


**City Council
Study Session**

Item #3. – 20-229
**Update on the Proposed
Changes to the City's
Transportation Analysis
Methodology**

May 12, 2020

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**City of
Santa Clara**
The Center of What's Possible

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

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Agenda

- Overview of Previous Study Session/Feedback
- Key VMT Policy Considerations
- VMT Tools
- Project Examples
- Level of Service
- VMT for Transportation Projects
- Schedule/Next Steps
- Q/A



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Previous Study Session

November 5, 2019

- CEQA, General Plan, and Climate Action Plan
- Senate Bill 743 - GHG, multimodal networks, land use diversity
- July 1, 2020 - California cities can 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

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City Council and Planning Commission Feedback

November 5, 2019 and December 11, 2019

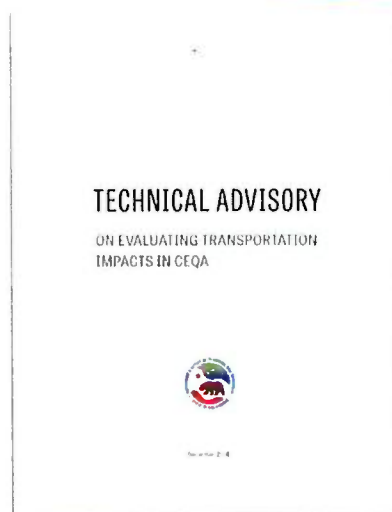
- Traffic condition is regional
- Countywide plan for all cities
- Use of big data in measuring VMT
- How Travel Demand Models measure VMT
- Methodology for estimating VMT
- LOS is important to keep
- Overall support for transition to VMT
- Concern with existing availability of Transit
- Improve Transportation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





Key VMT Policy Considerations



Setting the Baseline



Establishing CEQA Thresholds



Determining CEQA Exemptions



Setting the Baseline

Existing condition that is the basis of comparison for expected environmental conditions after a project is implemented

Land Uses	Santa Clara	Countywide	Regional
Total Household VMT per Capita	9.39	13.33	13.95
Total Employment VMT per Employee	16.34	16.64	15.33

- Cities to determine VMT baseline (City, County, or Regional)
- Countywide is recommended due to resources, monitoring, and transportation funding at the County level.



Thresholds of Significance

Level above which a Lead Agency will consider impacts to be significant

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

- State studied and recommends 15% threshold
- Goal: Project VMT to be 15% **below** existing baseline VMT



CEQA – Exempted Projects

State Recommended

Type:

- Small Infill Projects (110 trips/day)
- Local Serving Retail (50,000 sf or less)
- Affordable Residential Development

Location:

- Transit Supportive developments within 1/2 mile of existing Transit

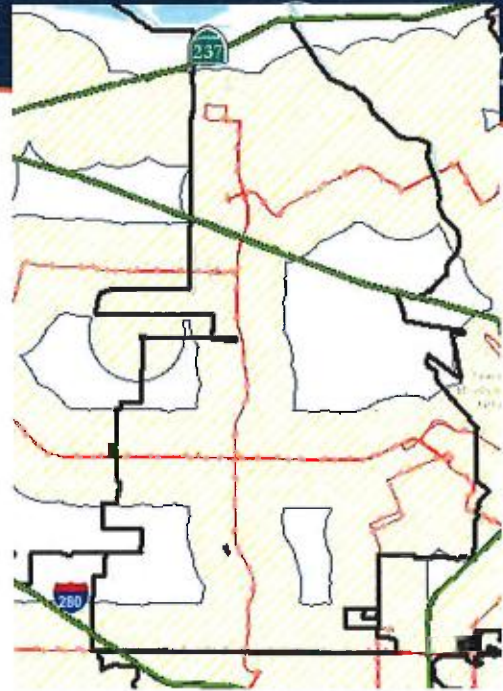


*Local Serving Retail
Santa Clara Station*

Development Near Transit

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

- Tan areas = within 1/2 mile transit
- Red = stop/stations/high quality transit
- Transit supportive projects within light green areas are exempt from VMT analysis



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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
- Minimum 35 du/acre for residential
- Promotes multimodal transportation
- No excessive parking
- Transit Oriented design
- Does not replace ex. affordable with market rate residential



Lawrence Station

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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

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VMT Evaluation Tool

Excel Based tool that calculates project's VMT impacts and provides feasible VMT mitigation measures

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

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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

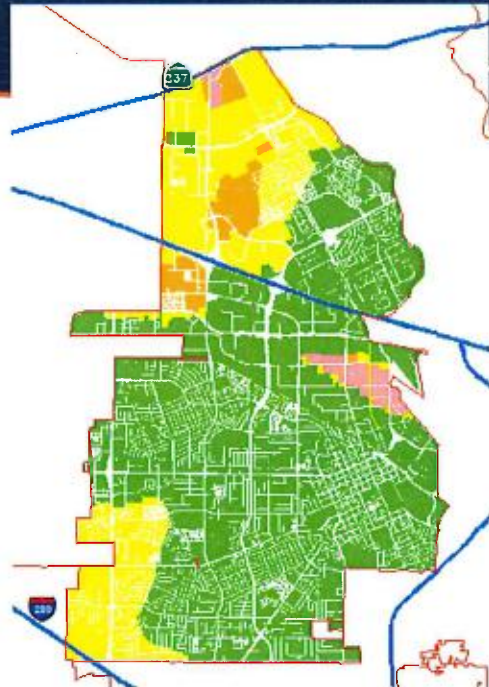
Four VMT levels in Santa Clara

- Green** = meets threshold
- Yellow** = minor mitigations
- Orange** = major mitigations
- Red** = difficult to mitigate

Residential VMT Heat Map

Countywide Residential Average

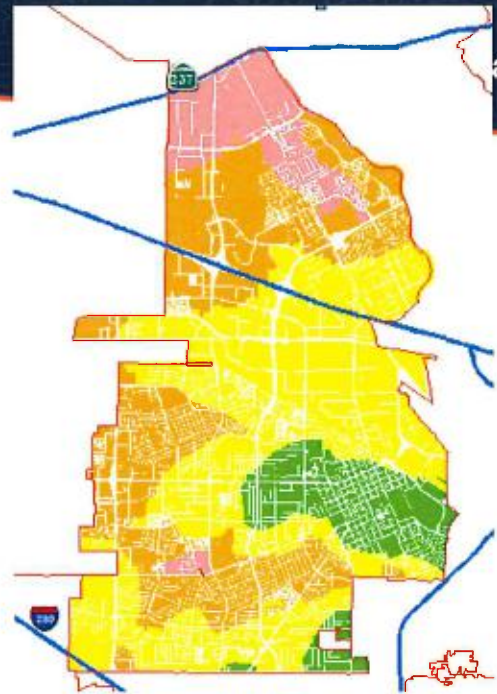
- VMT per Capita
 - Baseline – 13.33
 - 15% Threshold – 11.33
- **Green** = meets threshold
- **Yellow** = minor mitigations
- **Orange** = major mitigations
- **Red** = difficult to mitigate



Employment VMT Heat Map

Countywide Employment Average

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

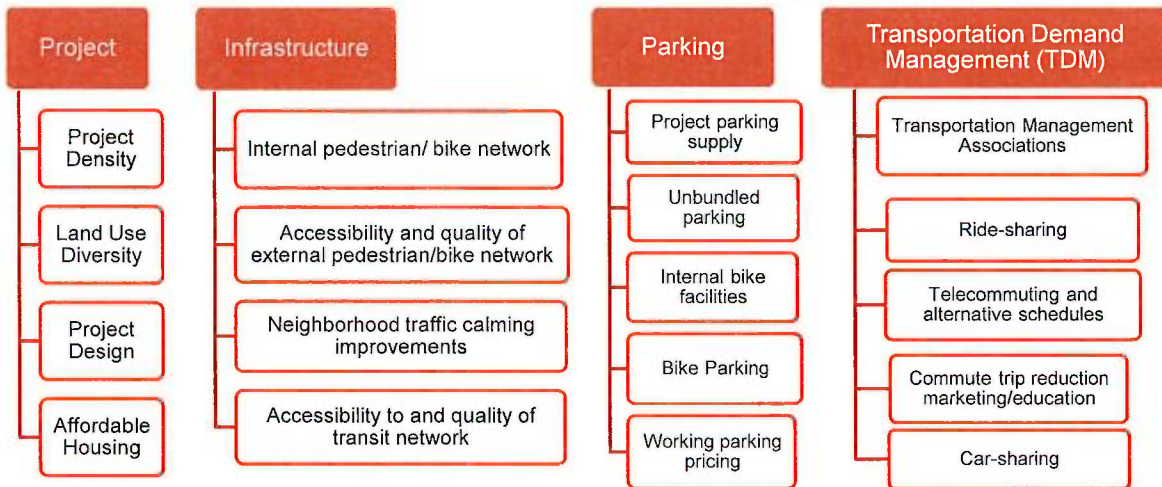


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VMT Reduction Strategies



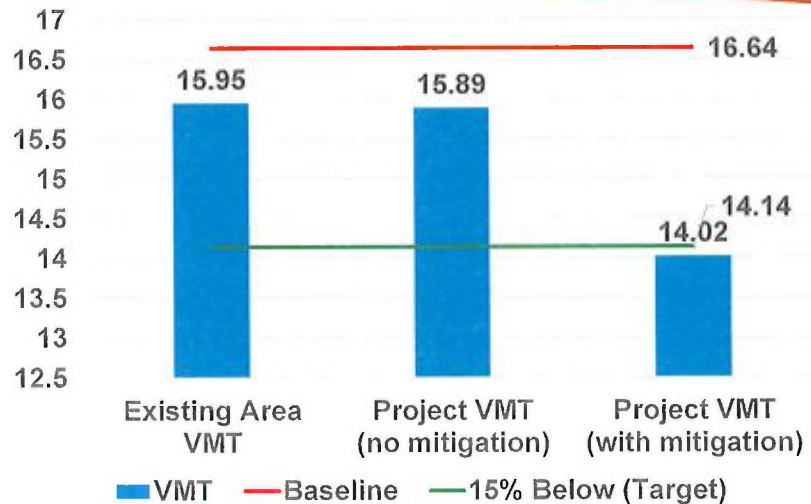
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Example 1

Santa Clara Office

- 500,000 sf Office
- 1500 spaces on 7.5 ac
- VMT Baseline = **16.64**
- 15% Threshold = **14.14**



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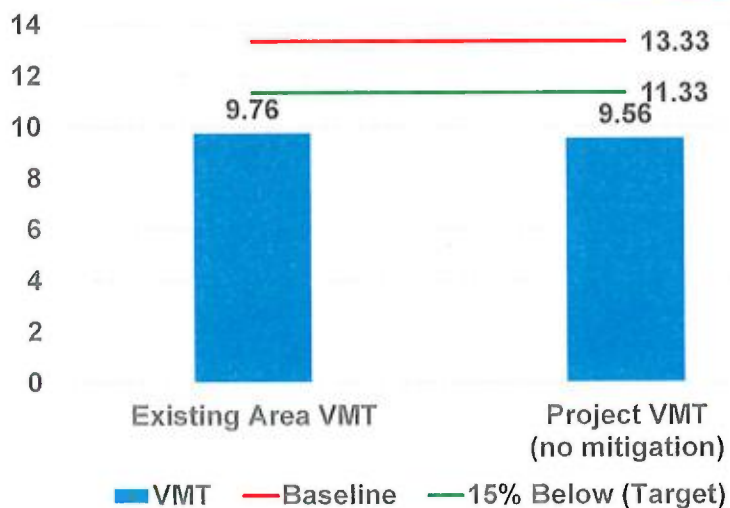
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Example 2

El Camino Real Mixed Use Residential

- 10,000 sf commercial w/60 residential units
- Not Transit Supportive due to density
- Not exempt from VMT analysis
- VMT Baseline **13.33**
- 15% Threshold **11.33**



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Measuring Level of Service

Current CEQA Requirement	Proposed non CEQA Requirement
Measures delay at intersections	Measures delay at intersections
Potential environmental impact	Operational deficiency
Requires CEQA mitigation or override	City Policy to address (not CEQA)
Mitigation includes roadway widening or intersection capacity improvements	Improvements (roadway widening, intersection capacity improvements, multimodal, or TDM measures)



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



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*

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Schedule/Next Steps

- May 2020
 - Community/Developer Outreach
 - Planning Commission (May 27th)
- June 23, 2020 – City Council

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Questions and Feedback

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