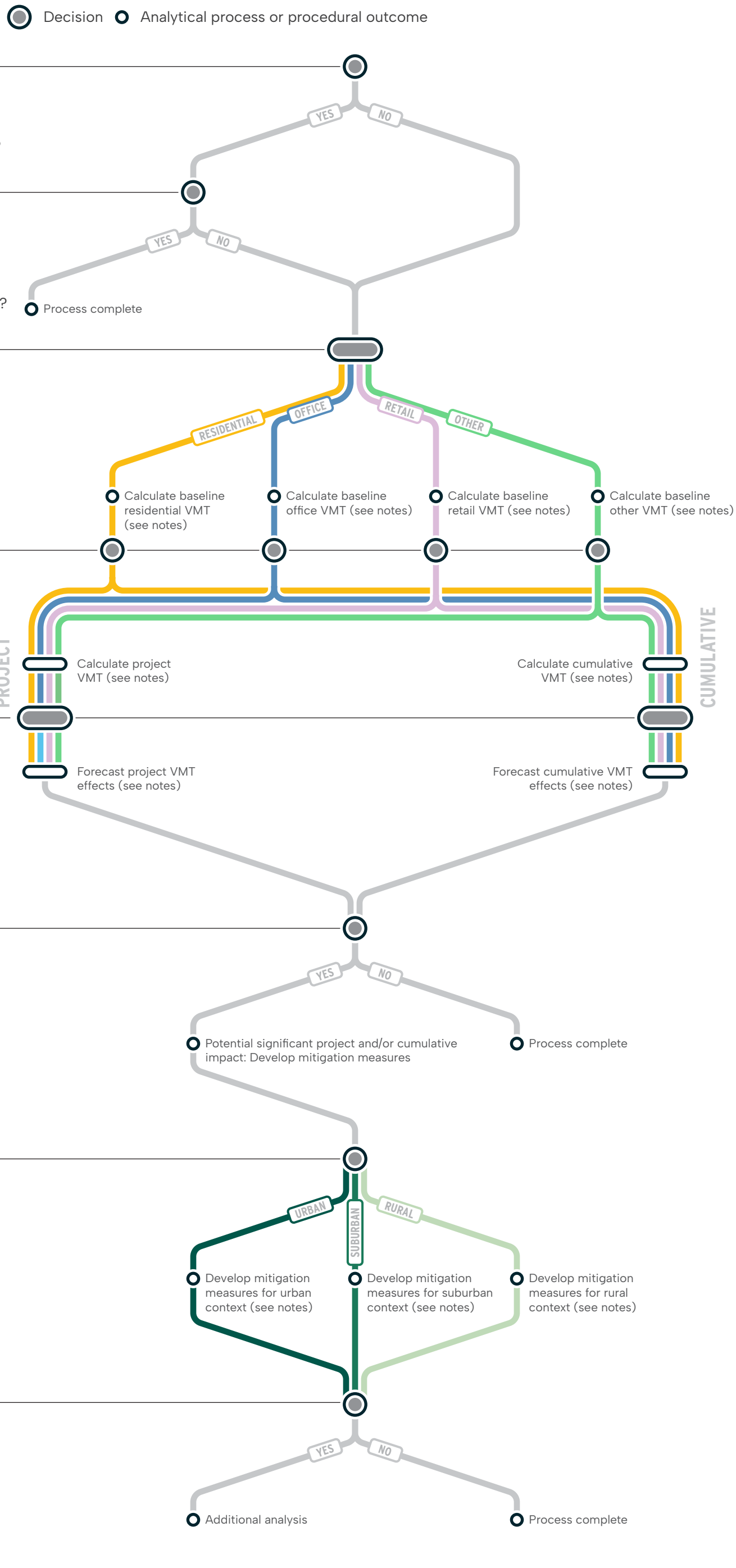
Navigating Land Use Projects Through SB 743

Fehr & Peers

OPR Steps

Project Questions

Procedural Flowchart



SB 743 Procedural Notes: Land Use (1/2)

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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 calculateVMT/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.

SB 743 Procedural Notes: Land Use (2/2)

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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** (Retail · Other) 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** (Retail · Other) 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** (Residential · Office · Retail · Other) 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** (Residential · Office · Retail · Other) 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).	

Navigating Transportation Projects Through SB 743

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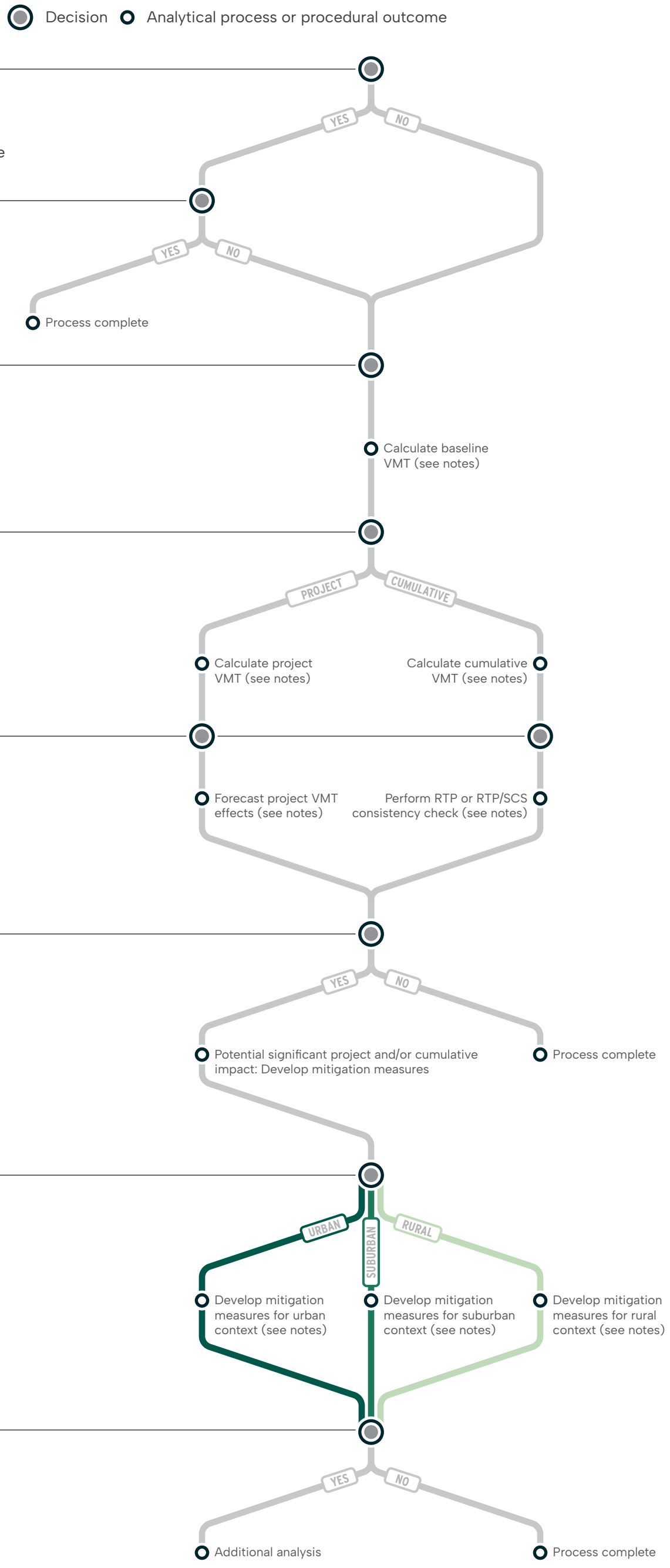
OPR Steps

Project Questions

Procedural Flowchart



STEP 1
Screening

STEP 2
Establishing Baseline VMT Levels

STEP 3
Establishing VMT Threshold

STEP 4
Forecasting Project VMT Effects

STEP 5
Identifying Significant Impacts

STEP 6
Developing Mitigation Measures

STEP 7
Identifying Impacts of Mitigation

SB 743 Procedural Notes: Transportation (1/2)

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OPR Steps	Analysis Procedures	Technical Notes
STEP 1 **Screening**	If “yes” to both questions on flowchart, process complete. If “no” to the first question, go to Step 2.	
STEP 2 **Establishing Baseline VMT Levels**		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.
STEP 3 **Establishing VMT Threshold**	**Project VMT Threshold: Option 1** Use the OPR Technical Advisory recommendation that any increase in VMT caused by the project is an impact. **Project VMT Threshold: Option 2** Use RTP or RTP/SCS consistency. **Cumulative VMT Threshold** Use RTP or RTP/SCS consistency.	Lead agencies have the option to use VMT as the impact metric for transportation projects, but it is not required. 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 (or do not cause increases in planned VMT growth) are part of the regional solution for meeting air pollution and GHG goals.
STEP 4 **Forecasting Project VMT Effects**	**Project Forecasting: Option 1** Use a short-term induced travel elasticity to directly estimate the project's VMT effect. Rely on short-term elasticities contained in the ARB SB 375 Policy Brief on Induced Travel available at http://www.arb.ca.gov/cc/sb375/policies/hwycapacity/highway_capacity_brief.pdf **Project Forecasting: Option 2** Use a regional travel forecasting model to estimate opening year no project and opening year plus project VMT. Verify the model is sensitive to short-term induced travel effects through dynamic validation and sensitivity testing. **Cumulative Forecasting** Perform RTP or RTP/SCS consistency check. If the project is specifically referenced or listed in the RTP or RTP/SCS as well as accurately represented in the regional travel forecasting model, no further analysis is required. If not, then the project should be added to the RTP or RTP/SCS regional forecasting model and the model should be re-run to forecast regional VMT.	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.

SB 743 Procedural Notes: Transportation (2/2)

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OPR Steps	Analysis Procedures	Technical Notes
STEP 5 **Identifying Significant Impacts**	Identify significant impacts for all impact scenarios. Significant Impact may occur if project's Step 4 VMT exceeds Step 3 threshold or the project is found inconsistent with the RTP or RTP/SCS (i.e., the project generates more VMT than the adopted RTP or RTP/SCS).	
STEP 6 **Developing Mitigation Measures**	**Urban** For urban areas, potential mitigation options include modifying the project—or the overall system operations of the network that the project is part of—to reduce VMT by relying on greater levels of traffic flow and demand management plus travel or parking pricing. **Suburban** For suburban areas, potential mitigation options include modifying the project—or the overall system operations of the network that the project is part of—to reduce VMT by relying on greater levels of traffic flow and demand management. **Rural** For rural areas, there are limited options for roadway capacity expansion mitigations given that their purpose and need is likely to conflict with VMT reduction goals.	Mitigation is likely to require modification of the project such that any new capacity is managed to achieve specific performance objectives that balance vehicle throughput, person throughput, and travel speeds. Ideally, new capacity would result in higher levels of person miles traveled per lane mile, which can only occur if vehicle occupancy is increased by the project.
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).	

Navigating General Plans Through SB 743

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OPR Steps	Project Questions	Procedural Flowchart

Decision · Analytical process or procedural outcome

STEP 1
Screening

Not applicable

STEP 2
Establishing Baseline VMT Levels

Is the general plan for an incorporated city or unincorporated area?

- INCORPORATED → Calculate baseline VMT for city and region (see notes)
- UNINCORPORATED → Calculate baseline VMT for region (see notes)

STEP 3
Establishing VMT Threshold

What is the surrounding land use context?

- URBAN → Calculate project VMT for urban context (see notes)
- SUBURBAN → Calculate project VMT for suburban context (see notes)
- RURAL → Calculate project VMT for rural context (see notes)

STEP 4
Forecasting Project VMT Effects

Should the general plan's VMT effects be forecasted only through the plan's horizon year, or should a separate cumulative year analysis be conducted?

- PLAN HORIZON → Forecast general plan VMT effects for plan's time horizon (see notes)
- CUMULATIVE → Forecast general plan and separate cumulative year VMT effects (see notes)

STEP 5
Identifying Significant Impacts

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

- YES → Potential significant project and/or cumulative impact: Develop mitigation measures
- NO → Process complete

STEP 6
Developing Mitigation Measures

What is the surrounding land use context?

- URBAN → Develop mitigation measures for urban context (see notes)
- SUBURBAN → Develop mitigation measures for suburban context (see notes)
- RURAL → Develop mitigation measures for rural context (see notes)

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?

- YES → Additional analysis
- NO → Process complete

SB 743 Procedural Notes: General Plan (1/2)

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OPR Steps	Analysis Procedures	Technical Notes
	Land Use Color Coding: ● Urban ● Suburban ● Rural	
STEP 1 **Screening**	The screening phase is not applicable. All general plans must be evaluated although the evaluation may be limited to an assessment of RTP/SCS consistency.	
STEP 2 **Establishing Baseline VMT Levels**	If plan is for an incorporated city, calculate citywide and regional VMT/capita or VMT/service population per weekday. If plan is for in an unincorporated area, calculate regional VMT/capita or VMT/service population per weekday and the same metic 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.
STEP 3 **Establishing VMT Threshold**	VMT thresholds should consider lead agency discretion and the following factors. • SB 743 legislative intent objectives to encourage infill, promote active transportation, and reduce GHGs. • Internal general plan consistency requirements especially between VMT reduction goals that may already be established for energy, air quality, and GHGs. • VMT is a composite metric that reflects the general plan's envisioned future as portrayed in the land use and circulation elements. **OPR Recommendation** ○ Case by case. ● ● Consistency with the RTP or RTP/SCS. Development specified in the plan is also specified in the SCS (i.e. the plan does not specify developing in outlying areas specified as open space in the SCS). Taken as a whole, development specified in the plan leads to VMT that is equal to or less than the VMT per capita and VMT per employee specified in the SCS. **Option 1** ○ Consistency with the RTP. **Option 2** ○ Less than the regional VMT/capita from Step 2. ● 90–85% of regional VMT/capita from Step 2. ● 60–25% of regional VMT/capita from Step 2. **Option 3** ○ ● ● No increase in baseline VMT/capita from Step 2.	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. Option 2 thresholds are based on maximum potential VMT reductions associated with vehicle travel reduction strategies contained in the Quantifying Greenhouse Gas Mitigation Measures, CAPCOA, 2010. This option also recognizes that most travel forecasting models are not sensitive to TDM strategies so additional VMT reduction is possible through general plan implementation and TDM conditions passed through to individual projects. The CAPCOA TDM strategies generally apply to indivdual projects or sites, so any use for general plan purposes needs to focus on how subsequent development projects and even how existing development may be affected by implementation of these strategies (i.e., a TDM ordinance versus entitlement review conditions only). Threshold considerations should also consider how they will be established and used for the general plan EIR. Adopting new thresholds prior to starting the general plan EIR may be advisable to avoid a CEQA outcome that conflicts with the proposed general plan policy intent.
STEP 4 **Forecasting Project VMT Effects**	**Project Forecasting** For impacts, each general plan alternative should be evaluated against existing (i.e., baseline) conditions per CEQA Guidelines Section 15125(a). For transportation, this means starting with a baseline condition upon which future population and employment and network changes are added. A general plan influences the location of land supply for permitted and conditional uses but does not change the regional control totals for cumulative population and employment growth. However, the plan may propose transportation network changes that influence regional travel behavior. As such, VMT effects should be analyzed using regional scale trip-based or activity-based models. The plan effects on VMT should be captured by modifying the network to reflect plan changes and modifying the regional allocation of population and employment growth based on the land supply changes associated with the plan alternatives. The general plan EIR analysis shall also discuss any inconsistencies between the proposed general plan and the currently adopted general plan per CEQA Guidelines Section 15125(d). These inconsistencies should consider CEQA Guidelines Section 15125(e), which requires analysis that examines potential future conditions in the adopted plan. Note the bold "discuss" and "analysis that examines." These are informational requirements for the EIR and do not establish the no project condition as a specific significance threshold. Since lead agencies are allowed to select their own significance thresholds (and should) per CEQA Guidelines Section 15064.7, the general plan should be evaluated against thresholds that are aligned with their community values and selected as part of Step 3 above. Because of the long-term horizon for a general plan, project and cumulative analysis are often the same scenario. The no project scenario should generally represent the adopted general plan in the context of the adopted RTP or RTP/SCS. The plus project scenario should represent the reallocation of the population and employment growth associated with the proposed general plan and any proposed modifications to the local and regional transportation network. Regional VMT or VMT/capita should be calculated for both scenarios. Any increase in VMT or VMT/capita above no project levels may constitute a significant impact because it could jeopardize regional air quality conformity or GHG reduction findings—hence, the recommended thresholds above in Step 3.	

SB 743 Procedural Notes: General Plan (2/2)

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OPR Steps	Analysis Procedures	Technical Notes
STEP 4 **Forecasting Project VMT Effects (Continued)**	**Cumulative Forecasting** Since many general plans accommodate growth beyond a 20-year horizon or beyond the planning horizon of the RTP or RTP/SCS, cities and counties should consider whether to include a separate cumulative year that recognizes this outcome. At a minimum, the potential additional land use development or population and employment growth should be acknowledged. Preferably, it would be quantified and the transportation analysis would include information about the potential effect on trips, VMT, and transportation network expansion needs. Actual link level traffic forecasts may not be reasonable especially if the land use growth includes substantial imbalances in jobs and housing.	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.
STEP 5 **Identifying Significant Impacts**	Identify significant impacts for all land use types and impact scenarios. Significant Impact may occur if project's Step 4 VMT exceeds Step 3 threshold.	
STEP 6 **Developing Mitigation Measures**	For urban areas, effective VMT reduction strategies at the general plan level will tend to be those that alter the built environment to improve accessibility (e.g., land use density, diversity, distance to transit, etc.). TDM strategies can also be effective but the general plan needs to be clear about how these strategies will be applied to individual development projects. Many TDM strategies are specific to individual sites and will not scale up to the general plan level. VMT reduction potential is highest in urban areas due to land use density and the associated variety of travel choices typically available. For suburban and rural areas, the same notes for urban areas apply about VMT strategies, but the VMT reduction potential is lower due to land use patterns and density that generally require auto use. Trip lengths can be influenced through more compact land use patterns even if auto use is necessary.	Mitigation can include land use, transportation network, or travel behavior changes. Land use changes for a general plan typically relate to the 7Ds. Transportation network or travel behavior changes tend to include actions that 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).	