

JUNE 16, 2020

# TRANSPORTATION ASSESSMENT POLICIES AND PROCEDURES

ADOPTED BY CITY COUNCIL RESOLUTION No. 2020-49



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## 1.0 Background Information

The City of Fullerton completed a comprehensive update to the City's general plan, called The Fullerton Plan, in 2012. It includes an Action to monitor private development projects adjacent to the street intersections/segments with substandard (deficient) right-of-way, as analyzed to accommodate multi-modal transportation infrastructure, and facilitate dedication in accordance with City regulations (Table 13, Action 5.6) in support of the goal for a balanced system promoting transportation alternatives that enable mobility and an enhanced quality of life (Goal 5). The Fullerton Plan includes policies that support regional and sub regional efforts such as the Master Plan of Arterial Highways, the Orange County Congestion Management Plan, Signal Synchronization Master Plan, and the Growth Management Plan (P5.1) and operating and maintaining a comprehensive network of arterial highways and local roads supporting safe and efficient movement of people, goods and services to, through and within the City (P5.6). Furthermore, State and Federal laws require the correlation of building intensities and traffic capacity in a General Plan.

Separately, SB 743, signed by the Governor in 2013, changes the way transportation impacts are identified for environmental analysis purposes. Following the rule making process that was completed in December of 2018, the California Environmental Quality Act (CEQA) Guidelines identify that, by July of 2020 all lead agencies must use Vehicle Miles Traveled (VMT) as the new transportation metric for identifying impacts for land use projects. VMT replaces auto delay, Level of Service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts. This change is intended to assist in balancing the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.

As noted in CEQA Guidelines Section 15064.7(b) below, lead agencies are encouraged to formally adopt their significance thresholds and this is key part of the SB 743 implementation process.

*(b) Each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects. Thresholds of significance to be adopted for general use as part of the lead agency's environmental review process must be adopted by ordinance, resolution, rule, or regulation, and developed through a public review process and be supported by substantial evidence. Lead agencies may also use thresholds on a case-by-case basis as provided in Section 15064(b)(2).*

SB 743 does not prevent the City from continuing to analyze delay or LOS outside of CEQA review for other transportation planning or analysis purposes unrelated to CEQA traffic impacts such as land use adjacency, general plan consistency, safety, community benefits, and/or public health pursuant to the City's existing general plan (The Fullerton Plan) goals.

**The purpose of this document is to establish the City's policy and procedure to evaluate a project for general plan consistency (LOS analysis) and CEQA compliance (VMT analysis) and address, through project conditions and mitigation measures, any corresponding effects on transportation or potential significant impacts.**



## 2.0 Applicability

An applicant seeking discretionary project approval will submit the proposed project to the City's Community and Economic Development Department in accordance with published application submittal requirements. Written project comments are provided to the applicant within 30 days of the application submittal deadline (1<sup>st</sup> submittal review).

### LOS Analysis

As part of the 1<sup>st</sup> submittal review, City staff (or City Traffic Engineer) will calculate a project's trip generation based on the latest Institute of Transportation Engineers (ITE) Trip Generation Manual and review that data against the following criteria.

An LOS analysis shall be required for a proposed project that meets any of the following criteria:

- Either the AM or PM peak hour trip generation is expected to exceed 40 net<sup>1</sup> new vehicle trips;
- Regardless of net new vehicle trips, the combination of the land use and location justify analysis at the City's discretion;

If a project does not meet any of the applicability criteria, no further analysis for LOS is needed.

Projects meeting any of the applicability criteria shall complete the necessary LOS analysis to determine if they have a potential effect on transportation. See Section 4.0, "LOS-Based Analysis Policy and Procedure", for details.

### VMT Analysis

As part of the 1<sup>st</sup> submittal review, City staff will make a determination if the project is exempt from CEQA. The VMT Analysis is not required for projects that are exempt from CEQA. If a project is not exempt from CEQA, City staff (or City Traffic Engineer) will perform a screening test and associated secondary analysis.

A VMT analysis shall be required for a proposed project that does not meet any of the following criteria including the associated secondary analysis<sup>2</sup>:

- Located in a Transit Priority Area;
- Located in a Low VMT-generating area;
- Project type is presumed to have a less than significant impact.

If a project meets any of the screening criteria including the associated secondary analysis, no further analysis for VMT is needed. The results of the screening would be used in the transportation section of the CEQA analysis that will be prepared for the project.

Projects not meeting any of the screening criteria including the associated secondary analysis shall complete the VMT analysis to determine if they have a potentially significant VMT impact. See Section 6.0, "VMT-Based Analysis Policy and Procedure", for details.

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<sup>1</sup> Net new trips include total in and out trips from the project site less trips attributed to the existing use.

<sup>2</sup> See Section 5.0, "VMT Screening Procedure", for screening and secondary analysis methodology.



### 3.0 Thresholds

The purpose of the analysis for applicable projects is to identify if there is a potential effect on transportation as determined by the LOS analysis and/or potential significant impact under CEQA as determined by the VMT analysis.

#### LOS Analysis

Level of Service (LOS) is a qualitative measure of describing operational conditions of an intersection in terms of congestion or delay experience by traffic. Service levels range from LOS A to LOS F with LOS A representing excellent operating conditions and free flow, and LOS F representing extreme congestion and delay. There are two accepted methods of determining LOS, Highway Capacity Manual (HCM) and Intersection Capacity Utilization (ICU). The City of Fullerton utilizes HCM methodology. Within Fullerton, there are facilities regulated by Orange County Transportation Authority (OCTA) and Caltrans. OCTA utilizes ICU while Caltrans utilizes HCM. A project is responsible for performing all applicable calculations. Therefore, while the City only sets its own policy, the effects on transportation are identified for all agencies for reference.

#### Highway Capacity Manual (HCM)

The City of Fullerton definition of acceptable operating conditions for signalized and unsignalized intersections is LOS D<sup>3</sup>; unacceptable operations is LOS E and LOS F.

However, based on the historic context in which they are developed, LOS E is acceptable and LOS F is unacceptable at the following intersections:

- Harbor Boulevard / Chapman Avenue
- Harbor Boulevard / Commonwealth Avenue

Therefore, an effect on transportation occurs if any of the following criteria are satisfied:

1. The project causes a signalized or unsignalized intersection operating at or above an acceptable operating condition to degrade to an unacceptable condition, or
2. The project causes a signalized or unsignalized intersection operating at an unacceptable operating condition to further degrade and for a signalized intersection the change is:
  - a. From LOS E to LOS F,
  - b. An increase of at least 4 seconds for an LOS E intersection, or
  - c. An increase of at least 2 seconds for an LOS F intersection.

#### Intersection Capacity Utilization

The Orange County Transportation Authority's (OCTA) definition of acceptable operating conditions is LOS E for intersections that are part of the Orange County Congestion Management Program Highway System (CMPHS); unacceptable operation is LOS F. This applies to the following:

- Harbor Boulevard / Orangethorpe Avenue
- Harbor Boulevard / Imperial Highway
- State College Boulevard / Orangethorpe Avenue

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<sup>3</sup> LOS D may also be considered an acceptable operating condition by Caltrans; consultation is recommended to determine the appropriate LOS by location.

An effect on transportation occurs if either of the following criteria are satisfied:

1. The project causes an intersection operating at or above an acceptable operating condition to degrade to an unacceptable condition, or
2. The project causes an intersection operating at an unacceptable operating condition to increase (worsen) the ICU rating by more than 0.10.

### **VMT Analysis**

#### Land Use Project

A land use project would result in a potentially significant project-generated VMT impact if either of the following conditions are satisfied:

1. The project-generated average total daily VMT per service population in the baseline year<sup>4</sup> exceeds the City of Fullerton General Plan Buildout average total daily VMT per service population calculated with Origin/Destination VMT; or
2. The project-generated average total daily VMT per service population in the horizon year<sup>5</sup> exceeds the City of Fullerton General Plan Buildout average total daily VMT per service population calculated with Origin/Destination VMT.

Additionally, the land use project's<sup>6</sup> effect on VMT would be considered potentially significant for purposes of determining a cumulative impact if either of the following conditions are satisfied:

1. The addition of the project in the baseline year causes an increase in the citywide average total daily VMT per service population calculated with Boundary Method VMT; or
2. The addition of the project in the horizon year causes an increase in the citywide average total daily VMT per service population calculated with Boundary Method VMT.

#### Transportation Project

A transportation project's effect on VMT would be considered potentially significant for purposes of determining a cumulative impact if either of the following conditions are satisfied:

1. The addition of the project in the baseline year causes an increase in the citywide average total daily VMT per service population calculated; or
2. The addition of the project in the horizon year causes an increase in the citywide average total daily VMT per service population.

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<sup>4</sup> "Baseline year" is the year in which the CEQA analysis for the project commenced.

<sup>5</sup> "Horizon year" is a year in the future corresponding to the forecast used for modeling purposes.

<sup>6</sup> For a long-range planning land use project such as a general plan, only the cumulative impact analysis of the project's effect on VMT is required.



## 4.0 LOS-Based Analysis Policies and Procedures

**Prior to beginning the study, the Consultant preparing the Transportation Assessment (Consultant) shall coordinate with the City Traffic Engineer on the study area, ambient growth for opening year conditions, project trip distribution assumptions, and components of site access analysis. The Consultant shall prepare a Scope of Work (Scope), consistent with the procedures outlined below, for review and approval of the City Traffic Engineer prior to the commencement of the LOS-Based Analysis. The approved Scope shall be provided as an attachment to the Transportation Assessment<sup>7</sup>.**

### Methodology

Within the study area identified by the City Traffic Engineer, Level of Service (LOS) analysis shall be conducted at identified intersections.

The City of Fullerton requires use of the latest Highway Capacity Manual (HCM) methodology for the traffic impact analysis with the following assumptions for signal timing parameters:

- Cycle length and pedestrian timing parameters – existing
- Minimum left turn split time, including clearance interval timing – 10 seconds
- Saturation flow rates (unless otherwise specified by City Traffic Engineer):
  - Thru and right turns – 1,900 vehicles per hour (vph)
  - Left Turns –
    - Single Lane – 1,800 vph
    - Dual Lanes – 3,500 vph
    - Triple Lanes – 5,100 vph

Programs such as Synchro, Vistro, or Highway Capacity Software (HCS) are acceptable to use for the HCM analysis. Any other program for HCM analysis will need to be first approved by the City Traffic Engineer.

### Analysis Scenarios & Effects on Transportation

Four scenarios shall be evaluated in addition to establishing the existing conditions at the discretion of the City Traffic Engineer and may be summarized in a single table (see Table 4-1 for formatting) for each of the following analysis scenarios. Unacceptable operating conditions shall be identified in **bold**. Detailed calculations shall be supplied as an appendix to the Transportation Assessment.

**TABLE 4-1 {INSERT ANALYSIS SCENARIO} PEAK HOUR INTERSECTION CAPACITY ANALYSIS**

	Intersection	Minimum Acceptable LOS	Time Period	Control Type (Signalized/Unsignalized)	Delay Per Vehicle (seconds/vehicle)	LOS
#			AM PM			

<sup>7</sup> Should preparation of both a LOS-Based and VMT-Based Analysis be required, these can be prepared together in one Transportation Assessment or in separate Transportation Assessment documents at the discretion of the applicant.



**Analysis Scenarios:****a. Existing Conditions**

*Existing traffic conditions using data collected within the previous 24-month period unless otherwise directed by the City Traffic Engineer. The raw data from sources other than the City, on which existing conditions are based (i.e. traffic counts), must be supplied as an appendix to the Transportation Assessment, identifying the source.*

**b. Project Opening Year Without Project**

*Existing traffic conditions plus ambient growth and traffic from all the development within the study area for which an application has been submitted ("pending projects"), or that have been approved but not yet constructed.*

**c. Project Opening Year With Project**

*Existing traffic conditions plus ambient growth and traffic from all the development within the study area for which an application has been submitted ("pending projects"), or that have been approved but not yet constructed, plus traffic generated by the proposed project.*

**d. General Plan Development**

*Forecast traffic conditions of General Plan build-out based on OCTAM projections for a project that includes a zoning amendment, general plan revision, or otherwise proposes development that exceeds the land use intensity assumed for the General Plan and/or at the discretion of the City Traffic Engineer.*

**e. General Plan Development With Project**

*Forecast traffic conditions of General Plan build-out based on OCTAM projections plus traffic generated by the proposed project that includes a zoning amendment, general plan revision, or otherwise proposes development that exceeds the land use intensity assumed for the General Plan and/or at the discretion of the City Traffic Engineer.*

Projects that are to be constructed in more than one phase shall require interim year future analysis to address each phase of the development and its associated traffic effects. The year(s) to be analyzed shall coincide with the scheduled phasing and shall be approved by the City Traffic Engineer or designee.

**Trip Generation**

Trip generation shall be calculated using the latest edition of the ITE Trip Generation Manual, unless directed otherwise by City Traffic Engineer. If the generation rates do not address proposed land use in sufficient detail, rates from other documented sources (i.e. SCAG) or from a similar existing site may be used with prior approval from the City Traffic Engineer. Internal capture and pass-by trip reductions, where applicable, shall be first approved by the City Traffic Engineer.

**Trip Distribution/Assignment**

The basic methodology and assumptions used to develop trip distribution and assignments must be clearly stated. This includes description of trip distribution and directional approach for vehicle trips to and from the site along with the specific roadways that will be utilized by site-generated traffic is required.

### Intersection Improvements

When a transportation effect is identified (as defined in Section 3.0, Thresholds) at a signalized intersection, the Transportation Assessment shall (1) identify improvements to the intersection that will bring back the intersection to an acceptable LOS and (2) identify the project's fair share portion of the effect.

When a transportation effect is identified at an unsignalized intersection, the project shall be evaluated for installation of stop control (four way stop control) or traffic signal per the latest version of the California Manual on Uniform Traffic Control Devices (CA MUTCD) with identification of the project's fair share as applicable. For the traffic signal warrant analysis, the peak hour warrant shall be used. Signal warrant worksheets shall be included as an appendix to the Transportation Assessment.

Additionally when a transportation effect is identified at a signalized or unsignalized intersection, collision history shall be evaluated to see if the additional project traffic will affect any critical movements at the intersection. Improvements shall be identified as necessary. Collision history shall be included as an appendix to the Transportation Assessment.

### Cost of Improvements

The cost improvements will be determined by the Consultant in cooperation with the City Traffic Engineer. The project shall be conditioned to contribute their fair share of the cost of improvement or construct the improvement if warranted and appropriate. In either case the project may also be conditioned to provide a dedication required to facilitate the improvement. If a feasible identified improvement(s) cannot be provided as determined by the City Traffic Engineer, then contribution of fair share towards an improvement established at an acceptable LOS will be considered. The fair share shall be determined on a case-by-case basis as warranted and appropriate by the City Traffic Engineer.

### Additional LOS Analysis

#### OCTA

An additional LOS analysis utilizing the latest Intersection Capacity Utilization (ICU) methodology (see Table 4-2 for formatting) shall be required for a proposed project that meets any of the following criteria:

- Project Average Daily Trips (ADT) meets or exceeds 2,400; or
- Project ADT meets or exceeds 1,600 when the proposed development has direct access to Harbor Boulevard, Imperial Highway, Orangethorpe Avenue, and/or State College Boulevard<sup>8</sup>.

**TABLE 4-2 {INSERT ANALYSIS SCENARIO} PEAK HOUR INTERSECTION CAPACITY ANALYSIS**

	Intersection	Minimum Acceptable LOS	Time Period	Control Type (Signalized/Unsignalized)	Volume/ Capacity Ratio	LOS
#			AM PM			

<sup>8</sup> These streets are part of the Orange County Congestion Management Program Highway System (CMPHS)



The Consultant shall consult OCTA and the current Congestion Management Program for updates on their requirements.

#### Caltrans

An additional analysis utilizing the latest Highway Capacity Manual (HCM) methodology shall be required for a project when either the AM or PM peak hour trip generation is expected meet or exceed 100 net new trips assigned to a State highway facility (facility) operating at any LOS, generate between 50 and 99 net new trips on a facility operating at LOS C or LOS D, or up to 49 net new trips on a facility operating at LOS E or LOS F.

The Consultant shall consult Caltrans for updates on their requirements.

#### **Site Access Analysis**

Based on the land use and/or location the analysis may also include any of the following evaluations, or as otherwise specified by the City Traffic Engineer:

- Curb radii, including corner cutoffs, for adequacy of turning maneuvers,
- Pocket storage lengths at driveways and/or site adjacent intersection(s) for adequacy of queuing,
- Site distance at project driveways for adequacy of vision clearance, and/or
- Potential turning conflicts between driveways and/or driveway(s) to street(s).



## 5.0 VMT Screening Procedure

If a project is not exempt from CEQA, City staff (or City Traffic Engineer) will perform a screening test and associated secondary analysis as required. The screening criteria and associated secondary analysis are detailed below.

### Criteria 1: Transit Priority Area (TPA) Screening

Projects located within a TPA<sup>9</sup> may be presumed to have a less than significant impact absent substantial evidence to the contrary. A TPA is defined as a half mile area around an existing major transit stop or an existing stop along a high-quality transit corridor<sup>10</sup>. To identify if the project is in a TPA, the City will utilize "NOCC+", a spreadsheet tool developed for the use of North County Cities in identifying projects that could be considered for screening from project-generated VMT impacts.

For a project located in a TPA, City staff will perform the associated secondary analysis to determine if the project:

1. Has a Floor Area Ratio (FAR) of less than 0.75;
2. Includes more parking for use by residents, customers, or employees of the project than required by the City;
3. Is inconsistent with the applicable Sustainable Communities Strategy; or
4. Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

If the answer to any of these questions is yes, the project cannot be screened under Criteria 1. The project shall be considered for screening under Criteria 2 and 3.

Conversely, if the answer to all of these four questions is no, the project can be screened under Criteria 1 and no further analysis for VMT is needed.

### Criteria 2: Low VMT Area Screening

Residential and office projects located within a low VMT area<sup>11</sup> may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per service population that is similar to the existing land uses in the low VMT area. A low VMT area is defined as an individual traffic analysis zone (TAZ) where total daily Origin/Destination VMT per service population is 15% or more less

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<sup>9</sup> Project location is based on parcel number(s).

<sup>10</sup> Pub. Resources Code, § 21064.3 - 'Major transit stop' means a site containing 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.

Pub. Resources Code, § 21155 - For purposes of this section, 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.

<sup>11</sup> Project location is based on parcel number(s).

than the City average total daily Origin/Destination VMT per service population.<sup>12</sup> To identify if the project is in a low VMT area, the City will utilize "NOCC+", a spreadsheet tool developed for the use of North County Cities in identifying projects that could be considered for screening from project-generated VMT impacts.

For a project located in a low VMT area, City staff will perform the associated secondary analysis do determine if the project:

1. Is inconsistent with the existing land use (i.e. if the project is proposing single-family housing, there should be existing single-family housing of approximately the same density); or
2. Has a unique attribute that would otherwise be misrepresented utilizing the data from the travel demand model such as including land uses that would alter the existing built environment in such a way as to increase the rate or length of vehicle trips.

If the answer to any of these questions is yes, the project cannot be screened under Criteria 2. The project shall be considered for screening under Criteria 3.

Conversely, if the answer to both of these questions is no, the project can be screened under Criteria 2 and no further analysis for VMT is needed.

#### Criteria 3: Project Type Screening

Some project types have been identified as having the presumption of a less than significant impact. The following land uses can be presumed to have a less than significant impact absent substantial evidence to the contrary as their uses are local serving in nature:

- Local-serving K-12 public schools
- Local-serving parks
- Day care centers
- Local-serving retail uses less than 50,000 square feet
- Local-serving hotels (e.g. non-destination hotels)
- Local-serving student housing projects
- Local-serving assembly uses (places of worship, community organizations)
- Community institutions (public libraries, fire stations, local government)
- Affordable, supportive or transitional housing
- Assisted living facilities
- Senior housing (as defined by HUD)

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<sup>12</sup> TAZs are geographic polygons similar to Census block groups used to represent areas of homogenous travel behavior. Service population is population plus employment. Used with VMT, it provides a normalized standard unit for comparison purposes while accounting for the population and/or employment in a given area.

- Projects generating less than 836 daily VMT<sup>13</sup>

For a project to be local serving, its users (residents, customers, employees, visitors) would be existing within the community, meeting existing demand that would shorten the distance users would need to travel.

If the project is not one or more of the identified land uses, the project cannot be screened under Criteria 3.

Conversely, if the project is for one or more of the identified land uses, the project can be screened under Criteria 3 and no further analysis for VMT is needed.

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<sup>13</sup> This threshold ties directly to the OPR technical advisory and notes that 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. (CEQA Guidelines, § 15301, subd. (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. 2012 California Household Travel Survey (CHTS) average trip length of 7.6 miles was applied to 110 daily trips to determine the associated total VMT with 10,000 square feet of office.



## 6.0 VMT-Based Analysis Policies and Procedures

**Prior to the beginning of the study, the Consultant preparing the Transportation Assessment shall prepare a Scope of Work (Scope), consistent with the procedures outlined below, for review and approval of the City Traffic Engineer prior to the commencement of the VMT-Based Analysis. The approved Scope shall be provided as an attachment to the Transportation Assessment<sup>14</sup>.**

Projects not screened through Criteria 1, 2 or 3 shall complete a VMT analysis through the OCTAM model<sup>15</sup> to determine if there is a potential significant VMT impact. This analysis shall include both "project generated VMT" for the project-level evaluation and "project effect on VMT" for the cumulative evaluation of transportation impacts.

### Methodology

#### Project Generated VMT

The City has selected the Origin/Destination VMT methodology to provide a more complete capture of all travel (car and truck trips) within the study area, including trips that may begin or end outside of the study area. VMT per service population is utilized to normalize VMT into a standard unit for comparison purposes while accounting for the population and/or employment in a given area. To determine whether or not there is a potentially significant impact, the analysis shall compare the project-generated VMT to the VMT that is forecast to be generated from approved general plan growth and other transportation network modifications ("general plan buildout VMT"). The City has chosen general plan buildout as the basis for this threshold because the general plan was adopted through a public process to reflect the goals and values of the City. The general plan (The Fullerton Plan), adopted in 2012, includes policies and actions to facilitate infill development, a multi-modal transportation network, energy and resource efficient practices, and a reduction of greenhouse gas emissions. While accounting for growth in both population and employment, implementation of The Fullerton Plan reduces the citywide VMT per service population from 29.9 to 29.4<sup>16</sup>. Therefore, when a project generates a VMT per service population that exceeds the general plan buildout VMT in either the baseline year or horizon year, there is a significant impact.

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<sup>14</sup> Should preparation of both a LOS-Based and VMT-Based Analysis be required, these can be prepared together in one Transportation Assessment or in separate Transportation Assessment documents at the discretion of the applicant.

<sup>15</sup> OCTAM is a travel demand model developed and maintained by OCTA, designed to provide a greater level of detail and sensitivity in Orange County compared to the regional model developed by the Southern California Association of Governments (SCAG) and the statewide model developed by Caltrans. It is provided to jurisdictions and traffic consultants under a modeling user agreement. Following review by Fehr & Peers of the *Technical Advisory on Evaluating Transportation Impacts in CEQA*, State of California, Governor's Office of Planning and Research, December 2018 as well as CEQA Guidelines, case law, and other relevant national guidance of model applications and forecasting, Fehr & Peers recommends that OCTAM be considered the best available model currently available to Orange County cities for SB 743 implementation. Additionally, its inputs and outputs are the framework for some of the analysis performed in the "NOCC+" tool.

<sup>16</sup> Source: Fehr & Peers

Project Effect on VMT

The City has selected the Boundary Method VMT<sup>17</sup> to capture all trips, including those trips that do not begin or end in the City (i.e. cut-through traffic) and/or displaced traffic, on the City's roadway network. VMT per service population is utilized to normalize VMT into a standard unit for comparison purposes while accounting for the population and/or employment in a given area. To determine whether or not there is a significant impact, the City proposes to compare the citywide VMT with and without the project. The City has chosen citywide VMT as the basis for this threshold because of its comprehensive geography and appropriateness for a City-wide analysis.

**Analysis Scenarios & CEQA Impacts**

The following analysis scenarios shall be evaluated and may be summarized in two tables (see Tables 6-1 and 6-2 for formatting). Total daily VMT per service population that exceeds the applicable comparative threshold shall be identified in **bold**. Detailed calculations shall be supplied as an appendix to the Transportation Assessment.

**TABLE 6-1 PROJECT GENERATED VMT**

<b>Scenario</b>	<b>Average Total Daily VMT</b>
	<b>TAZ #</b>
General Plan Buildout	
Baseline Year with Project	
Horizon Year with Project	

**TABLE 6-2 PROJECT EFFECT ON VMT**

<b>Scenario</b>	<b>Average Total Daily VMT</b>
	<b>Citywide</b>
Baseline Year	
Baseline Year with Project	
Horizon Year	
Horizon Year with Project	

<sup>17</sup> The appropriate methodology for transportation projects will be considered on a case by case basis.



Analysis Scenarios:Project Generated VMT<sup>18</sup>

## a. Baseline Year With Project

*The project land use is added to the TAZ<sup>19</sup> and the average total daily VMT per service population in the baseline year, the year in which the CEQA analysis commenced, is compared to that of the general plan buildout in OCTAM.*

## b. Horizon Year With Project

*The project land use is added to the TAZ<sup>20</sup> and the average total daily VMT per service population in the horizon year, a future year corresponding to the forecast used for modeling purposes, is compared to that of the general plan buildout in OCTAM.*

Project Effect on VMT<sup>21</sup>

## a. Baseline Year with Project

*The project land use is added to the TAZ<sup>22</sup> and the change to the Citywide average total daily VMT in the baseline year is evaluated in OCTAM.*

## b. Horizon Year with Project

*The project land use is added to the TAZ<sup>23</sup> and the change to the Citywide average total daily VMT in the horizon year is evaluated in OCTAM<sup>24</sup>.*

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<sup>18</sup> The same model runs can be used for project-generated VMT and project effect on VMT, as long as the VMT is extracted correctly using the OD Method for project-generated VMT and the Boundary Method for project effect on VMT.

<sup>19</sup> The TAZ the project is added to (Project TAZ) should be empty, or have existing land uses reallocated to neighboring TAZs, when the project land use is added.

<sup>20</sup> The Project TAZ should be empty, or have existing land uses reallocated to neighboring TAZs, when the project land use is added. The growth in the Project TAZ should be reviewed to confirm if the Project is represented. In this case, the land use growth should be removed in the Horizon Year without Project condition.

<sup>21</sup> The same model runs can be used for project-generated VMT and project effect on VMT, as long as the VMT is extracted correctly using the OD Method for project-generated VMT and the Boundary Method for project effect on VMT.

<sup>22</sup> The TAZ the project is added to (Project TAZ) should be empty, or have existing land uses reallocated to neighboring TAZs, when the project land use is added.

<sup>23</sup> The Project TAZ should be empty, or have existing land uses reallocated to neighboring TAZs, when the project land use is added. The growth in the Project TAZ should be reviewed to confirm if the Project is represented. In this case, the land use growth should be removed in the Horizon Year without Project condition.

<sup>24</sup> For projects near the City boundary, a different boundary may be more applicable to make sure that VMT effects are not artificially truncated at the City boundary.



**Mitigation Measures**

When a potential significant impact is identified (as defined in Thresholds, Section 3.0), the study shall (1) identify mitigation measures to reduce VMT impacts and (2) evaluate the magnitude of the reduction and feasibility of implementation.

To mitigate VMT impacts, the following choices are available to the applicant:

1. Modify the project's built environment characteristics to reduce VMT generated by the project;
2. Implement strategies to reduce VMT generated by the project, commonly referred to as Transportation Demand Management (TDM) strategies;
3. Participate in a VMT fee program and/or VMT mitigation exchange/banking program (if available) to reduce VMT from the project or other land uses to achieve acceptable levels.

VMT reduction strategies can be quantified using currently available best practices such as the California Air Pollution Control Officers Association (CACPOA) calculation methodologies and Air Resource Board research findings. "NOCC+" includes information on the CACPOA strategies most relevant to the City and can be used to test which combination of measures can achieve the desired level of mitigation, where feasible. The City Traffic Engineer will provide a current menu of recommended strategies to the Consultant as available.

For a strategy to qualify as a feasible mitigation measure, however, the Transportation Assessment shall include a detailed description of how it would be implemented and maintained on a continuing basis. The source for the anticipated VMT reduction shall also be provided. In situations where strategies are identified that are not a commonly recognized best practice, the case study or other empirical data supporting the proposed VMT reduction shall be provided as an attachment to the Transportation Assessment.

**Additional VMT Analysis**OCTA

At this time there is no additional VMT analysis required by OCTA.

The Consultant shall consult OCTA for updates on their requirements.

Caltrans

At this time there is no additional VMT analysis required by Caltrans.

The Consultant shall consult Caltrans for updates on their requirements.

**Active Transportation and Public Transit Analysis**

The CEQA Guidelines include the analysis of a project to evaluate if it conflicts with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Separate from VMT, the Transportation Assessment must include an analysis of a project to examine if it is consistent with adopted policies, plans, or programs regarding active transportation or public transit facilities, or otherwise increases or decreases the performance or safety of such facilities and make a determination as to whether it has the potential to conflict with existing or proposed facilities supporting these travel modes.

When a potential significant impact is identified, the Transportation Assessment shall (1) identify mitigation measures to reduce the active transportation and/or public transit impacts and (2) evaluate the magnitude of the reduction and feasibility of implementation.

**Site Access Analysis**

Based on the land use and/or location the Transportation Assessment may also include any of the following evaluations, or as otherwise specified by the City Traffic Engineer<sup>25</sup>:

- Curb radii, including corner cutoffs, for adequacy of turning maneuvers,
- Pocket storage lengths at driveways and/or site adjacent intersection(s) for adequacy of queuing,
- Site distance at project driveways for adequacy of vision clearance, and/or
- Potential tuning conflicts between driveways and/or driveway(s) to street(s).

**Construction-Related Traffic Impacts**

The CEQA Guidelines include the analysis of a project to evaluate if it impairs the implementation of or physically interferes with an adopted emergency response plan or emergency evacuation plan, substantially increases transportation hazards, or results in inadequate emergency access.

The Transportation Assessment shall identify the number of daily trips associated with heavy construction vehicles and the duration servicing the site. The Consultant shall coordinate with the City Traffic Engineer on the suitable route(s) for construction vehicles based on truck routes and other relevant information.

The Transportation Assessment shall also identify construction activities that will require the closure of one or more lanes of traffic.

When a potential significant impact is identified, the Transportation Assessment shall identify mitigation measures such as the identification of specific travel routes and/or the preparation of Traffic Control Plans.

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<sup>25</sup> Prior to the beginning of the Transportation Assessment, the Consultant shall coordinate with the City Traffic Engineer on the components of the site access analysis, if required.

