TRANSPORTATION IMPACT ANALYSIS GUIDELINES

City Council Procedure #CC-20-012

Purpose

To define guidelines for analysis of development or capital projects related to transportation on local streets, pedestrian, bicycle and transit circulation.

Authority

This policy sets forth the guidelines (methods, standards and thresholds of significance) to conduct a transportation impact analysis (TIA) for a development or capital project to ensure that a thorough transportation analysis occurs for all projects that might result in impacts under the California Environmental Quality Act and in conformance with the City's General Plan.

Background

Development and capital projects wishing to obtain approval need to satisfy a wide array of state and local requirements, including but not limited to full disclosure of the potential environmental impacts of the project. Possible environmental impacts include but are not limited to noise, air quality, greenhouse gas emissions and transportation. For purposes of disclosing potential transportation impacts, the City of Menlo Park has adopted TIA guidelines to ensure compliance with both state and local requirements.

Senate Bill 743 required the Governor's Office of Planning and Research (OPR) to establish a new metric for identifying and mitigating transportation impacts within CEQA in an effort to meet the State's goals to reduce greenhouse gas (GHG) emissions, encourage infill development, and improve public health through more active transportation. OPR identified vehicle miles traveled (VMT) as the required transportation metric and beginning July 1, 2020, VMT (not level of service (LOS) is the legally required threshold for transportation impacts pursuant to CEQA. OPR has identified recommendations regarding assessment of VMT and thresholds of significance, but the City may adopt local metrics and thresholds. Adoption of a local VMT threshold requires City Council approval; the City Council approved the VMT thresholds for incorporation into these updated TIA guidelines on June 16, 2020.

Policies and procedures

Projects shall analyze both vehicle miles traveled (VMT) and level of service (LOS) transportation metrics independently using the methodologies outlined below, except those meeting the exemption criteria.

Exemption criteria

The exemption criteria are illustrated in Attachment A.

The following projects would generally be exempt from carrying out VMT and LOS analysis:

1. Projects generating less than 100 vehicle trips/day
2. Local servicing retail projects and other commercial projects where the total square footage is 10,000 square feet or less
3. Residential or office developments located in a low VMT area (defined below) and within ½ mile of an existing "major transit stop" or within ½ mile of a "high-quality transit corridor"
4. Affordable housing developments with 100 percent affordable units, either in a low VMT area or within ½ mile of an existing major transit stop or within ½ mile of a high-quality transit corridor
5. Local serving public facilities where the total new or added square footage is 10,000 square feet or less, such as libraries, police stations, fire stations or parks. Facility type and size outside the description shall provide evidence of local serving status to City satisfaction.
6. Projects in compliance with the El Camino Real and Downtown Specific Plan

"Major transit stop" means an existing 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. A "high-quality transit corridor" means a fixed bus route with service intervals no longer than 15 minutes during peak commute hours.

Local serving retail projects where the total square footage is 50,000 square feet or less would be exempt from carrying out VMT analysis.

All other projects involving a change of use and/or new construction will be required to submit a TIA report performed by a qualified consultant selected by the City and paid for by the project applicant.

Report outline

For any project that is not exempt, the TIA report shall include the following:

1. Executive summary

2. Introduction
   - Project Description
   - Study Scope

3. Existing conditions – Conditions should be described based upon information found in the most recent Circulation System Assessment (CSA) document when applicable. The CSA existing traffic counts and information should be used as existing conditions.
   - Description of existing street system serving the site (Number of lanes, classification, etc.)
   - Description of VMT (definition and methods)
   - CSA existing traffic volumes – Average daily traffic volume (ADT) and AM and PM peak hours (Figure to be included in report)
   - CSA existing levels of service – AM and PM (Table to be included in report)
   - Public transit (Service providers to the area)
   - On and off-street parking conditions/availability
   - Pedestrian and bicycling conditions in the project area

4. VMT analysis
   A. To determine the appropriate VMT analysis tool (e.g., C/CAG VMT sketch model or City's travel demand model), refer to Attachment B.
   B. To determine if the project is located in a low VMT area, refer to the city's online mapping tool for average VMT values in the applicable traffic analysis zone (TAZ): http://menlopark.org/vmtzone.
   C. Significance Criteria
      A project is considered to have a significant impact on VMT if the project's VMT exceeds the following threshold values:
      - Residential: 13.7 VMT per capita[1]
      - Office: 12.7 VMT per employee[2]
      - Retail, hotel, school and transportation projects: a net increase in total City VMT
      - Mixed use projects: components are analyzed independently against the appropriate threshold
      - Other: Public works director or designee will provide direction on a case-by-case basis
      - Note:
        1. Threshold is defined as 15 percent below the regional average VMT per resident of 16.1.
        2. Threshold is defined as 15 percent below the citywide average VMT per employee of 14.9.

   D. Cumulative VMT analysis
      Projects requiring a general plan or area plan/specific plan amendment and use the City's travel demand model must evaluate cumulative VMT impacts according to the same thresholds as identified above in significance criteria.

5. Mitigation for exceeding VMT significance criteria
   A. Projects that exceed the VMT significance criteria as defined above must demonstrate that they can reduce their VMT to below the threshold values using a mixture of trip reduction measures and transportation demand management (TDM) strategies. TDM strategies work by offering a wider range of transportation options to user of the development. Projects may select strategies from "Quantifying Greenhouse Gas Mitigation Measures" report by the California Air Pollution Control Officers Association (CAPCOA), or other peer-reviewed publications as newer data becomes available, including but not limited to:
      - Transportation Demand Management: commute trip reduction program, transit subsidies, parking cash-out
      - Parking Management: unbundled parking, pricing
      - Transit improvements: proximity/access improvements, increased service frequency
      - Active Transportation Projects: pedestrian and bicycle networks, traffic calming
   B. All measures must first be discussed with the City Transportation Division before they are included in the report. Consultant shall identify and submit supporting documents for selected TDM strategies and mitigation measures for City review and approval.

C. As determined by the public works director or designee, development of a monitoring program may be requested.

6. Near-term LOS analysis – Near-term conditions without project should be discussed using the most recent CSA near-term traffic counts and information. Project traffic should then be added to the CSA near-term traffic counts. If the project build-out is beyond the CSA near-term data, future conditions should be projected to the first year of assumed project occupancy. A supplemental list of planned and or/approved projects will be provided to the consultants for inclusion in the analysis process. For large projects of regional magnitude (projects generating 100 or more trips during peak hours), the consultants will analyze the impacts of the project for a span of 10 years from the existing conditions.
   A. Description of new or planned changes to the street system serving the site including changes in on-street parking
   B. Near-term volumes – ADTs and AM and PM peak hours
      - List project trip generation rates
      - Discuss trip distribution
      - Discuss impact of project traffic on intersections in the project vicinity
   C. Near-term levels of service – AM and PM for both near-term and near-term plus project analysis. Table to be included in report. Also a comparison table of existing conditions including a column showing the difference in seconds of delay between existing, near-term conditions and near-term conditions with project and percent of increase.

7. LOS Analysis
   A. Discuss impacts of CSA near-term conditions and CSA near-term conditions with project, illustrated in the Intersection Compliance flowchart (Attachment C).
      a. A project is considered potentially noncompliant with local policies if the addition of project traffic causes an intersection on a collector street operating at LOS “A” through “C” to operate at an unacceptable level (LOS “D,” “E” or “F”) or have an increase of 23 seconds or greater in average vehicle delay, whichever comes first. Potential noncompliance shall also include a project that causes an intersection on arterial streets or local approaches to State controlled signalized intersections operating at LOS “A” through “D” to operate at an unacceptable level (LOS “E” or “F”) or have an increase of 23 seconds or greater in average vehicle delay, whichever comes first.
      b. A project is also considered potentially noncompliant if the addition of project traffic causes an increase of more than 0.8 seconds of average delay to vehicles on all critical movements for intersections operating at a near-term LOS “D” through “F” for collector streets and at a near-term LOS “E” or “F” for arterial streets. For local approaches to State controlled signalized intersections, a project is considered to be potentially noncompliant if the addition of project traffic causes an increase of more than 0.8 seconds of delay to vehicles on the most critical movements for intersections operating at a near-term LOS “E” or “F.”
   B. In certain circumstances as determined by the public works director or designee, analysis may be necessary for impacts on City street segments. If any of the thresholds listed below are exceeded, the analysis should make a recommendation as to whether the traffic impact is considered potentially noncompliant, illustrated in the roadway compliance flowchart (Attachment D).
      1. On Main Street, Avenue-Mixed Use and Avenue-Neighborhood (FHWA equivalent: minor arterial streets), a traffic impact may be considered potentially noncompliant if the existing ADT is: (1) greater than 18,000 (90 percent of capacity), and there is a net increase of 100 trips or more in ADT due to project related traffic; (2) the ADT is greater than 10,000 (50 percent of capacity) but less than 18,000, and the project related traffic increases the ADT by 12.5 percent or the ADT becomes 18,000 or more; or (3) the ADT is less than 10,000, and the project related traffic increases the ADT by 25 percent.
      2. On Mixed-Use Collector and Neighborhood Collector (FHWA equivalent: collector streets), a traffic impact may be considered potentially noncompliant if the existing ADT is: (1) greater than 9,000 (90 percent of capacity), and there is a net increase of 50 trips or more in ADT due to project related traffic; (2) the ADT is greater than 5,000 (50 percent of capacity) but less than 9,000, and the project related traffic increases the ADT by 12.5 percent or the ADT becomes 9,000 or more; or (3) the ADT is less than 5,000, and the project related traffic increases the ADT by 25 percent.
      3. On Neighborhood Connector, Bicycle Boulevard and Local Access (FHWA equivalent: local streets), a traffic impact may be considered potentially noncompliant if the existing ADT is: (1) greater than 1,350 (90 percent of capacity), and there is a net increase of 25 trips or more in ADT due to project related traffic; (2) the ADT is greater than 750 (50 percent of capacity) but less than 1,350, and the project related traffic increases the ADT by 12.5 percent or the ADT becomes 1,350; or (3) the ADT is less than 750, and the project related traffic increases the ADT by 25 percent.
   C. Discuss project site circulation and access and identify any deficiencies.

D. Discuss compliance of project site parking with adopted City code including loading and disabled spaces. If a shared parking arrangement is proposed, an analysis of the adequacy of this aspect shall be provided. Discuss any off-site parking impacts (such as neighborhood parking intrusion) of the project.
E. Analyze project in relation to relevant policies of the Circulation Element of the General Plan.
F. Analyze potential cut-through traffic generated by the project affecting other City neighborhoods.
G. Pedestrian conditions and bicycle access, including safety issues, should be discussed.
H. Analyze project using the requirements outlined in the San Mateo County Congestion Management Plan Land Use Analysis Program guidelines, if applicable.

8. Improvement measures for circulation or access deficiencies
   A. Discuss specific measures in detail to address noncompliance with local policies, which may occur as a result of the addition of project traffic (provide table comparing before and after improvement measure). Analysis shall focus on improving circulation or access deficiencies to comply with local policies. All feasible and reasonable measures that could reduce circulation or access deficiencies should be identified, whether or not they are caused by the project. The goal of these measures should be such that the project is in compliance with local policies. Measures may include roadway improvements, operational changes, TDM or Transportation Systems Management measures or changes in the project. If roadway or other operational measures would not achieve this objective, the consultant shall identify a reduction in the project size, which would with other measures, make the project compliant with local policies. All measures must first be discussed with the City Transportation Division before they are included in the report.
   B. Discuss possible measures to address future traffic conditions with the project. All feasible and reasonable measures that would make the project compliant with local policies shall be identified. Measures should be designed to address the project's share of noncompliance. Measures that should be jointly required of the project and any other on-going related projects in a related geographical area should also be identified, as applicable.
   C. Discuss possible measures to address any site circulation or access deficiencies.
   D. Note that if roadway improvements include capacity increases for vehicular traffic (e.g., adding lanes or turn lanes), additional VMT analysis may be required to determine if the measure would increase VMT. Increasing VMT is considered a significant impact under SB 743.
   E. Discuss possible measures to address any parking deficiencies.
   F. Discuss possible measures to address any impacts on pedestrian amenities, bicycle access, safety and bus/shuttle service.

9. Alternatives
   In the event any potentially noncompliance with local policies are identified in the analysis, alternatives to the proposed project shall be evaluated or considered to determine what the impacts of an alternative project or use might be. The alternatives to be considered shall be determined in consultation with the community development director and the public works director or designee.

10. Summary and conclusions
    Upon receipt by the City of a TIA report indicating that a project may have potentially significant traffic impacts, the applicant shall have the option of proceeding directly with the preparation of an EIR in accordance with the City's procedures for preparation of an EIR, or requesting a determination by the City Council as to whether a negative declaration, mitigated negative declaration or an EIR is most appropriate for the project.

Notes:
1. The Highway Capacity Manual (HCM), latest version shall be used for intersection analysis. The consultant shall use the citywide transportation model with the HCM analysis. The City utilizes a VISTRO analysis model for transportation analysis.
2. The LOS study boundary should include intersections expected to add 10 or more peak hour project trips per travel lane and roadway segments likely to generate project impact based on existing demand.
3. The most recent Circulation System Assessment (CSA) shall be used for all information regarding existing and near-term conditions.
4. Traffic counts that may be required beyond the counts contained in the CSA document shall be less than six months old.
5. The consultant shall submit proposed assumptions to the public works director or designee for review and approval before commencement of the analysis relating to the following:
   - trip rates
   - trip distribution
   - trip assignment
   - study intersections

- roadways to be analyzed

6. The consultant shall submit all traffic count sheets in pdf format to the City's Transportation Division.
7. Figures of existing and any proposed intersection configurations should be provided in the appendix.
8. Trip generation rates from Institute of Transportation Engineer's (ITE) publication, "Trip Generation," latest version should be used.
9. Street widening and on-street parking removal are measures which may be technically feasible, but which are generally considered undesirable. If such measures appear potentially appropriate to the consultant, they should consult the Transportation Division in preparing the analysis and improvement measure recommendations. If such measures are to be proposed, alternate measures, which would be equally effective, should also be identified. These measures may result in secondary impacts and be subjected to additional VMT analysis.
10. Existing uses at the site, which would be removed as part of the project, may be deducted from the calculation of the project traffic based on their traffic distribution patterns.
11. Refer to the San Mateo County Congestion Management Program (CMP) Land Use Impact Analysis Program guidelines for performing CMP analysis.
12. The "Quantifying Greenhouse Gas Mitigation Measures" report by the California Air Pollution Control Officers Association (CAPCOA), or other peer-reviewed publications, shall be used to determine the efficacy of TDM measures and land use context on reducing VMT.

Procedure history

Action	**Date**	**Notes**
Approved	June 16, 2020	

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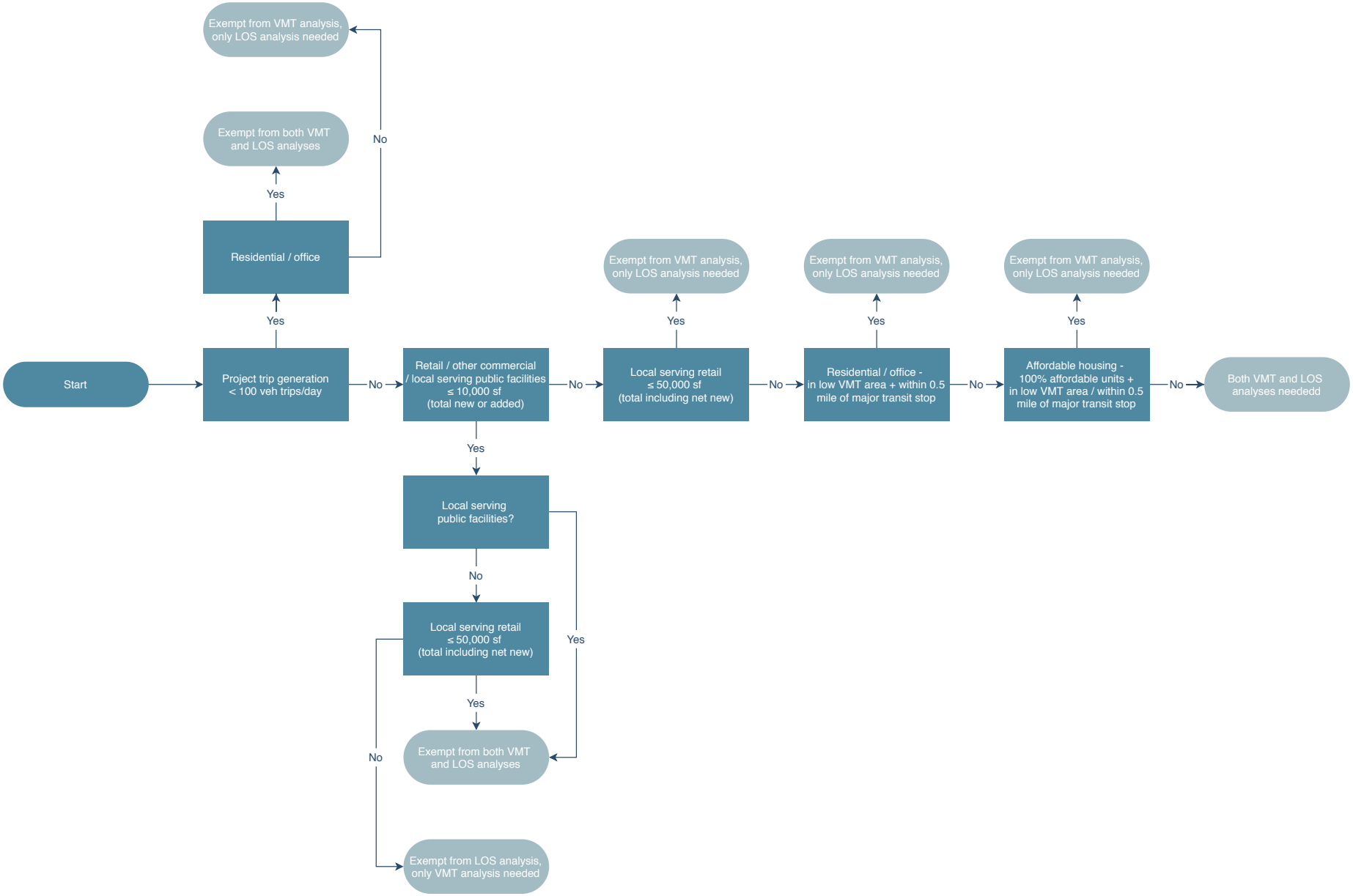
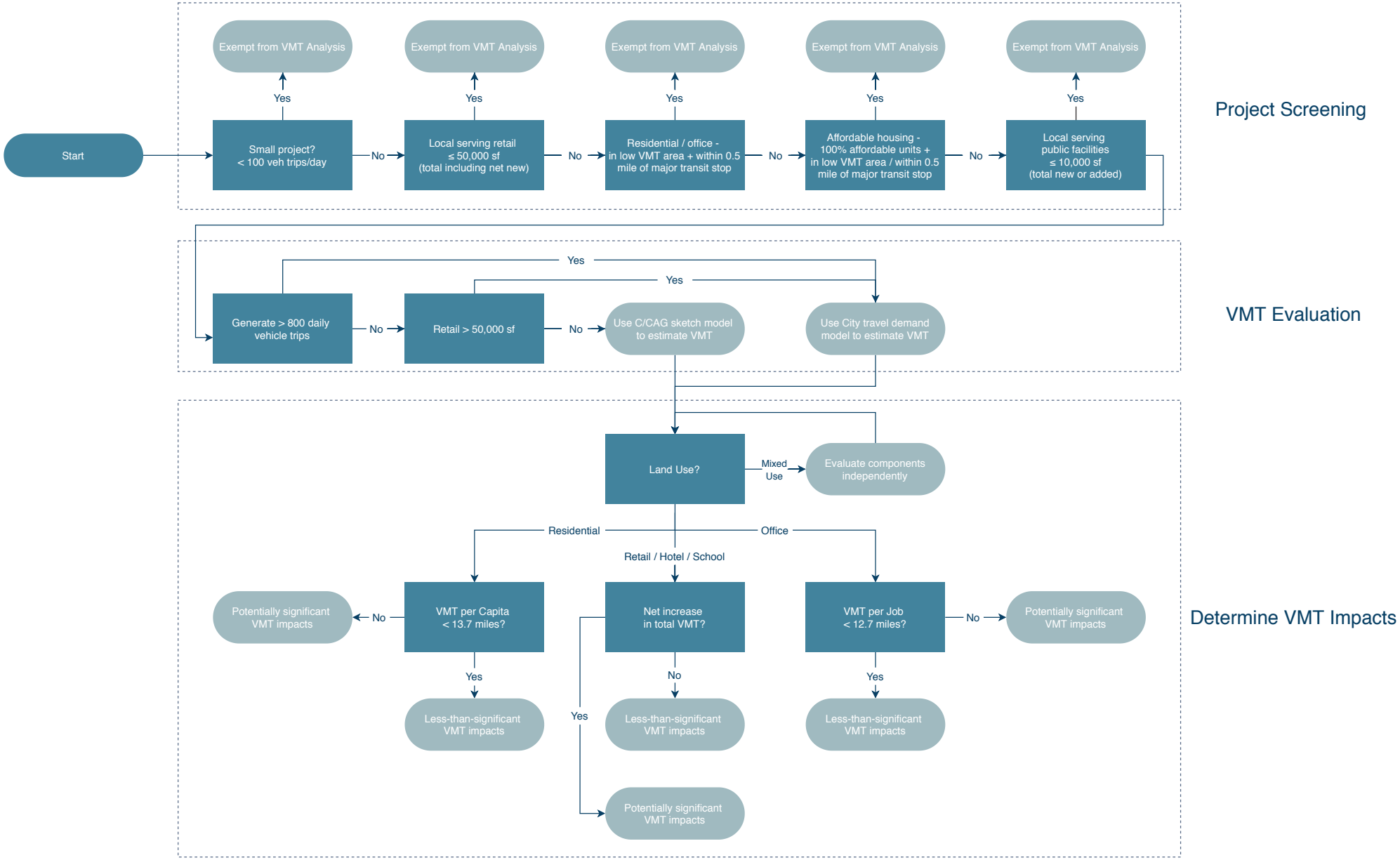
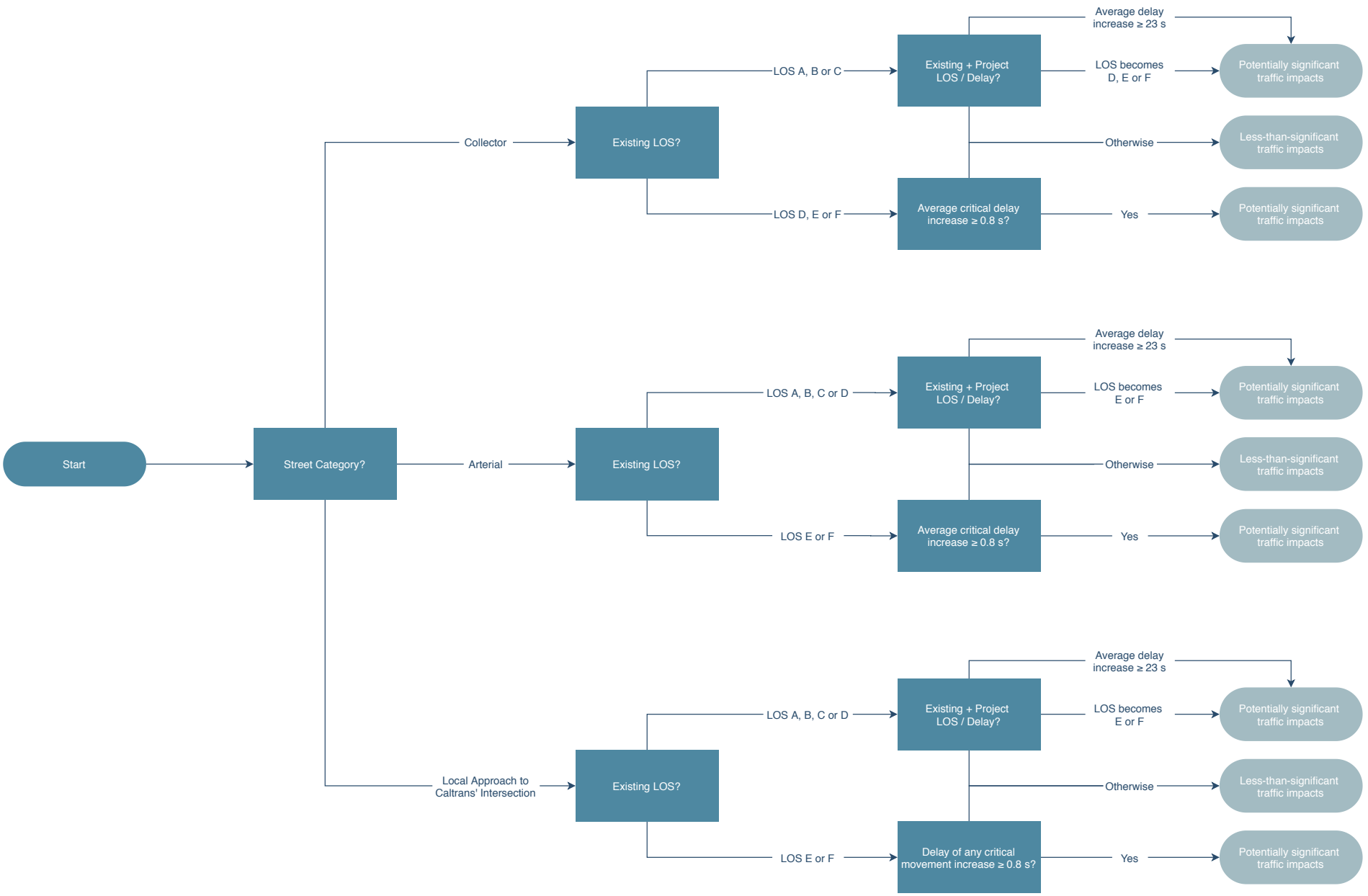
ATTACHMENT A




Start
Small project?
< 100 veh trips/day
Yes
Exempt from VMT Analysis
No
Local serving retail
≤ 50,000 sf
(total including net new)
Yes
Exempt from VMT Analysis
No
Residential / office -
in low VMT area + within 0.5
mile of major transit stop
Yes
Exempt from VMT Analysis
No
Affordable housing -
100% affordable units +
in low VMT area / within 0.5
mile of major transit stop
Yes
Exempt from VMT Analysis
No
Local serving
public facilities
≤ 10,000 sf
(total new or added)
Yes
Exempt from VMT Analysis
Project Screening
Generate > 800 daily
vehicle trips
Yes
No
Retail > 50,000 sf
Yes
No
Use C/CAG sketch model
to estimate VMT
Use City travel demand
model to estimate VMT
VMT Evaluation
Land Use?
Mixed
Use
Evaluate components
independently
Residential
Retail / Hotel / School
Office
VMT per Capita
< 13.7 miles?
No
Potentially significant
VMT impacts
Yes
Less-than-significant
VMT impacts
Net increase
in total VMT?
Yes
Potentially significant
VMT impacts
No
Less-than-significant
VMT impacts
VMT per Job
< 12.7 miles?
No
Potentially significant
VMT impacts
Yes
Less-than-significant
VMT impacts
Determine VMT Impacts

ATTACHMENT C



ATTACHMENT D