CALTRANS SB 743 Implementation



Transportation Analysis Framework (TAF) & Transportation Analysis under CEQA (TAC)

Caltrans Webinar | October 6, 2020



Welcome

- Welcome and Introductions
- Caltrans Participants
 - Ellen Greenberg, Deputy Director, Sustainability
 - **Zhongren Wang**, Office Chief, Division of Traffic Operations
 - Jeremy Ketchum, Assistant Division Chief, Environmental Analysis
- Submit questions via chat feature to "All Panelists"
- TAF and TAC online at: (<u>https://dot.ca.gov/programs/transportation-planning/office-of-smart-mobility-climate-change/sb-743</u>)



Topics for Today

- 1. Re-cap of Purpose and Process
- 2. Guidance Document Overview
- 3. TAF First Edition
- 4. TAC First Edition
- 5. Next Steps
- 6. Responses to Questions





- Amended the California Environmental Quality Act (CEQA)
- Codified as Public Resources Code § 21099.
- Better aligned CEQA with State climate and planning goals by addressing transportation impacts and infill development
- Changing CEQA analysis of transportation impacts associated with both land development and infrastructure projects, with wider implications for project selection and prioritization.
- CEQA Guidelines amended December 2018 to reflect SB 743.
- Caltrans launching related guidance: TISG, TAC, TAF



Re-Cap: Process

Getting to the Draft

- Policy Direction from Leadership
- Caltrans Working Group
- CEQA Guidelines
- OPR Technical Advisory
- Interagency Team
- Focused consultant input
- Stakeholder engagement

Moving from Draft to First Edition TAF and TAC

- Stakeholder
 Feedback
- Expert Panel
- Interagency Work
- Legal review and input
- Policy Clarification



Transportation Analysis and LOS

- LOS is eliminated as a basis for CEQA significance determination in transportation analysis – this change is formalized in the CEQA guidelines
- Caltrans is implementing VMT analysis as transportation impact assessment methodology
- LOS reference in HDM Section 102 is <u>not</u> direction to add capacity to the State Highway System



Aligning with Climate Goals

The State's plan for reducing greenhouse gas emissions is CARB's climate change Scoping Plan. The Plan's overall transportation sector GHG reduction strategy has three main components:

- Increasing zero emission vehicles
- Converting to cleaner fuels in conventional vehicles
- Reducing Vehicle Miles Traveled (vehicle use)

Reducing vehicle miles traveled is the focus of SB 743.



California GHG Emissions

Together, emissions from the transportation and industrial sectors account for half of statewide emissions of harmful greenhouse gases







3. Guidance Document Overview

Caltrans SB 743 Implementation Two Focus Areas

1. Land Development Projects

Our review of land development projects, through the Local Development- Intergovernmental Review (LD-IGR) Program. Guidance (TISG) released on July 1, 2020

2. Transportation Projects: today's focus

Delivery of projects on the State Highway System

Guidance (TAF & TAC) released on September 10, 2020

Note: local agencies may select different approaches for CEQA analysis of local street and road projects.



What Projects are Affected?

- Project Types Likely to Lead to a Measurable and Substantial Increase in Vehicle Travel
 - <u>Adding capacity</u> to the State Highway System through construction of new or expansion of existing facilities
- Project Types <u>Not</u> Likely to Lead to a Measurable and Substantial Increase in Vehicle Travel
 - Rehabilitation, maintenance, replacement, safety & repair projects designed to <u>improve the condition</u> of existing assets
 - Over 30 project types in TAC Section 5.1.1.



Updated Transportation Impact Analysis Policy

- CALTRANS Policy on Transportation Impact Analysis and CEQA Significance
 Determinations for Projects on the State
 Highway System – September 10, 2020
 - Consistent with CEQA Guidelines Caltrans concurs VMT is most appropriate measure of transportation impacts under CEQA
 - Includes update to April 13, 2020 Timing Memo and has attached VMT/CEQA memorandums dated May 8, 2020 and August 18, 2020

	State of California DEPARTMENT OF TRANSPORTATION		California State Transportation Agency
	Memorandum		
To:	CALTRANS EXECUTIVE BOARD CALTRANS DIVISION CHIEFS	Date:	September 10, 2020
From:	ELLEN GREENBERG <i>Ellen Greenberg</i> Deputy Director Sustainability	MICH/ Deput Projec	AEL D. KEEVER <i>Michael D. Keeve</i> y Director t Delivery

Subject: CALTRANS POLICY ON TRANSPORTATION IMPACT ANALYSIS AND CEQA SIGNIFICANCE DETERMINATIONS FOR PROJECTS ON THE STATE HIGHWAY SYSTEM

Purpose

The purpose of this memorandum is to communicate the California Department of Transportation (Caltrans) policy regarding analysis of transportation impacts under the California Environmental Quality Act (CEQA) for projects on the State Highway System (SHS). The Department documents Transportation Analysis Framework (TAF), and Transportation Analysis under CEQA (TAC) guide implementation of the policy. The policy and guidance implement Senate Bill (SB) 743 (Steinberg, 2013) codified at Public Resources Code (PRC) section 21099.

Caltrans Policy on Transportation Impact Analysis and CEQA Significance Determinations for Projects on the State Highway System Consistent with the language of Section 15064.3 of the CEQA Guidelines, Caltrans concurs that Vehicle Miles Traveled (VMT) is the most appropriate measure of transportation impacts under CEQA. The determination of significance of a VMT impact will require a supporting induced travel analysis for capacity-increasing transportation projects on the SHS when Caltrans is lead agency or when another entity acts as the lead agency.

Discussion

Capacity-increasing projects will require VMT analysis to determine whether significant, adverse transportation impacts are anticipated. The potential for projects to induce additional travel will be the basis for determinations of significance. VMT analysis methods include use of elasticity-based calculators, regional travel demand models, and use of the Statewide Travel Demand Model. Methods used should reflect the potential for capacity additions to induce vehicle travel. Caltrans' Transportation Analysis Framework (TAF) provides guidance for selection of appropriate methodologies.



Relationship between TAF and TAC

- Together the TAF and TAC reflect a major shift in interpretation, analysis and mitigation of transportation impacts from projects on the State Highway System
- Analysis of induced travel (TAF) feeds into the Determination of transportation impact significance under CEQA will now be based on assessment of "VMT attributable to the project" or induced travel (TAC)
- The TAF-TAC relationship is represented by Figure 1 in both documents



Figure 1. Steps in CEQA Transportation Impact Analysis for SHS Projects



4. TAF First Edition

Purpose of the TAF

- Establishes new Caltrans procedures for analysis of transportation impacts of projects on the State Highway System, focusing on induced travel.
 - Capacity increasing projects will be analyzed
- Provides input for significance determinations under CEQA
- NOTE: The TAF is not to be used for NEPA analyses or other CEQA analyses (such as air quality and noise).

Induced Travel Overview

- When transportation system changes effectively reduce the cost of travel to individuals and businesses, there is typically a change in user behavior. Induced travel is the term used to describe this phenomenon
- Central topic in the TAF, defined as VMT attributable to a specific project
- Conceptual diagrams illustrate the concept for better understanding:
 - Reduced travel time (lower cost) related to capacity expansion leads to more driving
 - Induced travel is driver response to reduced "cost"

Scenario: New River Crossing

- Reduces VMT for all existing trips between A and B
- But project may also attract more trips between A and B
- Project may alter the land use pattern along the new river crossing and other places.

Induced Travel: Driver Response to Reduced "Cost"

Induced Travel: VMT Attributable to Project

Induced Travel: Responses to Reduced Travel Cost

Driver Behavior Change

- Route changes (increase or decrease VMT)
- Mode shift (increases or decreases VMT)
- Longer trips (increases VMT)
- More trips (increases VMT)
- Land use change
 - More dispersed development (increases VMT)

Assessing Induced Travel

The TAF provides references for several ways to assess induced travel

- NCST Induced Travel Calculator
- Travel Demand Models (TDMs): may be regional or Statewide
- Use of other quantitative assessment methods
- Use of Qualitative Assessment Methods

Induced Travel Calculator (NCST)

- Limited Applicability
 - County or MSA wide average long-term elasticity-based
 - MSA counties only, not 21 Rural Counties in CA
 - General Purpose/HOV lanes only
- TAF provides flexibility of using calculator to provide result or to use as a benchmark for modeling results, +/- 20%
- Upheld by Panel, and well supported by academic research
- Linear interpolation for intermediate years
- Additional research is underway

Travel Demand Models (TDM)

- Five checks are designed to assess both model capabilities and modeling practices
- Lack of land use variation in modeling can be limitation, and in general should be checked before use
- Can be used exclusively if Calculator is not applicable
- Flowchart describes model use cases
- Modeling improvement will be focus going forward

TDM Assessment: Five Checks

Check 1	Check 2	Check 3	Check 4	Check 5
Land use response to network changes	Sensitivity of trip-making behavior to network travel times and travel costs.	Sufficient detail and coverage of modelled roadway and transit networks.	Network assignment processes	Model Calibration and Validation
Model	Canabilities			

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Selecting the Preferred Assessment Method¹

Project Type Project Location	GP or HOV Lane Addition Interstate Freeway	GP or HOV Lane Addition Other State Facilities	Other VMT Inducing Projects and Alternatives	
MSA County with Interstate Freeway	NCST by MSA and/or TDM ² benchmarked with NCST.	NCST by County and/or TDM ² benchmarked with NCST.	TDM ² or other quantitative methods	
Other MSA County	TDM ² or other quantitative methods			
Rural County	TDM ² or other quantitative methods			

¹If preferred methods are not available, qualitative assessment is acceptable as shown in Figure 5. ²TDMs must be checked for applicability as described in Sections 4.4 and 4.5.

Figure 5. Detailed Assessment Method Selection Flow Chart

5. TAC First Edition

Transportation Analysis under CEQA (TAC)

- 1. **Project Scoping** inclusion of VMT-reducing alternatives
- Screening process identifying projects not requiring VMT analysis because they will have no VMT impact
- **3. Tiering** potential for tiering, interaction between SB 743 and RTP/SCSs environmental documents
- 4. CEQA Significance Determination
- 5. Mitigation

Project Scoping

- 1. From TAC: "it may become increasingly difficult to achieve feasible and proportional project-level VMT mitigation as a roadway capacity-increasing project proceeds from initial scoping to final design. "Therefore, it is important to thoroughly consider a range of feasible project alternatives and/or mitigation which meet the purpose and need of the project, as well as feasible mitigation which can potentially minimize, or avoid altogether, the additional VMT from capacity-increasing projects"
- 2. Alternatives may include multimodal infrastructure and services and pricing-based strategies including expanded toll lane use.
- 3. Scoping also involves determination of the appropriate level of environmental document

Screening

Screening by Project Type: Non-Capacity-Increasing vs. Capacity-increasing Projects

- 1. TAC provides guidance to identify those projects that will lead to measurable and substantial increases in vehicle travel.
- 2. Many project types are not likely to lead to a measurable and substantial increase in vehicle travel. These are listed in the OPR TA.

Thank you for the project types provided as examples of those unlikely to lead to VMT increase and that were not included in the OPR list.

Project Types that generally will not require VMT Analysis

- 1. Maintenance & Rehabilitation projects
- 2. Reconfigurations & Traffic Calming
- 3. Safety Improvements
- 4. Pedestrian, Bicycle and Transit Projects
- 5. Paving Improvements

OPR Technical Advisory and TAC include a list of over 30 project categories

(Source: OPR Technical Advisory, 2019, <u>http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf</u>)

- 1. Limited opportunities now
- 2. Future RTP/SCS EIRs may allow for tiering if:
 - Induced travel is adequately captured
 - Plans are consistent with State climate targets
 - Mitigation is enforceable

Traffic Studies

- Utilize guidance in TAF
- Calculate induced travel
- NCST and TDM approaches

Significance Determination

- Standard CEQA 3-step process for determining significance applies
- Significance will be evaluated based on potential to increase induced VMT, using the future "no project" condition as a baseline
- Within the MPO areas, a project that results in an increase in VMT when comparing the future build alternative to the future no-build alternative will generally be considered significant and mitigation will be required.
- For projects within the rural (non-MPO) counties, significance should be addressed on a case-by-case basis, taking into account context and environmental setting.

Mitigating VMT Impacts

- 1. TAC and web page include options Examples include strategies to support mode shift, higher vehicle occupancy, shorter average vehicle trips, and transportation demand management, including telework
- 2. Explore compatible VMT and GHG mitigation measures
- 3. Mitigate to the maximum extent possible
- 4. Wide interest in possible mitigation banking/credit system. Ethan Elkind/UC Berkeley paper useful in framing challenges.

Statement of Overriding Considerations

Standard process for determining significance applies

- 1. When specific economic, social, or other conditions make mitigation measures or project alternatives infeasible, individual projects may be approved in spite of one or more significant effects of the project (PRC section 21002).
- 2. A project approved with unmitigated significant effects must state in writing the specific reasons to support its action based on the final EIR and/or other information in the record.
- 3. This "statement of overriding considerations" shall be supported by substantial evidence.

6. Next Steps

Next Steps

- 1. <u>Training and staff support</u>
- 2. TAF & TAC best practices/updates in future
- 3. Focus on VMT mitigation strategies and mechanisms
- 4. Continued stakeholder engagement
- 5. Technical activities to address key issues...

Sustainable Transportation Planning Grants

- Approximately \$3 million set-aside for technical project sub-category
- Schedule
 - October 2020 Release Draft for 30-day public comment period
 - November 2020 Two virtual workshops to receive input for the final document, and release the call for applications (dates pending)
 - January 2021 Grant application deadline (date to be determined)
 - June 2021 Grant announcements
 - Fall 2021 Grant recipients begin project activities
 - Winter-Summer 2024 Grant projects completed, grant funds expire

Key Technical Issues

- Supporting enhanced modeling capability and improved practices
- Qualitative assessment approaches
- Addressing managed lanes impacts
- Freight vs. passenger vehicle impacts and mitigation
- Land use assumptions for future year modeling
- Others?

5. Responses to Questions

