



# SB 743 VMT Analysis

---

## Methods and Thresholds

FEHR  PEERS

Ronald T. Milam, AICP, PTP

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

---

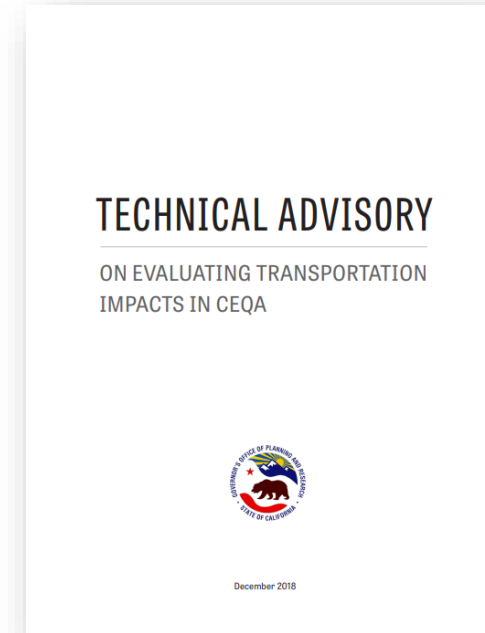
## Key Dates

- 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

- California Statewide Travel Demand Model (CSTDM)
  - <https://dot.ca.gov/programs/transportation-planning/multi-modal-system-planning/statewide-modeling/sb-743-vmt-impact-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



Home-based VMT per resident



Home-based VMT per employee



# VMT Threshold Options

## 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.

Decisions  
and  
Evidence

# VMT Threshold Options

## 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

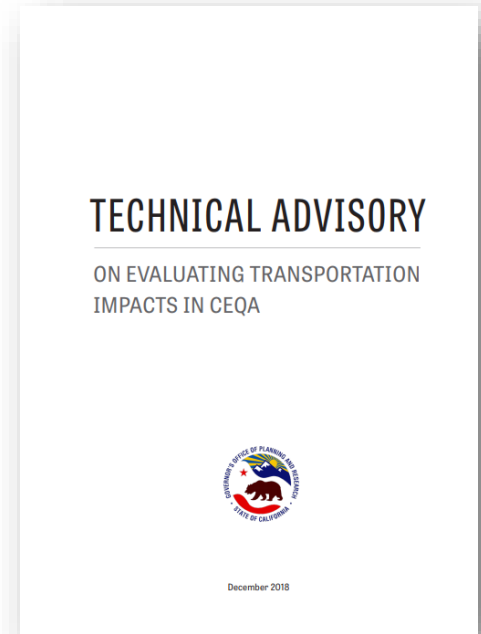
For the purposes of this EIR, SACOG has determined that adoption and/or implementation of the proposed MTP/SCS would result in significant impacts under CEQA, if any of the following would occur:

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

# VMT Threshold Recommendations

## Decisions and Evidence

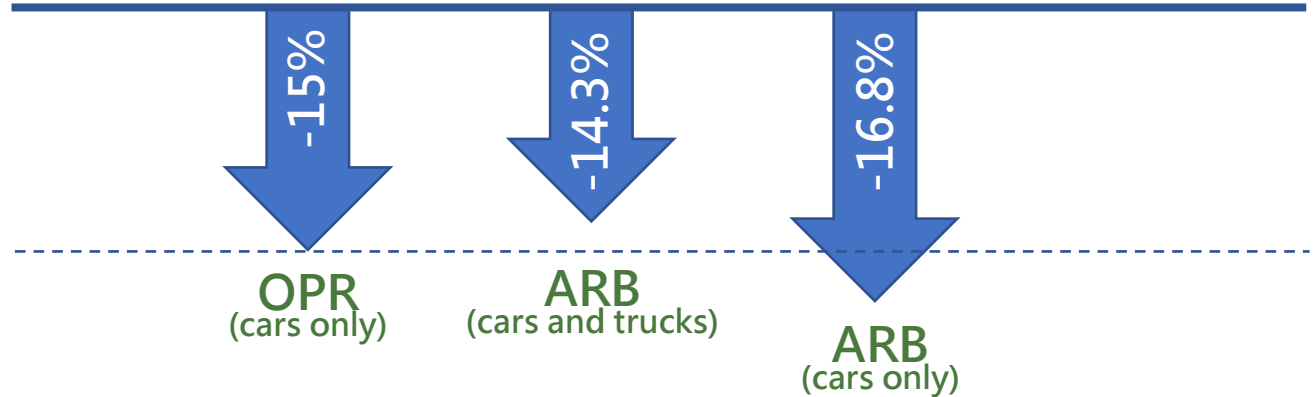
- Land use projects
  - Residential
  - Office
  - Retail
  - Other?
- Land use plans
- Transportation projects



# VMT Threshold Recommendations

## Decisions and Evidence

Baseline VMT – Citywide or Regional Average

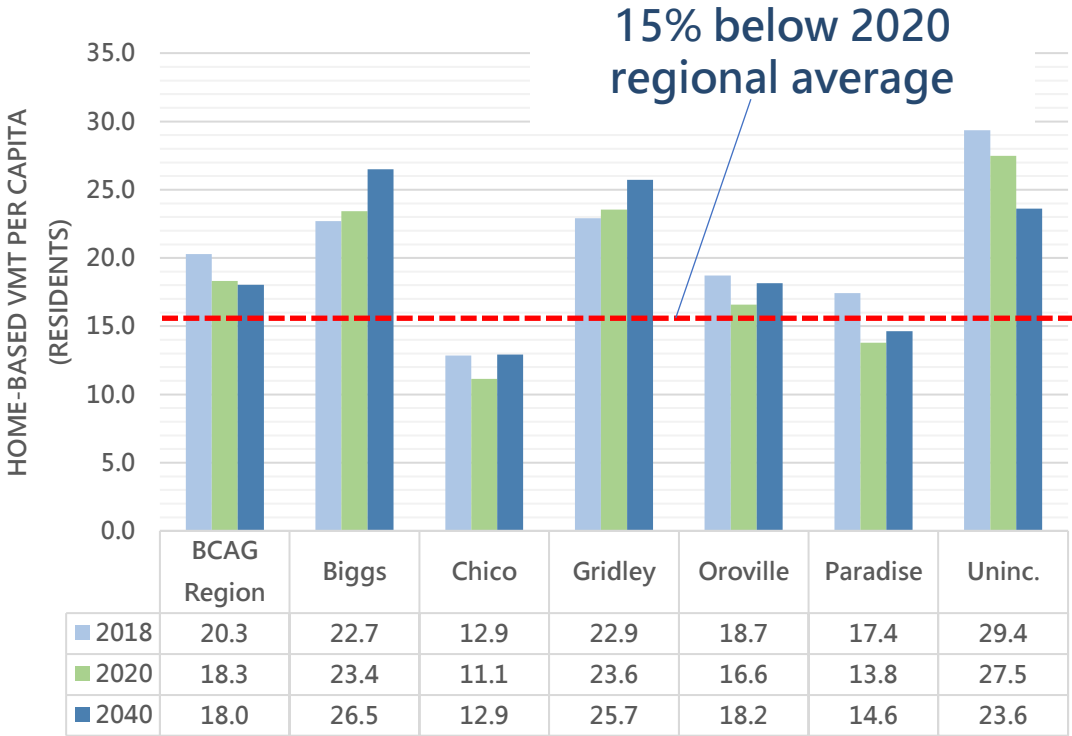


OPR threshold endorsed in *Vehicle Miles Traveled-Focused Transportation Impact Study Guide*, Caltrans, May 20, 2020.

Sources: Provided in SB 743 Overview and Thresholds Technical Memorandums

# Planned VMT Growth in Butte Co.

Decisions  
and  
Evidence

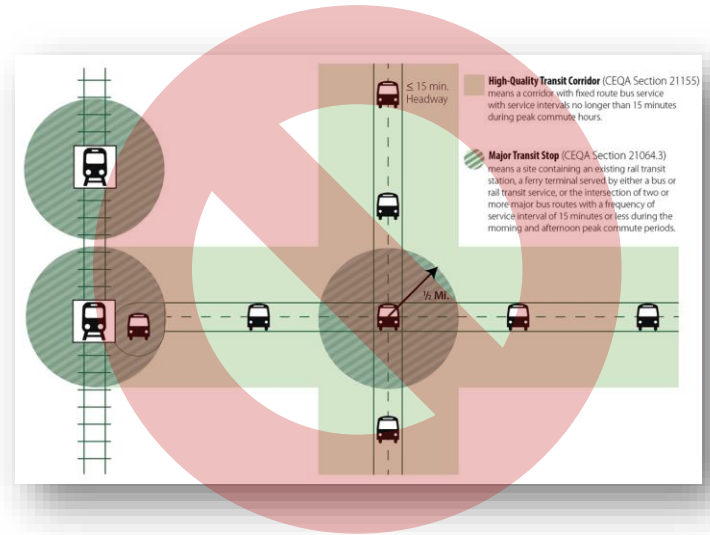


# VMT Impact Screening

## Screening Decisions

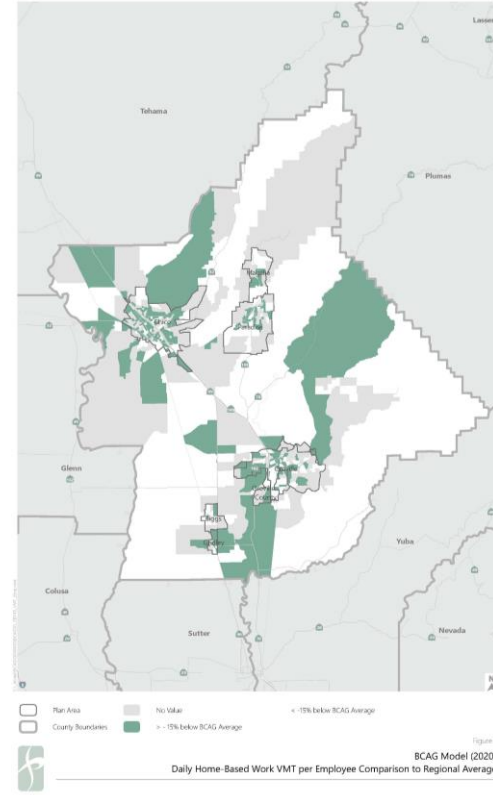
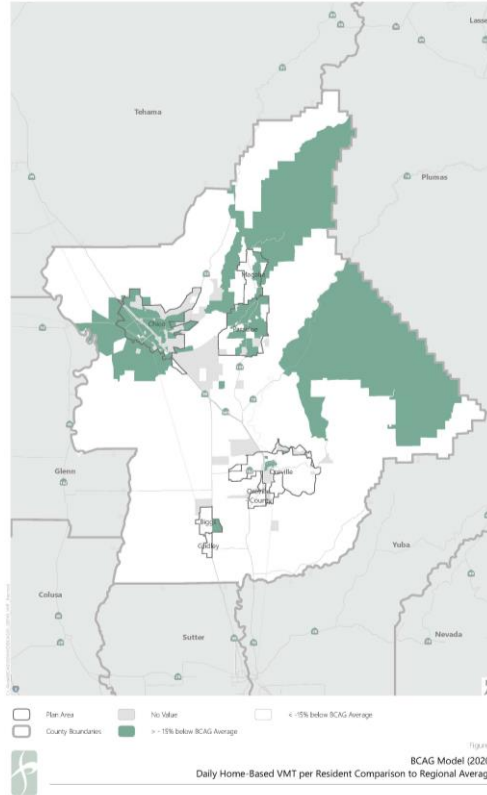
- Transit Priority Areas (TPAs)

- Not currently applicable in Butte County



# VMT Impact Screening

## Screening Decisions - Low VMT Areas



# VMT Impact Screening

Screening  
Decisions  
- Within  
VMT  
Growth  
Budget

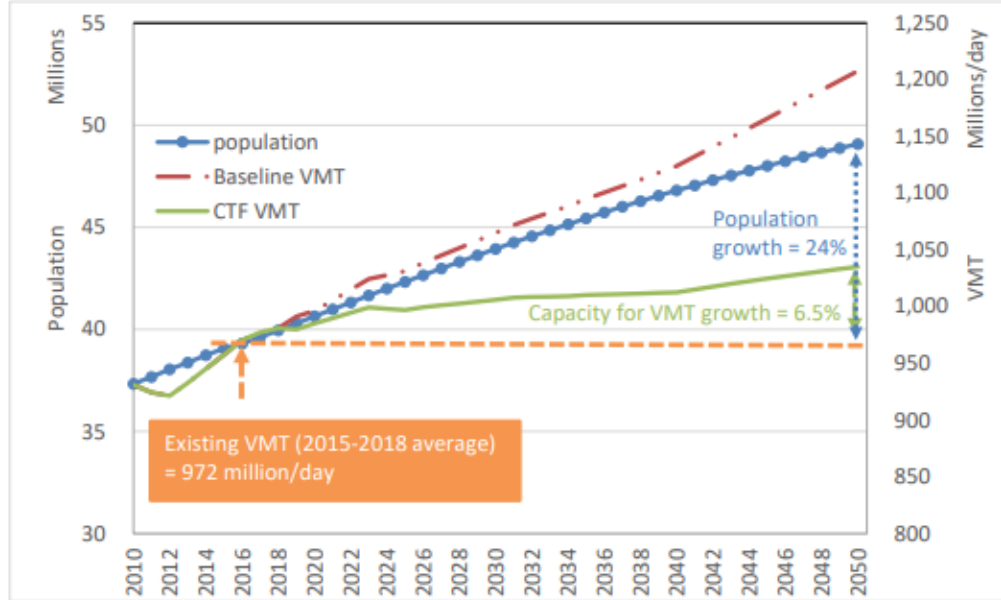


Figure 1: California Total Projected Population Growth and VMT Growth

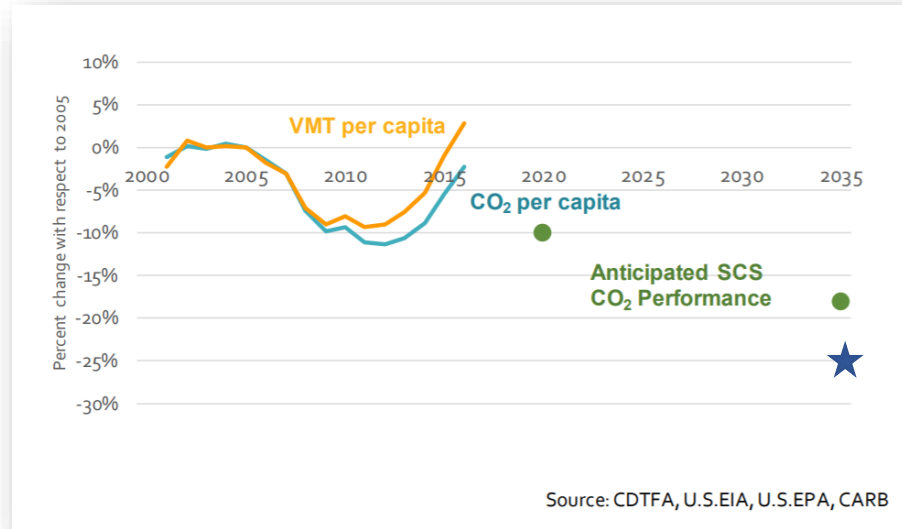
Source:

[https://ww2.arb.ca.gov/sites/default/files/2019-01/2017\\_sp\\_vmt\\_reductions\\_jan19.pdf](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



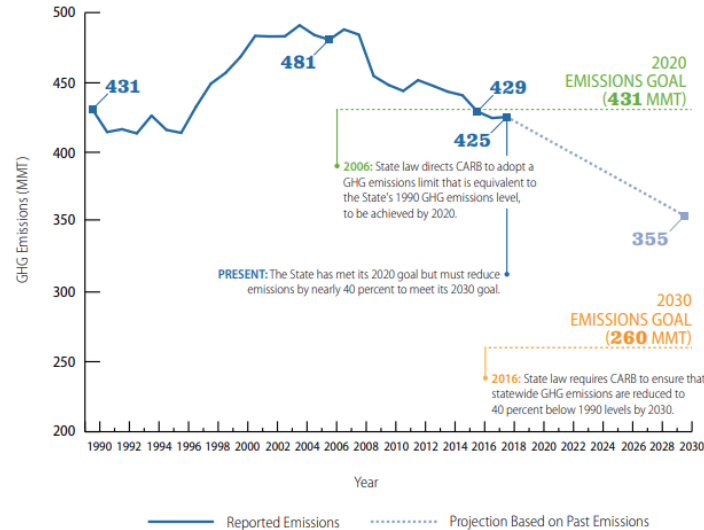
Source:

[https://ww2.arb.ca.gov/sites/default/files/201811/Final\\_2018Report\\_SB150\\_112618\\_02\\_Report.pdf](https://ww2.arb.ca.gov/sites/default/files/201811/Final_2018Report_SB150_112618_02_Report.pdf)

# California CO2 and VMT per Capita Trends

## The Connection Between VMT and GHG emissions

**Figure 1**  
California Has Implemented Goals to Reduce GHG Emissions



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.

GHG Emissions by Source

|                   | 2013 (MMT) | 2018 (MMT) |
|-------------------|------------|------------|
| Transportation    | 161        | 169        |
| All other sources | 286        | 256        |
| <b>TOTAL</b>      | <b>447</b> | <b>425</b> |


Source: CARB's 2020 GHG emissions report.

Source:

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

# What's Next?

## Study Process

- Technical Memorandums
    - Case Studies
    - Policy Recommendations
  - 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

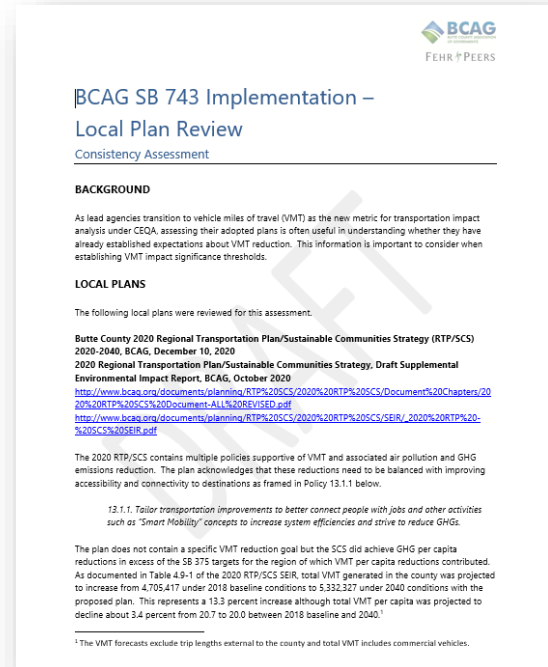
- Scope includes 4 case studies
- Prefer to use past projects



# 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



# Questions and Answers

---