



SAN FRANCISCO PLANNING DEPARTMENT

MEMO

Appendix L Vehicle Miles Traveled/Induced Automobile Travel Memorandum

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RE: **Transportation Impact Analysis Guidelines Update, Vehicle Miles Traveled/Induced Automobile Travel**

INTRODUCTION

The prior Transportation Impact Analysis Guidelines did not include the Vehicle Miles Traveled (VMT) topic. VMT is a measure of the amount and distance of vehicle travel attributable to a project, including induced automobile travel. On March 3, 2016, the San Francisco Planning Commission adopted a resolution to modify the environmental review process by removing automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, as a significant impact on the environment pursuant to the California Environmental Quality Act and replacing it with VMT criteria.¹

This memorandum provides guidance on the VMT topic. The department prepared this memorandum in consultation with stakeholders (e.g., city and county agencies, consultants). The department will issue memoranda that provide updates to other topics (e.g., transit, loading) within the guidelines. When the department issues a memorandum about a topic, it will supersede existing guidance regarding that topic.

This memorandum provides specific guidance on the methodology and impact analysis required for the VMT transportation topic. Overall guidance on conducting transportation analysis for environmental review, including developing the project description, how to address the significance criteria, methodology, and impact analysis, is in the guidelines.

The guidance provided herein assumes a land use development project located outside of an area plan that requires a transportation impact study. Guidance on other types of projects, such as projects located in an area plan or infrastructure projects, is discussed below under the "Other" subsection. The department may use this guidance for multiple projects, but the department has discretion on applying the guidance on a project by project basis.

¹ Planning Commission Resolution No. 19579, adopted March 3, 2016.

The organization of the memorandum is as follows:

- 1) Project Description
- 2) Significance Criteria
- 3) Existing and Existing plus Project
 - a) Methodology
 - b) Existing Baseline
 - c) Impact Analysis
- 4) Cumulative
 - a) Methodology
 - b) Impact Analysis
- 5) Other (covers different types of projects)

Attachments are under separate cover. Attachment A includes a screening criteria checklist. If a project meets the screening criteria, then the project would not be subject to the contents within this memorandum. The department may update the attachments to the memoranda more frequently than the body of the memoranda.

PROJECT DESCRIPTION

Refer to the Transportation Impact Analysis Guidelines Appendix A, Tables 1-3, for a list of the typical physical, additional physical, and programmatic features for existing and existing plus project conditions, as applicable. The geographic extent of these features must, at a minimum, include the project's frontage and may include the entirety of the project's block. Appendix A, Table 4 of the guidelines provides a non-exhaustive list of approvals from agencies other than the planning department that a project sponsor may need to obtain for the project description features described in the guidelines.

CSIGNIFICANCE CRITERIA

San Francisco Administrative Code chapter 31 directs the department to identify environmental effects of a project using as its base the environmental checklist form set forth in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. As it relates to VMT, Appendix G states: "For a land use project, would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?" The department uses the following significance criteria to evaluate that question: A project would have a significant impact if it:

- 1) Causes substantial additional vehicle miles traveled; or
- 2) Substantially induces additional automobile travel by increasing physical roadway capacity in congested areas (i.e. by adding new mixed flow travel lanes) or by adding new roadways to the network.

EXISTING AND EXISTING PLUS PROJECT

Methodology

This section describes the typical methodology required to address the significance criteria. The methodology section identifies the collection, generation, and approach to analyze data. The department will determine whether to adjust the methodology as necessary, to inform the analysis. General guidance on the typical methodology for a transportation analysis can be found in the guidelines. Specific direction on the appropriate geographical area and period of study for evaluating existing and existing plus project conditions for this topic, including data collection, is provided below. This section also indicates in bracketed text [] whether the presentation of typical methodological elements in other sections of a transportation study (e.g., baseline, impact analysis) could occur in text, a figure, and/or a table (see Appendix A of the guidelines for examples of typical tables).

Geography

The methodology will typically focus on the transportation analysis zone² that the project site is in or multiple transportation analysis zones if the project site is in more than one zone as well as the nine-county San Francisco Bay Area region.

Period

The methodology should typically reflect weekday daily VMT using an efficiency metric (e.g. VMT per capita or VMT per employee).

Existing Conditions

The following identifies the typical methodology for assessing existing conditions.

VMT

For most projects, use a travel demand model to estimate existing VMT. The travel demand model should, to the extent information is available, account for multiple variables that affect travel behavior and calibrate to reflect observed data. A travel demand model, the San Francisco County Transportation Authority's San Francisco Chained Activity Modeling Process (SF-CHAMP), accounts for many of these variables and the transportation authority calibrates the model to reflect observed data.³ The travel demand model should, to the extent information is available, account for VMT associated with private automobiles and for-hire vehicles.

For residential-type projects, estimate existing daily household VMT. The estimate should use a tour-based analysis (i.e., the outputs account for the entire chain of trips to and from a home). Then divide the total daily household VMT by the applicable geographic area household population to estimate VMT per capita. [text, figure, table]

For office-type projects, the methodology must estimate existing daily work-related VMT. The estimate should use a tour-based analysis (i.e., an output that accounts for the entire chain of trips to and from a job, including intermediary trips going to and from the workplace). Then divide the total daily work-related VMT by the applicable geographic area job population to estimate VMT per office employee. [text, figure, table]

³ The California Household Travel Survey 2010-2012 is the most current available household travel survey for the San Francisco Bay Area. SF-CHAMP is updated periodically as new data becomes available.

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For retail-type projects, estimate existing daily VMT. The estimate should use a trip-based analysis (i.e., the outputs account for trips to and from the project, not the chain) that allows apportioning of all retail related VMT to retail sites without double counting.⁴ Then divide the total daily retail related VMT by the applicable geographic area retail job population to estimate VMT per retail employee.⁵ [text, figure, table]

For mixed-use projects, estimate VMT for each the project land use type separately. For each applicable land use, present the appropriate existing VMT per employee or per capita for the project site transportation analysis zone(s) and region. The methodology must also present the existing regional VMT minus 15 percent. Refer to the definitions section of Attachment A for definitions of other land uses in relation to these three land uses.⁶

Transit Proximity

For most projects, identify if the existing site is within a half mile of an existing major transit stop.⁷

Existing plus Project Conditions

The following identifies the typical methodology for assessing existing plus project conditions.

VMT

Identify if the project site VMT is 15 percent below the regional VMT average for each applicable land use: residential, office, and retail. The department uses VMT efficiency metrics (per capita or per employee) for thresholds of significance. VMT per capita reductions mean that individuals will, on average, travel less by automobile than previously but, because the population will continue to grow, it may not mean an overall reduction in the number of miles driven.

Transit Proximity

For most projects, identify if the existing site is within a half mile of an existing major transit stop and if the project includes a floor area ratio greater than 0.75; includes parking less than or equal to the amount required or allowed by planning code, without a conditional use; and is consistent with the applicable Sustainable Communities Strategy.⁸

Vehicular Parking Rate Comparison

Most travel demand models do not directly account for vehicular parking supply in their VMT estimates. However, travel demand models may indirectly account for parking supply in their VMT estimates to the

⁴ To state another way: a tour-based assessment of VMT at a retail site would consider the VMT for all trips in the tour, for any tour with a stop at the retail site. If a single tour stops at two retail locations, for example, a coffee shop on the way to work and a restaurant on the way back home, then both retail locations would be allotted the total tour VMT. A trip-based approach allows the apportioning of all retail-related VMT to retail sites without double-counting.

⁵ Regional travel demand models do not typically explicitly capture retail travel. Rather, they typically include a generic "Other" purpose which includes retail shopping, medical appointments, visiting friends or family, and all other non-work, non-school tours. For SF-CHAMP, the retail efficiency metric captures all of the "Other" purpose travel generated by Bay Area households. The denominator of employment (including retail; cultural, institutional, and educational; and medical employment; school enrollment, and number of households) represents the size, or attraction, of the zone for this type of "Other" purpose travel.

⁶ Other land use projects mean a land use other than residential, retail, and office. OPR has not provided methodology for other types of land uses.

⁷ CEQA section 21064.3 defines a major transit stop as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

⁸ The department considers a project inconsistent with the Sustainable Communities Strategy if the Sustainable Communities Strategy did not identify the project site in area contemplated for development.

extent the parking supply affects the travel behavior of people within different geographic locations. For projects with a substantial amount of parking,^{9, 10} the methodology can address this indirect relationship. In these instances, include an estimate of the existing parking supply rate in the surrounding neighborhood (e.g., neighborhood parking rate) in comparison to the project's parking rate. Neighborhood parking rate¹¹ is the number of existing accessory parking spaces per 1,000 square feet of non-residential uses or the number of parking spaces per dwelling unit for residential uses for each transportation analysis zone within San Francisco. Alternatively, the methodology could estimate neighborhood parking rate using other methodologies the department identified in the Parking memorandum.

Transportation Demand Management Measures

Most travel demand models also do not directly account for other (i.e., besides parking) site-specific transportation demand management measures, that are applicable to the project, in their VMT estimates. If the project site VMT is not 15 percent below the regional VMT average for each applicable land use and the projects includes a substantial amount of parking that exceed the existing parking supply rate in the surrounding neighborhood (e.g., neighborhood parking rate), the methodology should, to the extent substantial evidence for transportation demand management measures' VMT reduction effectiveness is available, account for these transportation demand management measures being applied to the project by applying a percentage reduction to the VMT estimates derived using the above methodologies. For most transportation demand management measures, the percentage reduction would apply to the modal split calculation of the VMT analysis, while the vehicle occupancy and trip length would remain constant. If substantial evidence for transportation demand management measures is not available to quantify a percentage reduction, the methodology should qualitatively discuss whether the measures or other attributes of the project would reduce VMT per capita or employee.

Existing Baseline

Refer to the guidelines for direction on including existing baseline in transportation studies.

Impact Analysis

This section ties the project description, methodology, and existing baseline together to address the significance criteria for existing plus project conditions. This section addresses the typical approach for the impact analysis and provides more details related to VMT. The impact analysis section should present a format (text, figure, or table) consistent with earlier sections of this memorandum for easy comparison.

The impact analysis must address whether the project would create substantial VMT impacts. Refer to the guidelines for direction on what to consider when conducting the existing plus project impact analysis and how to present the findings.

Substantial VMT Impacts

The department uses the following quantitative thresholds of significance to address the substantial additional VMT significance criterion:

⁹ Refer to San Francisco Planning Commission, *Standards for the Transportation Demand Management Program*, August 4, 2016 or subsequent updates, for projects that meet this definition.

¹⁰ Throughout this memo, the term "substantial amount" or "substantial number" is used but not defined. This is because what constitutes a substantial amount or number of people, vehicles, etc., depends on the context in which the project is being evaluated (e.g., existing conditions, proposed land uses, and other variables).

¹¹ The methodology should use the neighborhood parking rate most appropriate for the project proposed (i.e., residential or non-residential uses). This neighborhood parking rate may differ from that rate used in the city's transportation demand management program (planning code section 169).

- A residential-type project would exceed the existing city household VMT¹² per capita minus 15 percent and the existing regional household VMT per capita minus 15 percent
- An office-type project would exceed the existing regional VMT per employee minus 15 percent
- A retail-type project would exceed the existing regional VMT per retail employee minus 15 percent

The following examples are some of the circumstances which may result in substantial VMT impacts. This is not an exhaustive list of circumstances, under which, potential VMT impacts may occur:

- A project site is in a transportation analysis zone with average daily VMT per capita and/or employee greater than 15 percent below the regional average daily VMT per capita and/or employee and project characteristics (e.g., code compliant TDM) would not reduce VMT to 15 percent below the existing regional average daily VMT per capita and/or employee
- A project site is in a transportation analysis zone with average daily VMT per capita and/or employee at or less than 15 percent below the regional average daily VMT per capita and/or employee and project characteristics (e.g., project parking rate substantially higher than the neighborhood parking rate) would increase site level VMT to greater than 15 percent below the existing regional average daily VMT per capita and/or employee, even accounting for other project characteristics (e.g., code compliant TDM) that would reduce VMT

CUMULATIVE

Methodology

VMT by its nature is largely a cumulative impact. The number of trips and distances of these trips of past, present, and future projects might cause people to contribute to the physical environmental impacts associated with VMT. It is likely that no single project by itself would be sufficient in size to prevent the region or state in meeting its VMT reduction goals. Instead, a project's individual VMT contributes to cumulative VMT impacts. The department set existing plus project-level thresholds of significance for VMT based on levels at which the department does not anticipate new projects to conflict with state and regional long-term greenhouse gas emission reduction targets and statewide VMT per capita reduction targets.

The guidelines detail the typical methodology for cumulative analysis, including the geographical area, period, cumulative projects, and adjustments (refer to Appendix B) under cumulative conditions. Further direction on identifying reasonably foreseeable projects for this topic under cumulative conditions is provided below. The cumulative section only needs to expand upon the methodology section for existing and existing plus project to the extent the methodology differs. The department will determine the appropriate methodology as necessary to inform the impact determination. The cumulative section in transportation studies must present (text, figure, or table) the applicable elements included in the methodology.

Vehicular Parking Rate Comparison

¹² Governor's Office of Planning and Research, Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA, January 20, 2016 recommends the city average as a possible threshold for areas where residential VMT is substantially higher than the regional average. Given San Francisco has lower residential VMT compared to the regional average, the department has chosen to use the regional average as the appropriate metric because the intent of the OPR Guidelines was not to disincentive developments that were located in proximity to major transit stops.

The methodology may require a list-based approach of cumulative projects (refer to the guidelines for a discussion of conducting a cumulative analysis using a list-based approach), as described above for projects that require a neighborhood parking rate comparison under existing plus project conditions analysis. The department has not projected neighborhood parking rate for cumulative conditions. To conduct a cumulative neighborhood parking rate comparison, the methodology should identify private development projects in the project site transportation analysis zone or adjacent transportation analysis zones actively undergoing environmental review, recently completed environmental review, or are anticipated to undertake environmental review in the near future with sufficient project definition. For these developments projects, the methodology should estimate the parking rate per residential unit and/or the parking rate per 1,000 square feet of non-residential use. Then, the methodology should qualitatively describe how existing neighborhood parking rate could change under cumulative conditions with development of the project in combination with these cumulative development projects. If the baseline neighborhood parking rate stays the same or goes down between existing and cumulative conditions, the project that is proposing parking greater than the neighborhood parking rate under existing plus project conditions would continue to have a parking rate higher than the neighborhood parking rate under cumulative conditions.

Impact Analysis

This section ties the methodology and description of cumulative conditions together to address the significance criteria for cumulative conditions. Refer to the guidelines for direction on what to consider when conducting the cumulative impact analysis and how to present the findings. The same examples of the types of circumstances that could result in a substantial VMT impact that were provided for existing plus project conditions apply here, except for cumulative conditions.

Substantial VMT Impacts

The impact analysis must address whether the cumulative projects would create substantial VMT impacts. The department uses the following thresholds of significance to address the substantial additional VMT significance criterion:

- The region would not meet its Sustainable Communities Strategy long-range greenhouse gas reduction goals or VMT reduction goals (if applicable)

If a cumulative impact would occur, the department uses the following quantitative thresholds of significance to address whether a project would contribute considerably to the substantial additional VMT significance criterion:

- A residential-type project would exceed the future city household VMT per capita minus 15 percent and the future regional household VMT per capita minus 15 percent
- An office-type project would exceed the future regional VMT per employee minus 15 percent
- A retail-type project would exceed the future regional VMT per retail employee minus 15 percent

The following examples are some of the circumstances which may result in substantial cumulatively considerable VMT impacts. This is not an exhaustive list of circumstances, under which, potential cumulatively considerable VMT impacts may occur:

- A project site is in a transportation analysis zone with future average daily VMT per capita and/or employee greater than 15 percent below the future regional average daily VMT per capita and/or employee and project characteristics (e.g., code compliant TDM) would not reduce VMT to 15 percent below the future regional average daily VMT per capita and/or employee
- A project site is in a transportation analysis zone with future average daily VMT per capita and/or employee at or less than 15 percent below the future regional average daily VMT per

capita and/or employee and project characteristics (e.g., project parking rate substantially higher than the neighborhood parking rate) would increase site level VMT to greater than 15 percent below the existing regional average daily VMT per capita and/or employee, even accounting for other project characteristics (e.g., code compliant TDM) that would reduce VMT

OTHER

The guidance provided in this memorandum assumes a land use development project located outside of an area plan that requires a transportation impact study. This section describes the type of additional or different information that may be necessary to address VMT impacts for the following circumstances: land use development project located within an area plan, an area plan, atypical trip generators, or infrastructure project (which may be located in a different county than San Francisco). In addition, this section describes the extent to which a code compliance analysis and/or a discussion of policy inconsistencies may be necessary.

Land Use Development Project Located within an Area Plan

For projects that are consistent with an area plan for which an environmental impact report (EIR) was certified, pursuant to CEQA guidelines section 15183, the assessment must limit its analysis to such conditions specified in that section. The guidelines provide direction on how to analyze a land use development project in an area plan and a list of area plan EIRs that have been certified as of February 2019. No mitigation and improvement measures from these abovementioned EIRs are related to VMT.

Area Plans

This section applies to area plans that include both land use (e.g. changes to existing zoning) and/or infrastructure changes (e.g. street redesign).

Project Description

Typically, the department conducts an analysis to estimate the amount of future growth and the infrastructure changes that could occur in the plan area as a result of its implementation. The department typically does not have all the project description details described herein. However, the project description may include policies that may relate to the methodology and impact analysis (e.g., off-street parking requirements). The department will determine the inclusion of programmatic features in the project description based on whether they are inherent project features, which may typically be considered, or whether they are actions related to project operations that are used to avoid a significant impact (e.g., funding mechanisms).

Methodology

The assessment will estimate daily VMT per appropriate efficiency metric associated with implementation of the area plan using the approach described in the Existing and Existing plus Project Methodology subsection. The methodology will estimate the appropriate efficiency metric using larger study geography such as transportation analysis zones in the plan area and the region.

Impact Analysis

If implementation of the area plan is consistent with the latest Sustainable Community Strategy (Plan Bay Area), then the area plan would not have a significant impact. Additionally, the analysis of VMT impacts should present daily VMT per efficiency metric for the plan area and region with and without implementation of the area plan. For example, the impact analysis will assess whether the area plan is located within an area contemplated for development in the latest Plan Bay Area and, if applicable, if its implementation leads to daily VMT per efficiency metric that is equal to or less than the VMT per

efficiency metric reduction goal or projected for the plan area within the latest Plan Bay Area cumulative year land use forecast and transportation system changes and policies.

Atypical Trip Generators or Substantial Rezoning

This section applies to projects that would require rezoning outside of area plans¹³, such that the development density allowed at a site would substantially increase, and the following non-exhaustive list of atypical trip generators: large event centers (e.g., museums, sports arenas, or public parking garage). For these projects, the assessment of the project description and significance criteria should be similar to Existing and Existing plus Project conditions identified herein.

Methodology

The methodology may typically require a different methodology than identified herein, including potentially requiring its own travel demand model run or VMT estimation based on sketch tools or other spreadsheet tools that estimate VMT based on land use and transportation characteristics. See Attachment B for examples of these sketch tools and spreadsheet tools. The methodology may identify, in order of preference, existing land uses and/or sources of data (e.g., surveys data, global positioning system user data) that are similar to the proposed atypical land use in San Francisco, the bay area, or California or nationally recognized transportation engineering materials. Based on that information, under both existing and existing plus project conditions, estimate to the extent applicable:

- The components of average daily VMT: trip generation, automobile modal split, vehicular occupancy, and automobile trip length
- Daily population or other relevant size variables such as employees, seats, size, rooms, etc.
- Average Daily VMT per appropriate efficiency metric using the relevant size variables above
- Change in total VMT of the site between existing and existing plus project

The methodology should also qualitatively describe the project in relation to the criteria set forth in California Senate Bill 743 (Public Resources Code Section 21099(b)(1)).¹⁴ For example, qualitatively describe the project in relation to diverting existing trips, reducing existing trip lengths, or overall reduction in existing trips.

Impact Analysis

The department may rely on one or more criteria to determine project impacts, including but not limited to: VMT per efficiency metric quantitative thresholds of significance mentioned for typical land use projects; change in total VMT; and the criteria set forth in California Senate Bill 743.

Infrastructure Project

For infrastructure projects (e.g., new roads, bridge repair, sewer line, rail service, roadway modifications, etc.), the assessment of the project description, significance criteria, and impact analysis should be similar to private development projects. The analysis typically does not require trip generation analysis as infrastructure projects usually do not generate trips.¹⁵ However, some infrastructure project may induce

¹³ On occasion, redevelopment of large areas within the city consisting of multi-structure, multi-phased development is proposed that is not within a formal plan area. These proposals often require rezoning in the form of special use districts or changes to zoning similar to the rezoning under an area plan. In terms of the project description, development for some aspects or phases may be well defined, while others may rely on consistency/conformance with associated design guidelines or performance standards.

¹⁴ The criteria for determining the significance of transportation impacts for projects “shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.”

¹⁵ Governor’s Office of Planning and Research, Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA, January 20, 2016.

trips, such as the addition of through lanes on existing or new highways or streets.¹⁶ In addition, infrastructure projects may generate short-term trips due to construction workers and vehicles accessing the project site. See Attachment C for research regarding infrastructure projects and their effects on VMT (as well as other research).

Project Description

The department will determine the inclusion of programmatic features in the project description based on whether they are inherent project features, which may typically be considered, or whether they are actions related to project operations that are used to avoid a significant impact (e.g., funding mechanisms).

Methodology

Use the following methodology to assess a transportation project's impacts to VMT.

- Assess whether the proposed infrastructure project can be considered an active transportation, rightsizing, transit project or a minor transportation project (see the definitions section of Attachment A for definition of these projects) or a non-trip inducing infrastructure project (e.g. installation of sewer lines, water lines, or other utilities).
- If the transportation project is not considered an active transportation, rightsizing, transit project or a minor transportation project, in consultation with the planning department, qualitatively and/or quantitatively assess impacts as follows:
 - Qualitative: Consider whether the transportation project would result in lower automobile travel time thereby causing trip-making changes, changes in mode choice, route changes, or newly generated trips, that could increase vehicle travel.
 - Quantitative: Estimate VMT induced by the transportation project using approaches such as 1) simulating potential trip-making changes due the transportation project with a travel demand model, and 2) use an elasticity model to estimate the amount of induced vehicle travel resulting from the transportation project (e.g. additional lane mile of roadway capacity added). See Attachment D for guidance on quantitative analysis for transportation projects.

Impact Analysis

The analysis of VMT impacts should compare the project's estimated VMT to the department's quantitative threshold of significance. The department uses a threshold of significance of approximately 2 million VMT per year in order to meet the greenhouse gas emission reduction goal of 40 percent below 1990 levels by 2030 set forth in California Senate Bill 32.¹⁷ A project that leads to an addition of more VMT than the threshold of significance may indicate a significant impact on VMT.

¹⁶ Generally, minor transportation projects would not result in additional trips. Examples include, but are not limited to, rehabilitation, maintenance, and repair of transportation infrastructure; installation, removal or reconfiguration of non-through traffic lanes and traffic control devices; removal of through lanes; installation of traffic calming measures and wayfinding; removal of on- or off-street parking. Governor's Office of Planning and Research, *Technical Advisory on Evaluating Transportation Impacts in CEQA*, November 2017.

¹⁷ This estimate is based on the methodology outlined by Governor's Office of Planning and Research, Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA, January 20, 2016, page III:31. To the extent information is available, the department may revise this estimate to reflect data within California Air Resources Board reports, Plan Bay Area, or other sources to account for the latest allowable increases VMT increases to meet long-range greenhouse gas reduction goals and estimated total number of transportation projects by greenhouse gas reduction goal target year.

The impact analysis must address whether the infrastructure project would substantially induce additional automobile travel by increasing physical roadway capacity in congested areas or by adding new roadways to the network. The following examples are some of the circumstances relevant to infrastructure projects, which may result in impacts related to VMT. This is not an exhaustive list of circumstances under which an impact would occur:

- A project would include new roadways, bridges, or expansion of existing roadway capacity on a roadway
- A project would include the creation of new or addition of roadway capacity that would worsen conditions for people walking, bicycling, and, if applicable, riding transit (e.g. construction of new freeway on/off-ramps) thereby reducing the number of people that would use non-automobile modes
- A project would add a substantial number of new on-street parking spaces
- Conversion of existing managed lanes (e.g., HOV, HOT, or trucks) or transit lanes to general purpose lanes (including vehicle ramps) or parking
- Removal of existing transit service without comparable transit service nearby or creation of new routes to maintain existing transit service