

MEMORANDUM



**PASADENA**  
DEPARTMENT OF TRANSPORTATION

**DATE:** September 9, 2020

**TO:** Planning Commission

**FROM:** Laura Cornejo, Director of Transportation

**RE:** UPDATE TO CEQA TRANSPORTATION PERFORMANCE THRESHOLDS OF SIGNIFICANCE

**RECOMMENDATION:**

It is recommended that the Planning Commission review and provide comments to the City Council on the recommended update to California Environmental Quality Act (CEQA) transportation performance thresholds of significance. The current and recommended CEQA transportation performance thresholds of significance are as follows:

METRIC	DESCRIPTION	Current Guidelines	Staff Recommendation
		IMPACT THRESHOLD	IMPACT THRESHOLD
VMT Per Capita <sup>a</sup>	Vehicle Miles Traveled (VMT) in the City of Pasadena per service population (population + jobs).	An increase over existing Citywide VMT per service population.  <b><u>Current CEQA Threshold: 22.6</u></b>	Net change in VMT per service population is 15% below Citywide average baseline  <b><u>2017 Baseline: 35.6<sup>b</sup></u></b>  <b><u>15% Below Baseline Threshold: 30.3</u></b>
VT Per Capita <sup>a</sup>	Vehicle Trips (VT) in the City of Pasadena per service population.	An increase over existing Citywide VT per service population.  <b><u>Current CEQA Threshold: 2.8</u></b>	Net change in VT per service population is 15% below Citywide average baseline  <b><u>2017 Baseline: 4.2<sup>b</sup></u></b>  <b><u>15% Below Baseline Threshold: 3.6</u></b>

<sup>a</sup> The City of Pasadena equates capita with service population (population + jobs)

<sup>b</sup> The Baseline should be updated approximately every 5 years in order to reflect changes to the street network and parcel level land uses.

# Update to CEQA Transportation Thresholds

September 9, 2020

Page 2 of 9

Proximity and Quality of Bicycle Network	Percent of service population within a ¼ mile of bicycle facility types.	Any decrease in existing Citywide service population within a ¼ mile of Level 1 or 2 bike facilities.  <b><u>Current CEQA Threshold: 31.7%</u></b>	Any decrease in baseline Citywide service population within a ¼ mile of Level 1 or 2 bike facilities.  <b><u>2017 Baseline: 32.3%<sup>b</sup></u></b>  <b><u>Recommended Threshold: 32.3%</u></b>
Proximity and Quality of Transit Network	Percent of service population located within a ¼ mile of transit facility types.	Any decrease in existing Citywide service population within a ¼ mile of Level 1 or 2 transit facilities.  <b><u>Current CEQA Threshold: 66.6%</u></b>	Any decrease in baseline Citywide service population within a ¼ mile of Level 1 or 2 transit facilities.  <b><u>2017 Baseline: 66.8%<sup>b</sup></u></b>  <b><u>Recommended Threshold: 66.8%</u></b>
Pedestrian Accessibility	The Pedestrian Accessibility Score uses the mix of destinations and a network-based walk shed to evaluate walkability	Any decrease in the Citywide Pedestrian Accessibility Score  <b><u>Current CEQA Threshold: 3.9</u></b>	Any decrease in the Citywide Pedestrian Accessibility Score  <b><u>2017 Baseline: 3.9<sup>b</sup></u></b>  <b><u>Recommended Threshold: 3.9</u></b>

<sup>b</sup> The Baseline should be updated approximately every 5 years to reflect changes to the street network and parcel level land uses.

The current CEQA thresholds determine a project’s CEQA significant impact to vehicle miles traveled (VMT) and vehicle trips (VT) per service population by evaluating whether the project’s incremental change is above the 2013 baseline. In an effort to better align the City’s thresholds to meet the State’s long-term climate goals, the recommended CEQA thresholds for VMT and VT per service population seeks to be more restrictive to the project’s incremental change metric by lowering the VMT and VT per service population CEQA thresholds to 15% below 2017 baseline. A potential result of having CEQA thresholds lower than baseline may be that some projects that would otherwise be in compliance with the adopted Land Use of the General Plan may be subject to additional environmental review processes.

The most current Governor’s Office of Planning and Research (OPR) technical advisory, issued on December 2018<sup>1</sup>, recommends that a VMT per capita or per employee 15% below that of existing development may be a reasonable threshold.

<sup>1</sup> OPR (December 2018) Technical Advisory on Evaluating Transportation Impacts in CEQA

## Update to CEQA Transportation Thresholds

September 9, 2020

Page 3 of 9

Also, Caltrans<sup>2</sup> and the California Air Pollution Control Officers Association (CAPCOA)<sup>3</sup> indicate that the required greenhouse gas emission (GHG) targets mandated by the State can be achieved with a 15% reduction of VMT. OPR and the California Air Resources Board (CARB) indicate that by applying transportation strategies at the project level outlined by CAPCOA the goal is achievable. DOT staff found the CEQA thresholds at the following California agencies to have a VMT per capita or VMT per employee metric that is 15% below an efficiency-based threshold:

- City of San Francisco<sup>4</sup>
- City of San Jose<sup>5</sup>
- City of Los Angeles<sup>6</sup>
- City of Irvine<sup>7</sup>
- City of San Diego<sup>8</sup>

To be consistent with SB 743's direction to select a threshold that will help the State achieve its climate goals, DOT is recommending the threshold for the net change in VMT and VT per Citywide service population to be 15% below the Citywide service population baseline average. California Air Resources Board (CARB) finds that per capita vehicle travel would need to be kept lower than existing levels to achieve state climate goals. CARB must assess each region's progress on achieving regional greenhouse gas emissions reduction targets at least every 4 years to evaluate what progress has occurred.

The City's recommended VMT per service population and VT per service population impact threshold 15% below the Citywide baseline average will align with the State's emission reduction goals as well as thresholds of other agencies, which are 15% below existing development.

### **BACKGROUND:**

In response to the growing concern over the environment and a sense of urgency to reduce greenhouse gas (GHG) emissions, the State of California made a fundamental decision to move away from the traditional transportation evaluation metric of Level of Service (LOS). Signed into law in September 2013, SB 743 (Steinberg) required the Governor's Office of Planning and Research (OPR) to amend the California Environmental Quality Act (CEQA) Guidelines to provide an alternative to LOS when evaluating a project's transportation impacts. SB 743 updated the way transportation impacts are measured by replacing Level of Service (LOS), which is a metric that evaluates vehicular delay, to vehicle miles of travel (VMT), which is a metric that measures how much auto travel a proposed project would create.

---

<sup>2</sup> Caltrans, 2015-2020 Strategic Management Plan

<sup>3</sup> CAPCOA, 2010 Quantifying Greenhouse Gas Measures

<sup>4</sup> City of San Francisco (October 2019) TIA Guidelines

<sup>5</sup> City of San Jose (April 2018) Transportation Analysis Handbook

<sup>6</sup> City of Los Angeles (July 2019) Transportation Analysis Guidelines

<sup>7</sup> City of Irvine (April 2020) Traffic Study Guidelines

<sup>8</sup> City of San Diego (February 2020) Transportation Study Manual (TSM) Draft

## Update to CEQA Transportation Thresholds

September 9, 2020

Page 4 of 9

As stated in the 2019 CEQA Statutes and Guidelines:

§ 21099 (b)(1): “The Office of Planning and Research shall prepare, develop, and transmit to the Secretary of the Natural Resources Agency ...criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses....”

§ 21099 (b)(2): “Upon certification of the guidelines by the Secretary of the natural Resources Agency...automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment....”

Vehicular delay and traffic congestion are no longer considered environmental impacts. The new guidelines aim to promote the reduction of GHG emissions, multi-modal transportation systems and diverse land uses. SB 32 (Pavley, 2016) further requires California to reduce gas emissions by 40% below 1990 levels by 2030. Effective July 1, 2020 all California lead agencies were required to shift the focus of CEQA transportation analyses from vehicle delay to vehicle miles travelled (VMT).

### OPR Technical Advisory on Evaluating Transportation Impacts in CEQA

The Governor’s Office of Planning and Research (OPR) gives the lead agency discretion in preparing environmental documents subject to CEQA. Although OPR does not specify the methodology to analyze VMT impacts, OPR discusses general principles for agencies to consider when determining VMT levels of significance:

- Lead agencies should select a significance threshold that aligns with the state’s goals to reduce greenhouse gas emissions, develop multimodal transportation networks, and a diversity of land uses.
- Continued growth depends on increased efficiency and conservation in land use and transportation from all Californians.
- OPR states that a 15% reduction is consistent with SB 743’s direction to select a threshold that will help the State achieve its climate goals.

OPR understands that lead agencies, using more location-specific information, may develop their own specific thresholds and screening criteria.

### Cumulative Analysis of Transportation Impacts under SB 743

In accordance with PRC §21083(b)(2) and CEQA Guidelines §15064(h)(1), CEQA documents are required to consider whether a project would make a “cumulatively considerable” contribution to a significant cumulative impact. As defined in the CEQA Guidelines:

§15064(h)(1): “Cumulatively considerable means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”

## Update to CEQA Transportation Thresholds

September 9, 2020

Page 5 of 9

CEQA Guidelines §15130(b) identifies two options for discussing significant cumulative impacts: (1) a list of past, present, and probable future projects producing related or cumulative impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan (or related planning document) that describes or evaluates conditions contributing to the cumulative effect.

The City of Pasadena General Plan identifies a mix of land uses where walking, bicycling, and the use of transit are encouraged. At General Plan build-out, a balanced mix of land uses are expected to reduce the trip length associated with adjacent land uses by encouraging walking and other non-motorized modes of travel, thereby reducing dependency on the automobile. The analysis of transportation impacts per the City of Pasadena's CEQA metrics is inherently a cumulative analysis. The analysis evaluates how a project would change Citywide conditions related to VMT per capita, VT per capita, access to the transit and bicycle networks, and pedestrian accessibility, measured against citywide buildout conditions envisioned in the City's 2015 General Plan. By analyzing a project's change to Citywide conditions, by their nature these analyses evaluate a project's contribution to cumulative impacts.

OPR applies this same logic in its recommendations for evaluating cumulative impacts, indicating that transportation impact metrics that evaluate impacts in terms of efficiency (e.g., per capita metrics) evaluate both project-level and cumulative impacts. Specifically, OPR's Technical Advisory states:

"A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact, and vice versa. This is similar to the analysis typically conducted for greenhouse gas emissions, air quality impacts, and impacts that utilize plan compliance as a threshold of significance."

The City's adopted VMT metric is reflective of the City's comprehensive approach of planned land uses and supportive transportation options that, when combined, are intended to produce a more sustainable urban environment. Since Pasadena's CEQA transportation metrics evaluate a project's incremental effect on Citywide conditions, and on Citywide buildout conditions pursuant to the City's 2015 General Plan, the analysis is inherently a cumulative analysis consistent with the "summary of projections" approach to cumulative impact analysis described in CEQA Guidelines §15130(b).

### City of Pasadena's Approach to SB 743

In anticipation of the direction of the State legislature and after a multi-year extensive planning and community engagement process, City Council decided in 2014 to adopt a more environmentally sound and holistic approach to evaluating project impacts. At the November 3, 2014 City Council Meeting, the City Council adopted a resolution to establish five new Transportation Performance Measures and set CEQA thresholds of significance. The five transportation measures with CEQA thresholds are:

## Update to CEQA Transportation Thresholds

September 9, 2020

Page 6 of 9

- Vehicles Miles Travelled (VMT) per capita
- Vehicle Trips (VT) per capita
- Proximity and Quality of the Transit Network
- Proximity and Quality of the Bicycle Network
- Pedestrian Accessibility

With the expanded emphasis on sustainability and a continued focus on livability, the adopted performance measures provide a balance in trade-offs among travel modes and among the mobility needs of different members of the community. The CEQA performance measures and thresholds City Council adopted in 2014 assumed a 2013 baseline. In order to ensure analyses remain relevant, DOT is proposing an update to the CEQA performance thresholds of significance using a 2017 Citywide baseline. Per the most current OPR technical advisory, DOT is recommending the threshold be set at 15% below the 2017 baseline. The baseline must be updated on a regular basis to reflect street network and parcel level land use changes expected over time.

### **DISCUSSION:**

Senate Bill 743 required changes to the guidelines implementing CEQA regarding the analysis of transportation environmental impacts. Vehicular delay and traffic congestion are no longer considered environmental impacts. Senate Bill 32 requires California to reduce greenhouse gas (GHG) emissions to 40% below 1990 levels by 2030. The 2019 CEQA Statute and Guidelines aim to promote the reduction of GHG emissions, multi-modal transportation systems and diverse land uses. California Air Resources Board (CARB) determined that reducing VMT growth is essential to achieve the State's climate goals. Further, CARB indicated that: "California will not achieve the necessary greenhouse gas emissions reductions to meet mandates for 2030 and beyond without significant changes to how communities and transportation systems are planned, funded, and built."<sup>9</sup>

### **State Recommended Thresholds to Achieve State Goals**

OPR seeks to evaluate a project based on VMT, and recommends that a per capita or per employee VMT that is 15% below that of existing development may be a reasonable threshold to achieve the state's goals. OPR states that a project-level 15% reduction in VMT is achievable using strategies affecting land use location, neighborhood enhancements, parking policies, transit system improvements, commute trip reduction, road pricing management, and new vehicle technologies.

California Air Resources Board (CARB) finds per capita vehicle travel would need to be kept below what today's policies and plans achieve. CARB also finds per-capita light-duty vehicle travel would need to be approximately 16.8% lower than existing, and overall per-capita vehicle travel would need to be approximately 14.3% lower than existing levels<sup>10</sup>. Stronger light-duty GHG reduction targets will enable the State to make significant progress towards reducing VMT from expected levels, but alone will

---

<sup>9</sup> California Air Resources Board (November 2018) 2018 Progress Report – California's Sustainable Communities and Climate Protection Act

<sup>10</sup> California Air Resources Board (January 2019) 2017 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals

## Update to CEQA Transportation Thresholds

September 9, 2020

Page 7 of 9

not provide all of the needed VMT reductions. Additional measures such as more efficient and more equitable development, infrastructure investments to expand access to quality transportation choices and promote vibrant communities, road and parking pricing policies, and transportation system efficiency improvements are key to achieve the State's climate goals.

### California Agencies' Approach to VMT

As of July 1, 2020, agencies are required to shift the focus from LOS to VMT to evaluate a project's potential impact. Vehicular delay shall not be considered a significant environmental impact. Where congestion and traffic impacts to drivers were once the determining factor for a project's environmental impact, accessibility and the act of driving itself now determines whether a project impacts the environment as measured by the amount of vehicle travel.

Other agencies in California have adopted project VMT per capita threshold levels of significance that are:

- 15% below the existing average household VMT per capita for residential project
- 15% below the existing average work VMT per employee for office projects
- 15% below regional average employee VMT/employee for commercial projects
- Net increases in VMT for regional serving retail projects
- For other land use types, VMT impacts are measured for the work trip element exceeding 15% below the existing average work VMT per employee, or evaluate each land use independently per the thresholds described above

Some agencies also support streamlining of projects in travel efficient locations and that improve access to destinations, livability, and community such as:

- Projects within a transit oriented priority area
- A project pre-screened to have low residential or office VMT
- Residential housing projects composed of 100% affordable housing located in any infill location

### Changes to the City's Travel Demand Model

A regional Travel Demand Forecasting (TDF) model reflects information gathered from various sources to develop commuting patterns for the region (US Census, California Household Travel Survey, National Cooperative Highway Research Program, SCAG Planning Model, National Household Travel Survey, etc.). The level of detail for applying the regional model, however, may not be adequate to evaluate results at a local scale. Accordingly, the City of Pasadena uses a locally calibrated and validated model to analyze projects subject to CEQA.

Developed in 2013 and adopted by City Council in 2014, the City's model is in line with the discretion granted by OPR to develop localized thresholds specific to the jurisdiction. The City's travel demand model more accurately captures and reflects local conditions using GPS and cell phone data, traffic counts, parcel level land use, vehicular availability, and street network and travel time information. By using this

## Update to CEQA Transportation Thresholds

September 9, 2020

Page 8 of 9

model, transportation analyses more accurately reflect and capture potential impacts at the local level.

The current thresholds are based on the City's traffic conditions in year 2013. The City's 2013 model accounts for only 50% of trips that started or ended inside the City boundary. It assumed that the accountability of trips were shared with other jurisdictions based on the trips' origin or destination. For example, if a trip originated in Arcadia and was destined to Pasadena, Arcadia was assumed to account for 50% of the VMT and Pasadena was assumed to account for 50% of the VMT in the City model.

The update of the TDF model and recommended thresholds reflect conditions that are more current and involved updated Citywide traffic data, an update of new parcel level development, model calibration to ensure the model represents existing traffic conditions, and recommendations by OPR.

The recommended thresholds are based on the 2017 baseline year traffic conditions, and noticeable changes are due to the following:

- New land use development
- Changes to the transportation network
- Updated vehicular trip generation rates
- Changes to account for 100% rather than 50% of trips that have only one trip-end in Pasadena (originate in Pasadena with a destination outside the City, or destined to Pasadena with an origin outside the City).

The most substantial change in establishing the updated CEQA thresholds is due to OPR's December 2018 technical advisory recommending that agencies not truncate VMT at jurisdictional boundaries. OPR's 2018 technical advisory recommends each jurisdiction to account for 100% of the trip regardless of the trip's origin or destination. Because the 2017 model was updated to account for 100% of the trip, the VMT and VT per service population thresholds are higher than in the 2013 model, which assumed accountability of trips were shared between jurisdictions.

It is important for the travel demand model to be updated on a regular basis to account for changes to the transportation network and land uses. Staff will reevaluate and update the City's travel demand model every five years to keep the model relevant.

### City of Pasadena recommended CEQA Thresholds

The City's model takes into consideration how all surrounding land uses with and without the project affect the recommended CEQA threshold metrics. Staff recommends the incremental change in VMT/capita and VT/capita thresholds to be 15% below Citywide baseline average to evaluate VMT and VT per capita CEQA impacts. Doing so better positions the City to reduce GHG emissions, encourage the development of multimodal transportation networks, and promote a diversity of land uses. The Proximity and Quality of the Pedestrian and Bicycle Network metric, and the Pedestrian Accessibility metric are recommended to be in line with the Citywide baseline average.

## Update to CEQA Transportation Thresholds

September 9, 2020

Page 9 of 9

The thresholds recommended by staff are in line with the direction adopted by the City Council in 2014. A potential result of having CEQA thresholds lower than baseline may be that some projects that would otherwise be in compliance with the adopted Land Use of the General Plan may be subject to additional environmental review processes. When adopted, the 2017 baseline and subsequent updates to the baseline will be included in revisions to DOT's Transportation Impact Analysis Current Practice and Guidelines. The Guidelines are posted on the Development Review Section of the Transportation Department website: [www.cityofpasadena.net/transportation](http://www.cityofpasadena.net/transportation). The revised thresholds will be applied to new project applications deemed complete six months after the update to CEQA thresholds of significance is approved by City Council.

### **NEXT STEPS:**

This update to CEQA transportation performance thresholds of significance will be presented to the Municipal Services Committee prior to presenting to City Council for consideration. Should the CEQA Thresholds be approved by City Council, a resolution will be prepared for Council approval prior to the CEQA Thresholds of Significance taking effect. At the direction of the City Council, staff will work with the Transportation Advisory Commission to update the administrative procedures for the Traffic Impact Analysis Guidelines that will include the updated CEQA thresholds and Outside CEQA caps within sixty days.

Respectfully submitted,



LAURA CORNEJO

Director of Transportation

Prepared by:



Conrad Viana, P.E.

Engineer