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DATE: July 30, 2020

TO: Members of the VMT Technical Advisory Committee (TAC)

FROM: Olivia Ervin, Principal Environmental Planner  
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SUBJECT: Technical Advisory Committee Discussion of Petaluma's Transition to Vehicle-Miles Traveled  
(Senate Bill 743)

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### **RECOMMENDATION**

It is recommended that the Technical Advisory Committee (TAC) consider the Memorandum prepared by Fehr & Peers: Summary of Key Decisions for SB 743 Implementation in the City of Petaluma (Attachment 1), and provide input on the following specific considerations to inform development of Petaluma's Vehicle-Miles Traveled (VMT) program:

- Thresholds – Does the TAC find the Office of Planning and Research (OPR) recommended 15% reduction in VMT per capita an appropriate threshold for Petaluma?
- Screening – What types of projects do not need VMT analysis?
- Mitigation Options – What options should be considered to mitigate significant VMT impacts? Given that CAPCOA caps VMT mitigation reduction at 10-15% for suburban areas such as Petaluma, under what circumstances might a greater than 15% reduction in VMT be acceptable?

### **BACKGROUND**

The City of Petaluma's VMT TAC met on June 18, 2020 for its first meeting. The focus of discussion was primarily on metrics and methodology. In particular the VMT TAC considered what model the City of Petaluma should use, what metrics should be analyzed, and how VMT should be calculated.

There was general consensus that the Sonoma County Transportation Authority (SCTA) model was appropriate for use by the City as it provides the most consistency with Sonoma County and other cities and towns in the region, is the most up to date and is routinely maintained, and contains the necessary data to support a variety of modeling efforts.

Metrics to be used by the City for assessing VMT were also discussed and included consideration of all home-based trips versus commute-based trips for residential land uses. TAC members

expressed an interest in assuring that local trips such as to the grocery store and schools were fully captured. There was general consensus that OPR recommended VMT metrics are appropriate for Petaluma and that the all home-based VMT metric for residential was preferred for residential trips.

A discussion on thresholds was also initiated and considered if the citywide or countywide averages would be most appropriate for use by Petaluma and if OPR's recommended 15% below the average or ARB's recommended 16.8% below the average might be more appropriate. It was explained that due to the City's location in the County and regional travel patterns, Petaluma has a higher per capita average VMT compared to the countywide average. This is because Petaluma residents commute longer distances than their Sonoma County neighbors, likely due to jobs held by Petaluma residents located in Santa Rosa or in jurisdictions outside Sonoma County such as Marin County.

Because countywide averages fall below Petaluma's citywide average, reliance upon the citywide average as the threshold would be more achievable. Conversely, reliance upon the countywide average would make it more difficult for land uses in Petaluma to meet thresholds since they would have to realize an even greater reduction in VMT beyond what may be technically feasible. Even with a citywide threshold, areas of the city that have higher than average VMT may not be able to realize sufficient VMT reduction to fall below thresholds, which would trigger an Environmental Impact Report and statement of overriding considerations, unless an alternate is identified such as accepting a greater reduction in VMT mitigation beyond what CAPCOA accepts.

Based on evidence from CAPCOA, the maximum reduction in VMT that can reasonably be substantiated by effectiveness research for available VMT reduction measures for any given project in a suburban context is 10%-15%. Other research, project conditions (location, onsite, offsite improvements, uses), or local/regional planning efforts, may be available to support a greater reduction beyond what the CAPCOA research suggests. The TAC will be asked to consider if VMT reduction greater than what CAPCOA suggests is acceptable and if so under what circumstances.

The initial discussion on thresholds also considered OPR's 15% recommendation as compared to ARB's 16.8% recommendation. TAC members expressed an interest in better understanding the implication of setting at 15% threshold versus the 16.8% threshold, or an even greater threshold. One Committee Member asked what a threshold might look like that achieved consistency with the City's climate goal, which specifies zero-emissions in 2045.

The City's climate emergency resolution was adopted based on Executive Order (EO) B-55-18<sup>1</sup> To Achieve Carbon Neutrality. Among the recitals in the EO, the State acknowledges that specific steps have been taken to reduce greenhouse gas emissions including supporting clean transportation to reduce petroleum use 45% by 2030, setting a goal of 5 million zero emission vehicles by 2030, and proposing to double the reduction in the carbon intensity of fuel through the Low Carbon Fuel Standard by 2030. Achieving net zero emissions in the transportation sector is a lofty goal that will be difficult to achieve even with major changes to regional travel modes, travel

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<sup>1</sup> <https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf>

behavior, and fuel combustion technology, over which the City of Petaluma has limited control. The City of Petaluma has the ability through the General Plan and guiding planning documents to encourage a shift to alternative travel modes, increase density in close proximity to public transit, and invest in multi-model infrastructure.

A VMT threshold that aligns with the zero-emissions target would have to offset 100% of new vehicle trips. This is in stark contrast to the 15% reduction threshold recommended by the Office of Planning and Research, which itself is difficult to achieve. It is noted that agencies with aggressive VMT and Greenhouse Gas (GHG) reduction policies in their General Plan (e.g. City of San Jose) have adopted a 15% threshold because much of the VMT reductions needed to achieve VMT/GHG reduction targets are related to reducing or modifying existing sources of VMT. Also, in the case of the CEQA Transportation section, VMT is being used as the measurement for the amount of additional travel being added to the roadway system to assess the project's effects on the transportation system. Identifying an appropriate threshold to evaluate VMT impacts will be one of the primary discussion topics at the July 30, 2020 VMT TAC meeting.

The second VMT TAC meeting is intended to provide the public and committee members with an overview of the key decision points related to thresholds, screening and mitigation options and provide the opportunity to discuss various options and provide feedback to shape the City's VMT program.

## **DISCUSSION**

The following information was previously presented in the June 18, 2020 VMT TAC Staff Report and is duplicated here to guide the discussion relating to thresholds, screening and mitigation measures. Similarly, Attachment 1 hereto, which contains a Memorandum from Fehr & Peers summarizing the key decisions for SB 743 implementation in the City of Petaluma, was previously presented in the prior staff report and is reattached to this Staff Report to inform the discussion.

### **Thresholds of Significance**

The City of Petaluma has discretion to set its own VMT impact thresholds to assess level of significance under CEQA for projects. In selecting an appropriate threshold, the City must consider state guidance from OPR, which is tied to the Air Resources Board (ARB) projections to achieve targeted statewide greenhouse gas reduction goals. The City has two primary options for selecting a VMT threshold: 1) adopt a threshold recommended by another public agency (such as OPR), or 2) adopt a Petaluma-specific VMT threshold. Similar to the City's current requirement for LOS, VMT analysis would need to consider VMT impacts under baseline conditions (existing conditions) and in the future under cumulative conditions (planned regional growth).

OPR's residential VMT threshold generally requires land use projects to achieve a 15 percent reduction below the city or regional (nine-county MTC region) average; the employment-based (i.e. office) threshold generally requires a land use project to achieve a 15 percent reduction below the regional (nine-county MTC region) average. The most recent ARB analysis indicates that VMT thresholds would need to achieve a 16.8 percent reduction for automobiles statewide based on 2018 levels to reach the state's GHG reduction goals. The targeted reduction levels set forth by

outside public agencies will change over time depending on statewide forecasts of population, travel, and economic conditions.

The challenge for Petaluma is that citywide VMT is higher than the regional average and accomplishing a 15 percent or 16.8 percent reduction will require mitigation strategies and implementation not previously attempted (Table 2: Base VMT Threshold Options, in Attachment 1). People living in Petaluma commute relatively long distances by car to regional employment centers including Santa Rosa and San Francisco. Accomplishing a VMT reduction that is 15 percent below the regional average may not be feasible, even with mitigation, especially for new residential projects located in proximity to city limits (which are generally areas with relatively higher VMT), such as areas on the east side of town that have existing residential land use designations.

Petaluma's VMT per service population is preliminarily estimated to be 33.1, which is above the countywide average of 28.8 by approximately 14.5%. As such, an approximately 30% reduction would be required to meet a countywide reduction target (15% below existing). This may be infeasible given the city's land use and transportation patterns, and the dynamics of the regional economy and markets. Please note that the above metrics are preliminary based on the SCTA model, which continues to be refined, with a final model anticipated for use in Summer 2020.

While setting a VMT threshold lower than the OPR recommended 15 percent, is likely defensible, so long as the threshold is supported by substantial evidence, OPRs recommended threshold is based on a body of evidence substantiating its appropriateness. Should the City choose to select a threshold different than OPR's, it will need to be supported by a well reasoned justification accompanied by substantial evidence.

One approach that could be considered for a program level analysis (General Plan or Specific Plan) is based on identifying the reduction in VMT rates that would occur on a citywide basis. This would rely upon the SCTA travel model to compare existing VMT rates for Petaluma to future year 2040 VMT rates. A development project would be found to have a significant impact if it did not achieve a 15% reduction below the citywide average (either for service population, resident, or worker, depending on the project type) by 2040. This would result in a less onerous target and may be more reasonable for Petaluma.

Transportation improvement project such as road widening, road diets, bike lanes, and new signals would be evaluated based on VMT generation. A net decrease or no change in VMT would be considered a less than significant impact. A net increase would be considered a significant impact.

#### VMT TAC Consideration:

- Should the City rely upon OPR or ARB's identified thresholds, or adopt Petaluma specific thresholds?
- What are appropriate VMT Thresholds for the City of Petaluma taking into consideration the City's climate emergency declaration, commitment to sustainability and resiliency, need for housing and physical location within the region?

- How might VMT thresholds be considered in the context of the forthcoming General Plan update?
- Under what circumstances might the City consider adopting a statement of overriding consideration for an exceedance to VMT?

### **Screening Criteria**

Under the LOS methodology, the City of Petaluma applies a screening mechanism for smaller projects based on trip generation. If a project would normally generate fewer than 50 peak hour trips (or 500 daily trips), then the project would not typically be subject to a detailed transportation analysis to assess level of service since it can be seen with certainty that the project would not result in a LOS impact.

Similarly, screening tools are available for VMT analyses and preclude projects that meet screening criteria from having to prepare a detailed VMT analysis. OPR's *Technical Advisory* suggests applying screening for small projects (generally 10,000 square feet or less for residential project, 15 dwelling units or less, retail of 50,000 square feet or less, or projects that generate fewer than 110 daily trips), residential and office projects located in low VMT areas (which are identified in the SCTA travel demand model currently in draft form), affordable housing development, and transportation projects that would not increase roadway capacity. Projects that meet screening criteria established by the City of Petaluma would only require a qualitative discussion in the CEQA document. Typically, this is most appropriate for projects that are consistent with the General Plan and do not increase VMT, provide public benefits such as affordable housing, and/or reduce VMT. Additionally, projects that are located within ½ mile of a major transit stop or high-quality transit corridor could also qualify to screen out of a VMT analysis. In Petaluma this includes the Downtown SMART station, the planned North SMART station (Corona Station), and bus stops with 15 minutes headway during the peak hour.

OPR has suggested exceptions to screening criteria that include: a floor area ratio (FAR) of less than 0.75, providing more parking than required by the code, inconsistency with the regional sustainability community strategy (Plan Bay Area), and or resulting in removal or replacement of affordable residential units. Projects that potentially conflict with exceptions, that would otherwise screen out, should be subject to a quantitative VMT analysis.

### **TAC Screening Considerations:**

- Are the OPR recommended screening criteria and exceptions appropriate for application in the City of Petaluma?
- Should screening be allowed for projects that offer a clear and direct public benefit to reduce citywide VMT rates?
- Are there other exceptions to the screening criteria that should be considered?

### **Mitigation Options**

Projects that result in VMT impacts would be subject to mitigation through transportation demand management (TDM) programs or project design/operations that support fewer and shorter vehicle trips. Program based VMT mitigation includes impact fees, mitigation exchanges, or mitigation banks. Project level mitigation may be feasible by incorporating a mix of land uses, altering the project density, including bicycle and pedestrian improvements, or by other means. However, project level mitigation may not be feasible, especially for single use projects, such as a residential subdivision. Furthermore, the City's land use and municipal code establishes allowed uses and maximum densities and may preclude mixed-use development or higher densities without legislative approval. Additionally, project operations proposed by developers are influenced by market conditions, which have seen a trend away from retail as e-commerce has continued to expand.

Exhibit E: VMT Reduction Strategy Assessment Memorandum provides a menu of mitigation measures that the City may consider as part of the VMT mitigation program. The effectiveness of various TDM programs range widely depending on travel behavior and preferences, the level of investment in alternative transportation modes, project location, and the quality, accessibility, and safety of multimodal infrastructure. Due to this variability, mitigating a VMT impact using TDM requires rigorous and ongoing monitoring that measures VMT performance over time. Monitoring requires significant city staff and applicant resources. Additionally, reliance upon a project by project TDM approach would likely result in an increased number of projects that have VMT impact that remain significant and unavoidable, even after implementation of all feasible mitigation measures.

One possible option for the City to consider is a citywide VMT mitigation program, which would be structured in a similar fashion as the existing transportation impact fee program, which collects fees from development projects to fund identified improvements to achieve level of service targets. A VMT impact fee program could be developed and levied upon all projects based on VMT contribution. Any VMT fee program adopted by the City would have to demonstrate that fees collected would fund improvements that realize VMT reductions in-line with Petaluma's VMT reduction objectives.

#### VMT TAC Consideration:

- Does the list of VMT measures set forth in Exhibit E capture all possible VMT reduction opportunities?
- Is there a preference to develop a citywide VMT program, rather than require mitigation on a project by project basis?
- Under what circumstances might a VMT reduction greater than what CAPCOA suggests (10-15% for a suburban area) be acceptable?
- How might the Transit Infrastructure inventory recently completed and the update to the City's bike and pedestrian plan, in process, be integrated into the VMT mitigation program?

## **Case Studies**

In an effort to understand the implications of how key decision might affect Petaluma's VMT program, several development projects from the past 5 years have been identified as case studies. These are included in Table 3 of Attachment 1. These case studies may be useful in considering the various VMT options and how VMT policy decisions could affect required VMT analyses.

## **VMT TAC PROCESS**

The role of the TAC is to consider key decisions and provide input and feedback to inform the VMT program. There is much to consider at the second VMT TAC meeting. This staff report and Attachment 1 hereto provides a summary of the primary decision points and aims to focus the discussion on the building blocks of the City's VMT program; Thresholds, Screening, and Mitigation. There are several lengthy attachments, as well as other resources available on the [City's VMT webpage](#) and [OPR's Transportation Impact \(SB 743\) webpage](#), among other sources that contribute to building the record and evidence needed to ultimately support a decision by City Council on the Petaluma VMT Program. An in-depth review of each attachment is not necessary to participate in a meaningful discussion, rather the VMT TAC is encouraged to focus on Attachment 1, and Exhibits A, D, and E thereto.

Following input received from the second VMT TAC meeting, the consultant team will review input and feedback and develop a Petaluma specific Draft VMT Report, which will include recommendations to establish Petaluma's VMT Program. Staff recommends that the Draft VMT Report be the focus of discussion at a third VMT TAC meeting, which would occur in September 2020 prior to being considered by decision makers. Following TAC's review of the Draft VMT Program, additional refinements will be made and will guide staff's recommendations on the VMT Program, which will then be presented to decision making bodies including at least one public hearing before the Planning Commission and at least one public hearing before the City Council targeted to occur during the Fall 2020.

## **PUBLIC OUTREACH**

Establishing the City of Petaluma's VMT program is a public process with multiple opportunities to participate, provide input, and feedback, including during the VMT TAC meetings.

## **ATTACHMENTS**

The following Attachment and Exhibits are the same set of materials previously provided as part of the VMT TAC Staff Report prepared for the June 18, 2020 meeting.

Attachment 1: Memorandum: Summary of Key Decisions for SB 743 Implementation

Exhibit A: Matrix Summary of SB 743 Decisions, Options and Recommendations

Exhibit B: Travel Behavior Forecasting Model Comparison

Exhibit C: Adjustment to Model Gateways

Exhibit D: Small Project Triggers

Exhibit E: Petaluma VMT Mitigation Memorandum

Attachment A: Comparison of CAPCOA Strategies vs. New Research Since 2010

Attachment B: Relevant Strategies for Implementation in Petaluma

Attachment C: Methodologies to Quantify VMT Reduction  
Attachment D: CAPCOA Guidance on Combining VMT Reduction Strategies  
Exhibit F: Adopted Goals and Policies Related to VMT and LOS  
Attachment A: General Plan  
Attachment B: Bicycle and Pedestrian master Plan  
Attachment C: Safe Routes to School