

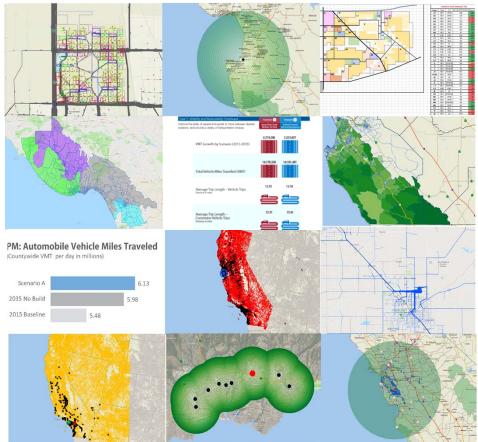
May 23, 2023





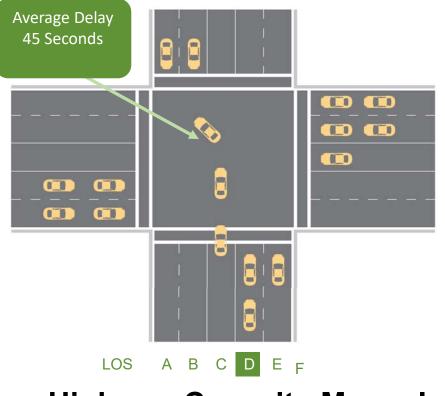
Agenda

- Level of Service (LOS) background
- SB 743 and Vehicle Miles Travelled (VMT)
- Hawthorne's VMT Thresholds
- Analysis Steps
- TREDLite
- Recommendation



Level of Service

Impact to the Driver



Highway Capacity Manual

Vehicle Miles Traveled

Diver's Impact to Transportation System



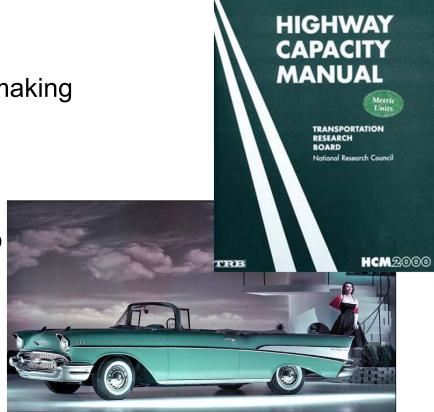
Travel Demand Model ₃





History of LOS

- Significantly guides transportation decision-making
- First Edition of HCM published in 1950
- There have been 6 editions
- 70 years later its application has been tied to
 - Urban Sprawl
 - Impacts to active transportation
 - Induced demand



Genat, Robert (2003). Original Chevrolet, 1955, 1956, 1957 – The Restorer's Guide. Motorbooks International. p. 66. ISBN 0-7603-1548-5. Retrieved May 1, 2013.





SB 743 Overview

- SB 743 is CEQA Specific
- Basis for a "transportation significant impact"
 determination
- Sustainability and GHG reduction by
 - Denser infill development
 - Reducing single occupancy vehicles
 - Improved mass transit
- Lead agencies have until July 1, 2020
- Most recent guidance is from December 2018
- · Recommends that land uses be split out
- VMT is the principal metric

WHAT IS VMT?			
VEHICLES			
MILES		3 miles	
		4 vehicles travel 3 miles or simply 4x3 = 12 VMT	





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 for region
- Transportation: Net increase to VMT
- Neither statute or CEQA Guidelines include thresholds
- "Substantial evidence" (Section15384) as the basis for not following OPR





Significance Threshold and Methodology

Land Use	VMT Threshold	Basis
Residential	11.9 VMT/capita9	15% below existing county-wide average residential VMT per capita
Office	18.7 Work VMT/Employee ¹⁰	15% below existing county-wide average Work VMT per employee
Retail	Net regional change	Using the Los Angeles County as the basis
Other Employment	18.7 Work VMT/Employee ¹⁰	15% below existing county-wide average Work VMT per employee
Other Customer	Net regional change	Using the Los Angeles County region as the basis

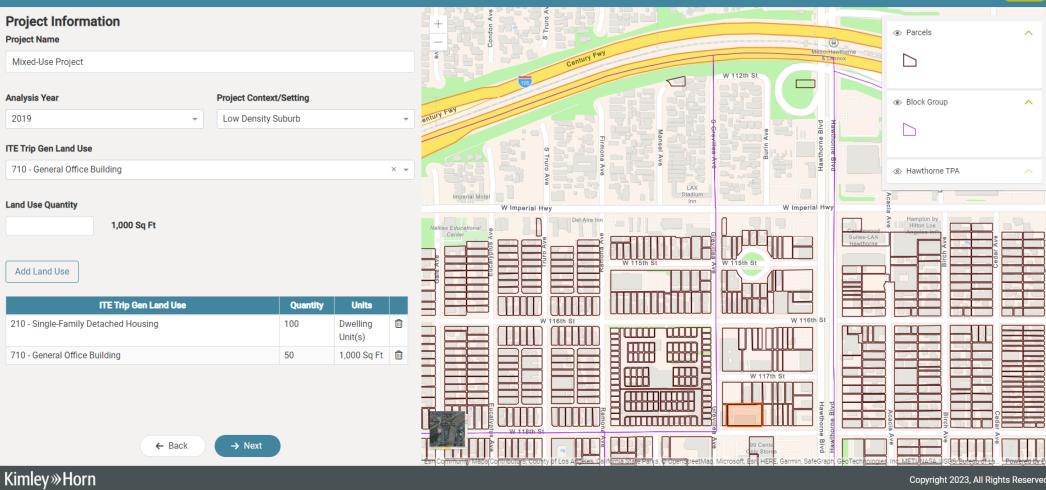




Analysis Steps

• Evaluate land use
• Screen for non-signifcant transportation impact
Step 3 • Determine significance threshold and methodology
Step 4 • Scope of Analysis Agreement
• Analysis and Mitigation
• Mitigation Monitoring (if Required)

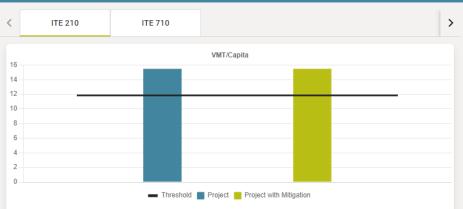
»TREDLiteVMT



Copyright 2023, All Rights Reserved.

	 	-	-						
» ⁻	21	-1	• 1	t٩	a١	1	N		l
~	\ L			ш	-	v	Ľ	V	l

emand Managen	ient (TD	(IVI)		
				reduction
Single-Family Detached H	lousing			
n: 20%				
Description	Max VMT Reduction	Input	Input Definition	Reduction
Group Max Reduction: 20)%, Current I	Reduction: 0.0	0%	~
ms - Group Max Reductio	on: 20%, Cur	ent Reduction	: 0.00%	^
This measure will implement a voluntary commute trip reduction (CTR) program with employers. CTR programs discourage single occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions.	4.00%	0 %	percent of employees eligible	0.00%
This measure will implement a mandatory CTR program with employers. CTR programs discourage single- occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking,	20.00%	0 %	percent of employees eligible	0.00%
	ted in each group by up to ust not exceed the max re Single-Family Detached H n: 20% Description Group Max Reduction: 20 ms - Group Max Reduction This measure will implement a voluntary commute trip reduction (CTR) program with employers. CTR programs discourage single occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions. This measure will implement a mandatory CTR program with employers. CTR programs discourage single- occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions.	ted in each group by up to the stated of ust not exceed the max reduction for i Single-Family Detached Housing n: 20% Description Max VMT Reduction Group Max Reduction: 20%, Current F ms - Group Max Reduction: 20% Max Reduction: 20%	ted in each group by up to the stated Group Max Results not exceed the max reduction for its respective of Single-Family Detached Housing 20% Description Max VMT Reduction Input Reduction: Group Max Reduction: 20%, Current Reduction: 0.00 Imput Reduction: 0.00 rms - Group Max Reduction: 20%, Current Reduction: 0.00 0 % This measure will implement a voluntary commute trip reduction (CTR) program with employers. CTR programs discourage single occupancy vehicle trips 4.00% and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions. 0 % This measure will implement a mandatory CTR program with employers. CTR programs discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions. 0 % This measure will implement a mandatory CTR program with employers. CTR programs discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking 20.00%	ted in each group by up to the stated Group Max Reduction. The current rust not exceed the max reduction for its respective group. Single-Family Detached Housing n: 20% Description Max VMT Input Input Input Definition Reduction Group Max Reduction: 20%, Current Reduction: 0.00% This measure will implement a voluntary commute trip reduction (CTR) program with employers. CTR programs discourage single occupancy vehicle trips and encourage alternative modes of transportation Such as carpooling, taking 20.00%



Regional Average (VMT/Capita): 13.9 Threshold (15% below Average): 11.9

Metric		Proje	ct	Mitigation	With Mitigation 15.5 0	
VMT/Capita Daily Trips		15.5		0.0		
		6,499		0		
Pollutant	Mobile	Mitigation	With Mitigation	Non Mobile	Total	
CO (lb/day)	278.61	0.00	278.61	342.76	621.37	
ROG (lb/day)	25.42	0.00	25.42	55.99	81.41	
NOX (lb/day)	37.46	0.00	37.46	52.50	89.96	
SOX (lb/day)	0.53	0.00	0.53	0.63	1.16	
PM2.5 (lb/day)	13.37	0.00	13.37	14.85	28.22	
PM10 (lb/day)	48.65	0.00	48.65	50.13	98.78	
CO ₂ (mt/year)	8,603.97	0.00	8,603.97	12,738.16	21,342.13	

Kimley»Horn

Copyright 2023, All Rights Reserved.

Log In





TDM Mitigations

- Trip Reduction Program (Voluntary)
- Trip Reduction Program (Mandatory)
- Commute Trip Reduction Marketing
- Subsidized Transit Program
- Provide End-of-Trip Bicycle Facilities

- Employer-Sponsored Vanpool
- Price Workplace Parking
- Electric Vehicle Charging Infrastructure
- Pedestrian Network Improvement
- Construct or Improve Bike Facility







Recommendation

 Staff recommends adoption of the draft resolution establishing VMT thresholds of significance for transportation impact analysis





Questions

