



MEMORANDUM

To: Jacob Armstrong, County; Kirsten Uchitel, SANDAG; Damon Davis, County
From: Stephen Cook, TE, Intersecting Metrics
Date: March 26, 2025
Regarding: **San Diego Regional VMT Mitigation Program – Preferred Option Section**

1.0 Purpose & Intro

The purpose of this memorandum (memo) is to document the process and analysis used to select the Preferred Program Option for the San Diego Regional VMT Mitigation Program.

Program Description

In 2023, the San Diego Association of Governments (SANDAG) and the County of San Deigo (County) jointly applied for a Caltrans Sustainable Transportation Planning Grant to develop a Regional Vehicle Miles Traveled (VMT) Mitigation Program (Program) for the San Diego Region. The main Program goal is to provide an equitable and feasible path forward for new development to mitigate VMT related impacts by the use of regional resources and infrastructure. The Program will also look to provide jurisdictions within the San Diego Region a comprehensive set of resources and VMT mitigation tools and programs, in which they can choose to participate in, adopt, and/or build from to create their own local programs to help mitigate local impacts.

While the program will be developed by SANDAG and the County, the project team will seek input and direction from a Technical Advisory Committee (TAC) throughout the development process. The TAC is comprised of Transportation Engineers and CEQA Planners from jurisdictions within the San Diego Region. The goal of the TAC is to help ensure that the Program will be usable and applicable for all jurisdictions within the region, to coordinate on current local issues and experiences, and finally, to provide a peer review of the program development and documents. A detailed scope of work for the Program is included in **Attachment 1**.

2.0 Program Development and Evaluation Process Overview

Figure 1 provides an outline of the process used to develop, select, and refine the Preferred Program Option. Eight High-Level Program Options were initially developed by the project team and presented to the TAC. The TAC then voted to refine the eight Hight-Level Program Options, based on how well they fit within the Program's evaluation criteria established within the grant, to four Primary Options. A planning level assessment was conducted for each of the four Primary Options to provide more information and score how each Primary Option compared against the Program's evaluation criteria. Finally, the option with the highest score was selected as the Preferred Program Option. The following sections provide additional detail on the overall process, and provide a summary of the analyses used for each step of the evaluation process.

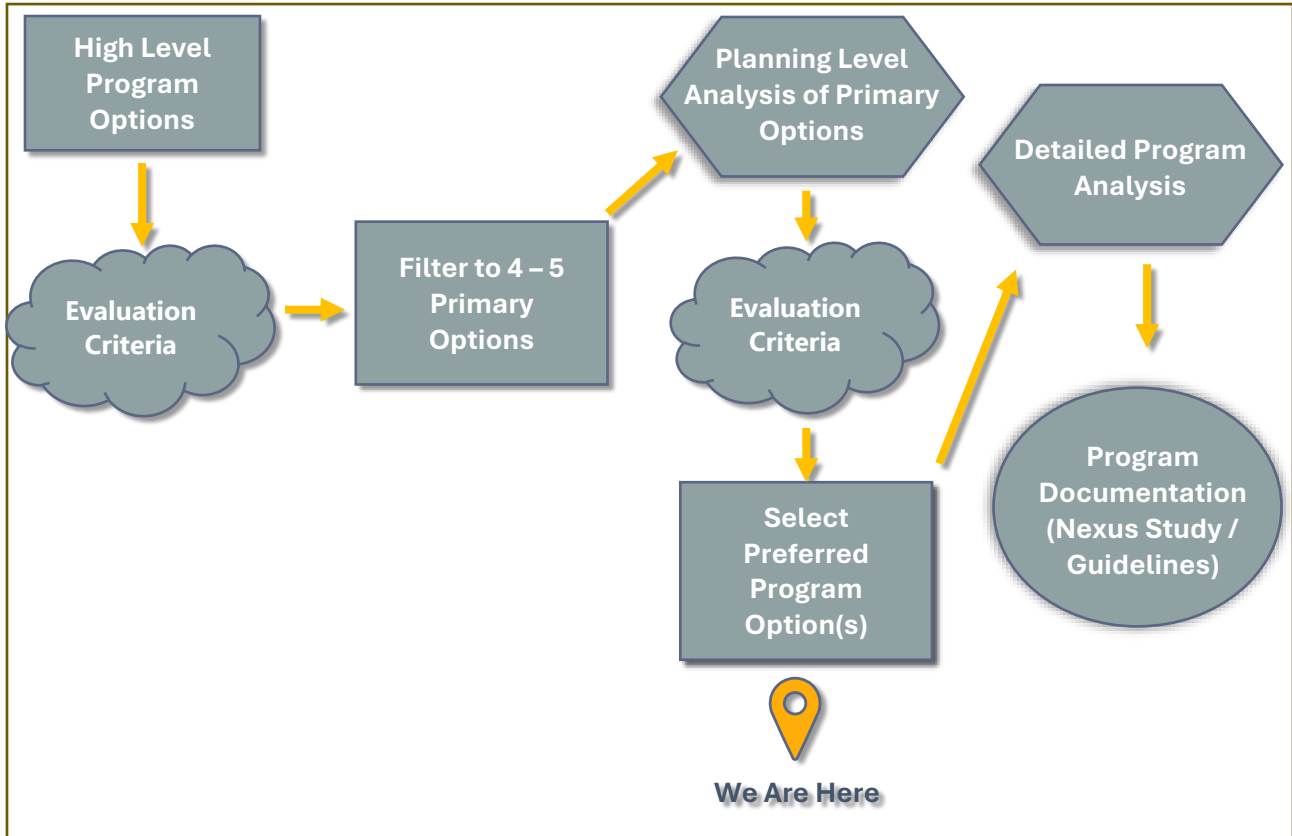


Figure 1: Program Evaluation Process

3.0 Developing the High-Level Program Options

The first step in developing the High-Level Program Options was to identify a wide range of VMT reduction program components and features that could be combined to create the Program. Potential program components and features were identified based on similar VMT mitigation programs implemented by peer jurisdictions, input from TAC members, theoretical program concepts established through white papers, as well as innovative ideas based on the project team’s professional experience in VMT analyses, CEQA, and the Mitigation Fee Act.

Attachment 2 displays all of the potential program components and features that were considered in developing the High-Level Program Options. The table organizes the components and features that would be implemented at a regional level or a local level, and identifies the applicable, general VMT reduction program classification. Finally, a brief description of the components and features is provided, including the potential pros and cons that would be associated with each type of Program.

To create a series of High-Level Program Options, the project team combined different VMT Mitigation program components and features, from Attachment 2, that complement each other, to create a comprehensive program option. Different options were created to create a wide spectrum of alternatives, ranging from regionally focused programs to locally focused programs, as well as a hybrid of both. Different options also focused on the development of expensive and complex programs, to less costly and simple programs. In total, eight High-Level Program options were developed. Detailed descriptions of each High-Level Program Options presented to the TAC are provided in **Attachment 3**.



4.0 Evaluation Criteria

The Caltrans Sustainable Transportation Grant that helped to establish the development of the Regional VMT Mitigation Program requires, at a minimum, that the following evaluation criteria should be used to select and develop a program option:

Legal Requirements:

- Will the timing of infrastructure implemented through the Program meet CEQA requirements?
- Ability of the Program to establish an “essential nexus” between the infrastructure/mitigation measures and new development.
- Ability of the Program to meet the California Mitigation Fee Act stipulations on establishing the “purpose and use” of the mitigation fee.
- Ability to meet California Assembly Bill 602 outlines consistency requirements with the fee Program and nexus.

Quantification:

- Ability to quantify the VMT reductions associated with the infrastructure included within the Program.
- Can regionally recognized documents such as the CAPCOA GHG Handbook and the SANDAG TDM tool be used as resources to quantify the VMT reductions associated with the Program?
- Will any additional research or analysis be required to qualify the Program reductions?

Total VMT Reduction Potential¹:

- The total potential VMT reductions that could be associated through the Program.
- The feasibility that the total reductions will be achieved through the life of the Program.

Cost Effectiveness and Affordability:

- The relative cost of mitigation as compared to the value created by permitting projects with additional VMT generation.
- Program mitigation costs must be low enough for projects and participating entities to participate, while also generating enough funds to pay for necessary mitigation projects.

Additionality:

- The ability of the Program to separate VMT reductions would not otherwise have been realized if not for the funds committed.
- VMT reductions are not double counted via the model and baseline and cumulative VMT analyses.

¹ A seventh evaluation criteria was added during the planning level analysis of the Primary Options, that was not initially included in the Grant. It was noticed during the analysis that there were no criteria that evaluates the overall total VMT reduction that could potentially be associated with the program. The total potential VMT reduction associated with a program option is a critical factor as it will extend the effectiveness of the program overtime, provide more opportunities for development to mitigate their impacts, and result in a more sustainable environment for the region.



Geographic Scope and Fit:

- The appropriateness of the proposed Program to be applied throughout the San Diego region.

Equity:

- Means to facilitate disadvantaged communities receiving their fair share of Program benefits, while also reducing disproportionate impacts.

5.0 Selecting the Primary Options

The eight High-Level Program Options discussed in Section 3.0 were presented and voted on at the third TAC Meeting in December 2024. **Figure 2** displays the voting results from the TAC.

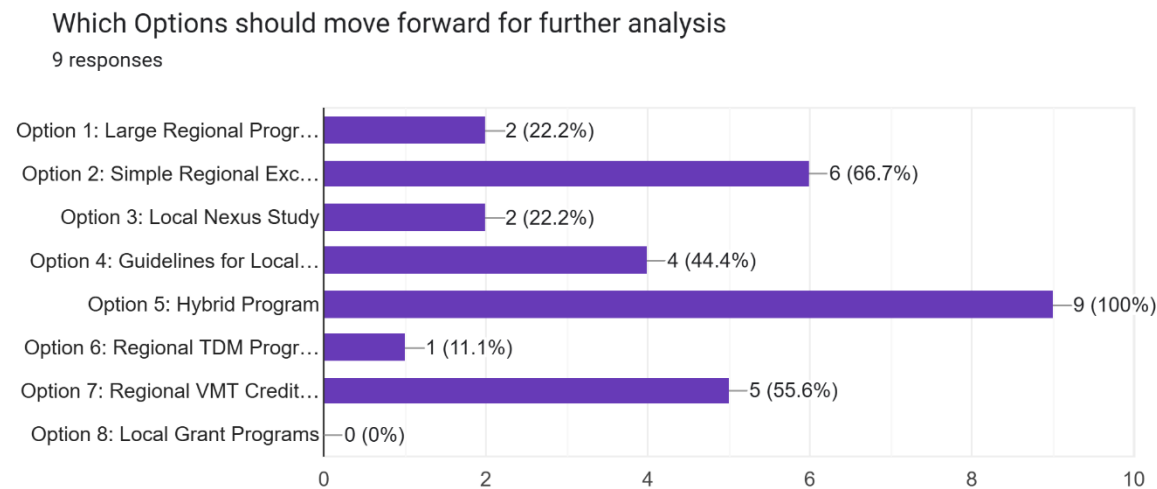


Figure 2: TAC Voting Results to select the Primary Options

As shown in Figure 2, the TAC selected the following four Primary Options to move forward with for a planning level analysis, and to be compared against the evaluation criteria outlined in Section 3.0:

Option 2: Simple Regional Exchange Program

SANDAG and/or the County will develop a regional database where jurisdictions can post shovel ready VMT reducing infrastructure projects for new development to construct to offset VMT related impacts. Under this option, jurisdictions will be responsible for calculating the associated VMT reductions, permitting and inspecting the infrastructure, as well as working with the lead CEQA agency on recognition, tracking, and monitoring the mitigation. Jurisdictions will also have the choice of participating in the program, both in posting shovel ready VMT reducing infrastructure projects to the database, as well as allowing new development within their jurisdiction to construct VMT reducing infrastructure in other jurisdictions to offset their VMT related impacts. Under this option, minimal regional oversight will be provided. The main purpose of the program will be to provide a tool that enhances the communication between the jurisdictions and new development.

Option 4: Guidelines for Local Programs

Develop guidelines that assist jurisdictions in developing both a VMT Credit / Mitigation Bank Program and a VMT Exchange Program at the local level. The guidelines will identify the process to set up the program, the legal requirements and documentation needed, as well as the resources, calculations, and methods that should be used in developing the program.



Option 5: Hybrid Program

This alternative combines three different components and provides VMT mitigation options at both the regional and local levels. Regional mitigation opportunities will be provided through both a regional VMT exchange program and a regional VMT credit program. Both programs will be implemented and monitored by SANDAG and/or the County. Jurisdictions will have the option to participate in both programs. To provide local VMT mitigation options, the program will develop guidelines and resources to assist jurisdictions in developing and implementing a local in-lieu fee program. The goal of this program alternative is to provide a wide and flexible list of VMT mitigation options, at both the regional and local levels, to allow new development to have multiple avenues to mitigate VMT related impacts. Each component of the program is described below:

Regional Exchange Program: SANDAG and/or the County will develop and maintain a regional database of shovel ready VMT reducing infrastructure projects, submitted by jurisdictions, for new development to construct to offset their impacts. Jurisdictions would be responsible for posting projects and their associated construction costs, while the regional exchange program would calculate the associated VMT reductions. VMT reductions would be calculated based on a set of agreed upon guidelines that are developed as part of the program. SANDAG and/or the County will maintain the database, with oversight from a regional body, such as the Mobility Working Group. *Note: This exchange program is intended to be more comprehensive than the simple regional VMT exchange program option (Option 2).*

Regional Credit Program: SANDAG and/or the County will develop and maintain a regional VMT credit program, where jurisdictions can submit recently constructed VMT reducing infrastructure that is eligible to receive VMT reduction credits. The credits can then be sold to new development to offset VMT related impacts. Credit values will be issued based on a standard regional cost to reduce VMT. VMT reductions will be evaluated based on set guidelines that are developed as part of the program. The program will also evaluate the potential for overlapping VMT credits and/or assuming credit for VMT reductions that would have happened without the program (i.e. additionality). SANDAG and/or the County will be responsible for maintaining the program, with oversight from a regional body, such as the Mobility Working Group.

Local In-Lieu Fee Nexus Study: The program will develop a nexus study that determines the cost to reduce one-mile of VMT through the development of infrastructure within the region. Due to the size of the region, the cost to reduce one-mile of travel may need to be broken into sub-regions. Program guidelines will also be developed to identify how the revenue from the fee program would need to be allocated and tracked to maintain compliance with both CEQA requirements and the Mitigation Fee Act. Using these resources, jurisdictions will have the option to develop, implement, and maintain their own local in-lieu fee program.

Option 7: Regional VMT Credit Program Based on the Regional Transportation Plan

Develop a Regional VMT Credit Program based on the implementation of VMT reducing infrastructure included in SANDAG's Regional Transportation Plan (RTP). As infrastructure included in the RTP is implemented, SANDAG can develop and sell the VMT related credits to developments to offset their impacts. The revenue generated from the program would then be used to fund more RTP infrastructure.



6.0 Primary Program Option Analysis

A planning level analysis was conducted for each of the primary options. The analysis focused on how well each option compared against the evaluation criteria outlined in Section 3.0. The analysis assigned a score between 1 and 5 (1 being the lowest and 5 being the highest) for each evaluation criteria (see Section 4.0) under each Primary Program Option. **Table 1** displays the result of the analysis and the total scores for each Primary Program Option. The full analysis of each Primary Program Options is provided in **Attachment 4**.

Table 1: Primary Program Option Analysis Summary

Option	Legal Requirements	Ability to Quantify VMT Reductions	Total VMT Reductions	Cost Effectiveness and Affordability	Additionality	Geographic Scope and Fit	Equity	Total
Simple Regional Exchange Program	4	2	2	3	5	2	1	19
Guidelines for Local Programs	3	2	3	3	3	5	3	22
Hybrid Program	4	4	4	5	3	5	2	27
Regional VMT Credit Based on RTP	4	5	5	2	1	2	1	20

As shown in Table 1, the Hybrid Program Option scored the highest overall score, and was by far the most consistent with the evaluation criteria. As such, it is selected as the Preferred Program Option.

7.0 Next Steps

The Primary Program Option analysis result will be presented at the fourth TAC meeting, which is tentatively scheduled to be held in April 2025. At the meeting, TAC members will be able to provide comments on the analysis and feedback on the Preferred Program Option. If the TAC is comfortable with the analysis results, the Project Team will move forward with developing the Draft Program based on the Hybrid Program Option.



Attachment 1

Full Scope of Work

Task 01: Project Administration

Kick-off Meeting with Caltrans

The County, with support from SANDAG, will hold a kick-off meeting with Caltrans to confirm the scope of work, discuss any needed modifications, identify key issues, and review Caltrans contracting procedures.

Ongoing Project Management

The County, with support from SANDAG, will prepare quarterly invoices and progress reports in accordance with the Caltrans contract requirements. As part of this task, The County will lead, with support from SANDAG, weekly or bi-weekly check-in calls, as needed, with the consultant team. SANDAG, with support from the County, will submit regular required progress reports to Caltrans.

Task Deliverables
<ul style="list-style-type: none">▪ Kick-Off Meeting with Caltrans - Meeting agenda and notes▪ Check-in Calls – Meeting agendas, notes, and action items▪ Quarterly Invoices▪ Progress Reports

Task 02: Consultant Procurement

Request for Proposals

The County, with support from SANDAG will prepare a Request for Proposals (RFP), to be released and circulated, following all relevant procurement procedures, by the County, to secure a consultant. All activities will be consistent with state and federal requirements, Local Assistance Procedures Manual for procuring non-Architectural and Engineering consultants, the Grant Application Guide, Regional Planning Handbook, and the executed grant contract with Caltrans.

Task Deliverables
<ul style="list-style-type: none">▪ Request for Proposals and associated documents▪ Consultant Agreement

Task 1: Technical Advisory Committee and Public Outreach

TAC Formation

The County, SANDAG, and the selected consultant team (Project Team) will establish a Technical Advisory Committee (TAC) to advise on policy decisions for a VMT Mitigation Program.

The TAC will comprise interested representatives from:

- SANDAG Member Agencies
- MTS/NCTD



- Caltrans District 11

The County, SANDAG, and the consultant team will hold a kick-off meeting with the TAC at the outset of the project to introduce the project objectives and scope of work and to seek feedback on the key issues the VMT Mitigation Program should address.

Outreach Plan

The Project Team will prepare an Outreach Plan outlining stakeholder and interested community member engagement and feedback opportunities. The Outreach Plan will identify methods for engagement with all of the region’s demographics and will leverage a range of outreach strategies including in person meetings (per current COVID-19 protocols, as outlined by the State of California and the CDC). Virtual meeting options will also be available for members and interested parties unable to attend meetings in person, as well as online engagement through an interactive project webpage. Public meetings will be recorded and made available on the project website. Meeting materials including presentations will also be posted on the project webpage.

The Outreach Plan will specify ways to involve each of these stakeholder groups at appropriate times throughout the project, from project kick-off through conclusion. Individual or group stakeholder interviews will be conducted at the beginning of the process to allow the Project Team to gain a better understanding of the issues and needs unique to each stakeholder. Follow up interviews will be conducted upon release of the Draft Outreach Plan, affording the Project Team direct feedback from project stakeholders.

TAC Meetings

The Project Team will convene up to six (6) TAC meetings to advise on policy decisions for a potential Regional VMT Mitigation Program at key milestones including but not limited to:

- VMT Framework Mitigation evaluation criteria and refinement
- VMT Framework Mitigation evaluation criteria refinement
- VMT Framework Mitigation preliminary program selection
- Draft Regional VMT Mitigation Program Report and Nexus Study
- Review of feedback on Public Review Drafts of the Program Report and Nexus Study and TAC refinements for integration into Administrative Drafts of the Program Report and Nexus Study.

Task Deliverables
<ul style="list-style-type: none"> ▪ Outreach Plan ▪ Publish Interactive Project Webpage ▪ Maintain Interactive Project Webpage (project updates, materials, etc.) ▪ TAC Meeting Materials and Summaries ▪ Stakeholder interviews and Summaries

Task 2: Regional VMT Mitigation Framework Evaluation Criteria

Develop and evaluate Program criteria using existing literature and resources to satisfy requirements necessary to qualify the proposed Program as a permissible mitigation measure under the California Environmental Quality Act (CEQA). The UC Berkeley ITS Report, ‘Implementing SB 743: An Analysis of Vehicle Miles Traveled Banking and Exchange Frameworks’, published in October 2018, will be used as a



resource to establish the Program criteria. The Project Team will coordinate with the UC Berkeley team to ensure any updates to the Report are integrated into the Program criteria.

Task 2 will ensure that the proposed VMT Exchange/Bank program constitutes a 'public facility' as defined by California Code Section §66000(d) and demonstrates a reasonable relationship between the Program and the need for a 'public facility' to include 'public improvements. Furthermore, it will ensure full cost is guaranteed and that 'additionality' (the VMT exchange/bank is funding mitigation that is not already committed) potential is eliminated. An evaluation as to whether the Program will satisfy all requirements of the Mitigation Fee Act, as well as AB 602 will be conducted. The criteria will demonstrate an essential nexus between the current condition being addressed and any adverse impact of the project. The criteria will also assess how the Program will may be applied throughout the San Diego region and benefit disadvantaged and VMT-impacted communities.

Literature Review of VMT Mitigation Programs

The consultant team will conduct an extensive literature review of existing and proposed VMT Mitigation Fee, Exchange, and Bank Programs. This review will also include conducting interviews with peer jurisdictions who have implemented, or are in the process of implementing, VMT mitigation programs.

Develop Evaluation Criteria

The Project Team will develop a series of criteria to evaluate potential VMT Mitigation Framework options. At a minimum, these criteria will address:

- **Legal Requirements:**
 - CEQA requirements including establishment of an "essential nexus" between the mitigation fee and government interest.
 - California Mitigation Fee Act stipulations on establishing the "purpose and use" of the mitigation fee.
 - California Assembly Bill 602 outlines consistency requirements with the fee program and nexus.
- **Quantification.** Quantify the VMT reductions anticipated through the infrastructure implementation included within the fee program. The VMT analysis conducted for 2021 Regional Plan contains much of these calculations and will be used as a primary source for this effort.
- **Cost Effectiveness and Affordability.** The relative cost of mitigation as compared to the value created by permitting projects with additional VMT generation. Program mitigation costs must be low enough for projects and participating entities to participate, while also generating enough funds to pay for necessary mitigation projects.
- **Additionality.** The principle that VMT reductions would not otherwise have been realized if not for the funds committed.
- **Geographic Scope and Fit.** The appropriateness of the proposed Program to be applied throughout the San Diego region.



- **Equity.** Means to facilitate disadvantaged communities receiving their fair share of Program benefits, while also reducing disproportionate impacts.

Task Deliverables
<ul style="list-style-type: none"> ▪ Evaluation Criteria

Task 3: Regional VMT Mitigation Program Options

Develop, Evaluate, and Select Regional VMT Mitigation Framework Options

The Project Team will develop at least four (4) VMT Mitigation Framework model options, including a mitigation fee model, mitigation bank model, mitigation exchange program model, and a hybrid of two or more models. Each of these options will be described in detail and evaluated under the criteria developed in Task 2. In particular, the options will describe:

- How project’s with VMT related impacts participate in the Program.
- How participating entities incorporate the Program into their CEQA review and approval process for projects.
- The mitigation mechanism(s) included in the Program.
- Anticipated total fee collection.
- Regional VMT reducing infrastructure funded through the Program.
- How a portion of the fees collected through the Program could be used or distributed to participating entities to implement local improvements.

Evaluate Regional VMT Mitigation Framework Options

The Project Team will assess the options using the evaluation criteria developed in Task 2.

Task Deliverables
<ul style="list-style-type: none"> ▪ Regional VMT Mitigation Program Options (at least 4) ▪ Regional VMT Mitigation Program Options Evaluation ▪ Regional VMT Mitigation Program Preliminary Option Recommendations

Task 4: Draft Regional VMT Mitigation Program

Draft Regional VMT Mitigation Program Report

Based on the results of the previous Tasks, the Project Team will prepare a Draft Regional VMT Mitigation Program Report (Draft Program Report) that incorporates feedback from the TAC and stakeholder needs. The Draft Program Report will describe how the Program will be administered, monitored, tracked, and mechanisms for reporting. It will also outline how the Program will meet the legal requirements documented in Task 2, describe the criteria used to evaluate and prioritize mitigation projects, mechanisms to adjust VMT pricing as needed to facilitate participation or address market changes, and strategies the Program will employ for equitable distribution of implementation projects or funding.



Draft Regional VMT Mitigation Program Nexus Study

Based on the Program criteria and guidance from the TAC, the Project Team will prepare a Draft Nexus Study to document the technical justification of the impacts associated with new projects within the region to the fees that will be collected and administered through the Regional VMT Mitigation Program. This analysis will evaluate the nexus of the proposed Program and address the “essential nexus” clause required by CEQA and consistency with the Mitigation Fee Act. This Task will also include estimating VMT benefits of the selected program option and providing substantiating evidence of mitigation of projected impacts as required by CEQA.

Public Review Draft Documents

The consultant team will incorporate the feedback from the TAC into the Draft VMT Mitigation Program Report and Draft Nexus Study.

Stakeholder Review

Following the steps outlined in the Outreach Plan, the Project Team will circulate the Draft VMT Mitigation Program Report and Draft Nexus Study for stakeholder review and feedback. Following the conclusion of the outreach program, the consultant will prepare a memorandum that summarizes the public feedback on the Draft VMT Mitigation Program.

Administrative Draft Regional VMT Mitigation Program Report and Nexus Study

Based on the feedback received during the Draft Regional VMT Mitigation Program Report and Nexus Study public review, Administrative Drafts of the Regional VMT Mitigation Program Report and Nexus Study will be prepared for approval.

Task Deliverables
<ul style="list-style-type: none"> ▪ Draft Regional VMT Mitigation Program Report ▪ Draft Regional VMT Mitigation Program Nexus Study ▪ Regional VMT Mitigation Program Stakeholder Outreach Summary ▪ Administrative Draft Regional VMT Mitigation Program Report ▪ Administrative Draft Regional VMT Mitigation Program Nexus Study

Task 5: Finalize VMT Mitigation Program and Approval

Regional VMT Mitigation Program Sample Fee Ordinance

The Project Team will develop a draft ordinance that documents the requirements and process of the Regional VMT Mitigation Program for the County and SANDAG. Participating entities may wish to adopt the ordinance, or similar, to implement a local Program.

City Council and other Board Meeting Presentations

The Project Team will coordinate with the TAC and stakeholders to promote the Program and provide presentations (up to XX) to City Council, Board, Commission, or other participating entity meetings to provide information on the proposed final San Diego Regional VMT Mitigation Program.



Regional VMT Mitigation Program Approval

The Project Team will present the final Regional VMT Mitigation Program, integrating feedback received through City Council and other Board Meetings, to the SANDAG Board of Directors and the County Board of Supervisors for approval as a resource and possible VMT mitigation tool.

Final San Diego Regional VMT Mitigation Program

The VMT Mitigation Program comprises the Report and Nexus Study, which will be finalized based on feedback and changes from the SANDAG Board of Directors and the County Board of Supervisors. The Sample Fee Program Ordinance will also be finalized.

Task Deliverables
<ul style="list-style-type: none">▪ Sample Fee Program Ordinance▪ Summary of Participating Entities' Engagement, Meeting Materials, and Feedback▪ SANDAG Board of Directors meeting materials▪ County Board of Supervisors meeting materials▪ Final Regional VMT Mitigation Program Report▪ Final Regional VMT Mitigation Program Nexus Study

Next Steps – Program Implementation

Upon approval of the Regional VMT Mitigation Program, future efforts may include ongoing coordination among the Project Team (with or without consultant support per the RFP), adopt Fee Program Ordinance, continue discussions with participating entities regarding local and regional implementation, outline methods for establishing project accounts and procedures for fee collection and distribution, develop outreach materials and methods for disseminating Program information, which includes updating the interactive project website, and establish schedule for evaluating and updating the Ordinance.



Attachment 2

High-Level Program Options

Regional vs Local Programs

VMT mitigation programs can be implemented and administered at a regional level by either the Metropolitan Planning Organization (MPO) or Regional Transportation Planning Agency (RTPA), which SANDAG represents both in the San Diego Region, or the programs can be implemented at a local level by the individual jurisdictions. Implementing programs at both levels have significant benefits and drawbacks; thus, deciding if the VMT Mitigation Program is implemented as a regional program, or provides materials, guidelines, substantial evidence, and resources for local jurisdictions to implement their own programs will be a key decision in the selection and development of the Preferred Program.

Program Type

VMT mitigation programs generally fall into one of the following three categories:

VMT Based Fee Program – Developments are assessed a fee relative to the severity of their VMT related impact. The fee will be based on the projects' fair share contribution to implement off-site VMT reducing infrastructure or programs to offset or reduce the projects' impact to less than significant. The revenue collected from a Fee Program can be used to implement multi-modal and other VMT reducing infrastructure improvements, and programs outlined in the 2021 Regional Plan. Fee programs can be developed as either an impact fee program where all development pays their fair-share to mitigate the overall impacts and implement the needed infrastructure, or as an In-Lieu Fee Program where development would pay into the program in-lieu of providing their own mitigation.

VMT Mitigation Credits/Banking – Developments buy VMT reduction credits that are the result of previously constructed VMT reducing or planned infrastructure that will be constructed within the near future, from SANDAG or other participating jurisdictions in the region. This model operates similar to a biological mitigation bank program, or carbon offset program. The revenue collected from a Mitigation Bank can be used to construct additional VMT reducing infrastructure in new locations, to close gaps in the existing multi-modal network, improving network efficiency. Jurisdictions who construct and submit VMT reductions to the bank can also receive VMT reduction credits from the bank that can either be sold to developments to offset their impacts or used by the jurisdictions to offset VMT impacts associated with local infrastructure improvements.

VMT Exchange Program – Developments with VMT related impacts would work with SANDAG, or other participating jurisdictions in the region, to fund and implement off-site VMT reducing infrastructure and/or programs to offset their VMT related impacts. This model allows projects in higher VMT demand areas to invest in multi-modal, VMT reducing infrastructure in more feasible areas where higher reductions are possible and more efficient, creating systemwide improvements.

It should be noted that the Regional VMT Mitigation Program has the option to develop a hybrid program, which pairs or uses different components of the program types outlined above to create a more comprehensive program.



All Program Options Considered

Level	Program Type	Option	Description	Pros	Cons
Regional	Credit	Regional VMT Reduction Bank (Based on Infrastructure included in the RTP)	Develop regionwide cost to reduce 1 mile of travel in the region. Calculate the VMT reductions associated with RTP based multi-modal improvements as they are implemented. Assign a cost to the VMT reductions to create regional VMT credits. Track credits in a bank to sell to developers / jurisdictions. Funds gathered credit sales will be used to implement new RTP base VMT reducing facilities.	<ul style="list-style-type: none"> Regional program accessible to everyone. Local jurisdictions will not need to administer or monitor the program. Regional improvements typically have the highest VMT reductions. Helps to assure SCS and SB 375 compliance. Provides funding sources for regional VMT improvements. Can allow factors such as equity and equality to be accounted for in the improvement prioritization process. 	<ul style="list-style-type: none"> Costs of the program may be hard to balance due to the variances in costs and associated VMT reductions based on the improvement's location. May be a slow process to start. Requires upfront funding to implement initial improvements to generate credits. RTP improvements are not solely prioritized based on associated VMT reductions. Improvements may be limited to denser and more urban areas of the region. High administration costs.
	Credit	Regional Bank System (Local Improvements)	Jurisdictions submit VMT reducing infrastructure that they recently implemented to the Bank System. The average daily VMT reduced by the infrastructure is calculated, and bank credits are issued based on a standard regional cost-to-reduce VMT. Credits can then be sold to developers throughout the region, and local jurisdictions can receive the equivalent funding to implement additional VMT reducing infrastructure.	<ul style="list-style-type: none"> Regional program accessible to everyone. Will provide an additional source of funding for local improvements. May allow for improvements to be spread more throughout the region. Jurisdictions will have more influence over the improvements that are implemented. Improvements implemented via grant funding may be eligible for VMT credits. 	<ul style="list-style-type: none"> Higher administration costs both at the regional and local level. Local improvements may not provide the same level of reductions as regional improvements. The efficiency to reduce VMT may not be the same for all jurisdictions; thus, the return on investment will not be the same. Requires higher effort from local jurisdictions to manage and coordinate.
	Credit	Affordable Housing Program	Develop a program that allows affordable housing developments that do not have a VMT related impact to sell credits to other developments. Additionally, the program could allow developments VMT impact to pay towards the development of affordable housing developments in VMT efficient areas. Payments would be collected by a regional body and allocated through a grant program.	<ul style="list-style-type: none"> Regional program accessible to everyone. Will provide funding for and encourage affordable housing development within the San Diego Region. Reductions will be equal and viable across all parts of the region. Does not require additional permitting or construction within the public ROW. Can be implemented in parallel with other mitigation programs. 	<ul style="list-style-type: none"> Mitigation may not be completed prior to implementation of the impacted development; thus, may require additional CEQA efforts. The improvements would be towards non-public infrastructure. Only applies to affordable housing projects with no VMT related impacts. Requires additional coordination with other departments, developers, and non-profits.
	Exchange	Regional VMT Exchange (Based on Infrastructure included in the RTP)	Identify the cost and VMT reductions associated with VMT reducing infrastructure included in the RTP. Allow new development to implement, or fund the implementation of, improvements on the list to offset VMT related impacts.	<ul style="list-style-type: none"> Regional program accessible to everyone. Local jurisdictions will not need to administer or monitor the program. Regional improvements typically have the highest VMT reductions. Helps to assure SCS and SB 375 compliance. Provides funding sources for regional VMT improvements. 	<ul style="list-style-type: none"> The cost of most regional infrastructure projects will be too high for most developments to take on. Permitting and implementation of improvements may take longer than local programs. Prioritization of projects may favor some jurisdictions over others.



All Program Options Considered

Level	Program Type	Option	Description	Pros	Cons
Regional	Exchange	Regional VMT Exchange (Local Improvement)	Jurisdictions can post shovel ready VMT reducing infrastructure capital projects (beyond what has been identified in the RTP) into a regional database. The database will calculate the average daily VMT reduction that would be associated with the infrastructure. Developers can then implement infrastructure on the list to offset their VMT related impacts.	<ul style="list-style-type: none"> • Will provide an additional source of funding for local improvements. • May allow for improvements to be dispersed more throughout the region. • Jurisdictions would have more influence over the improvements that are implemented. • Construction of improvements may not require prevailing wage. 	<ul style="list-style-type: none"> • Higher administration costs both at the regional and local level. • Local improvements may not provide the same level of reductions as regional improvements. • Improvements may need to be screened to ensure effectiveness. • Requires higher effort from local jurisdictions. • Eligible improvements may need to be shovel ready. • Development will favor more efficient improvements first. • A development project may be conditioned to work with a second jurisdiction that is not the lead agency.
	Exchange	VMT Reduction Grant Program	Establish a standard regional cost to reduce one mile of travel for the region. Developers can then contribute the cost per mile of travel that is needed to reduce their associated VMT impacts into a capital reserve fund. Jurisdictions then apply to receive grant funding from that fund to implement VMT reducing infrastructure.	<ul style="list-style-type: none"> • Will provide an additional source of funding for local improvements. • Would be available to all jurisdictions. • Could build off of SANDAG grant programs that are already in place. • Could potentially be used to fund projects to become shovel ready and paired with an exchange program. 	<ul style="list-style-type: none"> • Improvements would not be constructed prior to development; thus, additional CEQA work would be required. • The cost to reduce one-mile of travel will vary from jurisdiction to jurisdiction so the portion of available grant funds may not be equitable for each jurisdiction. • Higher admin costs. • Improvements would need to be screened for effectiveness. • Tracking the improvements built from the grant program may be difficult.
	Fee Program (In-Lieu Fee)	Regional VMT Reduction Cost (Based on Infrastructure included in the RTP)	A VMT in-lieu fee program, similar to the City of San Diego's ATILF program, is developed based on a set of VMT reducing infrastructure included in the RTP.	<ul style="list-style-type: none"> • Regional program accessible to everyone. • Local jurisdictions will not need to administer or monitor the program. • Regional improvements typically have the highest VMT reductions. • The program can target areas with the most needs / higher reductions. 	<ul style="list-style-type: none"> • Improvements may not be constructed in all jurisdictions. • RTP is updated every 4 years, so programs may change frequently. • Projects are larger in nature, so they may take longer to fund. • Permitting and implementation of improvements may take longer than local programs.



All Program Options Considered

Level	Program Type	Option	Description	Pros	Cons
Regional	Fee Program (In-Lieu Fee)	Regional VMT Reduction Cost (Local Improvements)	Jurisdictions submit local VMT reducing infrastructure improvements to be included in a regional VMT in-Lieu Fee program. The typical cost to reduce one-daily mile of travel is calculated based on the proposed infrastructure that is included in the program. Development can pay into the program to offset their VMT impacts, and the revenue generated by the program is allocated to the participating jurisdictions to implement the infrastructure.	<ul style="list-style-type: none"> Regional program accessible to everyone. Local jurisdictions will not need to administer or monitor the program. Improvements can be prioritized based on effectiveness, as well as equity and equality. Would provide a universal cost (per VMT to reduce) across the region. 	<ul style="list-style-type: none"> Improvements would not be constructed prior to development; thus, additional CEQA work would be required. Higher administration costs both at the regional and local level. Projects would need to be screened to ensure effectiveness. Requires higher effort from local jurisdictions. Prioritization of projects may favor some jurisdictions over others. Costs of the program may be hard to balance due to the variances in costs and associated VMT reductions based on improvement location.
	Fee Program	Update RTCIP	Update RTCIP to focus on VMT reducing infrastructure.	<ul style="list-style-type: none"> Regional program accessible to everyone. No additional fees would be imposed on new development. A program is already in place and may only need to be modified. 	<ul style="list-style-type: none"> May not be feasible based on the language in the original TrasNet proposition. Would most likely not fully mitigate impacts. May underfund pending/approved vehicular based roadway improvements. Improvements may be limited to the regional arterial system. Would need to update/replace the RTCIP nexus study.
	TDM	Develop Regional TDM Program	Update the iCommute program, or create a similar program, to quantify VMT the reductions associated with program features. Allow new development to pay into the program to fund VMT reducing programs for existing business for a designated period. Research if grants can be issued to existing business to provide VMT reducing amenities (bike rack, showers, repair stations, etc.)	<ul style="list-style-type: none"> Could create regionally recognized TDM guidelines (measures and associated calculations) that can be adopted by jurisdictions. Would allow new development to fund reductions to existing VMT generation. Funding could be targeted towards existing and established areas where it will be the most effective. 	<ul style="list-style-type: none"> Improvements would not be constructed prior to development; thus, additional CEQA work would be required. Funding would go towards private infrastructure. Tracking and ensuring the grant funding is spent properly could be arduous.
Local	All	Local VMT Committee	Develop a committee made up of members from each jurisdiction that encourages discussion and interaction of potential VMT reducing infrastructure and programs being implemented. In-Lieu of a regional program, committee members would help identify local VMT mitigation programs in which other jurisdictions can participate in.	<ul style="list-style-type: none"> Would increase coordination on infrastructure planning and development throughout the region. Could facilitate the sharing of VMT reducing infrastructure, programs, and resources among multiple jurisdictions. Would be necessary for jurisdictions to allow neighbor jurisdictions to participate in their local VMT mitigation programs. 	<ul style="list-style-type: none"> Requires additional jurisdictional staff time. No direct VMT reductions would be associated with the committee.



All Program Options Considered

Level	Program Type	Option	Description	Pros	Cons
Local	Credit	Local Bank Guidelines	Develop regional guidelines in which jurisdictions can use to develop a local VMT credit bank. The guidelines would document substantial evidence in both the effectiveness of VMT reducing facilities, as well as the methods and calculations used to quantify the reductions. The guidelines would also provide methodologies and requirements that can be used to establish the value of credits and the process of selling the credits to developers. The guidelines will also outline how the program can be integrated into CEQA findings and mitigation.	<ul style="list-style-type: none"> • Will provide jurisdictions flexibility in developing and implementing a program. • Will provide substantial evidence, calculations, and methodologies for jurisdictions to create their own program. • Guidelines will be developed with enough detail to allow jurisdictional staff develop and implement a program without outside expertise. • Jurisdictions with excess VMT reducing infrastructure could allow development in neighboring jurisdictions to utilize the program as well. 	<ul style="list-style-type: none"> • Initial effort and staff time will be required by the jurisdictions to develop and implement the program. • Local jurisdictions will be responsible for administering, tracking, reporting, and updating the program. • Local VMT infrastructure may not be as efficient as regional infrastructure. • Jurisdictions may not have sufficient local VMT reducing infrastructure to fully mitigate all impacts.
	Credit	Affordable Housing Credits	Develop guidelines for localized programs that allow market rate developments to pay towards the development of affordable housing in exchange for the associated VMT reduction credits.	<ul style="list-style-type: none"> • Will provide funding for and encourage affordable housing within the San Diego Region. • Does not require additional permitting or construction within the public ROW. • Can be implemented in parallel with other mitigation programs. • Will provide substantial evidence, calculations, and methodologies for jurisdictions to create their own program. • Guidelines will be developed with enough detail to allow jurisdictional staff to develop and implement a program without outside expertise. 	<ul style="list-style-type: none"> • Mitigation may not be completed prior to implementation of the impacted development; thus, may require additional CEQA efforts. • The improvements would be towards non-public infrastructure. • Only applies to affordable housing projects with no VMT related impacts. • Requires additional coordination with other departments, developers, and non-profits.
	Credit	VMT Reduction Programs	Develop guidelines that allow for existing businesses to apply for grant funding to implement TDM based programs (e.g., showers/lockers, bike parking, bike repair, equipment that allows them to work from home, etc.) to reduce existing VMT production. The reductions from the program can then be sold to future development to replenish the next round of grant funding.	<ul style="list-style-type: none"> • Would allow new development to fund reductions to existing VMT generation. • Funding could be targeted towards existing and established areas where it will be the most effective. • Will provide substantial evidence, calculations, and methodologies for jurisdictions to create their own program. • Guidelines will be developed with enough detail to allow jurisdictional staff to develop and implement a program without outside expertise. 	<ul style="list-style-type: none"> • Initial effort and staff time will be required by the jurisdictions to develop and implement the program. • Local jurisdictions will be responsible for administering, tracking, reporting, and updating the program. • Improvements would not be constructed prior to development; thus, additional CEQA work would be required. • Funding would go towards private infrastructure. • Tracking and ensuring the grant funding is spent properly could be arduous.



All Program Options Considered

Level	Program Type	Option	Description	Pros	Cons
Local	Credit	Land Use Exchange	Investigate the potential for developing a local land use exchange program, which allows landowners to exchange/sell density allotments in inefficient VMT areas to landowners in VMT efficient areas.	<ul style="list-style-type: none"> Land use density and mix has the highest effect on reducing VMT. 	<ul style="list-style-type: none"> Will require substantial land use planning, mobility planning, outreach and CEQA work. Future development assumptions are perspective and may not provide sufficient evidence to reduce VMT related impacts. Would rely on private transactions between landowners. A transportation infrastructure program may also be required to ensure accessibility and walk ability between the uses.
	Credit	Sustainable Land Use Programs	Develop a white paper outlining the best practices and potential reductions associated with jurisdictions creating sustainable land use programs to lower both existing and future VMT.	<ul style="list-style-type: none"> Land use density and mix has the highest effect on reducing VMT. Higher densities could attract future transit services; thus, further reducing VMT. 	<ul style="list-style-type: none"> Will require substantial land use planning, mobility planning, outreach and CEQA work. Future development assumptions are prospective and may not provide sufficient evidence to reduce VMT related impacts.
	Exchange	Local VMT Exchange Guidelines	Create guidelines that outline the methods and requirements needed for a local jurisdiction to create, implement, and administer a local VMT exchange program. The guidelines will document the legal requirements to allow for development, both within the jurisdiction and outside of the jurisdiction, to implement off-site VMT reducing infrastructure to offset their VMT related impacts. The guidelines will also outline how the program can be integrated into CEQA findings and mitigation.	<ul style="list-style-type: none"> Will provide jurisdictions flexibility in developing and implementing a program. Will provide substantial evidence, calculations, and methodologies for jurisdictions to create their own program. Guidelines will be developed with enough detail to allow jurisdictional staff develop and implement a program without outside expertise. 	<ul style="list-style-type: none"> Initial effort and staff time will be required by the jurisdictions to develop and implement the program. Local jurisdictions will be responsible for administering, tracking, reporting, and updating the program. Local VMT infrastructure may not be as efficient as regional infrastructure. Jurisdictions may not have sufficient local VMT reducing infrastructure to fully mitigate all impacts.
	Fee Program	Local VMT Fee Program Guidelines	Create a resource that documents the process, methods, and requirements to develop, implement, and administer a VMT based impact fee program. The guidelines will provide a template to develop a program nexus study, a flow chart of the approval and implementation process, and the methods / tables needed to calculate the fee requirement.	<ul style="list-style-type: none"> Will provide jurisdictions flexibility in developing and implementing a program. Will provide substantial evidence, calculations, and methodologies for jurisdictions to create their own program. Guidelines will be developed with enough detail to allow jurisdictional staff develop and implement a program without outside expertise. Guidelines may be able to create a regional nexus study which jurisdiction can use for legal justification of the fees. 	<ul style="list-style-type: none"> Initial effort and staff time will be required by the jurisdictions to develop and implement the program. Local jurisdictions will be responsible for administering, tracking, reporting, and updating the program. Local VMT infrastructure may not be as efficient as regional infrastructure. Jurisdictions may not have sufficient local VMT reducing infrastructure to fully mitigate all impacts.



All Program Options Considered

Level	Program Type	Option	Description	Pros	Cons
Local	Fee Program	Local Program Expansion	For jurisdictions that already have a local VMT mitigation program in place, the program will develop a white paper that provides guidance on how the program could be expanded to service other jurisdictions.	<ul style="list-style-type: none">• Would help to fund local VMT reduction infrastructure.• Would allow for more rural jurisdictions to mitigate VMT impacts with infrastructure in more efficient urban areas.• Will allow for excess VMT reductions to be fully utilized.	<ul style="list-style-type: none">• Improvements may not be constructed prior to development; thus, additional CEQA work would be required.• Additional work may be required by jurisdictional staff to update existing programs to allow other jurisdictions to participate in.• Jurisdictions would need to evaluate and identify if there is an excess of VMT reductions within their current program which can be sold/used by other jurisdictions.• Will require additional administration time to track and monitor how VMT credits and or fees have been distributed or used by outside jurisdictions.



Attachment 3

High Level Program Options

High Level Program Options

Option	Option Name	Program Type	Notes
1	Large Regional	Regional VMT Committee	Formed from SANDAG's Mobility Working Group - Would oversee the programs
		Regional VMT Exchange Program	List/database of shovel ready VMT reducing infrastructure posted by jurisdictions for new development to construct. Jurisdictions would be responsible for posting the projects, cost, and associated VMT reductions. VMT reductions would be calculated based on a set of agreed upon guidelines, developed as part of the program. SANDAG and/or the County would maintain the database.
		Regional Credit Program	SANDAG and/or the County will develop and maintain a regional VMT credit program, where jurisdictions can submit recently constructed VMT reducing infrastructure and they will receive VMT reduction credits. The credits can then be sold to new development to offset VMT related impacts. Credit values will be issued based on a standard regional cost to reduce VMT. VMT reductions will be evaluated based on set guidelines that are developed as part of the program. SANDAG and/or the County will be responsible for maintaining the program with oversight from the Regional VMT Committee.
		Regional Affordable Housing In-Lieu Fee	Work with ASHC to develop an in-lieu fee program that will help to fund affordable housing within the San Diego Region. Funding from the program can either be used for affordable housing grants or other resources to incentivize affordable housing development.
2	Simple Regional Exchange	Regional Exchange Database	Develop a regional database where jurisdictions can post shovel ready VMT reducing infrastructure for new development to construct to offset VMT related impacts. The jurisdictions will be responsible for calculating the associated VMT reductions and working with the responsible CEQA agency on recognition and tracking of the mitigation.



High Level Program Options

Option	Option Name	Program Type	Notes
3	Local Nexus Studies	Local In-Lieu Fee Nexus Study	Develop a nexus study that determines the cost to reduce one-mile of VMT through the development of infrastructure within the region. Due to the size of the region, the cost to reduce one-mile of travel may need to be broken into sub-regions. Program guidelines will also be developed to identify how the revenue from the fee program would need to be allocated and tracked to maintain compliance with both CEQA requirements and the Mitigation Fee Act. Jurisdictions will then have the option to adopt the program locally, or develop their own program based on the data provided.
		Local Affordable Housing Nexus Study	Develop a nexus study that identifies a relationship between affordable housing and VMT reductions. Identify the cost to reduce one mile of travel based on the development of affordable housing. Program guidelines will also be developed to identify how the revenue from the fee program would need to be allocated and tracked to maintain compliance with both CEQA requirements and the Mitigation Fee Act. Jurisdictions will then have the option to adopt the program locally, or develop their own program based on the data provided.
4	Local Guidelines	VMT Credit / Mitigation Bank Guidelines	Develop guidelines that assist jurisdictions in developing a VMT Credit / Mitigation Bank Program. The guidelines will identify the process to set up the program, the legal requirements, documentation needed, resources, calculations, and methods that should be used in developing the program.
		VMT Exchange Guidelines	Develop guidelines that assist jurisdictions in developing a VMT Exchange Program. The guidelines will identify the process to set up the program, the legal requirements, documentation needed, resources, and calculations and methods that should be used in developing the program.
5	Hybrid Program	Regional VMT Exchange Program	Develop a database of shovel ready VMT reducing infrastructure posted by jurisdictions for new development to construct. Jurisdictions would be responsible for posting the projects and costs. VMT reductions would be calculated based on a set of agreed upon guidelines developed as part of the program. SANDAG and/or the County would maintain the database.



High Level Program Options

Option	Option Name	Program Type	Notes
5	Grant Programs	Regional Credit Program	SANDAG and/or the County will develop and maintain a regional VMT credit program, where jurisdictions can submit recently constructed VMT reducing infrastructure and they will receive VMT reduction credits. The credits can then be sold to new development to offset VMT related impacts. Credit values will be issued based on a standard regional cost to reduce VMT, VMT reductions will be evaluated based on set guidelines that are developed as part of the program. SANDAG and/or the County will be responsible for maintaining the program with oversight from the Regional VMT Committee.
	Grant Programs	Local In-Lieu Fee Nexus Study	Develop a nexus study that determines the cost to reduce one-mile of VMT through the development of infrastructure within the region. Due to the size of the region, the cost to reduce one-mile of travel may need to be broken into sub-regions. Program guidelines will also be developed to identify how the revenue from the fee program would need to be allocated and tracked to maintain compliance with both CEQA requirements and the Mitigation Fee Act. Jurisdictions will then have the option to adopt the program locally, or develop their own program based on the data provided.
6	TDM Program	Regional TDM Guidelines	Develop regional TDM guidelines and requirements that can be applied to new developments with identified VMT related impacts. Develop a calculator to help identify and quantify the VMT reductions associated with project level TDM features.
7	Regional VMT Credit Based on RTP	Regional Credit Program	Develop a regional VMT credit program based on the implementation of VMT reducing infrastructure included in the RTP. As RTP infrastructure is completed, SANDAG can sell the VMT related credits to developments with VMT related impacts. The revenue generated from the program would then be used to fund more RTP related infrastructure.
8	Grant Programs	VMT Reduction Grant Program	Establish a standard regional cost to reduce one-mile of travel for the region. Developers can then contribute the cost per mile of travel that is needed to reduce their associated VMT impacts into a capital reserve fund. Jurisdictions can then apply to receive grant funding from the capital reserve fund to implement VMT reducing infrastructure locally.



High Level Program Options

Option	Option Name	Program Type	Notes
8	Grant Programs	Develop Regional TDM Grant Program	Update the iCommute program, or create a similar program, to quantify VMT the reductions associated with TDM program features. Allow new development to pay into the program to fund VMT reducing TDM programs and infrastructure for existing business, for a designated period. Research if grants can be issued to existing business to provide VMT reducing amenities (e.g., bike racks, showers, repair stations, etc.)



Attachment 4

Primary Program Option Analysis

Simple Regional Exchange Program

Criteria	Analysis	Points (1-5)
Legal Requirements	<p>VMT significance impact criteria are generally based on the statewide emission goals outlined in AB 32, as well as the GHG reduction targets outlined in SB 375. As such, VMT mitigation, and its associated offsets, are not restricted to the project site, nor are they limited to the jurisdiction in which a project is located. Therefore, implementing offsite VMT reducing infrastructure to mitigate a project's impacts, including in a jurisdiction that is not the lead agency but is within the state of California, would satisfy legal requirements so long as nexus is properly demonstrated. As such, the concept of a regional VMT exchange program within the San Diego Region is feasible from a legal standpoint. Moreover, options for offsite mitigation will likely be essential to achieve VMT reduction targets in light of the structural challenge of onsite mitigation for many projects. However, there may be several legal hurdles both with the timing and implementation of the infrastructure, and how that would relate to using the infrastructure as mitigation in a CEQA document.</p> <p>In cases where VMT reducing infrastructure, outside of the lead agency, is being implemented to offset VMT related impacts, there may be challenges in guaranteeing that the infrastructure will be implemented prior to the occupancy of the project. This will require a higher level of coordination between jurisdictions to ensure that the infrastructure is permitted and constructed to the proper standards within a reasonable timeframe. Additionally, the permitting and right-of-way acquisitions for the offsite improvements may present additional issues and hurdles which the lead agency cannot control. Therefore, the type of infrastructure and its ability to be shovel ready could delay the timeframe in which the mitigation is in place, potentially resulting in a time of unmitigated impacts. This may limit the type and scale of projects that jurisdictions are able to place on the exchange.</p>	4
Ability to Quantify VMT Reductions	<p>VMT reductions would be based off the methods and formulas outlined in the Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (GHG Handbook). The program will develop a VMT reduction manual which outlines and summarizes the applicable VMT reductions from the GHG Handbook, sample calculations, and links to where the required data for the analysis can be obtained. However, there could still be some variation in how the reductions are calculated. It is recommended that a committee, such as SANDAG's Mobility Working Group, provide oversight on the infrastructure submitted to the exchange program to ensure that it meets the minimum requirements, and the VMT reductions were calculated correctly.</p>	2



Simple Regional Exchange Program

Criteria	Analysis	Points (1-5)
Total VMT Reductions	<p>The overall VMT reductions that could be associated with this program option will depend on how active jurisdictions are in submitting potential infrastructure projects to the regional exchange program. The regional VMT exchange program will require that all projects submitted be shovel ready and included in the jurisdictions CIP program. Based on a sampling of jurisdictions in the San Deigo Region, the unfunded or unconstructed VMT reducing infrastructure within a typical CIP equates to about 1,500 miles of reduced vehicular travel. However, with the additional funding generated through these programs, it may allow for jurisdictions to include more planned VMT reducing infrastructure projects into their CIP program, based on those identified in their active transportation plan, General Plan, CAP, or other planning documents.</p>	2
Cost Effectiveness and Affordability	<p>Since this program option will focus on and evaluate infrastructure projects individually, the cost effectiveness may vary drastically for each infrastructure project submitted. The cost of VMT reducing infrastructure changes greatly based on the type and style of the infrastructure. For example, the cost to implement Class II Bike Lanes is approximately \$85,000 per mile, while the cost to implement a Class I Multi-Use Pathway is almost \$6.5 million per mile. While a Class I Multi-Use Pathway will typically provide a 50% higher VMT reduction than Class II Bike Lanes, the cost to reduce one mile of VMT is still significantly more affordable with bike lanes. Additionally, VMT reductions can vary greatly based on the location of the infrastructure. Based on an initial evaluation the cost to reduce one mile of travel can vary from \$2,700 to \$28,000 per mile in different jurisdictions. The wide variations are do you the type of facilities that included in the CIP as well as the density of the land uses surrounding the infrastructure.</p>	3
Additionality	<p>In general, there should be very limited or no additionality issues with this program, as jurisdictions would be submitting unfunded CIP projects to the Regional Exchange Program. As such, any infrastructure built through the program would not have been funded/constructed through other means. Thus, all VMT reductions associated with the infrastructure can be directly attributable to the program and used to offset VMT related impacts. It is recommended that a committee, such as SANDAG's Mobility Working Group, provide oversight to ensure that the infrastructure submitted to the program were not previously funded CIP projects.</p>	5



Simple Regional Exchange Program

Criteria	Analysis	Points (1-5)
Geographic Scope and Fit	<p>This program option will provide participating jurisdictions flexibility in the infrastructure that they submit to the exchange, both in type, requirements, and design. However, where the infrastructure is constructed will be up to those seeking VMT offsets, who most likely seek the most cost-effective option available. VMT reducing infrastructure located within denser areas with a higher population are far more effective than more suburban and rural areas. As such, improvements within more urban areas will have a greater VMT reduction, thus, resulting in a lower cost to reduce one mile of travel, thus, they will most likely be constructed first. Conversely, more complex and expensive infrastructure, such as Class I Multi-Use Pathways, or infrastructure in suburban and rural jurisdictions, which are less cost efficient, will be implemented last, or potentially not at all. This may result in an imbalance of benefits and utility for the different jurisdictions within the region.</p>	2
Equity	<p>The infrastructure submitted to the Regional Exchange Program would be done so at the will of the participating agency and implemented at the will of a development project seeking a VMT offset, individually. Thus, there would be no guiding influence nor prioritization by an overseeing group/agency to prioritize the development infrastructure projects within disadvantaged or underserved areas. As such, it's assumed that developers who are seeking VMT offsets will prioritize the infrastructure projects with the lowest cost to reduce one-mile of travel. This could present an obstacle for communities whose current infrastructure may have been underserved over the year and has degraded over time and may require additional costs to upgrade. Due to these additional costs, infrastructure projects within these areas may be less cost efficient and less attractive to build for VMT offsets.</p>	1
Total		19



Guidelines for Local Programs

Criteria	Analysis	Points (1-5)
Legal Requirements	The legal requirements for setting up both a VMT Exchange and Credit Program will both be outlined in the guidelines. The guidelines will also provide a list of eligible facility types that can be included within the program, as well as the methods, assumptions, and formulas needed to calculate the VMT reductions. Finally, the guidelines will outline the documentation, document posting, and financial transparency requirements that each program will need to follow to be consistent with the Mitigation Fee Act. However, it will still be the responsibility of each jurisdiction to ensure that the legal requirements for each program type are met, and that the program is updated to meet legal changes as needed. Thus, while the local scope of each program will likely make nexus analysis more straightforward, there will be fewer regional resources committed to ongoing legal support or potential litigation.	3
Ability to Quantify VMT Reductions	The guidelines will provide the methods, assumptions, and formulas needed to calculate the VMT reductions for the infrastructure types that can be included in the exchange or VMT credits can be claimed for. However, it will be the responsibility of each jurisdiction to quantify the VMT reductions that would be associated with the infrastructure improvements that can be included within the program(s). Thus, quantification methodologies will be more locally tailored than in a regional program but there will also be greater heterogeneity and potentially less capacity to develop and modulate over time.	2
Total VMT Reductions	Since this program option will focus on and evaluate infrastructure projects individually, the cost effectiveness may vary drastically for each infrastructure project submitted. The cost of VMT reducing infrastructure changes greatly based on the type and style of the infrastructure. For example, the cost to implement Class II Bike Lanes is approximately \$85,000 per mile, while the cost to implement a Class I Multi-Use Pathway is almost \$6.5 million per mile. While a Class I Multi-Use Pathway will typically provide a 50% higher VMT reduction than Class II Bike Lanes, the cost to reduce one mile of VMT is still significantly more affordable with bike lanes. Additionally, VMT reductions can vary greatly based on the location of the infrastructure.	3
Cost Effectiveness and Affordability	Jurisdictions will have the control and flexibility on the types and requirements for the VMT reducing infrastructure that is included within the program(s) they develop, based on the guidelines. Therefore, jurisdictions will have the choice focus on more cost-effective infrastructure such as Class II Bike Lanes, or less efficient but more neighborhood friendly infrastructure, such as Class I Multi-Use Pathways, or a mixture of the two. Thus, the cost effectiveness of the program will be up to each jurisdiction (and participating entities) separately.	3



Guidelines for Local Programs

Criteria	Analysis	Points (1-5)
Additionality	<p>Jurisdictions should be including unfunded CIP projects in their Exchange Program, so there should be limited to no additionality issues. Any infrastructure built through the program would not have been funded/constructed through other means. Thus, all VMT reductions associated with the infrastructure can be directly attributable to the program and used to offset VMT related impacts.</p> <p>VMT Credit Programs will require slightly more analyses and justification to verify that the infrastructure would be built without the program; thus, its VMT, or a portion of it, cannot be claimed as credit. The VMT Credit Program Guidelines will include the methods and processes that each infrastructure project will need to go through to determine if and how much of the VMT reduced by the infrastructure would be eligible to sell as credit.</p>	3
Geographic Scope and Fit	<p>Each jurisdiction will have the ability to develop programs that best fit their community and its needs. Jurisdictions will also have the choice to allow their developers to offset either a portion, or all of their VMT related impacts by using other jurisdictions programs. The program will also give jurisdictions the flexibility to allow other jurisdictions to participate in their program or keep it local for their own needs. Thus, this program option will tend to maintain local mitigation while providing jurisdictions and developers with flexibility in VMT reduction strategies.</p>	5
Equity	<p>The prioritization of infrastructure within underserved communities or within communities of needs will be up to the jurisdiction developing the program. Therefore, it cannot be projected how equitable this program option would be. Thus, a score of three was assigned as it is the neutral point on a five-point scoring system.</p>	3
Total		22



Hybrid Program

Criteria	Analysis	Points (1-5)
Legal Requirements	<p><u>Regional Exchange & Credit Programs</u> As noted under the Regional Exchange Program, VMT mitigation and offsets are not restricted to the project site, nor are they limited to the jurisdiction in which a project is located. Therefore, implementing VMT reducing infrastructure to mitigate a project’s impacts in a jurisdiction outside of the lead agency, as would be done with the regional exchange and credit programs, is legal.</p> <p>The exchange program may encounter some challenges in guaranteeing that the infrastructure will be implemented prior to the occupancy of the project. This will require a higher level of coordination with the participating jurisdictions to ensure that the infrastructure is permitted and constructed to the proper standards within a reasonable timeframe. Additionally, the permitting and right-of-way acquisitions for the offsite improvements may present additional issues and hurdles in which the lead agency cannot control. Therefore, the type of infrastructure and its ability to be shovel ready could delay the timeframe in which the mitigation is in place, potentially resulting in a time of unmitigated impacts.</p> <p><u>In-Lieu Fee Program</u> An in-lieu fee program is also a common way to mitigate impacts of all types. A regional nexus study will be developed to establish the relationship between the ability of different infrastructure types to reduce VMT and their associated cost. The nexus study will be conducted in accordance with the mitigation fee act; thus, providing the legal justification for jurisdictions to implement the fee program. Guidelines will also be produced to instruct jurisdictions on the requirements for implementing, tracking, and publicly reporting on the program.</p>	4
Ability to Quantify VMT Reductions	<p><u>Regional Exchange & Credit Programs</u> As part of the program oversight, SANDAG and/or the County would be responsible for calculating the VMT reductions associated with the submitted VMT reducing infrastructure. As such, the quantification of VMT reductions would be uniform across both programs.</p> <p><u>In-Lieu Fee Program</u> VMT reduction calculations would be quantified for a series of example projects, throughout different parts of the region, within the regional nexus study. As such, the quantification of VMT reductions would be uniform for all jurisdictions.</p>	4



Hybrid Program

Criteria	Analysis	Points (1-5)
Total VMT Reductions	<p><u>Regional Exchange Program</u> The overall VMT reductions that could be associated with this program option will depend on how active jurisdictions are in submitting potential infrastructure projects to the regional exchange program. The regional VMT exchange program will require that all projects submitted be shovel ready and included in the jurisdictions CIP program. Based on a sampling of jurisdictions in the San Deigo Region, the unfunded or unconstructed VMT reducing infrastructure within a typical CIP equates to about 1,500 miles of reduced vehicular travel. However, with the additional funding generated through these programs, it may allow for jurisdictions to include more planned VMT reducing infrastructure projects into their CIP program, based on those identified in their active transportation plan, General Plan, CAP, or other planning documents.</p> <p><u>Regional Credit Program</u> The Regional Credit Program will allow jurisdictions to also invest in VMT reducing infrastructure within their CIP program without tying it to future development. The VMT reductions associated with the infrastructure can then be sold to new development through the Regional Credit Program, and the revenue received for the credits can be used to help fund future VMT reducing infrastructure within the City's CIP.</p> <p><u>Local In-Lieu Fee Programs</u> Finally, the quantification of the VMT reductions associated with the local programs would be dependent on the infrastructure the jurisdiction decides to include in the program, as well as the overall VMT reducing capacity that the jurisdiction has based on its roadway network and land use densities.</p>	4
Cost Effectiveness and Affordability	<p>The regional and local components included in this program option create a higher potential for cost effective VMT reductions for all jurisdictions within the region. Jurisdictions with a high capacity for VMT reductions, can develop local in-lieu fee programs that focus on implementing the most cost-effective VMT reducing infrastructure locally. The VMT reducing infrastructure not included within the local programs can be submitted to regional exchange and allow development in less efficient communities to develop it. Jurisdictions with limited VMT reducing infrastructure, or low efficient VMT reducing infrastructure, have a series of options to help mitigate VMT impacts including creating their own Local In-Lieu fee program, allowing development to utilize the regional programs, or developing a hybrid system where development can utilize both resources to offset their VMT related impacts at a more affordable cost. Based on an initial evaluation the cost to reduce one mile of travel can vary from \$2,700 to \$28,000 per mile in different jurisdictions. The wide variations are do you the type of facilities that included in the CIP as well as the density of the land uses surrounding the infrastructure.</p>	5



Hybrid Program

Criteria	Analysis	Points (1-5)
Additionality	<p><u>Regional Exchange Program</u> In general, there should be limited to no additionality issues with this program, as jurisdictions would be submitting unfunded CIP projects to the regional exchange program. The infrastructure built through the program would not have been funded/constructed without the exchange program, meaning all VMT reductions associated with the infrastructure can be directly attributable to the program and used to offset VMT related impacts.</p> <p><u>Regional Credit Program</u> There may be some additionality concerns within the Regional Credit Program, as the design and construction of the infrastructure would have already been funded through existing means. Therefore, it can be argued that the VMT reductions would have occurred through the normal course of City actions, so the program cannot claim credit for the reductions. The credit program would need to present evidence that the funding received would help to prioritize the VMT reducing infrastructure resulting in its construction being accelerated, and/or helping to guarantee that it is implemented. In these cases, the program may only be able to credit a portion of the cost to VMT reducing infrastructure.</p> <p><u>Local In-Lieu Fee Program</u> Similar to the Regional Exchange Program, the Local In-Lieu Fee program should focus on unfunded VMT reducing infrastructure. Therefore, the program would help fund infrastructure that the City would otherwise not be afforded to implement. Thus, any additionality issues would be limited.</p>	3
Geographic Scope and Fit	<p>Since this program option has both a regional and local mitigation layer it provides the ultimate flexibility for jurisdictions. Jurisdictions who may have limited VMT reducing capacity can implement a local in-lieu fee program to help buildout their limited local infrastructure, and then utilize the regional programs to fill their excess mitigation needs. Conversely, jurisdictions who may have more VMT reducing capacity than they need to mitigate their VMT impacts, can implement a Local In-Lieu fee program to capture funding from local development, and post any excess VMT reducing infrastructure to the regional programs to help offset impacts from other jurisdictions.</p>	5



Hybrid Program

Criteria	Analysis	Points (1-5)
Equity	<p><u>Regional Exchange Program</u> The infrastructure submitted to the Regional Exchange Program would be done so at the will of the participating agency and implemented at the will of a development project seeking a VMT offset, individually. Therefore, there would be no guiding influence nor prioritization by an overseeing group/agency to prioritize the development infrastructure projects within disadvantaged or underserved areas. As such, it's assumed that developers who are seeking VMT offsets will prioritize the infrastructure projects with the lowest cost to reduce one-mile of travel. This could present an obstacle for communities whose current infrastructure may have been underserved over the years and has degraded over time and may require additional costs to upgrade. Due to these additional costs, infrastructure projects within these areas may be less cost efficient and less attractive to build for VMT offsets.</p> <p><u>Regional Credit Program</u> Infrastructure submitted to the Regional Credit Program will be based on VMT reducing infrastructure that was constructed by the jurisdictions. As such, it will be up to each jurisdiction to decide if they want to prioritize constructing infrastructure in underserved communities. Therefore, equity is not an aspect in which the credit program will be able to necessarily control.</p> <p><u>Local In-Lieu Fee Program</u> Finally, the prioritization of infrastructure within underserved communities or within communities of needs, will be up to the jurisdiction developing the Local In-Lieu fee Program. Therefore, it cannot be projected how equitable this program option would be.</p>	2
	Total	27



Regional VMT Credit Based on RTP

Criteria	Analysis	Points (1-5)
Legal Requirements	Mitigation credit programs have been well established for several years for other impact types, such as biology, habitat, and GHG production. Therefore, the legal precedent, standards, and caselaw have been well established, and can be referenced, for these types of programs. However, as noted in a subsequent section, there may be some legal questions that may need to be ironed out in regard to additionality of the VMT reductions for which the credits are issued.	4
Ability to Quantify VMT Reductions	SANDAG's Regional Plan conducts detailed modeling and analyses to evaluate the VMT productions and reductions that are associated with the Regional Plan for both the land use growth and transportation infrastructure included within the Plan. The Regional Plan also sets the transportation modeling baseline that is used for VMT analyses throughout the region. As such, the Regional Plan provides a comprehensive and quantitative VMT analysis, including the reduction associated with the program, which can be utilized in the development of a VMT Credit Program.	5
Total VMT Reductions	The transportation infrastructure included in the Draft 2025 Regional Plan is anticipated to reduce the daily VMT within the region by approximately 2.6 million miles per day ² . This will reduce the average daily VMT per capita in the region from 16.73 per capita to 15.39 per capita ³ . As compared to the previous alternatives, due to its regional nature, this program option will result in the highest potential for VMT reductions for the region.	5
Cost Effectiveness and Affordability	The Regional Plan focuses on implementing complex regional infrastructure, which is generally higher in cost than locally based infrastructure. Additionally, the infrastructure included in the program focuses on connecting different communities and filling gaps in the transportation network, which may not be able to generate the funding at the local level. Therefore, the infrastructure included in the program is not as efficient, from a cost per vehicular mile reduced standpoint, as some local based improvements. The average cost to reduce one-mile of vehicular travel would be \$24,700 ² , which is generally the highest of all program options.	2

² Note: This information is based on SANDAG's 2025 Regional Plan, which is still in Draft form and is subject to change. Thus, the information presented is not official, it is just the best estimate that can be provided at the time of writing this memo.

³ Source: SANDAG Activity Based Model version 3 (ABM). Note that model was in draft form at the time of writing this memo; thus, these numbers are not official and are subject to change.



Regional VMT Credit Based on RTP

Criteria	Analysis	Points (1-5)
Additionality	<p>The Regional Plan does identify and/or assumes funding sources for all of the infrastructure included within its constrained alternative. Therefore, it could be assumed that the infrastructure included within the Regional Plan would be implemented without the benefit of a credit program. Thus, the credit program would need to present evidence that the funding received would help to prioritize the VMT reducing infrastructure resulting in its construction being accelerated, and/or helping to guarantee that it is implemented. Additionally, the Regional Plan is updated every four years, so if the credit program is successful, subsequent Regional Plans can assume funding from the program as part of its budget and expand the multi-modal facilities included in the constrained alternative.</p> <p>Based on the issues outlined above, it is anticipated that issuing VMT reduction credits for infrastructure implemented by the Regional Plan would have some additionality challenges. Most likely, VMT credits may only be able to be issued for a percentage of the implementation cost. Since the infrastructure projects included in the Regional Plan are different from a timing, funding, and VMT efficiency standpoint, the program may need to evaluate each project on a case-by-case basis to identify the percentage of the VMT reduction that can be allocated as a credit.</p>	1
Geographic Scope and Fit	<p>The Regional Plan implements major transportation infrastructure projects throughout the entire San Diego Region. However, the majority of the infrastructure projects are located within the higher populated and more urbanized areas of the region and does not include many localized infrastructure projects located in smaller jurisdictions. Therefore, this program may not provide a benefit for all jurisdictions within the region.</p>	2
Equity	<p>The VMT reduction credits would be issued based on the implementation of VMT reducing infrastructure included within the regional plan. Since the credits are issued after the construction of the infrastructure the program would have no bearing or influence on where and when the infrastructure is built. As such, the equity associated with the program would not be accounted for.</p>	1
Total		20