DRAFT CHANGES TO INITIAL STUDY ASSESSMENT GUIDELINES
30 DAY PUBLIC REVIEW PERIOD

PROPOSED UPDATE TO SECTION 27A(1) TRANSPORTATION & CIRCULATION SECTION OF THE INITIAL STUDY ASSESSMENT GUIDELINES TO INCLUDE INTERIM VEHICLE MILES TRAVELED THRESHOLDS AND METHODOLOGY AND APPENDIX B VEHICLE MILES TRAVELED ESTIMATION; AND REMOVE LEVEL OF SERVICE THRESHOLDS AND METHODOLOGY WITH RECOMMENDED CHANGES IN LEGISLATIVE FORMAT

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27a(1). Transportation & Circulation - Roads and Highways - (Interim) Vehicle Miles Traveled

A. Definition of Issue

Senate Bill (SB) 743 (2013) changed the way transportation impacts are identified in the California Environmental Quality Act (CEQA) and required the Governor's Office of Planning and Research (OPR) to develop new CEQA Guidelines that address transportation impact metrics under CEQA. OPR identified Vehicle miles traveled (VMT) as the preferred metric for assessing passenger vehicle-related impacts. Pursuant to SB 743, as of July 1, 2020, lead agencies are required to utilize VMT in evaluating vehicle-related impacts under CEQA. The OPR Technical Advisory on Evaluating Transportation Impacts in CEQA (December of 2018) provides recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. The VMT assessment, thresholds of significance and mitigation measures identified in this section are derived from this technical advisory and are consistent with minimum VMT reduction standards .

B. Definition of Technical Terms

Vehicle Miles Traveled (VMT) - A measure of the amount of travel for all vehicles in a geographic region over a given period of time, typically a one-year period. VMT per capita is calculated as the total annual miles of vehicle travel divided by the total population in a county.

Traffic Impact Study (TIS) – An engineering study which describes how a new development or redevelopment would affect the area's local and regional transportation system and identifies measures to mitigate impacts from the project.

Traffic Impact Mitigation Fee (TIMF) - Fees assessed on all applicants for development approval for the construction of off-site transportation infrastructure improvements necessitated by new development and development expansion or intensification. TIMF's are generally intended to mitigate cumulative traffic impacts.

C. Applicable General Plan Goals and Policies

The County of Ventura has an adopted General Plan and Area Plans that contain specific transportation and circulation goals, policies, standards and programs that are applicable to development in the County, subject to project evaluation during policy consistency analysis.

D. Threshold of Significance Criteria

Residential Land Uses

OPR recommends a VMT per capita threshold set at 15 percent below baseline levels. Using the VCTC model, the average trip length of all home-based model trip types was used as a surrogate for a per capita estimate. Based on the VCTC baseline model, the average trip length for all home-based trips is 9.66 miles. Applying the 15 percent reduction yields a VMT Threshold for residential land uses of 8.21 miles.

Non-Residential Land Uses

For non-residential land uses, OPR identifies three basic land use categories of office, retail and mixed land use described further below:

1. **Office Land Use:** the average trip length of home-based work trips, was used as a surrogate for a per employee estimate. Based on the VCTC baseline model, the average trip length for home-based work trips is 13.52 miles. Applying the 15 percent reduction yields a VMT Threshold for office land uses of 11.49 miles.

2. **Retail Land Use:** attract many kinds of trip types (i.e., home-based and non-home -based trips). It generally redistributes existing retail trips rather than creating new trips, OPR recommends using no net change in either project or regional VMT. Given this programmatic application, the unincorporated trip-based VMT estimate was used to establish this VMT threshold.

3. **Mixed Land Use:** development (typically includes a combination of residential and retail/office uses), OPR guidance suggests applying the threshold of one (or more) of the land uses. Given that land use growth under the 2040 General Plan can be thought of as one holistic mixed-use development, the application of the residential, office, and retail thresholds inherently reflects mixed-use development.

   Relationship to Industrial/Agricultural and Non-Residential Land Use Category: Given that the predominant non-residential land uses in Ventura County are industrial and agricultural, these land uses can generally be associated with the OPR non-residential land use categories. For instance, industrial uses can be considered analogous with office uses in terms of associated work trips, while agriculture is unique and would be treated similarly to retail: no net change in either project or regional VMT.

Roadway Improvement Projects

OPR recommends no net change in either project or regional VMT for roadway improvement projects. The VCTC model includes currently programmed roadway improvement projects included in the Federal Transportation Improvement Program. Programmed improvements have an identified funding source and are therefore considered as part of the future baseline under CEQA. The VCTC model VMT output inherently captures the potential induced VMT associated with these projects (i.e., longer trip lengths related to improved access; mode shifts from transit to auto; etc.). Note that the established thresholds for residential and office in this analysis are regionally based and therefore do not distinguish between incorporated versus unincorporated growth or reflect the added length of trips associated with inter-county trips.

Criteria to Determining Level of Significance

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The following criteria are to be used to determine the level of significance of an adverse impact. A project will have a significant transportation impact if it would result in VMT exceeding the following thresholds:

1. Residential land uses: 8.21 miles average of all home-based trip types, trip length (15 percent reduction of regional average),

2. Office land uses: 11.49 miles average of all home-based-work trips, trip length (15 percent reduction of regional average,

3. Industrial land uses: 11.49 miles average of all home-based-work trips, trip length (15 percent reduction of regional average,

4. Retail land uses: 7,500,249 vehicle miles traveled (net increase to baseline unincorporated VMT),

5. Agricultural land uses: 7,500,249 vehicle miles traveled (net increase to baseline unincorporated VMT), or

6. Infrastructure: 7,500,249 vehicle miles traveled (net increase to baseline unincorporated VMT).

7. Result in new trips along roadway facilities with collision or incident rates above Statewide averages and/or those identified by the Statewide Integrated Traffic Records System (SWITRS) as experiencing a high incident rate.

8. Result in inadequate emergency access.

9. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

10. Cause actual or potential barriers to existing or planned pedestrian/bicycle facilities.

11. Generate or attract pedestrian and/or bicycle traffic volumes meeting requirements for protected highway crossings or pedestrian and bicycle facilities.

12. Cause a substantial interference with existing bus transit facilities and/or routes.

13. Result in substantial increased demand for additional or new bus transit facilities/ services.

14. Result in interference with an existing railroad's facilities and/or operations.

15. Generate an increased demand for commercial boat traffic and/or adjacent commercial boat facilities.

16. Result in substantial interference with or affect the operations of an existing pipeline.

Threshold for residential projects: A proposed project exceeding a level of 15 percent below existing VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as city VMT per capita. Proposed development referencing a threshold based on city VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the number of units specified in the Sustainable Community Strategy (SCS) for that city and should be consistent with the SCS.

Threshold for office projects: A proposed project exceeding a level of 15 percent below existing regional VMT per employee may indicate a significant transportation impact.

Threshold for retail projects: A net increase in total VMT may indicate a significant transportation impact.

Proposed Projects with Significant VMT Impacts

If a proposed project is found to have a significant impact on VMT, the impact must be reduced, as feasible, by modifying the project's VMT to a level below the established thresholds of significance and/or mitigating the impact through multimodal transportation improvements or mitigations to enhance transportation mode shift (use of alternative transportation modes).

E. Methodology

Introduction

The evaluation of traffic impacts and development of mitigation measures is a complex task. When the potential for significant adverse traffic impacts is evident (as determined by the Ventura County PWA - Transportation Department), A Traffic Impact Study (TIS) , including letter style studies, should be performed under the responsible charge of a registered civil engineer (or registered traffic engineer) that is qualified to perform traffic engineering studies and is familiar with Ventura County. The final report shall be stamped and signed by the responsible registered civil engineer engineer (or registered traffic engineer) in charge.

Many of the roads in the unincorporated area were originally built as farm-to-market roads and were not designed to current engineered standards. Some roads are in rugged mountainous or canyon areas of the County. The cost to upgrade these types of roads to current standard is generally prohibitive. Additionally, rural roads often carry slow moving agricultural traffic, and have adjacent irrigation ditches or farm crossings. Accordingly, a small amount of additional traffic on these types of roads may cause a significant impact due to the character and limited capacity of such roads. The same amount of traffic might not be considered significant in a more modern urban setting.

In some of the communities in the unincorporated area, a policy has been enacted by the Ventura County Board of Supervisors to recognize the uniqueness of the community through adoption of an Area Plan. For example, an Area Plan exists for the Ojai Valley which contains policies that are different from those in the Countywide General Plan relating to transportation. Prior to completing the TIS, the registered civil engineer must consult the Area Plan transportation policies that apply to the project.

A Traffic Impact Studyis required for:

1. Any project that has the potential to result in VMT exceeding thresholds identified in Table 1 below:

Table 1: Vehicle Miles Traveled (VMT) Thresholds of Significance CriteriaProject Type	**Metric Unit**	**Model Trip Types**	**Target**	**Baseline VMT**	**Threshold VMT**
Residential	VMT/Capita	Average of all Home-Based	15% Reduction of Regional	9.66	8.21

		Trip Types	Average		
Office	VMT/Employee	Home Based Work Trips	15% Reduction of Regional Average	13.52	11.49
Industrial	VMT/Employee	Home Based Work Trips	15% Reduction of Regional Average	13.52	11.49
Retail	Net Change in Unincorporated VMT	All Trip Types	No Net Increase	7,500,249	7,500,249
Agriculture	Net Change in Unincorporated VMT	All Trip Types	No Net Increase	7,500,249	7,500,249
Infrastructure	Net Change in Unincorporated VMT	All Trip Types	No Net Increase	7,500,249	7,500,249

3. When required by the County of Ventura Traffic Impact Fee Ordinance (Sections 8601-0 through 8601-7 of the Ventura County Ordinance Code), to determine the amount of the Traffic Impact Mitigation Fees (TIMF).

4. When required by the Director of the Public Works Agency Transportation Department (PWATD) because of safety or operational considerations on County roads that may be impacted by the proposed project.

Preparation of Traffic Impact Studies:

The applicant is responsible for submitting a TIS when potential significant adverse traffic impacts are evident (as determined by the PWATD). The TIS shall include, but is not limited to documentation which presents the proposed projects potential to result in VMT exceeding the thresholds of significance identified in Table 1: VMT Thresholds of Significance Criteria of this section. If a proposed project is found to have a significant impact on VMT, the TIS shall include a list and description of improvements (or mitigation measures) that reduce the impact, as feasible, by modifying the project's VMT to a level below the established thresholds of significance and/or mitigating the impact through multimodal transportation improvements or mitigations to enhance transportation mode shift (use of alternative transportation modes). VMT calculations shall include the effect of any mitigation measures, the approximate cost and tentative scheduled timing of each proposed improvement and the identification of specific mitigation measures to be constructed or implemented by the applicant. This information shall include payments to be made to the TIMF program, improvements, or other mitigation measures that are required to reduce significant adverse impacts to a less-than-significant level.

1. **Scope of Work** - In order to avoid disagreement as to scope and content of a TIS, the scope of work for a TIS for any project shall be submitted to and approved by the PWATD **prior** to commencing the

work. Any TIS submitted without such prior approval is subject to rejection. A pre-approved scope of work will not normally be required for a letter style TIS. A letter style TIS or equivalent may be required, for example for a project that exceeds the VMT threshold by a very small magin (5% or less). A letter style TIS shall be no mre than 4 pages in length.

2. **Typical Content of Traffic Impact Studies (TIS)**:

b. a. Executive Summary - This should be no more than two pages summarizing the project's traffic impacts based on the VMT threshold criteria, calculation of TIMF and, if necessary, a listing of needed road improvements and/or proposed changes in the project to mitigate the traffic impacts.Maps showing the following:

- Location of proposed project and site plan, if available.
- Collectors, arterial and State highways that are likely to be used by occupants and visitors.
- Location of other pending projects requiring General Plan Amendments (GPA) or Zone Changes (ZC) that impact those roads included in the study area, the status of those projects . The list of pending projects would be as of the date of issuance of the Notice of Preparation of the environmental document or approval of the TIS scope of work.

c. Tables, charts, or other written calculations showing the following:

1) Proposed project and other projects, their size and nature, VMT caluclations, and status shall be provided.

3) The location of operational as well as safety problems, project specific, and cumulative impacts after implementation of funded mitigation measures shall be identified. A traffic signal warrants analysis (or analysis of other traffic control measures) shall be attached where appropriate.

4) A list and description of improvements (or mitigation measures) needed to correct the identified deficiencies, segregated by project impacts shall be provided. . This information shall include payments to be made to the TIMF program, frontage improvements (e.g., sidewalks, curbs and gutters), or other mitigation measures that are required to reduce significant adverse impacts to a less-than-significant level.

d. Narrative, Footnotes, and Appendices containing the following:

1) Sources of data, including persons contacted and dates of contact

3) Assumptions made, methods used and special circumstances

Appendix A

Vehicle Miles Traveled Estimation

This memorandum summarizes the regulatory context pertaining to Vehicle Miles Traveled (VMT) analysis requirements under CEQA, and provides more detailed technical information of the technical approach and parameters used to estimate baseline and future VMT reported in the County 2040 General Plan Environmental Impact Report (EIR).

Regulatory Changes under CEQA: VMT

Recent regulatory changes to CEQA requirements under SB 743 now require transportation impacts to be analyzed using VMT as a metric. Passed in 2013, Senate Bill (SB) 743 required the Governor's Office of Planning and Research (OPR) to develop new CEQA guidelines that address transportation impact metrics under CEQA. Section 15064.3 was added to the State CEQA Guidelines effective December 28, 2018 as part of a comprehensive guidelines update. The guidelines address the determination of significance for transportation impacts under CEQA, requiring transportation impact analysis be based on VMT instead of a congestion metric (such as LOS) and states that a project's effect on automobile delay shall not constitute a significant environmental impact as previously required. While some jurisdictions may choose to retain LOS standards as a project's condition of approval, CEQA impacts or mitigations will no longer be based on LOS changes.

OPR published its proposal for the comprehensive updates to the CEQA Guidelines in November 2017 which included proposed updates related to analyzing transportation impacts, pursuant to Senate Bill 743. The updates indicated that VMT be the primary metric used to identify transportation impacts. In December of 2018, OPR published the most recent version of the Technical Advisory on Evaluating Transportation Impacts (December 2018) which provides guidance for VMT analysis. The Office of Administrative Law approved the updated CEQA Guidelines and lead agencies have an opt-in period until July 1, 2020 to implement the updated guidelines.

VMT was chosen as the primary metric to better integrate land use and multimodal transportation choices, to encourage alternative transportation, greater efficiency, and reduced GHG emissions. The most recent technical guidance on analyzing the transportation impacts under CEQA released by OPR in December of 2018 provides technical recommendations regarding assessment of VMT, thresholds of significance and mitigation measures. OPR (2018) offers a generalized recommendation of a 15 percent reduction below existing VMT as a threshold of CEQA significance. Trip- or tour-based based VMT analysis is recommended over boundary-based VMT analysis as the established and most appropriate methodology for analyzing VMT impacts under CEQA. Trip-based assessment of VMT captures the full extent of the vehicle trip length – even the portion that extends beyond the jurisdictional boundary. VMT

impacts are assessed by quantifying trips to or from a jurisdiction, which start or end within the jurisdiction. Conversely, a boundary-based assessment of VMT impacts is quantified by the length of the vehicle trips that occur within the boundaries of a jurisdiction.

As noted in the updated guidelines, agencies are directed to choose metrics that are appropriate for their jurisdiction to evaluate the potential impacts of a project in terms of VMT. The guidance provided thus far relative to VMT significance criteria is focused on residential, office, and retail uses. For rural land uses, OPR guidance states that fewer options may be available for reducing VMT for projects in rural areas outside of a metropolitan planning organization and significance thresholds may be best determined on a case-by-case basis. Ventura County plans to adopt formal thresholds of significance under SB 743 prior to the July 1, 2020 deadline. In lieu of formally adopted thresholds of significance, VMT thresholds consistent with OPR's final technical guidance for the analysis of transportation impacts under CEQA were applied in the analysis presented in the 2040 Ventura County General Plan EIR.

VMT Analysis: Methodological Approach

An integral step in the VMT analysis utilized to assess transportation impacts under CEQA is establishing baseline and forecasted VMT estimates for use in comparison against an established threshold to identify a significant impact. This information is presented in the Draft EIR of Ventura County's 2040 General Plan, and is described with more specific technical detail herein.

Description of Model Scenarios

In order to generate the baseline and future change in VMT per capita and net VMT resulting from the proposed 2040 General Plan, the recently updated Ventura County Transportation Commission (VCTC) countywide Travel Demand Model was used. The VCTC Travel Demand Model (TDM) uses the Caliper Trans Cad model development and operating software environment for all model components.

As part of the 2040 General Plan, the following two model scenarios were developed:

- 2012 Baseline Model – reflects the most recent validated baseline for Ventura County (i.e., existing land use and transportation network); and,
- 2040 Ventura County General Plan Land Use Model – this reflects the land use growth assumptions in the proposed Ventura County 2040 General Plan for the unincorporated areas and the Southern California Association of Government's (SCAG) 2016 Sustainable Communities Strategy (SCS) land use within the incorporated areas. The transportation network reflects all currently programmed transportation improvement infrastructure projects.

The source of the baseline and future 2040 land use of the VCTC model is from SCAG's 2016 Regional Transportation Plan and Sustainable Community Strategy. The land use within the unincorporated areas of Ventura County were reviewed by County staff for accuracy. Given that model traffic analysis zones (TAZs) are not coterminous with local political boundaries, the following steps were taken by VCTC to properly allocate the future land use growth associated with the 2040 General Plan for use within the model scenarios:

1. A reasonableness check was performed on the TAZ data originally provided by SCAG and land use corrections were made to TAZs where appropriate. These corrections were largely made within cities since SCAG worked closely with the County to initially establish their growth projections;

2. The County provided VCTC with unincorporated county population projections for 2020 and 2040 for the 2040 General Plan. These projections were used as a guide to refine the TAZ allocation by attempting to minimize the gap between the County and City numbers and total population by jurisdiction from the model's land Use to socio-economic data model output.

3. TAZ adjustments were performed through an iterative process. On first pass, a 51 percent rule and local knowledge of development patterns (i.e. East Area 1 development to Santa Paula) was used to allocate growth between shared border TAZs. This provided a fair means for allocating the vast majority city-county border TAZs.

4. Based on the information in Step 3, several individual TAZ adjustments were made in edge cases (notably in Oxnard and Camarillo).

Baseline VMT Estimates

A road inventory was provided in the Background Report based on information sourced from the Highway Performance Monitoring System (HPMS) using 2014 data. For the analysis presented in the Draft EIR, 2016 HPMS data was used to provide the "ground truth" boundary-based VMT estimate sourced from Caltrans Public Road Data. As shown in **Table K-1**, the countywide VMT estimate for Ventura County is 18,676,660. VMT occurring on local roadways in incorporated and unincorporated areas are reported by HPMS as 6,689,160 and 1,394,030, respectively. HPMS data reports state highway system (SHS) VMT separately; however, it does not explicitly distinguish between incorporated versus unincorporated area VMT occurring on the state highway system of the county.

To distinguish between incorporated and unincorporated area VMT occurring on state highways, the 2016 Caltrans Post-Mile based State Highway Volume Report was used to estimate the amount of state highway VMT occurring within unincorporated Ventura County. This was calculated by estimating the segment lengths between post-mile points and multiplying these lengths by the Average Daily Volume (ADT) reported in the Caltrans Volume Report (VMT = segment length x volume). This estimation resulted in an unincorporated state highway baseline VMT estimate of 3,519,851. The latter can then be added to the HPMS VMT estimates for local and other unincorporated roadways to yield the total boundary-based unincorporated Ventura County VMT estimate of 4,936,831. Incorporated and countywide VMT estimates were reported as reasonableness checks on the calculations performed to achieve the results displayed in **Table 2.1.**

Table K-1 2016 Ventura County Boundary-Based VMT Estimates

Total Countywide VMT (HPMS Boundary-based)	18,676,660
Unincorporated County Local Road VMT (HPMS Boundary-based)	1,394,030
Unincorporated County State Highway VMT (Caltrans ADT x SHS Miles)	3,519,851
Other Unincorporated VMT (HPMS Boundary-based)	22,950

Total Unincorporated VMT (HPMS Boundary-based + SHS estimate)	4,936,831
Total Incorporated Local Road VMT (HPMS Boundary-based)	6,689,160
Total Incorporated State Highway VMT (Caltrans ADT x SHS Miles)	7,037,589
Other Incorporated VMT (HPMS Boundary-based)	13,080
Total Incorporated VMT (HPMS Boundary-based + SHS estimate)	13,739,829

Source: 2016 HPMS (Caltrans, 2017), GHD via 2017 Caltrans Volume Report

The VMT estimates reported by HPMS do not reflect the full trip length of trips that cross jurisdictional boundaries (i.e., trip-based VMT). Pursuant to OPR guidance, and as described previously, full trip-length VMT estimates are preferred over boundary-based VMT for estimating greenhouse gas emissions from on-road mobile sources.

To reflect the full trip length of those trips that have one trip end (either beginning or ending) in Ventura County), VCTC and Santa Barbara County Association of Governments (SBCAG) travel demand model outputs were used to augment the amount of internal boundary-based VMT occurring with Ventura County. This entails estimating the amount of VMT that occurs outside Ventura County from interregional trips (i.e., internal-to-external (I-X) trips and external-to-internal (X-I) trips) occurring south and east of Ventura County. Given that the SBCAG regional travel demand model includes Ventura County in its modeling domain, the best approach for quantifying VMT from interregional trips north of Ventura County was to use the SBCAG model. This entailed processing similar output (i.e., trips with only one trip end in Ventura County) from the SBCAG model to compute interregional VMT between Santa Barbara County and Ventura County. For counties south and east of Ventura County, the VCTC travel demand model was used.

As shown in **Table K-2**, the added VMT that occurs outside Ventura County from interregional trips is 9,697,737 (7,880,729 VMT from areas south and east of Ventura County plus 1,817,008 from areas north of Ventura County). Based on the HPMS data and unincorporated area state highway VMT, approximately 26.4 percent of total boundary-based VMT occurs in the unincorporated areas of Ventura County. This same percentage split was applied to the total added intercountry VMT estimate to yield the unincorporated portion of VMT that occurs outside Ventura County (2,563,418 VMT). Adding this increment of VMT to the total unincorporated boundary-based VMT estimate of 4,936,831 yields the total trip-based (i.e., full trip length) VMT estimate of 7,500,249 associated with unincorporated Ventura County. **Table K-2** displays this information.

Table K-2 2016 Ventura County Trip-Based VMT Estimates (Baseline)

Interregional VMT occurring south and east of Ventura County	7,880,729
Interregional VMT occurring north of Ventura County	1,817,008
% of Unincorporated Boundary-based VMT	26.40%
Total Unincorporated Boundary-based VMT	4,936,831
Total Unincorporated Interregional VMT	2,563,418
Total Unincorporated Trip-Based VMT	**7,500,249**
Total Countywide Trip-Based VMT	28,377,397

Source: VCTC 2012 Baseline Model, SBCAG 2015 Baseline Model

Forecasted VMT Estimates

A similar methodology was used to forecast future VMT as the approach used to estimate baseline VMT. **Table K-3** displays the 2040 projections of boundary-based VMT within Ventura County. Based on the 2040 VCTC and 2040 SBCAG travel demand model forecasts and the percentage distribution of boundary-based unincorporated VMT, the amount of trip-based VMT associated with the unincorporated Ventura County is 8,173,937 per day.

Table K-3 Ventura County Daily VMT Estimates (2040 Forecast)

Total Unincorporated Boundary-based VMT	5,337,751
Total Incorporated Boundary-based VMT	14,855,640
Interregional VMT occurring south and east of Ventura County	8,700,996
Interregional VMT occurring north of Ventura County	2,042,133
% of Unincorporated Boundary-based VMT	26.40%
Total Unincorporated Interregional VMT	2,836,186
Total Unincorporated Trip-Based VMT	**8,173,937**
Total Countywide Trip-Based VMT	30,936,520

Source: VCTC 2040 Model, SBCAG 2040 Model, 2016 HPMS, GHD via 2017 Caltrans Volume Report