MEMORANDUM

To:	Jacob Armstrong and Damon Davis; County of San Diego
From:	Stephen Cook, TE, Intersecting Metrics
Date:	November 15, 2021
Regarding:	County of San Diego - Programmatic VMT Mitigation Options

The purpose of this memo is to evaluate potential programmatic vehicle miles traveled (VMT) mitigation options for the unincorporated portions of San Diego County (County).

1.0 Background

1.1 SB-743

On September 27, 2013, Governor Edmund G. Brown, Jr. signed SB-743 into law, starting a process that is expected to fundamentally change the way transportation impact analysis is conducted under CEQA. Within the State's CEQA Guidelines, these changes included elimination of auto delay, level of service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts.

On December 2018, the Resources Agency certified and adopted the CEQA Guidelines update package, which included the California Natural Resources Agency Guidelines for the Implementation of the California Environmental Quality Act. As part of this package the CEQA Guidelines were updated to include the new impact standards and criteria for transportation related impacts, as outlined below:

> *CEQA Guidelines Section 15064.3(b)(1):* Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.

1.2 OPR Technical Advisory

As a result, the California Governor's Office of Planning and Research (OPR) updated and released the *Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory)*[1] *in December 2018*. The Technical Advisory provides guidance and recommendations on how jurisdictions can update their transportation guidelines to be consistent with SB-743 and the updated CEQA guidelines. The Technical Advisory also provides substantial evidence for a series of recommended VMT based significance thresholds, in which jurisdictions can adopt, or project applicants can use in cases where jurisdictional specific standards are not provided.

The recommended VMT impact thresholds provided within OPR's Technical Advisory are as follows:

- *Residential Projects:* Projects that generate a VMT per capita at or below 85% of the regional mean have a less than significant impact.

[1] OPR Technical Advisory: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

- *Commercial Office Project:* Projects that generate a VMT per employee at or below 85% of the regional mean have a less than significant impact.
- *Commercial Retail:* Projects that would result in no net increase in VMT within the region have a less than significant impact.
- *Transportation Projects* – Projects that do not induce additional vehicular travel have a less than significant impact.

The County does not currently have adopted VMT significance thresholds. Therefore, private applicants currently utilize the standards, thresholds, and methodologies outlined in OPR's Technical Advisory for guidance in identifying VMT related impacts within the unincorporated county.

2.0 Mitigating VMT Related Impacts

VMT reduction and mitigation can be accomplished with the implementation of multi-modal infrastructure (such as bicycle, pedestrian, and transit facilities) which provides users more options and connections between the various modes or travel. However, multi-modal infrastructure is most effective when implemented as a system, with limited gaps, and within areas with a high density of land uses, creating a higher propensity for users to be able to complete their trip only while utilizing the available multi-modal facilities. Therefore, VMT based mitigation is typically best dealt with programmatically through comprehensive and systemwide changes and improvements in lieu of spot treatments. Programmatic mitigation measures, such as a VMT Based Fee Programs or VMT Mitigation Banks tend to be the most effective in mitigating VMT based impacts, as compared to transportation demand management (TDM) plans / ordinances or individual spot treatments directly implemented by new development.

2.1 VMT Reduction Elasticity

Research has found that the effectiveness of VMT related mitigation can be limited based on the location setting in which the infrastructure and/or programs are being implemented (Urban, Suburban, or Rural)[2]. *The California Air Pollution Control Officers Association (CAPCOA) published the Quantifying Greenhouse Gas Mitigation Measures - A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures in August 2010 (CAPCOA GHG Handbook)* identifies the following limits to VMT reduction measures, by location type[3]:

> *Urban:* VMT reducing measures within urban areas (Examples: Downtown, Bankers Hill and Hillcrest neighborhoods of the City of San Diego) can achieve a maximum reduction of 75%, while non-urban areas with compact infill land uses, similar to that which is found in urban areas, can achieve a maximum VMT reduction of 35% (Examples: El Cajon Boulevard Corridor, University Avenue Corridor, within the City of San Diego).
>
> *Suburban:* VMT reducing measures within typical suburban areas can achieve a maximum reduction of 15% (20% within Suburban Centre areas, such as Downtown La Mesa, Downtown El Cajon, and the Towne Center areas of Santee).
>
> *Rural:* No maximum VMT reduction is identified within rural areas; however, there are very few VMT reducing measures outlined in the CAPCOA GHG Handbook that apply within rural areas. As such, this naturally limits the VMT reductions that can be achieved within rural areas, such as the majority of areas within the unincorporated portions of the County, not located within the Village Areas.

[2] See Pages 59 & 60 of the CAPCOA GHG Handbook for detailed definitions of the location settings. http://www.aqmd.gov/docs/default-source/ceqa/handbook/capcoa-quantifying-greenhouse-gas-mitigation-measures.pdf

[3] Location types are defined within the *CAPCOA GHG Handbook* on Pages 59 & 60. These pages are provided in Attachment 1.

As noted above, VMT within suburban areas can only be reduced by a maximum of 15% through mitigation. As outlined in OPR's Technical Advisory, land use developments that generate a VMT per capita/VMT per employee above 85% of the regional mean are considered to have a significant VMT related impact. This presents a significant issue for new developments within suburban and rural areas, as they typically generate a VMT per capita/VMT per employee at or above the regional mean. Thus, new development within these areas would need to reduce their VMT generation by 15% or more to alleviate their impacts to a less than significant level. Therefore, the majority of land use developments within these areas are not able to feasibly mitigate their VMT related impacts based on localized improvements alone.

2.2 Programmatic VMT Mitigation Options

VMT Mitigation Programs develop a framework that allows developers, whose projects are identified to have a VMT related impact, to provide mitigation through a payment of fees, which ultimately fund VMT reducing infrastructure and/or programs. Programmatic VMT mitigation is generally a more effective approach in reducing VMT, as it allows jurisdictions to implement multi-modal infrastructure as a full system, with limited gaps, in areas with higher densities where the infrastructure is most effective.

Relying on new development to provide on-site or localized mitigation can result in a dis-jointed multi-modal network with large gaps. Localized mitigation also does not take advantage of areas with larger populations where there is a higher propensity for existing travels to use the multi-modal infrastructure implemented through the program in-lieu of personal automobile travel. As such, VMT Mitigation Programs allow for developers to take credit for VMT that is reduced from existing land uses, thus, reducing the net VMT of the jurisdiction, or the region as a whole. Thus, reducing the existing VMT allows for VMT reduction credits to be taken from a much larger pool of land uses instead of being limited to the VMT in which a specific project, or its directly surrounding area, generates. The following are different examples of programmatic VMT mitigation models that can be implemented:

VMT Based Fee Program – Developments are assessed a fee based on the severity of their VMT related impact. The fee will be based on new development's fair share cost to implement off-site VMT reducing infrastructure to offset or reduce new development's impact to less than significant. The revenue collected from the fee program can then be used to implement the multi-modal infrastructure improvements outlined in the RTP, or other CIP programs.

VMT Mitigation Banking – Developments can buy VMT reduction credits from the County or other jurisdictions within the region, that are the result of previously constructed VMT reducing infrastructure or planned infrastructure that will be constructed within the near future. This program would operate very similar to a biological mitigation banking program. The fees collected from this program would then be used to construct additional VMT reducing infrastructure in new locations, or be used to close gaps within the existing mulita-modal network, thus making the network more efficient.

VMT Exchange Program – Developments with VMT related impacts would work with the County, or other local jurisdictions, to fund and implement off-site VMT reducing infrastructure and/or programs to off-set their VMT related impacts. This program would allow new development within suburban and rural jurisdictions to invest in multi-modal/VMT reducing infrastructure in more urban jurisdictions where higher reductions are possible and more efficient.

Hybrid Program – VMT mitigation programs are not just limited to using a single methodology, a hybrid program, using components from the three types listed above, can also be developed.

VMT mitigation models help to provide a bridge for new development, within suburban and rural areas, to feasibly mitigate their VMT related impacts. It does this by allowing new development to invest in

multi-modal infrastructure where it is the most effective and will provide the most benefit for the highest number of people within the region. It also provides an equitable option for smaller new developments to mitigate their impacts, as it will provide them a path forward to affordable, feasible mitigation. This will allow smaller new development to continue to utilize the mitigated negative declaration CEQA process in-lieu of requiring a full environmental impact report to disclose significant and unavoidable VMT related impacts.

3.0 Peer VMT Reduction Programs

The changes to the CEQA guidelines associated with SB-743 went into effect on July 1, 2020. In response to these changes several jurisdictions throughout the state are currently in the process of developing and testing VMT mitigation programs to provide a path for new development to mitigate their VMT related impacts. However, only one jurisdiction within the region, the City of San Diego, has adopted and implemented a VMT Mitigation Program at this point.

> *City of San Diego Active Transportation In-Lieu Fee Program* - The City of San Diego adopted their Active Transportation In-Lieu Fee Program (ATILFP)[4], in November 2020. The ATILFP collects fees from new development that is identified to have a VMT related impact and invests that revenue into VMT reducing infrastructure (bike facilities, pedestrian facilities, transit service, and micro-mobility) in the areas of the City which have the highest densities (urban areas) and where the infrastructure will be the most effective. This allows new development located within the suburban areas of the City to mitigate their VMT related impacts via multi-modal infrastructure implemented within the most effective areas in the City. Therefore, the program results in lower costs to mitigate the impacts of new development, as well as additional investment in multi-model instructed where it is the most needed and effective. The City's ATILFP imposes a fee of $1,400 per mile of vehicular travel in which a development needs to reduce to mitigate their impact.

It should be noted that both the City of Chula Vista and the City of Encinitas are in the process of developing a VMT Mitigation Program; however, a draft fee program has not yet been released. Additionally, other agencies around the state are investigating and testing different VMT Mitigation Programs including LADOT & LA Metro, Western Riverside Council of Governments (WRCOG)[5], Metropolitan Transportation Commission (MTC)[6], and Contra Costa County[4]. However, these jurisdictions have not yet released a draft program to this point.

4.0 Cost to Mitigate VMT within the Unincorporated County

Based on an initial study conducted by Fehr & Peers in March 2021, it is estimated that the cost to reduce one mile of VMT within the County of San Diego would be between $10,000 and $19,000. The details of this analysis are provided in Attachment 2. Based on this analysis it would be 7 to 13 times more expensive for new development to mitigate their VMT related impacts, via a program that operates solely within the unincorporated County, than the City of San Diego's ATILFP. As noted under Section 2.1, VMT reducing infrastructure is very effective in high density urban areas. Thus, multi-modal infrastructure implemented in urban areas such as Downtown, Bankers Hill and Hillcrest will reduce a greater amount of VMT than the same infrastructure would in suburban areas such as Lakeside, Spring Valley and Fallbrook. Therefore, even though the cost to implement VMT reducing infrastructure is similar within both area types, the infrastructure located within the urban areas may be 10 times more effective at reducing VMT. As such, the cost per VMT reduced ends up being substantially lower within more urban areas.

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[4] https://www.sandiego.gov/complete-communities
[5] https://issuu.com/fehrandpeers/docs/vmt_exchangeandbank
[6] Received a Caltrans Sustainability Grant

Additionally, based on the County VMT analysis provided in Attachment 2, it is not expected that the County's transportation network has the capacity to implement a sufficient number of VMT reducing infrastructure, in VMT efficient areas, to reduce the VMT related impacts associated with new development to a less than significant level. If a VMT Mitigation Program is only focused to Key Village Core Areas or a set smart growth areas a VMT Mitigation Program may be more available and cost effective. However, additional research and study is needed to confirm this approach.

5.0 Recommendations

Based on the information provided in the previous sections the following recommendations are provided on how the County can move forward in implementing a VMT Mitigation Program.

5.1 Work With SANDAG to Develop a Regional VMT Mitigation Program

As noted in Section 4.0, mitigating VMT related impacts exclusively within the unincorporated portions of the County may be significantly more costly than other jurisdictions and may also not be fully feasible. Therefore, it recommended that the County work with SANDAG to develop a regional VMT Mitigation Program that will help to fund the multi-modal infrastructure identified within the *San Diego Forward – The 2021 Regional Pla*n and reduce VMT throughout the region as a whole. A regional VMT mitigation program will allow new development within the County to get VMT credit from regional infrastructure such as new transit lines and services as well as multi-modal infrastructure that is being implemented within highly efficient areas. Additionally, the *San Diego Forward – The 2021 Regional Pla*n DEIR has identified that the implementation of the proposed Plan will result in a 14.1% reduction in the regions VMT per capita by 2050 (as compared to Year 2016 conditions). This in conjunction with other localized improvements, such as Transportation Demand Management (TDM)[7], may be sufficient to reduce VMT related impacts within the unincorporated portions of the County to less than significant.

Additionally, if the County works with SANDAG in the development of a Regional VMT Mitigation Program, they can help to develop the process in which regional multi-modal infrastructure is prioritized and implemented. This may help to ensure that additional transit services and other regional VMT reducing infrastructure, included in the program, will be implemented within the unincorporated areas. It should also be noted that the development of a Regional VMT Mitigation Program would not preclude the County from developing and implementing its own localized VMT Mitigation Program. The two programs could work in unison and have a similar relationship as SANDAG's Regional Transportation Congestion Improvement Program (RTCIP), and the County's Transportation Impact Fee Program previously did from 2005 to 2020.

Finally, the County and SANDAG could join together to pursue a Caltrans Partnership Grant, which would provide funding for the development and implementation of the Regional VMT Mitigation Program. County and SANDAG staff have had initial discussions regarding this opportunity and have identified the 2022/2023 grant cycle as a potential timeframe to pursue this option.

5.2 Work with the City of San Diego to Develop a Joint Program

As noted in Section 3.0, the City of San Diego has already established a VMT Mitigation Program, with a fee rate of $1,400 per reduced VMT. This is substantially lower than the projected cost of $10,000 and $19,000 per reduced VMT that is anticipated within the unincorporated areas. It is anticipated that the City has enough population and network capacity within its urban areas to accommodate additional VMT reducing infrastructure, beyond what it needs to accommodate its own future growth. Therefore, if a regional program with SANDAG cannot be established, it is recommended that the County work with the City of San Diego to either expand the ATILFP into the unincorporated areas, or develop a hybrid program where new development could mitigate a portion of their VMT related impacts through a localized County VMT Mitigation Program and mitigate the remaining portion of their VMT related

7*Transportation Demand Management*: Policies, infrastructure and strategies that aim to reduce travel demand, particularly single occupant vehicles, or to redistribute that demand to off-peak times.

impacts through City's ATIL Fee Program. This approach would allow new development within the unincorporated areas to fully mitigate their VMT related impacts at a more affordable rate while still helping to fund some VMT reducing infrastructure within targeted areas of the County.

Similar to the Regional VMT Mitigation Program, the County of San Diego could partner with the City of San Diego to pursue a Caltrans Sustainability Grant. The grant could assist with the funding for the development and implementation of the program. During the outreach process for the City's ATILFP, County and City staff had preliminary discussions about the potential of a joint program, or allowing new development within the County to participate in the ATLIFP. The County could reignite these discussions with City staff if this option is chosen.

Finally, it should be noted that this approach will most likely require some form of CEQA documentation and review process. The City of San Diego did include the ATILFP as a mitigation measure for their *Complete Communities Housing Solutions and Mobility Choices PEIR*[8]. This allowed the City to link the benefits of the program directly to the anticipated impacts associated with new development within the City. As such, the County may need to incorporate the proposed VMT Mitigation Fee Program as a mitigation measure within a subsequent EIR effort, such as the Climate Action Plan EIR.

5.3 Develop a County Specific VMT Mitigation Program

The final option would be for the County to develop their own localized VMT Mitigation Program. As outlined in Section 4.0, the cost to fully mitigate VMT impacts solely within the unincorporated areas may not be financially feasible for most new development projects, and the County may not have the VMT reducing capacity to fully mitigate the VMT related impacts associated with all new development within the unincorporated areas. As such, under this approach the County would most likely need to conduct a subsequent CEQA effort to identify and disclose the VMT related impacts associated with new development, identify the VMT Mitigation Program as partial mitigation for the impacts, and identify that the mitigation would not be sufficient to fully mitigate all VMT related impacts, thus concluding that the VMT related impacts associated with new development would be significant and unavoidable.

The County could peruse a Caltrans Sustainable Communities Grant to assist with the funding for the development of the fee program and the subsequent EIR effort. However, since it is anticipated that the County would not be able to fully mitigate its VMT related impacts through the program, it may not be as competitive for grant funding as other efforts.

[8] https://www.sandiego.gov/sites/default/files/final_peir_for_complete_communities_housing_solutions_and_mobility_choices.pdf

Attachment 1
Area Type Definition

As used in this Report, location settings are defined as follows:

Urban: A project located within the central city and may be characterized by multi-family housing, located near office and retail. Downtown Oakland and the Nob Hill neighborhood in San Francisco are examples of the typical urban area represented in this category. The urban maximum reduction is derived from the average of the percentage difference in per capita VMT versus the California statewide average (assumed analogous to an ITE baseline) for the following locations:

Location	Percent Reduction from Statewide VMT/Capita
Central Berkeley	-48%
San Francisco	-49%
Pacific Heights (SF)	-79%
North Beach (SF)	-82%
Mission District (SF)	-75%
Nob Hill (SF)	-63%
Downtown Oakland	-61%

The average reflects a range of 48% less VMT/capita (Central Berkeley) to 82% less VMT/capita (North Beach, San Francisco) compared to the statewide average. The urban locations listed above have the following characteristics:

- Location relative to the regional core: these locations are within the CBD or less than five miles from the CBD (downtown Oakland and downtown San Francisco).
- Ratio or relationship between jobs and housing: jobs-rich (jobs/housing ratio greater than 1.5)
- Density character
  - typical building heights in stories: six stories or (much) higher
  - typical street pattern: grid
  - typical setbacks: minimal
  - parking supply: constrained on and off street
  - parking prices: high to the highest in the region
- Transit availability: high quality rail service and/or comprehensive bus service at 10 minute headways or less in peak hours

Compact infill: A project located on an existing site within the central city or inner-ring suburb with high-frequency transit service. Examples may be community redevelopment areas, reusing abandoned sites, intensification of land use at established transit stations, or converting underutilized or older industrial buildings. Albany and the Fairfax area of Los Angeles are examples of typical compact infill area as used here. The compact infill maximum reduction is derived from the average of the percentage difference in per capita VMT versus the California statewide average for the following locations:

Location	Percent Reduction from Statewide VMT/Capita
Franklin Park, Hollywood	-22%
Albany	-25%
Fairfax Area, Los Angeles	-29%
Hayward	-42%

The average reflects a range of 22% less VMT/capita (Franklin Park, Hollywood) to 42% less VMT/capita (Hayward) compared to the statewide average. The compact infill locations listed above have the following characteristics:

- Location relative to the regional core: these locations are typically 5 to 15 miles outside a regional CBD
- Ratio or relationship between jobs and housing: balanced (jobs/housing ratio ranging from 0.9 to 1.2)
- Density character
  - typical building heights in stories: two to four stories
  - typical street pattern: grid
  - typical setbacks: 0 to 20 feet
  - parking supply: constrained
  - parking prices: low to moderate
- Transit availability: rail service within two miles, or bus service at 15 minute peak headways or less

As used in this Report, additional location settings are defined as follows:

Suburban Center: A project typically involving a cluster of multi-use development within dispersed, low-density, automobile dependent land use patterns (a suburb). The center may be an historic downtown of a smaller community that has become surrounded by its region's suburban growth pattern in the latter half of the 20th Century. The suburban center serves the population of the suburb with office, retail and housing which is denser than the surrounding suburb. The suburban center maximum reduction is derived from the average of the percentage difference in per capita VMT versus the California statewide average for the following locations:

Location	Percent Reduction from Statewide VMT/Capita
Sebastopol	0%
San Rafael (Downtown)	-10%
San Mateo	-17%

The average reflects a range of 0% less VMT/capita (Sebastopol) to 17% less VMT/capita (San Mateo) compared to the statewide average. The suburban center locations listed above have the following characteristics:

- Location relative to the regional core: these locations are typically 20 miles or more from a regional CBD
- Ratio or relationship between jobs and housing: balanced
- Density character
  - typical building heights in stories: two stories
  - typical street pattern: grid
  - typical setbacks: 0 to 20 feet
  - parking supply: somewhat constrained on street; typically ample off-street
  - parking prices: low (if priced at all)
- Transit availability: bus service at 20-30 minute headways and/or a commuter rail station

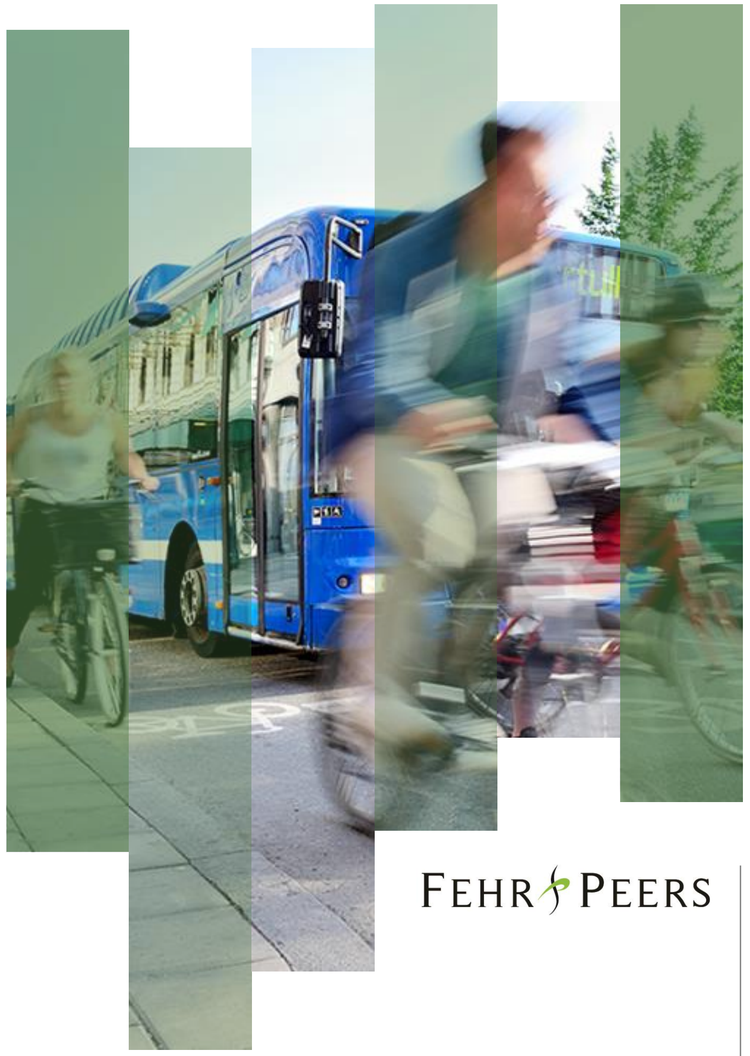
While all three locations in this category reflect a suburban "downtown," San Mateo is served by regional rail (Caltrain) and the other locations are served by bus transit only. Sebastopol is located more than 50 miles from downtown San Francisco, the nearest urban center. San Rafael and San Mateo are located 20 miles from downtown San Francisco.

Suburban: A project characterized by dispersed, low-density, single-use, automobile dependent land use patterns, usually outside of the central city (a suburb). Suburbs typically have the following characteristics:

- Location relative to the regional core: these locations are typically 20 miles or more from a regional CBD
- Ratio or relationship between jobs and housing: jobs poor
- Density character
  - typical building heights in stories: one to two stories
  - typical street pattern: curvilinear (cul-de-sac based)
  - typical setbacks: parking is generally placed between the street and office or retail buildings; large-lot residential is common
  - parking supply: ample, largely surface lot-based
  - parking prices: none
- Transit availability: limited bus service, with peak headways 30 minutes or more

The maximum reduction provided for this category assumes that regardless of the measures implemented, the project's distance from transit, density, design, and lack of mixed use destinations will keep the effect of any strategies to a minimum.

Attachment 2
Preliminary VMT Mitigation Cost Study



FEHR PEERS

Programmatic VMT Mitigation Strategies – County Options with Qualitative Comparison

Director Briefing: 2/3/2021

Mitigation Program Options

Program Type	Description
VMT Fee	Impact fee program based on a VMT reduction goal
VMT Exchange	Developers select from a pre-approved list of mitigation projects/programs based on the developer's needed VMT reduction; developer then funds and implements the selected project/program
VMT Bank	Developer's buy VMT credits that are used to fund larger scale VMT reducing projects or programs. Developers buy the credits and projects/programs are implemented by others

Programmatic VMT Mitigation Questions & Options

Which type of mitigation program?

- VMT Impact Fee: Voluntary (only projects with impacts pay) or Mandatory (all project pay)
- VMT Mitigation Exchange
- VMT Mitigation Bank

Who is the coordinating entity/agency?

- County of San Diego
- Another Agency
  - SANDAG
  - City of San Diego
  - Others that establish a mitigation program (TBD)

Are there any partner agencies?

- No, County of San Diego only
- Yes, partner with other agencies (ex., MTS, NCTD, etc.)

Coordinating Agency Options

County of San Diego

- The County would be responsible for creating and administering the program – **more control for the County**
- Mitigation measures could only be used within the unincorporated County – as the County is primarily rural, mitigation measures there could be **less effective at reducing VMT**

Regional Agency

- A regional agency would create and administer the program for the County and other agencies
- The mitigation measures for projects in the County could be in other geographic areas – measures in more urban areas could be **more effective at reducing VMT**
- The County would have less control over what measures are implemented, and the measures would not likely be in the unincorporated area

Partnerships with Other Agencies - Options

County of San Diego (No Partnership)

- The County would not partner with any other agencies
- Each program could only use mitigation measures under the control/jurisdiction of the County – there would be **fewer mitigation measures available** to developers

Partnership with Other Agencies

- The County, as the coordinating agency, could establish partnerships with other agencies
- The County, as the coordinating agency, could work with other agencies to make **more mitigation measures available** (ex., transit pass subsidies with MTS)
- If the coordinating agency is a regional body, there would be more potential partner agencies

Partnerships with Other Agencies - Options

Potential Partner Agencies	Example Projects
MTS	Purchasing buses, capital improvements, fare subsidies
NCTD	Purchasing buses, capital improvements, fare subsidies
Caltrans	Contribution to unfunded bike/ped projects on the state highway network within the County
SANDAG	Flexible fleets, teleworking, commute program
City of San Diego	County developers could pay into the existing City program

VMT Mitigation Program Alternatives

Program Type?	No Program	VMT Fee (In-Lieu – Only for Projects that Have Impacts)	VMT Fee (Mandatory Applies to Everyone)	VMT Exchange			VMT Bank		
Coordinating Agency?	County	County	County	County	County	Regional	County	County	Regional
Partner Agencies?	County Only	County Only	County Only	County Only	Partnership with MTS, NCTD, Caltrans	Partnership with SANDAG, participation in City of San Diego program	County Only	Partnership with MTS, NCTD, Caltrans	Partnership with SANDAG, participation in City of San Diego program
Sample Projects	Project design modifications, TDM programs	Pedestrian, bicycle, or transit infrastructure projects Could be standards based (cost to reduce 1 VMT) or plan based (VMT reduced by a specified list of projects)		Same as fee options, + county developed alternative mode incentive program (free bikes, etc.)	Same as fee & exchange county only options, + transit service improvements		Same as exchange & fee options, + transportation, telecommute incentive programs	Same as exchange, fee, bank county only options, + transit pass subsidies, transit service improvements	
Likelihood to Fully Mitigate VMT	Low	Low		Low	Medium	High	Low	Medium	High

VMT Mitigation Alternatives Evaluation Questions

- Which program alternatives can fully reduce all VMT associated with future growth in the County? Which alternatives have the highest and lowest VMT reduction potential?
- Which programs have the highest and lowest costs to create the program and for ongoing maintenance of the program?
- Which program alternatives would result in the highest and lowest costs fees, which could affect home prices?

VMT Mitigation Program Alternatives

Program Type?	No Program	VMT Fee (In-Lieu)	VMT Fee (Mandatory)	VMT Exchange			VMT Bank		
Coordinating Agency?	County	County	County	County	County	Regional	County	County	Regional
Partner Agencies?	County Only	County Only	County Only	County Only	Partnership with MTS, NCTD, Caltrans	Partnership with SANDAG or City of San Diego	County Only	Partnership with MTS, NCTD, Caltrans	Partnership with SANDAG or City of San Diego
Pros	• County control • Easy to administer • Low risk	• County control • Straightforward to develop • Easy to administer • Low risk • Could do a GP focused EIR to disclose significant and unavoidable impact and allow tiering		• County control • Could do a GP focused EIR to disclose significant and unavoidable impact and allow tiering	• Medium cost to developers • County control • Access to more types of mitigation than if County only • Could do a GP focused EIR to disclose significant and unavoidable impact and allow tiering	• Likely to mitigate most VMT • Lower cost to developers • Access to more types of mitigation than if County only • Could do a GP focused EIR to disclose significant and unavoidable impact and allow tiering	• County control • Could do a GP focused EIR to disclose significant and unavoidable impact and allow tiering	• Medium cost to developers • County control • Access to more types of mitigation than if County only • Could do a GP focused EIR to disclose significant and unavoidable impact and allow tiering	• Likely to mitigate most VMT as compared to other options • Lower cost to developers • Could do a GP focused EIR to disclose significant and unavoidable impact and allow tiering
Cons	• Unlikely to fully mitigate VMT • High cost to developers	• Unlikely to fully mitigate VMT • If fully mitigated there would be a high cost and could lead to higher housing costs		• Unlikely to fully mitigate VMT • High cost to developers (for full mitigation)	• Need to establish relationships with partner agencies	• Not under County control • Mitigation measures might not benefit County	• Unlikely to fully mitigate VMT • High cost to developers for full mitigation • Annual price variation • Expensive to develop, maintain	• Annual price variation • Expensive to develop, maintain	• Not under County control • Mitigation measures might not benefit County • Annual price variation • Expensive to develop, maintain

VMT Mitigation Program Alternatives – Hypothetical Costs General Plan (SANDAG 2050) Assumptions

Program Type?	VMT Fee (In-Lieu, i.e. only charging projects that have a SI based on the VMT that is needed to reduce)	VMT Fee (Mandatory, i.e. spreading the cost over more growth)	VMT Exchange (only charging projects that have a SI based on the VMT that is needed to reduce)			VMT Bank (only charging projects that have a SI based on the VMT that is needed to reduce)		
Coordinating Agency?	County	County	County	County	Regional	County	County	Regional
Partner Agencies?	County Only	County Only	County Only	Partnership with MTS, NCTD, Caltrans	Partnership with SANDAG or City of San Diego	County Only	Partnership with MTS, NCTD, Caltrans	Partnership with SANDAG or City of San Diego
30 Year Program Cost (Capital Cost plus Annual Ongoing Costs)	$460M	$460M	$1B	$1.9B	$12B	$1.8B	$3B	$23B
Expected Program VMT Reduction/ % of Reduction Goal	25K VMT 4% of Goal	25K VMT 4% of Goal	85K VMT 13% of Goal	105K VMT 17% of Goal	575K 90% of Goal	185K VMT 30% of Goal	250K VMT 40% of Goal	1.3M VMT 205% of Goal
Total Cost to Reduce 1 VMT for 30 years for full mitigation*	$19,000	$19,000	$11,000	$18,000	$22,000	$10,000	$12,000	$18,000
Total Cost per VMT if only charging developers for identified programs (partial mitigation)	$700/VMT Charged based on number of VMT that need to be reduced	$90/VMT Charged to all projects based on residential VMT added	$1,500/VMT Charged based on specific program selected by applicant based on VMT reduction need	$3,000/VMT Charged based on specific program selected by applicant based on VMT reduction need	$20,000/VMT Charged based on specific program selected by applicant based on VMT reduction need	$3,000/VMT Charged to all projects based on residential VMT added	$5,000/VMT Charged to all projects based on residential VMT added	See full mitigation above

*For the fee program and County lead options, there isn't enough capital improvements or programs that can get close to full mitigation; therefore, the numbers are just reported for comparison purposes.

VMT Mitigation Program Alternatives – **Hypothetical Costs**

CAP Smart Growth Option (See Green Highlighted Rows)

Program Type?	**VMT Fee** (In-Lieu, i.e. only charging projects that have a SI based on the VMT that is needed to reduce)	**VMT Fee** (Mandatory, i.e. spreading the cost over more growth)	**VMT Exchange** (only charging projects that have a SI based on the VMT that is needed to reduce)			**VMT Bank** (only charging projects that have a SI based on the VMT that is needed to reduce)		
Coordinating Agency?	County	County	County	County	Regional	County	County	Regional
Partner Agencies?	County Only	County Only	County Only	Partnership with MTS, NCTD, Caltrans	Partnership with SANDAG or City of San Diego	County Only	Partnership with MTS, NCTD, Caltrans	Partnership with SANDAG or City of San Diego
30 Year Program Cost (Capital Cost plus Annual Ongoing Costs)	$460M	$460M	$1B	$1.9B	$12B	$1.8B	$3B	$23B
Expected Program VMT Reduction/ % of Reduction Goal	**25K VMT 50% of Goal**	**25K VMT 50% of Goal**	**85K VMT 170% of Goal**	**105K VMT 210% of Goal**	**575K 1150% of Goal**	**185K VMT 370% of Goal**	**250K VMT 500% of Goal**	**1.3M VMT 2600% of Goal**
Total Cost to Reduce 1 VMT for 30 years for full mitigation*	$19,000	$19,000	$11,000	$18,000	$22,000	$10,000	$12,000	$18,000
Total Cost per VMT if only charging developers for identified programs (partial mitigation)	**$9,000/VMT Charged based on number of VMT that need to be reduced**	**$800/VMT Charged to all projects based on residential VMT added**	**See full mitigation above**	**See full mitigation above**	**See full mitigation above**	**See full mitigation above**	**See full mitigation above**	**See full mitigation above**

*For the fee program and County lead options, there isn't enough capital improvements or programs that can get close to full mitigation; therefore, the numbers are just reported for comparison purposes.

VMT Mitigation Program Alternatives – **Case Study Costs**

Project	VMT Fee (In-Lieu, i.e. only charging projects that have a SI based on the VMT that is needed to reduce)	VMT Fee (Mandatory, i.e. spreading the cost over more growth)	VMT Exchange (only charging projects that have a SI based on the VMT that is needed to reduce)			VMT Bank (only charging projects that have a SI based on the VMT that is needed to reduce)		
Partner Agencies?	County Only	County Only	County Only	Partnership with MTS, NCTD, Caltrans	Partnership with SANDAG or City of San Diego	County Only	Partnership with MTS, NCTD, Caltrans	Partnership with SANDAG or City of San Diego
Full Mitigation Option								
Smilax Townhomes 62 units	Unincorporated $0 - Screened	Unincorporated $0 - Screened	Unincorporated $0 - Screened	Unincorporated $0 - Screened	Unincorporated $0 - Screened	Unincorporated $0 - Screened	Unincorporated $0 - Screened	Unincorporated $0 - Screened
	Regional $7.1 million	Regional $7.1 million	Regional $4.2 million	Regional $6.8 million	Regional $8.3 million	Regional $3.8 million	Regional $4.5 million	Regional $6.8 million
Summit Estates 20 SFDs	Unincorporated $5 million	Unincorporated $5 million	Unincorporated $2.9 million	Unincorporated $4.8 million	Unincorporated $5.8 million	Unincorporated $2.6 million	Unincorporated $3.2 million	Unincorporated $4.8 million
	Regional $14 million	Regional $14 million	Regional $8.1 million	Regional $13.3 million	Regional $16.3 million	Regional $7.4 million	Regional $8.9 million	Regional $13.4 million
Ocean Breeze Ranch 398 SFDs	Unincorporated $510 million	Unincorporated $510 million	Unincorporated $ 295 million	Unincorporated $483 million	Unincorporated $590 million	Unincorporated $268 million	Unincorporated $322 million	Unincorporated $483 million
	Regional $690 million	Regional $690 million	Regional $400 million	Regional $653 million	Regional $800 million	Regional $363 million	Regional $436 million	Regional $654 million
Santoyo 17 SFDs	Unincorporated $1.9 million	Unincorporated $1.9 million	Unincorporated $1.1 million	Unincorporated $1.8 million	Unincorporated $2.2 million	Unincorporated $1 million	Unincorporated $1.2 million	Unincorporated $1.8 million
	Regional $9.5 million	Regional $9.5 million	Regional $5.5 million	Regional $9 million	Regional $11 million	Regional $5 million	Regional $6 million	Regional $9 million

VMT Mitigation Program Alternatives – **Case Study Costs**

Project	VMT Fee (In-Lieu, i.e. only charging projects that have a SI based on the VMT that is needed to reduce)	VMT Fee (Mandatory, i.e. spreading the cost over more growth)	VMT Exchange (only charging projects that have a SI based on the VMT that is needed to reduce)			VMT Bank (only charging projects that have a SI based on the VMT that is needed to reduce)		
Partner Agencies?	County Only	County Only	County Only	Partnership with MTS, NCTD, Caltrans	Partnership with SANDAG or City of San Diego	County Only	Partnership with MTS, NCTD, Caltrans	Partnership with SANDAG or City of San Diego
Partial Mitigation Option								
Smilax Townhomes 62 units	Unincorporated $0 - Screened	Unincorporated $0 - Screened	Unincorporated $0 - Screened	Unincorporated $0 - Screened	Unincorporated $0 - Screened	Unincorporated $0 - Screened	Unincorporated $0 - Screened	Unincorporated $0 - Screened
	Regional $282,000	Regional $33,840	Regional $564,000	Regional $1.1 million	Regional $7.5 million	Regional $1.1 million	Regional $1.9 million	n/a
Summit Estates 20 SFDs	Unincorporated $184,000	Unincorporated $24,000	Unincorporated $400,000	Unincorporated $800,000	Unincorporated $5.2 million	Unincorporated $800,000 million	Unincorporated $1.3 million	n/a
	Regional $520,000	Regional $66,000	Regional $1.1 million	Regional $2.2 million	Regional $14.7 million	Regional $2.2 million	Regional $3.7 million	n/a
Ocean Breeze Ranch 398 SFDs	Unincorporated $18.8 million	Unincorporated $2.4 million	Unincorporated $ 40 million	Unincorporated $80 million	Unincorporated $536 million	Unincorporated $80 million	Unincorporated $131 million	n/a
	Regional $25 million	Regional $3.2 million	Regional $55 million	Regional $108 million	Regional $726 million	Regional $108 million	Regional $181 million	n/a
Santoyo 17 SFDs	Unincorporated $70,000	Unincorporated $9,000	Unincorporated $150,000	Unincorporated $300,000	Unincorporated $2.2 million	Unincorporated $300,000	Unincorporated $500,000	n/a
	Regional $350,000	Regional $45,000	Regional $750,000	Regional $1.5 million	Regional $10 million	Regional $1.5 million	Regional $2.5 million	n/a

CEQA Considerations – GP Focused EIR

Potential CEQA Clearance for Project Streamlining:

- **Steps in the Process for Providing Streamlining to Applicants** *(that are Consistent with the General Plan and utilize the programmatic VMT mitigation):*

1. Perform a General Plan focused EIR (could be for the mobility element, land use element, etc.) and analyze VMT resulting from growth in the County, this would result in a significant impact.
    - The program would be used as partial mitigation for the impact.
    - The program plus all feasible mitigation* would not mitigate the full impact.
    - The Board would certify the EIR with a statement of overriding considerations for the VMT impact.

2. A land use project with a VMT impact tiers from the certified EIR.
    - Must be consistent with the General Plan and participate in the VMT program.
    - Must also implement other feasible mitigation as identified in the focused EIR.
    - Would receive environmental coverage and use of the already disclosed significant and unavoidable impact.

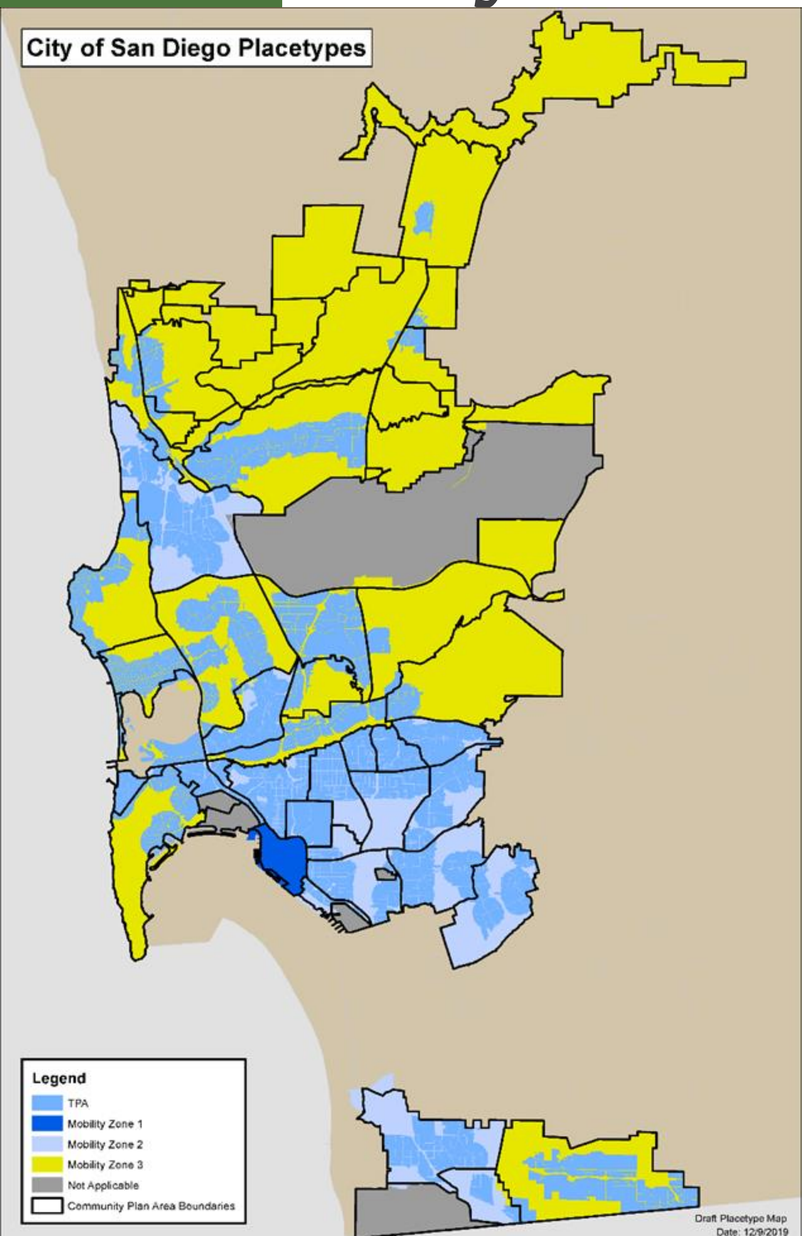
This strategy has been used by other agencies such as the City of San Diego and City of Chula Vista (in process).

**§ 21002. APPROVAL OF PROJECTS; FEASIBLE ALTERNATIVE OR MITIGATION MEASURES*
….The Legislature further finds and declares that in the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.

Initial Conclusions

- Regional programs have the most potential for full mitigation.
- County administered programs have limited potential for full mitigation.
- If partial mitigation is acceptable, County administered programs will have the lowest cost to developers.

City of San Diego Example

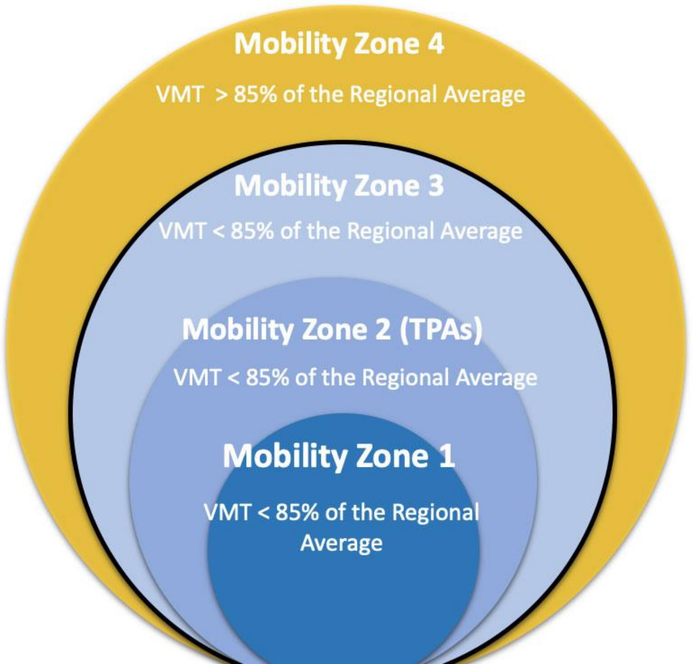


Mobility Zone 4

Mobility Zone 4

VMT > 85% of the Regional Average

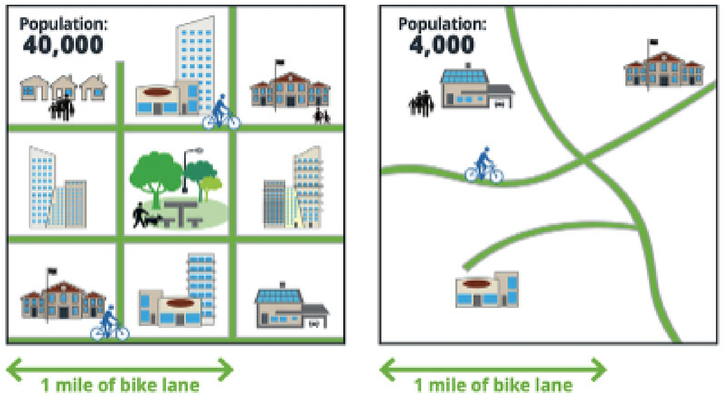
Development to mitigate VMT by paying the **Active Transportation In Lieu Fee.** Fee is based on active transportation infrastructure improvements in Mobility Zones 2 and 3 to reduce citywide VMT.



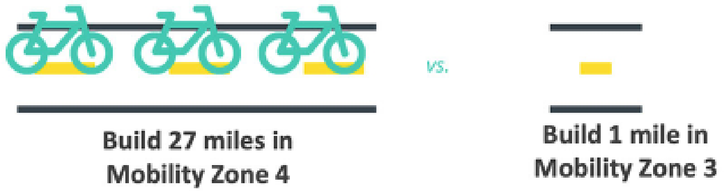
Mobility Choices Active Transportation In Lieu Fee

- Required in Mobility Zone 4 and optional in Mobility Zones 2 and 3 in-lieu of required Active Transportation Measures
- Investing in VMT reducing infrastructure in Mobility Zone 4 yields the least amount of Citywide VMT reductions
- Instead, it is **cheaper** and **more efficient** to invest in VMT reducing facilities in Mobility Zones 1, 2 and 3

Each mile of bike lane or sidewalk improvement invested in Mobility Zones 1, 2 or 3 can serve many more people and destinations, which will lead to greater reductions in Citywide vehicle-miles traveled and more walkable, livable neighborhoods.



You would have to build 27 miles of bike lane in Mobility Zone 4 to get the same VMT reductions as 1 mile of bike lane in Mobility Zone 3! We want to build bike lanes where they will be used the most.



Questions?