY PHOTOGEODETIC, INC.
DATE FLOWN: SEPTEMBER 29, 2021

LEGEND:

DESCRIPTION	STANDARD	SYMBOL
PROPOSED RIP-RAP	RSD D-40	
PROPOSED AC SPILLWAY	RSD D-22	
PROPOSED SPEED BUMP TO DIRECT RUNOFF TO THE SOUTH TOWARDS BIOFILTRATION BASIN		
PROPOSED 6" UNDERDRAIN PIPE		

EASEMENT NOTES:

EASEMENTS PLOTTED PER PRELIMINARY REPORT PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY AS ORDER NO. 1175142-9 DATED APRIL 29, 1998 AND PRELIMINARY REPORT PREPARED BY CHICAGO TITLE COMPANY AS ORDER NO. 12210088-U21 DATED JUNE 07, 2012.

(A) 50' WIDE PRIVATE ROAD EASEMENT RECORDED NOVEMBER 13, 1953 IN BOOK 5045, PAGE 518.

(B) IRREVOCABLE OFFER TO DEDICATE REAL PROPERTY FOR PUBLIC RIGHT OF WAY PURPOSES RECORDED OCTOBER 10, 1979 AS DOCUMENT NO. 1979-423277.

(C) 50' WIDE RIGHT OF WAY EASEMENT RECORDED MARCH 23, 1948 AS DOCUMENT NO. 30296.

(D) 50' WIDE PRIVATE ROAD EASEMENT RECORDED JULY 24, 1958 IN BOOK 7181, PAGE 276.

(E) 50' WIDE PRIVATE ROAD EASEMENT RECORDED OCTOBER 20, 1960 AS DOCUMENT NO. 1960-209071.

(F) SAN DIEGO GAS & ELECTRIC EASEMENT RECORDED AUGUST 30, 1963 AS DOCUMENT NO. 1963-155975.

(G) 50' WIDE PRIVATE ROAD EASEMENT RECORDED MAY 13, 1980 AS DOCUMENT NO. 1980-158789.

(H) EASEMENT FOR THE PURPOSE OF LAYING UNDERGROUND WATER PIPELINES RECORDED JULY 11, 2003 AS DOCUMENT NO. 2003-0823202.

(I) 50' WIDE PRIVATE ROAD EASEMENT RECORDED MARCH 8, 1957 IN BOOK 6487, PAGE 265.

SAN DIEGO FLUME COMPANY EASEMENT RECORDED DECEMBER 17, 1887 IN BOOK 104, PAGE 415 OF DEEDS (NOT PLOTTABLE).

SAN DIEGO GAS & ELECTRIC EASEMENT RECORDED JUNE 13, 1914 IN BOOK 651, PAGE 323 (NOT PLOTTABLE).

LEGAL DESCRIPTION:

PORTION OF THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 16 SOUTH, RANGE 1 WEST, SAN BERNARDINO BASE MERIDIAN, IN THE CITY OF EL CAJON, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, BEING A PORTION OF TRACT "A" OF RANCHO EL CAJON, BEING FURTHER DESCRIBED IN DOC# 2012-0451499 RECORDED AUGUST 01, 2012.

PORTION OF THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 16 SOUTH, RANGE 1 WEST, SAN BERNARDINO BASE MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, BEING A PORTION OF TRACT "A" OF RANCHO EL CAJON, BEING FURTHER DESCRIBED IN DOC# 2021-0239826 RECORDED MARCH 29, 2021.

OWNER:

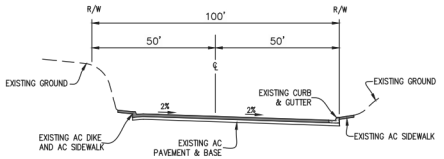
SALIM A. CHAGAN — DATE
301 CAJON VIEW DRIVE
EL CAJON, CA 92020
(619) 328-7876

NOTES:

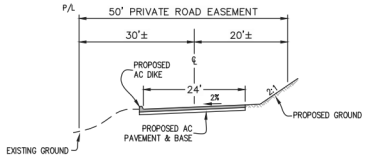
NET LOT SIZE AVERAGE: 14,500 SF
EXISTING ZONE: RS-14 RESIDENTIAL, SINGLE FAMILY
PROPOSED ZONE: RS-14 RESIDENTIAL, SINGLE FAMILY
TOTAL NO. LOTS: 5
EARTHWORK: 5,000 CY CUT
1,000 CY FILL
4,000 CY EXPORT

UTILITIES:

SEWER: CITY OF EL CAJON
WATER: HELIX WATER DISTRICT
GAS: SAN DIEGO GAS & ELECTRIC
FIRE PROTECTION: HEARTLAND FIRE AND RESCUE



AVOCADO AVENUE (TYPICAL)
LOOKING NORTH
NO SCALE



CAJON VIEW DRIVE (TYPICAL)
LOOKING WEST
NO SCALE

REGISTERED PROFESSIONAL ENGINEER
LAWRENCE W. WALSH
46316
CIVIL
STATE OF CALIFORNIA

LAWRENCE W. WALSH — DATE
Walsh Engineering & Surveying, Inc.
607 Aldwych Road, El Cajon, CA 92020
(619) 588-6747 (619) 792-1232 Fax

L:\PROJECTS 3D\211291-AVOCADO\PRODUCTION DRAWINGS\211291-ENG BASE.DWG December 29, 2023 - 11:02am

ATTACHMENT B

Excerpts from San Diego ITE Guidelines

GUIDELINES FOR TRANSPORTATION IMPACT STUDIES IN THE SAN DIEGO REGION

May 2019

7.0 ROADWAY

It is recommended that consideration be given to preparation of a local transportation analysis (LTA) for all land development and transportation projects. This section describes the recommended methodology for analysis of local roadway conditions.

The purpose of the roadway analysis portion of an LTA is to forecast, describe, and analyze how a development will affect existing and future circulation infrastructure for users of the roadway system, including vehicles, bicycles, pedestrians, and transit. The LTA assists transportation engineers and planners in both the development community and public agencies when making land use, mobility infrastructure, and other development decisions. An LTA quantifies the expected changes in transportation conditions and translates these changes into transportation system effects in the vicinity of a project.

The roadway transportation analysis included in an LTA is separate from the transportation impact analysis conducted as part of the environmental (CEQA) project review process, as described in Part I. The purpose of the roadway transportation analysis is to ensure that all projects provide a fair share of roadway infrastructure improvements in order to accommodate their multimodal transportation demands.

The following guidelines were prepared to assist local agencies throughout the San Diego Region in promoting consistency and uniformity in local transportation studies. These guidelines do not establish a legal standard for these functions but are intended to supplement any individual manuals or level of service objectives for the various jurisdictions. These guidelines attempt to consolidate regional efforts to identify when an LTA is needed, what professional procedures should be followed, and what constitutes a significant traffic effect that should be dealt with.

The instructions outlined in these guidelines are subject to update as future conditions and experience become available. Special situations may call for variation from these guidelines. It is recommended that consultants who prepare an LTA submit a scoping letter (methodology memo) for review by the lead agency to verify the application of these guidelines and to identify any analysis needed to address special circumstances. The scoping letter in this context is used for transportation analysis only and is not related to a formal scoping process that occurs with preparation of a CEQA study. Caltrans and lead agencies should agree on the specific methods used in local transportation analysis studies involving any State Route facilities, including metered and unmetered freeway ramps.

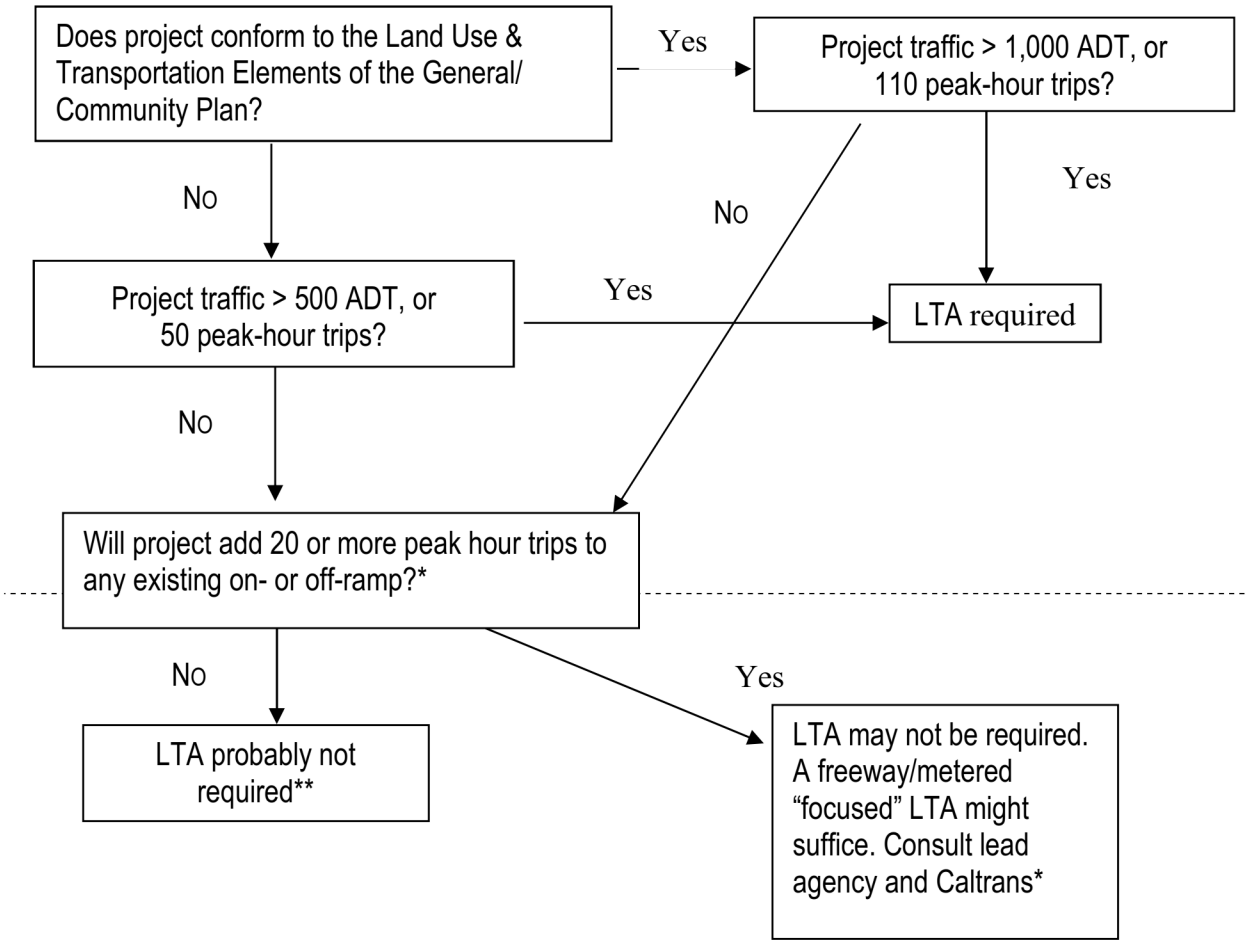
NEED FOR A STUDY

Figure 7-1 shows the flow chart for determination of when a roadway analysis should be conducted. A roadway analysis should be prepared for all projects which generate traffic greater than 1,000 total average daily driveway trips (ADT) or 100 peak-hour trips. If a proposed project is not in conformance with the land use and/or transportation element of the general or community plan, use threshold rates of 500 ADT or 50 peak-hour trips.

Early consultation with any affected jurisdictions is strongly encouraged since a “focused” or “abbreviated” roadway analysis may still be required – even if the above threshold rates are not met. An understanding of the level of detail and the assumptions required for the analysis should be reached. A pre-submittal in-person conference may not be required. However, the applicant should prepare a scoping letter for the agency’s review and approval prior to preparation of the analysis.

Figure 7-1

FLOW CHART FOR LTA ROADWAY ANALYSIS



* Check with Caltrans for current ramp metering rates. (See Attachment B – Ramp Metering Analysis)

** However, for health and safety reasons, and/or local and residential street issues, an "abbreviated" or "focused" LTA may still be requested by a local agency. (For example, this may include traffic backed up beyond an off-ramp's storage capacity or may include diverted traffic through an existing neighborhood.)

ATTACHMENT C

Excerpts from Office of Planning and Research Guidelines

TECHNICAL ADVISORY

ON EVALUATING TRANSPORTATION IMPACTS IN CEQA

December 2018

Also, in order to capture the full effects of induced travel resulting from roadway capacity projects, an RTP/SCS would need to include an assessment of land use effects of those projects, and the effects of those land uses on VMT. (See section titled "*Estimating VMT Impacts from Transportation Projects"* below.) RTP/SCSs typically model VMT using a collaboratively-developed land use "vision" for the region's land use, rather than studying the effects on land use of the proposed transportation investments.

In summary, achieving 15 percent lower per capita (residential) or per employee (office) VMT than existing development is both generally achievable and is supported by evidence that connects this level of reduction to the State's emissions goals.

1. Screening Thresholds for Land Use Projects

Many agencies use "screening thresholds" to quickly identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study. (See e.g., CEQA Guidelines, §§ 15063(c)(3)(C), 15128, and Appendix G.) As explained below, this technical advisory suggests that lead agencies may screen out VMT impacts using project size, maps, transit availability, and provision of affordable housing.

Screening Threshold for Small Projects

Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day[19] generally may be assumed to cause a less-than-significant transportation impact.

Map-Based Screening for Residential and Office Projects

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 VMT data, for example from a travel survey or a travel demand model, can illustrate areas that are

[19] 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, subd. (e)(2).) Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and 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.