VMT Winners and Losers

Agenda

• Why VMT?
• SB 743 Overview
• Thresholds
• Examples
• LOS after VMT
• TDM
• Take-Aways
History of LOS

• First Edition of HCM published in 1950
• There have been 6 editions
• Significantly guided transportation decision-making
• 70 year later its application has been tied to
  • Urban Sprawl
  • Impacts to active transportation
  • Induced demand
• We know how LOS affects outcomes

SB 743 Overview

• SB 743 is California Environmental Quality Act (CEQA) specific
• Basis for a “transportation significant impact” determination
• Sustainability and GHG reduction by
  • Denser infill development
  • Reducing single occupancy vehicles
  • Improved mass transit
• VMT is the principal metric
OPR VMT Thresholds

- Residential: 15% less than Average VMT per/capita
- Office: 15% less than Average VMT per/employee
- Retail: Net increase in total VMT
- Transportation: Net increase in total VMT
- Allowable Non-Significant Presumptions
  - Less than 110 trips per day
  - Within a ½ mile of major Transit Stop
  - Local retail (<50,000 Sq Ft)
  - Affordable infill housing
  - Map-based Screening
SB 743 Example #1

**Facts**

*Land Use Description*
- 1,000 SFR units in a master planned community
- Suburban/rural context

*Primary Analysis Tool*
- Travel Demand Model

*Location*
- Rural Central Valley
EFFICIENCY METRIC
RESIDENTIAL VEHICLE MILES TRAVELED (VMT)

School Trip: 2 trips x 7 miles = 14 VMT
Shopping Trip: 2 trips x 8 miles = 16 VMT
Work Trip: 2 trips x 10 miles = 20 VMT

Total VMT = 14 + 16 + 20 = 50 VMT
3 people = 16.7 miles/capita

Regional per Capita Threshold = 17.5 VMT/capita

FACTS:
- Parent 1 takes child to school
- Parent 1 goes shopping
- Parent 2 goes to work
- Family has 3 persons

NO SIGNIFICANT IMPACT
SB 743 Example #1
SB 743 Example #1: Likely Significant Impact
SB 743 Example #2

Facts

Land Use Description
• 12,000 Square Foot Retail Store
• Urban context

Primary Analysis Tools/Methods
• Qualitative

Location
• Northern California
NET CHANGE METRIC

RETAIL VEHICLE MILES TRAVELED (VMT)

Regional VMT with Project = 4.999M VMT
Regional VMT w/o Project = 5.000M VMT
- 0.001M VMT

FACTS:
- New store added
- Existing shoppers pick the shortest trip

REGIONAL VMT = 5.00M

REGIONAL VMT = 4.999M

NO SIGNIFICANT IMPACT
SB 743 Example #2
SB 743 Example #2: No Significant Impact
SB 743 Example #3

Facts
Land Use Description
• Medical Office Building (MOB)
• 25,000 Square Feet

Primary Analysis Tools
• GIS
• Use of Real Data
• Travel Demand Model – Multipath Analysis

Location
• Central Coast
SB 743 Example #3
SB 743 Example #3: No Significant Impact
SB 743 Example #4

**Facts**

*Land Use Description*
- 150 unit hotel
- at an existing event venue

*Primary Analysis Tools/Methods*
- Travel Demand Model – Multipath Analysis
- Use of Real Data

*Location*
- Northern California
SB 743 Example #4

Analysis Details
- New trips (vs existing)?
- Existing overnight stays?
- Evaluate hotel trips
  - Employee
  - Guest Initial trips
  - Guest local trips

Challenges
- No Travel Demand Model
- Multiple trip types
SB 743 Example #4
VMT Winners and Losers

SB 743 Example #4: Likely Significant Impact
Mitigations can be impacts
### Anecdotal Results

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Local Transportation Analysis

- LOS is still an important metric
  - Circulation
  - Site access
  - Proxy for Safety
  - Congestion Management Programs
  - General Plan Compliance

- Increasing importance of other metrics
  - Safety
  - Travel time and travel time reliability
  - Air quality
  - Person trips (throughput)
VMT Mitigation/ TDMs (Winner!!!)

- Land Use
  - Jobs/Housing balance (mixed use and/or proximity)
  - Infill retail

- Transportation Demand Measures
  - Van pools/ guaranteed rides
  - Flexible work schedule
  - Transit passes and/or transit improvements
  - First mile – Last mile
  - Alternate modes incentives and improvements

- Monitoring and programming
- VMT Banking and Exchanges
Take-Aways

- VMT reduction is part of California’s approach to meeting State Goals
- SB 743 is changing land use planning and analysis outcomes
- Roadway widening can be a challenge with VMT
- LOS isn’t going away
- Many of the outcomes of SB 743 are still being realized and understood
Questions