



Bicycle Pedestrian Action Committee (BPAC)

Transportation Analysis Methodology Update

January 27, 2020



Study Session Goals

- Introduce Senate Bill 743
- Discuss Santa Clara's current method to study traffic
- Introduce “Vehicle Miles Traveled” or VMT
- Provide the Schedule

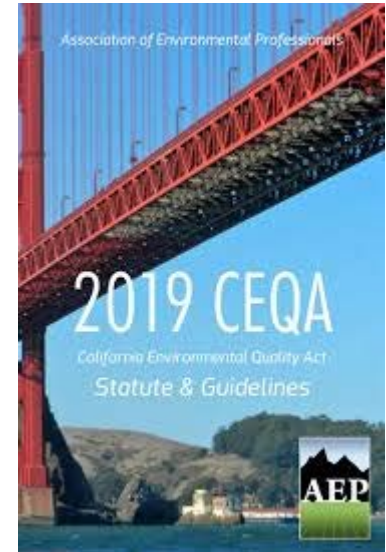




Background

California Environmental Quality Act (CEQA)

- Document that informs decision makers and the public about potential environmental impacts of proposed projects.
- Preparation of technical reports (i.e. Transportation, Noise, Air Quality, Historic Resources, etc.)
- Impacts and mitigations
- Public review and input





Background

City of Santa Clara 2010-2035 General Plan

- Reducing contribution to Greenhouse Gas emissions by encouraging alternative transportation modes, sustainable building practices and other energy efficiency measures.

Climate Action Plan (CAP)

- Implements the City's sustainability and environmental quality Goals and Policies

Senate Bill 743

- 2013 - Legislation approved by Governor
- 2018 - New CEQA VMT Guidelines and Technical Advisory
- July - Deadline to adopt 2020 new transportation policy





Senate Bill 743

New State Law that redefines the criteria for determining the significance of transportation environmental impacts

- Promote the reduction of GHG Emissions
- Development of multimodal transportation networks
- Diversity of land uses
- VMT the most appropriate measure



SB 743

CEQA Goals

- Requires all California cities to replace Level of Service (LOS) to measure CEQA transportation impacts with a methodology like Vehicle Miles Traveled (VMT) by July 2020.
- Focuses on reducing drive alone travel, rather than congestion to measure impacts.
- Encourages diversified/mixed-use development along transit corridors.
- Aligns with City's Climate Action Plan Goals.



CALIFORNIA REPUBLIC

City of Santa Clara
Climate Action Plan





Transportation Analysis - Today

CEQA

- Level of Service (LOS)

Non-CEQA

- Access and Circulation
- Traffic signal warrant studies
- Traffic calming
- Parking
- Pedestrian, Bicycle, and Transit





Transportation Analysis - Future

CEQA

- Vehicle Miles Traveled (VMT)

Non-CEQA

- Level of Service (LOS)
- Access and circulation
- Traffic signal warrant studies
- Traffic calming
- Parking
- Pedestrian, bicycle, and transit





Level of Service (LOS)

Current Method

- Measures congestion levels (delay) at signalized intersections
- Weekday and Peak Hour
- LOS grade “A” through “F” to indicate levels of congestion
- Mitigation can require roadway widening
- Facilitates vehicle traffic



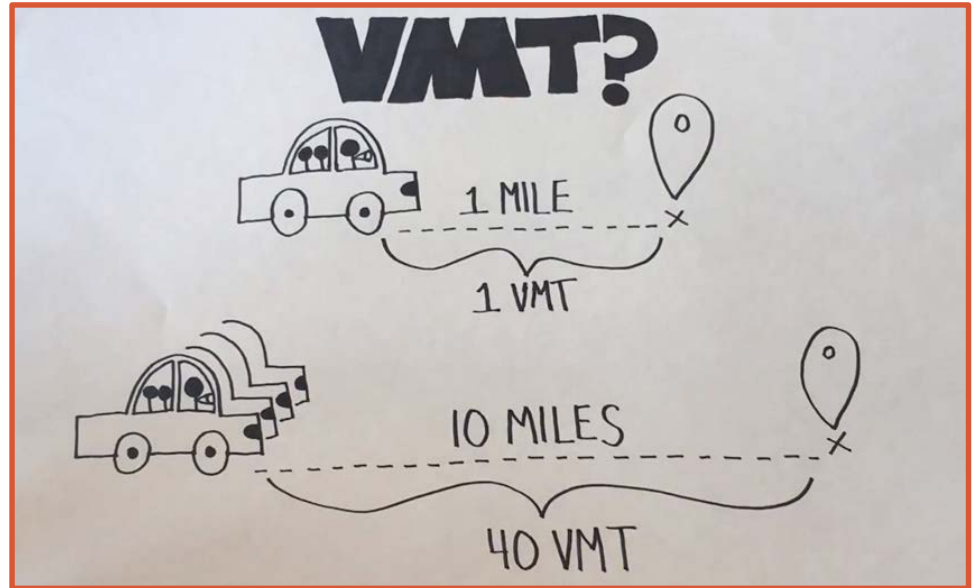


LOS Examples



Vehicle Miles Traveled (VMT)

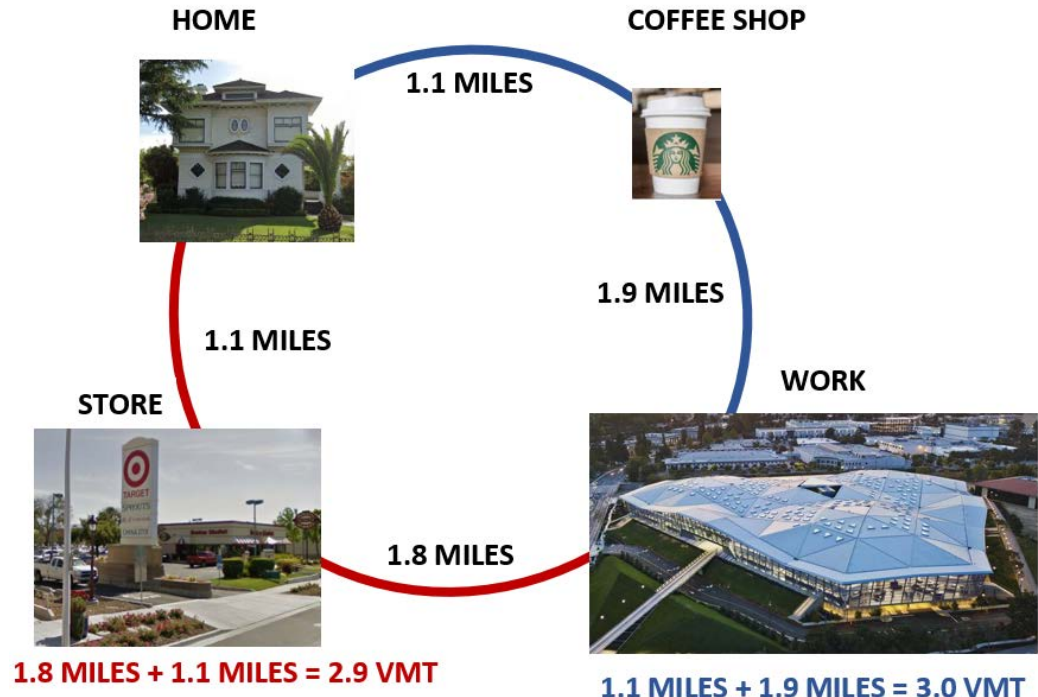
A “Vehicle Mile Traveled” is the ***distance*** (in miles) that a driver travels from point A to point B.





Project VMT

- Measuring weekday VMT
- Two main project types:
 - Residential
 - Home based trips
 - Employment
 - Work based trips





VMT

Goals:

- Reduce driving alone
- Reduce greenhouse gas emissions

Characteristics:

- Lower VMT:
 - Transit corridors
 - Diverse/dense land uses
 - Multimodal options available
- Higher VMT:
 - No available transit
 - No diversity of land use
 - Suburban areas





VMT Mitigation

- **Two Types of VMT Reduction Strategies**
 - Built-environment changes
 - Transportation Demand Management (TDM) strategies
- **Built Environment**
 - Changes to the project land use or surrounding multimodal transportation network
- **Travel Demand Management (TDM)**
 - Application of strategies, programs, and policies to reduce automobile travel



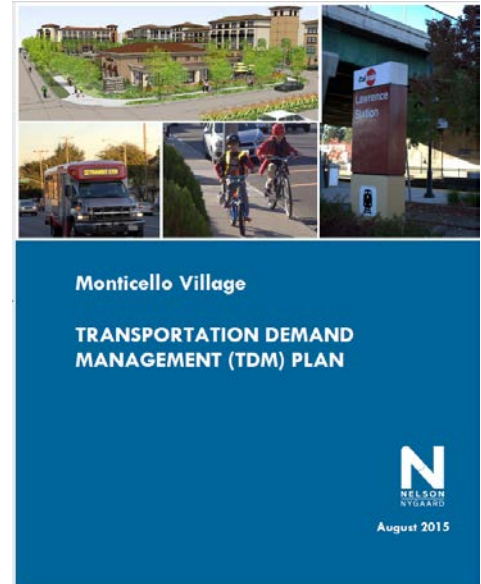
Built Environment VMT Mitigation

- Project density, land use diversity
- Improve the transportation network
 - New/wider sidewalks, sidewalks, crosswalks, signalized intersections
 - Bike lanes, bike amenities
 - Improve access to transit, upgrade transit stations



Travel Demand Management (TDM)

- Mitigation program/plan
- Effective VMT mitigation
- Requires monitoring
- Examples of TDM – shuttle programs, carpools, parking programs, transit incentives, etc., traveler information technology
- Particularly effective for employment projects





Transportation Project VMT

- Projects that lead to addition vehicle travel, or “induced vehicle travel”, must analyze and disclose
- Projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact.





Exempted Transportation Projects

- Rehabilitation, maintenance, repair that improve existing facilities that serve **bicycle and pedestrian facilities**
- Roadway shoulder improvements to provide **bicycle** access, etc.
- Roadway capacity projects provided the project also improves conditions for **pedestrians, cyclists**
- Grade separation for rail, transit, **pedestrians or bicycles**
- Traffic metering systems, and other electronics designed to optimize vehicle, **bicycle, or pedestrian flow**
- New or enhanced **bike or pedestrian facilities** on existing streets/highways or within existing public rights-of-way
- Class I bike paths, trails, multi-use paths, or other off-road facilities that serve **nonmotorized travel**



Policy / Procedures Considerations

- Set the baseline
- Define new “significant impact” threshold for CEQA VMT Impacts
- Determine mitigation measures (physical and programmatic)
- Establish exemption criteria
- Retain LOS for operational analysis



Research

Cities Who Implemented VMT

Common Issues/Concerns:

- Parking
- Lack of transit ridership
- Less transportation investment
- Intersection LOS analysis



VTA Coordination

- Congestion Management Agency
- Working with all member agencies to promote consistency between cities
- Technical support
- Modeling and mapping
- VMT evaluation tool





Outreach

- 8/26/19 City Manager's Blog
- 8/26/19 Launch VMT Webpage
- 10/24/19 Northside Library
Community Meeting
- 10/30/19 Central Library Community
Meeting
- 11/05/19 City Council Study Session
- 12/11/19 Planning Commission Study
Session





City Council Study Session

November 5, 2019

City Council Feedback:

- Traffic condition is Regional
- Develop a Countywide plan all cities conform
- The use of big data in measuring VMT
- How does the Travel Demand Model measure VMT
- How do we estimate VMT
- LOS is important to keep





Planning Commission Study Session

December 11, 2019

Planning Commission Feedback:

- Regional traffic conditions
- Effective Travel Demand Management Programs (TDM)
- More VMT reduction than currently required
- The value of bike and scooter share programs
- Limited availability of Transit options
- Importance of Level of Service (LOS)
- Transportation Management Associations (TMAs)
- Vision Zero





Schedule

- February/March 2020
 - Community Outreach
 - CC and PC Study Sessions
- March/April 2020 – Planning Commission
- May/June 2020 – City Council





Questions and Feedback



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LOS vs VMT

Level of Service (LOS)	vs	Vehicle Miles Traveled (VMT)
Total # of vehicles at intersections		Total # of vehicle miles generated
LOS during peak hour only		VMT for all day
Focus on automobile travel		Focus on all travel
Improves vehicle capacity		Improves ped, bike, and transit access
Facilitates driving		Promotes other transportation options
Can encourage development in suburban areas		Encourages development along transit in urban areas
Can increase greenhouse gas emissions		Focus on reducing greenhouse gas emissions