

OPR Steps

Project Questions

Procedural Flowchart

● Decision ○ Analytical process or procedural outcome

Step 1 Screening

Is the project:
 In a transit priority area
 OR In a low VMT area
 OR Local serving retail less than 50,000 square feet?

Is the project:
 Floor area ratio greater than 0.75
 AND Consistent with parking requirements without oversupplying
 AND Consistent with RTP/SCS?

Step 2 Establishing Baseline VMT Levels

What is the project land use?

Step 3 Establishing VMT Threshold

What are the project and cumulative VMT thresholds?

Step 4 Forecasting Project VMT Effects

What are the project and cumulative VMT forecasting options?

Step 5 Identifying Significant Impacts

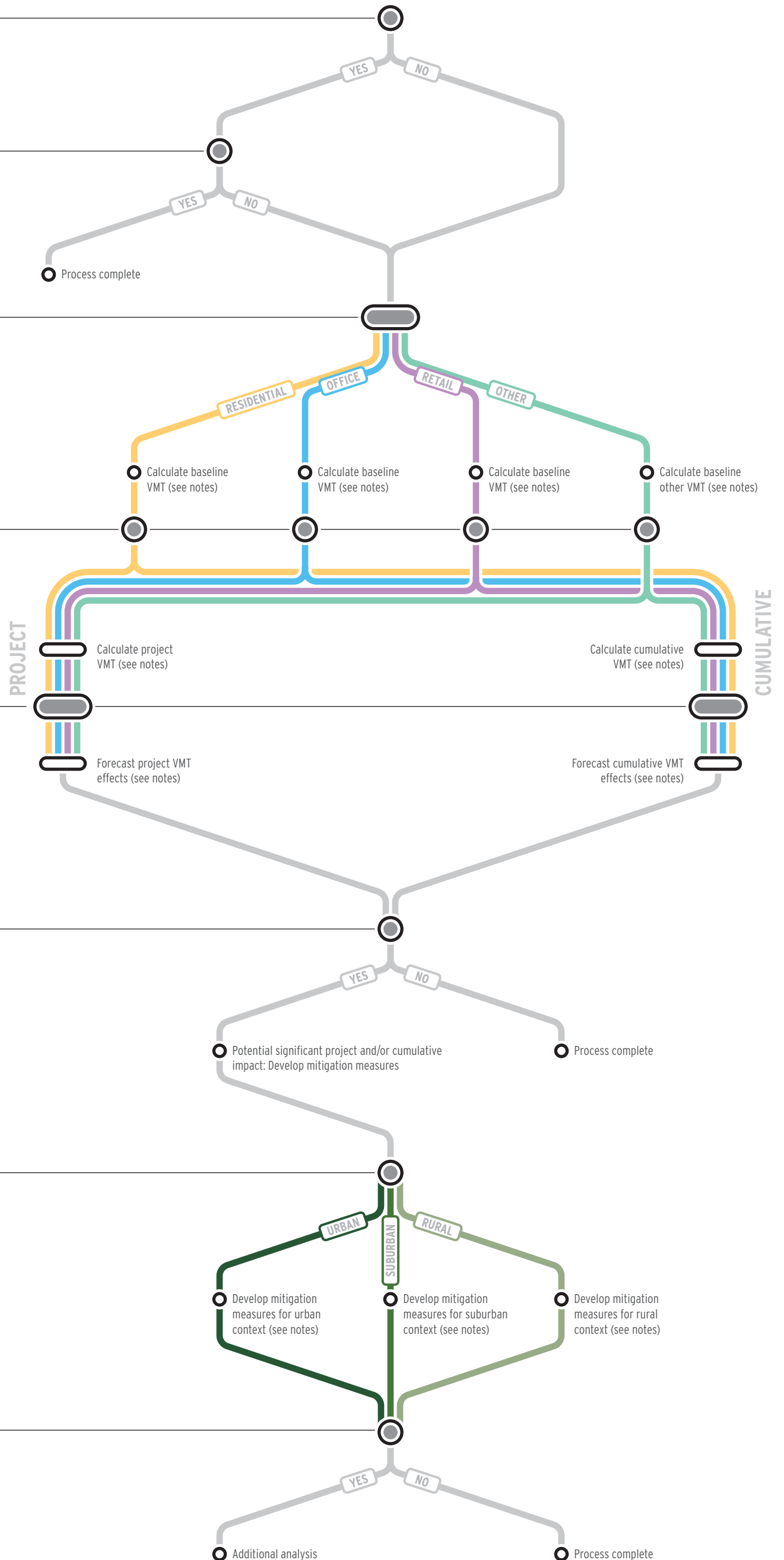
Do the VMT forecasts from Step 4 exceed the VMT thresholds from Step 3?

Step 6 Developing Mitigation Measures

What is the surrounding land use context?

Step 7 Identifying Impacts of Mitigation

Do the mitigations require new or expanded facilities/ services that may have environmental impacts that require evaluation under CEQA?



OPR Steps

Analysis Procedures

Technical Notes

Land Use Color Coding: ● Residential ● Office ● Retail ● Other

Step 1 Screening

If “yes” to both questions on flowchart, process complete. If “no” to the first question, go to Step 2.

Lead agencies make final determinations about RTP or RTP/SCS consistency, but MPOs may provide guidance or technical assistance.

Step 2 Establishing Baseline VMT Levels

Residential ●

If project is located in an incorporated city, calculate citywide and regional VMT/capita or VMT/service population per weekday. If located in an unincorporated area, calculate regional VMT/capita or VMT/service population per weekday and calculate the same metric for the incorporated cities in the county and take the average.

Office ●

If project is located in an incorporated City, calculate regional VMT/employee or VMT/service population per weekday. If located in an unincorporated area, calculate the same metric for the incorporated cities in the county and take the average.

Retail ●

Calculate total VMT, VMT/capita, or VMT/service population of market area served by the proposed retail project.

Other ●

If project is located in an incorporated City, calculate regional VMT/service population. If located in an unincorporated area, calculate the same metric for the incorporated cities in the county and take the average.

Baseline should be tied to the date of the NOP release. Hence, baseline VMT calculations may require obtaining current year data or interpolating between base year and future year model estimates.

VMT estimates can use total VMT representing all vehicle trips and trips purposes or can use isolated portions of VMT associated with only automobile trips and select purposes such as home to work.

Step 3 Establishing VMT Threshold

Project VMT Threshold

● ● 85% of citywide or regional VMT/capita or VMT/service population from Step 2.

● No increase in VMT, VMT/capita, or VMT/service population from Step 2.

● Lead agency discretion. Should consider SB743 objectives to encourage infill, promote active transportation, and reduce GHGs. Thresholds recommended for office or retail may also be considered.

Cumulative VMT Threshold

● ● ● ● Consistency with the RTP or RTP/SCS.

Lead agencies have ultimate discretion to establish their own significance thresholds per Guidelines Section 15064.7, but substantial evidence is required to support those thresholds. If they differ from the OPR recommendations, substantial evidence should also be provided to explain why.

For projects in rural areas outside MPOs, thresholds can be established on a case-by-case basis.

Step 4 Forecasting Project VMT Effects

Project Forecasting: Option 1 ●

Multiply project's vehicle trips by full trip lengths obtained from survey, big data or travel forecasting model estimates. Trip lengths vary depending on household activity or trip purpose. Trip lengths should not be truncated due to political boundaries. Divide the resulting VMT estimate by the project's residential population to calculate VMT/capita. Population estimate should be derived from household size estimates used for other environmental impact analysis or public infrastructure planning related to water, sewer, or school facilities.

Project Forecasting: Option 2 ●

Enter project land use into an isolated traffic analysis zone in the base year of a regional travel forecasting model and run the model to produce VMT for that specific zone. Check location of the zone to verify that trip lengths are not truncated due to model boundaries. Check production/attraction balance to determine if the model accurately represents full trip generation of the project. Divide the resulting VMT estimate by the project's residential population to calculate VMT/capita. Population estimate should be derived from household size estimates used for the model, other environmental impact analysis, or public infrastructure planning related to water, sewer, or school facilities.

Project Forecasting: Option 3 ● ●

Multiply project's vehicle trips by full trip lengths obtained from survey or travel forecasting model estimates. Trip lengths vary depending on trip purpose. Trip lengths should not be truncated due to political boundaries. Divide the resulting VMT estimate by the project's employment to calculate VMT/employee. Employment estimate should be derived from estimates used for other environmental impact analysis.

Project Forecasting: Option 4 ● ●

Enter project land use into an isolated traffic analysis zone in the base year of a regional travel forecasting model and run the model to produce VMT for that specific zone. Check location of the zone to verify that trip lengths are not truncated due to model boundaries. For trip based models, check production/attraction balance to determine if the model accurately represents full trip generation of the project. Divide the resulting VMT estimate by the project's employment estimate to calculate VMT/employee. Employment estimate should be derived from the model or other environmental impact analysis.

Project Forecasting: Option 5 ● ●

Determine if project area is underserved for the proposed retail use and whether the project is likely to shorten existing shopping trips by creating an intervening location between trip origins and current shopping destinations. Document evidence to support the likelihood of the project shortening existing trips.

Project level analysis may overstate the project's effect on VMT because it does not fully consider the project's influence on the VMT generation of surrounding land uses. Hence, cumulative analysis may be more meaningful for impact purposes.

For mixed use projects, use of VMT/service population is recommended.

OPR Steps

Analysis Procedures

Technical Notes

Land Use Color Coding: ● Residential ● Office ● Retail ● Other

Step 4 Forecasting Project VMT Effects (Continued)

Project Forecasting: Option 6 ● ●

Calculate total VMT for the market area of the proposed retail use without the project and then calculate the project's total VMT and add it to this baseline for the market area. This will typically involve multiplying automobile trips by full trip lengths obtained from survey or travel forecasting model estimates. Trip lengths vary depending on trip purpose. Trip lengths should not be truncated due to political boundaries. Divide the resulting VMT estimates by the total population of the market area (with and without the project). Population estimates should be derived from household size estimates used for other environmental impact analysis or public infrastructure planning related to water, sewer, or school facilities.

Project Forecasting: Option 7 ● ●

Estimate VMT for the market area of the proposed retail project using a regional travel forecasting model. This will typically involve aggregating the VMT produced by a group of zones within a defined geographic boundary. The VMT estimate should be divided by the population of the zones to calculate the VMT/capita. Next, enter the project land use into an isolated traffic analysis zone in the base year of a regional travel forecasting model and re-run the model to produce VMT for the market area of the proposed retail use. Check location of the zone/zones to verify that trip lengths are not truncated due to model boundaries. For trip based models, check production/attraction balance to ensure the model accurately represents trip generation of the project. Divide the resulting VMT estimate by the market area residential population to calculate VMT/capita. Population estimate should be derived from household size estimates used for the model, other environmental impact analysis, or public infrastructure planning related to water, sewer, or school facilities.

Cumulative Forecasting: Option 1 ● ● ● ●

Check consistency of the project with the RTP or RTP/SCS. The RTP or RTP/SCS are the regional plans that demonstrate compliance with air quality conformity requirements and GHG reduction targets. As such, projects that are consistent with these plans in terms of development location, density, intensity, proximity to transit, and urban design are part of the regional solution for meeting air pollution and GHG goals.

Cumulative Forecasting: Option 2 ● ● ● ●

Land use projects influence land supply for permitted and conditional uses. They do not change the regional control totals for cumulative population and employment growth. As such, VMT effects should be analyzed by specifically changing the allocation of population and employment growth based on the land supply changes associated with the project. The cumulative no project model run should represent the adopted RTP or RTP/SCS conditions while the cumulative plus project condition should represent the reallocation of the population and employment growth. Regional VMT or VMT/service population should be calculated for both scenarios. Any increase in VMT or VMT/service population may constitute a significant impact because it could jeopardize regional air quality conformity or GHG reduction findings.

Step 5 Identifying Significant Impacts

Identify significant impacts for all land uses and impact scenarios. Significant Impact may occur if project's Step 4 VMT exceeds Step 3 threshold.

Step 6 Developing Mitigation Measures

Urban

For urban areas, the number of effective VMT reduction strategies includes a broad range of both on-site and off-site actions. VMT reduction potential exceeds the 15% reduction threshold for single use projects.

Suburban

For suburban areas, the number of effective VMT reduction strategies includes on-site and off-site actions but will depend on the general density and intensity of the community, existing levels of transit service, and conduciveness for walking and bicycling. VMT reduction potential is close to the 15% reduction threshold for single use projects.

Rural

For rural areas, the number of effective VMT reduction strategies are few due to auto-dependent land use patterns and limited transit availability. VMT reduction potential is likely less than the 15% reduction threshold for single use projects. Area-wide TDM programs may be more effective but would require the lead agency to have already established the program to be feasible mitigation.

Mitigation can include project design changes related to the 7Ds or actions to reduce vehicle travel demand such as the TDM/pricing strategies contained in Quantifying Greenhouse Gas Mitigation Measures, CAPCOA, 2010.

Step 7 Identifying Impacts of Mitigation

Mitigation actions can create other environmental impacts. Mitigation actions that require the expansion of existing facilities or services or the creation of new facilities or services may have an effect on the environment that should be evaluated as prescribed by CEQA Guidelines Section 15126.4(a)(1)(D).