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SB 743/Vehicle Miles Traveled (VMT)

September 23, 2019

Presentation Outline

- SB 743 Background
- Vehicle Miles Traveled (VMT) vs Level of Service (LOS)
- Implementing SB 743 OPR Technical Advisory
- City of Irvine Approach
- Stakeholder Input/Next Steps



SB 743 Background



SB 743

Promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses by changing CEQA Transportation Analysis from congestion to distance traveled by vehicles



Climate/Land Use Policy

AB 32 (2006) GHG emissions reductions to 1990 levels by 2020

SB 375 (2008) RTP/SCS 19% reduction in GHG from cars/light trucks from 2005 by 2035

SB 391 (2009) 80% reduction in GHGs from 1990 levels by 2050

Ex Order B-30-15 (2015) GHG reduction 40% below 1990 by 2030

SB 32 (2016) 40% reduction in GHG from 1990 by 2030

SB 743 (2013) Replaces LOS with VMT

CALIFORNIA GREENHOUSE GAS EMISSIONS

California is on track to meet its goal for greenhouse gas emissions by 2020, but will need to do far more to reach targets for 2030 and 2050.

Million metric tons of carbon dioxide equivalent

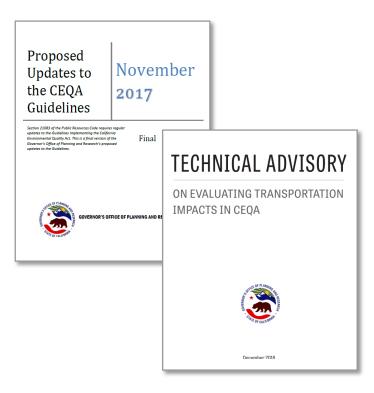




SB 743 History

"Develop alternative criteria of measuring transportation impacts in support of the State's goals for greenhouse gas reduction by encouraging higher density, mixed-use development in urban areas served by public transit and more diverse travel options":

- September 2013 Law Passes
- December 2013 Preliminary Guidelines published "Under SB 743, the focus of transportation analysis will shift from driver delay to reduction of greenhouse gas emissions, creation of multimodal networks and promotion of a mix of land uses"
- August 2014 Office of Planning and Research (OPR) recommends VMT replace LOS as primary measure of transportation impacts - Initially only for TODs
- Significant outreach, feedback, comments and concerns
- Final CEQA Guidelines November 2017
- Final OPR Technical Advisory December 2018 VMT/capita
- Adoption now required by July 1, 2020
- Importantly does not preclude LOS for operational analysis only CEQA





VMT versus Level Of Service



LOS vs VMT as Measure of Transportation Impact

Comparison	Level of Service Analysis	VMT Analysis
Measure of	Congestion	Trip Length
Time Period	Peak Hour (AM and PM)	Daily
Primary Influence	Roadway network	Land Use
Impacts Are	Local	Regional
Mitigation For	Vehicles	Non-Vehicles



OPR Technical Advisory – Not quite so simple

- "Meeting statewide reduction goals does not preclude all new development
 ... rather it assumes continued growth and depends on increased <u>efficiency</u>
 and conservation in land use and transportation ..."
- "when assessing climate impacts of some types of land use projects, use of an <u>efficiency metric</u> (eg. per capita, per employee) may provide a better measures of impact than an absolute numeric threshold"
 - VMT/capita Home-based trips
 - VMT/employee Work-based trips
 - Net VMT Retail trips

Result is total trips generated is less important than average trip length



Implementing SB 743

TECHNICAL ADVISORY

ON EVALUATING TRANSPORTATION IMPACTS IN CEQA



December 2018



OPR TECHNICAL ADVISORY - SB 743

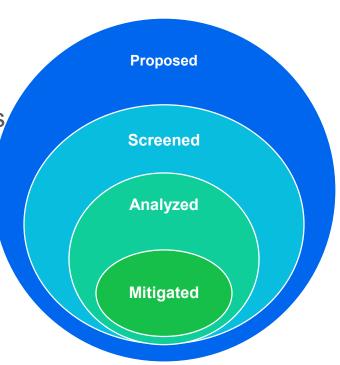


- 1. Project Screening
- 2. VMT Methodology
- 3. Significance Thresholds
- 4. Feasible Mitigations



OPR TECHNICAL ADVISORY - SCREENING

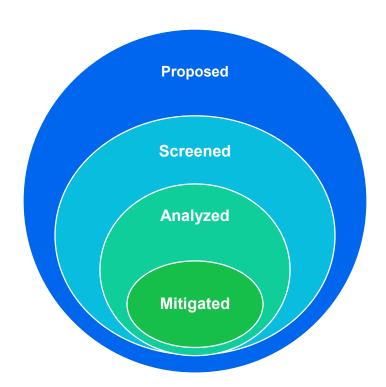
- Small Projects
- Low VMT areas
- High Quality Transit Areas/Corridors
- Neighborhood Retail Projects
- Affordable Housing
- Redevelopment Projects
- Goods Movement





OPR GUIDELINES - VMT METHODOLOGY

- Use traffic model or alternate
- Determine project VMT/capita or VMT/employee
- Compare to City or Regional thresholds
- Determine significance
- Mitigate as needed



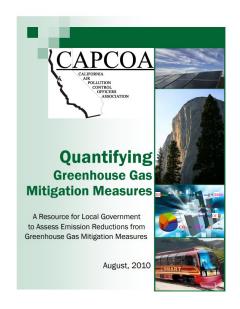


OPR TECHNICAL ADVISORY - SETTING THRESHOLDS

- OPR suggests 15% below existing City or Regional baseline (VMT/capita, VMT/employee)
- Local thresholds should be substantiated by evidence
 - General Plan Land Use and Circulation Elements
 - Feasible mitigation
- Local thresholds can vary by type of land use or geography



OPR TECHNICAL ADVISORY MITIGATIONS



Onsite Improvements

- End of trip facilities
- Transportation Demand Management
- Carpool/Vanpool Accommodation
- Car/Bike Share

Offsite Improvements

- Transit Access Improvements
- Pedestrian Improvements
- Bikeways
- Safe Routes to School



City of Irvine Specifics



CITY OF IRVINE APPROACH

- Keep LOS analysis requirements consistent with current TIA Guidelines and current practice
- VMT analysis
 - Update TIA Guidelines to add a VMT analysis section.
 - Use the City's traffic model (ITAM TransCAD 2018 VMT) to establish the citywide VMT significance threshold goals.
 - Use the City's traffic model to calculate project VMT rates to identify potential impacts.



PROPOSED SCREENING

- Project nets an increase of 250 or less daily trips
- The project is located in a High Quality Transit Area (i.e., within half-mile distance of existing rail transit station or located within half-mile of two or more existing bus routes with a frequency of service interval of 15 minutes or less during morning and evening peak hours);
- Project is locally serving retail (less than 50,000 square feet) or a K-12 locally serving public school; and
- Project is a 100 percent affordable housing project. (Note: if less than 100 percent, the number of affordable units is not subject to VMT impact analysis.)



PROPOSED SIGNIFICANCE THRESHOLDS

- OPR suggests 15% reduction of <u>existing</u>
 VMT rates
- Early adopters:
 - 0% reduction in Pasadena, Corona, rural San Bernardino County
 - 4% reduction in San Bernardino County
 - 15% reduction in Los Angeles, San Jose, and Oakland
- City considering 10% reduction of <u>existing</u>
 VMT rates





PROPOSED METHODOLOGY

SIGNIFICANCE THRESHOLD GOALS

- Residential VMT per capita
 - Applicable for residential use projects
- Non-residential VMT per employee
 - Applicable for office, industrial, hotel, retail uses, universities and commercial recreation use projects on a case-by-case basis depending on a project's specific proposed land use mix
- Mixed-use VMT per service population
 - Applicable for combination residential/non-residential use projects at the discretion of city staff on a case-by-case basis depending on a project's specific proposed land use mix



PROPOSED METHODOLOGY - Significance Threshold Goals

Residential VMT per capita*

- Home-Based Work
- Home-Based School
- Home-Based University
- Home-Based Shop
- Home-Based Social/Recreational productions
- Home-based other productions
- Rate based on citywide population

Non-residential VMT per employee*

- Home-Based Work direct and strategic attractions
- Work-Based productions
- Home-Based University attractions
- Home-Based Shop attractions
- Home-Based Social/Recreational attractions
- Home-Based other attractions
- Work-Based other attractions
- Other-Based other productions
- Other-Based other attractions
- Rate based on citywide number of employees

Mixed-Use VMT per service population*

- All residential home-based trips
- All non-residential trips
- Rate based on both citywide population and citywide number of employees

*Applicable threshold goal will be determined on a case-by-case project basis depending on the project's land uses.



PROPOSED METHODOLOGY

Application Received
Two Analyses Required

City's LOS traffic impact analysis Per Traffic Impact Analysis Guidelines, 2004

1-49 peak hour trips Perform Limited Scope Traffic Study 50 or more peak hour trips Perform Comprehensive Traffic Study

Project is responsible for mitigating the City's traffic impacts to address deficient LOS:

- intersections
- · roadway segments

Project is responsible for operational improvements to address TDPs

(This is consistent with current practice. No changes proposed.)

CEQA VMT Analysis Step 1. Screening

Does the project meet any one criterion below?

- Project nets an increase of 250 or less daily trips (ITE based)
- Project is located in High Quality Transit Area (i.e. within half-mile distance of existing rail transit station or located within half-mile of two or more existing bus routes with a frequency of service interval of 15 minutes or less during morning and afternoon peak hours)
- Project is a locally serving retail (less than 50,000 TSF) or a K-12 locally serving public school
- Project is 100 percent affordable housing project*

Yes

No impact; No further VMT Analysis required

* if less than 100 percent, the number of affordable units is not subject to VMT impact analysis No Go to Step 2 Step 2. Is the project a redevelopment project that results in a net overall decrease in city-wide VMT?

Yes

No impact; No mitigation required

No Go to Step 3

Step 3.

Calculate the change in Project's VMT Rate based on project type.

Calculation:

(Project VMT minus Existing VMT)
 (Project Pop or Emp minus Existing Pop or Emp)

Then compare the Project VMT Rate against the City's applicable significant threshold goal (determined case-by-case depending on project's land uses):

- If project VMT Rate is less than or equals the applicable significant threshold goal, no CEQA VMT impact; no mitigation required.
- If project VMT Rate greater than the applicable significant threshold goal, mitigation is required.

Potential Mitigation Measures being considered

Category	Strategy	
Neighborhood/Site Design	Provide Pedestrian Network	
	Traffic Calming Measures	
	Incorporate Bike Lane Street Design (on-site)	
	Provide Bike Parking in Non-Residential Projects	
	Provide Bike Parking in Multi-Unit Residential Projects	
	Dedicated Land for Bike Trails	
Transportation Demand	Implement Transportation Demand Management Program	
Management Program	 Required Implementation/Monitoring 	
	Provide Ride-Sharing Programs	
	Implement Subsidized or Discounted Transit Program	
	Provide End of Trip Facilities (such as on-site food service,	
	gym, shower)	
	Telecommuting and Alternative Work Schedules	
	Implement Preferential Rideshare Parking Program	
	Implement Car-Sharing Program	
	Provide Employer-Sponsored Vanpool/Shuttle	
	Implement Bike-Sharing Program	
Transit System Improvements	Implement Transit Access Improvements	
	Expand Transit Network	
	Provide Bike Parking Near Transit	
	Provide Local Shuttles	
Road Pricing/Management	Improve Traffic Flow	
	Require Project Contributions to Transportation	
	Infrastructure Improvement Projects	
	Install Park-and-Ride Lots	

Next Steps



Next Steps

- Feedback from stakeholders Submit to Melissa Chao, Senior Planner, at <u>mchao@cityofirvine.org</u> by October 23, 2019
- Stakeholder Meeting #2 anticipated late Nov./early Dec. 2019
 - Share updated TIA Guidelines (redlines)
 - Share refined VMT methodology and threshold goal numerical values
- Feedback from Stakeholder Meeting #2 anticipated early Jan. 2020
- Transportation Commission updated TIA Guidelines
- Planning Commission review and City Council adoption updated CEQA Manual and updated TIA Guidelines
- Statewide VMT implementation deadline is July 1, 2020.

