City of Manhattan Beach Transportation Impact Analysis Guidelines

Community Development Department
Traffic Engineering Division
October 2020 Draft

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Section 1. – Background + Purpose

A Transportation Impact Analysis (TIA) is a technical document prepared by a transportation professional to assess the potential for development projects, land use plans and/or infrastructure projects to impact the transportation system. The City of Manhattan Beach generally requires the preparation and submission of a TIA for discretionary planning projects that meet the following criteria:

Development Projects and Land Use Plans:

- Estimated to generate a net increase of 110 or more daily vehicle trips.

Transportation Projects:

- Likely to induce additional VMT by increasing vehicle capacity.
- Projects for which a TIA is required by ordinance, regulation, resolution, court order or other public agency requirement.

Under the California Environmental Quality Act (CEQA), cities, counties, and other public agencies must analyze land development and transportation projects to determine whether they may have a significant impact on the environment. One key environmental area considered under CEQA is transportation impact. Traditionally, transportation impacts have been evaluated by examining whether the project is likely to cause automobile delay at intersections and congestion on nearby individual highway segments, and whether this delay will exceed a certain threshold (this is known as Level of Service or LOS analysis).

Senate Bill 743 (SB 743) was passed by the State legislature and signed into law by the Governor in the fall of 2013. It took effect throughout California on July 1, 2020. This legislation led to a change in the way that transportation impacts are measured under CEQA. Pursuant to SB 743, CEQA transportation studies must now be based on vehicle miles traveled (VMT). VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto our roads, the project may cause a significant transportation impact. This change was made to bring CEQA transportation studies into better alignment with statewide initiatives to reduce greenhouse gases, reduce suburban sprawl, encourage infill developments, and promote the implementation of multimodal transportation networks.

SB 743 requirements were formally adopted into the CEQA Guidelines upon their certification on December 28, 2018. The Governor's Office of Planning and Research (OPR) released their "*Technical Advisory on Evaluating Transportation Impacts in CEQA"* at this same time. Section 15064.3 of the updated CEQA Guidelines identifies automobile VMT as the most appropriate metric for transportation impact analysis for land use projects and requires lead agencies to start using VMT impact analysis after July 1, 2020. SB 743 also applies to transportation infrastructure projects, although agencies were given flexibility in determining the performance measure for these types of projects as long as their determination is consistent with the CEQA Guidelines Section 15064.7 and supported by substantial evidence.

On May 15, 2018, the City adopted the Manhattan Beach Mobility Plan, which updated the Circulation, Neighborhood Traffic Intrusion, Parking, and Bicycle Networks chapters of the Infrastructure Element of the General Plan. The Mobility Plan seeks to provide for a balanced, safe, multi-modal transportation system to meet the needs of all users, including motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation. It reflects an evolution away from an auto-centric perspective towards Complete Streets and Living Streets concepts, such as those identified and adopted in the California Complete Streets Act (California AB 1358) and the SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The City's Mobility Plan acknowledges the need to reduce VMT and shift from short automobile trips to biking, walking and use of public transit in order to reduce greenhouse gas emissions and improve public health.

Specifically, the TIA Guidelines help to support the goals and policies in the City's General Plan Mobility Plan, namely:

> **Goal I-1: Provide a balanced, safe, and efficient multi-modal transportation system that serves the mobility needs of all community members, including children, seniors, and the disabled.**
>
> **Goal I-2: Move commuter traffic through the City primarily on arterial streets and collector streets, as appropriate, to protect other streets from the intrusion of cut-through traffic.**

Other State regional goals supported by these TIA Guidelines include the following:

- California Global Warming Solutions Act (Assembly Bill 32)
- Sustainable Communities and Climate Protection Act of 2008

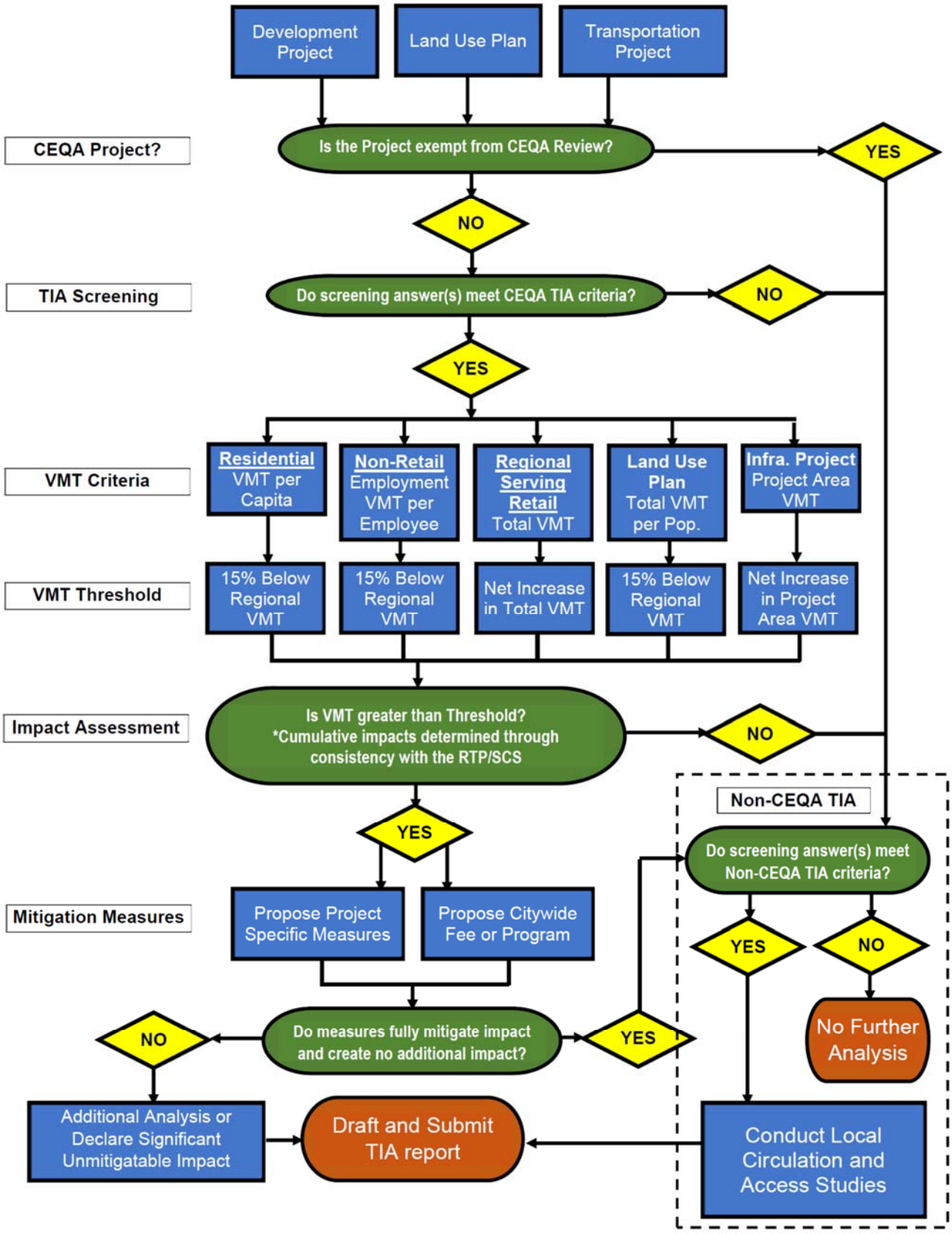
- California Complete Streets Act (Assembly Bill 1358),
- SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)
- Los Angeles County Metro Long Range Transportation Plan (LRTP)

The purpose of these TIA Guidelines is to establish a review process for development projects, land use projects and infrastructure projects to analyze transportation impacts. This allows the City to advance the Mobility Plan vision of developing a safe, accessible, well-maintained, and well-connected multi modal transportation network. The TIA Guidelines reflect and enact the most current State and local land use goals, policies and requirements. Finally, they are compliant with CEQA Guidelines revisions (California Code of Regulations Section §15064.3), and OPR's Technical Advisory.

Section 2. – TIA Procedure

Upon receipt of a project application for any discretionary action (Use Permit, Variance, Zone Change, etc.), the City will conduct a preliminary assessment based on the application details to determine if a TIA is required. A development project is defined as any proposed land use project that changes the use within an existing structure, creates an addition to an existing structure, or new construction, which includes any occupied floor area. For transportation infrastructure projects for which a transportation analysis is required, refer to Section 3.2 of these Guidelines for recommended transportation analysis methods. The following process shall be followed for the preparation, screening, submission and review of TIAs:

TABLE 2-1
TRANSPORTATION IMPACT ANALYSIS PROCESS FLOWCHART



Section 2.1 – General Steps

The project applicant shall follow these general steps summarized below when preparing a Transportation Impact Analysis (TIA) for a discretionary development project or a transportation project.

Step 1. Project Memo

The project applicant shall inform the *City Traffic Engineer* that a new TIA is being prepared. In this initial communication, the following information shall be provided:

A. Project Description – The applicant shall provide a general description of the project, including size (defined by square footage per use and/or number of dwelling units) and use(s). If the exact size of the project land uses are unknown, the applicant should over-estimate the size to analyze a larger project to be conservative. The project description should include information on any special operation, phased construction and/or other unusual conditions. The project description shall specify a building address, Assessor's parcel number, and project title.

B. Project Site Plan – The applicant shall provide a detailed project site plan, clearly identifying driveway or access location(s); loading/unloading areas; and parking design and circulation to help define the distribution of project trips. Considerations for traffic flow and movement should be designed and incorporated early in building and parking layout plans.

Step 2. Preliminary Design Review

Project applicants shall conduct a preliminary design review with the Planning Division and other city departments to determine the requirements for the proposed project elements prior to initiating the TIA. The project applicant shall consult with other agencies and adjacent jurisdictions (e.g., Caltrans, other cities, transit agencies, etc.) that may be affected by site access and travel demands generated by the project to ensure those agencies' transportation-related concerns and issues are properly addressed in the TIA. If the TIA includes the evaluation of traffic conditions in an adjacent local jurisdiction, then any corrective actions deemed necessary to address circulation concerns should be reviewed by and confirmed in writing by that jurisdiction. Written confirmation of consultation with all affected agencies is required.

Step 3. TIA Scope of Work Document

The project applicant shall prepare and submit a TIA Scope of Work Document to the *City Traffic Engineer* for approval. The Document will describe the assumptions and parameters to be included in the TIA including any analysis requirements from other affected jurisdictions identified in Step 2. (See attached sample.)

Step 4. Data Collection

The project applicant shall gather qualitative and quantitative data needed to support the required analyses and components of the TIA Report. Data may include vehicle/pedestrian/bicycle counts, roadway geometrics, field observations, parking counts, time/delay studies, origin/destination studies, VMT assumptions and criteria, etc. Traffic count data shall be collected in accordance with standards and methods established in the TIA Guidelines.

Step 5. TIA Preparation

The project applicant shall compile all of the information identified in Steps 1 through 4, including the analyses and findings conducted in Sections 3 to 5, and present them in a logical and clear TIA report pursuant to Section 2.1, with appropriate tables, figures and charts. An appendix of collected data, worksheets and supporting documentation shall be attached to the TIA report.

Step 5. TIA Submittal

The project applicant shall submit the completed Draft TIA Report to City for review and comments. Initial and subsequent revisions shall be uniquely dated and submitted via electronic copy. The City may require printed originals of Final and/or revised TIAs as part of the CEQA environmental review process for public review.

Step 6. Mitigation and Monitoring

The project applicant may be responsible for the implementation of physical or operational mitigation measures as well as ongoing reporting, depending on the nature of the mitigation measures and corrective actions to be implemented by the project. Reporting and monitoring of Transportation Demand Management (TDM)

measures implemented by the project to improve mobility options at and around a project site may also be required and will be described in the TIA Report.

Section 2.1 – TIA Report Format

Each TIA Report should follow a consistent format and organization and include all of the figures, maps, and information developed in this section. The level of detail and parameters for each project's TIA will be determined as part of the scoping process and identified in the TIA Scope of Work Document.

Section 2.1.1 - Project Description

The TIA Report shall include a detailed project description at the beginning of the document. The project description should include the following information at minimum:

- Project name and Planning Case Number, as assigned by the Planning Division,
- Location of the project site, address, Assessor's Block and Lot number(s), land use zone(s), cross streets, and nearby points of interest.
- Existing and proposed total square footage for each type of land use and/or the number of residential units, including the net changes for each type of use,
- Transportation demand management measures and traffic calming measures incorporated as part of the proposed project.

This section shall also include the following maps and figures:

- Project site plan showing driveway locations, loading/unloading area,
- Site map showing study intersections, distance of the project driveway(s) from the adjacent intersections, and nearby points of interest. Include location and identification of all major buildings, driveways, parking areas, and loading docks of the project and those of immediately adjacent properties.

Section 2.1.2 - Site Conditions

The information on the location and surroundings of the project shall be discussed following the project description, as a different section of the TIA Report. This section will provide a brief, but comprehensive, description of the existing transportation infrastructure and conditions in the vicinity of the project, including all modes of transportation. The specific boundaries of

the TIA study area, for both the location and surroundings of the project, should be confirmed during the initial discussion and scoping process with the *City Traffic Engineer*.

The project context section should include the following information, with the level of detail to be directed by the *City Traffic Engineer* during the scoping process:

- Street designations, classifications, existing and planned pedestrian and bicycle facilities,
- Description of the study area streets, including the number and width of lanes, direction of flow, on-street parking information, and other significant street information,
- Description of public transit routes operating on the streets within the TIA study area, including hours of service, peak period headways, type of vehicle (bus, light rail vehicle, etc.), and service provider.

This section of the TIA Report will also include the following maps and figures:

- Area map showing location of the project and related projects,
- Street maps of the study area indicating street names, classifications, and traffic control,
- Map or diagram of potential transit, bicycle and pedestrian routes and destinations within one-half mile of the edge of a project site,
- Table indicating location, size, name, description, and trip generation of each related project.

Section 2.1.3 - Analysis, Discussion, and Results

Following the descriptions of the project and its surroundings, the TIA Report shall contain sections that detail the analyses conducted, summarize the results, identify any significant transportation impacts, and describe any mitigation measures for each of the CEQA issue areas identified in Section 3, and any operational deficiencies and corrective actions for the additional areas of analysis identified in Section 4.

The TIA Report should include calculations, data, and descriptions of any transportation analyses conducted to determine project impacts on the transportation system. The TIA should describe the results of all project scenarios and describe all project impacts that have been identified. Data and worksheets should be included in appendices and summarized in the main document.

Section 2.1.4 – Mitigation Measures and Recommended Actions

When a project analysis demonstrates potentially significant transportation impacts, as defined in Section 3, or local circulation impacts, as defined in Section 4, the project's consultant should meet with the City to discuss potential transportation mitigation options and corrective actions before submitting the draft TIA Report. A variety of transportation mitigation measures should be considered to mitigate a project's significant transportation impact to a level of insignificance. All proposed mitigation measures must be feasible and implementable, have a responsible party and appropriate timing, and must mitigate the impact to a quantifiable level. Mitigation measures shall be described in the TIA to the satisfaction of the *City Traffic Engineer*.

Section 2.1.5 – Conclusion

The TIA report shall have a conclusion section summarizing the findings, recommendations, mitigation measures and ongoing monitoring requirements for the proposed project.

Section 3. - California Environmental Quality Act (CEQA) Transportation Impact Analysis

CEQA Guidelines require the use of vehicle miles traveled (VMT) for the assessment of transportation impacts to the environment caused by development projects, transportation plans, and transportation infrastructure projects. These guidelines follow the recommendations of the Office of Planning and Research and the California Air Resources Board (CARB) to measure VMT, establish thresholds of significance, and recommend mitigation measures for CEQA required transportation impact analysis in the City.

Section 3.1 – CEQA TIA Analysis for Development Projects

For development projects, the purpose of the TIA analysis is to assess whether a proposed project or plan adequately reduces total VMT. The City has published the following guidance regarding screening and impact criteria to address this question. The screening criteria is intended to determine whether a TIA should be performed, and impact criteria are meant to identify when a significant transportation impact is expected to occur. Any interpretation of these guidelines for a particular project shall be decided solely with the City.

Section 3.1.1 - Screening Criteria

Section 3.1.1.1 - Non-Retail Project Trip Generation Screening Criteria

Per CEQA Guidelines, (§15301(e)(2)), typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact. CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. If the answer is NO to the question below, further analysis is not required, and a less than significant determination can be made.

- **Does the non-retail development project generate a net increase of 110 or more daily vehicle trips**?

A project's daily vehicle trip generation should be estimated using the most recent edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual. If the project proposed

land use is not listed in the ITE Trip Generation Manual, a custom trip generation study or methodology should be submitted to the *City Traffic Engineer* for review and approval.

Section 3.1.1.2 - Retail Project Site Plan Screening Criteria

A project that contains a local serving retail use is assumed to have less than significant VMT impacts for the retail portion of the project. If the answer to the following question is NO, a less than significant determination can be made for the portion of the project that contains retail uses.

- **Does the project contain retail uses that exceed 50,000 square feet of gross floor area?**

However, if the retail project is part of a mixed-use project, then the remaining portion of the project may be subject to further analysis in accordance with other screening criteria in Section 3.1. Projects that include retail uses in excess of the Retail Project Site Plan Screening Criteria need to evaluate the entirety of the project's VMT.

Section 3.1.1.3 – Proximity to Transit Based Screening Criteria

CEQA Guideline Section 15064.3, subdivision (b)(1), states that lead agencies generally should presume that certain projects (including residential, retail, and office projects, as well as projects that are a mix of these uses) proposed within ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor will have a less-than-significant impact on VMT. A major transit stop is site containing a rail station or the intersection of two or more bus routes with a service interval of 15 minutes or less during the morning and afternoon peak commute periods. A high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours. (Pub. Resources Code, § 21155) The Metro C Line Douglas Station is the only major transit stop within ½ mile of Manhattan Beach. If a project is located near a major transit stop or high-quality transit corridor, the following question should be considered:

- **Is the project located within a one-half mile radius of a major transit stop or an existing stop along a high-quality transit corridor?**

If the answer to the question above is YES, then the following subsequent questions should be considered to determine if this presumption of less-than-significant impact on VMT would not be appropriate based on criteria identified in the OCR Technical Advisory:

- **Does the project have a Floor Area Ratio less than 0.75?**

- Does the project provide more parking than required by the City?
- Is the project inconsistent with the SCAG RTP/SCS?
- Does the project replace residential units set aside for lower income households with a smaller number of market-rate residential units?

If the answer to all four questions is NO, further analysis is not required, and a less than significant determination can be made. Refer to the CEQA Technical Advisory for lower income housing unit screening criteria.

Section 3.1.1.4 – Residential Land Use Based Screening Criteria

Per CEQA Guidelines, (§ 15301(e)(2)) noted earlier, residential projects that generate or attract fewer than 110 net trips per day can be generally assumed to cause a less-than-significant transportation impact. If the answer is NO to the question below, further analysis is not required, and a less than significant determination can be made.

- Does the residential development project generate a net increase of 110 or more daily vehicle trips?

Section 3.1.2 - Impact Criteria

The project has a potentially significant VMT impact if it meets one or more of the criteria listed below. These impact criteria are based on latest guidance published by OPR and CARB to reach greenhouse gas reduction goals, but their applicability to a specific project shall be justified with substantial evidence and is not presumed to be appropriate for every project.

- Residential Projects. The project's residential VMT per capita would not be less than 16.8% below the existing residential VMT per capita, (See Table 3-1)
- Non-Retail/Office Projects. The project's employment VMT per employee exceeding would not be less than 16.8% below the existing employment VMT per employee, (See Table 3-1)
- Regional Serving Retail Projects. The project would result in a net increase in existing total VMT, (See Table 3-1)
- Land Use Plans. The plan total VMT per service population (residents and employees) would not be less than 16.8% below the existing VMT per service population, (See Table 3-1) and

- For other land use types, please contact the *City Traffic Engineer* to determine which threshold(s) of significance should be applied. (See Table 3-1)

Table 3-1: Baseline VMT and VMT Impact Criteria (16.8% Below Area Baseline)

	Resident VMT per Capita	Employment VMT per Employee	Total VMT per Service Population
Baseline Area	12.7	18.4	31.1
16.8% Below Baseline	10.6	15.3	25.9

Table 3-1 provides the Baseline VMT for the City at the time these guidelines were prepared as determined by the Los Angeles County Senate Bill (SB) 743 Implementation and CEQA Updates Report. This baseline VMT is the average existing regional VMT rate or the calculated regional VMT rate at the time the TIA is prepared as defined in the TIA Scope of Work Document.

Section 3.1.3 - Methodology

The SCAG RTP/SCS is the regional transportation plan that demonstrates compliance with air quality conformity requirements and greenhouse gas (GHG) reduction targets. The City has adopted the RTP/SCS Travel Demand Forecast Model (as described in the Los Angeles County Senate Bill (SB) 743 Implementation and CEQA Updates Report) to estimate VMT for projects in the City. This forecasting model accurately calculates both locally and regionally generated VMT without regard to local boundaries. It is sponsored and supported by SCAG, the region's MPO, and is regularly updated with new travel data. Transportation demand management strategies incorporated as project design features should be considered in the estimation of a project's daily vehicle trips and VMT. (See Section 3.1.4 regarding TDM strategies.) The following methodologies and references should be used in calculating the potential significant impact for development projects and land use plans.

Section 3.1.3.1 - Project Impact Determination

- Residential Projects: Daily vehicle trips, daily VMT, and daily residential VMT per capita for residential projects should be estimated using the SCAG RTP/SCS Travel Demand Forecast Model.

- Office Projects: Daily vehicle trips, daily VMT, and daily employment VMT per employee for office projects should be estimated using the SCAG RTP/SCS Travel Demand Forecast Model.

- Regional Serving Retail Projects: The TIA Scope of Work Document prepared by the project applicant and approved by the *City Traffic Engineer* will outline one of the following methods for impact determination:

    - Preparation of a market-study-based transportation analysis submitted by the project applicant that demonstrates the project area is underserved for the proposed retail use (i.e. market radius is greater than average for the region or other similar metric) and that the project will shorten existing shopping trips by creating an intervening location between trip origins and current retail destinations.

    - Run the SCAG RTP/SCS Travel Demand Forecasting Model with and without the project. Since the overall number of trips in the model is based on home-based trips and is balanced to home-trip productions, the total number of trips will not be influenced materially by the introduction of the additional retail space. Rather, the model will redistribute home-shopping trips from other retail destinations to the proposed retail destination.
        - If the project is entirely retail, the following steps apply:
            - Determine the Traffic Analysis Zone (TAZ) in which the project is located,
            - Convert the project retail land uses into the appropriate employment categories utilized in the model and adjust the socioeconomic parameters in the TAZ appropriately to reflect removal of existing land uses and addition of the project,
            - Run the four-step model process for the model existing base year for the four-time periods in the model (AM peak period, midday period, PM peak period, nighttime period) for the base ("no project") scenario and for the "plus project" scenario,
            - Calculate total VMT on the model network for each time period and sum to determine daily VMT for each scenario. The total VMT should capture both employee and home-shopping trips. Subtract the daily VMT for the base scenario from the daily VMT for the "plus project" scenario to determine the net change in daily VMT.

- If the proposed project is a mixed-use development including more than 50,000 square feet of retail, conduct steps similar to those described above. However, first create a "without retail" model scenario that includes the rest of the project's proposed land uses and then create and run the four-step model for this "with retail" scenario. Subtract the daily VMT for the "without retail" scenario from the daily VMT for the "with retail" scenario to determine the net change in daily VMT.

- Land Use Plans: Daily vehicle trips, daily VMT, and daily total VMT per service population for land use plans should be estimated using the SCAG RTP/SCS.

- Unique Land Uses: Some projects will not fit into one of the above categories. In such cases, a customized approach may be required to estimate daily trips and VMT. The methodology and thresholds to be used in such cases should be proposed by the developer's traffic consultant in consultation with and approved by the City Traffic Engineer in the TIA Scope of Work Document. The methodology and thresholds shall be consistent with CEQA guidelines.

Mixed-Use Projects: The project VMT impact should be considered significant if any (one or all) of the project land uses exceed the impact criteria for that particular land use, after taking credit for internal capture. In such cases, mitigation measures that reduce the VMT generated by any or all of the land uses could be considered towards the reduction in total project VMT.

Section 3.1.3.2 - Cumulative Impacts Determination

Land use projects should consider both short- and long-term project effects on VMT. Short-term effects will be evaluated in the detailed project-level VMT analysis. Long-term, or cumulative effects is determined through consistency with the SCAG RTP/SCS. As such, projects that are consistent with the RTP/SCS in terms of development location, density, and intensity, are part of the regional solution for meeting air pollution and GHG goals. Projects that are deemed to be consistent would have a less than significant cumulative impact on VMT. Development in a location where the RTP/SCS does not specify any development may indicate a significant impact on transportation. However, if a project does not demonstrate a significant impact in the project-level impact analysis, a less than significant impact in the cumulative impact analysis can also be determined. Projects that fall under the RTP/SCS's efficiency-based impact thresholds are already shown to align with the long-term VMT and GHG reduction goals of the RTP/SCS.

Land use projects that: (1) demonstrate a project impact after applying an efficiency based VMT threshold and (2) are not deemed to be consistent with the RTP/SCS could have a significant cumulative impact on VMT. Further evaluation would be necessary to determine whether the project's cumulative impact on VMT is significant. This analysis could be conducted by running the SCAG RTP/SCS Travel Demand Forecasting Model with the cumulative "no project" scenario representing the RTP/SCS cumulative year conditions and the cumulative "plus project" scenario representing the reallocation of the population and/or employment growth based on the land supply changes associated with the proposed project. Baseline Area VMT, residential VMT per capita, or employment VMT per employee (depending on project type) would be calculated for both scenarios, and any increase in VMT, residential VMT per capita, or employment VMT per employee (depending on project type) above that which was forecasted in the RTP/SCS would constitute a significant impact.

When specifically evaluating the VMT impacts of regional-serving retail, the cumulative analysis would include additional steps under the project impact methodology to compare a cumulative "plus project" scenario with the cumulative "no project" scenario. The cumulative "no project" scenarios represents the adopted RTP/SCS cumulative year conditions (as incorporated into the SCAG RTP/SCS model). This would involve the following additional steps:

- Determine the traffic analysis zone (TAZ) in which the project is located,
- Convert the project land uses into the appropriate employment categories utilized in the RTP/SCS horizon year model. Adjust the socioeconomic parameters in the TAZ appropriately to reflect removal of the existing land uses and addition of the project,
- Run the four-step model process for the model's cumulative "no project" scenario for the four-time periods in the model (AM peak period, midday period, PM peak period, nighttime period). Then do the same for the base cumulative "no project" scenario and for the cumulative "plus project" scenario,
- Calculate total VMT on the model's network for each time period as well as the sum total to determine daily VMT for each scenario. Subtract the daily VMT for the base cumulative "no project" scenario from the daily VMT for the cumulative "plus project" scenario to determine the net change in daily VMT.

Land use plans that: (1) demonstrate a project impact after applying an efficiency based VMT threshold and (2) are not deemed to be consistent with the SCAG RTP/SCS could

have a significant cumulative impact on VMT. Further evaluation would be necessary to determine whether the Plan's cumulative impact on VMT is significant. This analysis could be conducted by running the SCAG RTP/SCS Travel Demand Forecasting Model with the cumulative "no project" scenario representing the RTP/SCS cumulative year conditions and the cumulative "plus project" scenario representing the reallocation of the population and/or employment growth based on the land supply changes associated with the proposed plan. Total VMT and VMT per service population would be calculated for both scenarios, and any increase in VMT above that which was forecasted in the RTP/SCS would constitute a significant impact.

Section 3.1.4 - Mitigation

Section 3.1.4.1 - Development Project Mitigations

Potential mitigation measures for a development project's VMT impacts can include the following:

- Transportation demand management (TDM) strategies beyond those that will be included as project design features. These strategies shall be demonstrated to be effective in reducing VMT. Some of these may include, but are not limited to, the following measures described in Table 3-2 below. Substantial evidence should be provided to the City to support the claimed effectiveness of the measure(s) as it relates to the specific project or plan.

Table 3-2: Potential TDM Strategies

Category	Measure
Commute Trip Reduction	• Commute Trip Reduction Programs with Required Monitoring • Ride Sharing Programs • Subsidized or Discounted Transit Programs • Telecommuting • Alternative Work Schedules
Education & Encouragement	• Voluntary Travel Behavior Change Program • Promotions and Marketing to Reduce Vehicle Trips
Parking	• Unbundle parking • Reduce Parking Supply • Parking Cash Out • Workplace Parking Fees
Transit	• Increase Transit Accessibility or System Improvements

	• Reduce Headways or Enhance Public Transit System • Neighborhood Shuttle • Transit Subsidies
Shared Mobility	• Car Sharing • Bike Sharing • Other Shared Mobility Devices/Programs • School Carpool/Shuttle Program
Bicycle Infrastructure	• Construct/Improve On-Street Bike Facilities • Outdoor Bike Parking/Lockers • Bicycling Incentives and Showers
Neighborhood/Site Enhancement	• Pedestrian Network Improvements • Traffic Calming Measures • Car Sharing Programs

- Additional TDM measures beyond those listed above may be considered, if such measure is used to quantitatively reduce a project's VMT estimate. Substantial evidence should be provided to the City to support the effectiveness of the measure,
- For a single-use project, introducing compatible additional land uses to allow for internalization of trips,
- For a mixed-use project, modifying the project's land use mix to increase internalization of trips, reduce external trip generation, and serve the local community.

Section 3.1.4.2 - Land Use Plans Mitigations

Potential mitigation measures for land use plan VMT impacts can include:

- Reallocation of future land use development to increase land use variety and density in transportation-efficient locations (e.g., proximity to jobs and housing, proximity to transit, proximity to services),
- Measures to enhance the public transit system and/or connections to the system including active transportation mode improvements, such as infrastructure improvements, programs, or education and marketing,
- Measures to encourage reduced reliance on automobile trips and encourage transit and active transportation modes.
- Measures to improve/expand bicycle or low-speed vehicle transportation network and facilities.

- Measures to provide/enhance local commuter shuttles, local fixed route system and/or private shared transportation programs.

Section 3.2 - CEQA TIA Analysis for Transportation Projects

Transportation projects that increase vehicular capacity can lead to additional travel on the roadway network, which can include induced vehicle travel due to factors such as increased speeds and induced growth. "Induced" travel or VMT is the increased amount of vehicle travel on the transportation network that is caused by the highway capacity increase. To provide consistency across transportation projects and achieve the County's sustainability goals, the screening criteria for transportation impacts is based on the question below:

- For a transportation project, would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)(2)? This section states that transportation projects that reduce or have no impact on VMT should be presumed to cause a less than significant impact. It also excludes those projects that are already addressed at a programmatic level in a regional transportation plan EIR. For roadway capacity projects, agencies have the discretion to determine the methodology to measure transportation impact that is consistent with CEQA. The City has chosen to follow the County's methodology.

For transportation projects, the intent is to assess whether a transportation project induces substantial additional VMT. The following screening criteria and impact criteria are meant to serve as guidance for projects to determine whether a TIA should be performed, and whether a project generates a significant transportation impact. The criteria will be considered on a project-by-project basis as approved by the *City Traffic Engineer*.

Section 3.2.1 - Screening Criteria

If the answer is NO to the following question, further analysis will not be required, and a less than significant impact determination can be made for that threshold:

- **Would the project include the addition of through traffic lanes on existing or new highways, including general purpose lanes, high-occupancy vehicle (HOV) lanes, peak period lanes, auxiliary lanes, and lanes through grade-separated interchanges (except managed lanes, transit lanes, and auxiliary lanes of less than one mile in length designed to improve roadway safety)?**

Transit and active transportation projects and projects that reduce roadway capacity generally reduce VMT and, therefore, are presumed to cause a less-than-significant impact. Transportation projects that are not likely to lead to a substantial or measurable increase in

vehicle travel and would, therefore, not be required to prepare an induced travel analysis supported by the OPR Technical Advisory, are listed below:

- Rehabilitation, maintenance, replacement, safety, and repair projects designed to improve the condition of existing transportation assets (e.g., highways; roadways; bridges; culverts; Transportation Management System field elements such as cameras, message signs, detection, or signals; tunnels; transit systems; and assets that serve bicycle and pedestrian facilities) and that do not add additional motor vehicle capacity,
- Roadside safety devices or hardware installation such as median barriers and guardrails,
- Roadway shoulder enhancements to provide "breakdown space" - dedicated space for use only by transit vehicles, to provide bicycle access, or to otherwise improve safety, but which will not be used as automobile vehicle travel lanes,
- Addition of an auxiliary lane of less than one mile in length designed to improve roadway safety,
- Installation, removal, or reconfiguration of traffic lanes that are not for through traffic, such as left, right, and U-turn pockets, two-way left turn lanes, or emergency breakdown lanes that are not utilized as through lanes,
- Addition of roadway capacity on local or collector streets provided the project also substantially improves conditions for pedestrians, cyclists, and, if applicable, transit,
- Conversion of existing general-purpose lanes (including ramps) to managed lanes or transit lanes, or changing lane management in a manner that would not substantially increase vehicle travel,
- Addition of a new lane that is permanently restricted to use only by transit vehicles,
- Reduction in number of through lanes,
- Grade separation to separate vehicles from rail, transit, pedestrians or bicycles, or to replace a lane to separate preferential vehicles (e.g., high-occupancy vehicles [HOV], high-occupancy toll [HOT], or trucks) from general vehicles,
- Installation, removal, or reconfiguration of traffic control devices,
- Installation of traffic metering systems, detection systems, cameras, changeable message signs and other electronics designed to optimize vehicle, bicycle, or pedestrian flow,
- Timing of signals to optimize vehicle, bicycle or pedestrian flow,
- Installation of roundabouts or traffic circles,

- Installation or reconfiguration of traffic calming devices,
- Adoption of, or increase, in tolls,
- Addition of tolled lanes, where tolls are sufficient to mitigate VMT increase.
- Initiation of new transit service,
- Conversion of streets from one-way to two-way operation with no net increase in number of traffic lanes,
- Removal or relocation of off-street or on-street parking spaces,
- Adoption or modification of on-street parking or loading restrictions (including meters, time limits, accessible spaces, and preferential/reserved parking permit programs),
- Addition of traffic wayfinding signage,
- Rehabilitation and maintenance projects that do not add motor vehicle capacity,
- Addition of new or enhanced bike or pedestrian facilities on existing streets/highways or within existing public rights-of-way,
- Addition of Class I bike paths, trails, multi-use paths, or other off-road facilities that serve non- motorized travel,
- Installation of publicly available alternative fuel/charging infrastructure,

Section 3.2.2 – Impact Criteria

The project has a potentially significant VMT impact if it meets the criteria listed below. The impact criteria below are considered as a potential option that may be selected as thresholds for determining significance. The impact criteria below is based on guidance published by OPR, but their applicability to a specific project shall be justified with substantial evidence and is not presumed to be appropriate.

- The project will increase the project area VMT, as measurable by the SCAG RTP/SCS base year Travel Demand Forecasting Model plus an induced travel elasticity factor per lane mile.

Section 3.2.3. - Methodology

Section 3.2.3.1. - Project Impacts Determination

The City utilizes the SCAG RTP/SCS Travel Demand Forecasting Model that is suitable for assessing change in VMT due to a given roadway project in its land use/transportation context. This model should be used to calculate the change in VMT from transportation projects that, by definition, are considered to have the potential for inducing VMT.

For the direct measurement of project impacts, the SCAG RTP/SCS model's base year network should be modified to reflect the vehicle capacity-enhancements that would result from the proposed transportation project. The base year model should be run with and without the proposed transportation project, without adjusting the model's land use inputs, to isolate the potential change in network VMT with the project as compared to the baseline. The assessment should cover the full area in which driving patterns are expected to change and include supporting evidence for why such area was selected.

The SCAG RTP/SCS model is capable of adjusting trip lengths, mode split, and route choice in response to network changes. However, the model does not include the ability to modify land use in response to changes to the transportation system and will not increase trips to reflect latent demand. Therefore, such induced travel should be estimated by applying an induced demand elasticity factor available from appropriate academic literature.

Accordingly, the VMT impact of a transportation project shall be calculated as the direct change in VMT as estimated by the SCAG RTP/SCS model with and without the project plus a factor for induced demand calculated as follows:

- Run the SCAG RTP/SCS model with and without the transportation project to isolate the potential direct change in network VMT due to changes in trip length, mode split, and route choice,
- Using the SCAG RTP/SCS model, determine the total modeled lane-miles over the project area that fully captures travel behavior changes resulting from the project,
- Determine the percent change in total lane miles that will result from the project,
- Using the SCAG RTP/SCS model, determine the total existing VMT over that same area,
- Multiply the percent increase in lane miles by the existing VMT and then multiply that by the elasticity factor from the latest induced travel literature to determine the induced VMT,

- Add the induced VMT to the modeled change in network VMT due to trip length, mode split, and route choice.

Section 3.2.3.2. - Cumulative Impacts Determination

Analyses should consider both short- and long-term project effects on VMT. Short-term effects will be evaluated in the project-level VMT analysis described above. Long-term, or cumulative, effects will be determined through consistency with the SCAG RTP/SCS. The RTP/SCS is the regional plan that demonstrates compliance with air quality conformity requirements and greenhouse gas (GHG) reduction targets. As such, transportation projects that are included in this plan are part of the regional solution for meeting air pollution and GHG reduction goals. Transportation projects that are deemed to be consistent would have a less than significant cumulative impact on VMT.

Transportation projects that are not deemed to be consistent could have a significant cumulative impact on VMT. Further evaluation would be necessary to determine whether such a project's cumulative impact on VMT is significant. This analysis would be conducted by running the RTP/SCS cumulative year conditions and the cumulative "plus project" scenario[7] incorporating the network changes due to the proposed transportation project. An induced demand elasticity factor should be applied to any increase in VMT thus determined, and any increase in VMT would constitute a significant impact because it could jeopardize regional air quality conformity or GHG reduction findings.

Section 3.2.4. – Mitigation

Mitigation measures that could reduce the amount of increased vehicle travel induced by capacity increases could include, but not be limited to, the following measures:

- Converting existing general-purpose lanes to HOV lanes, high occupancy toll (HOT) lanes, toll lanes, or bus lanes to encourage carpools and fund transit improvements,
- Implementing or funding off-site mobility improvements, including the initiation of transportation management organizations (TMOs),
- Implementing intelligent transportation systems (ITS) strategies to improve passenger throughput on existing lanes,
- Additional measures beyond those listed above, may be considered, if such measures are used to quantitatively reduce a project's VMT estimate, substantial evidence should be provided to support the claimed effectiveness of the measure(s).

Section 4 – Non-CEQA Local Circulation and Site Access Studies

CEQA guidelines do not modify the discretion lead agencies have to develop their own methodologies or guidelines, or to analyze impacts to other components of the local transportation system, such as walking, bicycling, transit, and safety. SB 743 does not prohibit use of delay or other analysis metrics for applications other than CEQA, or even for non-transportation impacts in CEQA. Such studies are useful when considering issues such as intersection lane assignments, signal/traffic control warrants, signal timing, operational analysis, and are needed in some cases for assessing air quality, noise, safety, and energy impacts of a project. This interpretation is supported by Public Resources Code Section 21099.

The City's Mobility Plan includes additional goals and policies to "move commuter traffic while preventing neighborhood intrusion". The Local Circulation and Site Access studies in this Section support and help implement Goal 1-2 of the Mobility Plan. The applicable policies include the following:

Goal 1-2: Move commuter traffic through the City primarily on arterial streets and collector streets, as appropriate, to protect other streets from the intrusion of cut-through traffic.

- Policy 1-2.1: Utilize the Neighborhood Traffic Management Program (NTMP) tools to mitigate neighborhood intrusion by cut-through traffic, and improve conditions for pedestrians and bicyclists.
- Policy 1-2.2: Monitor all major intersections and arterial streets and pursue capital projects as needed to minimize traffic diversion into local streets, improve pedestrian and bicycle conditions to keep traffic moving efficiently.
- Policy 1-2.3: Minimize vehicular access for new developments on local residential streets, and in locations with high pedestrian and bicycle activity, and design access and egress to avoid traffic intrusion on local streets to the maximum extent possible.
- Policy 1-2.4: Require property owners, at the time new construction is proposed, to either improve abutting public right of- way to its full required width per the street master plan or to pay in-lieu fees for improvements, as appropriate.
- Policy 1-2.5: Encourage the use of Intelligent Transportation Systems (ITS), such as advanced traffic signalization, motorist information, advanced transit, advanced emergency vehicle access, and intelligent parking systems, as well as other appropriate communication technologies, to efficiently and safely move traffic.

- Policy I-2.6: Review on-street parking in neighborhoods adjacent to commercial areas where neighbors request such review, and develop parking and traffic solutions for those neighborhoods adversely impacted by spillover parking and traffic.
- Policy I-2.7: Monitor and minimize traffic, parking and truck loading issues associated with construction activities.
- Policy I-2.8: Carefully review commercial development proposals with regard to parking, loading and planned ingress/egress, and enforce restrictions as approved.
- Policy I-2.11: Develop a new multi-modal level of service methodology that includes:
  - Emphasis on pedestrian and bicycle access and circulation
  - Support for reduced vehicle miles traveled
  - Maintenance of appropriate emergency vehicle access and response time

Section 4.1. – Local Circulation Analysis

The site access and circulation constraints related to the provision of access to and from the project site may be analyzed as part of the project's environmental review. The analysis should address the site access and local circulation needs of vehicles, bicycles and pedestrians. If a local circulation analysis is determined to be necessary in consultation with the *City Traffic Engineer*, operational performance may need to be quantified for primary site access points, unsignalized intersections integral to the project's site access, and signalized intersections in the vicinity of the project site.

Section 4.1.1. - Screening Criteria

For development projects, if the answer is YES to any of the following questions, further analysis may be required to assess whether the project would negatively affect project access and circulation:

- **Is the project required to submit a Transportation Impact Analysis pursuant to Section 3?**
- **Does the development project involve a discretionary action that would be reviewed by the Planning Commission?**
- **The project is located along a Minor, Major or Regional Arterial Street as designated on the Functional Classification Map in the City's Mobility Plan (Figure 5), and the study intersections under project build-out conditions (as determined in Section 4.1) operate at a peak hour LOS E or LOS F.**

Section 4.1.2. - Evaluation Criteria

The TIA should include a quantitative evaluation of the project's expected access and circulation operations. Project access is considered constrained if the project's traffic would contribute to unacceptable queuing at nearby signalized intersections or other roadway features. Unacceptable or extended queuing or delay may be defined as follows:

- Vehicle stacking or delays that extend into through lanes,
- Vehicle stacking or delays that extend into intersections.
- Oversaturation of the Level of Service (LOS) of any approach lanes at a study intersection

Section 4.1.3. - Methodology

Section 4.1.3.1. - Level of Service and Queueing Methodology

Intersection Level of Service (LOS) and queueing methodologies from the latest edition of the Transportation Research Board Highway Capacity Manual (HCM) should be used to evaluate the operation of the project driveways and nearby intersections. For individual isolated intersection analysis, the use of software packages such as Synchro, Vistro, or HCS that implement the HCM methodologies is acceptable.

Where oversaturated conditions currently exist, the operational analysis should be conducted using Synchro/SimTraffic or VISSIM simulation models to more accurately reflect the effect of downstream congestion on intersection operations. VISSIM should be used in areas with transit lanes or with high levels of pedestrians conflicting with vehicle turning movements

Section 4.1.3.2. - Study Area

Study locations should be determined in consultation with the *City Traffic Engineer* and should include:

- All primary project driveway(s),
- Unsignalized and/signalized intersections that are adjacent to the project or that are expected to be integral to the project's site access and circulation plan,
- Additional intersections may be necessary as determined by the *City Traffic Engineer*.

For most projects, analyze traffic for both the a.m. and p.m. weekday peak hours as determined by 24-hour traffic counts. For some projects, the analysis should include midday or weekend periods if those periods are expected to have the highest project trip generation.

Section 4.1.3.3. - Traffic Counts

Traffic counts should generally be conducted per the following guidance for the locations identified in the previous section, unless otherwise directed by the *City Traffic Engineer*:

- Turning movement data at the study intersections:
    - Should be collected in 15-minute intervals,
    - Must include vehicle classifications, pedestrian volume counts, and bicycle counts,

- Must include a minimum or 2 hours of traffic counts for each of the peak periods,
- Must be conducted on Tuesdays, Wednesdays or Thursdays, unless otherwise authorized,
- Must exclude holidays, and the first weekdays before and after the holiday,
- Must be taken on days of good weather, and
- Must avoid days with atypical conditions (e.g., road construction, detours, or major traffic incidents),

- Traffic counts from other studies conducted within the previous year may be used, subject to the approval of the City Traffic Engineer.

When simulation analyses are to be conducted, obtain traffic speed and/or travel time data during peak periods to aid in calibration of the simulation model.

Section 4.1.3.4 – Project Trip Generation

Use the latest edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual to calculate daily, weekday AM and PM peak hour and/or weekend peak hour trip generation for the existing and proposed project. Alternately, site specific driveway volume counts may be obtained from the existing and/or comparable land use(s) at the discretion of the *City Traffic Engineer*. The TIA shall include a table showing existing and proposed project trip generation for each land use type. Existing and proposed rip reduction credit may be used pursuant to ITE Trip Generation Manual at the discretion of the *City Traffic Engineer*. The estimated existing and proposed Project Trip Generation shall be included in the TIA Scope of Work Document and approved by the City prior to proceeding with the TIA.

Section 4.1.3.5 - Project Trip Distribution

Distribution patterns for project trips should be determined considering a number of factors including, but not limited to, the following:

- Characteristics of the street system serving the project site,
- Level of accessibility of routes to and from the proposed project site,
- Locations of employment and commercial centers,
- Locations of residential areas.

The TIA shall include map(s) showing project trip distribution percentages (inbound and outbound) at the study intersections, and project driveway(s). The Project Trip Distribution shall be included in the TIA Scope of Work Document and approved by the *City Traffic Engineer* prior to proceeding with the TIA.

Section 4.1.3.6 - Traffic Forecasts

The TIA shall estimate traffic conditions for the study horizon year and annual ambient growth rate as approved in the TIA Scope of Work Document. For development projects constructed in phases over several years, the TIA should analyze intermediary milestones before full buildout and completion of the project. The annual ambient growth rate shall be determined during the scoping process and can be based on the most recent SCAG Regional Transportation Model or other empirical information approved by the City.

The TIA shall consider related project trip generation for known development projects within one-half mile (2,640 foot) radius of the farthest outlying study intersections. Consultation with the Planning Division or other city planning agencies will be required to compile a related projects list.

Traffic forecasts for local circulation constraints are determined by adding project-generated trips to future base traffic volumes, including ambient growth and related projects and conducting the operational analysis.

Any programmed and funded transportation system improvements that are expected to be implemented on or before the project buildout year should be identified in the TIA, in consultation with the City. If programmed improvements include a modification to the existing lane configuration at any of the study intersections, then the study should identify these changes and include the revised lane configuration in the LOS calculations for all future scenarios.

Section 4.1.4. – Recommended Action

Potential corrective actions for project access and circulation constraints can include, but are not limited to:

- Installation of a traffic signal or stop signs or electronic warning devices at site access points,
- Redesign and/or relocation of project access points,

- Redesign of the internal access and circulation system,
- Installation of stop-signs and pavement markings internal to the site,
- Restriction or prohibition of turns at site access points,
- Installation of new traffic signal, left-turn signal phasing, or other vehicle flow enhancements at nearby intersections,
- Reconfiguration of study intersections that reduces gridlock and unsafe conflict points.
- Fair-share contribution towards a planned regional or City Capital Improvement Project that mitigates the identified adverse transportation impact(s).

Any of the above-mentioned actions shall be recommended in accordance with California Manual on Uniform Traffic Control Devices (CA MUTCD) warrants and criteria, or other criteria deemed appropriate by the *City Traffic Engineer*.

Section 4.2 – Construction Phase Analysis

The TIA shall evaluate potential transportation impacts associated with project construction and major in-street construction of infrastructure projects.

Section 4.2.1. - Screening Criteria

If the answer is YES to any of the following questions, further analysis will be required to assess if the project could negatively affect existing pedestrian, bicycle, transit, or vehicle circulation:

- **Would the project construction activities require the closure of any travel lanes, alleys, or vehicular access on an arterial street for more than one full day, (including day and evening hours, and overnight closures if on a residential street)?**
- **Would the project construction activities require the closure of any travel lanes, alleys, or vehicular access on a local street for more than five days, (including day and evening hours, and overnight closures if on a residential street)?**
- **Would off-site construction activities result in the loss of any ADA access to an existing public facility?**
- **Would off-site construction activities restrict access to any bus stops for more than one day, or necessitate any rerouting of a bus route?**
- **Would construction of a project interfere with pedestrian, bicycle, transit, or vehicle circulation and accessibility to adjoining areas?**

Please note that further analysis may determine that a project construction analysis may be required as determined by the *City Traffic Engineer*.

Section 4.2.2. - Evaluation Criteria

The Construction Phase Analysis shall consider the following factors in evaluating potential transportation impacts: location of the project site, functional classification of the adjacent streets; nearby land uses; location of existing bicycle, transit, and pedestrian facilities; availability of alternate routes or additional capacity; alternate locations for bus stops; location of construction related parking; construction loading areas; construction truck routes and access; duration of construction activities, duration of impacted access; and magnitude of the temporary construction activities.

Section 4.2.3. – Methodology

The TIA shall describe the physical setting, including the existing transportation infrastructure identified in the previous section. It shall identify the classification of adjacent streets, on-street parking conditions, bicycle facilities parking, in the immediate vicinity of the construction project, a description of the land uses potentially affected by construction, and an inventory of existing transit lines, bus stops, transit stations, and transit facilities within a 1/2-mile radius of the construction site. Review proposed construction procedures/plans to determine whether construction activity within the street right-of-way would require any of the following:

- Closure of street, sidewalk, or lanes,
- Blocking existing vehicle, bicycle, or pedestrian access along a street or to parcels fronting the street,
- Modification of access to transit stations, stops, or facilities during service hours,
- Closure or movement of an existing bus stop or rerouting of an existing bus line.
- Creation of transportation hazards.

Compare the results to the evaluation criteria to determine the level of deficiency.

Section 4.2.4. - Recommended Action

Potential corrective conditions for project construction constraints can include but are not limited to:

- Implement a construction management plan, including traffic control plans (Consult with the *City Traffic Engineer* if temporary closure of a travel lane may be necessary to stage equipment in the right-of-way),
- Modify construction procedures,
- Limit major road obstructions to off-peak hours,
- Coordinate with emergency service and public transit providers,
- Provide alternative vehicular, bicycle, and/or pedestrian access to affected parcels. Consult with the *City Traffic Engineer* if temporary closure of a travel lane may be

necessary to maintain adequate pedestrian and bicycle access as part of the traffic management plan,

- Coordinate access with adjacent property owners and tenants,
- Coordinate with transit agency regarding maintenance of ADA access to transit stations, stops, and transit facilities (e.g., layover zones),
- Coordinate with transit providers regarding need to temporarily close or relocate bus stops or reroute service.

Section 4.3. – Local Residential Street Cut-Through Analysis

Development and transportation projects may be required to conduct a Local Neighborhood Traffic Management Plan (LNTMP). The objective of this analysis is to determine potential increases in average daily traffic (ADT) volumes on designated local residential streets near a project that can be classified as cut-through trips generated by the project, and that can adversely affect the character and function of those streets. Cut-through trips are defined as trips along a street classified as a Local, Major Local or Residential Collector Street with residential land-use frontage as designated on the Functional Classification Map in the City's Mobility Plan (Figure 5), for purposes of accessing a destination that is not within the same neighborhood where that residential street is located.

Cut-through traffic may result from development projects that add vehicle trips to congested street segments, or by transportation projects that reduce vehicular capacity on arterial street segments. The applicant shall first endeavor to prevent cut-through traffic by designing the project to discourage non-residential project related trips from using local residential streets. To mitigate potential adverse impacts from cut-through traffic (e.g., congestion, access issues, and speeding on residential streets), traffic calming and diverting features should be considered and, if deemed appropriate by City, implemented to offset any anticipated cut-through traffic. Some traffic calming measures and implantation criteria are described in the City's Neighborhood Traffic Management Program (NTMP).

Section 4.3.1. - Screening Criteria

Section 4.3.1.1. - Development Projects

If the answer is YES to the following questions, further analysis may be required to assess whether the project would negatively affect residential streets:

- **Is the project required to submit a Transportation Impact Analysis?**
- **Does the development project involve a discretionary action that would be reviewed by the Planning Commission?**

In addition, for development projects to which any of the following circumstances apply, specific local residential street segments shall be selected for analyses during the transportation assessment scoping process:

- The project is located along a Minor, Major or Regional Arterial Street as designated on the Functional Classification Map in the City's Mobility Plan (Figure 5), and the study

intersections under project build-out conditions (as determined in Section 4.1) operate at a peak hour LOS E or LOS F,

- Based on connectivity to the roadway network, the project has the potential to add cut-through trips to nearby Local, Major Local or Residential Collector streets,
- The project is located where adjacent local residential streets would provide motorists with a viable or attractive route that causes cut-through traffic as an alternative to the primary route. The project applicant in consultation with the *City Traffic Engineer* shall define which routes are viable alternative routes, based on, but not limited to, features such as geography and presence of existing traffic control devices, and other criteria as determined by City.

For the purpose of screening for daily vehicle trips, a proposed project's daily vehicle trips should be estimated using the latest edition of the ITE Trip Generation Manual or as described in Section 4.1.

Section 4.3.2. - Methodology

Section 4.3.2.1. - Development Projects

Existing and future peak hour "without project" traffic conditions for the study intersections in the vicinity of the project should be developed using the intersection analysis methodologies, adding ambient growth rates, related project traffic, and other factors as identified in Section 4.1. Existing and future "without project" daily traffic volumes for the local residential streets included in the analysis should be developed by collecting daily traffic counts for the subject streets, adding ambient growth rates, related project traffic, and other factors also using methodologies described in Section 4.1.

The methodologies described in Section 4.1 should be applied to estimate the daily and peak hour trip generation of the project and distribute the project trips to the street system to forecast the amount of project traffic that may be added to nearby congested roadways. If the nearby study intersections are projected to operate at LOS E or F, the analysis shall include the following:

- Estimate the amount of peak hour project traffic that may instead shift away from the congested facilities to local residential streets,

- Estimate the amount of daily project traffic that may shift to local residential streets, considering that the street system is less congested during non-peak hours than during peak hours,

Section 4.3.3 - Recommended Action

If the analysis indicates that the project may result in substantial diversion as determined by the NTMP Guidelines, the project applicant shall conduct public outreach and develop a Local Neighborhood Traffic Management Plan (LNTMP). The project applicant shall consult with various City departments, neighborhood stakeholders, and any other regional or state stakeholders to collaboratively prepare the LNTMP.

The project applicant shall submit a separate scoping document for the LNTMP to the *City Traffic Engineer* for review and approval as part of the TIA, which shall include the following items:

- Identification of key milestones,
- Summary of proposed process in developing a LNTMP for the local residential street segments of concern,
- Explanation of proposed public outreach and consensus- building process,
- Selection and approval criteria for any evaluated traffic calming measures,
- Proposed funding plan for the analysis, outreach and implementation, including the project's own contribution.

The development of the LNTMP shall generally follow the steps in the City's NTMP Handbook, in consultation with the *City Traffic Engineer*. The LNTMP shall include the analysis of any relevant traffic data, roadway characteristics, and conditions of the local residential street segments of concern.

The LNTMP should prioritize the implementation of effective traffic calming measures, subject to City guidelines and appropriate warrants, which may include, but are not limited to:

- Traffic circles,
- Roadway narrowing effects (raised medians, traffic chokers, etc.),
- Landscaping features,

- Roadway striping changes,
- Speed humps,
- Traffic control devices,
- Restrictive measures such as turn restrictions, physical barriers, diverters, signal metering, etc., Restrictive measures should be carefully evaluated to ensure that they do not lead to unintended diversion of a significant amount of traffic other local residential street(s).

For these above-mentioned items, the project applicant shall also be responsible for determining the feasibility of the potential measures regarding drainage, constructability, street design and other pertinent elements. The project applicant shall lead public outreach in consultation with the *City Traffic Engineer*.

The project applicant shall submit the completed LNTMP with a cost estimate for the improvements, and a funding plan to the City for review and approval prior to issuance of the first grading or building permit. The LNTMP shall be prepared in conformance with the guidelines established by the City and should contain, at a minimum, the following elements:

- Description of existing facilities and neighborhood traffic conditions,
- Description of proposed neighborhood traffic measures, including sketches of specific street modifications,
- Analysis of any change in existing or future traffic patterns as a result of implementation of the plan,
- Implementation and monitoring program.

Section 4.4 - Site Access Analysis

Project access constraints and on-site circulation requirements may need to be analyzed separately from the Transportation Impact Analysis.

Section 4.4.1. - Screening Criteria

If the answer is YES to any of the following question, additional site access studies may be required to assess the projects site access requirements:

- **Does the project include a driveway on a Local, Major Local or Residential Collector Street as designated on the Functional Classification Map in the City's Mobility Plan?**
- **Would project's land use be expected to generate vehicle queuing on-site or at driveways?**
- **Does the project's land use include intermittent events or other conditions which may exceed the supply of on-site parking or adversely impact the local street network?**

Section 4.4.2. - Evaluation and Methodology

The project applicant shall prepare and submit a Project Site Access Scoping Document to the *City Traffic Engineer* for review and approval. The Scoping Document describes the assumptions and parameters that shall be used in any additional site access studies, including any data collection and analysis requirements. Some site access studies that may be required based on the screening criteria in the prior section include the following:

- Traffic Access Management Study to evaluate the site access and on-site circulation conditions related to the project's private roadways, driveways, pedestrian walkways and special parking conditions,
- Traffic Queueing Analysis to assess minimum requirements for vehicular queuing at driveways, vehicle gates or drive-through lanes,
- Traffic Event Management Study to evaluate site access and parking requirements for land use(s) with intermittent events or special conditions that may exceed parking supply or potentially cause an adverse transportation impact to the local street network.

Section 4.4.3. - Recommended Actions

Potential corrective actions for project access and circulation will be addressed in the additional site access studies and documented in the TIA Confirmation of Findings Letter.

Section 5 - Mitigation Measures and Monitoring

When a project is expected to result in significant transportation impacts, as defined in Section 3, or transportation deficiencies, as defined in Section 4, the project's consultant should meet with the City to discuss potential transportation mitigation options and corrective actions before submitting the draft TIA Report. A variety of transportation mitigation measures should be considered to mitigate a project's significant transportation impact to a level of insignificance. All proposed mitigation measures shall be described in the TIA to the satisfaction of the *City Traffic Engineer*.

Section 5.1 - Transportation Demand Management Measures

Mitigation measures shall minimize vehicle miles traveled through Transportation Demand Management (TDM) strategies. A preliminary performance-based TDM Program shall be included in the TIA Report for any project seeking trip generation amendments supported by TDM, to the satisfaction of the *City Traffic Engineer*.

Section 5.2 - Physical Infrastructure Improvements

Construction of physical infrastructure improvements may be recommended to mitigate adverse local impacts and/or to comply with Mobility Plan Goals. Any improvements shall incorporate Complete Street practices to accommodate and promote walking, and biking and transit use. Conceptual Street Improvement Plans, Traffic Signal Plans and Signing/Striping Plans should be prepared for any proposed physical infrastructure improvements and should be submitted to the *City Traffic Engineer* for review and approval as part of the TIA Report.

Section 5.3 - Mitigation Monitoring and Reporting Program

Each mitigation measure in the project's mitigation monitoring program should be described separately in the TIA Report and related CEQA document(s), if applicable. The following details are required for each measure:

- Identification of the agency responsible for monitoring the measure and coordinating all participants,
- Qualifications, if any, of the necessary monitor(s),

- Monitoring schedule (i.e., the phase of the project, frequency, and completion/termination) – this should be stated for physical mitigation measures required during construction as well as those that are for the operation/life of the project (e.g., TDM program),
- Funding required and sources of funding for monitoring activities by both project and City personnel (especially for long-term monitoring activities).

FOOTNOTES:

[1] As referenced in the CEQA Guidelines, (§ 15301(e)(2)), December 28, 2018

[2] As referenced in the Governor's Office of Planning and Research (OPR), *Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018. (Available online at http://opr.ca.gov/ceqa/updates/sb-743/)

[3] As referenced by the VMT reduction goals discussed in the California Air Resources Board, 2017 Scoping Plan-Identified VMT Reductions and Relationship to State Goals, January 2019, Figure 3.

[4] *Los Angeles County Senate Bill (SB) 743 Implementation and CEQA Updates Report*, Fehr & Peers, June 2020

GLOSSARY:

Development Project: any proposed land use project that changes the use within an existing structure, creates an addition to an existing structure, or new construction, which includes any occupied floor area

High-Quality Transit Corridor: a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours. (Pub. Resources Code, § 21155)

Level of service (LOS): the operational characteristics of an intersection based on the delay being experienced by vehicles passing through an intersection in the peak hour, calculated using a ratio of its traffic volume and its intersection capacity and based on intersection geometrics peak-hour volumes, turning movements and signal phasing.

Local Serving Uses: land uses which serve a local community and which do not substantially affect the regional or sub regional transportation infrastructure as determined by the City. Retail projects under 50,000 square feet are generally considered local serving.

Major Transit Stop: a site containing a rail station or the intersection of two or more bus routes with a service interval of 15 minutes or less during the morning and afternoon peak commute periods. (Pub. Resources Code, § 21155)

Peak Hour: the single hour of a day with the highest volume of traffic on a particular street or intersection.

Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): long-range visioning plan prepared every four years by the Southern California Association of Governments (SCAG)

Service Population: all of the people living and working within the plan or project area.

Transportation Impact Analysis (TIA): a study prepared by the project applicant that assesses the possible transportation impacts of a proposed project. This study follows the TIA Guidelines which provides the instructions and sets standards for the preparation of this analysis.

Transportation Consultant: individual or persons or a designated representative preparing and/or submitting the TIA on behalf of the project applicant

Transportation Demand Management (TDM): The aim of TDM is to improve mobility options by improving accessibility and reducing reliance on single occupant vehicles. Holistic implementation of TDM strategies can alter travel behavior in the long run and produce positive benefits to communities, such as improvement in transportation happiness, air quality, health, and quality of life.

Transportation Project: any proposed project that includes a change to the local or regional transportation system by adding a new element or modifying or changing the existing transportation network. A project can involve any mode of transportation.

Vehicle Miles Traveled (VMT): a calculation of the amount of driving, generated from a project site measured in the total distance (miles), per capita and per employee, or per service population.

Baseline VMT: the average existing regional VMT rate or the calculated regional VMT rate at the time the TIA is prepared as defined in the TIA Scope of Work Document

Residential VMT: the VMT generated by Home-Based Work and Home-Based Other trip productions.

Employment VMT: the VMT generated by Home-Based Work trip attractions.

Vehicle: on-road passenger vehicles, specifically cars and light trucks. Heavy-duty trucks should only be included in a TIA for modeling convenience and ease of calculation (e.g., where models or data provide combine auto and heavy-freight VMT) but should not contribute to a finding of significant traffic impact under any circumstances.

Vehicle trip: an arrival at or departure from a Project by a motor vehicle during the Peak Hour.