

## SB 743 VMT Analysis

**Methods and Thresholds** 

FEHR PEERS

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March 2021



#### **Project Work Plan**

#### Key Project Tasks

- SB 743 Overview and Local Plan Review
- VMT Methodology and Metric Form
- VMT Thresholds
  - Case studies
- VMT Mitigation
- VMT Screening Tool



## Project Schedule and Input Opportunities

#### Key Dates

- 7 Months from Dec 2020 Jun 2021
- 3 Stakeholder Meetings
  - Jan 28 (Overview)
  - Mar 25 (Methodology and Thresholds)
  - Apr 22 (Mitigation and Screening)
- BCAG Board Acceptance Jun 24

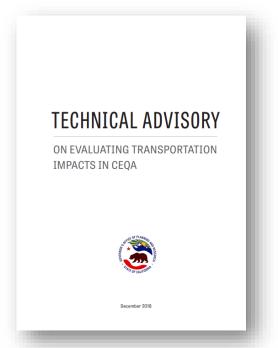


## **Methodology Decisions**

Legal and Technical Factors

#### VMT Methodology

- Model
- Metric
- Screening





#### Model choices

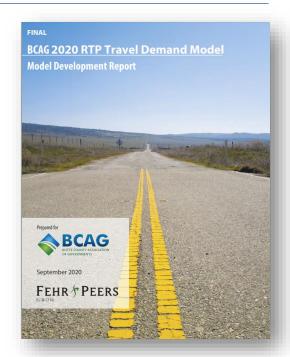
## Technical Factors

#### California Statewide Travel Demand Model (CSTDM)

https://dot.ca.gov/programs/transportationplanning/multi-modal-systemplanning/statewide-modeling/sb-743-vmtimpact-assessment

#### BCAG TDM

http://www.bcag.org/Planning/Transportation
 -Forecasting/index.html





#### **Metric Choices**

#### Legal Factors

- Partial vs total VMT
  - Auto vs truck
  - Select trip purposes
- Efficiency VMT metrics
- Full accounting of trip lengths





#### Metric recommendations

## Technical Factors



**Total VMT** 



Total VMT Generated by a Project



Total VMT per Service Population



#### Metric recommendations

## Technical Factors



Homebased VMT per resident



Home-based VMT per employee



#### **VMT Threshold Options**

# Decisions and Evidence

#### **CEQA Guidelines**

(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.

### **VMT Threshold Options**

# Decisions and Evidence

#### **OPR Technical Advisory**

those thresholds is supported by substantial evidence." (CEQA Guidelines, § 15064.7, subd. (c).) Based on OPR's extensive review of the applicable research, and in light of an assessment by the California Air Resources Board quantifying the need for VMT reduction in order to meet the State's long-term climate goals, OPR recommends that a per capita or per employee VMT that is fifteen percent below that of existing development may be a reasonable threshold.

#### Interfere with State VMT/GHG Reduction Goals

#### 16.4.2 Criteria for Determining Significance

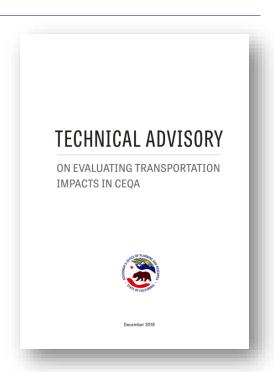
For the purposes of this EIR, SACOG has determined that adoption and/or implementation of the proposed MTP/SCS would result in significant impacts under CEQA, if any of the following would occur:

TRN-1 Substantially interfere with achievement of VMT reductions consistent with CARB's 2017 Scoping Plan.

#### **VMT Threshold Recommendations**

# Decisions and Evidence

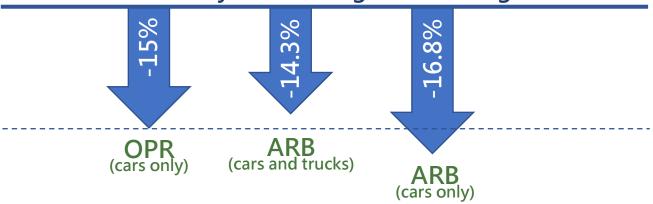
- Land use projects
  - Residential
  - Office
  - Retail
  - o Other?
- Land use plans
- Transportation projects



#### **VMT Threshold Recommendations**

# Decisions and Evidence

Baseline VMT – Citywide or Regional Average

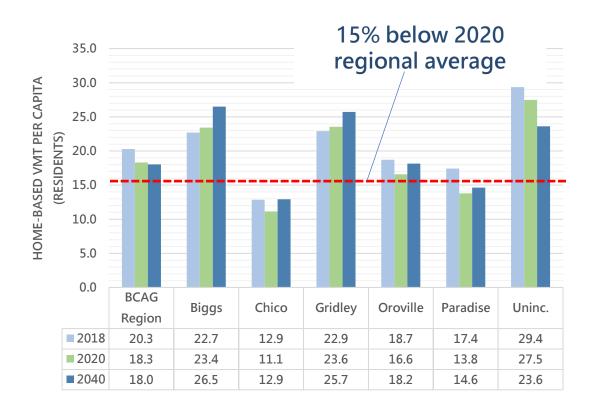


OPR threshold endorsed in *Vehicle Miles Traveled-Focused Transportation Impact Study Guide*, Caltrans, May 20, 2020.

Sources: Provided in SB 743 Overview and Thresholds Technical Memorandums

#### Planned VMT Growth in Butte Co.

Decisions and Evidence

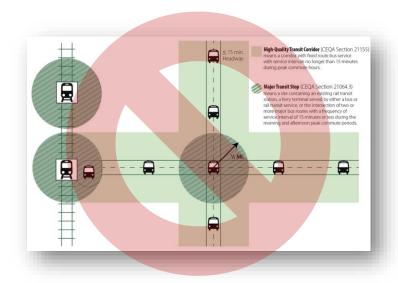




#### **VMT Impact Screening**

# Screening Decisions - Transit Priority Areas

Not currently applicable in Butte County

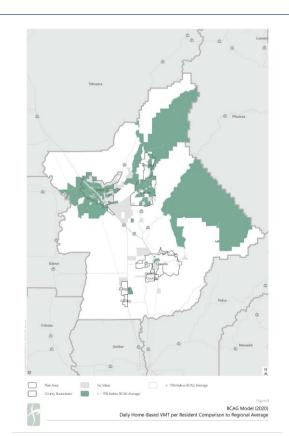


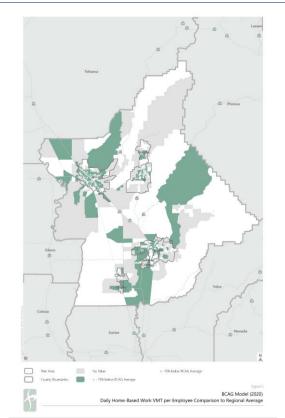


(TPAs)

#### **VMT Impact Screening**

#### Screening Decisions - Low VMT Areas









#### **VMT Impact Screening**

## Screening Decisions

WithinVMTGrowthBudget

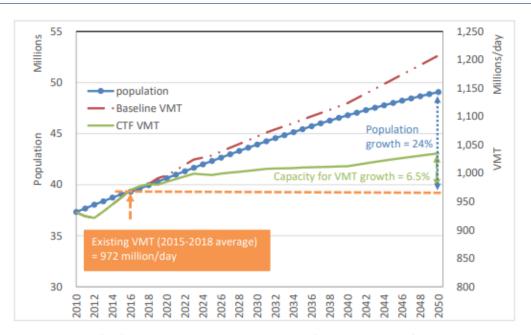


Figure 1: California Total Projected Population Growth and VMT Growth

#### Source:

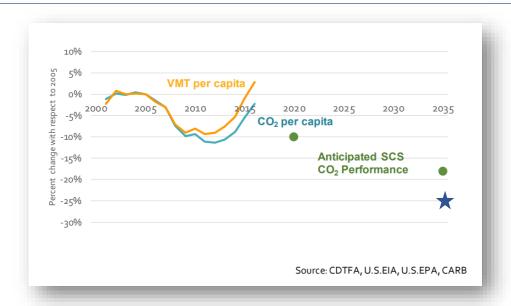
https://ww2.arb.ca.gov/sites/default/files/2019-01/2017 sp vmt reductions jan19.pdf





## California CO2 and VMT per Capita Trends

The Connection Between VMT and GHG emissions



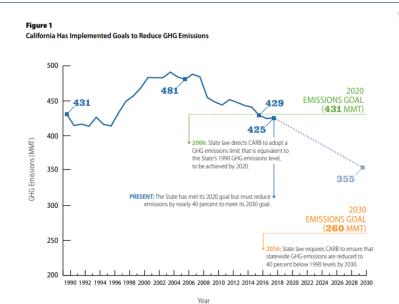
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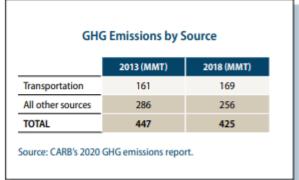
https://ww2.arb.ca.gov/sites/default/files/201811/Final 2018Report\_SB150\_112618\_02\_Report.pdf



# The Connection Between VMT and GHG emissions

## California CO2 and VMT per Capita Trends





#### Source:

http://auditor.ca.gov/reports/2020-114/summary.html

Source: CARB's GHG emissions reports, California's 2017 Climate Change Scoping Plan, state law, CARB Resolution 14-16, and our projections of future GHG emissions based on the average annual change in GHG emissions over the past 10 years.

Reported Emissions

Projection Based on Past Emissions



#### What's Next?

#### Study Process

- Technical Memorandums
  - Case Studies
  - PolicyRecommendations
- Final Document Package
- Screening Tool

- Stakeholder Meetings
  - #3 Mitigation and Screening
- BCAG Board Meeting
- Lead Agency Decisions



#### **Case Studies**

# Land use type or location

- Typical Land Uses
  - Residential
  - Retail
  - Office
  - Mixed-Use
- Unique Land Uses
  - Hospital
  - Hotel
  - Entertainment

- Scope includes 4 case studies
- Prefer to use past projects



#### **Policy Recommendations**

CEQA Strategy  Use of General Plan EIRs to provide CEQA streamlining

- Section 15183 Exemption
  - VMT reduction addressed in general plan
  - VMT analysis is project level and so is mitigation



#### BCAG SB 743 Implementation –

Consistency Assessment

#### BACKGROUND

As lead agencies transition to vehicle miles of travel (VMT) as the new metric for transportation impact analysis under CEQA, assessing their adopted plans is often useful in understanding whether they have already established expectations about VMT reduction. This information is important to consider when establishing VMT impact significance thresholds.

#### LOCAL PLANS

The following local plans were reviewed for this assessment.

Butte County 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) 2020-2040, BCAG, December 10, 2020

2020 Regional Transportation Plan/Sustainable Communities Strategy, Draft Supplemental Environmental Impact Report, BCAG, October 2020

http://www.bcag.org/documents/planning/RFP%205S/2020%20RTP%205S/Document%20Chapters/ 20%20RTP%205C5%20Document-ALL%20REVISED.pdf http://www.bcag.org/documents/planning/RTP%205S/2020%20RTP%205C5/SBIR/\_2020%20RTP%20-

The 2020 RTP/SCS contains multiple policies supportive of VMT and associated air pollution and GHG emissions reduction. The plan acknowledges that these reductions need to be balanced with improving accessibility and connectivity to destinations as framed in Policy 13.1.1 below.

13.1.1. Tailor transportation improvements to better connect people with jobs and other activities such as "Smart Mobility" concepts to increase system efficiencies and strive to reduce GHGs.

The plan does not comain a specific VMT reduction goal but the SCS did achieve GHG per capital reductions in except the SB375 species for the region of which VMT per capital reductions contributed. At documented in Table 4.9 -1 of the 2020 RTP/SCS SER, total VMT generated in the county was projected to increase front J00.94T under 2018 baseline conditions to S32.3227 under 2020 conditions with epipopose glan. This represents a 13.3 percent increase although total VMT per capita was projected to decline about 3.4 or externt from 20.7 to 200 between 2018 baseline and 2004.

<sup>1</sup> The VMT forecasts exclude trip lengths external to the county and total VMT includes commercial vehicle



### **Questions and Answers**

