

Overview of Fee-Based VMT Mitigation Programs

Transportation Authority of Monterey County

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Introduction

This white paper establishes a framework for a programmatic approach to respond to the growing need for feasible project Vehicle Miles Travelled (VMT) mitigation.

Background

With the introduction of Senate Bill 743 (SB 743), the assessment of a project's impact to the transportation system under the California Environmental Quality Act (CEQA) has changed from Level of Service (LOS), a qualitative measure of driver comfort based on delay or congestion, to Vehicle Miles Traveled (VMT), a proxy for Greenhouse Gases (GHG) and sustainability. As intended by the California state legislature, this change is resulting in a fundamental shift in CEQA findings as the change favors developing in more urbanized areas. This shift is due to the fact that more urbanized areas have typically been more challenging from a LOS standpoint given limited Right-of-Way, but the higher land use density and zoning mix results in shorter vehicle trips. In contrast, in suburban and rural areas, a VMT analysis more often results in a finding of a transportation impact due to more homogenous land use mixes and less dense development. In addition, with less transportation options compared to more urbanized areas, mitigating impacts in suburban and rural areas is proving to be more difficult than under LOS. For many jurisdictions, SB 743 is resulting in a reversal in the results of transportation significant findings as compared to how things were before SB 743.

As a practical matter, SB 743 for many jurisdictions is also a more restrictive approach to identifying transportation impacts both because of the basis for setting an impact threshold and limited mitigation opportunities. In terms of the threshold of significance, the Governor's Office of Planning and Research's (OPR) recommends that projects consisting of residential or general employment category land uses effectively need to be located in an area where they are 15-percent less than the average VMT¹ for similar uses. Effectively this means that new projects must be located in an area where they are more efficient than 65-percent of similar uses from a VMT standpoint. Given that most development is still not planned as infill, this is resulting in an increasing need for feasible mitigation solutions if a finding of overriding considerations is to be avoided.

To date, VMT mitigation has relied heavily on Transportation Demand Measures (TDMs). These measures generally represent two basic approaches: infrastructure and policy. The California Air Pollution Control Officers Association (CAPCOA) guide for *Quantifying Greenhouse Gas Mitigation Measures*, last updated in 2010, is one of the primary bases for estimating mitigation effects in California. Although this resource is invaluable, the data on which it is based is relatively old, limited in terms of sample size, and based on experiences in highly urbanized areas. As such, many of the

¹ *Technical Advisory on Evaluating Transportation Impacts in CEQA* (2018)

mitigation options provided have questionable efficacy in suburban and rural contexts. TDMs are also challenging from the standpoint of mitigation monitoring and are often unpopular with project applicants because they may need to be managed and paid for in perpetuity. These limitations have led jurisdictions to increasingly consider programmatic approaches to VMT mitigation. Programmatic approaches that rely on collectively funding larger projects appear to hold great promise for VMT mitigation as they allow a project to obtain an amount of mitigation commensurate with their impact, include only a single payment without the complexity of ongoing management, and do not require ongoing mitigation monitoring. Programmatic approaches can also provide a public benefit in terms of funding transportation improvements that would not otherwise be constructed, resulting in improvements to congestion, GHG emissions, increased transportation choices, and additional opportunities for active transportation.

Fee-Based VMT Mitigation Programs

This white paper focuses on two programmatic approaches to funding VMT mitigation: VMT Banking and VMT Exchanges. Following is an introduction to the basic framework of each of these Fee-Based VMT Mitigation Programs:

VMT Banking – Under a VMT Banking framework, multiple VMT reducing projects are grouped together and their associated VMT reductions are monetized in the form of credits. These credits are then purchased for the purposes of mitigating VMT in excess of determined impact thresholds. The underlying projects may be either regionally or locally beneficial to the area in which the project is located.

VMT Exchanges – VMT Exchanges are like VMT Banking with the exception that they deal with a single VMT-reducing project that can be established by the project applicant, other entity, or be selected from a VMT Banking list. As this approach eliminates the need to convert a group of projects into equivalent VMT reducing credits, its administration could potentially be simplified, and funding can be directed at a single preferred mitigation solution which may be of greater benefit to the project than alternatively funding VMT Banking.

Some jurisdictions have also considered the creation or conversion of an existing Transportation Impact Mitigation (TIM) Fee Program to serve the purpose of VMT mitigation. This is, however, impractical for most jurisdictions given that, to not be counterproductive in terms of VMT mitigation, all capacity-enhancing projects would need to be purged from the TIM Fee Program. Simply, a TIM Fee Program cannot have roadway widening projects and be VMT mitigating at the same time. While a full conversion to VMT mitigation projects is feasible in some urban locations, most jurisdictions still desire to have some level of roadway widening within their programs for the purpose of facilitating travel and reducing congestion, even if approach may be conflicting with SB 743 given that most capacity-enhancing projects result in induced demand².

² Induced demand is a phenomenon where trips that would otherwise not occur are created in response to the provision of new transportation capacity.

High-Level Considerations

The following high-level considerations are provided for establishing a basis for developing a framework under which a Fee-Based VMT Mitigation Program can be developed:

1. *Targeted Mitigation* – A Fee-Based VMT Mitigation Program should only be imposed when a project can't sufficiently or cost-effectively mitigate its transportation impact. Unlike a typical TIM Fee Program under which nearly every development project may be required to pay into it, VMT Fee-Based Mitigation Programs are anticipated to only collect money from projects that can't effectively mitigate under their respective significant impact threshold on their own. As a result, forecasting revenue may be more difficult given the need to predict a project location and timing, its land use characteristics, and whether it will require mitigation.
2. *Additionality* – Reductions attributed to mitigations must not have otherwise happened had the additional money from a Fee-Based VMT Mitigation Program been collected and allocated. This consideration applies both from the perspective that VMT reductions are not accounted for in the VMT estimating technique and that this is truly a new mitigation (not just shifting money around).
3. *Roughly Proportional* – Mitigation must be appropriately sized to offset the actual impact. As a practical matter this translates to the need for VMT Fee-Based Mitigation Programs to be defined in terms of "credits" or similar units, such that the appropriate level of mitigation can be secured by a project. Under an approach where the VMT reductions are determined in terms of "credits" or similar units, an amount of mitigation commensurate with the impact can be purchased.
4. *Legal* - Local and other jurisdictional legal frameworks need to be carefully vetted to ensure that the creation of a VMT Fee-Based Mitigation Program does not violate existing laws. As part of this, careful evaluation of AB 1600 implications should be completed.
5. *Equity* – Programs need to be carefully vetted to avoid the potential for disproportionate impacts to low-income and minority communities. Benefits of Fee-Based VMT Mitigation Programs should also be distributed equitably.
6. *Unintended Consequences* – Given the relative newness of these programmatic approaches, the potential for unintended consequences exists. Care needs to be given to avoiding program designs that disincentivize good public policy or that don't find an appropriate balance between efficient VMT mitigation in terms of return on investment and community values.

Detailed Considerations

The following detailed considerations are provided for the purpose of refining a programmatic approach to Fee-Based VMT Mitigation Programs. Considering these in the form of questions may also help further establish the mechanics and community values that guide project selection and other implementation considerations that will be required by a Fee-Based VMT Mitigation Program.

1. A successful regional approach may necessitate standardization of analysis/mitigation requirements across jurisdictions to maintain a sense of fair play. Mitigation projects included in

a VMT Bank or similar program will likely need to be vetted for efficiency (VMT Return on Investment) and equity considerations as part of any evaluation.

2. One option may be to consider a hybrid program that includes both VMT Banking projects and a slate of localized measures with pre-determined VMT reduction values. This approach would enable projects to both get credit for smaller projects that are more difficult to implement at the programmatic level (bike lanes, sidewalk projects, safe routes to school, etc.) while still providing the opportunity to buy into a larger pool of projects. Consideration would need to be given to whether the pre-determined VMT reductions were based on localized conditions/context (perhaps using localized mode split information or similar).
3. Consideration of a phased approach to VMT Banking could address timing and funding concerns. Under this approach, smaller manageable groupings of projects could be funded and implemented in phases. Upon the closeout of each phase, or group of projects, a subsequent new phase of projects would be introduced. This approach may make it easier to both implement the improvements in a timely fashion (reducing issues related to the timing of mitigation) and avoid revenue shortfalls. Conversely, this approach could result in the timing of benefits not being consistent across jurisdictions and would not work well for major (costly) projects.
4. Another consideration is whether it is desirable to make the VMT banking projects available to jurisdictions outside of the primary area of benefit. While this could increase revenue for mitigation projects, it could also result in the need for complex Intergovernmental Agreements and/or questions regarding the equity of such a plan.
5. Caltrans has indicated its potential interest in participating in Fee-Based VMT Mitigation programs³. Given the unique issues surrounding the evaluation and mitigation of transportation projects, consideration should be given to whether they should be treated similarly to land use projects for the purposes of VMT mitigation. Mitigation of induced demand may be more efficient through other mechanisms, including policy.
6. Consideration should be given to completing a technical validation of VMT using a Big Data source. This could be used to further validate/refine existing VMT estimates/thresholds as well as lend further support to validating the nexus for a VMT Fee-Based Mitigation Programs. Although relatively new to the market, there are a few Big Data providers that have products that are worthy of consideration for this purpose.
7. CEQA requires that feasible mitigation be applied to projects that result in a significant impact. By creating a VMT Bank or similar, a feasible option will be introduced that did not exist previously, which will likely necessitate participation by projects that have significant impacts (if they have no other remedy to fully mitigate). While this approach may well allow some projects to be mitigated, as a practical matter some projects may not still be mitigatable within reason (the cost of “credits” or similar may become infeasible at some point) and still require an overriding consideration. For some projects this will increase the cost of analysis without changing the resulting findings and process.

³ Transportation Analysis under CEQA First Edition: Evaluating Transportation Impacts of State Highway System Projects, 2020, Caltrans, Page 24

8. Special consideration should be given to what extent a program may affect housing affordability and availability. With the existence of other required fees, including TIM Fee Programs, jurisdictions will need to understand how a new Fee-Based VMT Mitigation Programs will effect the resultant costs and feasibility of projects.
9. Traffic Analysis requirements (LOS-based) and resultant mitigation requirements should be considered given the requirements and costs of a Fee-Based VMT Mitigation Program. Similar to other costs, consideration should be given to the resultant costs and feasibility of projects.
10. Special consideration should be given to what extent a program may affect housing affordability and availability.

Program Development

The following are intended to outline a road map for the development of a Fee-Based VMT Mitigation Program.

1. Establish a stakeholder group to build consensus and support for the program. This may involve several groups or one collective group. Consideration should be given to:
 - a. Member public agencies
 - b. Caltrans or other State Agencies
 - c. Developers and Project proponents
 - d. Community-Based Organization (CBOs)
 - e. General Public
2. Identify candidate project list
3. Evaluate individual project efficacy (VMT Mitigation Return on Investment (ROI) or mitigation VMT/\$)
4. Establish project evaluation criteria. At a minimum this should consider:
 - a. VMT Mitigation ROI
 - b. Equity
 - c. Total cost
 - d. Timeliness and schedule
 - e. Feasibility
 - f. Stakeholder, Decision-Maker, and Public support
5. Forecast revenue. At a minimum this will require:
 - a. Identifying the location of projects, the timing of a project, and the extent to which project VMT is in excess of thresholds
 - b. Estimating the extent of “feasible mitigation” (the maximum reasonable contribution, irrespective of the actual required VMT mitigation)
 - c. Evaluation of the impact to project feasibility, affordability, other financial considerations
6. Evaluate and select program format
 - a. VMT Banking
 - b. VMT Exchanges
 - c. VMT-Based Impact Fee

- d. Hybrid (example VMT Banking with additional fixed menu of local VMT mitigation options not included as specific projects)
 - e. Phasing of VMT Banking if appropriate
- 7. Prepare program documentation
- 8. Develop implementation plan
 - a. Establish approval process
 - b. Legal review
 - c. Public notice
 - d. CEQA review as appropriate
 - e. Establish required intergovernmental agreements (IGAs)