APPENDIX C

2020 VMT GUIDELINES

VEHICLE MILES TRAVELED (VMT) GUIDELINES
FINAL DRAFT

Prepared by the City of Santa Rosa

Transportation and Public Works Department

(revised) – June 5, 2020

INTRODUCTION/BACKGROUND

A significant change in CEQA practice has been triggered by the implementation of Senate Bill (SB) 743. SB 743 removes the use of automobile delay or traffic congestion for determining transportation impacts in environmental review. Instead, CEQA Guidelines Section 15064.3 now specifies that Vehicle Miles Traveled (VMT) is the appropriate metric to evaluate transportation impacts. To comply with these new rules, local jurisdictions will need to define policies and practices for conducting VMT analysis in areas under their jurisdiction.

Under CEQA, lead agencies must determine whether a proposed project has the potential to cause significant environmental impacts. This determination must be based, to the extent possible, on factual data and scientific methods of analysis. The project's effect on transportation is one of the areas that must be analyzed. Jurisdictions have typically used vehicle Level of Service (LOS) as the primary measure of a project's transportation impacts. The City has a separate Traffic Operational Guidelines which may be used to determine operational impacts created by development projects. These operational analyses are not subject to CEQA compliance.

In September 2013, the legislature passed, and Governor Jerry Brown signed into law SB 743, initiating a process intended to fundamentally change transportation impact analysis under CEQA. One major change resulting from the statute is the elimination of automobile delay or other similar measures of traffic congestion as a basis for determining significant impacts. According to the legislative intent contained in SB 743, these changes to current practice are intended to "more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions."

In December 2018, the California Governor's Office of Planning and Research (OPR) published the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (referred to herein as the OPR Technical Advisory), which provides guidelines on the implementation of SB 743. The OPR Technical Advisory's guidelines state that VMT must be the metric used to determine significant transportation impacts. This requirement will apply statewide effective July 1, 2020; lead agencies can opt in sooner at their own discretion.

PROJECT CONSIDERATIONS

The City expects these guidelines to result in studies that provide comprehensive and accurate analysis of potential transportation operations to City facilities and services. This information is essential for decision makers and public when evaluating individual projects.

The following types of projects may require a transportation analysis:

- Land use entitlements requiring discretionary approval, which include but are not limited to annexations, general plan amendments, specific plans, zoning changes, conditional use permits, and tentative maps.

- Transportation infrastructure modification or expansion, including Capital Improvement Program (CIP) projects on city roads and state highways.
- Land use activity advanced by agencies other than the City of Santa Rosa that is subject to jurisdictional review under State and Federal law.
- Land use activity advanced by agencies other than the City of Santa Rosa that is inconsistent with the City's General Plan.

INTENT OF ANALYSIS GUIDELINES

These guidelines address key elements required for preparing and reviewing transportation analysis studies in Santa Rosa. This document is intended to be a resource applied in concert with professional judgment of the City Traffic Engineering Division. The following major issues are addressed in this document:

- Situations and thresholds that commonly trigger the need for a CEQA transportation analysis
- Scope and extent of the required study
- Transportation analysis methodology
- Criteria to determine if the transportation related impacts of a proposed project are significant under CEQA
- Mitigation measure requirements
- Guidelines for documentation of the findings, conclusions, and recommendations

The City will primarily review the transportation studies and reports based on the guidelines presented in this document. However, each project is unique, and the guidelines are not intended to be prescriptive beyond practical. Not all criteria and analyses described in this document will apply to every project. Early and consistent communication with the Planning and Economic Development and Transportation and Public Works Departments is encouraged to confirm the type and level of analysis required on a case-by-case basis. Ultimate determination of the criteria and analysis required for a project shall be the responsibility of the City Traffic Engineer or his/her/their designee.

CEQA TRANSPORTATION ANALYSIS

CEQA transportation analysis requires an evaluation of a project's potential impacts related to VMT and other significance criteria. This section provides the significance criteria, screening criteria, thresholds of significance, and methodologies of the analysis to be used in transportation impact studies (TIS) and CEQA documents for development projects.

SIGNFICANCE CRITERIA – TRIGGERS REQUIRING ANALYSIS

Unless explicitly waived by the City, a transportation analysis is required when any one or more of the following conditions is met:

1. The project has the potential to create a significant environmental transportation impact under CEQA (see below criteria from OPR)

2. A project with unique land uses or operating characteristics, as determined by the City Traffic Engineer or his/her/their designee
3. The project requires discretionary planning approval and was not previously analyzed under a prior transportation analysis or similar study.
4. A transportation project that is likely to lead to a substantial or measurable increase in VMT.

In general, a transportation analysis is considered valid for three years. The ultimate decision of whether an updated transportation analysis is required shall be at the discretion of the City Traffic Engineer or his or her designee.

In accordance with OPR's guidelines for CEQA, a project could have significant transportation impact on the environment if it:

a) Conflicts with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities;
b) Conflicts with or is inconsistent with CEQA Guidelines section 15064.3(b);
c) Substantially increases hazards due to geometric design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment);
d) Results in inadequate emergency access.

CEQA Guidelines section 15064.3(b) provides the following criteria for analyzing transportation impacts:

1) Land Use Project. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within ½ mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis.

CEQA TRANSPORTATION PERFORMANCE METRICS

Vehicles Mile Traveled (VMT)

VMT is the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT is calculated using projections and data outputs from the 2015 Sonoma County Travel Model.

Residential VMT per Capita

When assessing a residential project, the project's home-based VMT is divided by the number of residents expected to occupy the project to determine the VMT per capita of the project.

Employment VMT per Worker

When assessing an office or industrial project, the project's VMT associated with home-based work (commute) trips is divided by the number of employees expected to occupy the project to determine the VMT per worker of the project.

Net Change in Total VMT (Retail, Hotel or School Projects)

When assessing a retail, hotel, or school project, the project's total VMT, as opposed to a residential VMT per capita or employment VMT per worker metric is measured. Further separation of uses may be applied in that for a hotel, there is an employee component that would be analyzed using employment VMT and a hotel guest component that would be analyzed with the Total VMT.

IMPLEMENTING SB 743

There are several components of SB 743 implementation that the City will need to consider and address.

- Metrics – how VMT is presented
- Screening – which projects will require quantitative VMT analysis and which projects can be presumed not to cause a significant VMT impact
- Methods – what techniques will be used to calculate and forecast VMT
- Thresholds – what level of VMT is considered a significant environmental impact and
- Mitigation – how project sponsors can address a project's significant VMT impacts.

In addition, there are three separate types of projects that are subject to CEQA review and for which VMT evaluation will be needed.

- Land Use Projects - development projects
- Land Use Plans – General Plan update and Specific Plans
- Transportation Projects – infrastructure changes, such as building roads, bicycle and pedestrian facilities and transit facilities.

VMT METRICS

The new CEQA Guidelines Section 15064.3(b)(4) establishes that the lead agency has discretion to choose the most appropriate methodology to evaluate a project's VMT. The OPR Technical Advisory cover residential, office and retail land uses. For all VMT estimates, the method should capture the full trip length to the extent feasible and reasonable.

- For residential land uses, the OPR Technical Advisory recommends using Residential VMT per capita for home-based trips.

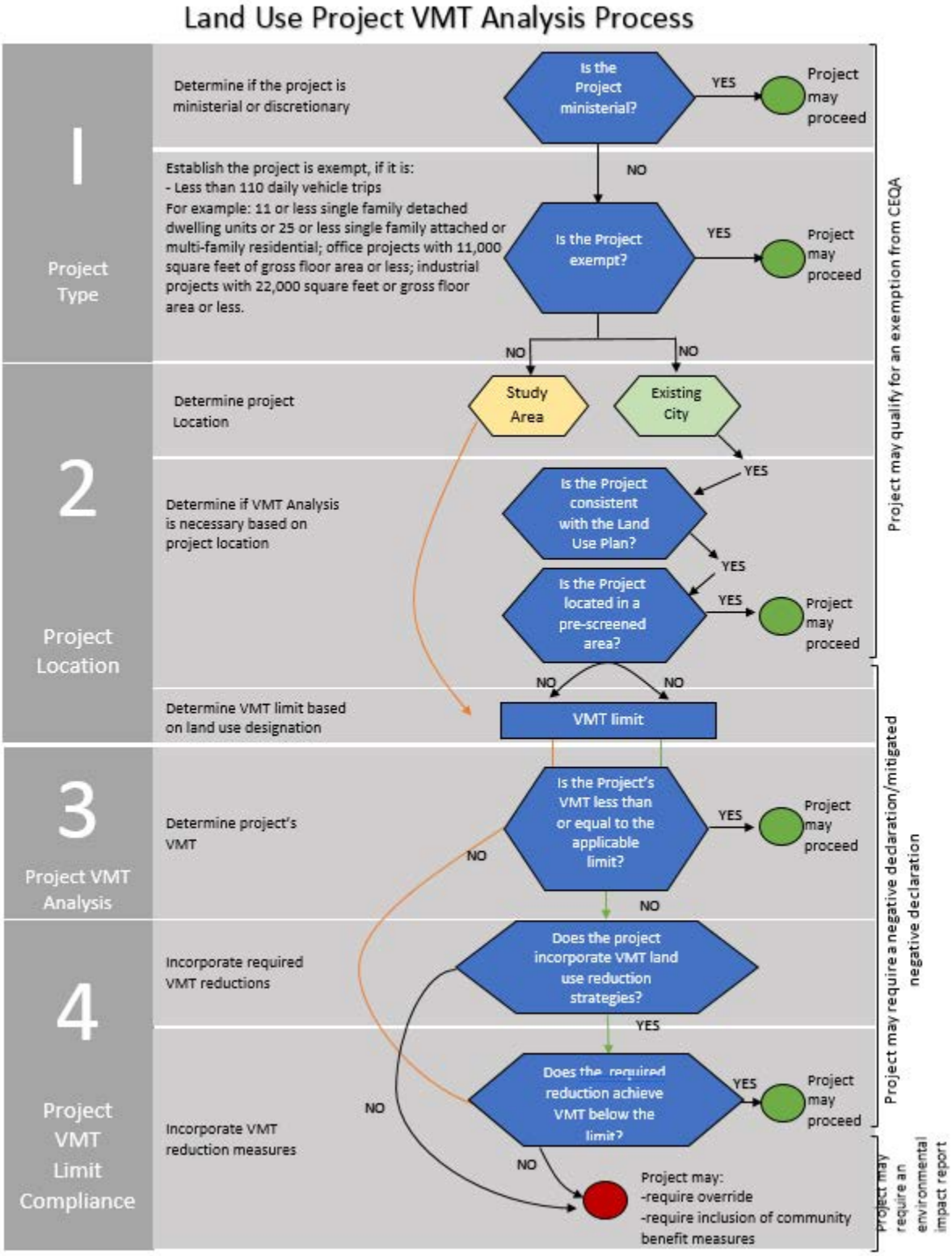
- For office land uses, the OPR Technical Advisory recommends using Employment VMT per worker for work-related trips only. In this form, the VMT per capita represents the VMT generated by workers for only trips with one trip end at the work location.
- For retail land uses, the OPR Technical Advisory recommends using the total VMT

Santa Rosa will be using the following VMT metrics based on information from the Sonoma County Travel Model maintained by SCTA.

PROJECT SCREENING

LAND USE PROJECTS

The City will conduct an initial assessment of each project based on the project description, project location, and proposed uses. Figure 1 summarizes the VMT analysis process for land use projects.



The concept of project screening is that some projects have characteristics that would readily lead to the conclusion that they would not cause a significant VMT impact, and therefore those projects could be screened out of completing a detailed VMT analysis. The CEQA Guidelines section 15064.3(b)(1) states that land use projects within ½ mile of a major transit stop or a stop along a high-quality transit corridor (i.e. with at least 15-minute headways during the peak

hours) generally should be presumed to have a less than significant impact on VMT. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.

The OPR Technical Advisory presents a method for "map-based" screening, where projects located in low-VMT areas may require only a qualitative discussion of their VMT effects. The areas that would qualify as "low-VMT" areas would depend on how a jurisdiction defines its VMT metrics and thresholds.

Land use projects may also be screened out of further analysis if they are very small (110 vehicles trips per day or less) or can be demonstrated to primarily attract trips that would have otherwise been traveled at a longer distance.

SCREENING CRITERIA for Land Use Projects in Santa Rosa

TYPE	**SCREENING CRITERIA**
Small Infill Projects	110 or fewer daily vehicle trips. For example: 11 or fewer single family detached residential, 25 or fewer single family attached or multi-family residential; office projects with buildings totaling 11,000 square feet of gross floor area or less; industrial projects with buildings totaling 22,000 square feet gross floor area or less (OPR Technical Advisory)
Map-Based Screening for Residential and Office Projects	Low-VMT generating areas (OPR Technical Advisory)
Near transit station	Within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor (CEQA Guidelines section 15064.3(b)(1)
Affordable Housing	100% affordable
Local-Serving Retail	Projects including retail uses up to a combined total of 10,000 gross square feet
Mixed Use Projects	Evaluate each component independently and apply the significance threshold for each project type (residential /retail). Alternatively, consider only the project's dominant use.
Local-Serving Public Facilities (excluding schools)	Publicly-owned local-serving facilities such as: Library, Community Center, City Hall, Public Safety Station, Passive Parks, Public Utilities Offices or Infrastructure

Streamlining Projects that are Consistent with GP and Specific Plans	SB35

For projects that include other land uses, the following guidance should be applied:

- Hotels – apply Employment VMT per worker (employees commuting to workplace) and Total VMT (hotel guests)
- Light industrial/cannabis manufacturing/cultivation – apply Employment VMT per worker (employees commuting to workplace)
- Mixed Use – apply the VMT significance threshold for each component separately, taking credit for internally-captured trips; a mixed-use project that has a dominant use with a very small secondary use may evaluate only the dominant use.
- Dispensary – apply Total VMT

The City has established VMT limits for land use projects, which are designed to achieve a 15 percent reduction below the 2015 baseline for new land use development. The VMT limits are established at the Countywide level based on the SCTA travel model using an Origin Destination methodology.

Projects with VMT less than or equal to the established limits will likely be found to have less than significant transportation impacts under CEQA. Projects with VMT exceeding the established limits that are unable to reduce VMT through reduction strategies:

a. may be required by the City to demonstrate clear community benefit, within the context of the General Plan and consistent with the Climate Action Plan; and
b. may be found to have significant and unavoidable transportation impacts, requiring preparation of an EIR and statement of overriding considerations. Projects are required to mitigate transportation impacts to the extent feasible.

Land use projects must show consistency with the General Plan Land Use Plan. Projects that are inconsistent with the Land Use Plan are automatically considered inconsistent with the VMT policy and shall conduct a VMT analysis.

Projects that are not likely to lead to a substantial or measurable increase in VMT and are presumed to be less than significant include, but are not limited to, the following:

- Projects located within pre-screened areas on the VMT Screening Maps shown in Figures 2 and 3. Screening maps (Residential VMT Per Capita and Employment VMT Per Worker) are available at the following link: https://srcity.org/VMT
- Project located within ½ mile of an existing major transit stop or a stop along an existing high-quality transit corridor. (such as Santa Rosa Avenue/Mendocino Avenue and Sebastopol Road).

For projects located within ½ mile of an existing major transit stop, the presumption of less than significant would not apply if project-specific or location- specific information indicates

that the project will still generate significant levels of VMT. For example, the presumption might not be appropriate if the project:

- Has a floor area ratio of less than 0.75
- Adversely affects pedestrian, bike, or transit infrastructure or circulation.

If any of these apply, the project will be subject to VMT analysis. Notwithstanding these provisions, the Traffic Engineering Division may determine that a VMT analysis is required for any discretionary project where substantial evidence indicates the project is likely to result in substantial increase in VMT.

Figure 2

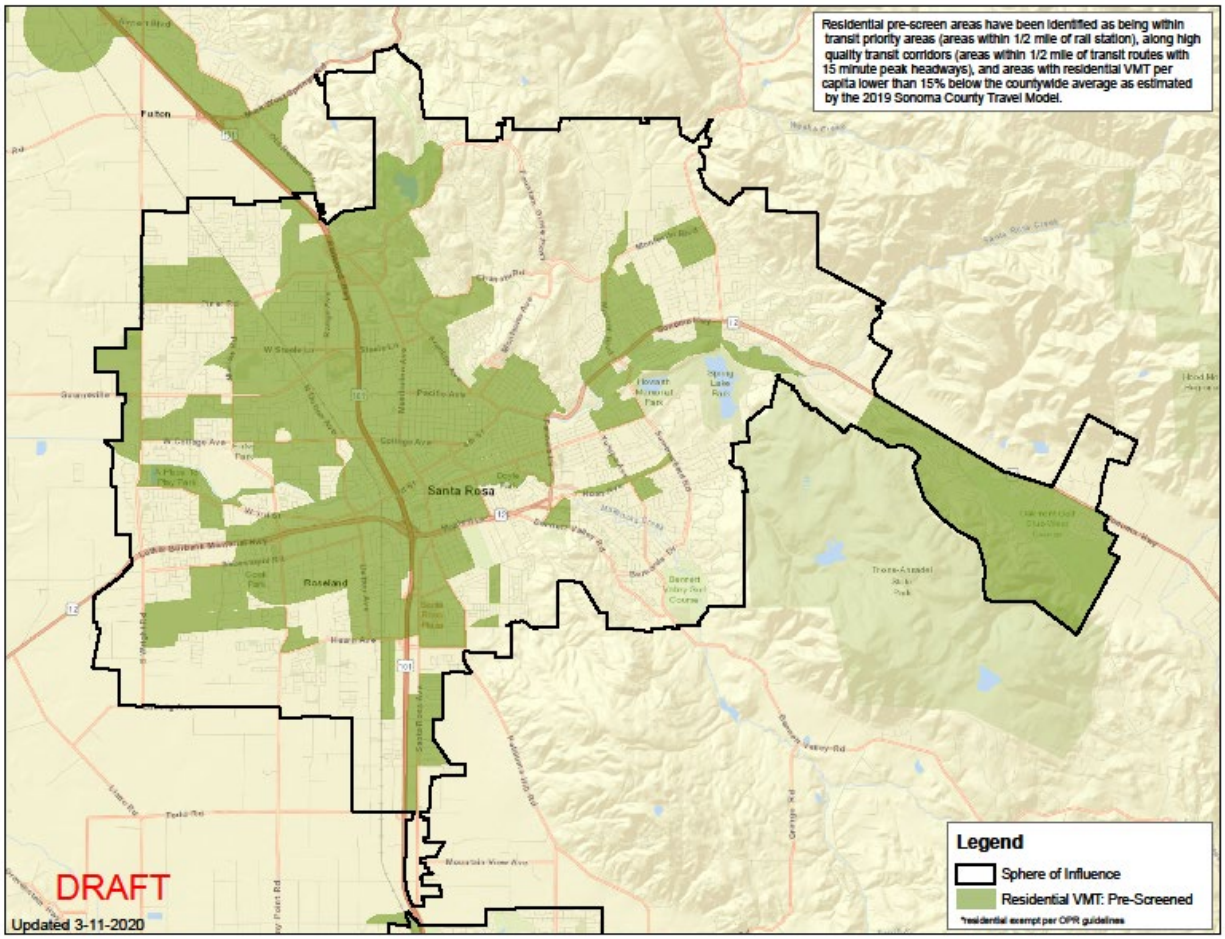


Figure 2 shows the Residential VMT Per Capita Screening Map that identifies areas in the City that are exempt from quantitative VMT analysis. These include sites that have been pre-screened through citywide VMT analysis using the 2015 SCTA travel model. Pre-screened areas are shown in dark green and have been determined to result in 15 percent or below the countywide average for VMT per capita established for that land use designation if built consistent with the General Plan Land Use Plan.

Figure 3

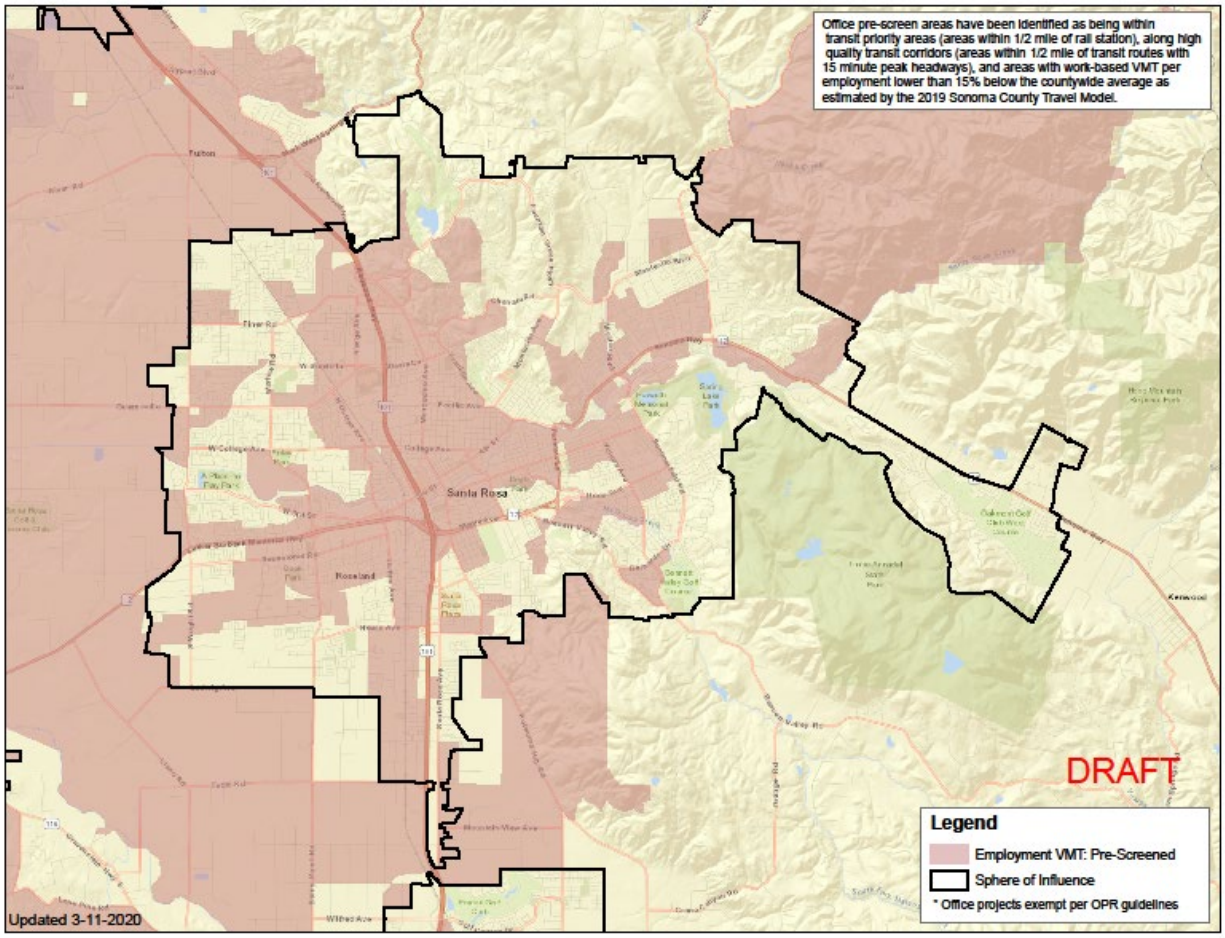


Figure 3 shows the Employment VMT Per Worker Screening Map based on VMT per worker that identifies areas in the City that are exempt from quantitative VMT analysis. These include sites that have been pre-screened through citywide VMT analysis using the 2015 SCTA travel model. Pre-screened areas are shown in salmon and have been determined to result in 15 percent or below the countywide average for VMT per capita established for that land use designation if built consistent with the General Plan Land Use Plan.

TRANSPORTATION PROJECTS

The City will conduct an initial assessment to determine if the proposed transportation project is likely to substantially increase VMT, as determined by the City Traffic Engineer or his/her/their designee. Projects that are anticipated to substantially increase VMT would likely be subject to a quantitative VMT analysis that considers the effects of induced travel.

Projects that are not likely to lead to a substantial or measurable increase in VMT include, but are not limited to, the following:

- Public transit (establishing new routes or services or modifying existing routes or services)

- Addition of active transportation improvements (class II bicycle lanes, shared use paths, sidewalks, pedestrian pathways)
- Addition of roadway capacity on local and collector roadways only provided for the purpose of improving conditions for pedestrians, cyclists, and transit users
- Resurfacing, rehabilitating, maintenance, preventive maintenance, replacement and repair projects that do not add additional roadway capacity
- Installation, removal, or modification of turn lanes
- Installation, removal, or modification of traffic control devices, including traffic signals, wayfinding, HAWK, RRFB and traffic signal priority systems
- Traffic signal optimization and or coordination to improve vehicle, bicycle or pedestrian flow
- Installation of roundabouts
- Installation or modification of traffic calming devices
- Lane reductions (i.e. road diets)
- Addition of auxiliary lanes that do not add additional roadway capacity
- Removal of off-street parking and addition, adoption, or modification of parking devices and management strategies
- Safety improvements, including roadway shoulder enhancements and auxiliary lanes, and grade separations for rail, transit, pedestrian and bicycle facility enhancements
- Sidewalk infill, removing barriers to accessibility, and ADA improvements
- Installation or modification of access control restrictions
- Complete streets projects that do not add additional roadway capacity
- Other improvements to the circulation system that do not add additional roadway capacity

THRESHOLDS OF SIGNFICANCE

Since SB 743 introduces a new mandatory metric for use in transportation impact analysis, the City will be required to determine what constitutes acceptable versus unacceptable levels of VMT for CEQA analysis. This process is generally referred to as establishing significance thresholds and is governed by CEQA Section 15064.7.

The City will rely on VMT threshold recommendations contained in the OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA*. OPR recommends that VMT thresholds for residential and employment-based land use projects be set at fifteen percent below the baseline VMT/capita or VMT/employee for Sonoma County. Below is a table showing the Countywide Average Residential VMT Per capita and Employment VMT Per Worker.

Sonoma County Travel Model 2015 Estimates - Total VMT and VMT Efficiency Estimates

Jurisdiction	Total VMT	Residential VMT (All home-based)	Employment VMT (commute only)	Total Population	Total Employment	VMT/Service Population*	Residential VMT/Capita	Employment VMT/Worker
Cotati	400,171	147,607	50,876	7,599	3,771	35.20	19.42	13.49
Cloverdale	453,568	123,965	44,909	8,878	1,915	42.02	13.96	23.45
Healdsburg	618,280	169,085	107,324	12,908	8,000	29.57	13.10	13.42
Petaluma	3,369,451	1,009,873	721,180	60,755	41,306	33.01	16.62	17.46
Rohnert Park	1,858,198	582,716	274,428	42,717	18,710	30.25	13.64	14.67
Santa Rosa	6,288,192	2,403,030	736,396	193,006	78,243	23.18	12.45	9.41
Sebastopol	452,127	138,664	62,022	7,768	5,354	34.46	17.85	11.58
Sonoma	625,751	272,844	91,454	11,248	5,810	36.68	24.26	15.74
Windsor	970,490	355,269	119,604	27,849	9,563	25.94	12.76	12.51
Unincorporated Sonoma County	5,519,207	2,591,720	523,642	129,164	40,962	32.44	20.07	12.78
Countywide	20,622,253	7,810,430	2,737,796	501,892	213,634	28.82	15.56	12.82

*Note: Service Population = Population + Employment

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The following are thresholds of significance related to substantial additional VMT:

- For residential projects, a project would cause substantial additional VMT if it exceeds existing Countywide average home-based VMT per capita minus 15 percent
- For office projects, a project would cause substantial additional VMT if is exceeds existing Countywide average commute based VMT per worker minus 15 percent
- For retail projects, a project would cause substantial additional VMT if it results in a net increase in regional total VMT
- For redevelopment projects, if the replacement land use would lead to a net overall decrease in VMT, the project would be considered to have a less than significant transportation impact.

PROJECT IMPACT ANALYSIS

Method for Forecasting VMT

VMT is typically calculated and forecasted using a travel demand model using an Origin Destination methodology, which can estimate the total number and length of vehicle trips for a given geographic area. Using a travel demand model is typically preferred over other methods because the travel model is better able to account for both project generated VMT and the project's effect on total area wide VMT, both of which are important in a CEQA analysis. The OPR Technical Advisory recommends that the method used to define a VMT threshold should be the same method that is used to evaluate a project's VMT against that threshold.

There are two primary travel demand models available for the purposes of VMT analysis in Sonoma County: the Metropolitan Transportation Commission (MTC) model and the Sonoma County Transportation Authority (SCTA) model. The SCTA model includes a more detailed representation of the Sonoma County and its cities transportation network and land use patterns, and is the model typically used for most land use project specific applications for jurisdictions in the county.

The SCTA has recently completed the calibration of the travel model to a base year of 2015. In 2019, the Sonoma County Travel Behavior Study was completed.

The City of Santa Rosa will be using the 2015 Sonoma County Travel Model as the forecasting method for VMT. The Traffic Engineering Division has the discretion to request other methods to determine VMT, such as a VMT calculator tool once it has been established for Sonoma County.

CEQA requires environmental analysis to reflect a "good faith effort at full disclosure" (CEQA Guidelines Section 15151). Therefore, VMT analysis should not be truncated at jurisdictional or other boundaries. The City's VMT thresholds were developed using the SCTA travel model and estimated for the entire model network. Further, recent enhancements to the SCTA model account for the lengths of "gateway" trips made beyond the County boundaries. Consequently, CEQA analysis should use the SCTA model network for consistency of evaluation.

VMT CALCULATOR TOOL OPTIONS

A few jurisdictions in the state have already developed VMT calculator tools, such as San Jose, Los Angeles, and SANDAG. An objective of these calculators is to evaluate a project's VMT and quantify VMT reduction associated with proposed mitigation measures. The SCTA will begin developing a VMT calculator tool in 2020. It is anticipated that the SCTA will model the County calculator tool after the SANDAG approach. Once the SCTA creates the VMT Calculator Tool, the City is expected to utilize it for local land use projects. The City's VMT Guidelines will be updated to incorporate the Tool once it is finalized.

CUMULATIVE ANALYSIS

Cumulative impact analysis must comply with CEQA. Land use development and infrastructure projects that are consistent with the General Plan, are expected to rely on the General Plan cumulative traffic analysis and EIR conclusions.

- The cumulative scenario is required per CEQA Guidelines Section 15130
- The general definition of cumulative as a scenario is that is represents past, present and reasonably foreseeable action regarding land use development and the transportation network (see CEQA Guidelines Section 15355)

MTIGATION – VMT REDUCTION STRATEGIES

Projects should be designed to address VMT reduction strategies. This can be a combination of providing access to active transportation modes and transit stations as an example. The project must also comply with current Bicycle and Pedestrian Master Plan infrastructure improvements and may include providing gaps in bicycle and pedestrians networks or traffic calming techniques.

Below is a list of several strategies that could be utilized to help reduce VMT. Until the City has a means of quantitatively analyzing the affects of the VMT mitigation strategies, a qualitative approach may be used as allowed by CEQA guidelines.

When the Countywide calculator tool becomes available, the City may incorporate that into its quantitative analysis. If a development does not screen out and requires mitigation per CEQA, the City will take a qualitative approach to ensure adequate, applicable measures for the project are taking place. The traffic study should include an assessment of possible VMT reduction strategies to help a development meet their VMT goal.

Land Use Projects –

- Increase diversity of land uses
- Incorporate mixed uses into a development project
- Designate all or a portion of a residential development as deed-restricted affordable housing
- Increase the residential density of a project within the parameters established by the General Plan
- Provide pedestrian and/or bicycle network enhancements
- Provide traffic calming measures and low stress bicycle network enhancements
- Increase transit service frequency and speed
- Unbundle parking
- Provide bicycle parking
- First/last mile connections
- Transit fare subsidies, ECO passes
- Telecommuting for businesses
- Provide In lieu fee
- Other TDM strategies – rideshare, car sharing, bike share, shuttle programs, education/training

Transportation Projects

- Addition of bicycle and/or pedestrian facilities
- Increase in access to transit including bus stop improvements
- Offsite improvements to bicycle network
- Offsite improvements to pedestrian network
- Adaptive Traffic Control Systems
- Optimizing intersection signal timing for bicycles
- Install transit priority or queue jump capability

It should also be noted that projects outside of the downtown will likely have higher VMT. Depending on how high the VMT is, there may be locations where the VMT cannot be reduced enough through mitigation to attain less than a significant impact level. In such instances, a project will be required to prepare an EIR.