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VMT Mitigation Through Fees, Banks, & Exchanges

UNDERSTANDING NEW MITIGATION APPROACHES

A WHITE PAPER PREPARED BY

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WRCOG
Western Riverside Council of Governments

VMT MITIGATION THROUGH FEES, BANKS, AND EXCHANGES

Understanding New Mitigation Approaches

BACKGROUND

On September 27, 2013, Governor Jerry Brown signed SB 743 into law and started a process intended to fundamentally change transportation impact analysis as part of CEQA compliance. These changes include elimination of *auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion* as a basis for determining significant impacts. Instead, transportation impacts will be determined based on changes to vehicle miles of travel (VMT). ***This change essentially shifts the focus of analysis from impacts to drivers through higher delays to the impact of driving itself***.

Lead agencies making the transition to VMT are realizing the challenges of using the new metric especially when it comes to mitigating significant VMT impacts. Reducing VMT from land use projects and land use plans has traditionally been accomplished through transportation demand management (TDM) strategies. These strategies include modifying a project's land use characteristics (i.e., density) and incorporating vehicle trip reduction programs at the site to change travel behavior of tenants and visitors. TDM is most effective in urban areas where the site is accessible by multiple travel modes (i.e., walking, bicycling, transit, and vehicle) offering similar travel times and convenience. Conversely, TDM strategies are less effective in lower density suburban and rural areas where modes are limited to personal vehicles. In both areas though, a program-based approach to mitigation can be more effective than project-site strategies. Programs can pool development mitigation contributions to pay for larger and more effective VMT reduction strategies that are not be feasible for individual projects. This paper outlines and compares multiple program types and then explains the implementation steps and key governance issues.

PROGRAM CONCEPTS

The concept of a 'program' approach to impact mitigation is not new and has been used for a variety of technical subjects including transportation, air quality, greenhouse gases, and habitat. Transportation impact fee programs have been used to help mitigate cumulative level of service (LOS) impacts. What is new are how to use impact fee programs for VMT impacts and alternative programs called mitigation exchanges and banks. Absent new program-level mitigation options, suburban and rural lead agencies will have limited feasible mitigation options for project sites.

For CEQA purposes, feasible means "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors."

- CEQA Guidelines Section 15364

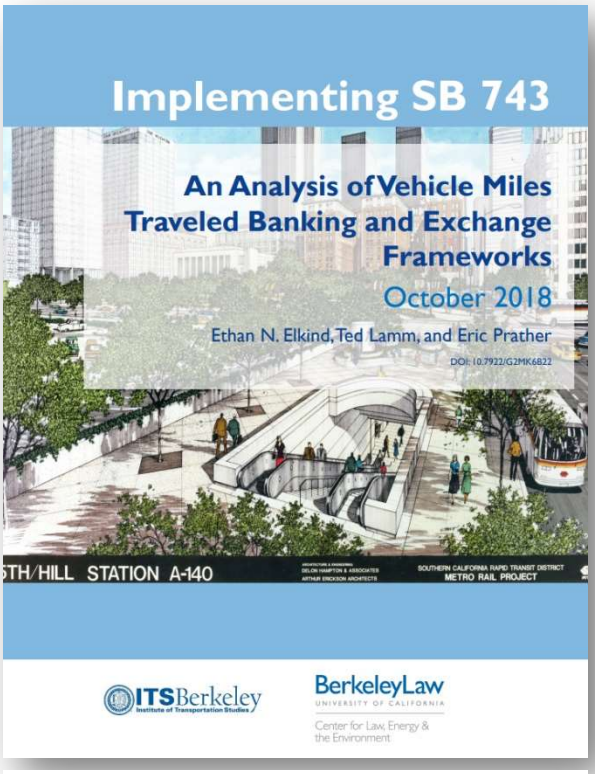
Without feasible mitigation, significant VMT impacts would be significant and unavoidable (SAU). Under these circumstances a project must prepare an environmental impact report (EIR) adding extra time and cost to environmental review compared to a negative declaration (ND). Program-based approaches may be able to overcome the limitation of project-site only mitigation. Three specific concepts as described below have been identified for the purposes of this white paper.

- **VMT-based Transportation Impact Fee program (VMT-TIF)** – The first program concept is a traditional impact fee program in compliance with the mitigation fee act. The nexus for the fee program would be a VMT reduction goal consistent with the CEQA threshold established by a lead agency for SB 743 purposes. The City of LA is the first in California to complete a nexus study for this type of program. The main difference from a fee program based on a metric such as vehicle level of service (LOS) is that the VMT reduction nexus results in a capital improvement program (CIP) consisting largely of transit, bicycle, and pedestrian projects. These types of fee programs are time consuming to develop, monitor, and maintain but are recognized as an acceptable form of CEQA mitigation if they can demonstrate that the CIP projects will be fully funded and implemented.

- **VMT Mitigation Exchange** – In simple terms, the exchange concept relies on a developer agreeing to implement a predetermined VMT reducing project or proposing a new one. The project may be located in the vicinity of the project or elsewhere in the community, and possibly outside the community. The exchange needs to have a facilitating entity that can match the VMT generator (the development project) with a VMT reducing project or action. The facilitating entity could be the lead agency or another entity that has the ability to provide the match and to ensure through substantial evidence that the VMT reduction is valid. A key unknown with this approach is the time period for VMT reduction. For example, how many years of VMT reduction are required to declare a VMT impact less than significant?

- **VMT Mitigation Bank** – A mitigation bank attempts to create a monetary value for VMT reduction such that a developer could purchase VMT reduction credits. The money exchanged for credits could be applied to local, regional, or state level VMT reduction projects or actions. Like all VMT mitigation, substantial evidence would be necessary that the projects covered by the bank would achieve expected VMT reductions and some form of monitoring may be required. This is more complicated than a simple exchange and would require more time and effort to set up and implement. The verification of how much VMT reduction is associated with each dollar or credit would be one of the more difficult parts of the program.

With both exchanges and banks, another important test is that the VMT reduction would not have occurred otherwise such that mitigation program creates 'additionality'. This means that additional VMT reduction will occur above and beyond what would have occurred without the program. A commonly accepted definition of 'additionality' has not yet been developed. One possible test of additionality is that the mitigation project is not included in the regional transportation plan (RTP). The RTP is a financially constrained plan so projects not included in the plan would not likely have been implemented within the typical cumulative timeframe.



https://www.law.berkeley.edu/research/clee/research/climate/transportation/vehicle-miles-traveled/

For any program to qualify as a CEQA mitigation program, the discretionary action to adopt the program may require CEQA review. This conclusion is based on the *California Native Plant Society v. County of El Dorado* where the court found that payment of fee does not presumptively establish full mitigation of a discretionary project. A separate CEQA review of the program is necessary to satisfy the 'duty to mitigate' imposed by CEQA. Decision makers should also realize that absent a VMT reduction program, developers would likely be limited to only project site mitigation. While this may be less effective, it also lowers their mitigation costs because the available and feasible mitigation would be more limited.

More details about exchanges and banks are explained in the framework document shown above and available at the cited web link. This white paper expands on the framework to accomplish two objectives. The first objective is to compare the pros and cons of exchanges and banks to a traditional impact fee program. Since impact fee programs have already been established as feasible CEQA mitigation, they serve as a benchmark against which to compare other program concepts. The second objective is to outline the implementation steps associated with creating an exchange or bank to help identify key implementation questions or issues that could affect their feasibility.

PROGRAM ASSESSMENT (Pros/Cons)

Table 1 below outlines the pros and cons of approach VMT mitigation through an impact fee program, exchange, or bank. This assessment is intended to highlight some of the key differences between each program concept.

Table 1 – VMT Mitigation Program Type Comparison

Program Type	Pros	Cons
Impact Fee Program	• Common and accepted practice • Accepted for CEQA mitigation • Adds certainty to development costs • Allows for regional scale mitigation projects • Increases potential VMT reduction compared to project site mitigation only	• Time consuming and expensive to develop and maintain • Requires strong nexus • Increases mitigation costs for developers because it increases feasible mitigation options • Limited to jurisdictional boundary unless a regional authority is created • Uncertainty about feasibility and strength of nexus relationship between VMT and pedestrian, bicycle, and transit projects (especially in suburban/rural jurisdictions)
Mitigation Exchange	• Limited complexity • Reduced nexus obligation • Expands mitigation to include costs for programs, operations, and maintenance • Allows for regional scale mitigation projects • Allows for mitigation projects to be in other jurisdictions • Increases potential VMT reduction compared to project site mitigation only	• Requires 'additionality' • Potential for mismatch between mitigation need and mitigation projects • Increases mitigation costs for developers because it increases feasible mitigation options • Unknown timeframe for mitigation life • Effectiveness depends on scale of the program
Mitigation Bank	• Adds certainty to development costs • Allows for regional scale projects • Allows for mitigation projects to be in other jurisdictions • Allows regional or state transfers	• Requires 'additionality' • Time consuming and expensive to develop and maintain • Requires strong nexus • Political difficulty distributing mitigation dollars/projects

Table 1 – VMT Mitigation Program Type Comparison		
Program Type	**Pros**	**Cons**
	• Expands mitigation options to include costs for programs, operations, and maintenance • Increases potential VMT reduction compared to project site mitigation only	• Increases mitigation costs for developers because it increases feasible mitigation options • Unknown timeframe for mitigation life • Effectiveness depends on scale of the program

To better understand potential program differences, Table 2 contains a comparison of the VMT mitigation projects or actions that each program type could fund or implement. The information for an impact fee program is more certain than for exchanges or banks. Fee programs have been used in practice for decades and have been vetted through court decisions. While banks and exchanges do exist for other environmental mitigation purposes such as wetlands preservation and habitat conservation, these applications have largely focused on protecting fixed land amounts versus reducing a metric that fluctuates over time and may vary in value depending on economic conditions.

Table 2 –VMT Mitigation Projects and Actions Comparison	
Program Structure	**Project Types that Reduce VMT**
Impact Fee Program	• Pedestrian network expansion • Bicycle/Scooter network expansion (includes bike/scooter share stations) • Transit vehicles or facilities associated with service expansion • Roadway gap closures that reduce trip lengths (bridges)
Mitigation Exchange	• All impact fee program project types • Private or institutional projects that reduce VMT • Transit service improvements and transit pass subsidies
Mitigation Bank	• All impact fee program project types • All mitigation exchange project types • VMT reduction strategies associated with travel behavior changes

IMPLEMENTATION STEPS

This section addresses the second objective noted above to outline the implementation steps associated with creating an exchange or bank to help identify key implementation questions or issues that could affect their feasibility. The starting point for these steps begins with identifying the potential statutory or legal requirements that could govern or influence program creation. These are highlighted in Table 3 and build on the research previously done by U.C. Berkeley in the document referenced above. Since specific statutes do not exist specific to VMT exchanges and banks, U.C. Berkeley used a proxy based on conservation programs established under the California Fish & Game code. This is a reasonable proxy given that the intent behind VMT exchanges and banks is a form of conservation. Instead of habitat, VMT exchanges and banks are trying to conserve vehicle trip making and the VMT generated through this activity. VMT mitigation banks or exchanges do not appear to require new legislative authority but as noted in the U.C. Berkeley document, having state-wide templates for their development could help establish clear standards and expectations for program designs.

Table 3 – Potential VMT Mitigation Exchange/Bank Legal Requirements

Program Type/Legal Requirements	Statutory Reference
Transportation Impact Fee Program	
1. Mitigation Fee Act – Intended to create a program that allows individual development projects to pay for all or portion of the cost to implement public facilities necessary to support the project. Public facilities are generally limited to capital projects. The nexus study for the program must demonstrate how there is a reasonable relationship between the following. • How there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed. • How there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed. • How there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed. The fees may not be applied to existing deficiencies or the maintenance and operation of an improvement. As such, clear standards should exist about the physical and operational performance expectations for each model of travel included in the program.	• California Government Code §66000-66001

Table 3 – Potential VMT Mitigation Exchange/Bank Legal Requirements	
Program Type/Legal Requirements	**Statutory Reference**
2. Constitutional – Court decisions have placed limits on what level of mitigation can be expected of land use development projects. The limits largely require a nexus between the mitigation and a legitimate government interest plus a rough proportionality between the mitigation and the adverse impact caused by the project.	• Nollan v. California Coastal Commission, 483 U.S. 825 (1987) • Dolan v. City of Tigard, 512 U.S. 374 (1994)
3. CEQA – For mitigation to be imposed, a significant impact must occur. Impacts stem from changes to the baseline environment caused by the project. The significance of those impacts is determined by the lead agencies choice of thresholds. This limits mitigation to increment of VMT change that occurs above the threshold.	• CEQA Statute (CA Public Resources Code 21000-21189) • CEQA Guidelines (CA Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387)
VMT Mitigation Exchange or Bank	
1. An explanation of the VMT mitigation purpose of and need for the bank or exchange.	• Fish & Game Code §1852(c)(1)
2. The geographic area covered by the bank or exchange and rationale for the selection of the area, together with a description of the existing transportation and development dynamics that provide relevant context for the development of the bank or exchange.	•§1852(c)(2)
3. The public transit and VMT reduction opportunities currently located within the bank or exchange area.	•§1852(c)(3)
4. Important residential and commercial communities and transportation resources within the bank or exchange area, and an explanation of the criteria, data, and methods used to identify those important communities and resources.	•§1852(c)(4)
5. A summary of historic, current, and projected future transportation stressors and pressures in the bank or exchange area, including economic, population growth and development trends.	•§1852(c)(5-6)
6. Provisions ensuring that the bank or exchange will comply with all applicable state and local legal and other requirements and does not preempt the authority of local agencies to implement infrastructure and urban development in local general plans.	•§1852(c)(7)
7. VMT mitigation goals and measurable objectives for regional transportation resources and important mitigation elements identified in the plan that address or respond to the identified stressors and pressures on transportation within the bank or exchange area.	•§1852(c)(8)

Table 3 – Potential VMT Mitigation Exchange/Bank Legal Requirements	
Program Type/Legal Requirements	**Statutory Reference**
8. VMT mitigation projects, including a description of specific projects that, if implemented, could achieve the mitigation goals and objectives, and a description of how the mitigation projects were prioritized and selected in relation to the mitigation goals and objectives.	• §1852(c)(9)
9. Provisions ensuring that the bank or exchange plan is consistent with and complements any local, regional or federal transportation or congestion management plan that overlaps with the bank or exchange area, a summary of any such plans, and an explanation of such consistency.	• §1852(c)(10-11)
Sources: Implementing SB 743 An Analysis of Vehicles Miles Traveled Banking and Exchange Frameworks, October 2018, Institute of Transportation Studies, U.C. Berkeley. 2019 California Environmental Quality Act (CEQA) Statute & Guidelines, Association of Environmental Professionals, 2019. http://leginfo.ca.gov/ http://ccr.oal.ca.gov/	

A review of these potential legal requirements suggests that the creation of an exchange or a bank may not be less rigorous than that of a conventional transportation impact fee program. These legal requirements combined with the need to demonstrate additionality and provide verification could create implementation costs beyond those of a conventional transportation impact fee program. To explore this issue further, annotated flow charts were developed for each program concept. These flow charts are presented on the following pages and allow a reviewer to quickly surmise the differences and similarities associated with creating, operating, and maintaining these programs.

Mitigating VMT Impacts Under SB 743

FEHR PEERS

VMT Bank

Implementation

Step 1
Determine Scale/Scope

Step 2
Determine Sponsor

Step 3
Formally Establish Bank & Review Team

Step 4
Determine & Prioritize Mitigation Options

Step 5
Administer Bank

Considerations

There are advantages and disadvantages to creating a Bank with a larger scale/scope. However, multiple agencies must be willing to accept the Bank's mitigation options for a state or regional Bank to be feasible. Larger regions can:

*Decrease costs associated with running the Bank
*Decrease local authority over mitigation options
*Increase efficiency and effectiveness of the program

There are a few organizational components to consider when creating a mitigation Bank. These elements include:

*Administrative - The Bank must perform several administrative functions such as collecting fees, managing information, answering questions, and other business operations.

*Technical - There is a significant amount of technical work needed to initially and continually prove the mitigation options reduce VMT and that the reductions would not have occurred without the programs. The Bank also needs to show the fees it receives are related and proportional to new development.

*Accounting - The Bank requires a thorough accounting system to track collected fees and to ensure fees are being handled according to CEQA and other legal guidelines. This includes payments for implementing VMT reduction projects.

Agencies should consider their ability to perform these roles when deciding whether the Bank should be run internally or by a third party.

The entity creating the Bank must legally formalize its creation. If the intent is for the Bank to be used by multiple agencies, this may require a joint powers authority or equivalent.

A review team should be used to verify the effectiveness of mitigation options based on substantial evidence. This team could be internal to the entity creating the bank or an independent third party.

Potential third party entities that could function as a review team include public agencies such as those listed below.

*Caltrans - local office
*ARB
*CalEPA

The Bank Sponsor creates a list of mitigation options. The Review Team evaluates the list to ensure it complies with relevant requirements. The Sponsor should consider the following elements when prioritizing options:
*Equity
*Timeliness of Implementation
*Cost

Mitigation options can include:
*Infrastructure projects
*Programs/incentives (Unlike infrastructure projects, programs/incentives are ongoing activities. Because programs/incentives must be continually maintained to be effective, agencies should consider if developers must pay for them indefinitely.

The public agency or entity sponsoring a Bank may not always be the lead agency on a project. In this situation the Sponsor should develop an agreement with the lead agency that allows the Bank's mitigation options to be considered an acceptable mitigation measure for the EIR.

Banks must continue to prove that their mitigation options reduce VMT and that the reduction would not have occurred without the projects/programs.

CEQA review of the Exchange creation may be required to be considered as a formal mitigation program.

Procedural Flowchart

Mitigating VMT Impacts Under SB 743

FEHR PEERS

VMT Exchange

Implementation

Step 1
Determine Scale/Scope

To create a regional program requires all participating agencies to adopt the program. Programs with larger scopes can:

*Decrease administrative costs
*Decrease local authority
*Increase efficiency and effectiveness of the program

Step 2
Determine Sponsor

The organizational components of a mitigation Exchange will depend on the type of sponsor (public or private) mitigation options, and matching process between mitigation options and projects.

Step 3
Determine & Propose Mitigation Options

If the sponsor is a public agency, they will develop a list of options developers can choose from to mitigate the VMT generated by their development.

If the developer wants to propose their own mitigation Exchange, they must get it approved by the sponsor and lead agency.

Step 4
Develop Review Team

The Exchange should have a Review Team to verify mitigation effectiveness and additionality based on substantial evidence. The team could consist of third-party representatives. The team reviews the mitigation list and verifies that the options reduce VMT and that the reductions would not have occurred without the project, program, or incentive.

Because Exchanges can include programs/incentives as mitigation options, the Review Team must continually evaluate them to ensure the options are still effective and determine to what degree they reduce VMT.

Step 5
Administer Exchange

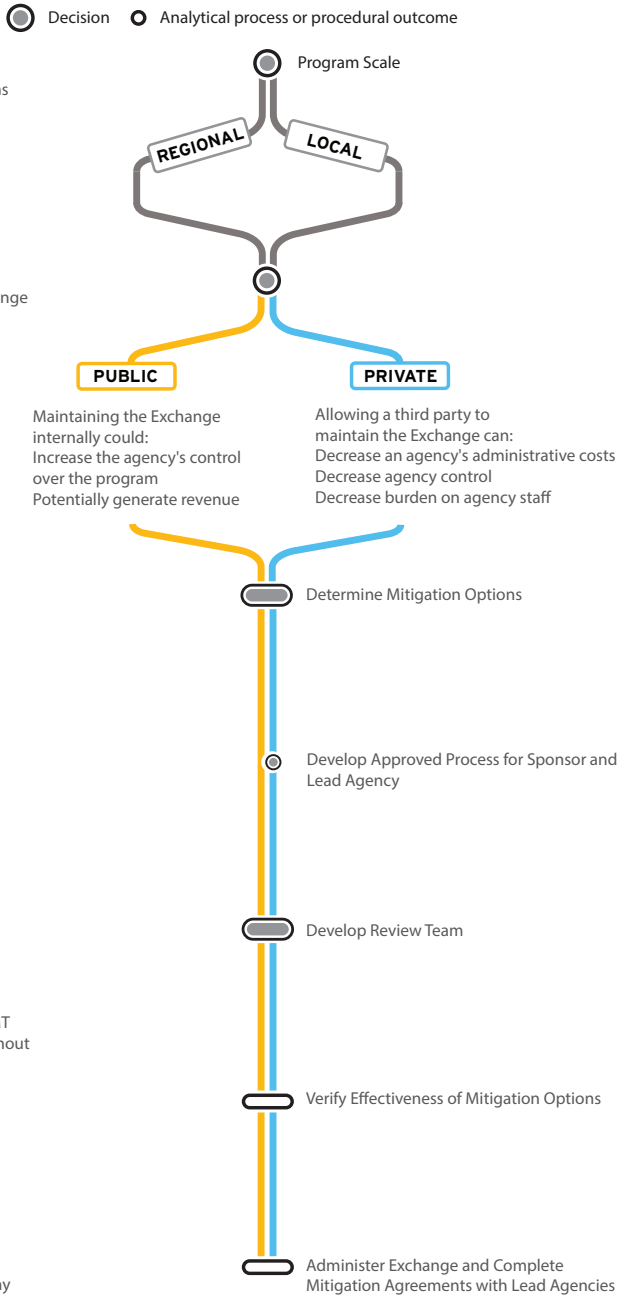
The public agency/entity sponsoring an Exchange may not always be the lead agency on a project. In this situation the Sponsor should develop an agreement with the lead agency that allows the Exchange's mitigation options to be considered an acceptable mitigation measure for the EIR.

Exchanges must continue to prove that their mitigation options reduce VMT and that the reduction would not have occurred without the projects/programs.

CEQA review of the Exchange creation may be required to be considered as a formal mitigation program.

Considerations

Procedural Flowchart



Mitigating VMT Impacts Under SB 743

FEHR & PEERS

VMT Impact Fee

Implementation

Step 1
Determine Scale/Scope

Step 2
Determine Nexus (VMT)

Step 3
Determine & Propose Mitigation Options

Step 4
Prepare & Approve Nexus Study

Step 5
Prepare & Adopt Fee Ordinance

Step 6
Complete CEQA Review for the Program

Step 7
Administer the Program

Considerations

To create a regional program requires all participating agencies to adopt the program. Programs with larger scopes:

*Decrease administrative costs
*Decrease local authority
*Increase efficiency and effectiveness of the program

An agency must determine its VMT reduction goal before it can show the relationship between new development and that goal.

The CIP develops a list of capital improvement projects necessary to reduce VMT consistent with its desired goal. The agency should prioritize the projects so they are constructed in a logical order.

The prioritization process should consider:
*Equity
*Timeliness
*Cost
*Modal Preference (Walking/Biking/Transit)
*Stakeholder/Community Input

Agencies must demonstrate that the projects in the fee program contribute to VMT reduction. The agency must also show that the fees are related and proportional to new development.

Fees should take into account the delay in the time when fees are collected and when they are used.

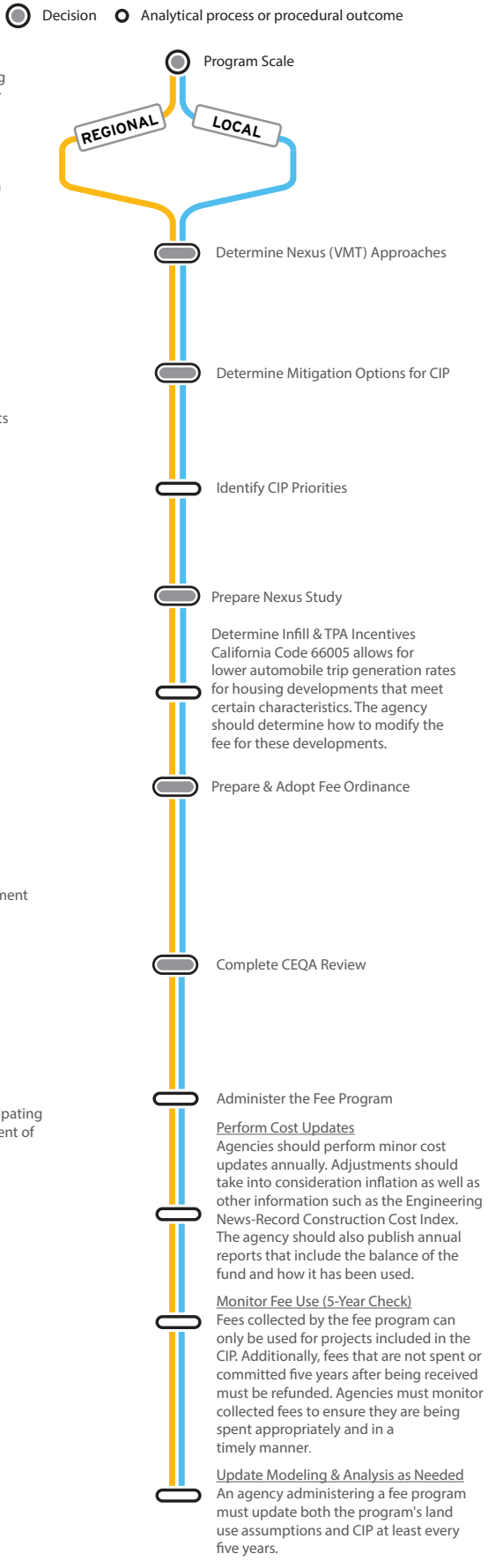
For a fee to be regularly imposed, it must be adopted as an ordinance.

The ordinance must include:
*Reason for the fee
*The relationship between the fee and new development
*Methodology used in developing the fee
*Projects to be included in the CIP

California courts have ruled that in order for a fee program to serve as acceptable CEQA mitigation, the program itself must first be reviewed in an EIR.

For Regional Impact Fee Programs ensure that participating agencies have adopted the program such that payment of fees is considered a feasible mitigation measure.

Procedural Flowchart



PROGRAM EXAMPLES

To help explain the different program types, it may be useful to consider some examples. The existing programs below range from an existing VMT-based impact fee program to programs that could be evolved into VMT mitigation banks or exchanges.

City of Los Angeles Westside Mobility Plan Transportation Impact Fee Program

(https://planning.lacity.org/eir/CoastalTrans/deir/pdfs/tiafeestudy.pdf)

The City of Los Angeles developed the first impact fee program that relies on a VMT reduction nexus. The westside previously relied on LOS-based impact fee programs but as the area matured and new laws like SB 743 emerged, the City chose to shift their nexus. This shift changed the nature of the CIP from largely roadway capacity expansion projects to more transit, bicycle, and pedestrian infrastructure projects. A key benefit of this approach as noted above is that once the fee program is in place, administration of the program is limited to construction cost updates and complying with state reviews to ensure that funding is being appropriately used to construct and implement the CIP projects. No further verification of CIP effectiveness is required.

WRCOG Transportation Uniform Mitigation Fee (TUMF) Program

(http://www.wrcog.cog.ca.us/174/TUMF)

Western Riverside County has the Transportation Uniform Mitigation Fee (TUMF) Program, implemented in 2003. While this program is tied to a vehicle LOS nexus, the foundation and structure of the program could be used to create a new VMT impact fee program similar to the Los Angeles example. The following summary describes the foundational elements of the TUMF and provides information about how to evolve the program for VMT impact mitigation purposes.

The TUMF funds critical county-wide transportation infrastructure to accommodate the traffic created by new population growth and commercial development throughout western Riverside County. It is a vital funding source that complements Federal, State, and local funding funds for improvements to roadways, interchanges, and transit facilities. The fee is uniformly assessed on new residential and non-residential development throughout the WRCOG region. Each of WRCOG's member jurisdictions and the March Joint Powers Authority (JPA) participate in the program.

WRCOG serves as the Program Administrator and has three main responsibilities. First, WRCOG leads the development of regular AB 1600 compliant Nexus Studies. These Studies identify needed the transportation facilities to be funded by the fee, identify future growth projections, and set the resulting

fee, which is then adopted by WRCOG's Executive Committee. The transportation projects included in the Nexus Study are identified through a collaborative process in which jurisdictions submit projects for consideration, which are then subject to an analysis process to verify that they meet applicable criteria. These two-step process ensures that the projects included in the Nexus Study reflect both local input and regional need. A similar process could be used to create a VMT reduction nexus and to select VMT reducing projects for either a separate VMT impact fee program or a modified TUMF that includes projects to achieve LOS and VMT reduction goals.

WRCOG's second responsibility is the collection and calculation of fees. WRCOG has developed a set of consistent fee calculation tools, which ensure that TUMF is calculated on a consistent basis for all projects, regardless of their location. Because there is a regional Nexus Study and a consistent fee calculation approach, WRCOG ensures that all projects of the same type pay the same fee, regardless of their location. In 2019, WRCOG completed work on an online fee payment system which expedites fee payments from project applicants.

The final responsibility of WRCOG is distributing funds collected from each agency and using those monies to fund transportation projects. Project identification and prioritization is led by the local agencies who meet to decide how much funding to provide to each project. Local agencies are grouped into geographic sub areas known as TUMF Zones. Each TUMF Zone is allocated a budget of anticipated revenues, which are then distributed through a consensus-based approach. WRCOG then provides reimbursements to each agency as work occurs. WRCOG's facilitates this process and also reviews invoices to ensure that funds in a manner which is consistent with program requirements.

Miles

(https://www.sacrt.com/apps/miles-get-rewarded-for-your-commute-travel/)

The City of Sacramento, Sacramento Regional Transit, and Sacramento State partnered with Miles, a new app that will rewards users with redeemable miles for their commute and travel. The redeemable miles can be exchanged for exclusive experiences, products and services with vendors including Ray-Ban, Illy, Audible, and Rockport. Miles app users automatically earn miles for daily travel and receive bonus miles for green trips (walk, bike, carpool or transit). Sacramento residents are also eligible to complete special challenges to earn additional rewards. While this program was not set up as an VMT mitigation exchange or bank, it could evolve into one.

The purpose of rewarding green trips and the special challenges is to influence user behavior to reduce vehicle trips and VMT. With some additional accounting of user travel behavior before and after using the app, enough substantial evidence could be created to provide the VMT reduction verification described above and noted in the flow charts. The program already has administrative functions developed and

established relationships between the partner agencies. Some of the unknowns at this time are listed below.

- cost of the program on a per user basis
- amount of VMT reduction that is achieved for a typical user
- how a developer could contribute to the program to sponsor additional users
- stability or permanency of VMT reductions dependent on 'challenges'

In addition to the Miles program, other similar vendors exist such as Luum (https://luumbenefits.com/) and Metropia (https://www.metropia.com/). These types of app-based vendors could evolve to offer exchange or bank type mitigation options if they can comply with the various requirements outlined in the implementation steps and identified in the U.C. Berkeley white paper cited above.

Metro Transit Pass Subsidy

Metro is the Los Angeles County mobility provider. One of the programs they currently offer is a transit pass subsidy with a couple of unique elements that may qualify it as a VMT mitigation exchange. Metro offers student and employee transit passes under their U-pass and E-pass programs. These are transit passes for students and employees in LA County that are unique because instead of a physical transit pass card, the pass comes in the form of an RFID chip with an antenna that sticks to an existing student or employee identification badge. This type of chip allows the transit agency to charge for trips when they are made, which is more cost-effective for schools and employers. The registration form for obtaining the pass includes a survey about current travel behavior and data such as the distance between home and school or work for the applicant. By tracking how individual travel behavior changes from this baseline condition over time, LA Metro can produce aggregate statistics about the effect on transit ridership and VMT.

The second unique component of the program is that Metro allows anyone to 'sponsor' these passes for a particular school or employer. As such, they are entertaining the concept of using the program as an SB 743 VMT mitigation exchange. Developers could purchase U- or E-passes and could use the Metro performance data to estimate the VMT reduction per pass. LA Metro is working with LA DOT and SCAG on a pilot concept this year to formalize the program. As part of this white paper development, we asked Metro if developers/agencies outside Los Angeles County could participate. The reason for this request is that VMT mitigation dollars spent on Metro transit passes may be more effective than the same dollars spent in other communities. Whether local communities would be willing to allow mitigation dollars across borders will likely depend on a variety of factors but knowing that it is feasible on the Metro end is an important first feasibility question. Metro replied that their work has not progressed sufficiently to answer this question yet.

Expanded Public Agency Telecommute Bank

With increased telecommuting during the COVID-19 shelter-in-place order, public agencies may decide to permanently expand their telecommuting offerings to employees. When making that decision, these agencies could 'bank' the commute VMT savings from each employee into a mitigation program. The agency would then have the option to allocate the VMT savings to individual development or transportation projects. The allocation process could be gifted, auctioned, or offered at a fixed price. WRCOG could function as an umbrella facilitator for this type of program with responsibility for collecting and organizing the VMT savings into a single 'bank' and then disposing of the savings to individual projects as mitigation subject to all the program expectations outlined above.

IMPLEMENTATION RISKS

As explained above, VMT exchanges or banks come with unique requirements such as the 'additionality' test and ongoing verification that make them more challenging to implement than a conventional transportation impact fee program. However, exchanges and banks offer the ability to include program-type strategies directed at changing travel behavior that are not available in a conventional impact fee program. Given these tradeoffs, we assessed whether other risks could influence the choice of program.

One risk that stood out was related to current legal challenges to the use of carbon offsets that are based on similar concepts. In a recent legal case, the Sierra Club, Center for Biological Diversity, and Cleveland National Forest Foundation, Climate Action Campaign, Endangered Habitats League, Environmental Center of San Diego, and Preserve Wild Santee challenged the County of San Diego over the use of carbon offsets to achieve GHG reduction goals in the County's climate action plan. The court petition is available at the link below.

- https://www.biologicaldiversity.org/programs/urban/pdfs/San-Diego-CAP-Petition-for-Writ-of-Mandate.pdf

The California Attorney General's (AG's) office has also weighed in on this court case. According to a November 11, 2019 Los Angeles Times article, "California says San Diego County could undermine state's greenhouse gas plan", the AG's office filed an amicus brief. The article reported the following about the AG's brief.

> *In a strongly worded amicus brief recently submitted to the 4th District Court of Appeal in San Diego, Becerra argued that the county's offset strategy would "perpetuate current sprawling development patterns, which will impede the ability of the region and state to reach their long-term climate objectives."*
>
> *"Without significant [vehicle miles traveled] reductions across the state, California simply will not be able to achieve its [greenhouse gas] reduction targets," the 33-page document said.*

The state does not appear to support reducing GHG emissions from land use development without those reductions coming from fundamental local land use and transportation network changes. The risk is that lower density suburban and rural parts of the state would continue their sprawling patterns leading to more VMT and emissions. If the state maintains this position, it could also be used to argue against the creation of VMT mitigation exchanges and banks that attempt to offset VMT increases. To minimize this risk, the mitigation options offered by exchanges and banks could be applied only after project site mitigation has been exhausted and should attempt to offer additional mitigation within the same area or community.

GOVERNANCE

Governance for a VMT mitigation program is another important part of assessing program feasibility for a particular agency. The definition of governance for the purposes of this assessment includes the following three components.

1. Who makes program decisions?
2. How are decisions made?
3. Who is accountable for decisions?

These questions are answered below based on WRCOG serving as the specific agency that would implement and operate the VMT mitigation program. Since the answers will vary depending on the exact type of mitigation program, WRCOG was asked about specific program types of most interest. In response, three program options were identified.

- Modified TUMF – This option involves a modification to the existing TUMF where a new VMT reduction nexus is added. This change would allow the creation of two separate capital improvement programs (CIP) with their own separate fee schedules. A roadway capacity CIP would be retained for the LOS nexus component of the program and a new VMT mitigation CIP would be created. Some of the existing projects in the TUMF CIP are VMT reducing such as transit, bicycle, and pedestrian projects. These would be moved to the new VMT mitigation CIP presuming they are consistent with the new VMT reduction nexus requirement. If changes are limited to this new accounting and nexus approach, impact fees would remain relatively stable.

  This option also allows for new VMT reducing projects to be added to the VMT mitigation CIP. The more projects that are added, the greater the potential VMT reduction, but also the greater the impact fees. Under this option, the TUMF would continue to serve a mitigation program for land use development projects. No mitigation would be available through the program for transportation infrastructure projects that generate new VMT.

- New VMT Impact Fee Program – This option involves creating a new VMT impact fee program focused solely on achieving VMT reduction through the CIP projects. The CIP would largely consist of active transportation and transit projects where sufficient evidence exists to demonstrate a VMT reduction nexus. The program would also be targeted exclusively for land use development project mitigation.

- New VMT Mitigation Exchange – This option is the most flexible in terms of offering VMT mitigation for both land use and transportation infrastructure projects. The program would identify VMT reduction projects that could be either fully funded or directly implemented by land use project applicants or transportation project sponsors. The type of project could include capital projects similar to those mentioned above for the impact fee programs plus TDM strategies or activities that reduce VMT. TDM often involves information development and dissemination and actions that change travel behavior. Since these do not qualify as capital projects, they are typically excluded from impact fee programs. As long as these strategies or activities have a clear nexus to VMT reduction, they would qualify for the VMT mitigation exchange project list. By covering VMT mitigation for transportation projects (i.e. roadway capacity projects causing induced vehicle travel impacts), more agencies could participate in the program and more VMT reduction could be delivered.

These options do not include a mitigation bank. As explained above, banks are more complex and require more effort to create, operate, and maintain without current evidence showing that the higher investment would necessarily produce greater VMT reduction than an impact fee program or exchange.

Who makes program decisions?

The simple answer to this question is that WRCOG makes the decisions, but that is not precise enough to fully understand what individuals or groups of individuals are authorized to make different types of decisions. WRCOG was formed through a joint powers agreement (JPA) is composed of all 18 incorporated Cities, Riverside County, Eastern and Western Municipal Water Districts, the Morongo Band of Mission Indians, and the Riverside County Superintendent of Education. The main decision-making body of WRCOG is the Executive Committee which is comprised of elected officials from each of WRCOG's member agencies and meets monthly to discuss policy issues and consider recommendations from WRCOG's Technical Advisory Committee (TAC), primarily comprised of the region's City Managers.

How are decisions made?

Any decision related to the implementation of any option identified above would ultimately be made by the Executive Committee after discussions, input, and voting has occurred at the various policy committees. On-going operation of the program would occur at the Executive Director, Transportation & Planning Director, and Public Works Committee (PWC) levels. Decisions and informational items are first brought to the Public Works and or Planning Directors Committee (PDC). Recommendations are then brought forth to the TAC. Following this would be the Administration & Finance Committee (AFC) who

provide budget and finance overview, which is comprised of a smaller group of elected officials who are also members of the Executive Committee. The final decision recommendations are lastly brought to the Executive Committee who make the final determination.

Once a program is established, WRCOG staff would oversee the program with input from WRCOG's member agencies, primarily through WRCOG's existing committee structure.

Who is accountable for decisions?

The WRCOG organization described above is transparent with an emphasis on a streamlined approach to decision-making. For day-to-day decision making, responsibility and accountability lies with the Executive Director and the Transportation & Planning Director. Major decisions are reserved for the Executive Committee since it has sole authority to adopt and amend by-laws for the administration and management of the JPA.

The table below summarizes the governance expectations above.

Type of Program	Who Makes Program Decisions?	How Are Decisions Made?	Who is Accountable?
Modified TUMF Program	Creation of the program - WRCOG Executive Committee Operation of the program - WRCOG Executive Committee, Executive Director, Transportation & Planning Director, AFC, TAC, and PWC	Decisions can originate from questions at any level of the agency, member agency, or the public. These are then resolved at the PWC, PDC, TAC, AFC or Transportation & Planning Director level for day-to-day operations and the Executive Committee for more significant decisions.	Executive Director and Transportation & Planning Director for day-to-day operations and the Executive Committee for more significant decisions.
New VMT Impact Fee Program			
New VMT Mitigation Exchange			

Advancing Implementation

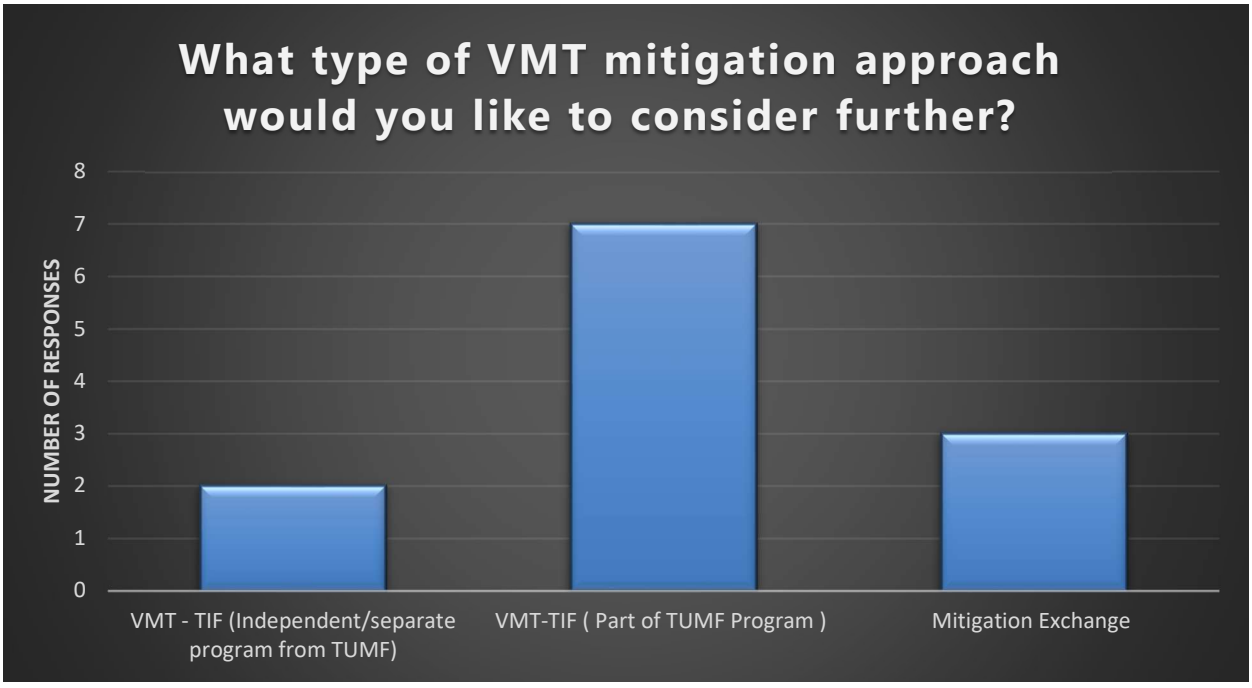
Advancing one of the three options above would begin with a formal proposal by WRCOG staff at the PWC where informative discussions, presentations, and options would be explored. With the recommendation of the PWC it would then advance to the other policy committees in the following order.

- TAC
- AFC
- Executive Committee

Prior to implementing any new Program, WRCOG would need to develop a concrete proposal for recommendation. Given WRCOG's experience, this proposal should address each item below.

- The exact structure to be implemented (bank, exchange, or fee).
- The relationship between this program and other WRCOG programs.
- Program governance, which would likely be modeled after existing WRCOG programs like TUMF.
- Supporting documentation related to this proposal such as any quantification methods related to VMT reductions and other applicable items.

WRCOG Staff conducted a survey of its member agencies late in 2019 and early in 2020 to gauge their interest in either a VMT mitigation fee or exchange. The survey results are provided below. Based on the survey responses, it appears that a majority of our local agencies prefer a fee-based approach, though there is support for an exchange as well.



Based on that positive feedback, there appears to be merit in advancing a mitigation program. The next steps would generally focus on increased socialization of this concept and conceptual program development. Specific tasks WRCOG should undertake would include but not be limited to the following items.

- Convening a meeting with the Riverside County Transportation Commission (RCTC) and Riverside Transit Agency (RTA) to discuss this concept in greater detail.
- Identify at least two options for either a fee-based approach and an exchange, which would include an evaluation of their use for mitigating development and infrastructure projects.
- A review of the latest guidance from OPR and Caltrans regarding VMT impacts and the applicability of this type of program or programs to address any issues they have raised as SB 743 is implemented.
- Coordination with the upcoming TUMF Nexus Study update to ensure that the Nexus Study scope of work provides the necessary information for this type of program.

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