



# **Planning Commission Study Session**

**20-302**

**Update on the Proposed  
Changes to the City's  
Transportation Analysis  
Methodology**

**April 22, 2020**



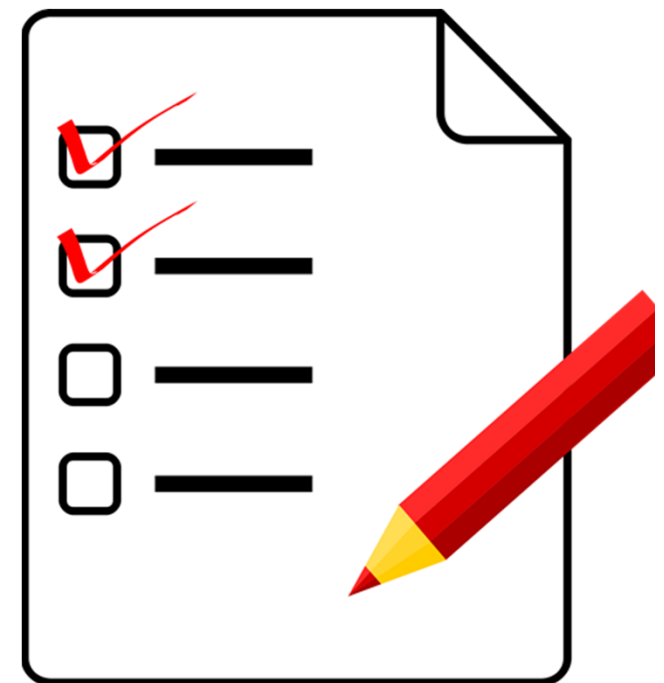
# Study Session Goals

- Present key policy considerations
- Discuss the components of a Vehicle Miles Traveled (VMT) Analysis and the tools used to study VMT
- Receive Feedback / Direction on Policy Considerations



# Agenda

- Overview of Previous Study Session / Feedback
- Key Policy Considerations
- VMT Tools
- Project Examples
- Schedule / Next Steps
- Q & A





# Previous Study Session

**December 11, 2019**

- CEQA, General Plan, and Climate Action Plan
- Senate Bill 743 - GHG, multimodal networks, land use diversity
- July 1, 2020 - California cities must:
  - No longer use Level of Service (LOS) to measure CEQA Transportation impacts
  - VMT recommended by the State
- LOS and VMT Information
- Future Policy Considerations
- Research, Interagency Coordination, Workplan, Outreach



# City Council and Planning Commission Feedback

November 5, 2019 and December 11, 2019

- Traffic condition is Regional
- Develop a Countywide plan for all cities
- Use of big data in measuring VMT
- How Travel Demand Models measure VMT
- Methodology for estimating VMT
- LOS is important to keep
- Overall support for transition to VMT
- Concern with existing availability of Transit
- Improve Transportation Demand Management Programs (TDMs)
- Support for Bike and Scooter Share
- Desire for Vision Zero



# Technical Guidance

## **“Technical Advisory on Evaluating Transportation Impacts In CEQA, December 2018”**

- Governor's Office of Planning and Research (OPR)
- Recommendations on implementing VMT for cities
- Does not alter lead agency discretion

### TECHNICAL ADVISORY ON EVALUATING TRANSPORTATION IMPACTS IN CEQA



December 2018



# Key Policy Considerations



Setting the Baseline



Establishing CEQA Thresholds



Determining CEQA Exemptions



Analyzing Transportation Projects



Measuring Level of Service



# Environmental Review

**Baseline** – environmental setting of existing conditions that provides a basis of comparison for the expected environmental conditions after a project is implemented

**Threshold of Significance** – level of effect above which Lead Agency will consider impacts to be significant, and below which it will consider impacts to be less than significant

**Exemption** – projects that can be presumed to have a less than significant impact





# Setting the Baseline

Land Uses	City (Santa Clara)	Countywide	Regional
Total Household VMT / Capita	9.39	13.33	13.95
Total Employment VMT / Employee	16.34	16.64	15.33

- Traffic is a countywide issue
- VTA - Congestion Management Program - Countywide Coordination
- Countywide transportation projects – Implemented at County level
- Mitigation/Implementation difficult to implement regionally



# Thresholds of Significance

Land Uses	Countywide	15% Threshold
Total Household VMT per Capita	13.33	11.33
Total Employment VMT per Employee	16.64	14.14

- State recommends 15% threshold
- 15% studied by State as achievable
- Goal: Project VMT to be 15% **below** existing baseline VMT
- If Project does not meet Goal = Mitigate or Significant Impact



# CEQA – Exempted Projects

## State Recommended

### Type:

- Small Infill Projects (110 trips/day)
- Local Serving Retail (50K or less)
- Affordable Residential Development

### Location:

- Existing Low VMT Areas
- Developments within 1/2 mile of Existing Transit

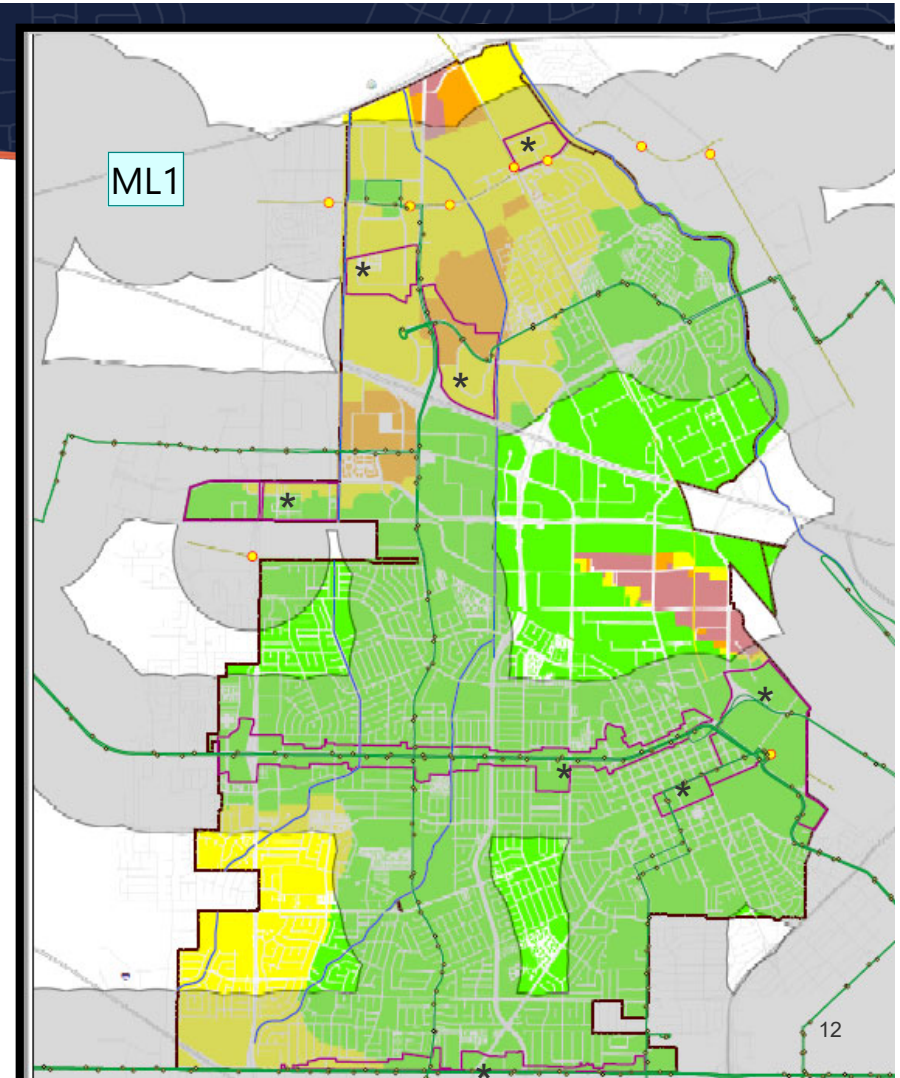


*Local Serving Retail  
Santa Clara Station*

# Development Near Transit

Within **1/2 mile** of existing transit **stop/station** or **high-quality transit** corridor

- Gray areas = within 1/2 mile transit buffer
- Projects within buffer that meet **transit supportive requirements** = exempt from VMT analysis



## Slide 12

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**ML1**

Swap with City Map GP map with Transit Buffers (no heat map yet)

Michael Liw, 4/18/2020



# Development Near Transit

Within 1/2 mile of ex. transit stop/station or high-quality transit corridor

## *Transit Supportive Requirements:*

- Floor Area Ratio (FAR) no less than 0.75
- 35 du/acre for residential
- Promotes multimodal transportation
- Does not proposed excessive parking
- Transit Oriented design
- Does not replace affordable with fewer market rate residential



***Lawrence Station***



# VMT Heatmaps

## *Maps of Existing Residential and Employment VMT levels*

- Developed by VTA
- Based on Travel Demand Model, Census Data, California HH Survey, etc.
- Map reflects Countywide baseline and 15% threshold
- Maps for Residential and Employment

### **Four VMT levels in Santa Clara**

**Green** = meets threshold

**Yellow** = minor mitigations

**Orange** = majors mitigations

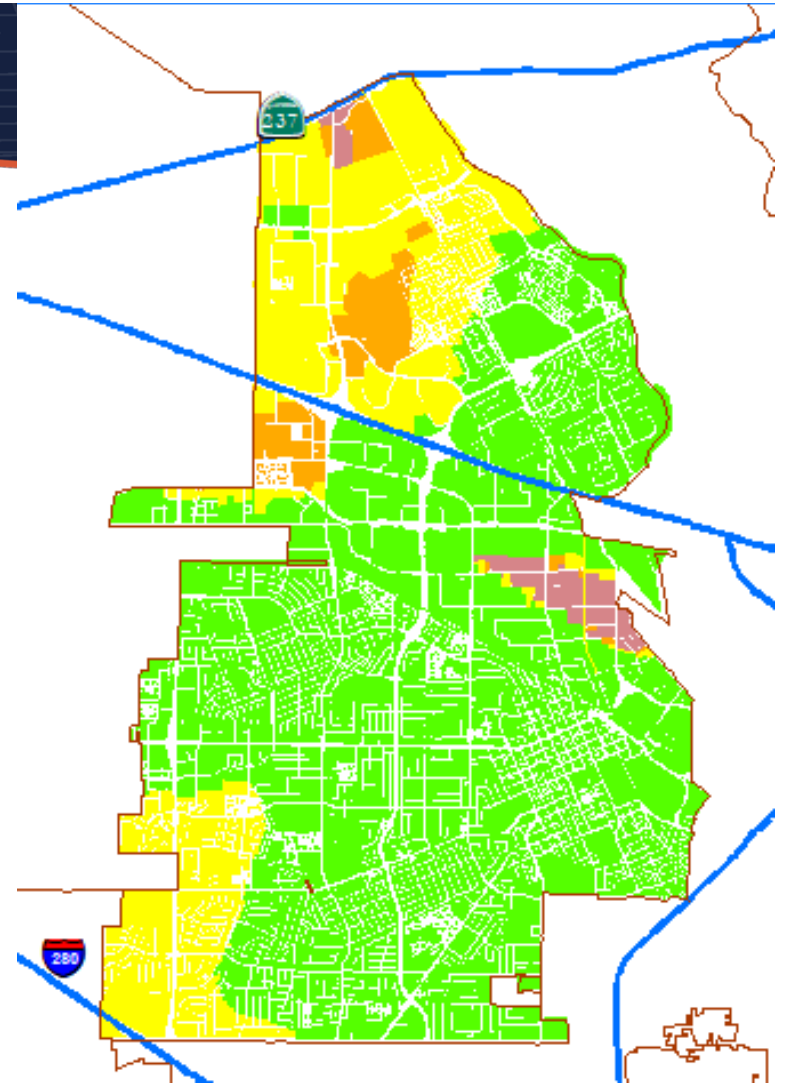
**Red** = difficult to mitigate



# Residential VMT Heat Map

## Countywide Residential Average

- VMT per Capita
  - Baseline -- 13.33
  - 15% Threshold -- 11.33
- **Green** = meets threshold
- **Yellow** = minor mitigations
- **Orange** = majors mitigations
- **Red** = difficult to mitigate

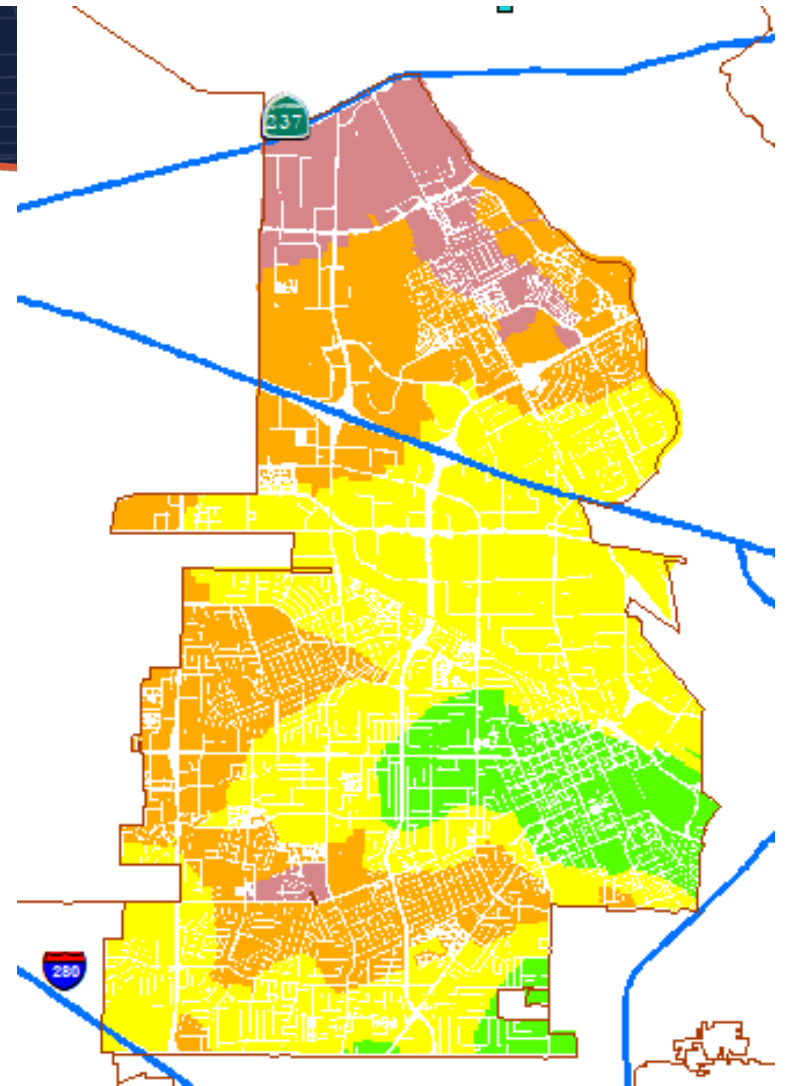




# Employment VMT Heat Map

## Countywide Employment Average

- VMT per Employee
  - Baseline -- 16.64
  - 15% Threshold -- 14.14
- **Green** = meets threshold
- **Yellow** = minor mitigations
- **Orange** = majors mitigations
- **Red** = difficult to mitigate





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# Analyzing Transportation Projects

## CEQA Analysis Elements

- Consistent with State greenhouse gas reduction goals
- Near-term and Long-term Project induced vehicle travel
- Impacts on multimodal transportation networks
- Impacts on diversity of land uses



***Lawrence Expressway  
Ramp Improvements***



# Measuring Level of Service

Current CEQA Requirement	Proposed non CEQA Requirement
Measures delay at intersections	Measures delay at intersections
Potential environmental impact	<b>Operational</b> deficiency
Requires CEQA mitigation or override	<b>City Policy</b> to address ( <b>not CEQA</b> )
Mitigation includes roadway widening or intersection capacity improvements	Improvements (roadway widening, intersection capacity improvements, <b>multimodal, or TDM measures</b> )
CMP requirement are CEQA requirements per General Plan	CMP requirement <b>no longer</b> CEQA impact



# Level of Service as an Operational Analysis Element

## Transportation analysis requirements outside of CEQA

- ***Intersection operational analysis (LOS)***
- Queuing analysis
- Driveway operations
- Signal warrant studies
- Pedestrian, bicycle and transit assessment/improvements
- Traffic control and crosswalk evaluation
- Neighborhood intrusion/cut-through
- Loading zones, parking evaluation
- Congestion Management Program requirements



# VMT Tools

## Travel Demand Model

Used for regional projects, land use plans, hospitals, private schools

## VMT Evaluation Tool

Measures VMT for residential and office projects

## Heat map

Provides locations where projects meet the threshold



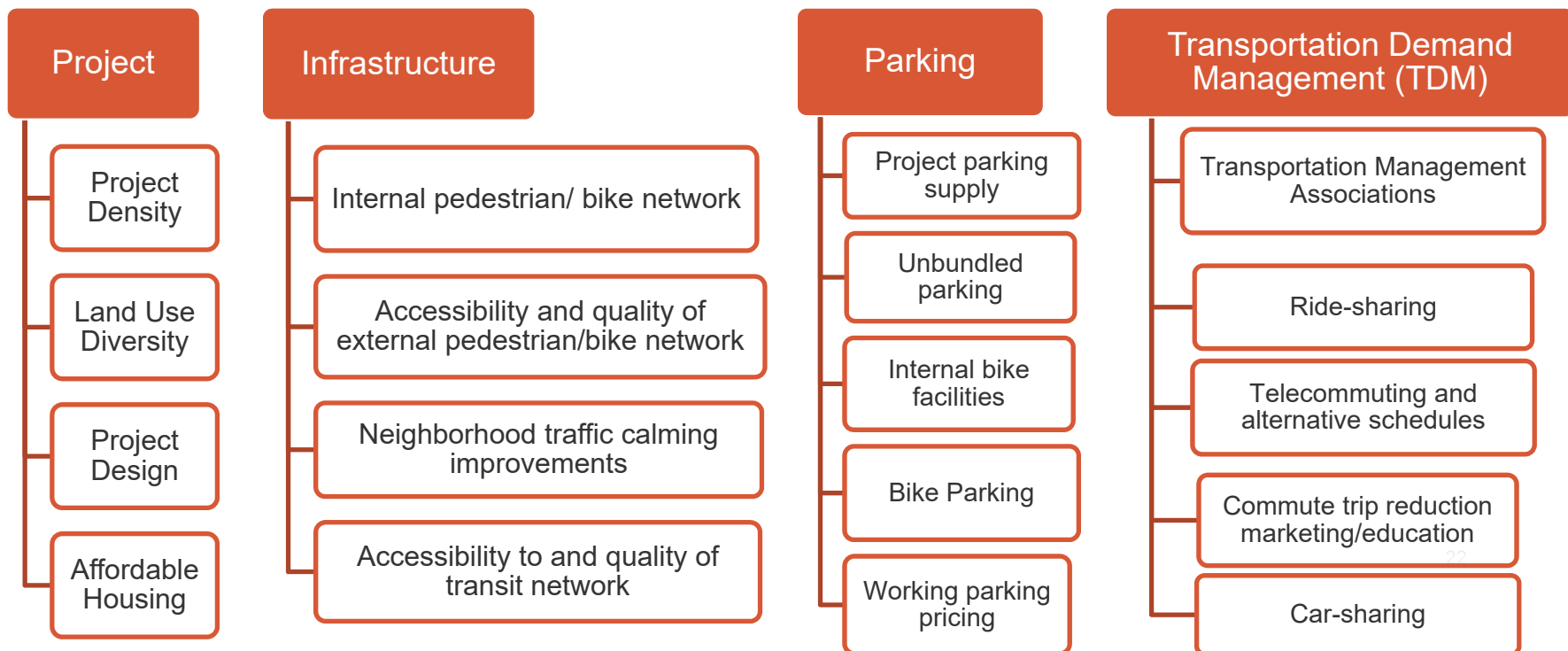
# VMT Evaluation Tool

*Excel Based Tool that calculates proposed project's VMT impacts and provides feasible VMT mitigation measures*

- Based on Travel Demand Model data
  - Measures VMT/Capita or VMT/employee for every parcel using:
    - Project location and description
    - Proposed multimodal improvements & TDM measures
    - Other project characteristics such as number of parking spaces
- Available to all at no cost on the VTA website



# VMT Reduction Strategies







# Project Example 1

## North Santa Clara Office

- Proposed 500ksf Office with 1,500 parking spaces on 7.5 ac
- Countywide Baseline 16.64

### Tier 4 TDM Programs

#### Employee Parking Cash-Out

Employee Parking Cash-Out Percent Eligible Employees:	50 %
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#### Subsidized Transit Program

Percent of Transit Subsidy:	50 %
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#### Price Workplace Parking

Price Workplace Parking Percent Eligible:	100 %
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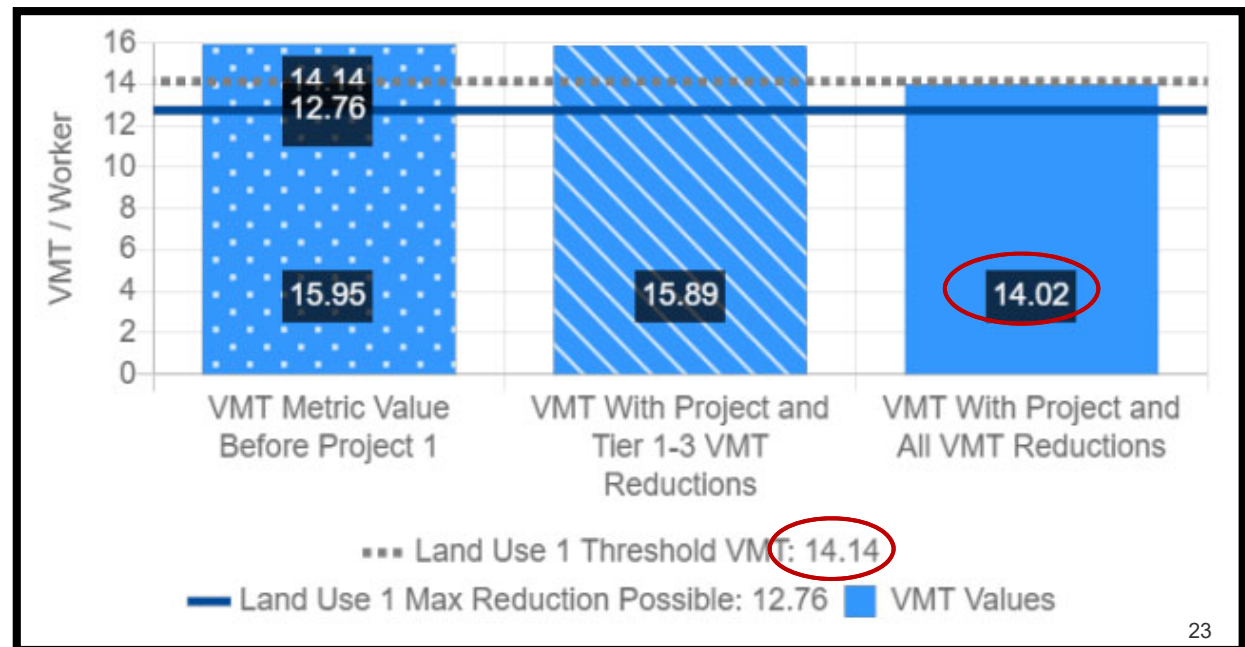
#### Ride-Sharing Programs

Expected Percent of Ride-Sharing Participants:	17 %
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Existing  
Area VMT

Project VMT  
no mitigation

Project VMT  
with mitigation







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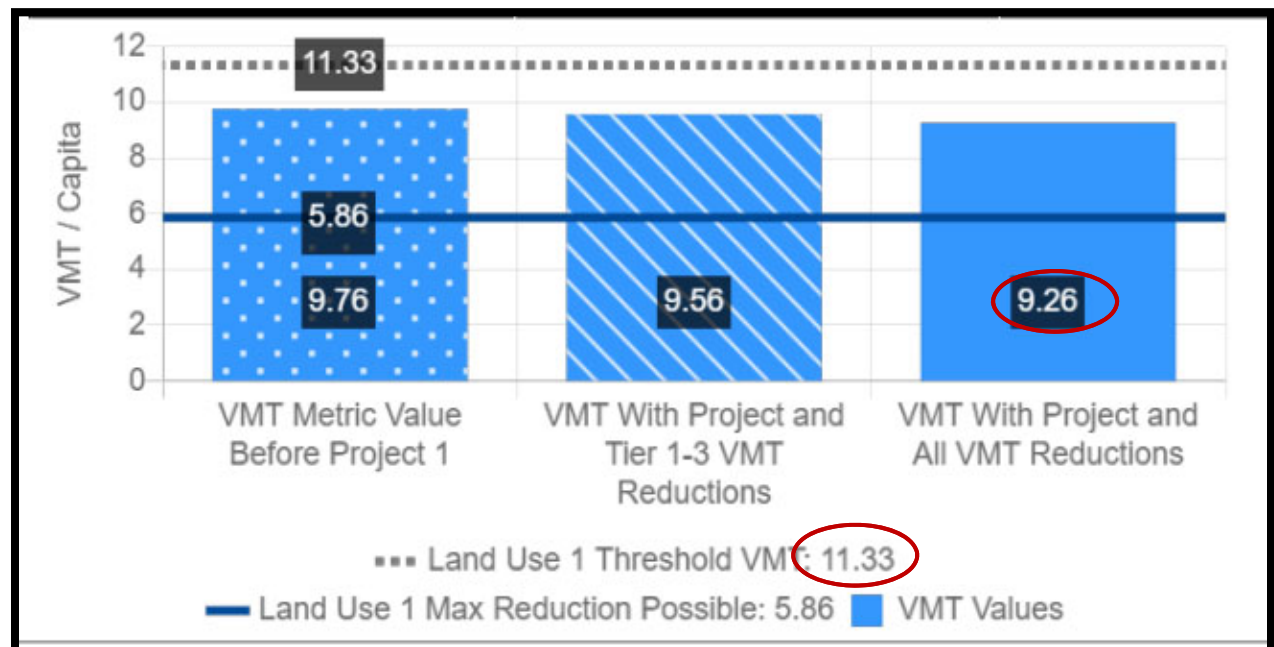
## Project Example 2

### El Camino Real Mixed Use Residential

- Proposed 10ksf commercial and 60 residential units on Within Transit Priority Area but does not meet minimum 35 units/acre
- Not exempted from VMT analysis
- Countywide Baseline **13.33**

Existing  
Area VMT

Project VMT





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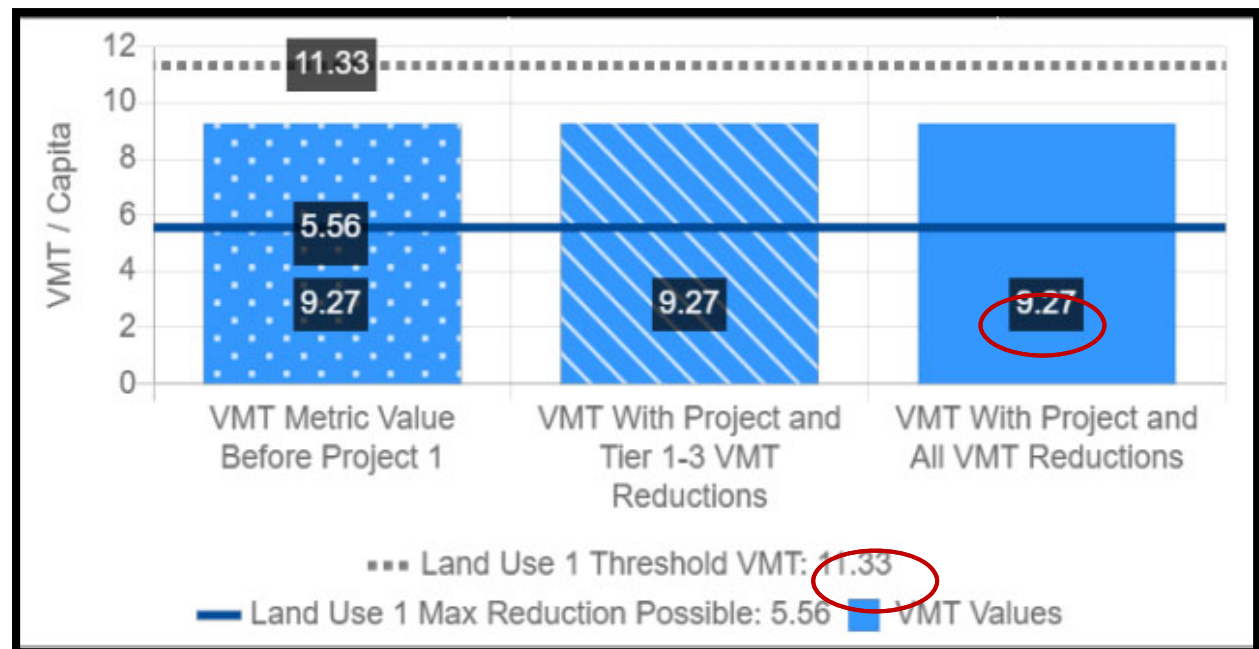
## Project Example 3

### Santa Clara Winchester Mixed Residential

- Proposed 375 residential apartments with 50% affordable and 5ksf commercial on 5.8 acres
- Countywide Baseline **13.33**

Existing  
Area VMT

Project VMT





# Schedule / Next Steps

- April/May 2020
  - Community / Developer Outreach
  - 2<sup>nd</sup> Planning Commission Study Session
  - 2<sup>nd</sup> City Council Study Session
- May/June 2020 – Planning Commission
- June 2020 – City Council





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# Questions and Feedback



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