

DRAFT

**VEHICLE MILES TRAVELED REDUCTION
PROGRAM AND NEXUS STUDY**

**CITY OF FRESNO
FRESNO COUNTY, CALIFORNIA**

LSA

August 2025

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FRESNO COUNTY, CALIFORNIA**

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EXECUTIVE SUMMARY

BACKGROUND

Senate Bill 743 (SB 743) changed the way transportation impact analyses are conducted under the California Environmental Quality Act (CEQA). In accordance with SB 743, the Fresno City Council adopted the *CEQA Guidelines for Vehicle Miles Traveled Thresholds* (VMT Guidelines) for the City of Fresno (City) on June 25, 2020, to address the shift from delay-based level of service CEQA traffic analyses to vehicle miles traveled (VMT) CEQA traffic analyses. The City VMT Guidelines included standardized project screening criteria and VMT significance thresholds for development and transportation projects, and recommended VMT mitigation strategies. However, the implementation of SB 743 has created challenges for development projects by triggering significant VMT impacts without clear, proven, and feasible mitigation measures to offset such impacts. As such, the City proposed to create a VMT Reduction Program to provide an opportunity for development projects to mitigate VMT impacts and streamline compliance for SB 743.

GOALS OF THE VMT REDUCTION PROGRAM

Under CEQA, if a project is determined to have a significant environmental impact, feasible mitigation measures must be identified to mitigate the impact, where possible. Providing VMT mitigation has proven to be more complex as mitigation measures may not be physical improvements, are subject to variability of human behavior, or require ongoing maintenance. In addition, on-site mitigation alone may be insufficient in mitigating the regional scale of VMT impacts. The VMT Reduction Program seeks to address these issues by establishing a consistent methodology for calculating VMT reduction, pre-planning more effective and affordable VMT mitigation projects, and addressing other needs of the community.

LEGAL AND ADMINISTRATIVE FRAMEWORK

A fee is a monetary exaction other than a tax or special assessment, whether established for a broad class of projects by legislation of general applicability or imposed on a specific project on an ad hoc basis, that is charged by a local agency to the applicant in connection with approval of a development project for the purpose of defraying all or a portion of the cost of public facilities related to the development project (Government Code § 66000(b)). The legal requirements for enactment of a development impact fee program are set forth in Government Code §§ 66000–66025 (also referred to as the “Mitigation Fee Act”), many of which were adopted as part of Assembly Bill 1600 (AB 1600) and thus are often referred to as “AB 1600 requirements.”

The VMT Reduction Program complies with the California Mitigation Fee Act by establishing an “essential nexus” and “rough proportionality.” An essential nexus for the VMT Reduction Program is established by defining how the VMT mitigation fee will be used to fund VMT mitigation projects across the city. A rough proportionality for the VMT Reduction Program is established by defining that the VMT mitigation fee would only be applicable to development projects that have been determined to have a significant VMT impact from a detailed VMT analysis and that the VMT mitigation fee collected from the development projects with a significant VMT impact will fund only a portion of the VMT mitigation projects.

The VMT Reduction Program must also adhere to the concept of additionality under CEQA, where investments made to mitigate environmental impacts should provide benefits that otherwise would not have occurred absent the VMT Reduction Program. To ensure “additionality,” each VMT reducing project in the VMT Reduction Program was analyzed to ensure that mitigation projects were not already fully funded.

VMT REDUCTION PROGRAM FRAMEWORK

The City’s VMT Reduction Program was designed to provide a flexible, streamlined, and cost-effective approach to mitigate VMT impacts of land use development projects using the City’s “Urban Design Calculator” (UDC) and a VMT mitigation fee.

The UDC was developed to assist development projects that trigger VMT impacts. The UDC uses design elements of a project that have a potential to reduce project VMT and estimates total VMT reduction due to those design elements. The City determined that the VMT Reduction Program would update the City’s UDC using the most recent research on VMT mitigation strategies. The update was primarily based on strategies provided in the California Air Pollution Control Officers Association (CAPCOA) Greenhouse Gas Emissions Reduction Handbook (CAPCOA Handbook, 2021) transportation section. The UDC would help projects reduce VMT impacts by implementing VMT reducing project design features at the project site. In case the project results in a significant VMT impact even with the UDC, the VMT Reduction Program would allow those developments to further mitigate VMT impacts by making “fair share” payments into the program to cover the cost of identified VMT reducing projects in the proposed VMT Reduction Program.

During the preparation of the VMT Reduction Program, thorough research of local planning documents such as the City’s Active Transportation Plan, the Fresno Area Express (FAX) short-range and long-range transit plans, and the Fresno Council of Government’s Regional Transportation Plan was conducted along with available literature of VMT mitigation strategies. The objective was to compile a list of active transportation and transit-related infrastructure and capital improvement projects that can be funded by the program. Fees paid towards the VMT Reduction Program will provide funding to build the top 24 most effective VMT mitigation projects that were prioritized based on the following criteria: VMT offset provided, enhancing connectivity, enhancing access and equity, contributions to safety, cost effectiveness, and feasibility of implementation.

VMT REDUCTION PROGRAM COSTS

The VMT Reduction Program would require units of VMT pricing for ease of implementation. In coordination with the City and stakeholders, the cost (\$) to reduce one vehicle mile traveled was selected as the unit of VMT mitigation bank credit or VMT pricing. In order to determine the cost to reduce one vehicle mile traveled, total costs of all the VMT reducing projects and the amount of VMT that should be mitigated were estimated. Based on the VMT reducing project costs and unmitigated citywide origin-destination VMT, the cost for reducing one VMT/VMT reduction credit was estimated to be \$295.

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LIST OF ABBREVIATIONS AND ACRONYMS

AB 32	Assembly Bill 32
AB 1358	Assembly Bill 1358
AB 1600	Assembly Bill 1600
ABM	Activity-Based Model
CAPCOA	California Air Pollution Control Officers Association
CAPCOA Handbook	California Air Pollution Control Officers Association Greenhouse Gas Emissions Reduction Handbook
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CIP	Capital Improvement Plan
City	City of Fresno
COG	Council of Governments
EIR	Environmental Impact Report
FAX	Fresno Area Express
GHG	greenhouse gas
LOS	level of service
OD	origin-destination
RTP	Regional Transportation Plan
SB 375	Senate Bill 375
SB 743	Senate Bill 743
SB 743 Policy Report	Berkeley Law <i>Implementing SB 743</i> Policy Report
TRB	Transportation Research Board
UDC	Urban Design Calculator
VMT	vehicle miles traveled
VMT Guidelines	<i>CEQA Guidelines for Vehicle Miles Traveled Thresholds</i>

INTRODUCTION

BACKGROUND

In September 2013, the Governor’s Office of Planning and Research signed Senate Bill 743 (SB 743) into law, starting a process that fundamentally changed the way transportation impact analysis is conducted under the California Environmental Quality Act (CEQA). SB 743 identifies vehicle miles traveled (VMT) as the most appropriate CEQA transportation metric and eliminates auto delay, or level of service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts. In December 2018, the California Natural Resources Agency certified and adopted the CEQA statute (14 California Code of Regulations Section 15064.3). Per the CEQA statute, the VMT guidelines became effective on July 1, 2020.

In accordance with SB 743, the Fresno City Council adopted the *CEQA Guidelines for Vehicle Miles Traveled Thresholds* (VMT Guidelines) for the City of Fresno (City) on June 25, 2020, to address the shift from delay-based LOS CEQA traffic analyses to VMT CEQA traffic analyses. The City’s VMT Guidelines include standardized project screening criteria for projects, recommendations for appropriate VMT significance thresholds for development projects, transportation projects, and plans, and feasible VMT mitigation strategies for projects.

The implementation of SB 743 and the City’s adopted VMT Guidelines have created challenges for development projects in Fresno. Specifically, development projects that trigger potentially significant VMT impacts under CEQA are experiencing challenges in finding feasible or economically viable mitigations to offset such impacts. Thus, the City proposed to create a VMT Reduction Program to streamline the SB 743 compliance process for development within Fresno.

The following provides a summary of other legislative actions, plans, and policies relevant to the development of the VMT Reduction Program.

Assembly Bill 32

Assembly Bill 32 (AB 32), also known as the *California Global Warming Solutions Act of 2006*, was signed into law in September 2006. AB 32 required California to reduce its greenhouse gas (GHG) emissions to 1990 levels by 2020, a reduction of 15 percent below emissions under “business as usual,” and requires a further reduction of 80 percent by 2050. Pursuant to AB 32, the California Air Resources Board (CARB) must adopt regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions.

Assembly Bill 1358

Assembly Bill 1358 (AB 1358), also known as the *California Complete Streets Act of 2008*, was signed into law in September 2008. AB 1358 requires the legislative body of a city or county, upon revision of the circulation element of the General Plan, to include a complete street policy, for the accommodations of all users of the roadway including motorists, pedestrians, bicyclists, users with disabilities, and users of public transportation.

Senate Bill 375

Senate Bill 375 (SB 375), also known as the *Sustainable Communities and Climate Protection Act of 2008*, was signed into law September 2008. SB 375 directs the CARB to establish regional targets for reducing greenhouse gas emissions, by using the regional transportation planning process to achieve reductions in greenhouse gas emissions consistent with AB 32 goals. SB 375 also offered CEQA incentives to encourage projects that are consistent with a regional plan that achieves greenhouse gas emission reductions and coordinated the regional housing needs allocation process with the regional transportation process while maintaining local authority over land use decisions.

2022 Scoping Plan for Achieving Carbon Neutrality

The CARB's Scoping Plan lays out the sector-by-sector roadmap for California to achieve carbon neutrality by 2045 or earlier, outlining a technologically feasible, cost-effective, and equity focused path to achieve the State's climate target. This plan extends and expands earlier plans with a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. To fulfill these goals, there will be a need to provide communities with sustainable options for walking, biking, and public transit to reduce the reliance on cars. The 2022 Scoping Plan Update identifies the following strategies for achieving success to reduce VMT:

- Invest in making public transit a viable alternative to driving by increasing affordability, reliability, coverage, service frequency, and consumer experience.
- Expand and complete planned networks of high-quality active transportation infrastructure.

Guidelines for the Implementation of the California Environmental Quality Act (2019)

The State of California Natural Resources Agency revised the CEQA Guidelines in 2019 to become consistent with SB 743. Revisions in the CEQA Guidelines under Section 15064.3 codify the switch from LOS to VMT as the metric for transportation impact analysis. Under Section 15064.3 (c), a lead agency could elect to be governed by the provisions of VMT immediately. Beginning on July 1, 2020, the provisions of VMT applied statewide for all jurisdictions.

GOALS OF THE VMT REDUCTION PROGRAM

Currently, when a significant impact is identified, feasible mitigation projects must be identified to avoid or substantially reduce that impact. Lead agencies are responsible for ensuring that implementation of the mitigation projects is in accordance with the program and have been completed. However, VMT mitigation projects are more complex in nature as some mitigation projects may not be physical improvements and are subject to the variability of human behavior. Furthermore, on-site mitigations alone are often insufficient in mitigating VMT impacts due to the regional scale of VMT impacts.

To identify VMT mitigation projects beyond that of the project site, the current approach for VMT mitigation requires each individual development project on a project-by-project basis to individually identify, analyze, negotiate, and coordinate mitigation actions. This project-by-project mitigation runs the risk of inconsistently analyzing how much VMT reduction can be achieved from VMT projects. The VMT Reduction Program allows the City to pre-plan VMT mitigation projects. Using this

mitigation model, the City can strategically plan mitigation projects to reduce the time required for implementation, have a consistent methodology of calculating VMT reduction, and ensure that mitigation projects are aligned with the goals of the City. The VMT Reduction Program can prioritize a list of VMT mitigation projects that are deemed the most cost effective and responsive to the needs of the community.

PROGRAM OVERVIEW

During preparation of the VMT Reduction Program, thorough research of local planning documents such as the City's Active Transportation Plan, the Fresno Area Express (FAX) short-range and long-range transit plans, and the Fresno Council of Government's (COG) Regional Transportation Plan (RTP) was conducted. In addition, available literature on VMT mitigation strategies was consulted, and the City's VMT Guidelines were reviewed to identify locally applicable VMT mitigation project types. This effort identified potential active transportation and transit-related infrastructure and capital improvement projects that could be funded by the program. Planning-level cost estimates and nexus calculations were prepared for the identified VMT reducing projects to estimate the cost of identified improvements and the net VMT benefits.

The City had previously developed an "Urban Design Calculator" (UDC) to assist development projects that have triggered VMT impacts. The UDC uses design elements of a project that have a potential to reduce project VMT and estimates total VMT reduction due to those design elements. The VMT Reduction Program updates the City's UDC using the most recent research on VMT mitigation strategies. The UDC would help projects that have a significant VMT impact reduce the project's VMT by implementing VMT-reducing project design features at the project site.

If the project results in a significant VMT impact even with the UDC, the developments would be required to further mitigate VMT impacts by making "fair share" payments into the bank to cover the cost of identified VMT reducing projects in the proposed VMT Reduction Program. The fee contribution would be calculated by analyzing the relationship between the excess VMT generated by the project compared to the City's VMT threshold. The project would then be required to pay the calculated fee based on the excess VMT generated by the project. By virtue of collecting this fee as part of the mitigation bank, the City would be able to implement the proposed VMT mitigation projects. The proposed VMT mitigation projects for this program have been selected from infrastructure projects listed on local planning documents that are the highest performing (ranked) based on VMT reduction, connectivity, access and equity, safety, funding effectiveness, and feasibility of implementation.

Land use development projects subject to a CEQA VMT analysis that demonstrate VMT impact over the City's threshold of significance are subject to VMT impact fees collected as part of the mitigation bank. Conversely, projects that demonstrate less than significant VMT impact are not subject to the VMT Reduction Program impact fees. The impact fee would only apply to projects that result in potentially significant VMT impacts under CEQA. Summarized in a list below is the process for determining VMT impacts and opportunities to mitigate VMT as part of the VMT Reduction Program:

- Project VMT Screening Criteria – Projects screened from VMT analysis are presumed to have a less than significant VMT impact.
- Detailed VMT Analysis – Projects that demonstrate a less than significant VMT impact do not require VMT mitigation.
- Application of Urban Design Calculator – Projects that demonstrate a significant VMT impact can minimize VMT impact through the implementation of improved urban design through project design features.
- Pay the VMT Mitigation Fee – Projects that demonstrate a significant VMT impact after implementation of project design features using the UDC can contribute to a VMT mitigation fee to offset project VMT above the City’s threshold. Payment of the VMT mitigation fee would serve as mitigation to reduce a project’s VMT impact to less than significant thresholds.

KEY PROGRAM FRAMEWORK DECISIONS

Throughout the development of the VMT Reduction Program, the City has worked with Fresno Area Express (FAX) and other stakeholders to determine appropriate structure for the Program, to evaluate various VMT quantification tools and mitigation options to assess the best fit for a defensible and consistent mitigation approach for development projects. The following key decisions, which resulted from the collaborative effort, have helped shape the direction of this VMT Reduction Program:

- A VMT Reduction Program is preferable to the current approach of project-by-project mitigation, which requires each development project with significant VMT impact to conduct a lengthy and expensive Environmental Impact Report (EIR) to identify, analyze, negotiate, and coordinate implementation of VMT mitigation measures. Furthermore, without a coordinated VMT Reduction Program, these mitigation actions do not guarantee any consistency in the analysis and application of VMT mitigation projects.
- The service area for the VMT Reduction Program should cover the entire city.
- The City’s UDC provides opportunities for development projects that have a significant VMT impact to reduce their VMT impact by implementing VMT reducing project design features at the project site.
- A mitigation bank is preferred over other mitigation techniques for maximization of VMT mitigation effectiveness and flexibility. A mitigation bank allows development projects of all sizes to pay a VMT mitigation fee that contributes to larger mitigation projects. A mitigation bank allows smaller development projects to contribute to more impactful VMT mitigation projects than would be feasible to implement on an ad hoc basis.
- Development of a VMT Reduction Program also has the added benefit of bringing investments to parts of the city that have been underserved instead of improvements just in the project

vicinity. In that regard, the VMT Reduction Program took into consideration various attributes such as equity, safety, access, and connectivity in prioritizing the list of VMT mitigation projects.

- Affordability of VMT pricing was a key consideration in developing the framework. Excessively high fees could hinder economic growth and housing development within the city and prompt developments to relocate to neighboring cities. This shift could have long-term adverse effects on the city's economy and housing market. Additionally, imposing steep fees may drive developers to prepare project EIRs and override their VMT impacts as feasible mitigation measures may not be available or viable.
- The mitigation fee for development projects under this program is based on a \$ per VMT (\$ per vehicle miles traveled) approach. The impact of each development project under SB 743 is primarily determined by the geographic location of the project and not by its land use type or size. VMT is calculated as the product of project-generated trips and their respective trip lengths. For example, a project situated near key destinations such as workplaces, schools, shopping centers, and entertainment venues will result in shorter trip lengths. In contrast, the same project located on the urban fringe, with limited surrounding development, will generate longer trip lengths. As such the project located near key destinations will have a lower VMT, and the urban fringe location will have a higher VMT. Although the land use type, project size, and trip generation rates remain identical, the project's impact varies depending on its proximity to complementary land uses. Given that the same project can have different results/impacts based on its location under SB 743 and the impact of the project is measured in units of VMT, it was determined that \$ per VMT would be an appropriate unit for this mitigation fee program.
- VMT reduction project selection for the VMT mitigation bank was based on existing local plans such as the Short-Range and Long-Range Transit Plans, Fresno COG RTP, Fresno Safe Route to Schools, Fresno Active Transportation Plan, Fresno County Regional Trails Plan, and Southern Blackstone Avenue Smart Mobility Plan.
- The lifecycle of the fee and subsequent revaluation of fees for the VMT Reduction Program would be 5 years. This would allow for completed VMT mitigation projects to be removed and for new VMT mitigation projects to be added to the VMT Reduction Program. This 5-year life cycle would also be consistent with typical capital improvement plans prepared by the City.

LEGAL AND ADMINISTRATIVE FRAMEWORK

LEGAL FRAMEWORK

Definition of Mitigation Fees

With the implementation of SB 743, the Office of Land Use and Climate Innovation (previously the Office of Planning and Research) guidance recommended that LOS no longer be considered a significant environmental impact and that VMT, a measure of the amount and distance traveled in automobile trips that are generated by a project regardless of congestion impact, is often the best metric for a transportation project's impact. Before the passage of SB 743, cities and counties often constructed needed LOS-based operational improvements or charged impact fees that paid for the portion of the operational improvements made necessary by the project. However, with the passage of SB 743, these LOS-based operational improvements are no longer considered as mitigation for CEQA transportation impacts. Therefore, cities and counties are instituting new mitigation fees to fund VMT reducing infrastructure needed to mitigate development-related VMT impacts. If a local government has the power to approve or deny a project, then it also has the power to subject the development to conditions that mitigate CEQA transportation impacts due to the development.

A fee is a monetary exaction other than a tax or special assessment, whether established for a broad class of projects by legislation of general applicability or imposed on a specific project on an ad hoc basis, that is charged by a local agency to the applicant in connection with approval of a development project for the purpose of defraying all or a portion of the cost of public facilities related to the development project (Government Code § 66000(b)). The legal requirements for enactment of a development impact fee program are set forth in Government Code §§ 66000–66025 (also referred to as the “Mitigation Fee Act”), many of which were adopted as part of Assembly Bill 1600 (AB 1600) and thus are often referred to as “AB 1600 requirements.”

Nexus

The California Mitigation Fee Act codifies “essential nexus” and “rough proportionality” as requirements for local agencies seeking to impose a fee as a condition of land development. For VMT mitigation fees to be collected under the VMT Reduction Program, there must be a “essential nexus” between the VMT Reduction Program and the reduction of VMT impacts associated with development projects. The VMT Reduction Program must also demonstrate “rough proportionality” between the fees collected under the VMT Reduction Program and the anticipated VMT impact associated with development projects.

Nexus Requirement

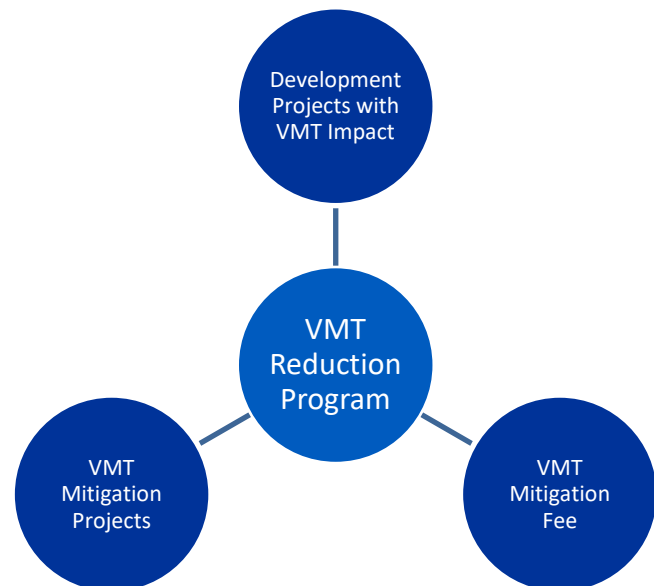
A mitigation impact fee is not a tax or special assessment. By definition, the fee is voluntary and must be reasonably and proportionally related to the cost of the service provided by the local agency. Furthermore, typically fees imposed on a development project need to be proportionate to the size (dwelling units/square footage) of the development. However, if a city or county can provide an explanation as to why size is not an appropriate metric to calculate fees imposed on a development project, an alternative basis of calculating the fee needs to be developed. This fee should bear a reasonable relationship between the fee charged and the burden posed by the

development. Under SB 743, the nexus of a project’s requirement to pay a fee would only be triggered when a project has a significant VMT impact and is not able to mitigate its impact. As discussed previously, the extent of VMT impact is also a key factor in determining the fees. This is dependent on the project’s geographic location and its proximity to complementary land uses. As such, two similar sized projects located in different geographic locations are anticipated to have varying VMT impacts. Therefore, the project would be subject to paying a fee based on dollar amount per VMT instead of project size. This would help establish the appropriate nexus between the project’s impact and payment of fees.

Mitigation Fee Act

As referenced in the Berkeley Law *Implementing SB 743 Policy Report* (SB 743 Policy Report), August 2022, under the Mitigation Fee Act, an agency imposing a fee must document and support findings that:

1. Identify the purpose of the fee.
2. Identify the use of the fee, including identifying any public facilities (defined broadly to include “public improvements, services, and community amenities”) to be funded.
3. Determine the reasonable relationship between the project type and the fee use.
4. Determine the reasonable relationship between the project type and the need for the public facility to be funded.
5. Determine the reasonable relationship between the cost (or relevant portion of the cost) of the public facility or service to be funded and the amount of the fee, which cannot exceed the “estimated reasonable cost” of the facility or service.



These five steps meet the Government Code 66001 criteria as described in the *Impact Fee Nexus Study Templates* prepared by the Turner Center for Housing Innovation at UC Berkeley. The VMT mitigation bank project evaluation as described in the VMT Reduction Program Framework section provides further detail regarding these requirements and how it addresses level of service improvements that are required to satisfy Government Code 66016.5(a)(2). In addition to these substantive standards, the law requires agencies to adopt a proposed construction schedule or plan, establish accounts prior to fee assessment, and identify the public improvement that the fee will be used to finance at the time the fee is assessed, along with other accounting requirements.

Purpose of the Fee

The purpose of the VMT mitigation fee is to fund the costs associated with the implementation of the top 24 performing VMT mitigation projects identified in Appendix C and to allocate those costs to development projects that have a significant VMT impact within the city. The VMT mitigation fee does not include any urban design improvements related to VMT mitigation along the development project's frontage, which will be the responsibility of individual development projects. The VMT mitigation fee can be applicable to all development with a significant VMT impact.

Use of the Fee

The VMT Reduction Program reviewed local planning documents to identify active transportation projects, transit projects, and other mobility-related projects that have potential to provide quantifiable reduction in VMT. The proposed VMT mitigation fee will be used to fund the top 24 ranking projects, listed in Appendix C, in the VMT Reduction Program.

Relationship Between Project Type and Fee Use

Development projects that have demonstrated a VMT impact over the significance thresholds established in the City's VMT Guidelines will cause an increase to the City's VMT. The fees collected from these development projects will be used to construct VMT mitigation projects that will serve as an offset or mitigate the VMT increases due to the projects.

The VMT mitigation fee calculations are based on the 24 most effective VMT mitigation projects within the proposed mitigation bank, which is based on a variety of evaluation and prioritization criteria set forth by the City.

Relationship Between Project Type and Need for Public Facility

Development projects in areas that cannot be screened out of a detailed VMT analysis and are determined to have a significant VMT impact will cause an increase in citywide VMT. These projects are often located in suburban areas that are still developing and more distant from complementary land uses. VMT mitigation measures in these areas often will provide insufficient VMT mitigation or be cost prohibitive. The projects identified in the VMT Reduction Program are located citywide and therefore will provide an efficient and cost-effective way to reduce additional VMT resulting from the development projects.

Relationship Between Cost of Public Facility and Fee Collected

The VMT mitigation fee would only be applicable to development projects that have been determined to have a significant VMT impact from a detailed VMT analysis. The VMT mitigation fee collected from the development projects with a significant VMT impact will fund only a portion of the VMT mitigation projects' costs whereas the majority of the funding is derived from other funding sources. Therefore, the VMT mitigation fees collected from the development projects will never exceed the cost of the public facility. On the contrary, the VMT Reduction Program will provide a cost-effective and streamlined methodology for mitigating VMT impacts of the development projects.

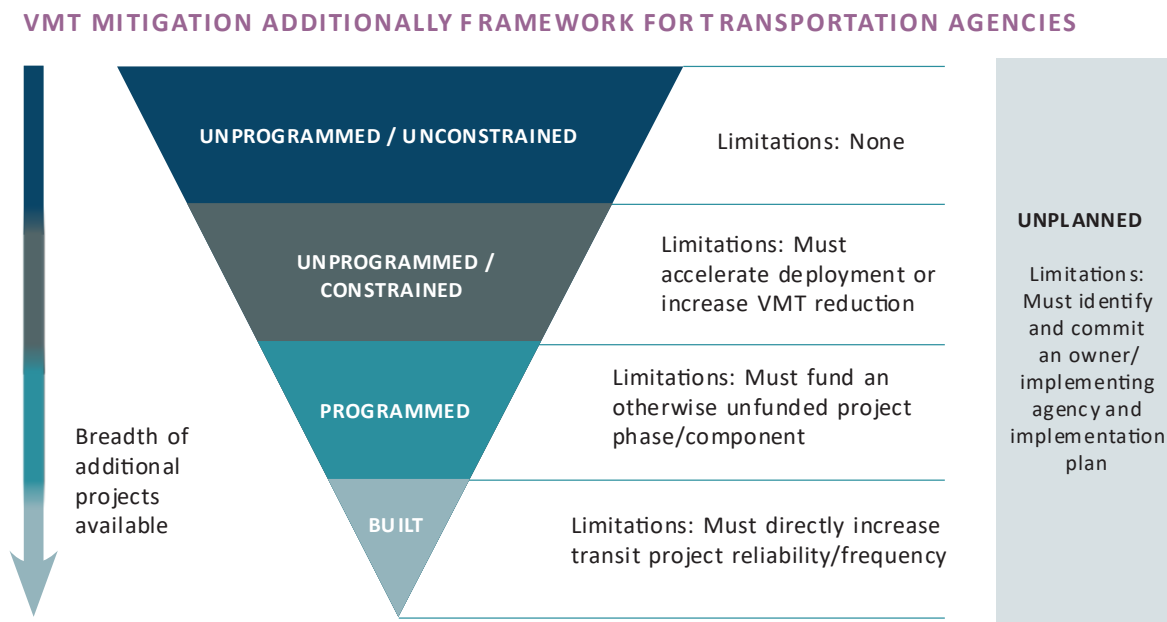
Additionality

Additionality under CEQA refers to the concept that investments made to mitigate environmental impacts should provide benefits that otherwise would not have occurred absent the mitigation program. While neither CEQA nor SB 743 explicitly refers to the term “additionality” as a statutory requirement, additionality considerations should form a core component of a mitigation bank monitoring program. Therefore, mitigation projects under the VMT Reduction Program are subject to additionality requirements. As such, mitigation projects generally should not include actions that would be reasonably expected to occur otherwise.

As previously indicated, VMT mitigation projects were sourced from existing planning documents from the City and may face challenges in the context of additionality as some of these transportation projects may already be fully funded.

However, if the VMT Reduction Program can demonstrate that VMT mitigation fees would move the VMT mitigation projects forward in time, increase the VMT measures’ capacity to reduce VMT, displace funds for a later use in other VMT mitigating investments, or otherwise ensure further net VMT reductions, then the VMT reduction can be considered as additional. Figure 1 below is a visual diagram illustrating how projects would meet the additionality criteria to be included as part of the VMT mitigation program.

Figure 1: Additionality of VMT Mitigation Projects



Source: *Implementing SB 743*, Berkeley Law Policy Report, August 2022.

Project Specific Additionality

Based on the SB 743 Berkeley Law Policy Report, VMT mitigation banks can consider two basic approaches to tracking additionality in the selection and implementation of VMT mitigation investments.

- The first approach is at a project-specific level, where prior to funding a VMT mitigation project, the bank administrator determines based on the RTP and other planning documents whether the project can be considered additional.
- The second approach is at the programmatic level, where the program administrator reviews funds received and spent, VMT impacts and reductions, mitigation investments supported, and the relation of the investment cohort to the applicable RTPs to determine whether investments were additional relative to an expected baseline scenario for the same period.

A project-specific level approach was selected for the City's VMT Reduction Program. Each VMT reducing project in the VMT Reduction Program was analyzed to ensure that mitigation projects were not already fully funded. The funds from the VMT Reduction Program will provide a portion of funding (e.g., local match) and therefore will assist or accelerate the completion of these measures.

ADMINISTRATIVE FRAMEWORK

This section establishes the administrative framework and key roles for implementing the VMT Reduction Program.

Bank Sponsor

The City is the bank sponsor and will be responsible for the planning, management, and operation of the VMT Reduction Program and will ensure sufficient funds are collected to implement the VMT mitigation projects. The City will also be responsible for managing the funds of the VMT Reduction Program and implementation of VMT reducing projects. As mitigation projects are funded, the corresponding projects will be removed from the project list.

Bank Service Areas

The VMT Reduction Program will use the city limits as the service area. The city limits may be readjusted in the future, and the VMT Reduction Program would still be applicable if the boundaries are extended. The bank service area would be applicable to all development projects that fall within the jurisdiction of the City.

Staffing

It is anticipated that the City would hire or designate a VMT Reduction Program coordinator who would be responsible for maintaining the VMT Reduction Program. The duties of the coordinator would generally include:

- Providing information to agencies responsible for implementing VMT mitigation projects on behalf of the program.

- Preparing and presenting annual program reports, including fees collected from individual projects.
- Monitoring implementation of VMT mitigation projects for consistency with the VMT Reduction Program.

Estimated Costs for Administering the Program

Based on City salary and benefits information, the staffing described above is estimated to cost approximately \$300,000 per year to administer the VMT Reduction Program (2024 dollars). This cost includes salaries and benefits. This cost will be included in the cost calculation for mitigation credits for up to 5 years (for a total of \$1.5 million).

Mitigation Action Implementation

When a VMT mitigation project has been fully funded and constructed, it will be removed from the Capital Improvement Plan. Unless otherwise specified, VMT mitigation projects will have a 5-year implementation timeline. The 5-year implementation timeline is intended to meet the mitigation obligations related to VMT increases above the City's threshold and align with the horizon year of current regional planning efforts. However, the City can adjust the timeline for implementation of VMT mitigation projects based on funding availability through the VMT Reduction Program and availability of other funds. Annual progress reports will be prepared to provide transparency on VMT mitigation projects and ensure that performance standards are achieved.

Monitoring and Reporting

The VMT Reduction Program staff will monitor the timing of initiation of the VMT mitigation projects as well as annual monitoring of the progress of each VMT mitigation project. Development of performance metrics will be an initial responsibility.

Program data will be collected to support the development of an Annual Report that should include the following topics:

- Cash on hand for each VMT mitigation project
- Status of each VMT mitigation project
- Reporting on performance standards for each VMT mitigation project
- Any additional VMT mitigation project under consideration for addition to the mitigation bank

CAPITAL IMPROVEMENT PLAN REQUIREMENTS

Assembly Bill 602 (AB 602), also known as the *Development Fees: Impact Fee Nexus Study Act*, was signed into law in September 2021. AB 602 requires local agencies that conduct an impact fee nexus study to follow specific standards and practices, including but not limited to: (1) the adoption of an impact fee nexus study prior to the adoption of an associated development fee, (2) identify and explain the existing level of service for each public facility and why the new level of service is

necessary, and (3) calculate a fee levied on housing development projects to be proportionate to the square footage of the proposed units, or make specific findings explaining why square footage is not an appropriate metric to calculate the fees.

AB 602 added Section 66016.5 to the California Government Code. Pursuant California Government Code 66016.5 (a)(1), an impact fee nexus study is required to be adopted before the adoption of an associated development fee. Additionally, California Government Code 66016.5 (a)(6) requires that large jurisdictions adopt a capital improvement plan (CIP) as part of the nexus study. For nexus study purposes, the CIP shall indicate the approximate location, size, time of availability, estimates of costs for all facilities or improvements to be financed with the fees, and indicate any alternative (non-fee) funding sources to complete a project. The sources, amounts and timing of funding should also be referenced in the jurisdiction's five-year findings regarding the use of funds. In the event that fees are accumulated over more than five years to fund capital projects, the CIP should include "Reserve to Complete" project account with a general description of both the project and funding plan to indicate the future use of these fee funds.

The CIP project list is included in Appendix D. The full CIP is forthcoming.

VMT REDUCTION PROGRAM FRAMEWORK

The City's VMT Reduction Program was designed to provide a flexible, streamlined, and cost-effective approach to mitigate VMT impacts of land development projects. The VMT Reduction Program includes a two-step approach where:

- The development projects have an opportunity to reduce or mitigate VMT impacts by improving project design elements using the City's UDC. Use of the UDC will help improve development project designs by incorporating VMT-reducing features and more effective design elements. Improving designs of individual development projects will help build better communities. Also, use of the UDC will reduce the magnitude of a project's VMT impact and as such the project's VMT mitigation fees.
- If the project is unable to completely mitigate its VMT impact using the UDC, the project would pay into the VMT Reduction Program based on the magnitude of the remaining impact. The VMT mitigation fees are unit/credit-based (dollars per VMT reduction) and therefore provide flexibility.

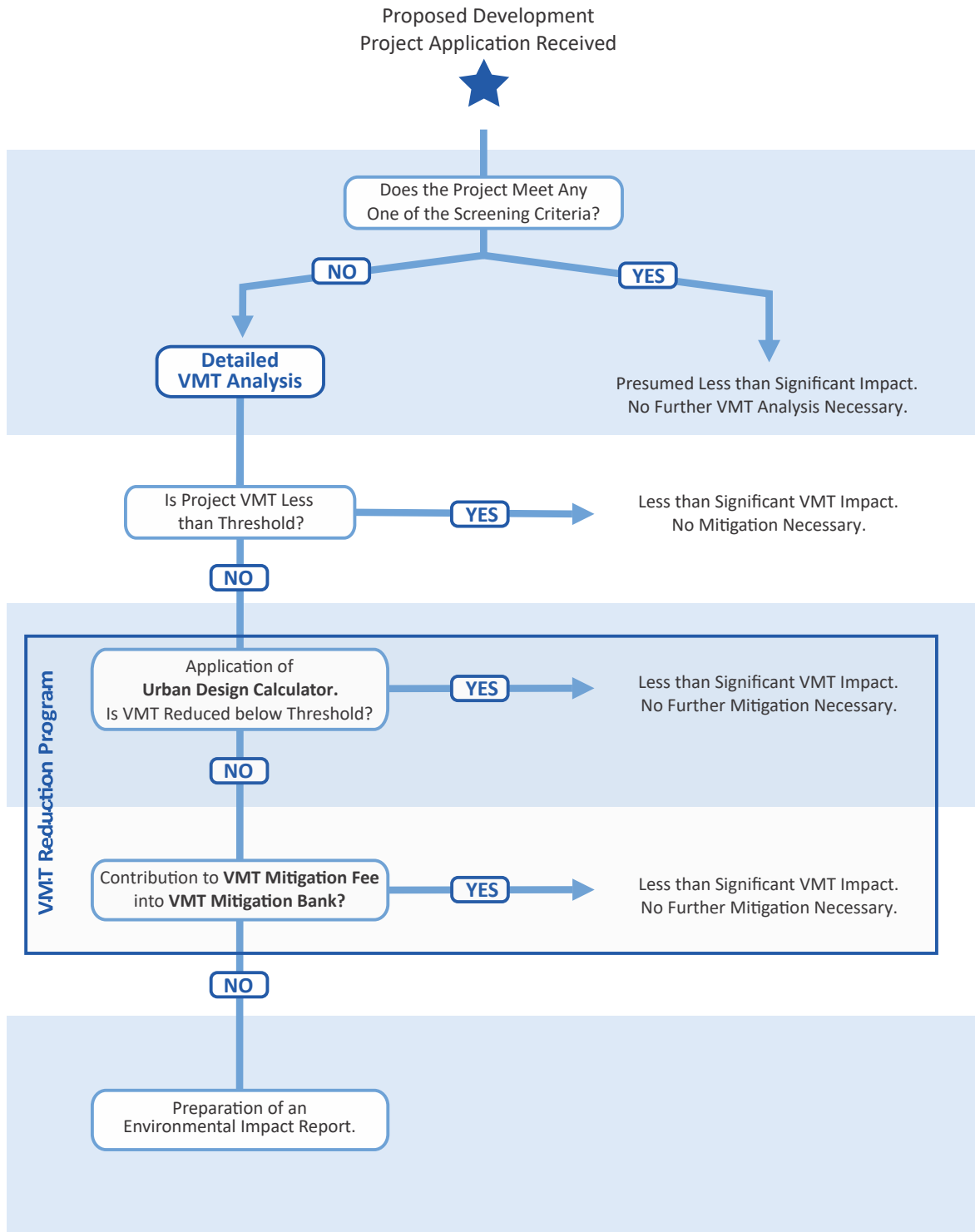
Figure 2 shows a flowchart of the VMT mitigation progress under the VMT Reduction Program.

URBAN DESIGN CALCULATOR

The UDC is a tool that was previously developed by the City and was updated as part of the VMT Reduction Program to allow development projects that have a significant VMT impact to implement VMT-reducing project design features. This would promote the use of active transportation and transit modes at the project site, while discouraging the use of vehicles. The goal of the UDC is to encourage developers to maximize the implementation of known and quantifiable urban design features that reduce VMT within the project site before having to contribute to a VMT mitigation fee. The VMT reduction categories included in the UDC are based on strategies provided in the California Air Pollution Control Officers Association (CAPCOA) Greenhouse Gas Emissions Reduction Handbook (CAPCOA Handbook) transportation section. For purposes of organization and calculation the VMT mitigation measures presented in the UDC are separated into four main categories: Land Use, Design, Transit, and Parking Pricing/Management. The mitigation measures of the categories are summarized in the following list:

- Land Use
 - Increase Residential Density
 - Integrate Affordable and Below Market Rate Housing
 - Increase Job Density
 - Improve Street Connectivity

Figure 2: VMT Reduction Program Process for Development Projects



- Design
 - Provide Pedestrian Network Improvement
 - Expand Bikeway Network
 - Implement Conventional Carshare Program
 - Implement Electric Carshare Program
 - Implement Pedal (Non-Electric) Bikeshare Program
 - Implement Electric Bikeshare Program
 - Implement Scooter Share Program
- Transit
 - Implement Transit-Supportive Roadway Treatments
- Parking Pricing/Management
 - Provide Electric Vehicle Charging Infrastructure
 - Limit Residential Parking Supply
 - Unbundle Residential Parking Costs from Property Cost

Detailed information on the inputs required, assumptions, and methodologies used to calculate the VMT reduction from the project design features in the UDC is provided in Appendix A. The UDC may be updated from time to time to incorporate best practices for site-specific VMT-reduction.

MITIGATION BANK PROJECTS

Project Selection

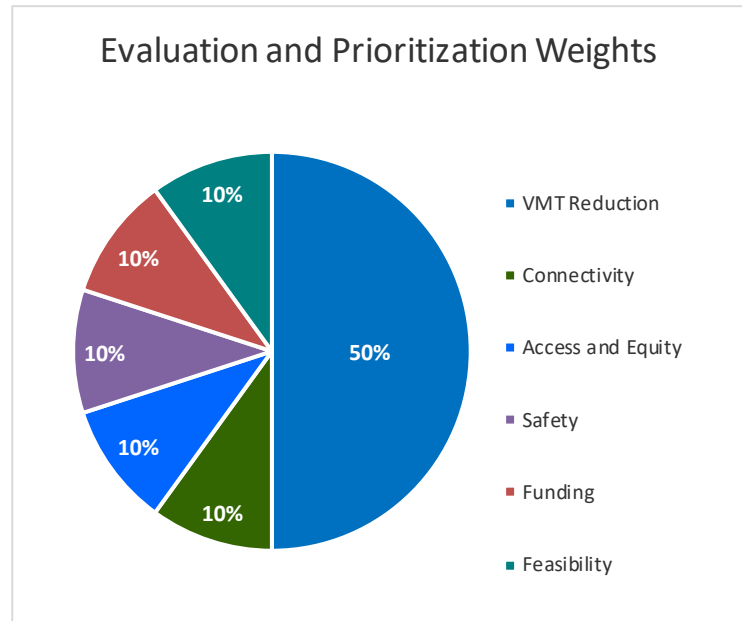
The list of VMT mitigation bank projects to be funded by the VMT Reduction Program was based on existing local planning documents for active transportation, transit-related infrastructure, capital improvement projects, and other mobility-related projects suggested by project stakeholders. These local planning documents from the Fresno area include the following:

- FAX Transit Projects in the Short-Range Transit Plan
- FAX Transit Projects in the Long-Range Transit Plan
- Fresno COG Regional Transportation Plan
- Fresno Safe Routes to School Action Plan
- Fresno Active Transportation Plan
 - Southern Blackstone Avenue Smart Mobility Plan

Evaluation and Prioritization Criteria

Projects from the above-mentioned sources were reviewed for their potential to reduce VMT. Projects with potential to reduce VMT were compiled into a master list for the VMT Reduction Program. The projects were evaluated and prioritized by each project's ability to achieve the desired goals and objectives of the VMT Reduction Program.

As referenced in the Berkeley Law *Implementing SB 743* Policy Report, each mitigation program is required to develop a set of criteria to prioritize and deliver the most locally appropriate, cost-effective, and publicly beneficial set of mitigation projects. These criteria, in addition to VMT reduced, can include other considerations such as equity implications, access, connectivity, safety and mode shift, funding, and feasibility of implementation. Different weights can be assigned to these criteria based on their importance in achieving the City's goals and desired outcomes for the VMT Reduction Program.



The following section describes the list of factors that were utilized to prioritize the projects identified under the VMT Reduction Program based on the goals and objectives set forth by the City and its stakeholders.

VMT Reduction

VMT reduction is the main objective of the VMT Reduction Program. As such, when evaluating the priority for investment from the master list of selected projects, 50 percent of a project's ranking is determined by its contribution to VMT reduction.

A project's potential to reduce VMT was estimated using the CAPCOA Handbook. The CAPCOA Handbook includes assumptions and methodologies to estimate VMT reduction for each VMT mitigation strategy. The methodologies in the CAPCOA Handbook have been adapted to local conditions using local data from various sources such as the Fresno COG Activity-Based Model (ABM), Census/American Community Survey,

CAPCOA VMT Reduction Measures

- T-18) Provide Pedestrian Network Improvement
- T-20) Expand Bikeway Network
- T-25) Extend Transit Network Coverage or Hours
- T-26) Increase Transit Frequency
- T-27) Implement Transit-Supportive Roadway Treatments

and local factors identified in the CAPCOA Handbook. The VMT reduction for each of these projects was evaluated using the following CAPCOA VMT mitigation strategies.

T-18) Provide Pedestrian Network Improvement. The Pedestrian Network Improvement CAPCOA measure is applicable to any VMT mitigation project that will increase the sidewalk coverage to improve pedestrian access. Installing sidewalks to streets with no sidewalks or sidewalks on one side of the street has been proven to encourage people to walk instead of drive, which reduces VMT. The percent reduction in VMT for each VMT mitigation project from the local community can be as high as 6.4 percent and is based on the existing length of sidewalks within the community and future length of sidewalks within the community.

Quantifying the VMT reduction potential from this mitigation action involves estimating the existing sidewalk length in the study area, estimating the sidewalk length in the study area with the implementation of the VMT mitigation project, and applying parameters obtained from published industry research. The parameters used here are:

- Elasticity of household VMT with respect to the ratio of sidewalks-to-streets¹

The estimated percentage reduction in VMT was multiplied by the baseline passenger-vehicle VMT within the study area to yield an estimate of the total VMT reduced.

T-20) Expand Bikeway Network. The Expand Bikeway Network CAPCOA measure is applicable to any VMT mitigation project that adds to/improves a bicycle network with Class I, II, or IV bicycle infrastructure. Providing bicycle infrastructure improves biking conditions in the area and increases access to and from transit hubs. This encourages a mode shift from vehicles to bicycles, which reduces VMT. The percentage of VMT reduction for each VMT mitigation project from the local community can be as high as 0.5 percent and is based on the existing bikeway miles in the community and future bikeway miles in the community.

Quantifying the VMT reduction potential from this mitigation action involves estimating the existing bikeway length in the study area, estimating the bikeway length in the study area with the implementation of the VMT mitigation project, and applying parameters from published industry research or the Fresno COG ABM. The parameters used here are:

- Bicycle mode share in Fresno (Fresno COG ABM)
- Vehicle mode share in Fresno (Fresno COG ABM)
- Average one-way bicycle trip length in Fresno (Fresno COG ABM)

¹ Frank, L., M. Greenwald, S. Kavage, and A. Devlin. 2011. An Assessment of Urban Form and Pedestrian and Transit Improvements as an Integrated GHG Reduction Strategy. WSDOT Research Report WA-RD 765.1, Washington State Department of Transportation. April. Available: www.wsdot.wa.gov/research/reports/fullreports/765.1.pdf. Accessed: January 2021.

- Average one-way vehicle trip length in Fresno (Fresno COG ABM)
- Elasticity of bike commuters with respect to bikeway miles per 10,000 population²

The estimated percentage reduction in VMT is multiplied by the baseline passenger-vehicle VMT within the study area to yield an estimate of the total VMT reduced.

T-25) Extend Transit Network Coverage or Hours. The Extend Transit Network Coverage or Hours CAPCOA measure is applicable to any VMT mitigation project that expands the local transit network by adding or modifying existing transit service or extending the operation hours to enhance transit service. Extending transit network coverage gives more people access to alternative modes of travel. Alternatively, starting services earlier/extending services to later hours can also offer more flexible times of travel and accommodate those workers that work non-traditional shifts. Greater transit geographic coverage and longer transit operational hours provide greater access and flexibility that encourages use of transit, which reduces VMT. The percent reduction in VMT for each VMT mitigation project from the local community can be as high as 4.6 percent and is based on the existing transit service miles/hours and future transit service miles/hours.

Quantifying the VMT reduction potential from the mitigation action involves estimating the existing total transit service miles in Fresno, estimating the total transit service miles in Fresno after implementation of the VMT mitigation project, and applying parameters from published industry research or the Fresno COG ABM. The parameters used here are:

- Transit mode share in Fresno (Fresno COG ABM)
- Elasticity of transit demand with respect to service miles³
- Statewide mode shift factor (Fresno COG ABM)
- Ratio of vehicle trip reduction to VMT

The estimated percentage reduction in VMT is multiplied by the citywide passenger-vehicle VMT to yield an estimate of the total VMT reduced.

T-26) Increase Transit Service Frequency. The Increase Transit Frequency CAPCOA measure is applicable to any VMT mitigation project that increases transit frequency on one or more transit lines serving the community. Increased frequency reduces the waiting and travel time for passengers, which improves the experience and attractiveness of transit. This increases the mode

² Pucher, J., and Buehler, R. 2011. Analysis of Bicycling Trends and Policies in Large North American Cities: Lessons for New York. March. Available: http://www.utrc2.org/sites/default/files/pubs/analysisbike-final_0.pdf. Accessed: January 2021.

³ Handy, S., K. Lovejoy, M. Boarnet, and S. Spears. 2013. Impacts of Transit Service Strategies on Passenger Vehicle Use and Greenhouse Gas Emissions. October. Available: https://ww2.arb.ca.gov/sites/default/files/2020-06/Impacts_of_Transit_Service_Strategies_on_Passenger_Vehicle_Use_and_Greenhouse_Gas_Emissions_Policy_Brief.pdf. Accessed: January 2021.

shift from single occupancy vehicles to transit, which reduces VMT. The percent reduction in VMT for each VMT mitigation project from the local community can be as high as 11.3 percent and is based on the percent increase in transit frequency and percentage of transit lines in the community receiving the improved frequency.

Quantifying the VMT reduction potential from the mitigation action involves estimating the percent increase in transit frequency, estimating the level of implementation, and applying parameters from published industry research or the Fresno COG ABM. The parameters used here are:

- Elasticity of transit ridership with respect to frequency of service³
- Transit mode share in Fresno (Fresno COG ABM)
- Vehicle mode share in Fresno (Fresno COG ABM)
- Statewide mode shift factor (Fresno COG ABM)

The estimated percentage reduction in VMT is multiplied by the citywide passenger-vehicle VMT to yield an estimate of the total VMT reduced.

T-27) Implement Transit-Supportive Roadway Treatments. The Implement Transit-Supportive Roadway Treatments CAPCOA measure is applicable to any VMT mitigation project that incorporates roadway infrastructure improvements to improve transit travel times and reliability. Providing transit supportive roadway treatments such as transit signal priority, queue jumps, etc. improves the travel time and travel time reliability of buses. The improvement to travel times and travel time reliability promotes the mode shift from single occupancy vehicles to transit, which reduces VMT. The percent reduction in VMT for each VMT mitigation from the local community can be as high as 0.6 percent and is based on the percentage of transit lines in the community receiving the transit supportive roadway treatments.

Quantifying the VMT reduction potential from the mitigation action involves estimating the percent of transit routes in the city that receive transit-supportive roadway treatments and applying parameters from published industry research or the Fresno COG ABM. The parameters used here are:

- Percent change in transit travel time due to treatments⁴
- Elasticity of transit ridership with respect to transit travel time⁴
- Transit mode share in Fresno (Fresno COG ABM)

⁴ Transportation Research Board (TRB). 2007. Transit Cooperative Research Program Report 118: Bus Rapid Transit Practitioner's Guide. Available: https://nacto.org/docs/usdg/tcrp118brt_practitioners_kittleson.pdf. Accessed: January 2021.

- Vehicle mode share in Fresno (Fresno COG ABM)
- Statewide mode shift factor (Fresno COG ABM)

The estimated percentage reduction in VMT is multiplied by the citywide passenger-vehicle VMT to yield an estimate of the total VMT reduced.

Connectivity

Enhancing connectivity was identified as an additional objective of the VMT Reduction Program. Enhancing connectivity allows more people within the community, especially those with limited mobility, to access essential services and economic opportunities. VMT mitigation projects that meet these objectives are given higher priority for investment. As such, when evaluating the priority for investment from the master list of selected projects, 10 percent of a project's ranking is determined by its contribution to enhancing connectivity. Under the connectivity component, projects were evaluated by a modified version of the City's Active Transportation Project Prioritization Tool to include transit projects. The connectivity scoring for each of these projects was evaluated using the following components:

Connectivity

- C-1) Connectivity to Existing Network
- C-2) Connectivity to Schools
- C-3) Connectivity to Public Transit
- C-4) Connectivity to Parks
- C-5) Connectivity to Key Destinations
- C-6) Connectivity to Future Network
- C-7) Regional Significance
- C-8) Place Type

- **Connectivity to Existing Network** – Prioritizing VMT mitigation projects that fill a network gap between active transportation facilities or transit networks creates a more interconnected network, which allows for more regional trips to be made using alternative modes of transportation.
- **Connectivity to Schools** – Prioritizing VMT mitigation projects that provide direct access to K-12 schools increases the connectivity for children and teenagers. Better connectivity to schools allows children and teenagers with limited mobility options to walk, bike, and use transit to travel to and from school without vehicular trips from parents.
- **Connectivity to Public Transit/Bicycle Lane Network** – Prioritizing VMT mitigation projects that are located within 0.5 mile of public transportation/bicycle networks allows for enhanced connectivity between both travel modes, allowing for better first-mile last-mile connections.
- **Connectivity to Parks** – Prioritizing VMT mitigation projects that are located near existing parks increases the accessibility of parks for all members of the community, especially those with limited mobility. Better connectivity to parks allows the promotion of healthier communities as residents can take more active forms of transportation for recreational trips.
- **Connectivity to Key Destinations** – Prioritizing VMT mitigation projects that are located near a grocery store, health provider, civic center, large employment center, or other regional

destination increases the community's access to essential city services and opportunities for employment.

- **Connectivity to Future Network** – Prioritizing VMT mitigation projects that fill a network gap between an existing and funded near term proposed facility creates a more interconnected future network, which allows for more future regional trips to be made using alternative modes of transportation.
- **Regional Significance** – Prioritizing VMT mitigation projects that provide connectivity within 0.25 mile of a regional network in neighboring jurisdictions creates greater access to adjacent jurisdictions and integration with regional networks, which allows for more regional trips to be made using alternative modes of transportation.
- **Place Type** – Prioritizing VMT mitigation projects that are in developed areas with anchoring locations will support higher levels of non-motorized travel and transit use than areas that are still developing.

Appendix B shows the scoring and evaluation of connectivity for the list of mitigation bank projects in the VMT Reduction Program.

Access and Equity

Improving access and equity to disadvantaged populations was identified as an additional objective of the VMT Reduction Program. Improved access reduces barriers for people with disabilities in the existing transportation system. These projects also provide needed investments in communities that have traditionally been subjected to underinvestment and usually face higher burdens of pollution. VMT mitigation projects that meet this objective are given a higher priority for investment. As such, when evaluating the priority for investment from the master list of projects, a 10 percent weight was assigned to a project's ranking to increasing access to equity populations. Under the access and equity component, both transit and non-motorized projects were evaluated by a modified version of the City's Active Transportation Project Prioritization Tool. The access and equity scoring for each of these projects were evaluated using the following components:

Access and Equity

- A-1) Accessibility
- A-2) Equity
- A-3) Community Identified Priority
- A-4) Vehicle Ownership

- **Accessibility** – Prioritizing VMT mitigation projects in areas that are identified as barriers in the City's ADA Transition Plan and by complaints from a person with disabilities can allow for investments to be made in accordance with maximizing accessibility for all people.
- **Equity** – Prioritizing VMT mitigation projects in areas located in or near census tracts that are considered as disadvantaged by CalEnviroScreen can alleviate inequalities and prioritize investments in historically underinvested communities, especially in areas that face higher levels of pollution burden.

- **Community Identified Priority** – VMT mitigation projects in areas that are identified as high priority in existing plans, community petitions, and part of the community planning process can allow for investments to be made in accordance with the needs of the community.
- **Vehicle Ownership** – Prioritizing VMT mitigation projects in areas that are identified to have low vehicle ownership can allow for investments to be made in areas that have limited mobility options, which will increase a community’s access to essential services and employment opportunities.

By factoring access and equity into the evaluation and prioritization criteria, the VMT Reduction Program will reduce barriers to access transit and active transportation facilities. This will help in improving the citywide level of service through implementation of such projects, thereby satisfying the requirements under Government Code 66016.5(a)(2). Appendix B shows the scoring and evaluation of access and equity for the list of mitigation bank projects in the VMT Reduction Program.

Safety

Increasing safety was identified as an additional objective of the VMT Reduction Program. Increasing safety for pedestrians, cyclists, and transit riders will increase attractiveness of these modes, causing a mode shift from vehicular trips which in turn will reduce VMT. VMT mitigation projects that improve safety are given a higher priority for investment. As such, when evaluating the priority for investment from the master list of projects, a 10 percent weight is assigned for a project’s contribution to increasing safety. Under the safety component, projects were evaluated by a modified version of the City’s Active Transportation Project Prioritization Tool for traffic control, mode shift, and user comfort. The safety scoring for each of these projects was evaluated using the following components:

Safety

- T-1) Bicycle or Pedestrian Collisions
- T-2) Project Type
- T-3) Potential for Mode Shift and GHG Reduction
- T-4) Local Efficiency: Population Density

- **Bicycle or Pedestrian Collisions** – VMT mitigation projects that can provide counter measures, as determined by the Local Roadway Safety Manual, in areas with bicycle and pedestrian collisions can improve safety for pedestrians and cyclists and can increase the attractiveness of walking and biking.
- **Project Type** – VMT mitigation projects that create controlled crossings reduce barriers for alternatives modes of transportation and increase the likelihood of mode shift. Similarly, increasing geographic coverage of bikeway facilities or transit coverage will induce mode shift from vehicular traffic.
- **Potential for Mode Shift and Greenhouse Gas Reduction** – VMT mitigation projects that are adjacent to corridors with high average daily traffic have higher probability and potential to cause mode shift and reduce vehicular traffic and VMT.

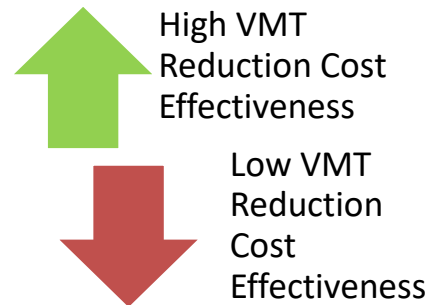
- **Location Efficiency: Population Density** – Prioritizing VMT mitigation projects in areas with a higher population density has a higher likelihood of supporting higher levels of non-motorized travel and transit use than areas that are lower density.

Appendix B shows the scoring and evaluation of safety for the list of mitigation bank projects in the VMT Reduction Program.

Funding

In addition to the magnitude of VMT reduction provided by each VMT mitigation project, the VMT reduction cost effectiveness was identified as an additional consideration when determining project priority. VMT mitigation projects that have a higher VMT reduction per \$100k spent were given priority over less cost-effective VMT mitigation projects. Prioritizing VMT mitigation projects with higher cost effectiveness allows for maximization of VMT reduction while minimizing the cost of implementation.

Identification of cost-effective VMT reduction projects will reduce overall program costs and, therefore, burden on development projects, while achieving desired VMT reduction goals. As such, when evaluating the priority for investment from the master list of projects, a 10 percent weight was assigned to the VMT reduction cost effectiveness.



Appendix B shows the scoring and evaluation of funding availability for the list of mitigation bank projects in the VMT Reduction Program.

Feasibility

The feasibility of implementation for each VMT mitigation project was identified as an additional consideration when determining project priority. VMT mitigation projects that are regarded as feasible are generally easier to implement and have a higher likelihood of being completed in a timely manner and therefore begin contributing to VMT reductions within a reasonable time frame. As such, a 10 percent weight was assigned to the feasibility of implementation. The master list of projects was submitted to FAX and the City Public Works Department to evaluate the feasibility of implementation. The master list of selected projects was separated into three categories: feasible, probably feasible, and infeasible. VMT mitigation projects under the feasible category were given the greatest priority, while the probably feasible category was given slightly higher priority over infeasible projects, which received the lowest priority.

Feasibility

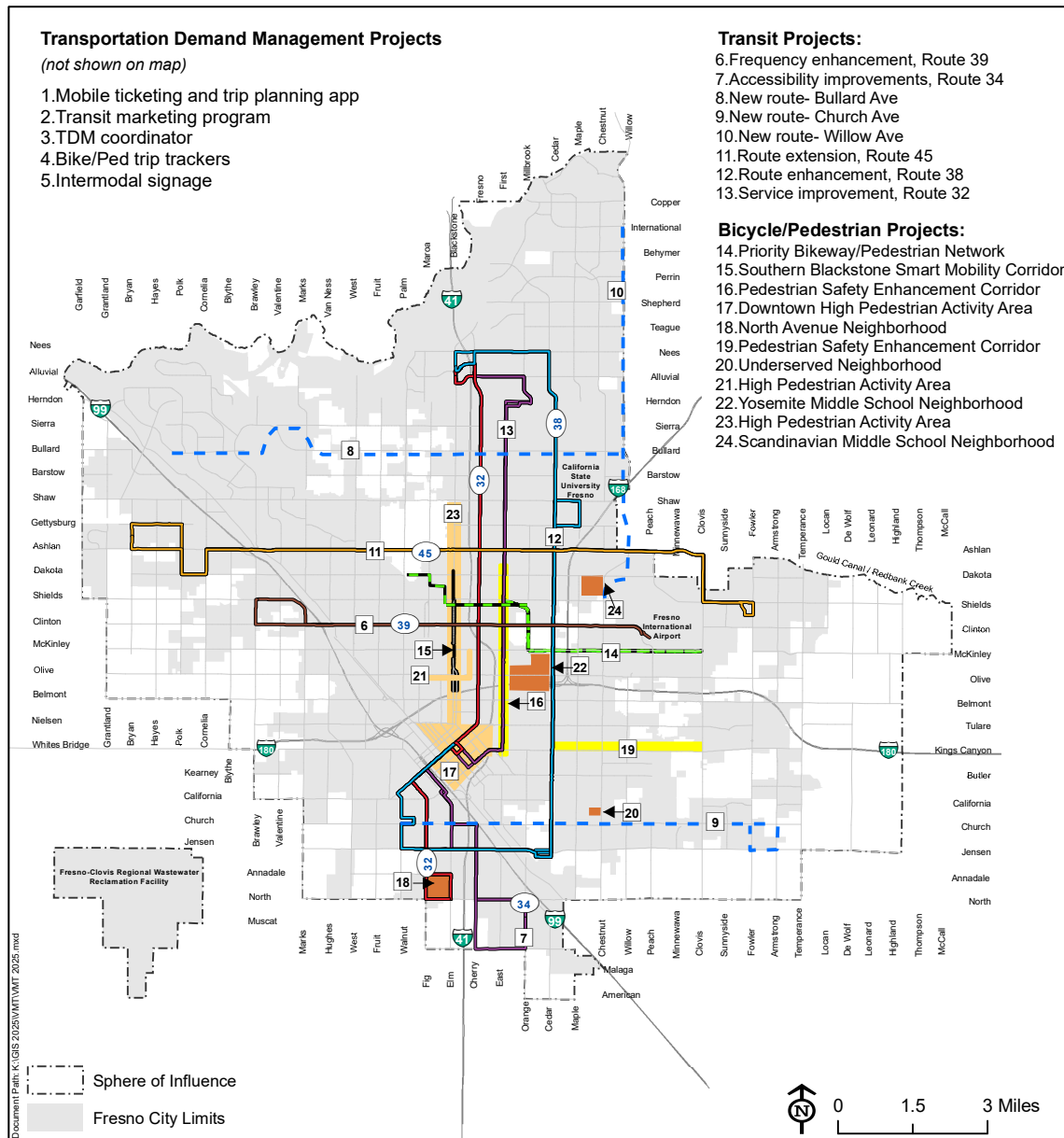
- Feasible
- Probably Feasible
- Infeasible

Appendix B shows the scoring and evaluation of feasibility of implementation for the list of mitigation bank projects in the VMT Reduction Program.

List of Prioritized Projects

Based on the above evaluation and prioritization criteria, a list of 24 VMT mitigation projects were shortlisted from the master list of projects. The following Figure 3 shows the location of the shortlisted projects included in the VMT Reduction Program. Table A lists the shortlisted projects included in the VMT Reduction Program. Appendix C shows the master list of VMT mitigation projects included in the VMT Reduction Program.

VTM Mitigation Project Locations



VTM Reduction Program Fee Projects

Table A: VMT Reduction Program Projects

ESTABLISH CAPITAL IMPROVEMENT PROGRAM

Based on the California Health and Safety Code 53559.1 (g) and 53559.1 (h), the City of Fresno is considered a Large Jurisdiction. As such, a CIP must be adopted as part of the nexus study. A total of 24 projects were identified and prioritized for funding under the VMT Reduction Program. Of those 24 projects, 21 are capital projects included in this CIP; the remaining 3 projects are non-capital resources to facilitate the reduction of VMT. The 21 capital projects are based on existing proposed capital improvement projects within the City.

Appendix D under transit projects and bicycle/pedestrian projects includes capital improvement projects. Appendix D also shows the approximate location, size, and estimated costs for the facilities to be funded with the VMT mitigation fee. Typically, a CIP also includes an approximate time of availability for facilities to be funded over five years. Because of the high costs of VMT mitigation and the uncertainty of the timing of collection of VMT mitigation funds, the proposed facilities in the VMT Reduction Program may be constructed on a longer time horizon. As such, the programming of impact fee revenues to the proposed VMT mitigation projects is expected to last at least five years. Therefore, the CIP will include a “Reserve to Complete” project account with a general description of both the project and funding plan to indicate the future use of these unencumbered fee funds.

VMT REDUCTION PROGRAM COSTS

As previously indicated, VMT-reducing projects from the City's plan documents that had funding gaps were included in the VMT Reduction Program. Several variables were identified in coordination with the stakeholders to evaluate and prioritize the VMT-reducing projects. The goal of the project evaluation and prioritization process was to maximize VMT reduction while being cost effective and meeting the needs of the community.

FISCAL FRAMEWORK

Based on coordination with the City and stakeholders, the VMT Reduction Program will be based on a VMT Mitigation Bank Framework in terms of establishing the method of calculating the VMT mitigation fee within the traditional structure of an impact fee program where the costs of impacts for development projects are assessed and the VMT Reduction Program will act as a clearinghouse for mitigations and acceptance of payments according to established transactional terms. The VMT Reduction Program will implement prioritized VMT-reducing projects once enough funds are collected. In that regard, the program should incorporate two key capacities:

- **VMT Pricing:** The program should establish a price for VMT impacts that can be linked to mitigation investments.
- **Enabling Transactions:** the program should establish a means of exchange (e.g., dollars or credits) to facilitate the mitigation obligations.

The bank would require units of VMT pricing for ease of implementation. In coordination with the City and stakeholders, the cost (\$) to reduce one vehicle mile traveled was selected as the unit of VMT mitigation bank credit or VMT pricing.

Determination of VMT Fee

In order to determine the cost to reduce one vehicle mile traveled, total costs of all the VMT-reducing projects and the amount of required VMT reduction were estimated.

The VMT reduction project costs were obtained from planning documents, and City staff estimated project costs where project costs were not readily available. The initial VMT-reducing project list consisted of over 100 projects (transit, non-motorized, and travel demand management). For each of the VMT-reducing projects, the stakeholders identified the source type and funding available from the primary funding source. It should be noted that while primary funding sources are available for these projects, they were not fully funded. For example, 80 percent of the funding was identified through various sources for most of the transit projects, which required 20 percent local match. The funding gap that was required to make the project funding complete was included in the VMT Reduction Program costs. The VMT mitigation bank only included costs for construction / implementation of the projects and does not include costs for operation and maintenance of the projects or monitoring of their performance.

Total citywide unmitigated VMT from the City's General Plan scenario was obtained from the Fresno COG ABM and was used as the VMT to be mitigated by the VMT reducing projects. The total unmitigated VMT was estimated from the growth of origin-destination (OD) VMT between General Plan and existing (base year) conditions after considering the population and employment growth in the region. The following steps describe the estimation process in detail:

1. Citywide OD VMT per service population (population + employment) was estimated for the existing conditions.
2. Horizon year (General Plan scenario) service population and existing OD VMT per service population were used to estimate desired citywide OD VMT for the horizon year. This is the target VMT that the City needed to achieve to avoid a significant VMT impact for the City's General Plan.
3. Citywide OD VMT from the ABM was calculated for the General Plan scenario.
4. Difference in OD VMT between steps 3 and 2 resulted in the total unmitigated OD VMT, which was used in the development of unit VMT pricing.

Based on the VMT reducing project costs and unmitigated citywide OD VMT, the cost for reducing one VMT/VMT reduction credit was estimated to be \$295.

As previously indicated, the VMT Reduction Program will be implemented as an impact fee program. The fee would apply to new residential and non-residential developments in the city that are subject to VMT analysis under CEQA and are shown to generate VMT over the City's threshold of significance. In other words, if a project screens out of VMT analysis, the impact fee would not be applicable. Similarly, if the project can demonstrate less than significant VMT impact using the ABM, the impact fee would not be applicable. For development projects that have a significant VMT impact, these projects can reduce VMT through utilizing the UDC and implementing project design features. If a development project still demonstrates significant VMT impact after utilization of the UDC, the project will be required to mitigate the VMT overage (amount of VMT that is over the City's thresholds). The development projects can estimate their total fees as a product of cost to reduce one VMT (\$295) and the amount of VMT overage.

The cost per VMT mitigation/VMT reduction credit is the same across the entire City of Fresno. However, the approach indirectly considers a development project's geographic location. For example, development projects that are closer to other developments or developments that provide complementary land use types to the surrounding land uses will demonstrate a lower magnitude of impact and thus will pay a lower mitigation fee. Similarly, development projects that are in the less urban areas may have higher VMT overage, thereby paying higher VMT mitigation fees. A fee-based approach would likely be the most straightforward to administer and efficient in terms of investment, as it would allow bank administrators and/or exchange participating parties to select the highest level of VMT mitigation per dollar of impact (controlling for other project prioritization factors) based on a transparent price per VMT. The VMT Reduction Program should review and update VMT pricing to account for variables such as inflation.

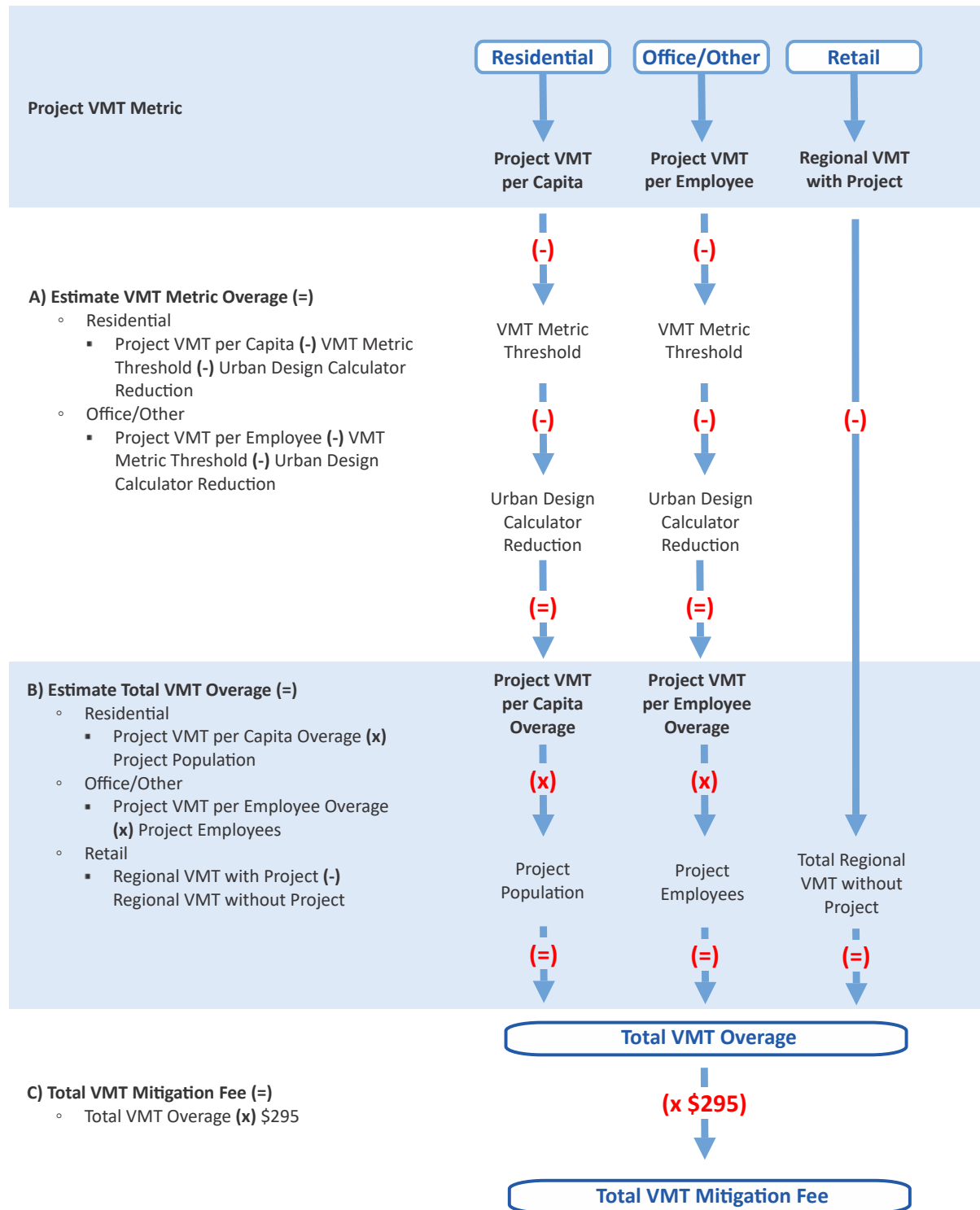
CALCULATION OF PROJECT MITIGATION FEE

Steps to Calculate VMT Mitigation Fee

Figure 4 illustrates the estimation of VMT mitigation fees for a development project that demonstrates a significant VMT impact after inclusion of project design improvements from the City's UDC. The steps are described in detail below:

1. Estimate the total project land use quantities (e.g., dwelling units, employees). This information is available from the project description. For non-residential projects, typically thousand square feet (TSF) information is available which would be converted to the number of employees for conducting the project's VMT analysis using the Fresno COG ABM.
2. Calculate the appropriate project VMT metric (e.g., VMT per capita, VMT per employee, total regional VMT) based on the project land use type. This information is included in the City's SB CEQA Guidelines for Vehicle Miles Traveled (2020).
3. Compare the project VMT metric with the established threshold from the City's guidelines. If the project VMT metric is lower than the threshold, as indicated before, the project does not have to pay VMT mitigation fees. In case the project's VMT analysis results in a significant impact, the following steps need to be conducted.
4. The project VMT metric can be adjusted if the project proposes any design element improvements identified in the City's UDC. The types of suggested design improvements and corresponding reduction in VMT are available from the City's UDC. If the project can reduce its VMT impact to less than significant using the UDC, the project will not be required to pay any VMT mitigation fees. The following steps are applicable if the project VMT metric is greater than the threshold after application of the UDC.
5. Estimate the project VMT metric overage compared to the established threshold. As shown in Step A from the flow diagram, the project VMT metric overage would be:
 - A. $\text{Project VMT metric overage} = \text{Project VMT metric from ABM} - \text{VMT reduction from UDC} - \text{VMT per capita threshold}$
6. Estimate the total project VMT overage as shown in Step B of the flow diagram. The project VMT metric is multiplied by the project population/employees (population for residential uses and employees for non-residential uses) for efficiency metrics. For example,
 - A. For residential projects:
 - i. $\text{Total VMT overage} = \text{VMT per capita overage from step 5} * \text{Total project population which can be obtained from ABM}$

Figure 4: Estimation of VMT Mitigation Fee for Development Projects with Significant VMT Impact



For office and non-residential projects:

- i. Total VMT overage = VMT per employee overage from step 5 * Total project employees which can also be obtained from ABM

B. For retail projects:

- i. Total VMT overage = Regional roadway VMT with project – Regional roadway VMT without project (Roadway VMT from the model can be estimated as a product of roadway volumes and roadway segment length within Fresno County)

7. Multiply the total VMT overage by the unit VMT mitigation fee to obtain the total project VMT mitigation fees.

Sample Calculation of VMT Mitigation Fee

Estimations of project VMT mitigation fees were conducted for sample projects to illustrate the magnitude of VMT mitigation fees in comparison to the City's other fees. Calculation of VMT mitigation fees for a sample single family residential project is shown below.

1. Obtain the number of dwelling units/households (project households = 200) from the project description/site plan.
2. Estimate project population (project population = 610). Fresno COG ABM will include this information during the model run.
3. Calculate project VMT per capita (project VMT per capita = 17.6) using the Fresno COG ABM model run given the project is a residential project.
4. For the sample project's analysis, no VMT reduction from the City's UDC was assumed as a conservative approach. However, that step needs to be incorporated as previously described to determine the project's VMT overage.
5. Compare project VMT per capita (17.6) with the City's VMT per capita threshold (14.0) to estimate project VMT metric overage (VMT per capita overage = $17.6 - 14.0 = 3.6$)
6. Convert VMT per capita overage into total VMT overage by multiplying the VMT per capita overage with project population (total VMT overage: $3.6 * 610 = 2,196$ VMT)
7. Estimate total VMT mitigation fees by multiplying unit VMT fees with total VMT overage (total project VMT mitigation fees: $2,196 * \$295 = \$647,809$)

The total VMT mitigation fee for the sample single family residential project with 200 dwelling units is \$647,809. The VMT mitigation fee was compared to other existing fees for a typical single family residential, multifamily residential, retail, and industrial project and was compared to ensure that the VMT mitigation fee was not excessive or significantly higher than other existing impact fees as illustrated in Table B.

Table B: Comparison of Existing Fees versus VMT Mitigation Fee

Project Name	Type	LU Quantity	Fire Fac. Impact Fee	Police Fac. Impact Fee	Regional Street Charge	New Growth Street Charge	T.S.M.I. Fee	Park Fac. Impact Fee	Total VMT Mitigation Fee*
Multi-Family Residential Development	Multifamily (DUs)	150	\$261,450	\$108,450	\$151,302	\$473,975	\$88,650	\$577,800	\$45,815
Single Family Residential Development	Single Family (DUs)	200	\$457,000	\$189,600	\$146,668	\$459,056	\$152,400	\$1,021,600	\$647,809
Retail Development	TSF	100	\$60,203	\$88,604	\$117,474	\$377,773	\$143,907		\$950,068
Office Development	Employees	307							\$263,378
Industrial Development	Employees	406							\$362,260

*Actual VMT Mitigation Fee will vary based on location and proximity of other diverse land uses

The following provides an illustration of the VMT mitigation fee calculations for this sample project. Appendix E provides examples for calculation of VMT mitigation fees for other development projects.

Single Family Residential Development - VMT Analysis

2019	Mitigation Fee
Project Households (a)	200
Project Population (b)	610
Project VMT per capita (c)	17.6
VMT per capita Threshold (d)	14.0

Project excess VMT per capita (e = c - d)	3.6
Total Project excess VMT (f = e*b)	2,196
Fee per one mile of VMT reduction (g)	\$295
Total VMT Reduction Fees (h=g*b)	\$647,809
VMT Reduction Fees per Household (i=h/a)	\$3,239

