# LOS $\rightarrow$ VMT Are we there yet?

Senate Bill 743 Update

Planning Commission | Justin Meek, AICP | March 3, 2020



# PREVIEW

- SB 743
- What is LOS
- What is VMT
- Needed technical analysis
- Next up: establish significance thresholds



# SB 743 Overview

#### Changes CEQA

"Automobile delay, as described solely by level of service or similar measures... shall not be considered a significant impact on the environment..." (PRC § 21099 [b] [2])

• New primary metric will be VMT – aligns with climate goals

# SB 743 milestones

- Enacted in 2013
- State guidelines/rule-making process 2014-2018
- OPR adopted rules in **2018**
- Effective July 1, 2020

### **TECHNICAL ADVISORY**

ON EVALUATING TRANSPORTATION IMPACTS IN CEQA



December 2018

### SB 743 background

- Brainchild of Senator Darrell Steinberg (D-Sacramento)
- Also crafted **SB 375** in 2008
  - Coordinate regional housing needs and transportation planning in an effort to curb GHG emissions
  - Aim: encouraging infill and alternative transportation



**2035** Metropolitan Transportation Plan / Sustainable Communities Strategy

> Final June 2014



## Traffic Truism context for SB 743 & SB 375

- Truism:
  - the more residents a downtown accommodates,
  - the less driving there is in the aggregate
- Example: Santa Barbara
  - Encouraging development commercial and residential in its downtown core
  - A development's traffic impact is less
  - Developments in the core will generate <sup>1</sup>/<sub>2</sub> the traffic of developments in outlying areas of the city

### SB 743 purpose

• Change transportation impact analysis, per **CEQA** 

• Objective: promote infill and reduce GHG

#### Change from maintaining LOS to reducing VMT

• Base impacts on how much vehicle travel a project generates, not changes to existing traffic conditions

## SB 743 Requirements

new approach required to evaluating transportation impacts

- The legislation includes the following language:
  - "Upon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, 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..." (PRC § 21099[b][2], emphasis added)
- The Governor's Office of Planning and Research (OPR) was required to develop new CEQA guidelines establishing criteria...
  - "for determining the significance of transportation impacts" that use vehicle miles traveled (VMT), or a similar metric, instead of measures of congestion or delay, such as level of service (LOS)

### SB 743 purpose

- Promote infill
- Reduce greenhouse gas emissions
- Support multimodal transportation networks
- Encourage diversity of land uses

### SB 743 purpose

- Removes focus on traffic at intersections and roadways
- New focus on how new development may influence overall auto use
- Focus on reducing GHG emissions
- Promote multi-modal transportation
- Ensure land use diversity within transit priority areas

#### OPR

developed new CEQA guideline

- "Determining the Significance of Transportation Impacts"
  - CCR § 15064.3
  - Implements PRC § 21099
- Focuses on VMT and includes the statement that, except for roadway capacity projects, "a project's effect on automobile delay shall not constitute a significant impact."

#### SECTION 15064.3. DETERMINING THE SIGNIFICANCE OF TRANSPORTATION IMPACTS

(a) Purpose.

This section describes specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact.

- (b) Criteria for Analyzing Transportation Impacts.
  - (1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
  - (2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.
  - (3) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.
  - (4) Methodology. A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.
- (c) Applicability. The provisions of this section shall apply prospectively as described in section 15007. A lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide.

Note: Authority cited: Sections 21083 and 21099, Public Resources Code. Reference: Sections 21099 and 21100, Public Resources Code; Cleveland National Forest Foundation v. San Diego

# CCR § 15064.3

effective date

Applicability. The provisions of this section shall apply prospectively as described in section 15007. A lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide.

SB 743 implications

- CEQA documents can no longer base a significance determination on an automobile delay-based analysis, such as LOS.
- These documents are not precluded from including a LOS analysis for disclosure purposes, such as General Plan Circulation Element or Congestion Management Plan consistency, but the analysis cannot be used as a basis for determining a significant environmental impact.
- All EIRs and negative declarations circulated for public review after July 1, 2020, are required to consider VMT when determining whether a project may cause a significant impact.

### SB 743 recap/takeaways

- **Prohibits** automobile delay as a significant impact
- Must evaluate transportation impacts using VMT
- Will go into effect July 1, 2020







LOS

# What is Level of Service?

# What is **LOS**?

- "Level of service," or LOS, is a measure of delay or congestion
- Application?
  - Former rules treat auto delay and congestion (i.e., a project's contribution to a roadway's LOS) as an environmental impact

# What is **LOS**?



- The LOS approach, born of 1950s-era management approaches, set up the paradoxical situation in which high-density development was often pushed away from city centers – where multiple transportation options are available – and out to urban fringes, where intersections are less congested even if they end up generating more and longer car trips.
- "Over-reliance on level of service as the only indicator of success in our transportation systems is one of the biggest obstacles to infill development," said Jeffery Tumlin, principal and director of strategy at Nelson-Nygaard.

LOS

level-of-service considerations

- Focus: driver convenience
- Volume-to-capacity analysis
- Qualitative scoring

Level of Service	Control Delay (s/veh)	Travel Speed at % Free-Flow Speed
A	≤10	> 85
В	> 10 and ≤ 20	> 67 and ≤ 85
C	> 20 and ≤ 35	> 50 and ≤ 67
D	> 35 and ≤ 55	> 40 and ≤ 50
E	> 55 and ≤ 80	> 30 and ≤ 40
F	> 80	< 30

Table 1. LOS for Urban Streets, Adapted from the Highway Capacity Manual<sup>3</sup>

- A to F letter grades
  - "84 seconds of delay" = "LOS F"
  - Implies failure

#### LOS recap/takeways

- What is it?
  - Measure of traffic flow (or delay)
  - Assigns qualitative levels of traffic based on performance measures such as vehicle speed, congestion, etc.
- When did it start?
  - Post World War II
  - Context: suburban development and higher auto ownership
- Why is it important?
  - Used for evaluating traffic impacts
  - Obstacle to infill



# SPEEDING THE TRANSITION FROM LOS TO VM7

# LOS paradigm shift underway

# Changing the Paradigm of Traffic Impact Studies:

#### How Typical Traffic Studies Inhibit Sustainable Transportation

By Michelle DeRobertis, M.S., P.E., John Eells, MCP, Joseph Kott, Ph.D., AICP, PTP, and Richard W. Lee, Ph.D., AICP

he practice of focusing on automobile level of service (LOS) and traffic flow as part of environmental clearance has, ironically, actually inhibited sustainable transportation, that is, transit, bicycling, and walking. This paper describes the problems with current practices and suggests how transportation studies should be used to improve mobility and livability for all.

30 May 2014 ite journal



#### feature

# **Decisions, Values, and Data:**

Understanding Bias in Transportation Performance Measures



Changing values and the performance measures that reflect them



Figure 2: This image from Canberra, Australia shows the space required to move 69 people by bus, bicycle, and car.

### SB 743 Implementation Around California

- Cities that have adopted VMT-focused transportation analysis policies
  - Emeryville (2009 prior to SB 743)
  - Pasadena (2014)
  - San Francisco (2016)
  - Oakland (2016)
  - San Jose (February 2018)
  - Los Angeles (2019)
- Caltrans working on new guidance for development projects affecting the State Highway System

SB 743 Implementation Caltrans State of California DEPARTMENT OF TRANSPORTATION California State Transportation Agency

### Memorandum

Making Conservation a California Way of Life

TO: TRANSPORTATION STAKEHOLDERS

Date: February 12, 2020

From: ELLEN GREENBERG Deputy Director, Sustainability CHRIS SCHMIDT SB 743 Program Manager

subject: Caltrans Implementation of SB 743 – Use of Vehicle Miles Traveled in CEQA

- TAC will provide methodologies for CEQA practitioners
- Draft document: March 2020
- Target publication date: May 2020

# Why VMT?

- SB 743 requires the CEQA Guidelines to proscribe an analysis that **better accounts for transit and reducing greenhouse gas emissions**.
- OPR selected **vehicle miles traveled (VMT)** as a replacement measure not only because it satisfies the explicit goals SB 743, but also because VMT is already used in...
  - CEQA to study greenhouse gas and energy impacts
  - Planning for regional sustainable communities strategies

If Level of Service can still be used for planning purposes, isn't this just adding another layer of study?

- Because SB 743 preserves local government authority to make planning decisions, LOS and congestion can still be measured for planning purposes. In fact, many general plans contain LOS requirements.
- While traffic studies may be required for planning approvals, those studies will not be required to be part of the CEQA process.
  - This would be similar to how some local governments require landscaping plans and site elevations as part of project approval, but not necessarily for the environmental document prepared under CEQA.

What benefits come from removing level of service and congestion from CEQA?

- Removing level of service and congestion from CEQA is beneficial for several reasons.
  - It preserves local choice in planning circulation systems (i.e., it does not mandate that local roads have any certain capacity).
  - 2. It gives local governments the ability to make policy tradeoffs in dealing with congestion (i.e., balancing free-flow with the cost of building and maintaining roadways and using other modes of travel).
  - 3. Mitigation for congestion impacts (which often entails larger roadway infrastructure) can be quite costly, and cause other adverse environmental impacts.

Does this add more of a litigation burden for infill?

- Using VMT should reduce litigation burdens in several ways.
  - 1. Congestion impacts are frequently litigated in CEQA cases today. Under this approach, however, such effects would not be part of CEQA litigation.
  - 2. This approach presumes that projects located near transit would normally not have a significant impact. In most cases, no study or mitigation would be required for such projects, meaning that there would be fewer issues to litigate in a lawsuit.
  - 3. Even for projects that are not located near transit, the proposal establishes wide discretion for lead agencies in selecting models to estimate VMT, and to apply professional judgment in adjusting model assumptions and outputs to reflect project conditions.
- All of these features should make infill projects more defensible in litigation than they are today.

What are the implications for mitigation for enhanced mobility?

- A switch to VMT means that impacts need not be mitigated only by improving vehicular flow.
- Other modes are eligible now including transit, cycling, pedestrian improvements, etc.

What if local general plans call for more roadway capacity?

- SB 743 preserves local government authority to plan the circulation system that is right for their community.
- Local governments may continue to require new projects to contribute to transportation enhancements in connection with project approvals.
- To the extent that local governments adopt policies that have environmental impacts, those impacts would need to be studied. Once addressed in an environmental impact report for a general plan, such impacts would not normally need to be reevaluated for later projects. (PRC § 21083.3.)

## Options & other considerations Local practice?

• SB 743 **does not** preclude local agencies from applying LOS in policies, codes, conditions, etc.

Local practice?

- New focus may include:
  - Manage congestion
  - Manage traffic volumes
  - Manage how signals operation
- Not adding capacity to mitigate LOS impacts

# Now what?



### SB 743 Implementation work plan

- Countywide collaboration
- Convene working group
- Share resources/costs
- Develop countywide VMT tool for land use projects
- Model is trip-based (not activity-based or tour-based)

### SB 743 Implementation currently underway

- Baseline VMT modeling
- VMT evaluation tool for land use projects

# Kimley »Horn

Expect More. Experience Better.

### SB 743 Implementation currently underway

- VMT calculator
- Estimate protect-specific daily...
  - Household VMT per capita
  - Work VMT per employee

# **Kimley**»**Horn**

Expect More. Experience Better.

# preliminary results

# Residential

 Residential VMT per Capita Not Applicable 50% or more Below County Threshold 50% - 15% Below County Threshold Less than 15% Below County Threshold Less than 15% Above County Threshold 15% to 50% Above County Threshold 50% to 100% Above County Threshold More than 100% Above County Threshold Other

Miles

# preliminary results

\*

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Office



## SB 743 Implementation

OPR recommended thresholds

- **Residential:** > 15% of existing VMT per capita
- Office: > 15% of existing VMT per employee
- **Retail:** Net increase in total existing VMT for region
- **Transportation:** Net increase to VMT "budget" to comply with GHG targets

## Exemptions

OPR presumption of less-than-significant impact

#### • Screening thresholds

- Identify when a project should be expected to cause a *less-than-significant* impact without conducting a detailed study. (CEQA Guidelines, §§ 15063(c)(3)(C), 15128, and Appendix G)
- May be based on project *size*, *maps*, *transit availability*, and provision of *affordable housing*

# Exemptions

OPR presumption of less-than-significant impact

- Map-based screening
  - Residential & office project located in areas of low VMT
- Small projects screening
  - < 110 trips per day
  - Local retail < 50K sq ft
- Affordable housing to infill locations
- Within <sup>1</sup>/<sub>2</sub> mile of a Major Transit Stop\*

\*Red flags:

- Excessive parking
- Inconsistency with SCS
- Replaces affordable housing
- FAR of < 0.75

Mitigation How to reduce VMT?

- Travel Demand Management (TDM) strategies
- Applied to reduce vehicle trips and VMT estimates
- Typical categories from which users can select strategies include:
  - 1. Parking: Reducing, unbundling, permitting, pricing parking.
  - 2. Transit: Transit subsidies, reduced headways, neighborhood shuttles.
  - 3. Education & Encouragement: Travel behavior change program, promotions/marketing.
  - 4. Commute Trip Reductions: Required commute trip reduction program, vanpool, rideshare.
  - 5. Shared Mobility: Car-share, bike share, school carpool program.
  - 6. **Bicycle Infrastructure:** On-street bike facilities, bike parking, bike facilities, showers.
  - 7. Neighborhood Enhancement: Traffic calming, pedestrian network improvements

# **TDM Mitigations**

- Transit Tickets
- Trolley Subsidy
- Bike Racks and lockers
- Showers
- Bike share facility (for residents or employers)
- No parking provision
- Unbundling of parking where applicable

- Shared parking and parking cash-out programs
- Guaranteed ride home
- Flexible schedule
- Company HR policies
- Carpool parking
- Preferential parking





Transportation Demand Management Measure	Description
Bike Share Program	Bicycle share programs provide convenient rental bicycles to users. This allows urban residents and visitors to bicycle without
	needing to purchase, store and maintain a bike.
Bicycle Lockers/Racks	Provide safe storage for employees to park bicycles for commuting.
Showers/Changing Room	Provide showers and changing rooms for those walking/bicycling to work.
Facilities	
Bicycle Repair Station	Provide a bicycle repair station on-site to encourage bicycling. This would include bicycle maintenance tools and supplies that
	are readily available for users of the building.
Bicycle Fleet	Project will provide its own fleet of bicycles that can be rented out to users. The number of bicycles would be equivalent to
	the required number of Class II bicycle spaces, or at a minimum of five (5) bikes.
Provide Delivery Services	The project would have a delivery services facility to store food deliveries at work. This would reduce the number of vehicle
Facility	trips needed to run errands before, during, or after work.
Provide Laundry, Dry-Cleaning,	The project would have on-site laundry services, dry cleaning services, and banking services. This would reduce the number
and Banking Services	of vehicle trips needed to run errands before, during, or after work
and banking services	
Childcare Services	The project can provide on-site childcare services. This would reduce the vehicle trip distance to a childcare facility and then
	to work.

Car Share Membership	Provide an on-site car share vehicle for employees to use.	
	Provides an occasional subsidized ride to commuters who use alternative modes and eliminates a common constraint to the	
Guaranteed Ride Home	use of alternative modes. Guaranteed ride home for people if they need to go home in the middle of the day due to an	
Program (GRH)	emergency or stay late and need a ride at a time when transit service is not available. GRH programs may use taxies, company	
	vehicles or rental cars.	
Subsidized transit tickets for		
employees	Pay for employees to use transit. This could either be a discounted ticket or a fully-reimbursed transit ticket (e.g. Caltrain Go	
and	Pass Program or Caltrain Monthly Pass paid by Company).	
Shuttle service from transit	Provide a shuttle from the project site to nearby transit stations or park and ride lots.	
Vanpool Program	Organize a vanpool for employees.	
Compressed Workweek		
Program	Employees work a different work week schedule (e.g. four 10-hour days, four 9-hour days and take every other Friday off).	
Alternate Hours Workweek	Engles and work many standard basis (a.e. 10 ANA to C DNA)	
Program	Employees work non-standard hours (e.g. 10 AM to 6 PM).	
Telecommuting	Employees work from home on certain days.	
Safe and well-lit and accessible		
routes to nearby transit or	Enhance the route for employees walking or bicycling to nearby transit (typically off-site).	
shuttle stops		

Preferential Carpool Parking Spaces	Reserved carpool spaces closer to the building entrance.
Preferential Vanpool Parking Spaces	Reserved vanpool spaces closer to the building entrance.
Designated Parking Spaces for Car Share Vehicles	Reserved car share spaces closer to the building entrance.
Passenger Loading Zones for carpools and vanpools	Provide easy access for carpools or vanpools.
Unbundle Parking	Parking spaces shall be leased or sold separately as part of a residential development. By not automatically providing parking to all tenants, residents have the option to pay for parking. This may result in fewer vehicles on-site and would reduce the number of vehicle trips generated by the site.
Short-term Daily Parking	The project would only provide hourly parking for a maximum of one day. The project would not provide parking passes for weekly, monthly, or yearly durations. This would result in higher turnover of parking spaces and may discourage users from parking at the site.
Parking Cash Out	The project would pay users to not utilize their parking spaces. This would incentivize users to find alternative modes of transportation to the site.
Parking Maximums	The project would have a set parking maximum supply, instead of minimum parking required. The reduction in parking supply would result in users finding alternative means of getting to and from the site.
Commute Assistance Center	Provide a computer kiosk that allows employees to research other modes of transportation for commuting.



### SB 743 Implementation recap/takeaways

- Regional effort underway
  - Boundary condition analysis tool (estimate VMT outside the County)
  - VMT data development & analysis (enable screening maps)
  - VMT estimation tool
- Next steps
  - VMT significance thresholds
    - For residential, retail and office development projects
  - Mitigation strategies
    - Project level, programmatic and transaction exchanges
    - Legal and administrative framework
  - Update CIP program and fees



More Information





 California State Legislature | Senate Bill 743 (Steinberg, 2013) <u>https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\_id</u> <u>=201320140SB743</u>

 OPR | Transportation Impacts | SB 743 website <u>http://opr.ca.gov/ceqa/updates/sb-743/</u>

• OPR | Technical Advisory on Evaluating Transportation Impacts <u>http://opr.ca.gov/docs/20190122-743\_Technical\_Advisory.pdf</u>

 Caltrans | SB 743 Implementation <u>https://dot.ca.gov/programs/transportation-planning/office-of-</u> <u>smart-mobility-climate-change/sb-743</u>

 Fehr & Peers | California SB 743 <u>https://www.fehrandpeers.com/sb743/</u>



# Questions

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