

Level-of-Service (LOS) to Vehicle-Miles-Traveled (VMT)

Council Study Session October 8, 2019



LOS to VMT Study Session

Agenda

- Why Are We Here? (SB 743)
- What About Our CMP Intersections?
- How is VMT Determined?
- Continued Use of LOS
- Encouraging Development Near Transit
- Project Outline
- Public Meetings/Outreach and Threshold Adoption





Why Are We Here? (SB 743)

California Senate Bill (SB) 743 and CEQA Guidelines

 Requires all California cities to measure CEQA transportation impacts with Vehicle Miles Traveled (VMT).

 Jurisdictions must adopt VMT Policy and Thresholds by July 1, 2020

 Focuses on the act of driving, rather than congestion as the measure of environmental impacts









SB 743 LOS vs. VMT

- Level of Service (LOS)
 - Measures delay at signalized intersections or roadway segments.
- Vehicle Miles Traveled (VMT)
 - Measures the distance a motorized vehicle will travel to a destination.



SB 743 Why VMT Makes Sense

- Half of CA's GHG emissions generate from transportation.
 - Lower VMT = Reduced GHG Emissions
- Alignment with State's goals:
 - Reducing GHG emissions;
 - Developing multi-modal transportation networks, providing clean,

efficient access to destinations; and

- *Diversifying land uses near each other.
- Alignment with Sunnyvale's goals:
 - *Sunnyvale General Plan
 - Climate Action Plan





What About Our CMP Intersections?

SB743 Congestion Management Program (CMP)

Background and Requirements

- Proposition 111 (1990)
 - Provided additional funding for urbanized counties to develop CMP
 - Address near/long term congestion
 - Monitor performance of transportation system
 - Integrate transportation & land use planning
 - Defined Level of Service (LOS) as measurement standard
- SB743 does not modify CMP legislation
- VTA = Santa Clara County Congestion Management Agency (CMA)

VTA Coordination of Efforts

- Congestion Management Agency Lead Role Regionally
 - Work with all local jurisdictions in the County
 - Consistency between Santa Clara County Cities
 - Provide Technical Support
 - Update Countywide TDM Model
 - Develop VMT Heatmaps
 - Modify San Jose VMT Evaluation Tool



SB 743 Congestion Management Program

Level of Service (LOS)

Current standard for measuring transportation impacts

Measurement of the amount of congestion (delay) at intersections and

roadway segments

Typical mitigation

- Capacity enhancing (widening/additional lanes)
- Efficiency (signalization or modification)
- Does not prioritize multimodal transportation
 - Facilitates vehicular traffic



Level of Service Table

Level of Service	Control Delay per Vehicle (sec)
A	< 10
В	> 10 to 20
C	> 20 to 35
D	> 35 to 50
E	> 50 to 80
F	> 80



How is VMT Determined?

How is Vehicle Miles Traveled (VMT) Determined

VMT Background

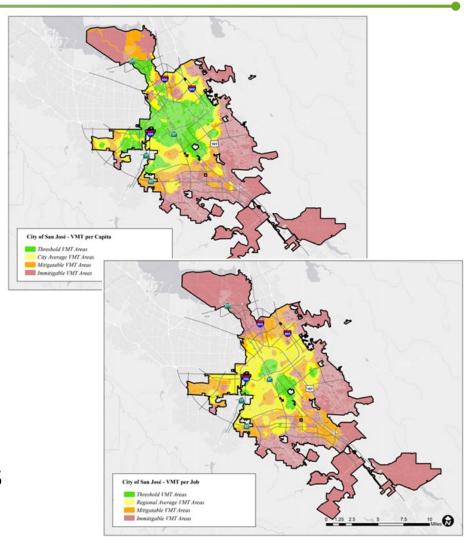
- Measurement of total amount of vehicle travel on the roadway network
 - Calculated by multiplying total number of vehicle trips by average distance



- Normalized against per capita, employees or person-trip to reflect travel efficiency
- Good indicator of overall efficiency of the multimodal transportation network
 - Cannot identify specific problems in specific locations

Measurement and Tools

- Travel Demand Models
 - Countywide VTA model
 - Only has large, significant roadways in network
 - City model
 - Has fine granularity of roadway network
- Heat Maps
- Evaluation Tool
 - Spreadsheet based on City of San Jose efforts



Potential Reduction Measures

- Project Characteristics
- Multimodal Infrastructure
- Parking
- Transportation Demand Management (TDM) Programs

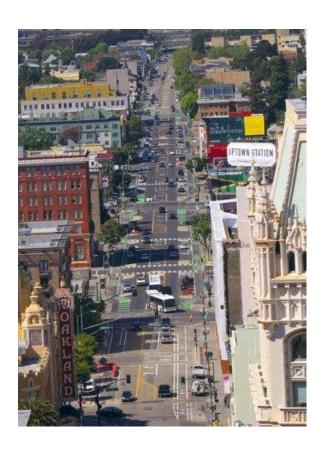




Research

- Cities that have already implemented VMT
 - San Francisco
 - Oakland
 - * San Jose
 - Los Angeles
 - Long Beach
 - Pasadena





Research on Other Cities Experiences

- Common Issues/Concerns
 - Parking
 - Lack of Transit Service/Low Ridership
 - Fewer Transportation Investments
 - Intersection LOS Analysis
 - Other Operational Issues

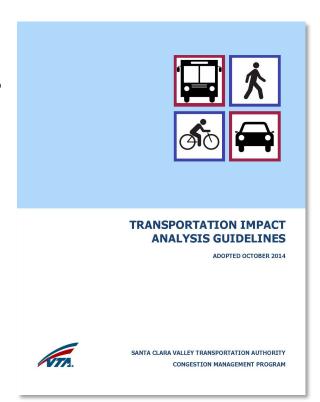




Continued Use of LOS

LOS Going Forward

- Continued use of LOS
 - CMP Legislation still requires LOS analysis
 - Anticipate future legislation will align VMT with CMP intents
 - Comply with CMP requirements
- Develop a policy for Local Transportation Analysis to include LOS and operational studies





Encouraging Development near TransitVMT Streamlining Tools

CEQA Streamlining Tools Associated with VMT Analysis

Goal: Locate Density Near Transit

- Continued use of Program EIRs for Plan Areas
- SB 743 Technical Advisory Policies
- Promote development in areas near major transit stops (LSAP & DSP)
- Consider streamlining efforts along high quality transit corridors (ECR & Moffett Park)



Project Outline

Project Outline

City Policy Assessment

Educate the Public

Creation of VMT Heat Maps

VMT Determination Tool

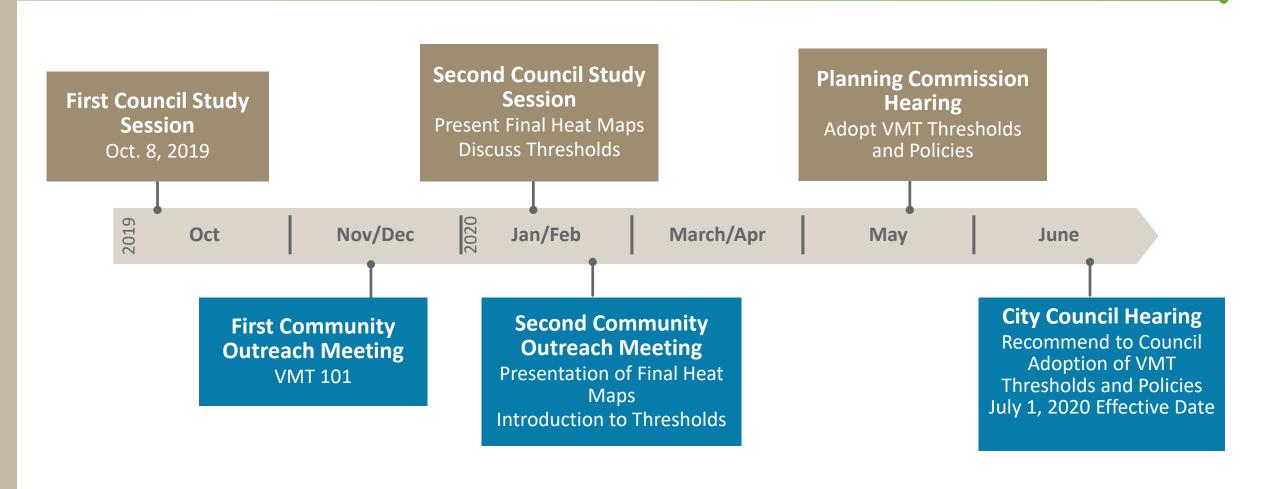
- Analyze VMTrelated Policies/Goals
 - General Plan
 - Climate ActionPlan
 - City Policies

- Create VMT Webpage (Nov. 2019)
- Hold VMT
 Outreach Sessions
 with the Public
 and Developers
- Finalize heat maps with VTA
- Overlay Sunnyvale General Plan Maps on Heat Maps (Nov. 2019)
- Beta test known development projects
- Finalize the VMT
 Determination to
 ol/spreadsheet for
 public use (Spring
 2020)



Public Meetings/Outreach and Threshold Adoption

Public Meeting/Outreach and Threshold Adoption



Major Policy Points

- Streamlining CEQA Review Near Transit
 - Major Transit Stops LSAP & DSP
 - High Quality Transit Corridors ECR, Moffett Park, etc.
- Continued Use of LOS for Analyzing Development





Questions?