

# Module 3 – VMT Mitigation & Steps to Policy Adoption



ASSOCIATION OF BAY AREA GOVERNMENTS  
METROPOLITAN TRANSPORTATION COMMISSION

FEHR  PEERS

Cohort: **Sonoma County**

Presented by: Ian Barnes & Ashlee Takushi

September 21, 2022

# Agenda

**1 Introduction & Review**

**2 VMT Mitigation**

*Break (5 min)*

**3 Policy Adoption &  
Implementation Considerations**

**4 Next Steps**



# Introduction

1

# Ground Rules

- Be an active participant – Let's learn from each other!
- Keep your video on if possible
- Ask questions by using the raise hand function or use the chat
- Take turns speaking and give others a chance to speak up, please mute when not speaking

Remember, this is **not** a webinar, we want it to be interactive!

# Purpose & Goals of Technical Assistance

- VMT policy adoption is required for compliance with SB743
  - Promote the reduction of greenhouse gas emissions
  - Promote the development of multi-modal transportation networks
  - Promote a diversity of land uses
- Help you create VMT policies that support local values and other policies/goals (housing elements, climate action, etc.)
- Streamline VMT analysis for common land uses, and provide a framework for analyzing unique land uses

**This TA program is designed to help you implement the basic steps through approachable templates and workshops, and free, one-on-one consultation assistance**

# Curriculum Overview

Phase 1a: Summer/Fall 2022

Phase 1b: Fall/Winter 2022

1

## Introduction to SB 743

- Overview of Technical Assistance
- Intro to SB 743 & VMT
- OPR Recommendations

2

## Two-Step Adoption: Thresholds and Screens

- Application of VMT metrics, thresholds, and screens to your jurisdiction
- Review VMT data
- Peer examples

3

## VMT Mitigation & Policy Adoption

- VMT mitigation concepts
- Available tools
- Adoption strategy and implementation considerations



## Implementation Support

- Non-CEQA transportation
- Jurisdiction support
- Mitigation fees, banks, and exchanges

# Module 3 Learning Objectives

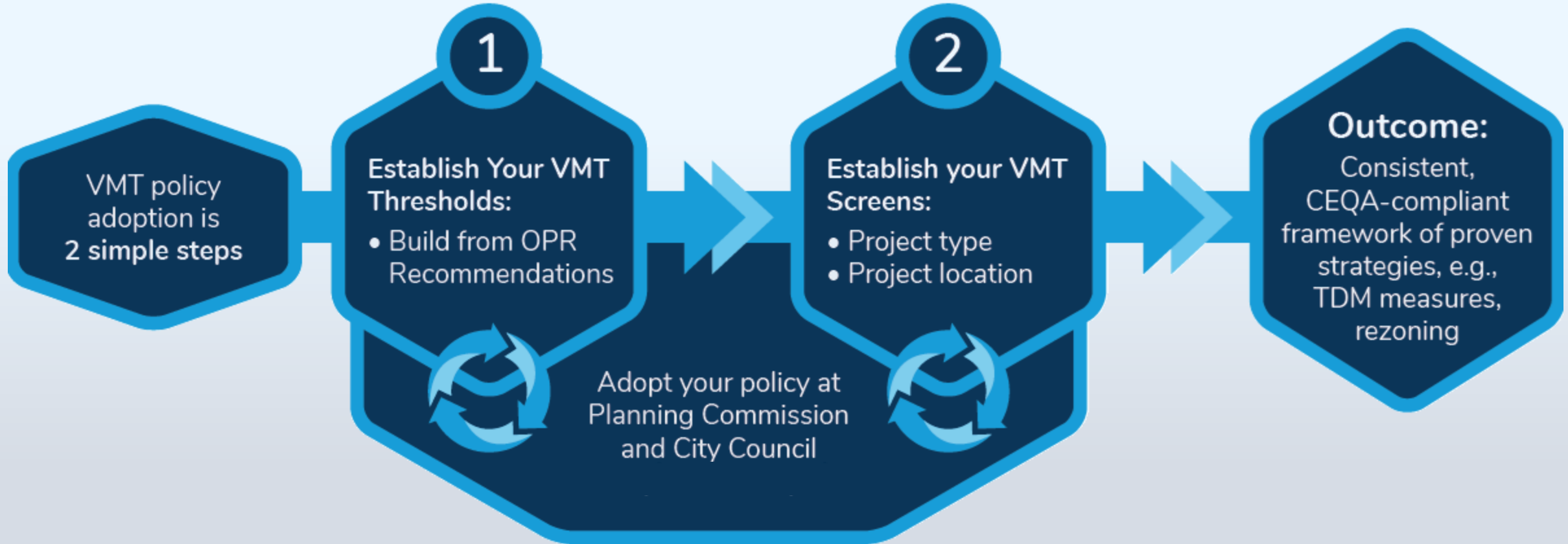
## VMT Mitigation

- Understand VMT mitigation concepts and tools for quantifying effectiveness of Transportation Demand Management (TDM) measures
- Understand what policies you can adopt to support VMT mitigation

## VMT Policy Adoption Strategy

- Review process to adopt VMT policy

# Module 2 Recap & Group Share





# Module 2 Recap & Group Share

## Module 2 Memo Template – Group Share:

- Share experiences reviewing and filling out memo templates
- Any successful outcomes during this activity, such as conversations that helped to identify appropriate metrics and thresholds?
- Any challenges that arose during this activity?
- Is anyone ready to adopt these policies?

# VMT Mitigation

2

# What is VMT Mitigation?

**Mitigation:** Jurisdictions must investigate and disclose measures to reduce impacts below the threshold of significance. If impacts are S/U, then all feasible measures must be disclosed and implemented.

## How to reduce Vehicle Miles Traveled?

- Reduce the number of vehicle trips
  - Shift travel to non-driving modes
- Reduce the length of vehicle trips
  - Increase densities or encourage mixed uses

# What is Transportation Demand Management (TDM)?

**Traditional TDM Approach:** On-site programs for employers such as commuter benefits, bicycle parking, etc.

**TDM as a tool for VMT Mitigation can include:**

- On-site programs for employees, residents, visitors
- On-site or near-site design features supporting active transportation or transit modes
- Parking management
- Community serving infrastructure and programs

# Example VMT Mitigation Measures

## Site-Specific Features

- Commute trip reduction program
- Price parking or provide parking “cash-out”
- Limit parking supply
- Integrate affordable housing
- Increase residential density
- Provide ridesharing program
- Provide subsidized transit passes

## Community-Based Measures

- Provide community-based travel planning
- Charge for public parking
- Provide pedestrian network improvements
- Construct or improve bicycle facilities
- Expand transit network or service
- Improve bus stops and other transit-supportive roadway treatments
- Implement a carshare program
- Implement bike or scooter share program

# Related Plans & Programs

## How is VMT mitigation related to other policies or programs?

- Existing trip reduction ordinances
  - Parking & TDM ordinances
- VMT mitigation can build on existing programs, but quantifying effectiveness should be based on the best available research.
- Updating existing TDM ordinances is not required

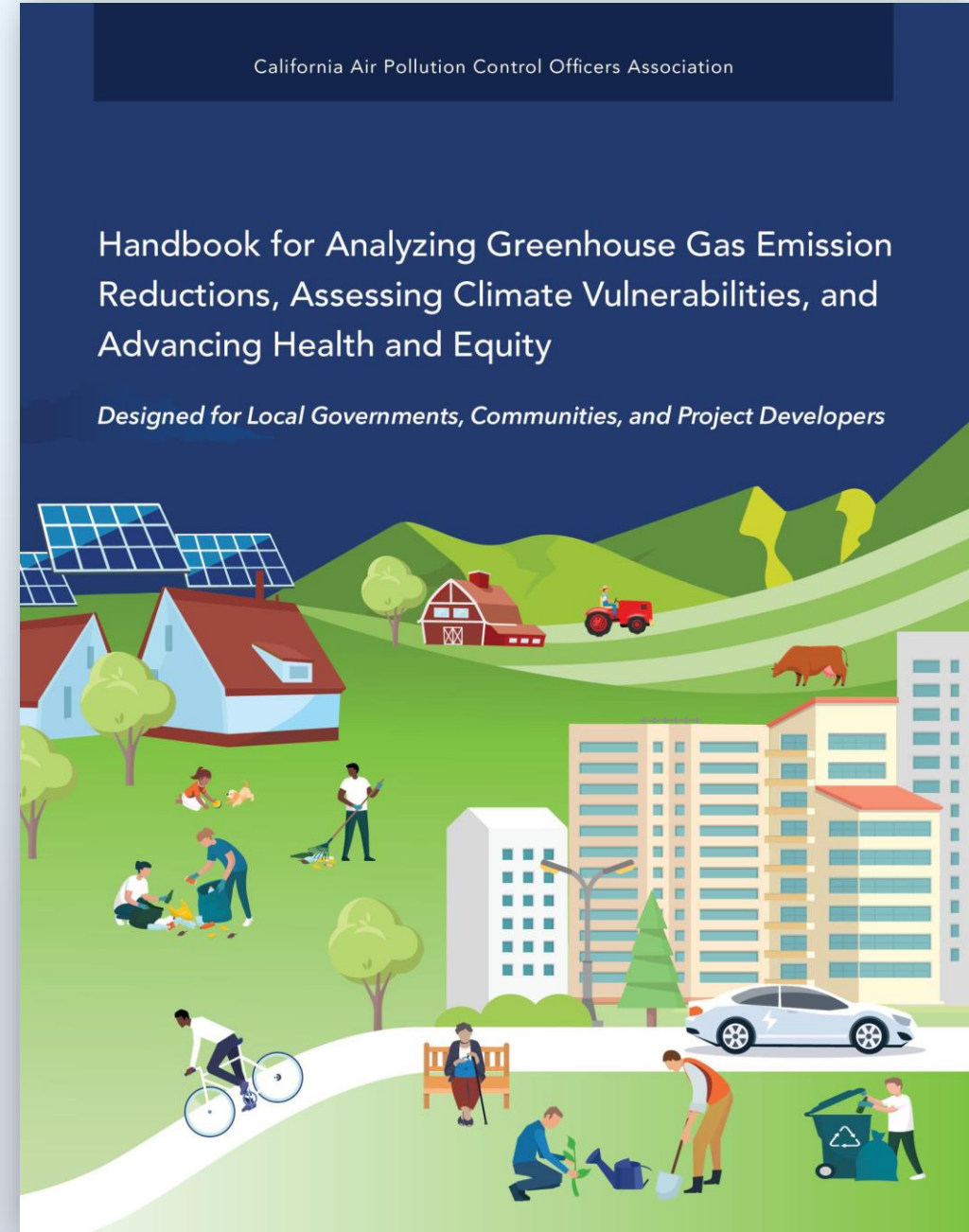


**What are some TDM plans, policies or programs that your city already has?**

# VMT Mitigation Resources

- CAPCOA Handbook Update
- California Emissions Estimator Model (CalEEMod)
- TDM+ tool through Caltrans
- Sonoma County VMT Mitigation & Reduction Calculator Tool\*

\* <https://scta.ca.gov/planning/vmt-reduction-calculator/>



# Sonoma County VMT Reduction and Mitigation Calculator

Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity

*Designed for Local Governments, Communities, and Project Developers*



- Estimates effectiveness of mitigation
- Tied to project type and location
- Uses data from the Sonoma County Travel Model
- Based on research (primarily 2021 CAPCOA Handbook)



Locational Context: **Urban, Suburban**  
 Scale of Application: **Project/Site**  
 Type of VMT affected: **Project-generated trips**  
 Max VMT reduction: **30.00%**

This measure accounts for the VMT reduction achieved by a project that is designed with a higher density of dwelling units (du) compared to the average residential density in the U.S. Increased densities affect the distance people travel and provide greater options for the mode of travel they choose. Increasing residential density results in shorter and fewer trips by single-occupancy vehicles and thus a reduction in GHG emissions. This measure is best quantified when applied to larger developments and developments where the density is somewhat similar to the surrounding area due to the underlying research being founded in data from the neighborhood level.

Residential density of project development	<input type="text" value="44.0"/>	du/acre	user input (default value = 0-9999)
Residential density of typical development	<input type="text" value="9.1"/>	du/acre	optional (default value = 9.1)
Elasticity of VMT with respect to residential density	<input type="text" value="-0.220"/>	unitless	constant (default value = -0.22)
Change in VMT		<input type="text" value="-30.00%"/>	

Formula: % Change in VMT = (( Residential density of project development - Residential density of typical development) ÷ Elasticity of VMT with respect to residential density) × 100

Below are the different cell styles the user will see in the formulae of the strategy pages. Not all strategies use each cell type.

- = required user input  
Note: For percentages less than 1%, user must input "0.#", not ".#" (i.e., 0.2% requires an input of "0.2", not ".2").
- = optional user input with County-wide value range provided, automatically populated value is specific to project location  
Note: For percentages less than 1%, user must input "0.#", not ".#" (i.e., 0.2% requires an input of "0.2", not ".2").
- = constant, coefficient, or default value
- = hover over cell to see notes for tips on input value

Project Information

<b>General Project Info</b>	<b>Common Variables (selecting this will set all measures with this variable to the same value)</b>
Project Name: <input type="text" value="Test"/>	<a href="#">Project Transportation Analysis Zone (TAZ):</a> <input type="text" value="94"/>
Project Address: <input type="text" value="Test"/>	Project TAZ Place Type: <input type="text" value="Suburban"/>
Project Type: <input type="text" value="Residential"/>	Project Jurisdiction: <input type="text" value="Sonoma County"/>
	Project in transit-oriented development location?: <input type="text" value="Yes"/>

TDM Strategy Available (strategies that can combine their reductions are the same color)

TDM ID	Strategy Name	Strategy Type	VMT Type
T-1	Increase Residential Density	Land Use	Project-generated trips
T-2	Increase Job Density	Land Use	Project-generated trips
T-3	Provide Transit-Oriented Development	Land Use	Project-generated trips
T-4	Integrate Affordable and Below Market Rate Housing	Land Use	Project-generated trips
T-5	Implement Commute Trip Reduction Program (Voluntary)	Trip Reduction Programs	Employee commute trips
T-6	Implement Commute Trip Reduction Program (Mandatory Implementation and Monitoring)	Trip Reduction Programs	Employee commute trips

Project name: **Test** Project Transportation Analysis Zone (TAZ): **94**  
 Project Address: **Test** Project TAZ Place Type: **Suburban**  
 Project Type: **Residential** Project Jurisdiction: **Sonoma County**  
 Project in transit-oriented development location?: **Yes**

### About These Results

combination of strategy type, scale of application, and type of VMT affected. Then, a High-Level VMT Reduction Summary further combines those effects into the five unique combinations of scale of application and type of VMT affected. These five buckets are intended to facilitate further analysis, including evaluating whether the VMT reductions calculated by this tool are sufficient to mitigate a project's VMT impact.

Below the High-Level VMT Reduction Summary, the TDM Strategy Results section lists all strategies included in this tool, noting the change in VMT associated with each configured strategy.

### VMT Reduction Summary

Land Use	Project/Site	Project-generated trips	-30.0%
Land Use	Plan/Community	All neighborhood/city trips	0.0%
Trip Reduction Programs	Project/Site	Employee commute trips	-4.0%
Trip Reduction Programs	Project/Site	Project-generated trips	0.0%
Trip Reduction Programs	Plan/Community	Household trips	0.0%
Parking or Road Pricing/Management	Project/Site	Project-generated trips	0.0%
Parking or Road Pricing/Management	Plan/Community	All neighborhood/city trips	0.0%
Neighborhood Design	Plan/Community	All neighborhood/city trips	0.0%
Neighborhood Design	Plan/Community	Employee commute trips	0.0%
Neighborhood Design	Plan/Community	Household trips	0.0%
Transit	Plan/Community	All neighborhood/city trips	0.0%

# SCTA SB 743/VMT Resources

<https://scta.ca.gov/planning/forecasting-and-travel-data/>

# VMT Mitigation Policy

**After adopting thresholds and screening criteria, what VMT mitigation guidance should you provide?**

Recommended an analytical approach for calculating mitigation effectiveness to remove guesswork:

- Use locally appropriate VMT mitigation tool, if available, or
- Reference resources for effectiveness calculations (e.g., CAPCOA or the latest available TDM research)

# VMT Mitigation Policy

## What other TDM or mitigation guidance would be helpful?

1. Review local TDM ordinance or requirements and determine if they need to be updated
  - Start by comparing local requirements to the list of CAPCOA measures presented at the end of the Module 2 memorandum
2. Identify off-site mitigation measures when impacts can't be mitigated on-site
  - VMT fee or exchange programs. For more information, see Module 3 memo template.

# Discussion

What other questions or concerns do you have about VMT mitigation?  
Any questions about the Module 3 memo template?

# Break

*(5 minutes)*

# Adoption Strategy & Implementation Considerations

3

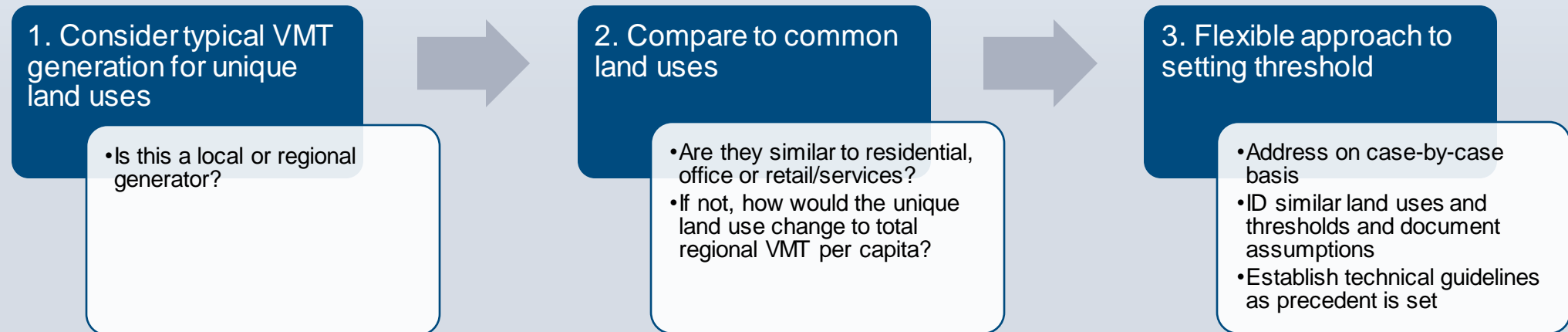


# Goals for this Program

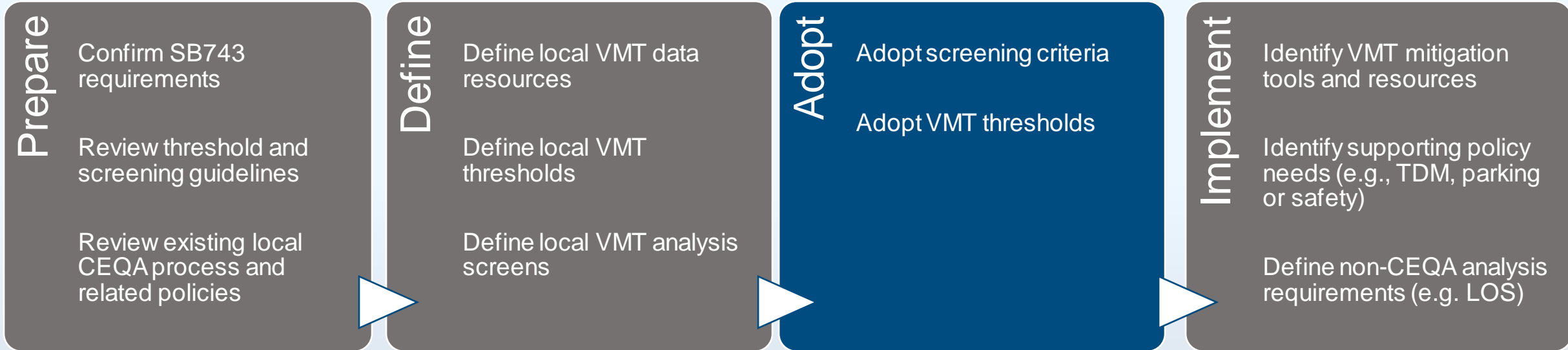
“Get the basics done first, then tackle the challenging stuff”

1. Streamline VMT analysis for common land uses
2. Establish a basis on which to guide future decisions about more complicated or unique land uses, which would include:

## VMT Process for Unique Land Uses



# Steps to SB 743 Compliance



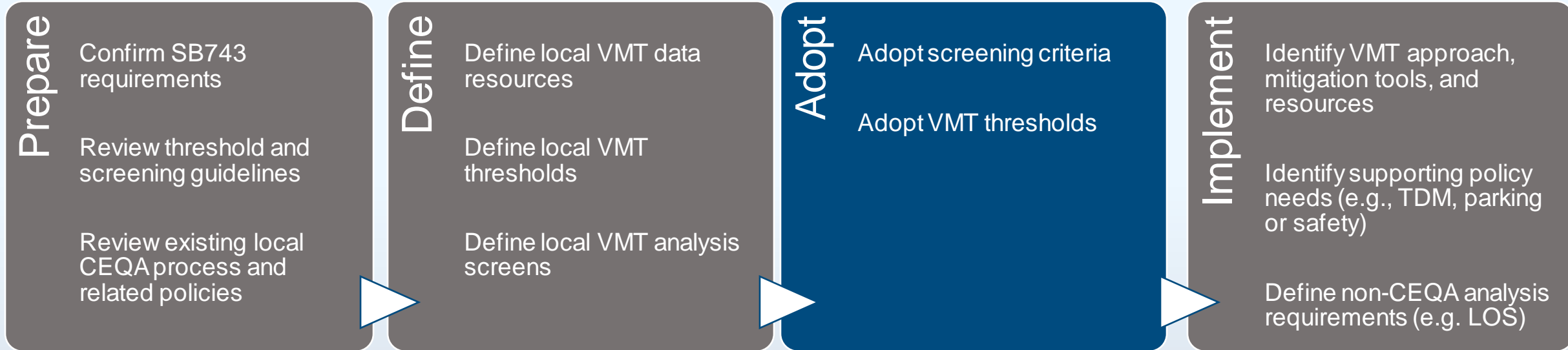
**Typical Engagement**

*Internal Staff*

*Decision Makers*

*Internal Staff, may need decision maker input*

# Steps to SB 743 Compliance



## Typical Engagement

*Internal Staff*

*Decision Makers*

*Internal Staff, may need decision maker input*

Level of Effort



Petaluma, Fremont

Technical Advisory Committee (TAC) or regular cross-department internal teams reviewed details

Planning Commission & Council study sessions and adoption hearings

Local VMT mitigation, TDM ordinance, transportation review guidelines to address CEQA and non-CEQA

Milpitas, Vacaville

Staff reports based on internal discussions

Planning Commission & Council presentation

General Plans used to evaluate other related policies

# Steps to Adoption: Engaging Decision Makers

## TA Materials:

- **Presentations:** Short council adoption or long study session
- **Staff reports and resolutions:** Templates and policy adoption language
- **Internal guidance documents**

**What additional documents, tools, or resources would support you in moving forward with VMT policy adoption?**

RESOLUTION NO. \_\_\_\_\_

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF  
CHULA VISTA ADOPTING THE CHULA VISTA  
TRANSPORTATION STUDY GUIDELINES IMPLEMENTING  
SENATE BILL 743**

WHEREAS, Senate Bill 743, which replaces Level of Service (LOS) with Vehicle Miles Traveled (VMT) as the metric for determining the significance of transportation impacts under the California Environmental Quality Act (CEQA), requires municipalities to adopt guidelines to implement the provisions of SB 743 by July 1, 2020; and

WHEREAS, the guidelines will assist applicants, professionals, City personnel, and other stakeholders to prepare, review, and process CEQA transportation studies as required by SB 743; and

WHEREAS, in accordance with Resolution 2019-236, the City retained a multidisciplinary consulting team led by Fehr & Peers, a recognized expert in the area of SB 743 implementation, to advise City staff in developing the Transportation Study Guidelines; and

WHEREAS, the development of the Transportation Study Guidelines involved review of a wide range of guidance documents and practices, including the Governor's Office of Planning and Research's Technical Advisory; the Institute of Transportation Engineers' Guidelines for Transportation Impact Studies in the San Diego Region; and implementation procedures developed by other agencies; and

WHEREAS, the development of the Transportation Study Guidelines carefully considered the unique characteristics and community values of the City of Chula Vista; and

WHEREAS, the Transportation Study Guidelines provides specific direction for conducting a Transportation Study for CEQA review, and provides guidance on VMT estimation, thresholds of significance, and procedures for screening certain projects considered unlikely to have a significant impact; and

WHEREAS, the Transportation Study Guidelines also provides direction on how to analyze a project's effect on transit, pedestrian, and bicycles facilities, and on LOS; and

WHEREAS, the Transportation Study Guidelines may be modified from time to time with the approval of the City Manager or designee.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Chula Vista, that it adopts the City of Chula Vista SB 743 Transportation Study Guidelines.

Presented by \_\_\_\_\_ Approved as to form by \_\_\_\_\_

Kelly G. Broughton, FASLA  
Development Services Director

Glen R. Googins  
City Attorney

# Review Public-Facing Materials

**Next Steps**

**4**

# What's Next

- Feedback survey
- Office hours – October 4, 3:00 PM – 5:00 PM
  - *“Learn from an early adopter”*
  - *VMT mitigation tools*
  - *Walk through memo templates and public-facing materials*
- Module 4 – October 18, 3:00 PM – 5:00 PM

# Thank you!

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