City of Sebastopol
Planning Commission Staff Report

Meeting Date:	July 25, 2023
Agenda Item:	7A
To:	Planning Commission
From:	Kari Svanstrom, Planning Director John Jay, Associate Planner Ian Barnes, Fehr & Peers
Subject:	Vehicle-Miles Traveled (VMT) Threshold Project
Recommendation:	Receive Presentation

Introduction:

This meeting is to kick-off a policy update related to the City's analysis of transportation impact metrics for the California Environmental Quality Act (CEQA) to comply with State Law (SB743) related to Greenhouse gas emissions and Vehicle-Miles Traveled. The City received a grant award for this project from the State, and has retained Fehr & Peers, a transportation engineering/consulting firm, to assist the City with this project. Fehr & Peers has done a significant amount of work for the Sonoma County Transpiration Authority (SCTA), including travel modeling that included the City of Sebastopol and surrounding areas. They have also developed "SB743" screening maps for SCTA which includes VMT tools and screening maps. Working with Fehr & Peers will save money as they have already developed background information on VMT within the County and Sebastopol, including VMT mapping tools (the contract scope reflects this savings already).

The project will review what VMT is, and how it differs from prior (Level of Service, or LOS) analysis; how VMT is used in CEQA; assist the City in developing VMT metrics/thresholds for the City to adopt and additional criteria during VMT review; and, also provide guidance on potential mitigations that could be applied to projects.

Background:

The State of California adopted SB743, effective 2020, which shifts transportation impact metrics for the California Environmental Quality Act (CEQA) from vehicle level of service (LOS), a measure of roadway capacity that assigns a letter grade to roadway performance (A to F, similar to scholastic grades), to vehicle-miles traveled (VMT), a metric that accounts for the number of vehicle trips generated and the length or distance of those trips. (See also the

following video “What is VMT”: https://www.youtube.com/watch?v=UE4TJItVdJ8). The shift to VMT changes the focus of CEQA Transportation analysis from “how does a project impact drivers” to “what is the environmental impact of driving resulting from the project.”

The switch to the VMT metric will enables the City to more closely align CEQA Transportation section analysis with goals and policies related to sustainability and climate. However, the VMT analysis methods and thresholds present unique challenges for agencies on the periphery of an MPO that are served by limited/infrequent transit services and/or that have a high driving mode share.

Under SB743, the City must decide what level of VMT change caused by a project would constitute a significant transportation impact when a project undergoes CEQA analysis. Currently, VMT needs to be done individually on each project subject to CEQA review under overall State guidelines. Additionally, the City has not identified mitigations that would be appropriate to reduce VMT or screening criteria that would allow projects to be presumed to have a less-than-significant impact on VMT. It is noted that screening of VMT impacts in the CEQA Transportation section is subject to staff approval.

This report will include a presentation by staff and the consultant, followed by any questions or discussion by the Planning Commission to being the project.

General Plan Consistency:

This project supports the General Plan Goals and policies as follows:

Goal CIR 5: Reduce Vehicle Miles Traveled (VMT) in Order to Reduce Congestion and Help Achieve Regional Efforts to Reduce Greenhouse Gas (GHG) Emissions

Policy CIR 5-1: Actively support the Regional Climate Protection Authority (RCPA) in its efforts to reduce GHG emissions and strive to meet its regional goals.

Policy CIR 5-2: Ensure that the City’s Trip Reduction Program (Municipal Code Section 8.16) is implemented. The purpose of the City’s Trip Reduction ordinance is to reduce traffic and improve air quality within the City of Sebastopol by promoting the development of Trip Reduction Programs (also referred to as Transportation Demand Management Programs, or TDM) at existing and future work sites. Examples of TDM programs may include (but are not limited to) subsidized transit passes, guaranteed ride home, carpool matching, telecommuting, alternative work schedules, car sharing, employer-sponsored vanpools, priced workplace parking, preferential parking for carpools and/or low-emission vehicles, and shower facilities at workplaces to support bike riding.

Policy CIR 5-3: Support the establishment and expansion o f a regional network of electric vehicle charging stations and encourage the expanded use of electric vehicles.

Actions in Support of Goal CIR 5

Action CIR 5a: Supply transportation data to the RCPA as requested to assist in the assessment of GHG reduction efforts.

Action CIR 5b: Establish specific TDM requirements that is consistent with the City's Trip Reduction Program for projects and consider making requirements sector-based (e.g., residential, commercial, industrial).

Action CIR 5c: Complete surveys of employment trips as outlined in the City's Trip Reduction Program.

Action CIR 5d: Establish standards and requirements for electric vehicle parking, including the installation of electric vehicle charging stations, in new development projects.

Public Comment:
No public comments have been received as of the writing of this staff report.

Recommendation:
Receive the presentation and provide discussion. No decisions will be made at this meeting.

Attachments:
General Plan Circulation Element
Consultant scope of work
2019 white paper by Fehr & Peers on VMT in Sonoma County

Related, but not part of this discussion:
If you are interested in learning more about existing travel patterns in Sonoma County and Sebastopol, See SCTA (Sonoma County Transportation Authority):
https://scta.ca.gov/wp-content/uploads/2020/02/Sonoma_TBS_2-7-2020_web.pdf
and
https://scta.ca.gov/library-archive/#toggle-id-12

3. CIRCULATION

Introduction

The Circulation Element provides the framework for decisions concerning the city's multi-modal transportation system, which includes roadway, transit, bicycle, and pedestrian modes of travel. The Circulation Element provides for coordination with the Sonoma County Transportation Authority (SCTA), which serves as the coordinating agency for transportation funding for Sonoma County.

State law (California Government Code Section 65302(b)) mandates that the Circulation Element contain the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, military airports and ports, and other public utilities and facilities, to the extent these items exist in the planning area. As required by California Government Code Section 65302(b), the Circulation Element is correlated closely with the Land Use Element and is related to the Housing, Conservation & Open Space, Noise, and Safety elements.

The Circulation Element reflects the City's desire to provide for complete street, bicycle, and pedestrian facilities. This element considers overall mobility, existing and desired land uses, future street conditions, and mobility for non-automobile users, including safe routes to schools. This element establishes standards that guide development of the transportation system through goals, policies, and actions.

Background information regarding circulation conditions in Sebastopol is presented in Chapter 2 of the General Plan Update Existing Conditions Report.

Goals, Policies, and Actions

Goal CIR 1: Provide a Transportation System that Promotes the Use of Alternatives to the Single-Occupant Vehicle and Facilitates the Efficient and Environmentally Responsible Movement of People and Goods Within and Through the City of Sebastopol

Policy CIR 1-1: Ensure that the City's circulation network is maintained and improved over time to support buildout of the General Plan in a manner that is consistent with the General Plan Circulation Map. (Figure 3.1)

Policy CIR 1-2: Ensure that the City's circulation network is a well-connected system of streets, roads, sidewalks, multi-use trails, routes, and paths that effectively accommodates vehicular and non-vehicular traffic in a manner that considers the context of surrounding land uses and the needs of all roadway users.

Policy CIR 1-3: Regard the quality of life in Sebastopol, maintaining its special small-town character, and providing a safety network of pedestrian and bicycle facilities as more important than accommodating vehicle circulation.

Policy CIR 1-4: Promote public education and participation in transportation issues and decision-making.

Policy CIR 1-5: When analyzing impacts to the circulation network created by new development or roadway improvements, consider the needs of all users, including those with disabilities, ensuring that pedestrians, bicyclists, and transit riders are considered preeminent to automobile drivers.

Policy CIR 1-6: In evaluating circulation improvement needs, and in reviewing major development proposals, consider impacts for all modes of transportation, including pedestrians, bicyclists, transit, and vehicles.

Policy CIR 1-7: Projects that would substantially impact circulation conditions shall provide a circulation impact report. This report will serve as a decision-making tool for the City, recognizing that maintaining and improving the community's social fabric and economic vitality includes consideration of a project's effects on pedestrians, bicyclists, and transit as well as the overall effect of improvements associated with achieving appropriate Level of Service. LOS is not intended to be used as the primary method to limit the size or density of a project, but rather to provide decision-makers with a picture of the impacts associated with a project and allow decision-makers to determine appropriate improvements to alleviate traffic impacts, to the extent appropriate and feasible. The Planning Department will determine whether a circulation impact report is required as part of the initial project application review process.

Circulation impact reports shall evaluate:

- Project effects on all modes of travel, including pedestrians, bicycles, transit, and vehicles;
- Improvements to accommodate the project with a focus on access and safety; and

- Impacts to vehicle travel, as determined by the Transportation Research Board's Highway Capacity Manual. This analysis is intended to provide a menu of potential improvements but should not mitigate LOS by reducing project size, either by intensity or density.

Decision-makers shall evaluate projects based on the merits of a project, including contribution to City character, and shall determine whether the City is best served by either implementing improvements to address potential circulation impacts or, if improvements are determined to not be appropriate or feasible, ensuring that a project provides a certain level of density and intensity, as envisioned by Figure 2-2 (Land Use Map) to contribute to the social fabric of the community and meet the City's goals for economic development, economic vitality, and adequate housing.

Multimodal improvements, traffic calming improvements, or other system-wide transportation network improvements may be required in lieu of requiring mitigations to the impacted road or intersection in order to reduce the overall impacts to mobility. This approach could apply to the use of traffic impact fees collected from developments as well.

Policy CIR 1-8: Establish multi-modal LOS objectives that would facilitate review of transit, bicycle and pedestrian impacts, in addition to motor vehicles when these methods are more available and useful.

Policy CIR 1-9: Through the development review process, CEQA process, and through long-range infrastructure planning efforts, identify circulation network improvements and mitigation measures necessary to maintain the City's vehicle, transit, bicycle and pedestrian objectives.

Policy CIR 1-10: Consider all transportation improvements as opportunities to improve safety, access, and mobility for all roadway users and avoid dead-end streets and cul-de-sacs.

Policy CIR 1-11: Provide high quality regular maintenance for existing and future transportation facilities including streets, sidewalks, and paths.

Policy CIR 1-12: Maximize the use of matching funding grant sources to provide ongoing maintenance, operation, and management of the City's circulation network.

Shared Space is an urban design approach which seeks to minimize the segregation of pedestrians and vehicles. This is done by removing features such as curbs, road surface markings, traffic signs, and traffic lights. The goal of shared space design is to improve traffic efficiency and safety when the street and surrounding public space is redesigned to encourage each person to negotiate their movement directly with others.

Shared space design can take many different forms depending on the level of demarcation and segregation between different transportation modes. It has been suggested that, by creating a greater sense of uncertainty and making it unclear who has priority, drivers will reduce their speed. This is conducive to a safer

Policy CIR 1-13: Consider roundabouts in lieu of traffic signals where adequate right of way is available and appropriate conditions exist to maximize intersection efficiency, maintain continuous but moderate traffic flow, reduce pollution emissions, reduce accident severity, and enhance pedestrian and cyclist circulation.

Policy CIR 1-14: Maintain and improve critical transportation facilities to provide logical emergency vehicle access and emergency evacuation needs.

Policy CIR 1-15: Continue to evaluate the benefits and feasibility of a two-way street system on some or all of SR 116 between McKinley Street and just south of Palm Avenue. The two-way street system should focus on slower vehicle speeds and enhancements to pedestrian and bicycle travel.

Policy CIR 1-16: Identify potential for bypass route(s) or "beltway connector" route(s) which minimize impacts to the Laguna, and provide regional travel options with the intention of providing traffic with an optional route away from downtown Sebastopol.

Policy CIR 1-17: Consider a "shared space" design where pedestrian activity is welcomed.

Policy CIR 1-18: Consider the impacts of traffic and land use growth on the road network, especially in downtown Sebastopol, when evaluating proposals for new development.

Policy CIR 1-19: Consider the impacts of traffic and land use growth in surrounding jurisdictions when designing Sebastopol's circulation network, and in particular, the impacts created on the SR 116 and SR 12-Bodega Avenue corridors by growth in surrounding Sonoma County.

Policy CIR 1-20: Discourage through traffic located on State Highways and Bodega Avenue from using residential streets as bypass routes.

Policy CIR 1-21: Monitor the development and implementation of self-driving, autonomous vehicle technologies and consider appropriate methods to accommodate and adapt to these technology changes.

Actions in Support of Goal CIR 1

Action CIR 1a: The City shall cooperate with other jurisdictions in Sonoma County to reduce transportation congestion through the following actions:

- *Staff should participate in the SCTA's technical advisory groups in pursuing funding opportunities.*
- *Encourage public input into SCTA's congestion management planning process*
- *Participate in future updates to the Comprehensive Transportation Plan*
- *Coordinate with the County of Sonoma including the Parks & Recreation Department in efforts to expand regional bicycle and pedestrian networks to meet anticipated demands*

Action CIR 1b: Coordinate with the County of Sonoma, Caltrans, and the City of Santa Rosa to investigate, and as appropriate, determine feasible alternative routes, bypasses or "beltway connector" routes, including both north-south and east-west routes, (e.g. Llano Road extension from SR 12 to Occidental Road, or measures to divert some Hwy. 116 traffic at the southern terminus of Llano Road, or diversion of some Hwy. 12 traffic to Occidental Road at Fulton Road, or improving Ragle Road) and

evaluate benefits provided by these routes. If appropriate, work collaboratively with the County of Sonoma and Caltrans to determine the extent of roadway improvements needed to support these bypass routes, add the project to the City's Capital Improvement Plans (CIP) and/or seek County or other agencies plan improvements, encourage proactive participation and coordination by the SCTA and support funding through the SCTA or other sources, and as appropriate, update both City and County General Plan Circulation Elements to include these routes.

Action CIR 1c: In collaboration with Caltrans, complete a comprehensive 2-way street analysis for SR 116 (South Main Street, Petaluma Avenue and McKinley Street) including traffic operational analysis, concept designs, urban design/landscaping improvements, economic benefits and identification of potential funding sources. As appropriate, work with SCTA, Caltrans, and other affected agencies to update policy objectives based on the results of the analysis. As interim roadway improvements to the SR 116 corridor are proposed, they shall be evaluated by City staff for compatibility with a future conversion to 2-way streets, in order to foster informed decision making.

Action CIR 1d: Consider the following roadway improvements and projects included in the CIP to maintain the safety and efficiency of the current circulation system, and to support buildout of the General Plan.

- *Healdsburg Avenue (SR 116)/Covert Lane intersection - install a traffic signal or roundabout*
- *Healdsburg Avenue (SR 116)/Murphy Avenue intersection - install a traffic signal or roundabout*
- *Gravenstein Highway South (SR 116)/Fircrest Avenue intersection - install a traffic signal or roundabout*
- *McKinley Street/Laguna Park Way/Petaluma Avenue intersection - install a beacon or appropriate pedestrian crossing improvements on the southern leg pedestrian crossing*
- *Willow Street - extend the street through the City parking lot from Main Street to Petaluma Avenue to enhance grid connectivity*
- *Abbott Avenue - change route to parallel Sebastopol Avenue, with a potential connection to Morris Street*

Action CIR 1e: The Public Works Department shall maintain a systematic pavement management program and identify and prioritize maintenance projects in the CIP.

- *Street maintenance should include upkeep and regular cleaning of bicycle routes to remove debris and repair poor pavement conditions that discourage bicycle riding.*
- *The pavement management program data system should address signage and pavement quality throughout the city.*

Action CIR 1f: As part of the development review process, the Planning Department, Public Works Department, Police Department, and Fire Department shall review development projects to ensure that developers:

- *Construct transportation improvements along property frontages when appropriate*
- *Address the project's proportional-share of impacts to the City's circulation network through payment of traffic mitigation fees*

- *Provide for complete streets to the extent feasible; facilitating walking, biking, and transit modes*
- *Provide appropriate on-site pedestrian and bicycle features*
- *Fund traffic impact studies that identify on-site and off-site project effects and mitigation measures*
- *Provide adequate emergency vehicle access*
- *Minimize driveway cuts consistent with access and site planning considerations*

Action CIR 1g: Update the City's Traffic Impact Fee (TIF) schedule to include, as appropriate, the roadway improvements necessary to support buildout of the General Plan.

Action CIR 1h: Use the City's CIP to identify and address deficient areas, such as areas where additional striping, sidewalks, maintenance, and other improvements are needed.

Action CIR 1i: Routinely monitor the performance of the circulation network, optimizing traffic signals and utilizing Intelligent Transportation Systems (ITS) measures where beneficial to maximize efficiency of the existing network on a regular basis.

Action CIR 1j: Provide staff support/liaison to regional agencies such as SCTA and Caltrans in the implementation of ITS measures that improve the efficiency of roadway and transit networks in western Sonoma County.

Action CIR 1k: Ensure regular monitoring of traffic accidents, traffic levels of service, and intersection capacity to update base data and respond to safety problems and changing conditions. Prioritize locations with high collision rates for safety improvements.

Action CIR 1l: Continually seek opportunities to fund maintenance of and improvements to the circulation network, including through active pursuit of a wide range of grant sources.

Action CIR 1m: Establish specific Transportation Demand Management (TDM) requirements for new development projects and consider making requirements sector-based (e.g., residential, commercial, industrial).

Action CIR 1n: Create incentives for proposed development to incorporate measures to reduce vehicle trips, such as mixed use projects and including bicycle and pedestrian facilities in the development plans and connections to existing bicycle and pedestrian facilities.

Action CIR 1o: Ensure that future development provides roadway improvements and/or fees contributing towards transportation improvements consistent with the Circulation Diagram and Circulation Element system-wide mobility goals and improvements identified as part of the City's Traffic Impact Fee (TIF) to improve the safety, efficiency and connectivity of the current circulation system for all modes of transportation, and to support buildout of the General Plan.

Action CIR 1p: Require future development to complete a fair share calculation and to pay their contribution upon the development of the project.

Action CIR 1q: Provide outreach and opportunities for public engagement with transportation planning issues and project initiatives, including use of citizen bodies such as the Planning Commission.

Action CIR 1r: Coordinate with Caltrans to implement traffic calming, vehicle safety, and bicycle/pedestrian network improvements throughout Sebastopol. Also encourage Caltrans to maintain good pavement conditions on State Highways within Sebastopol, in order to reduce traffic-related roadway noise.

Action CIR 1s: Coordinate with Caltrans, SCTA, Sonoma County, school districts, and other appropriate entities to coordinate and optimize the use of circulation and mobility resources.

Insert Figure 3.1: Circulation Map

Insert Figure 3.2: Bike/Ped Map (from SCTA)

Goal CIR 2: Maintain and Expand a Safe and Efficient Pedestrian, Bicycle, and Transit Network that Connects Neighborhoods with Key Destinations to Encourage Travel by Non-Automobile Modes while also Improving Public Health

Policy CIR 2-1: Establish and maintain a system of interconnected bicycle and pedestrian facilities that facilitate commuter and recreational travel, and that are consistent with the City's parks, trails, and recreation goals and policies in this General Plan and the *Sebastopol Bicycle and Pedestrian Master Plan (Amended November 2011)* or future updates of the plan.

Policy CIR 2-2: Routinely incorporate sidewalks and enhanced pedestrian crossing facilities as part of new street construction or enhancements to existing streets.

Policy CIR 2-3: Incorporate bicycle facilities according to the Sebastopol Bicycle and Pedestrian Master Plan (including bicycle lanes, pavement markings, pavement treatments, bicycle route and destination signs, and bicycle detection at traffic signals).

Policy CIR 2-4: Require development projects to construct frontage sidewalks, missing sidewalk sections, paths, and nearby enhanced crosswalks in a manner that is consistent with the City's goals and policies in this General Plan and the *Sebastopol Bicycle and Pedestrian Plan*, and as dictated by the location of other activity centers, transit stops and common pedestrian destinations.

Policy CIR 2-5: Evaluate opportunities for pedestrian or other circulation and mobility connections to the circulation network in review of major development projects, and require appropriate improvements.

Policy CIR 2-6: Explore opportunities to better connect existing development to the bicycle/pedestrian network.

Policy CIR 2-7: Create an accessible circulation network that is consistent with guidelines established by the Americans with Disabilities Act (ADA), allowing mobility-impaired users such as the disabled and elderly to safely and effectively travel within and beyond the city.

Policy CIR 2-8: Increase connectivity between trip attractors and trip generators, including a complete sidewalk network, marked and enhanced crossings, and well-lit paths.

Policy CIR 2-9: When it can be shown that construction of a sidewalk would be at odds with an existing neighborhood's aesthetic and the historic nature of the area, alternatives such as an off-street path or wider paved shoulders may be considered, particularly on low-volume local streets.

Policy CIR 2-10: Increase the safety of popular bicycle and pedestrian routes to schools, downtown, and other destinations in the City that don't involve riding on SR 116, SR 12 and/or Bodega Avenue including enhanced crossings of SR 116, SR 12 and/or Bodega Avenue.

Policy CIR 2-11: Work with utility providers to reduce or eliminate barriers to pedestrian and bicyclist mobility created by utility infrastructure (such as utility poles that obstruct accessibility).

Policy CIR 2-12: Establish and maintain bicycle facilities that are consistent with the network depicted in the City's Bicycle and Pedestrian Master Plan.

Policy CIR 2-13: Public road construction projects shall incorporate facilities identified in the Bicycle and Pedestrian Master Plan to the greatest extent feasible.

Policy CIR 2-14: Provide secure bicycle racks in places such as the Downtown, at commercial areas, park and ride transit facilities, schools, multiple unit residential developments, and other locations where there is a concentration of residents, visitors, students, or employees.

Policy CIR 2-15: Ensure that all crossings where trails and roads meet include best practices for crossing design for these conflict points.

Policy CIR 2-16: Promote public education to help create an atmosphere of respect for bicycles and pedestrians.

Policy CIR 2-17: Through a CIP and joint funding from Sonoma County Transit, the City shall maintain and, where feasible, continue to build lighted and sheltered seating facilities at bus stops where appropriate.

Policy CIR 2-18: Pursue improvements and funding to increase transit ridership, increase transit frequencies on key corridors, increase the hours of transit operation, and expand regular transit service in portions of Sebastopol that currently have no public transit.

Policy CIR 2-19: Continue to work with Sonoma County Transit to create an effective Rider Awareness Program that will educate the public on the existing transit systems.

Policy CIR 2-20: Ensure that adequate lighting and trash disposal is provided at all bus stops.

Policy CIR 2-21: Work with Sonoma County Transit to identify the need for and locations of additional park-and-ride lots in Sebastopol in order to increase the number and length of trips made by transit and carpooling.

Policy CIR 2-22: Ensure that effective linkages are in place between the SMART commuter rail stations in Santa Rosa and Cotati and the city's primary activity centers.

Policy CIR 2-23: Encourage the use of park-and-ride lots and other transit incentives for Sebastopol commuters.

Policy CIR 2-24: Provide safe and continuous pedestrian, vehicular, and bicycle access at all transit park-and-ride facilities.

Policy CIR 2-25: Prioritize bicycle and pedestrian safety for students traveling to and from school.

Policy CIR 2-26: Support regional efforts to develop Safe Routes to School Programs for schools that serve Sebastopol's population.

Policy CIR 2-27: Prioritize the improvement of roadway pedestrian crossings throughout the community, particularly in accident-prone areas.

Policy CIR 2-28: Pursue improvements and funding for priority projects identified in the Sebastopol Bicycle and Pedestrian Master Plan.

Policy CIR 2-29: Encourage special events, such as festivals, community activities, etc. to provide onsite bicycle parking accommodations in order to promote and facilitate bicycle use for transportation to such events. Consider incentives to event organizers that incorporate onsite bicycle accommodations.

Actions in Support of Goal CIR 2

Action CIR 2a: As part of the development process, review development applications to ensure compliance with the Sebastopol Bicycle and Pedestrian Master Plan.

Action CIR 2b: Review traffic signal timing plans or work with Caltrans to ensure adequate crossing times for all users at signalized intersections.

Action CIR 2c: Ensure that bicycle loop detectors are present at traffic signals, clearly identified with stencils, and tested and maintained regularly.

Action CIR 2d: Review all transportation improvements to ensure installation in accordance with current accessibility standards.

Action CIR 2e: Regularly review transportation corridors to identify barriers encountered by persons with disabilities, including locations where there are not ADA-compliant curb cuts and ramps, and address such obstacles in the CIP, to the extent that funding for such activities is available.

Action CIR 2f: Continue to include construction of bicycle and pathway facilities, including pedestrian road crossings and pedestrian pathways, in the City's CIP, prioritizing areas where gaps in the current network need to be filled.

Action CIR 2g: Focus on the identification of more Class I multi-user trails and Class IV separated bike facilities. In particular, pursue Class I or Class IV alternatives to SR 116, SR 12 and Bodega Avenue, Class II Bike lanes, and sharrow markings to create viable north-south and east-west mobility opportunities for bicyclists and pedestrians of all ages, as identified in the Sebastopol Bicycle and Pedestrian Master Plan.

Action CIR 2h: As funding becomes available, the City shall encourage Sonoma County Transit to provide faster and more efficient routes, more frequent headways, extend service hours, and serve a greater portion of the City. The City would review and renew the contract as necessary and, when feasible, include provisions for:

- *Consideration of an additional route.*
- *Bus headways of 15 minutes or less on routes serving Sebastopol.*
- *Local bus service operating until 10 PM.*
- *Saturday and Sunday bus services with expanded weekend hours.*

Action CIR 2i: Compile a list of bus stops with inadequate lighting, and through the CIP, install street lights at those stops as funding is available.

Action CIR 2j: Study the feasibility of establishing a public or private shuttle system to serve the SMART commuter rail station.

Action CIR 2k: Review all transportation improvements to ensure installation in accordance with current accessibility standards.

Action CIR 2l: Identify potential bicycle and pedestrian connections between residential areas and school campuses and incorporate into the Sebastopol Bicycle and Pedestrian Master Plan.

Action CIR 2m: As part of the development review process, ensure that new development projects provide bicycle and pedestrian improvements to facilitate the implementation of a Safe Routes to School plan for Sebastopol schools.

Action CIR 2n: Coordinate with the SCTA, Sonoma County Health Services, Sebastopol Union School District, and Sonoma County Bicycle Coalition to continue the Safe Routes to School Program in Sebastopol.

Action CIR 2o: Routinely review and update the Safe Routes to School plan, to reflect the current circulation infrastructure, student travel patterns, identified hazards, and school.

Action CIR 2p: Support and implement policies and recommendations related to transportation from Health Action's Action Plan Sonoma. These include:

- *Increase in percent of commuters who use active transportation (walk, bike, or public transit).*
- *Implement and strengthen policies and programs to enhance transportation safety.*

Action CIR 2q: Monitor national efforts to establish effective multimodal LOS standards for pedestrian, bicycle, and transit modes.

Action CIR 2r: Issue guidelines and incorporate assessment of multimodal LOS as a routine component of transportation impact analyses once the Planning Department determines a multimodal LOS methodology that is deemed suitable for application in Sebastopol.

Action CIR 2s: Periodically review priorities in the Sebastopol Bicycle and Pedestrian Master Plan and update as necessary, incorporating current best practices.

Action CIR 2t: Coordinate with SCTA to include City staff and a citizen representative on the Countywide Bicycle and Pedestrian Advisory Committee to ensure City representation in reviewing projects and funding sources.

Goal CIR 3: Coordinate Circulation Facilities with Land Use and Development Patterns to Create an Environment that Encourages Walking, Bicycling, and Transit Use

Policy CIR 3-1: Recognize the role of streets not only as vehicle routes but also as parts of a system of public spaces, with quality landscaping, street trees, and bicycle and pedestrian paths.

Policy CIR 3-2: Prioritize the quality of life for Sebastopol residents and visitors over vehicular traffic movement.

Policy CIR 3-3: Prioritize high-density and mixed land use patterns that promote transit and pedestrian travel along transit corridors.

Policy CIR 3-4: Design developments to include features that encourage walking, bicycling, and transit use. Design features shall include bus turnouts, transit shelters and benches, and pedestrian access points between subdivisions and between adjacent related land uses.

Policy CIR 3-5: Provide an interconnected street network that provides multiple points of access, discouraging cut-through traffic while maintaining neighborhood connectivity.

Policy CIR 3-6: Encourage local access connections between neighborhood parks and commercial areas by walking and biking as an alternative to short-distance driving.

Policy CIR 3-7: Ensure that the City's adopted street standards reflect a multi-modal focus, including vehicular lane widths that are no wider than necessary to serve the surrounding land use context and accommodate emergency vehicles.

Policy CIR 3-8: Where necessary, emphasize traffic management and calming techniques to control vehicle speeds on all streets within the City of Sebastopol.

Policy CIR 3-9: Design intersections to provide adequate and safe access for all users including pedestrians, bicyclists, and motorists of all ages and abilities.

Policy CIR 3-10: Require new development to include effective linkages to the surrounding circulation system for all modes of travel, to the extent feasible.

Policy CIR 3-11: Review Subdivision Ordinance standards for new streets and driveways to maintain safe access while minimizing area devoted to vehicle traffic.

Policy CIR 3-12: Maintain restrictions on commercial truck routes to protect residential neighborhoods.

Policy CIR 3-13: Use urban design techniques, such as minimizing curb cuts and driveways, to improve the pedestrian and bicycle environment.

Actions in Support of Goal CIR 3

Action CIR 3a: During the development review process, the Planning Department shall review plans to ensure that projects include an interconnected network of streets and paths that facilitate non-auto modes for shorter trips, and disperse rather than concentrate traffic in residential neighborhoods.

Action CIR 3b: The Public Works Department shall review plans for new or modified intersections to ensure that the number of vehicle lanes is limited where possible to provide for moderate speeds and pedestrian and bicyclist safety, and that curb extensions are installed where appropriate to reduce driving speeds and shorten pedestrian crossing distances.

Action CIR 3c: The Public Works Department shall review its adopted street standards, including those specified in the Subdivision Ordinance, and update as necessary to achieve balanced roadway configurations that serve all users, and through design help to reinforce appropriate vehicle speeds for the surrounding land use context.

Action CIR 3d: The City shall develop a new truck route plan and associated signage that is consistent with the policies outlined in this Circulation Element.

Action CIR 3e: The City shall develop and implement a way-finding signage program that differentiates Downtown route options and rural route options that bypass the Downtown area. The intent of this program is to assist travelers in the identification of route options that may help alleviate Downtown traffic congestion.

Goal CIR 4: Ensure that a Combination of Managed Growth and Adequate Funding Mechanisms are in Place to Complete Future Improvements on the Local and Regional Circulation Networks

Policy CIR 4-1: Ensure that the rate of land use and population growth in Sebastopol is consistent with the ability to provide adequate transportation services.

Policy CIR 4-2: Require new development to contribute its proportional cost of circulation improvements necessary to address cumulative transportation impacts on roadways throughout the city, as well as the bicycle and pedestrian network.

Policy CIR 4-3: Include capital projects sponsored by the City and necessary to maintain and improve traffic operations in the five-year CIP that is annually reviewed by the City Council. Funding sources for such projects as well as intended project phasing will be generally identified in the CIP.

Policy CIR 4-4: Consider funding transportation projects intended to meet or maintain LOS standards and to provide mitigation for intersections through use of funds allocated by the SCTA.

Actions in Support of Goal CIR 4

Action CIR 4a: Maintain and routinely update the City's Development Impact Fee Program to cover the cost of mitigating development's share of improvements on non-regional and regional routes, as well as the cost of maintaining Sebastopol's identified service and/or performance standards.

Action CIR 4b: As part of the development review process, require new development to mitigate circulation impacts by making improvements to the motorized and non-motorized circulation networks as necessary, and in a fair manner with an established nexus between the level of impact and required improvements and/or contributions.

Goal CIR 5: Reduce Vehicle Miles Traveled (VMT) in Order to Reduce Congestion and Help Achieve Regional Efforts to Reduce Greenhouse Gas (GHG) Emissions

Policy CIR 5-1: Actively support the Regional Climate Protection Authority (RCPA) in its efforts to reduce GHG emissions and strive to meet its regional goals.

Policy CIR 5-2: Ensure that the City's Trip Reduction Program (Municipal Code Section 8.16) is implemented. The purpose of the City's Trip Reduction ordinance is to reduce traffic and improve air quality within the City of Sebastopol by promoting the development of Trip Reduction Programs (also referred to as Transportation Demand Management Programs, or TDM) at existing and future work sites. Examples of TDM programs may include (but are not limited to) subsidized transit passes, guaranteed ride home, carpool matching, telecommuting, alternative work schedules, car sharing, employer-sponsored vanpools, priced workplace parking, preferential parking for carpools and/or low-emission vehicles, and shower facilities at workplaces to support bike riding.

Policy CIR 5-3: Support the establishment and expansion of a regional network of electric vehicle charging stations and encourage the expanded use of electric vehicles.

Actions in Support of Goal CIR 5

Action CIR 5a: *Supply transportation data to the RCPA as requested to assist in the assessment of GHG reduction efforts.*

Action CIR 5b: *Establish specific TDM requirements that is consistent with the City's Trip Reduction Program for projects and consider making requirements sector-based (e.g., residential, commercial, industrial).*

Action CIR 5c: *Complete surveys of employment trips as outlined in the City's Trip Reduction Program.*

Action CIR 5d: *Establish standards and requirements for electric vehicle parking, including the installation of electric vehicle charging stations, in new development projects.*

Goal CIR 6: Maintain Parking Requirements and Practices that Complement the Desired Land Use Pattern while Minimizing Neighborhood Impacts

Policy CIR 6-1: Maximize the use of existing downtown parking areas, emphasizing the use of shared parking wherever possible, including provision of multi-purpose parking facilities that serve both residential and commercial uses.

Policy CIR 6-2: Investigate formation of a downtown parking assessment district which assembles and maintains common parking facilities within a defined downtown area.

Policy CIR 6-3: Periodically review the City's parking requirements to ensure that they result in an efficient supply that is not "over parked."

Policy CIR 6-4: Ensure that the parking demand associated with future development does not adversely impact adjacent residential areas due to spillover parking demand.

Policy CIR 6-5: Look for ways to generate revenue from areas of high-demand parking to put towards bicycle facilities and public spaces.

Policy CIR 6-6: Create reduced parking requirements for proposed downtown developments.

Policy CIR 6-7: Require parking facilities to provide for pedestrian access and safety, including delineated paths and walkways.

Actions in Support of Goal CIR 6

Action CIR 6a: *Work with downtown property owners, businesses and downtown organizations to facilitate the creation of a parking assessment district.*

Action CIR 6b: *Review parking best practices employed in other jurisdictions, as well as parking utilization within Sebastopol itself, and as appropriate, incorporate revised parking requirements into the Municipal Code.*

Action CIR 6c: *Study the potential for a parking permit system and reduced parking requirements to be implemented in transit-oriented areas such as Downtown Sebastopol.*

Action CIR 6d: Consider developing protocols for parking study requirements for major commercial, multi-family residential, mixed-use, and other projects that seek relief from the City's adopted parking requirements in order to ensure that adequate parking is provided.

Action CIR 6e: If deemed necessary by the City, use parking management techniques (such as residential parking permits) to limit spillover parking impacts in residential neighborhoods.

Action CIR 6f: Explore mechanisms, such as establishment of a parking district, funding parking facilities (structure(s) or lots) through payment of in-lieu or development impact fees, and expanding the City's shared parking provisions, to allow proposed development downtown to not have to provide on-site parking.

Action CIR 6g: Consider exemptions or reductions in parking requirements for small additions, changes in use, and developments on small sites in the downtown area.

Action CIR 6h: Emphasize the use of central shared parking and co-location of parking around the periphery of the downtown, without compromising requirements for new projects to contribute their fair-share towards parking facilities and infrastructure.

FEHR PEERS

City of Sebastopol SB 743/VMT Support
Scope of Work

Fehr & Peers will support the City of Sebastopol in addressing SB 743 and the transition of CEQA Transportation analysis from congestion-based metrics (such as Level of Service) to the State-mandated metric of vehicle-miles traveled (VMT). The switch to the VMT metric enables the City to more closely align CEQA Transportation section analysis with goals and policies related to sustainability and climate; however, the VMT analysis methods and thresholds present unique challenges for agencies on the periphery of an MPO that are served by limited/infrequent transit services and/or that have a high driving mode share.

Task 1 – Kickoff Meeting

Fehr & Peers will participate in a (virtual) kickoff meeting with City staff to discuss the desired goals and outcomes of the project. The scope of work will be reviewed and revised, if necessary. Communication protocols and schedule will be confirmed. Fehr & Peers will prepare meeting minutes and submit to City staff for review and confirmation.

Task 2 – Informational Meetings with Planning Commission and City Council

Fehr & Peers will prepare a PowerPoint presentation outlining the background behind SB 743, changes to the CEQA Guidelines made in response to SB 743, and their effect on future land use and transportation projects in Sebastopol. The purpose of the presentation is to be informational in nature and to provide a high-level background and summary about the topic. More detailed information can be provided verbally by Fehr & Peers or City staff during the presentation or can be provided during the CEQA threshold adoption process (Task 4). The presentation will be given at one Planning Commission meeting and one City Council meeting.

Task 3 – SB 743 Implementation Technical Memorandum

Fehr & Peers will prepare a brief technical memorandum summarizing implementation items (potential VMT metrics, calculation methods, screening criteria, and thresholds) for the Planning Commission and City Council's consideration for adoption. The memorandum will also summarize the actions taken by nearby agencies, and summarize other regional efforts related to implementing VMT for CEQA (i.e. work being done by SCTA on the VMT mitigation topic). Additional guidance on potential VMT mitigation strategies will be provided.

Task 4 – Adoption Meetings with Planning Commission and City Council

Fehr & Peers will update the PowerPoint from Task 1 to include data from the memo in Task 2 and develop draft recommendations for adoption of VMT metrics, calculation methods, screening criteria and thresholds. Fehr & Peers will assist City staff in the preparation of staff reports for the Planning Commission and City Council meetings (up to four hours of staff report preparation time per meeting); the staff reports will also include details about potential next steps regarding mitigation methods or other means of programmatically clearing future development in the City. Fehr & Peers will present at one Planning Commission meeting and one City Council meeting.

Task 5 – Conference Calls

Fehr & Peers will attend up to eight 30-minute conference calls over the course of the project. The purpose of these conference calls will be to check in on status of Fehr & Peers' work and to coordinate on the development of presentations, staff reports, and other meeting materials.

Fee Proposal for Sebastopol SB 743/VMT Implementation Support

	Fehr & Peers						
	Associate-in-Charge *I. Barnes*	Forecasting Expert *M. Watten*	Sr. Engineer/ Planner A. Takushi	Admin/ Graphics	Labor Hours	Direct Costs	Total
Tasks	*$305*	*$275*	*$195*	*$150*			
Task 1 - Kickoff Meeting	2	0	2	1	5	$80	$1,230
Task 2 - Informational Meetings with Planning Commission and City Council							
Develop Presentation	4	2	8	2	16	$250	$3,880
Two Evening Meetings	8	0	0	2	10	$440	$3,180
Task 3 - SB 743 Implementation Technical Memorandum							
Draft Memorandum	*6*	*4*	*12*	3	*25*	*$2,650*	*$8,370*
Final Memorandum	*2*	*0*	*4*	1	*7*	*$110*	*$1,650*
Task 4 - Adoption Meetings with Planning Commission and City Council							
Update Presentation	*4*	*2*	*4*	2	*12*	*$200*	*$3,050*
Staff Report Support	*2*	*2*	*4*	1	*9*	*$150*	*$2,240*
Two Evening Meetings	*4*	*0*	*0*	*2*	*6*	*$360*	*$1,880*
Task 5 - Conference Calls	4	0	0	1	5	$100	$1,470
Total for All Tasks (Including Task 4)	**36**	**10**	**34**	**15**	**95**	**$4,340**	**$26,950**

Notes:

This fee proposal is valid for a period of 90 days from the proposal submittal date.

Actual billing rate at the time of service may vary depending on the final staffing plan at the time the project starts; the overall fee will not be exceeded.

Rates and staff are subject to change at any time, without notice, and within the total budget shown

Senate Bill (SB) 743 Implementation in Sonoma County

THE ISSUE

General plans will provide guidance on and set policies regarding the evaluation of transportation impacts under the California Environmental Quality Act (CEQA). A significant change in CEQA practice is being 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, the CEQA Guidelines now specify that Vehicle Miles Traveled, or VMT, is the appropriate metric to evaluate transportation impacts. To comply with these new rules, the jurisdictions will need to define policies and practices for conducting VMT analysis in areas under their jurisdiction.

PURPOSE

This memo considers policy questions around the implementation of SB 743 in Sonoma County, offering guidance on:

a. The background of SB 743 and how it will change planning practice in Sonoma County.
b. The steps involved in implementing SB 743 and options available to jurisdictions with each step.
c. A series of questions for each jurisdiction to consider as they settle on an approach.

It is very important to understand that *the implementation of SB 743 is just beginning across the state*. Current CEQA practices have developed over several decades, as a result of a large body of case law and periodic updates to the CEQA guidelines. Because SB 743 is brand new, there is not yet any case law to guide our understanding or interpretation. The following represents our current understanding of the issues and options involved, informed by our research into SB 743 and knowledge of past CEQA practice; this understanding will evolve over time as more agencies apply SB 743 concepts to their own CEQA procedures.

BACKGROUND

CEQA was enacted in 1970 with the goal of providing a mechanism for disclosing to the public the environmental impacts of proposed actions. Before taking a discretionary action, lead agencies must determine if that action is subject to CEQA and conduct a review of the effects of that action on the physical environment. The State Office of Planning and Research (OPR) prepares and maintains a set of guidelines to help agencies implement CEQA.

Typical CEQA Practice

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.

LOS is a qualitative description of traffic flow based on factors of speed, delay, and freedom to maneuver. Six levels are defined from LOS A, which reflects free-flow conditions where there is very little interaction between vehicles, to LOS F, where the vehicle demand exceeds the capacity and high levels of vehicle delay result. LOS E represents "at-capacity" operations. When traffic volumes exceed an intersection's capacity, stop-and-go conditions result and a vehicle may wait through multiple signal cycles before passing through an intersection; these operations are designated as LOS F. The calculation of vehicle LOS is done through the application of specialized software and is based on traffic counts, observations of vehicle interactions, and data about traffic signal operations (at those intersections that are signalized).

Under CEQA, agencies must decide what constitutes a significant environmental impact. The CEQA Guidelines encourage the use of thresholds of significance; these can be quantitative or qualitative performance standards by which the agency can measure the amount of impact the project causes and thereby determine if the project's impacts are significant. A typical CEQA practice has been to apply a threshold of LOS D, depending on the location and context.

Mitigating a LOS impact typically involves making changes to the physical transportation system in order to accommodate additional vehicles and reduce delays. These mitigations

may involve actions such as installing traffic signals, adding turn lanes, widening roads, or contributing toward the construction of HOV/Express Lanes, among other options.

Changes in CEQA Practice

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.*"

As of December 2018, OPR completed an update to the CEQA Guidelines to implement the requirements of SB 743. The 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. For reference, the new CEQA Guidelines can be found at http://resources.ca.gov/ceqa/ and additional technical guidance is available from OPR at http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

VMT is a measure of the total amount of vehicular travel. One vehicle traveling ten miles would equal 10 VMT. Four vehicles traveling ten miles would equal 40 VMT. Typically, development located at greater distance from other land uses or in areas with few transportation options generates more vehicle trips and trips of greater length (and therefore more VMT) than development located in close proximity to other uses or in areas with many transportation choices. VMT is an important input in the analysis of air quality and greenhouse gas (GHG) emissions, and has been used for that purpose within CEQA documents for years. What has changed with SB 743 is that VMT is now being used to measure transportation impacts.

Mitigating a VMT impact involves different types of actions than mitigating a LOS impact. VMT mitigation requires actions that reduce the number or the length of vehicle trips generated by a project. This might involve modifying the project's characteristics or

location so that it generates fewer vehicle trips or trips of shorter distance; options may include locating the project closer to public transit facilities, changing the project's characteristics to include a broader mix of complementary land uses, requiring that it provide amenities to support bicycling and walking, or adopting paid parking, among other possibilities.

Many jurisdictions find that travel time and system delay are still important issues for their residents, and SB 743 does not prevent an agency from continuing to analyze vehicle delay or LOS as part of plans, fee programs, or on-going network monitoring outside of the CEQA process. The most common applications will likely occur for agencies wanting to use vehicle LOS to size roadways in their general plan, to determine nexus relationships for impact fee programs, or to require installation of physical improvements in situations where delay exceeds the LOS standard established in the General Plan.

IMPLEMENTING SB 743 IN SONOMA COUNTY

There are several components of SB 743 implementation that jurisdictions will need to consider and address. For each component listed below, the options available are summarized in the remainder of this memo, and are described in more detail in the accompanying matrix (Attachment A).

- **Metrics**: how VMT is presented;
- **Screening**: which projects will require quantitative VMT analysis and which projects can be presumed not to cause a VMT impact;
- **Methods**: what techniques will be used to calculate and forecast VMT;
- **Thresholds**: what level of VMT is considered to be 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, so jurisdictions will need to address how each of these three types will be evaluated:

- **Land Use Projects**: typically development projects on a single parcel or multiple adjacent parcels;
- **Land Use Plans**: such as a General Plan update and future Specific Plans;
- **Transportation Projects**: infrastructure changes such as building or removing roads, bicycle facilities, transit facilities, and the like.

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, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's VMT, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate VMT and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

The guidelines cover residential, office, and retail land uses. Lead agencies, using more location-specific information, may develop their own methodology and thresholds for other land use types. For all VMT estimates, the method should capture the full trip length to the extent feasible and reasonable.

- For residential land uses, the guidelines recommend using automobile VMT per capita for home-based trips. In this form, the VMT per capita represents the VMT generated by household residents for only trips with one trip end at the household.
- For office land uses, the guidelines recommend using automobile 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 guidelines recommend using total automobile VMT.

Preliminary VMT information is provided below to illustrate a potential VMT metric jurisdictions may choose and to provide jurisdictions with a sense of how their VMT will compare to the county average prior to model data becoming available. As part of the model enhancement work Fehr & Peers will develop three different VMT quantification methodologies and post-processors, consistent with OPR guidelines, to produce three different measures of VMT to provide lead agencies with a range of VMT quantification options to choose from.

Total VMT per Service Population

CEQA impact analysis should strive to provide a complete picture of the VMT effects on the environment. Current practice relies on estimates of total weekday VMT. Both 'project generated VMT' and the 'project effect on VMT' are recommended to fully account for

VMT effects that may include changes to VMT generation from neighboring land uses. Total weekday VMT includes all vehicle trips, vehicle types, project land uses, and trip purposes. This contrasts with the OPR Technical Advisory recommendation to use partial VMT for individual land uses such as residential and office.

While separating land uses within a project deviates from the conventional CEQA practice of identifying 'project' impacts, it may prove useful for streamlining environmental review related to VMT especially when relying on map-based screening. Understanding where built environment conditions create low residential and worker VMT is substantial evidence that could help support conclusions that adding similar land uses to those areas would create similar outcomes. For projects that may be subject to further scrutiny from neighbors or opposition groups, only reporting a portion of VMT from select trip purposes or tours and limiting the VMT to light-duty vehicles could be considered an incomplete analysis of VMT.

Project applicants may also have concerns with the separation of land uses because it may produce VMT forecasts that dilute the benefits of their projects. For example, mixed-use projects help reduce VMT by shortening vehicle trip lengths or reducing vehicle trips because of the convenience of walking, bicycling, or using transit between project destinations. To quantify these effects with models used in current practice requires analyzing the project as whole.

For these reasons, lead agencies should consider including total VMT in their analysis and express if as total VMT per service population (i.e., population plus employment, population plus employment plus students, population plus employment plus visitors) if using an efficiency metric form. If reporting individual components of total VMT is meaningful for impact analysis, then separate processing can usually be done to isolate light-duty vehicle VMT from heavy-duty vehicle VMT as well as to provide VMT by trip tours or purposes. Producing land use specific VMT is the most difficult when using local and regional travel forecasting models because trip generation estimates are largely based on population and employment instead of land uses or the trip assignment step in the model does not retain the original land use generator of the trips in the final origin-destination trip tables.

The following VMT estimates were produced using 2017 mobile device data collected for 188 zones in Sonoma County as part of the Sonoma County Travel Behavior Study. The VMT estimates represent total VMT, including all vehicle trips, vehicle types, project land uses, and trip purposes, expressed as total VMT per service population (population plus employment). It is important to note this information is different than the three

quantification methodologies described above as it includes VMT for all vehicle types and trip purposes.

Table 1 provides a summary of service population (population plus employment) and Total VMT per service population for Sonoma County and all Sonoma County jurisdictions.

Table 1: Sonoma County Total VMT Per Service Population

Jurisdiction	2015 Service Population (Population + Employment)	2017 Total VMT Per Service Population
Sonoma County	711,978	30.0
Cloverdale	4,233	36.4
Healdsburg	21,084	26.8
Windsor	33,036	35.2
Santa Rosa	277,182	30.5
Sebastopol	18,978	30.4
Rohnert Park	67,027	37.0
Cotati	10,648	30.8
Petaluma	103,214	30.4
Sonoma	19,063	24.4
Unincorporated	157,513	25.8

Question for consideration: Which VMT metric should be used to describe the VMT effects of projects in my jurisdiction?

PROJECT SCREENING

The concept of project screening is that some projects have characteristics that would readily lead to the conclusion that they would not cause a VMT impact, and therefore those projects could be screened out of doing a detailed VMT analysis. The CEQA Guidelines explicitly state that 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 peak hours) should be presumed to have no impact on VMT.

In addition, the 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, provided they comply with best practices for infill development. The areas that

would qualify as "low-VMT" areas would depend on how the jurisdiction defines its VMT metrics and thresholds.

Land use projects may also be screened out of further analysis if they are very small (110 vehicle trips per day or less), or can be demonstrated to primarily attract trips that would otherwise travel a longer distance (local serving retail less than 50,000 square feet). Further, certain transportation projects, such as installation of bicycle/pedestrian/transit facilities, or projects designed to address a localized operational issue, can be presumed not to contribute to increased VMT.

> *Question for consideration: Should there be a defined set of project screening criteria in my jurisdiction, and if so, what should those criteria include?*

METHODS FOR FORECASTING VMT

VMT is typically calculated and forecasted using a travel demand model, which can estimate the total number and length of vehicle trips for a given geographic area. Using a travel demand model is preferred over other methods, such as using sketch models or spreadsheet tools, because a travel model is better able to account for both project-generated VMT and the project's effect on total areawide 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 impact against that threshold.

There are two primary types of travel demand model: activity-based (also called tour-based) models, such as the MTC model, and trip-based models such as the SCTA model. Either type of model can be used to develop VMT forecasts. The Technical Advisory also specifies that the VMT evaluation should capture the full length of the trips being analyzed, and should not truncate those trips at jurisdictional or model boundaries.

There are two primary travel demand models available for the purposes of VMT analysis in Sonoma County: the MTC model and the SCTA model. The MTC model covers the entire nine-county Bay Area region while the SCTA model covers the entirety of Sonoma County and utilizes gateway factors to account for the portion of trips that travel outside the model boundaries. The SCTA model includes a more detailed representation of the Sonoma County transportation network and land use patterns, and is the model typically used for most project-specific applications in Sonoma County jurisdictions. The SCTA model is a trip-based model, which means it is difficult to separately measure the VMT generated by residents and workers. The MTC model is an activity-based (or tour-based)

model, meaning it can track VMT separately for different categories of people (residents, workers, students). An application of the SCTA model takes about 60 minutes on a typical modeling computer. An application of the MTC model takes at least 24 hours and requires a more advanced computer system. A more detailed review of the two models can be conducted if there are specific questions. Once a model is selected, the model should be checked to confirm that it is regularly calibrated and validated, that it is reasonably sensitive to future changes that can affect VMT, and whether it has any geographic limitations (such as truncating trips at a jurisdictional boundary) that would need to be compensated for when using it to produce VMT forecasts.

> *Question for consideration: What model should be used to establish a forecasting method for VMT in my jurisdiction?*

SETTING VMT SIGNIFICANCE THRESHOLDS

Since SB 743 introduces a new mandatory metric for use in transportation impact analysis, lead agencies will be required to determine what constitutes acceptable versus unacceptable levels of VMT for CEQA analysis. Specific effects and outcomes from the shift to VMT analysis will depend on the VMT thresholds a jurisdiction establishes for land use and transportation projects. These thresholds will define what constitutes an acceptable level of VMT and what requires mitigation actions. This process is generally referred to as establishing significance thresholds and is governed by CEQA Section 15064.7, which states the following.

15064.7. THRESHOLDS OF SIGNIFICANCE. (a) Each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of an environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant. (b) Thresholds of significance to be adopted for general use as part of the lead agency's environmental review process must be adopted by ordinance, resolution, rule, or regulation, and developed through a public review process and be supported by substantial evidence. (c) When adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence.

Following these recommendations are useful in establishing clarity and consistency in environmental impact analysis. With regards to SB 743 and establishing thresholds for VMT, lead agencies will have at least two options:

1) **Rely on VMT threshold recommendations developed by OPR.**
   In absence of lead agency specific thresholds, VMT impact analysis may rely on the thresholds contained in the OPR SB 743 recommendations. The current OPR threshold guidance is contained in *Technical Advisory on Evaluating Transportation Impacts in CEQA*. OPR recommends that VMT thresholds for a land use project are set at fifteen percent below the baseline (conditions when NOP is released) VMT/capita for the city, county, or region. To achieve a VMT reduction equivalent to fifteen percent below Sonoma County's baseline average, a typical new suburban development project located further than a half-mile from a transit facility (such as a SMART station) would likely have to incorporate project changes and/or transportation demand management (TDM) measures, which will be discussed in more detail in the next section. For projects not able to reach this maximum level of reduction, VMT impacts would remain significant and unavoidable, and preparation of an environmental impact report (EIR) would be necessary, with approval of impact override findings for project approval.

2) **Develop jurisdiction specific VMT thresholds.**

   Jurisdictions will need VMT thresholds for land use plans, development projects, and transportation projects. Determining when a VMT change represents an unacceptable condition as part of setting a threshold is difficult to establish without linking VMT to other environmental resources and considering its relationship to the built environment and economic factors. VMT by itself is a composite metric that measures the vehicle travel effect associated with land use patterns, amount of growth, and transportation network changes. Further, VMT also varies over time as a function of economic activity and travel cost. VMT tends to increase with economic activity and decline with higher costs for vehicle travel (i.e., higher gas prices).

   VMT with respect to other environmental resources is best understood for its relationship to air pollution and GHGs as well as other effects such as energy consumption and public health. While all these topics should be addressed in other sections of the environmental document, SB 743 requires the analysis of VMT as a transportation impact and lead agencies will need to adopt VMT thresholds to comply with the law. These thresholds should be supported by substantial evidence

as specified in CEQA Guidelines Section 15064.7 and consider all three objectives in SB 743: reduce GHGs, encourage infill development and promote active transportation.

If a lead agency decides to set their own thresholds, those thresholds should be consistent with key regional transportation planning documents, such as Plan Bay Area, this region's Regional Transportation Plan/Sustainable Community Strategy contains regional and local projections of VMT growth associated with anticipated changes in population, employment, and the regional transportation network. Additional VMT reduction may be achieved at the project level especially through TDM strategies and active transportation network expansion, which are not fully accounted for in regional level travel forecasting models.

Question for consideration: What VMT threshold should I rely on for projects in my jurisdiction?

MITIGATION OPTIONS

As described earlier, mitigating a VMT impact involves taking actions that reduce the number or length of trips generated.

Mitigation Options for Land Use Plans and Land Use Projects

For large area plans such as general plans and specific plans, mitigation will typically focus on physical design elements related to the ultimate built environment, such as the density and mix of land uses as well as the availability and quality of the transportation network related to transit, walking, and bicycling.

For individual development projects, the primary available methods of mitigating a VMT impact are to either: 1) change the project; or 2) implement a program designed to reduce VMT, such as a Transportation Demand Management (TDM) program. The available research indicates that the effectiveness of TDM measures varies substantially depending on the context in which they are applied; for example, offering subsidized transit passes may cause a notable increase in transit use in neighborhoods that have several bus route options that operate frequently throughout the day, but will have a much more limited effect in neighborhoods with only hourly bus service on a single route. Because of the site-specific nature and significant variability in the effectiveness of TDM programs, a

mitigation that relies on TDM would require a rigorous ongoing monitoring and reporting program to ensure that it results in the level of VMT reduction anticipated.

Mitigation Options for Transportation Projects

Based on the current OPR guidance, the only transportation projects likely to have VMT impacts are larger roadway capacity expansion projects. Transit, bicycle, pedestrian, and smaller roadway modification projects would be presumed to have a less than significant VMT impact. Mitigation for larger roadway projects would involve options such as managed lane operations, the use of pricing to influence travel behavior, or participation in a VMT exchange program whereby a project that causes VMT increases can offset those impacts by funding VMT-reducing projects elsewhere.

> *Question for consideration: What types of VMT reduction strategies are appropriate for application in my jurisdiction, and what magnitude of VMT reduction can be achieved through those strategies?*

CONTINUED USE OF VEHICLE DELAY METRICS

If jurisdictions feel that vehicle delay is an important issue that should continue to be monitored, the agency can continue to use vehicle LOS as part of its transportation planning and entitlement review process. For example, the Draft General Plan could retain a set of LOS criteria and require project-level LOS analysis; if that analysis indicates that a project would not meet the LOS criteria and identifies some physical improvements, those improvements could then be required as a condition of approval on that project.

The use of LOS analysis can also help to define the elements of a future transportation network that would achieve the jurisdiction's goals. The set of infrastructure improvements needed to complete that network could then be funded through an impact fee program, which would provide a method for addressing the cumulative impacts of future development.

POLICY CONSIDERATIONS

Lead agencies may consider several approaches to setting VMT thresholds in compliance with SB 743, as well as for establishing the community's transportation and circulation expectations through the General Plan.

1. OPTIONS FOR ADOPTING VMT THRESHOLDS FOR GENERAL PLAN UPDATE CEQA STUDY

The General Plan Update may undergo environmental review once SB 743 is applied statewide. Even if the environmental review is performed prior to July 1, 2020, Caltrans has adopted the OPR draft guidelines, and, as a commenting agency, may request VMT analysis be included in the general plan. Therefore, a VMT analysis for the General Plan may need to be completed during the environmental impact assessment stage.

a. Use OPR Plan-Level VMT Thresholds for General Plan environmental review process.

Pros: Provides simple guidance for thresholds that are known to be consistent with most up-to-date state-level guidance; Caltrans is likely to refer to these thresholds in their review of transportation impacts of land use plans and land use projects in absence of locally established thresholds.

Cons: OPR Thresholds may not fully reflect the local transportation context. They also may present unrealistic mitigation goals for new development projects in Sonoma County.

b. Adopt (i.e., through resolution or ordinance) jurisdiction specific VMT thresholds.

Pros: Allows for locally based determination of what constitutes an environmental impact. Also allows for adjustments to realistic TDM-based and project-based mitigation goals.

Cons: City staff would need to establish substantial evidence for the specific adopted thresholds. This is particularly important if the thresholds deviate from the OPR recommendations or are inconsistent with the RTP/SCS developed by MTC. Such an effort would require the assistance of a CEQA attorney and transportation consultant with experience in VMT modeling and corresponding mitigation measures. Such a study to create justification for a local threshold and adoption would take several months and would delay completion of the General Plan EIR and adoption of the new General Plan.

2. OPTIONS FOR ADOPTING VMT THRESHOLDS FOR FUTURE DEVELOPMENT AND TRANSPORTATION PROJECT CEQA STUDIES

a. Use OPR VMT thresholds for all future projects requiring environmental review.

Pros: Provides simple guidance for thresholds that are known to be consistent with most up-to-date state-level guidance; Caltrans is likely to refer to these thresholds in absence of locally established thresholds. The County may have few if any transportation project significant impacts since the OPR guidance tends to presume that small roadway expansions, all transit, and all bicycle and pedestrian projects have less than significant VMT impacts.

Cons: OPR thresholds may not fully reflect the local transportation context, or present realistic mitigation goals for development in Sonoma County. Individual land use projects would need to achieve VMT levels that are 15 percent below baseline conditions, which exceeds the maximum reduction potential of 10 percent for a suburban area based on research and guidance from the California Air Pollution Control Officers Association (CAPCOA).

b. Develop project level VMT thresholds through General Plan Update process and include in adopted General Plan.

Pros: Allows for locally based determination of what constitutes an environmental impact and can be informed by technical investigation and public outreach during the General Plan Update process. Also allows for adjustments to realistic TDM-based and project-based mitigation goals. Documentation of consistency with RTP and SCS can be achieved as part of the General Plan review process.

Cons: Staff would need to establish substantial evidence for the specific adopted thresholds. Such an effort would require the assistance of a CEQA attorney and transportation consultant with experience in VMT modeling and corresponding mitigation measures. Such a study to create justification for a local threshold and adoption would take several months and would delay completion of the General Plan EIR and adoption of the new General Plan.

c. Add a program to the Draft General Plan calling for preparation of a project level VMT threshold subsequent to adoption of the new General Plan.

Pros: Allows for locally based determination of what constitutes an environmental impact. Also allows for a more deliberative process to study and adopt such a threshold, including use of a more refined transportation model for VMT analysis being developed by SCTA (completion estimated by end of 2019) and would benefit from the General Plan EIR informational analysis of VMT suggested in Option 1c above.

Cons: Not necessary if there is intent to simply utilize the OPR recommended threshold.