Module 1 – Introduction to SB 743 Technical Assistance

ASSOCIATION OF BAY AREA GOVERNMENTS

METROPOLITAN TRANSPORTATION COMMISSION

NELSON NYGAARD

Cohort: Alameda

Presented by: Meghan Weir, Karina Macias, and Brian Manford

Date: 06/23/2022

Agenda

1 **Introduction & Overview**

2 **SB 743 Background**

Break *(5 min)*

3 **OPR Guidance**

4 **Questions and Feedback**

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Introduction & Overview

Ground Rules

- Be an active participant

- 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!

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Today's Goals

- Introduce the technical assistance program and overview of all modules

- Be able to explain SB 743 to your colleagues and leadership

- Connect with your colleagues in neighboring jurisdictions

- Review of VMT metrics, thresholds, and screens to prepare for Module 2

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Technical Assistance Support Team

Metropolitan Transportation Commission (MTC) & Association of Bay Area Governments (ABAG)

- Managing this technical assistance
- Providing funding for TA and project support
- Helping to coordinate and host workshops

Consultant Teams

- Nelson\Nygaard and Fehr & Peers teams
- Co-developing the curriculum
- Each team is leading half the cohorts

County Transportation Authorities (CTAs)

- Providing VMT data and mapping assistance
- In some cases, providing tools to support VMT analysis and mitigation

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Purpose & Goals of Technical Assistance

- Support Bay Area jurisdictions to **adopt and implement VMT policies in 2022**

- Reach all Bay Area jurisdictions that have yet to implement VMT policies

- Provide a balance of efficient support that can meet unique needs, including staff and capacity constraints

- Test a new approach to technical assistance that can reach more jurisdictions

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Cohort Ice Breaker

- Name & pronouns

- Jurisdiction / organization

- Department

- For a typical in-office work day, how do you choose to get from home to your office? How do you travel around your community for local trips?

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Curriculum Overview

Part A: Summer 2022

Part B: Fall 2022

1

Introduction to SB 743

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

2

Advanced SB 743

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

3

VMT Mitigation

- VMT mitigation concepts
- Available tools
- Mitigation fees, banks, and exchanges

Implementation Support

- Non-CEQA transportation
- Jurisdiction support
- Adoption strategy and implementation considerations

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Curriculum Overview

Today

1

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Part A: Summer 2022

2

Advanced SB 743

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VMT Mitigation

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- Available tools
- Mitigation fees, banks, and exchanges

Part B: Fall 2022

Implementation Support

- Non-CEQA transportation
- Jurisdiction support
- Adoption strategy and implementation considerations

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Module process, each module consists of:

Workshop

- Presentations and discussion
- Group activities
- Attendance **required**

Accompanying Materials & Templates

- Varies by module
- Supports implementation
- Intended to save you time by providing memo and presentation templates
- Out-of-workshop effort **required**

Office Hours

- For you to ask questions and get additional assistance
- Peer review of your memos or presentations
- Revisit concepts you have questions about
- Attendance **encouraged**

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Expectations for participation and policy adoption

- **Attend all module workshops**: recommended to have the same person attend all modules if possible

- **Advance your jurisdiction's understanding of VMT**: coordinate with relevant staff from other departments, share materials/findings or invite others to join workshops

- **Adopt VMT metrics and policies within six months from end of the curriculum.**

Pre-Curriculum Survey Findings

- **Adoption**. Wide range of adoption progress across jurisdictions

- **Biggest barriers**: Lack of staff availability and/or limited understanding of SB 743 requirements

- **VMT Analysis**. Respondents want to know more about how VMT can be quantified, mitigated, and explained.

- **VMT Mitigation.** Particularly for jurisdictions with VMT policies, interest in finding effective VMT mitigation strategies.

- **Workshop Format.** Highest interest in online workshops as well as peer review service and 1-on-1 appointments.

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Acknowledgement of Technical Assistance Expectations

Please use the thumbs up button to acknowledge the information provided here and that you will attend these workshops and seek VMT policy adoption within six months from the end of the curriculum.

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SB 743 Background, VMT Metrics, and Available Data

Status of participating jurisdictions – Alameda County

Jurisdiction	Status of SB 743 Policy Adoption	Your Goals for Technical Assistance
Piedmont	Not aware of work done	
Pleasanton	Working with consultant, bringing recs + CAP 2.0 to council in August	Hoping to establish a mitigation pool, struggle with mitigation and explaining
Union City	Threshold has been adopted but maybe not formally by City Council	How will it relate to impact fees or mitigations
Alameda County	Plays support role in SB 743, planning department will take leading role	Understanding analysis and mitigation measures
Livermore	Case by case, about a year into a GPU and will be developing a traffic model	Policy perspective, what does the GP need to include across the document and circulation element
Newark	No work so far	Collaborate as a county, best practices, how to create specific maps (thresholds) for Newark
San Leandro	Has not started efforts	Challenges, benefit from other efforts, understand mitigation measures
Dublin	Already has policies and methodologies	TA for better understangind of

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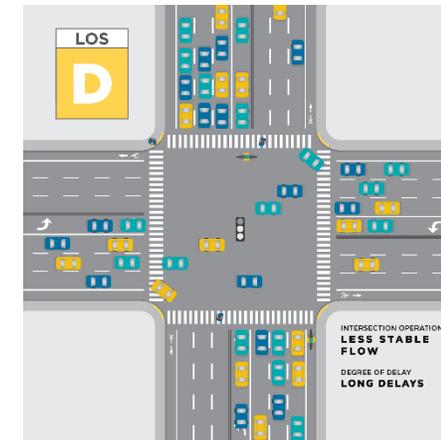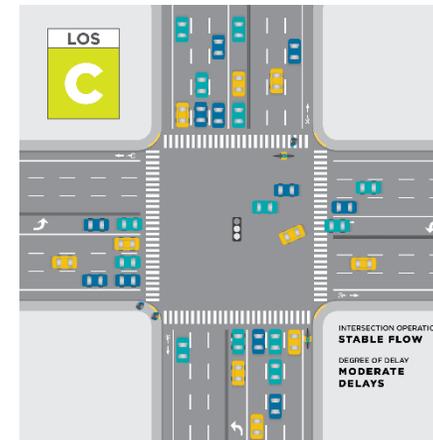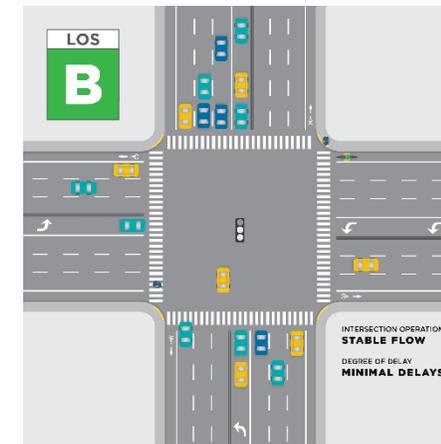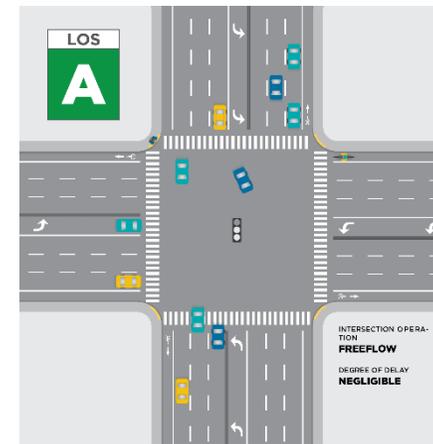
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CEQA and the Development Process

- **California Environmental Quality Act (CEQA)** requires analysis of environmental impacts of projects such as land development and transportation projects.

- State CEQA Guidelines provide direction, but local governments are the lead agencies for most land use and local transportation projects.

- **Historically, vehicle level of service (LOS) was used to evaluate transportation impacts**. Resulted in widening of roads, increasing the cost and time it took to build transit and active transportation projects, and making infill and mixed-use development more challenging.

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LOS

- CEQA historically used vehicle LOS

- Level of service (LOS): measures the convenience of traveling in an automobile

- Measures automobile delay at intersections and speed reductions caused by the addition of more vehicles

- Intersections are rated from "A" to "F" with "F" having the greatest delay

- Did not meaningfully reflect long-term environmental impacts

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What's important depends on perspective

Traffic Engineer: **F**

Economist: **A**

Traffic Engineer: **A**

Economist: **F**

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Senate Bill 743

- SB 743 **changes the focus of transportation impact analysis in CEQA** from measuring impacts to drivers, to measuring the impact of driving.

- The Governor's Office of Planning and Research (OPR) **recommended that Vehicle Miles Traveled (VMT) be used** to measure transportation impacts under CEQA.

- Compliance was required in July 2020.

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Why VMT?

- **SB 743 connects transportation and land use.** Under SB 743, transportation thresholds must be established to:
  - Reduce greenhouse gas emissions
  - Develop multimodal transportation networks
  - Encourage a diversity of land uses.
- Instead of measuring traffic (LOS), now we measure the amount of driving (VMT)
- VMT provides a measure of travel efficiency of a land use project, can be used to inform zoning and Housing Elements
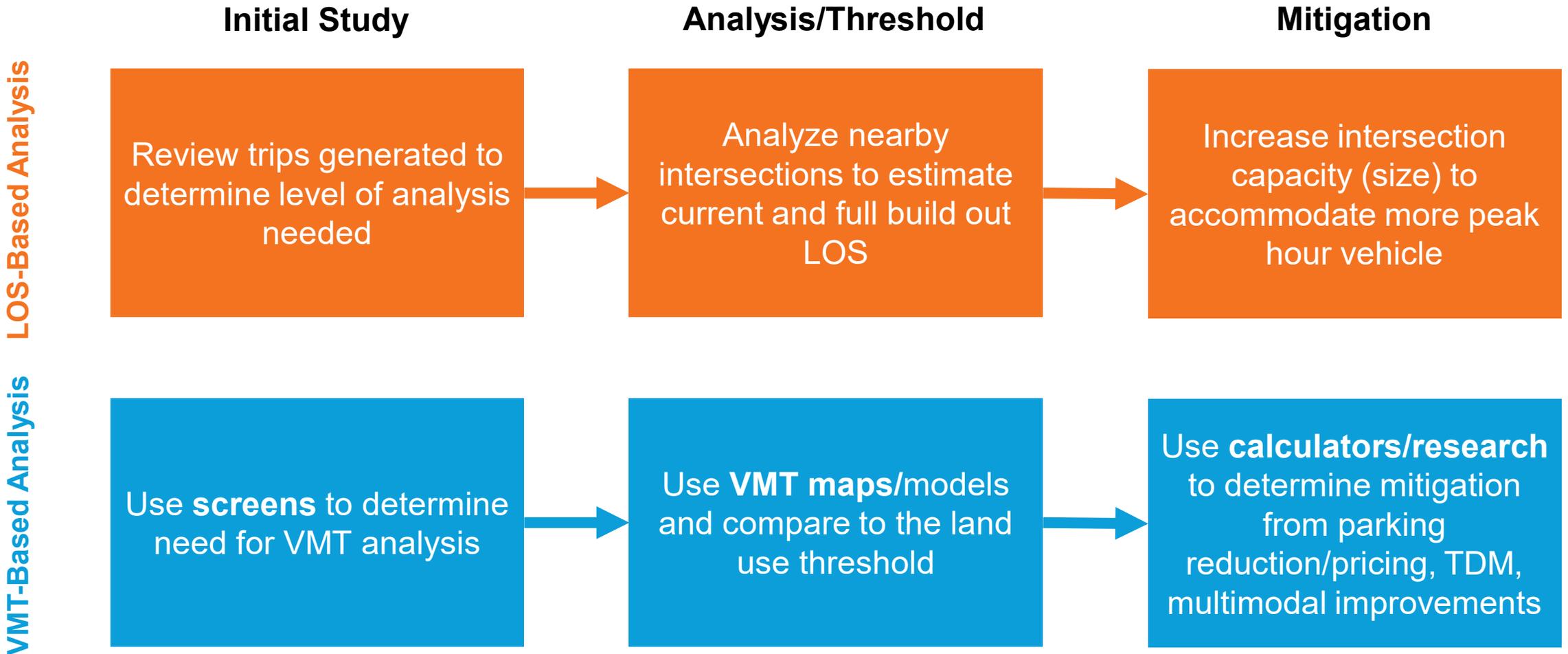- VMT offers streamlined analysis

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Why Adopt VMT Thresholds, Screens, and Mitigations?

- **Simplify development** process to save staff time and provide clarity for developers.

- **Achieve goals** regarding climate, transportation, and housing.

- **Reduce risk** to projects and to your jurisdiction by establishing defensible thresholds and clear implementation guidance.

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Comparison of VMT- and LOS-based CEQA analysis

	Initial Study	**Analysis/Threshold**	**Mitigation**
LOS-Based Analysis	Review trips generated to determine level of analysis needed	Analyze nearby intersections to estimate current and full build out LOS	Increase intersection capacity (size) to accommodate more peak hour vehicle
VMT-Based Analysis	Use **screens** to determine need for VMT analysis	Use **VMT maps**/models and compare to the land use threshold	Use **calculators/research** to determine mitigation from parking reduction/pricing, TDM, multimodal improvements

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What About Electric Vehicles?

- Electrification of transportation is a key element of California's strategy for reducing GHGs.

- **Electrification is not enough**. The California Air Resources Board has determined that the average VMT per person needs to go down *and* we need to transition to electric cars.
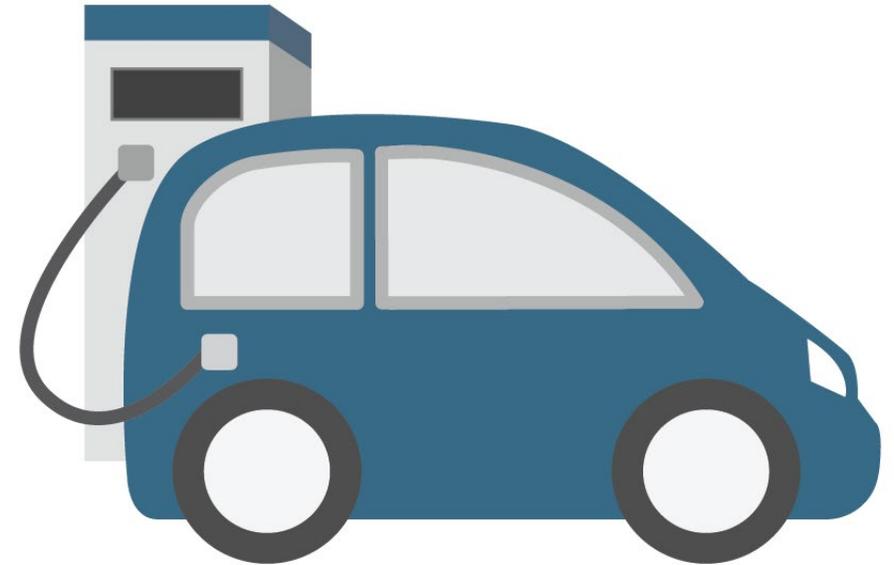
VMT Data Sources

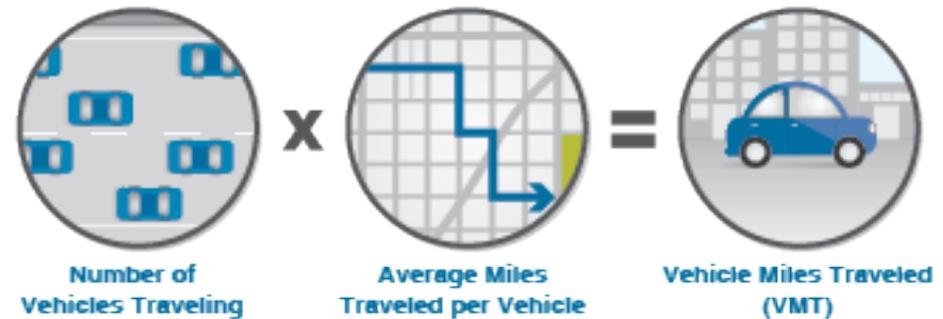**TRAVEL DEMAND FORECASTING MODELS FROM COUNTY TRANSPORTATION AUTHORITIES (CTAS)**

- Travel demand models calculate trips generated across the region between transportation analysis zones (TAZs)

- **CTA Models** provide the best available and regionally consistent data source

- Model calculations are informed by existing and future land uses, transportation networks, and travel patterns

- Models are validated with existing travel data
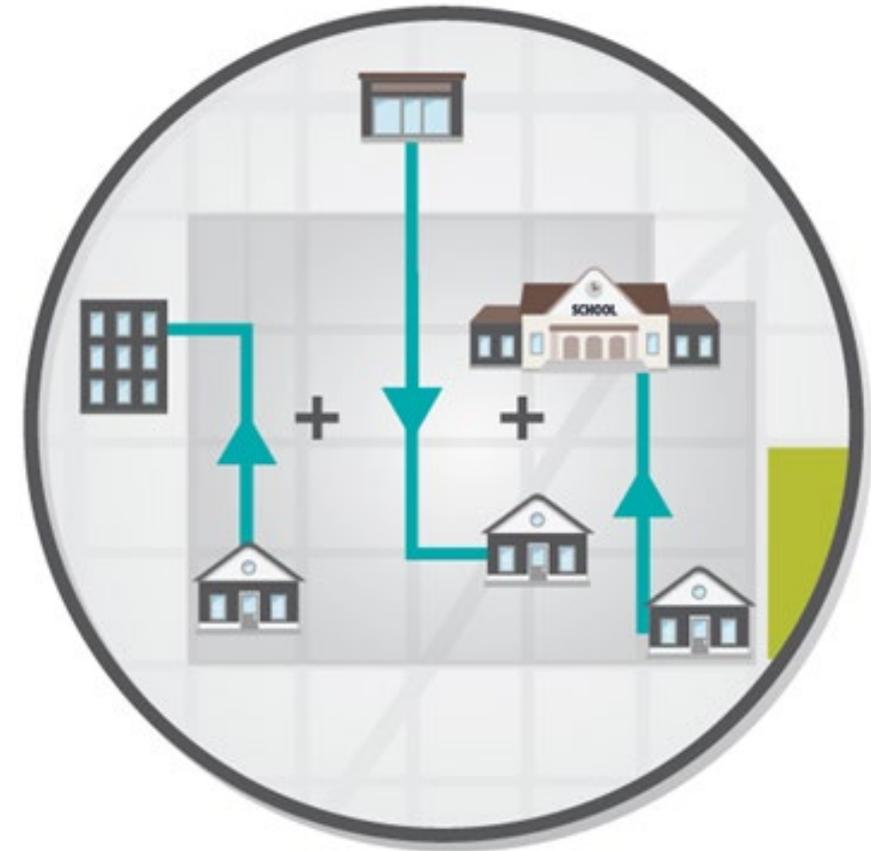
Defining Vehicle Miles Traveled

- VMT is a measure used in planning for a variety of purposes.
- Change in total VMT is a calculation used for retail and transportation projects
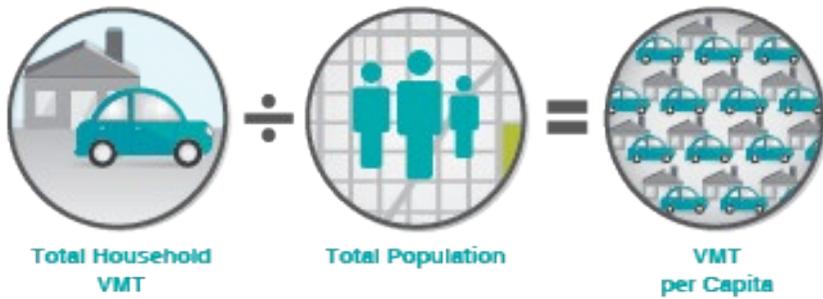- Caltrans has adopted guidance and a process for calculating induced demand from highway projects

Calculating Vehicle Miles Traveled (VMT)

Number of Vehicles Traveling × Average Miles Traveled per Vehicle = Vehicle Miles Traveled (VMT)

Calculating Roadway (Induced Demand) VMT

Change in Lane Miles × Number of Auto Trips = Roadway (induced) Demand

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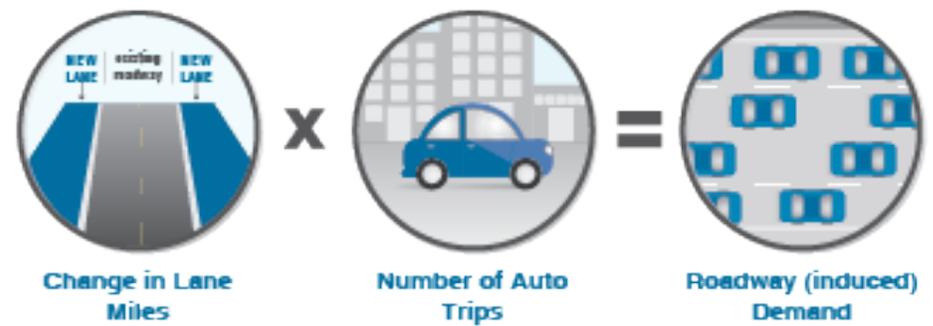
Calculating VMT per Capita

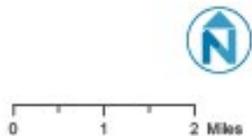Total Household VMT ÷ Total Population = VMT per Capita

Relative VMT per capita ranges from lowest (yellow) to highest (brown).

VMT per Capita
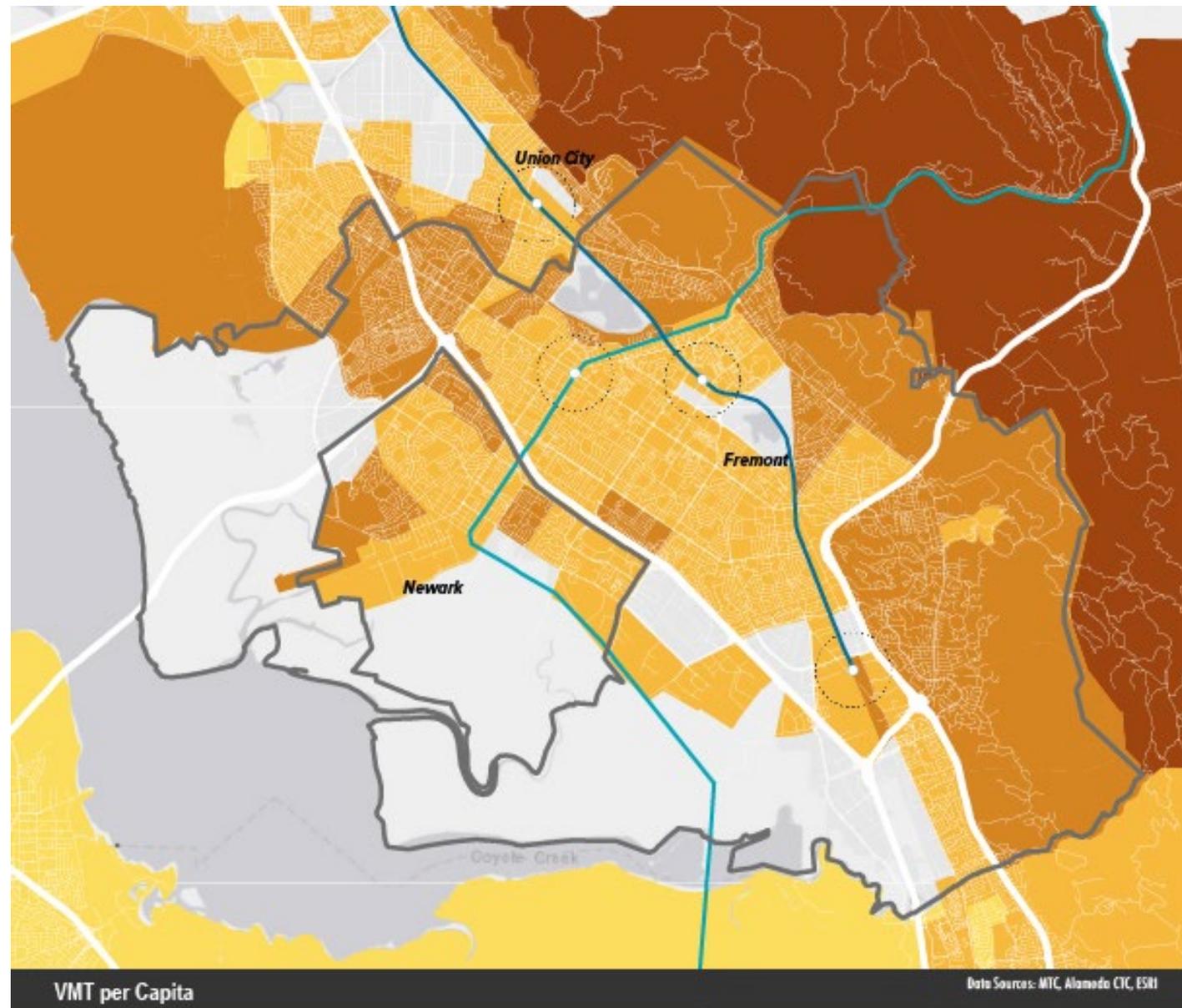
- less than 16 miles
- 16.1-24 miles
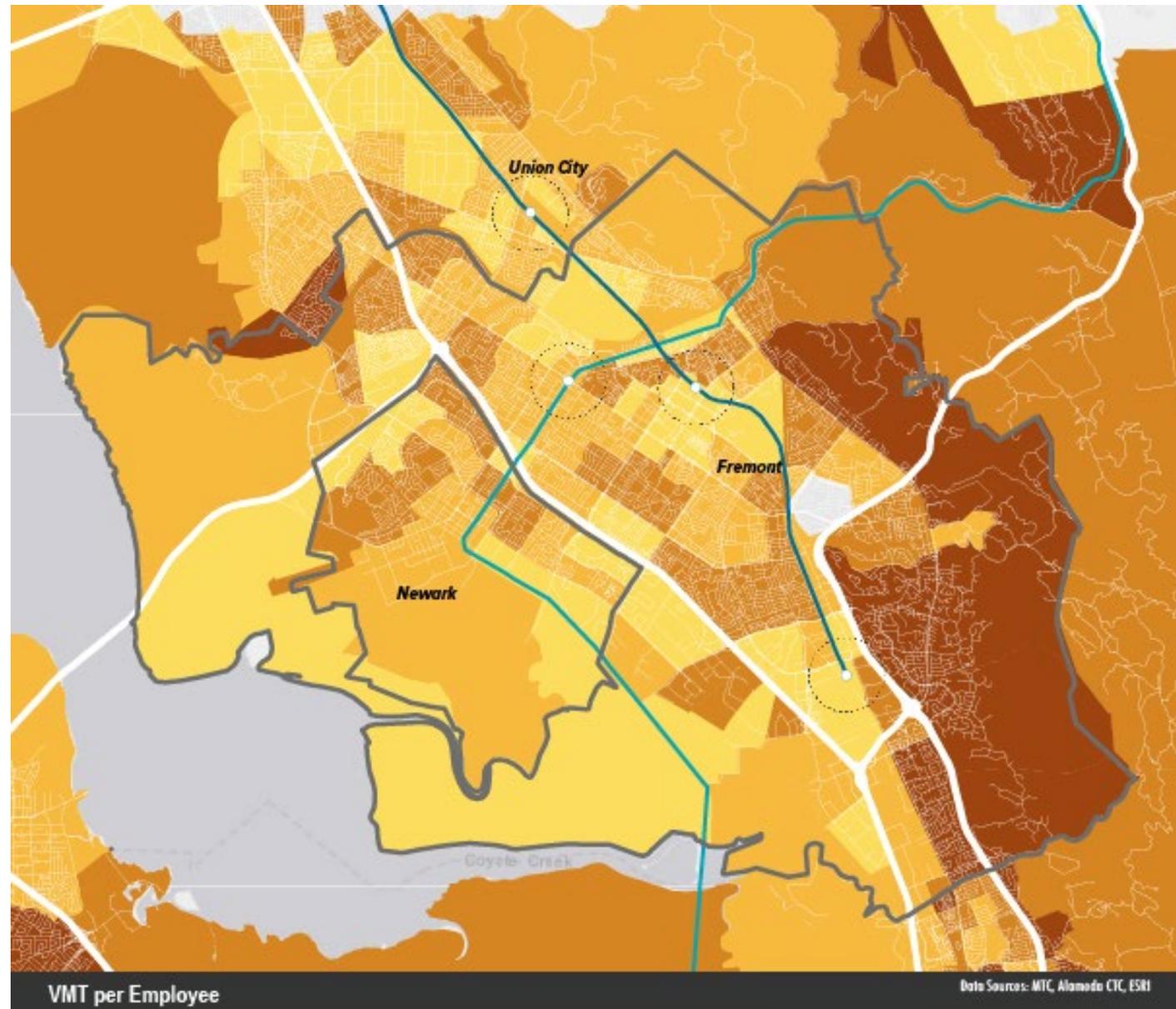- 24.1-36
- More than 36
- No Population or Employees

- Half mile from major transit stop
- BART
- ACE

Data Sources: MTC, Alameda CTC, ESRI
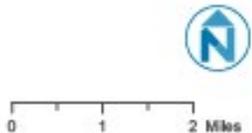
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Calculating VMT per Employee

Employment VMT per Worker ÷ Total Number of Workers = VMT per Employee

Relative VMT per employee ranges from lowest (yellow) to highest (brown).

Data Sources: MTC, Alameda CTC, ESRI

VMT per Employee

- less than 17 miles
- 17.1-24 miles
- 24.1-34
- More than 34
- No Population or Employees

- Half mile from major transit stop
- BART
- ACE

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0   1   2 Miles

Break

(5 minutes)

OPR Guidance

VMT Policies to Adopt for CEQA Review

Approach will vary by jurisdiction but includes:

1. Adopt VMT-based CEQA **thresholds**

2. Formalize or adopt VMT-based **screens** for land use projects

3. Formalize or adopt a **VMT mitigation** approach

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VMT Thresholds of Significance

- Objective measure to achieve state GHG reduction goals and reduce VMT while enabling all communities to grow

- **Land use thresholds**: lowest VMT areas in a jurisdiction will having no impact, thresholds vary by land use type and VMT metric

- **Transportation threshold**: does not induce net new VMT – many locally-sponsored transportation projects are likely to be exempt

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OPR Recommended VMT Thresholds

Land Use	OPR Recommended Threshold of Significance
Residential	15% below existing average VMT per capita for the City *or* Region
Office	15% below existing regional average VMT per employee
Retail	Net increase in total VMT
Mixed Uses	Each land use component of a mixed-use project will be analyzed independently, applying the significance threshold for each land use component from the enumerated project types in this Table.
Other Land Uses Not Defined	Methodology must measure the predominant VMT generator, thus other land uses may be similar to the Residential, Office, or Retail threshold and analysis.

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Residential Threshold

Blue shows areas below the recommend threshold: *15% or more below average using the local (city) average.*
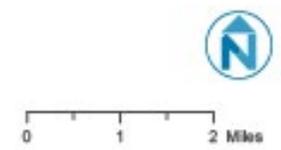
Residential projects asses their VMT per capita based on location on the map.
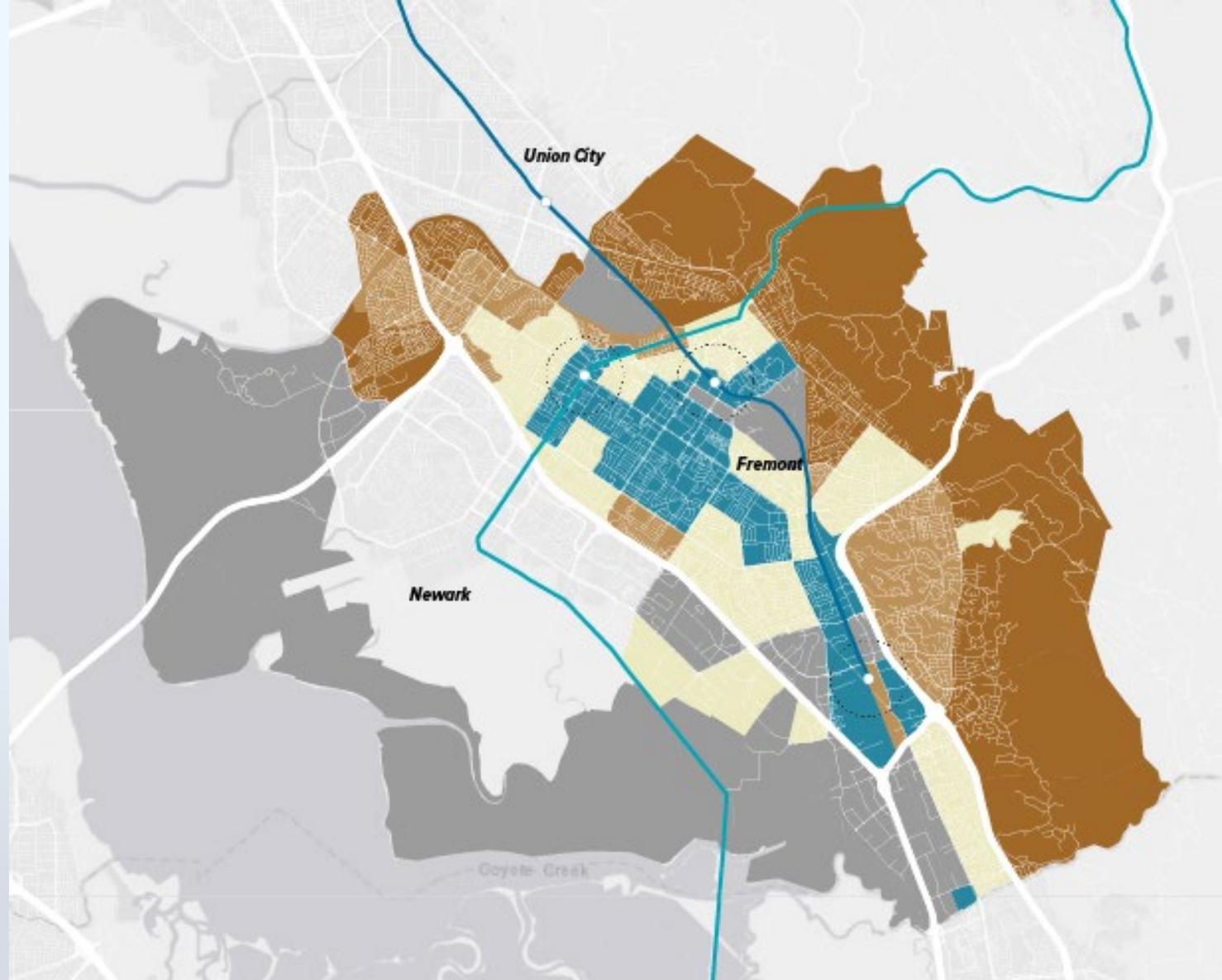
Fremont VMT Per Capita - Local Threshold (2020, Alameda CTC)
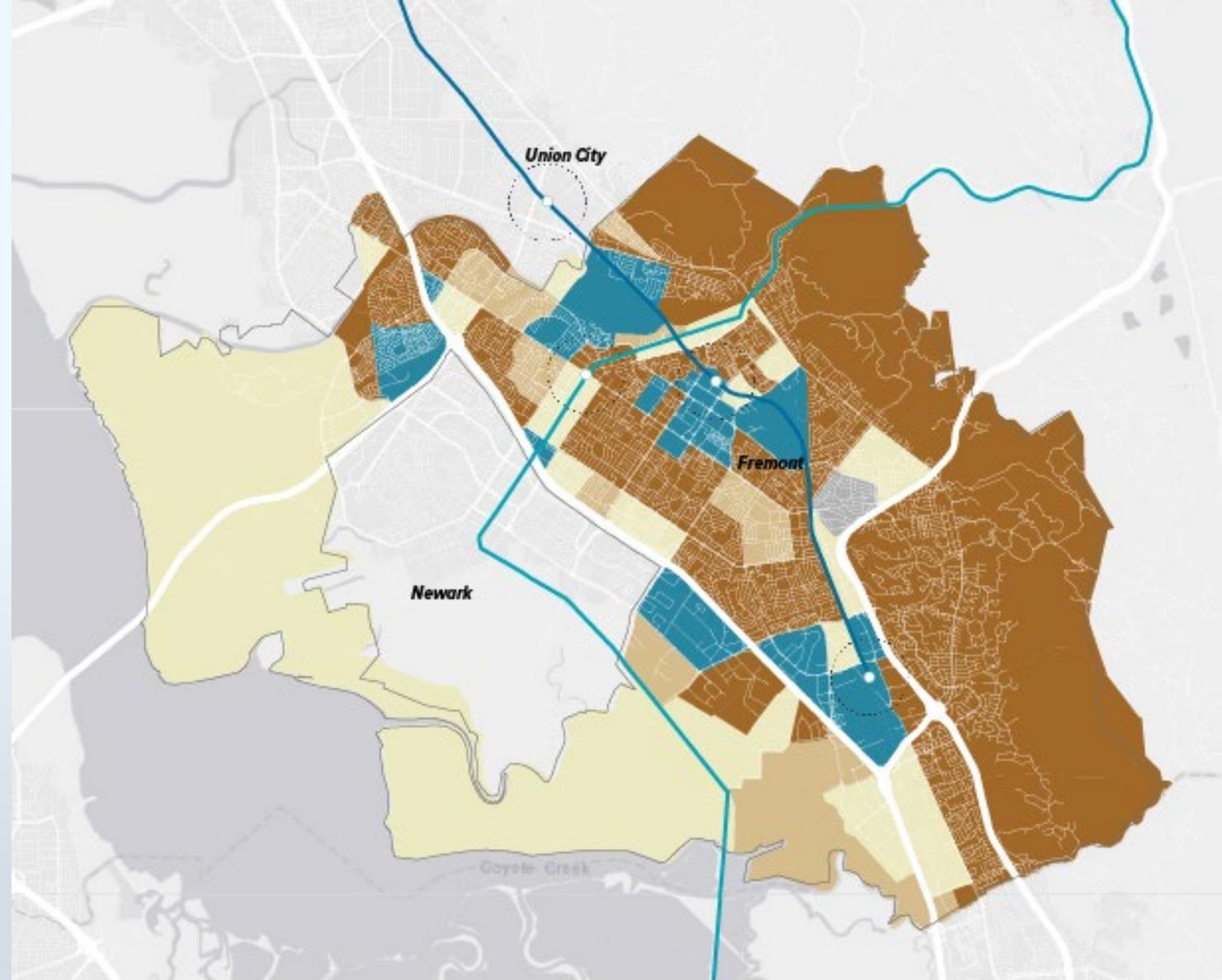
Data Sources: MTC, Alameda CTC, ESRI

- 15% or more below city average (below threshold)
- 14.9% below average - average
- Average - 15% above average
- More than 15% above average
- No Population or Employees

- Half mile from major transit stop
- BART
- ACE

0   1   2 Miles

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Office threshold

Blue shows areas below the recommended OPR threshold: *15% or more below the regional average.*
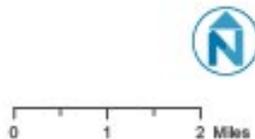
Office/employment projects asses their VMT per employee based on location on the map.

Fremont VMT Per Capita - Regional Threshold (2020, Alameda CTC)

Data Sources: MTC, Alameda CTC, ESRI

- 15% or more below regional average (below threshold)
- 14.9% below regional average - regional average
- Regional average - 15% above regional average
- More than 15% above regional average
- No Population or Employees

- Half mile from major transit stop
- BART
- ACE

0   1   2 Miles

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Screening

- Jurisdictions can develop screens to **quickly identify low-VMT projects** that do not need analysis (no CEQA transportation impact)

- Two kinds of screening for land use projects: by **project type** and by **location** (map-based)

- Saves staff time by streamlining review process

- Can be an incentive for developers to build less parking, build near transit, build affordable housing, etc.

- Provides more certainty to the CEQA process

- OPR developed a list of transportation projects that can be screened

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Project Type Screens

- **Small, infill projects**: Small projects generate less than 110 trips per day (about 10,000 SF of office and about 10-15 units)

- **Affordable housing:** Research supports the finding of lower VMT per capita from affordable housing developments

- **Local serving retail and public facilities**

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Map-Based Screening

- **Location:** In a low-VMT area or within ½ mile of high-quality transit (every 15 minutes during commute and/or rail)

- To presume a project will have a similarly low VMT to its location it must meet the following **criteria**:

  - **Density:** Meets a minimum density, similar or denser than existing

  - **Parking supply:** No more than the minimum number of parking spaces required

  - **Displacement:** Does not replace affordable units with a smaller number of market-rate units

  - **Consistent** with Plan Bay Area
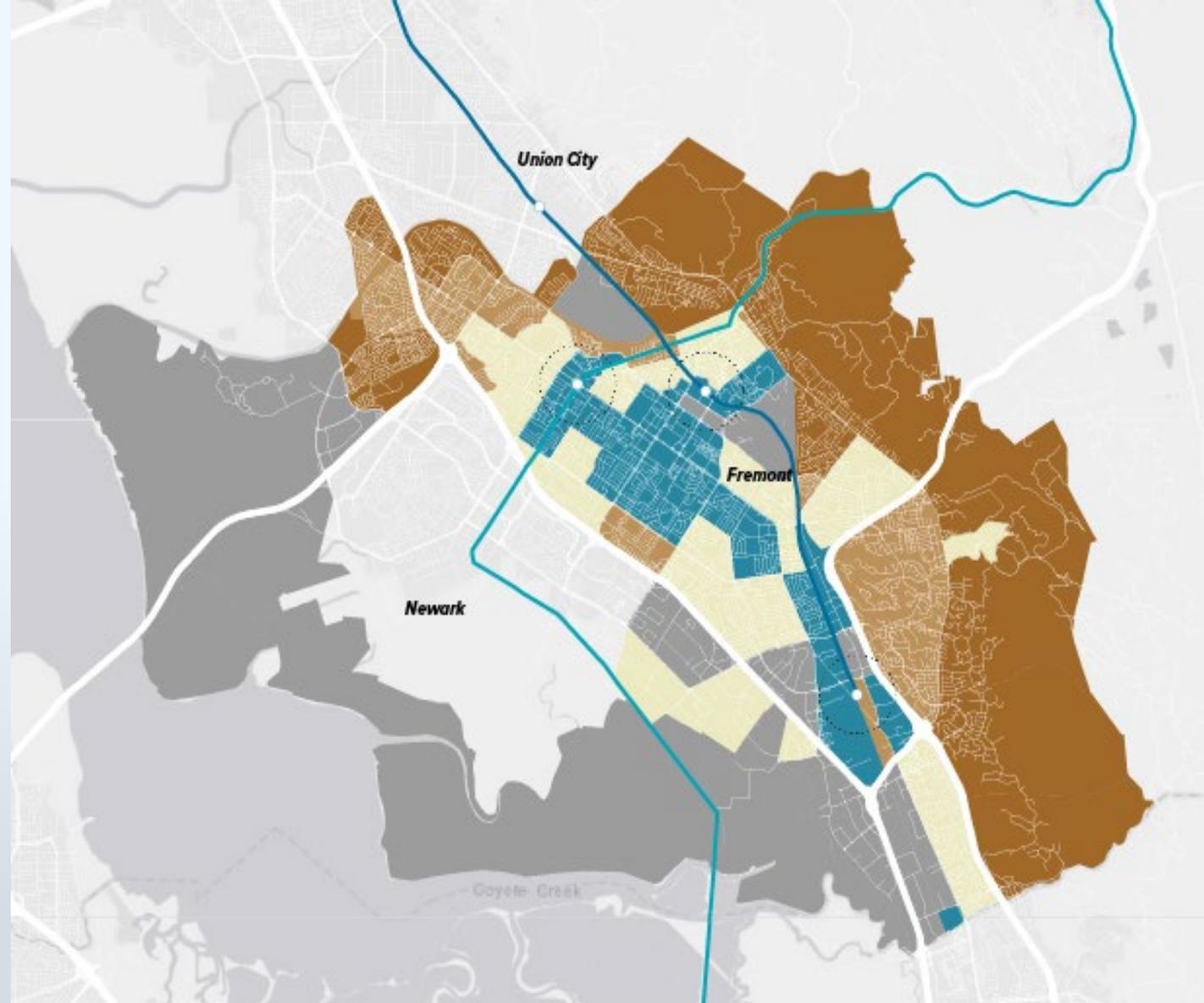
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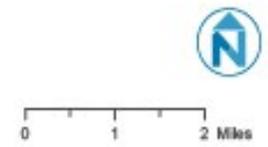# Map-Based Screens

LOW VMT - RESIDENTIAL

Fremont VMT Per Capita - Local Threshold (2020, Alameda CTC)

Data Sources: MTC, Alameda CTC, ESRI

- 15% or more below city average (below threshold)
- 14.9% below average - average
- Average - 15% above average
- More than 15% above average
- No Population or Employees
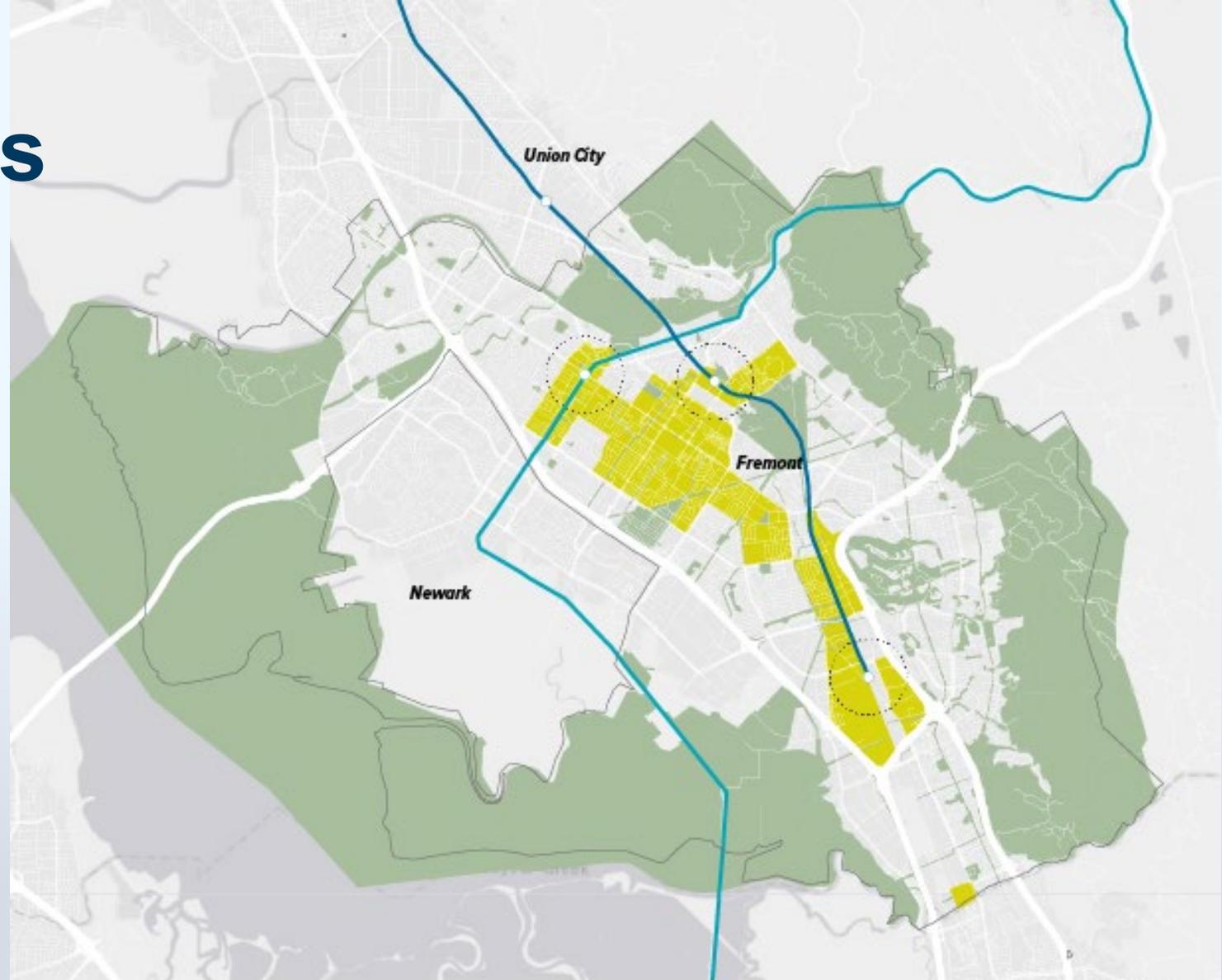
- Half mile from major transit stop
- BART
- ACE

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Map-Based Screens

LOW VMT - RESIDENTIAL

- Yellow shows Low VMT areas where **residential projects** could be screened out.

Screens

- Low VMT - Residential Projects
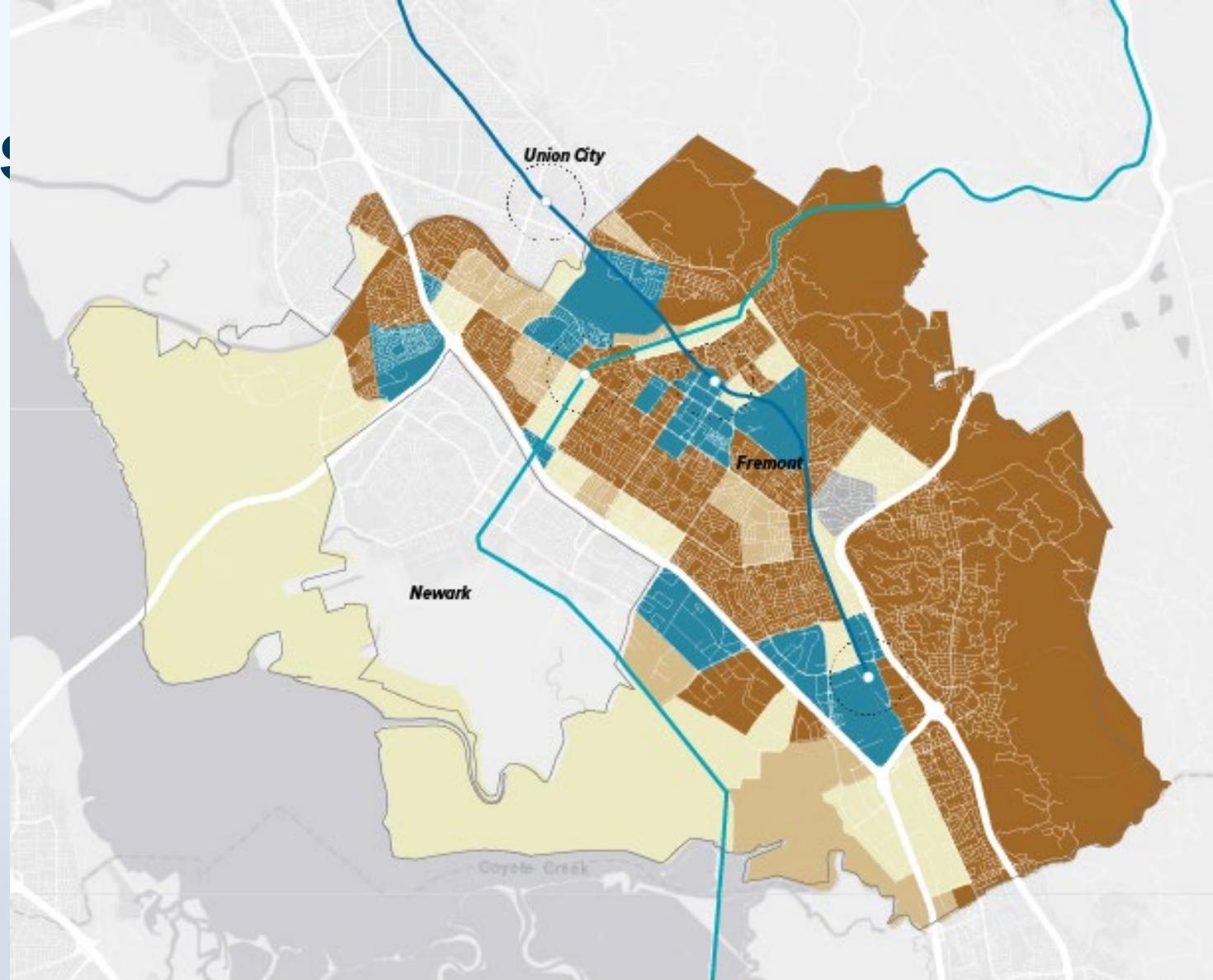- Half mile from major transit stop
- BART
- ACE
- Open Space

Map-Based Screens

LOW VMT - OFFICE

Fremont VMT Per Capita - Regional Threshold (2020, Alameda CTC)

Data Sources: MTC, Alameda CTC, ESRI

- 15% or more below regional average (below threshold)
- 14.9% below regional average - regional average
- Regional average - 15% above regional average
- More than 15% above regional average
- No Population or Employees

- Half mile from major transit stop
- BART
- ACE

0   1   2 Miles
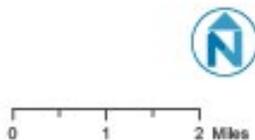
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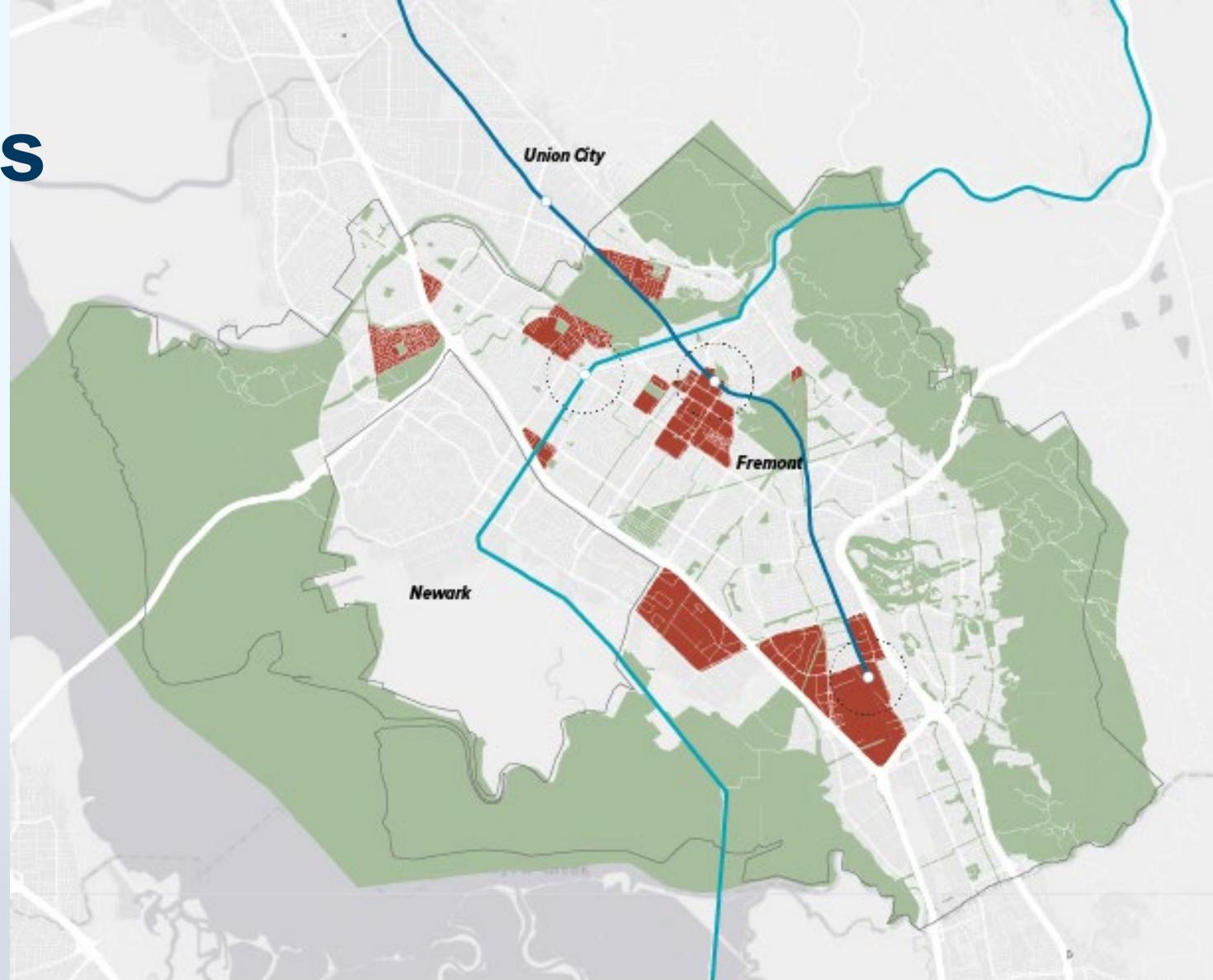METROPOLITAN TRANSPORTATION COMMISSION

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Map-Based Screens

LOW VMT - OFFICE

- Red shows Low VMT areas where **office projects** could be screened out.

Screens

- ■ Low VMT - Office Projects
- ⊙ Half mile from major transit stop
- BART
- ACE
- Open Space

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Map-Based Screens

TRANSIT PROXIMITY

- Green shows areas within ½ **mile of high-quality transit** where most land uses could be screened out.

- To qualify, the transit stop must be served by rail, a bus + ferry, or a bus with 15 minute or better peak hour commute frequencies.

Screens

- Transit Screen
- Half mile from major transit stop
- BART
- ACE
- Open Space

Data Sources: MTC, Alameda CTC, ESRI

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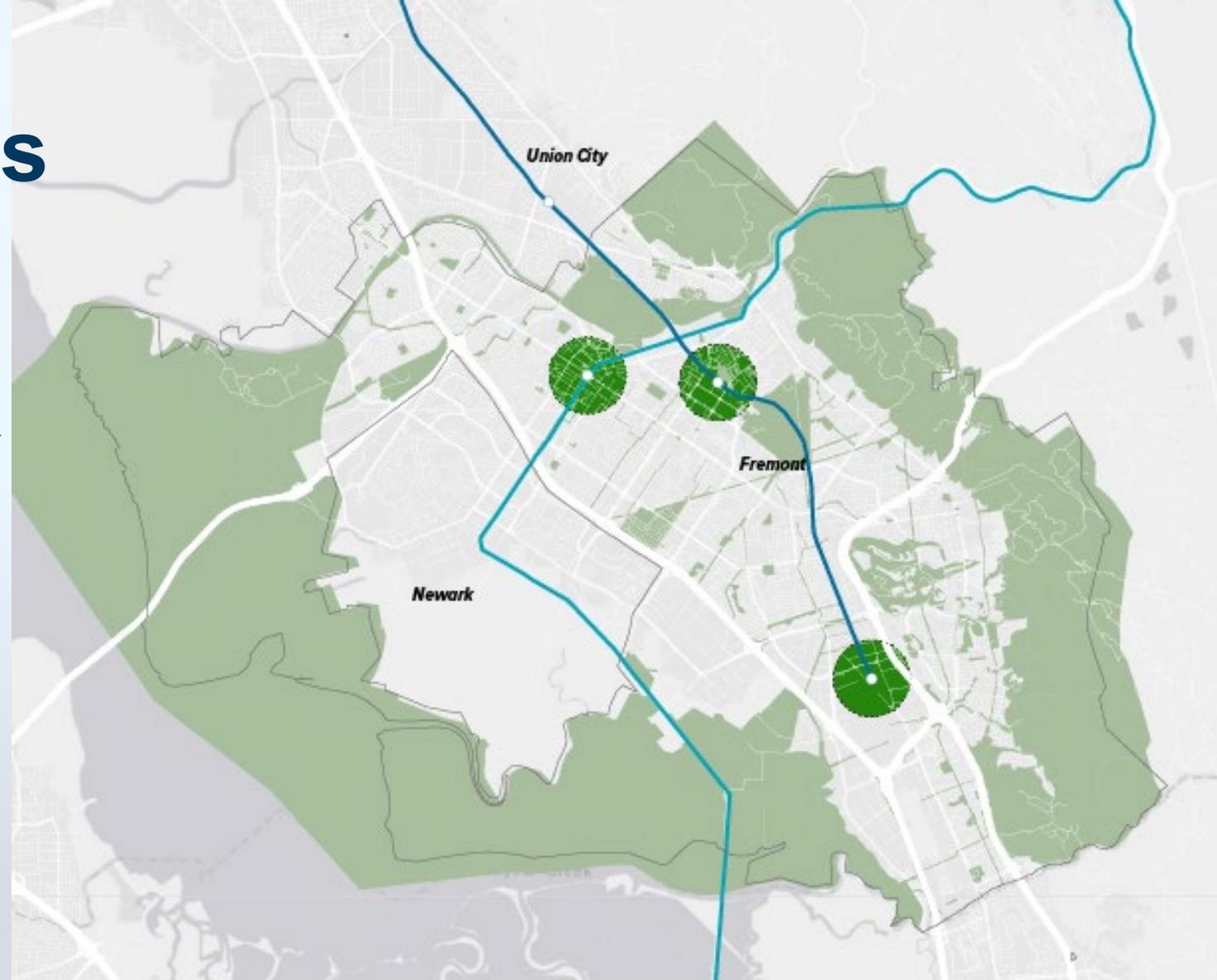
Comparison of VMT- and LOS-based CEQA analysis

	Initial Study	Analysis/Threshold	Mitigation
LOS-Based Analysis	Review trips generated to determine level of analysis needed	Analyze nearby intersections to estimate current and full build out LOS	Increase intersection capacity (size) to accommodate more peak hour vehicle
VMT-Based Analysis	Use **screens** to determine need for VMT analysis	Use **VMT maps**/models and compare to the land use threshold	Use **calculators/research** to determine mitigation from parking reduction/pricing, TDM, multimodal improvements

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Next Steps, Exercise, Resources, and Feedback

Approach to Adopting VMT Policies

Review your jurisdiction's existing legal framework, policies, and goals. Coordinate across departments.

Learn about approaches to implementing SB 743, requirements for setting thresholds, screens, and mitigations.

Define your jurisdiction's transportation analysis approach, including updated thresholds of significance, screens, and mitigations.

Develop specific policy revisions and guidelines (e.g., transportation analysis guidelines)

Consider complementary policy changes around parking and transportation demand management.

Adoption can take place in any of these steps

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What's Next

- **Practical Exercises:** Memo template
- **Office hours:** Tuesday, 7/12 10 AM – 12 PM
- **Module 2:** July 20 from 1-3 PM

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Practical Exercises: Memo Template

- Intended to serve as the basis of a staff memo, adapt it in whatever way is helpful for your jurisdiction. Memo has some blanks for you to fill in for your:

- **Existing Policies Review.** Identify where your jurisdiction's current CEQA transportation thresholds are and what needs to be updated.

- **Engagement Needs**. Determine process for updating CEQA thresholds and who needs to be involved.

  - Planning, Public Works, City Attorney, Mayor/Executive's Office, others?

- **Schedule.** Develop your project schedule.

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Technical Assistance Portal

- Find today's presentation and supporting materials on MTC/ABAG's Technical Assistance Portal here:
  - https://abag.ca.gov/technical-assistance/vmt-policy-adoption-technical-assistance-sb743
  - Or type "VMT Policy Adoption" in Portal's search box at https://abag.ca.gov/technical-assistance

- The TA Portal is a one-stop shop of programs that provide planning and technical support to make it easier to access resources you need. The resources are searchable and can be filtered by topics such as housing, environment, land use, resilience and transportation.

ASSOCIATION OF BAY AREA GOVERNMENTS
METROPOLITAN TRANSPORTATION COMMISSION

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Questions or feedback?

- Share here
- Put in the chat
- Add to the feedback survey (link on following page)
- Email us (email on the last page)
- Bring to office hours

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Feedback Survey

https://www.surveymonkey.com/r/MTC-VMT-Module1

Please use the next five minutes to fill in this short survey.

Thank you!

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