

MODERNIZING LOS ANGELES' APPROACH TO TRANSPORTATION ANALYSIS

Institute of Transportation Engineers (ITE): Mitigation Measures for VMT Impacts
March 17, 2021



VMT is Aligned with Local Goals



Reduction in GHGs



Multimodal mobility networks



Diversity of land uses



Mobility Plan 2035 and LA's Green New Deal goals



New Metric: Vehicle Miles Traveled (VMT)



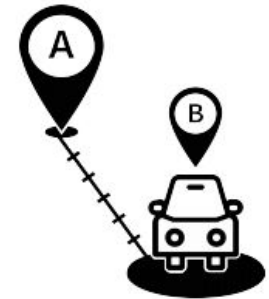
Number of
automobile trips

X



Number of
miles driven

=

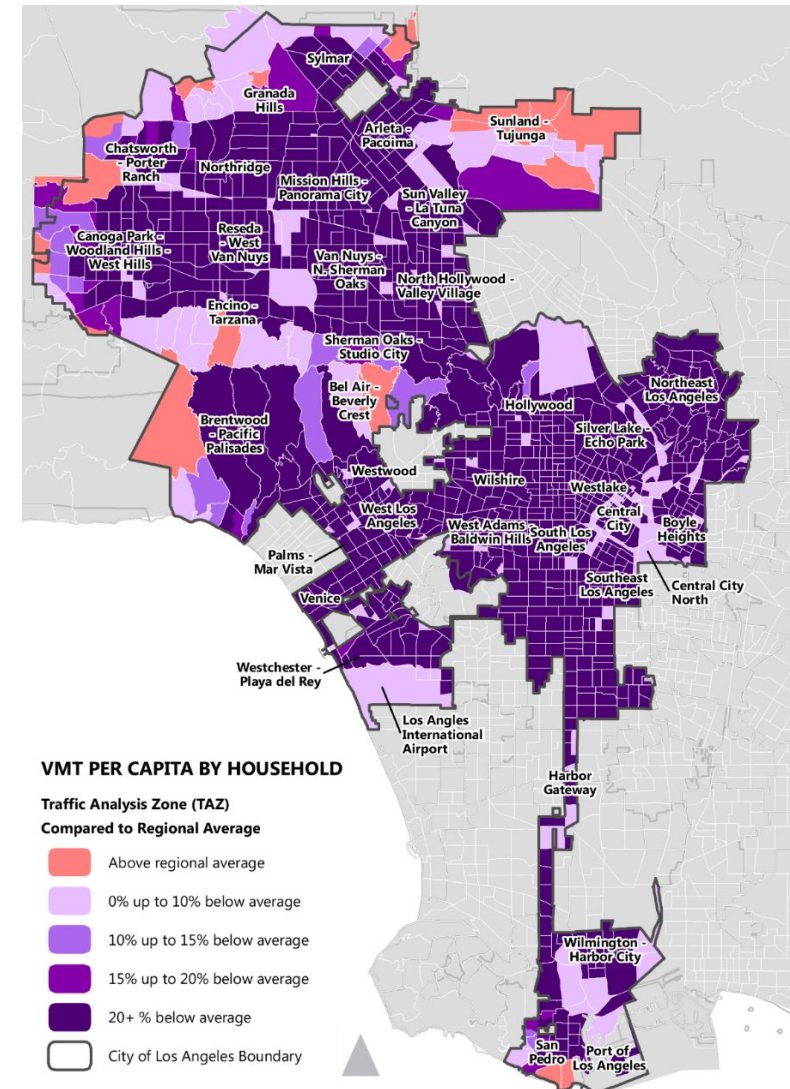


Vehicles Miles
Traveled

Los Angeles' Approach: Establishing a Threshold

Developed local VMT threshold that is lower than the region's which ensures more projects comply with CEQA

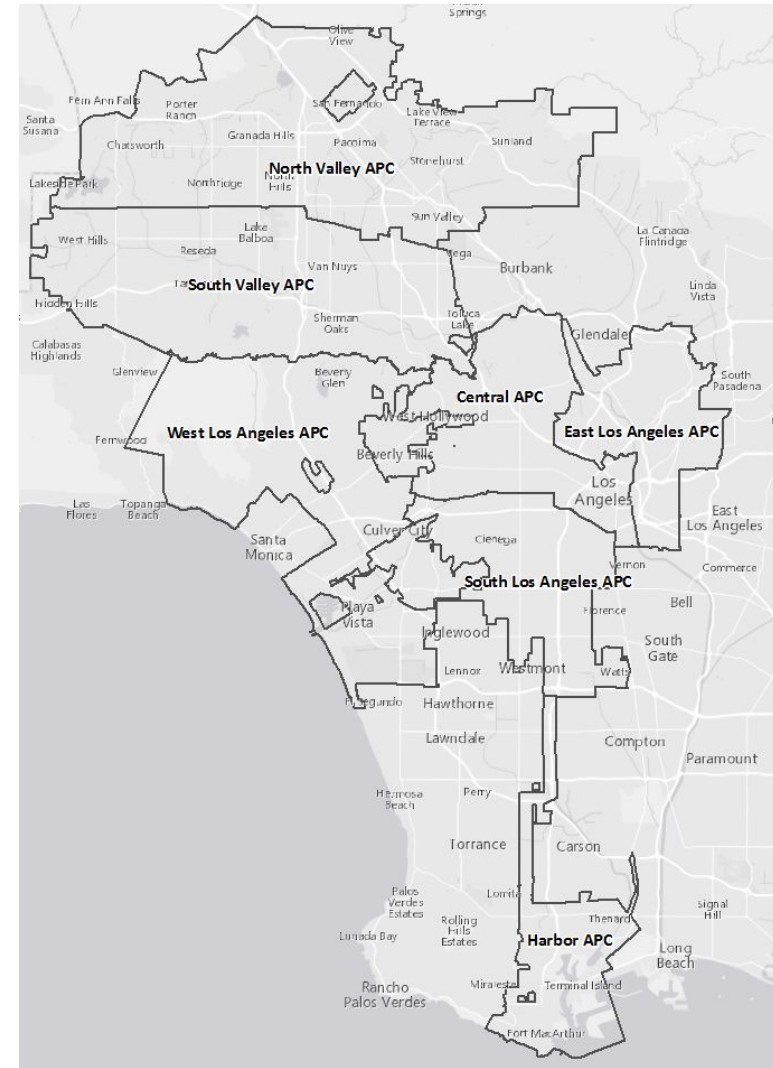
Geography	VMT per capita	VMT per employee
SCAG	17.2	21.3
City of LA	9.3	12.9



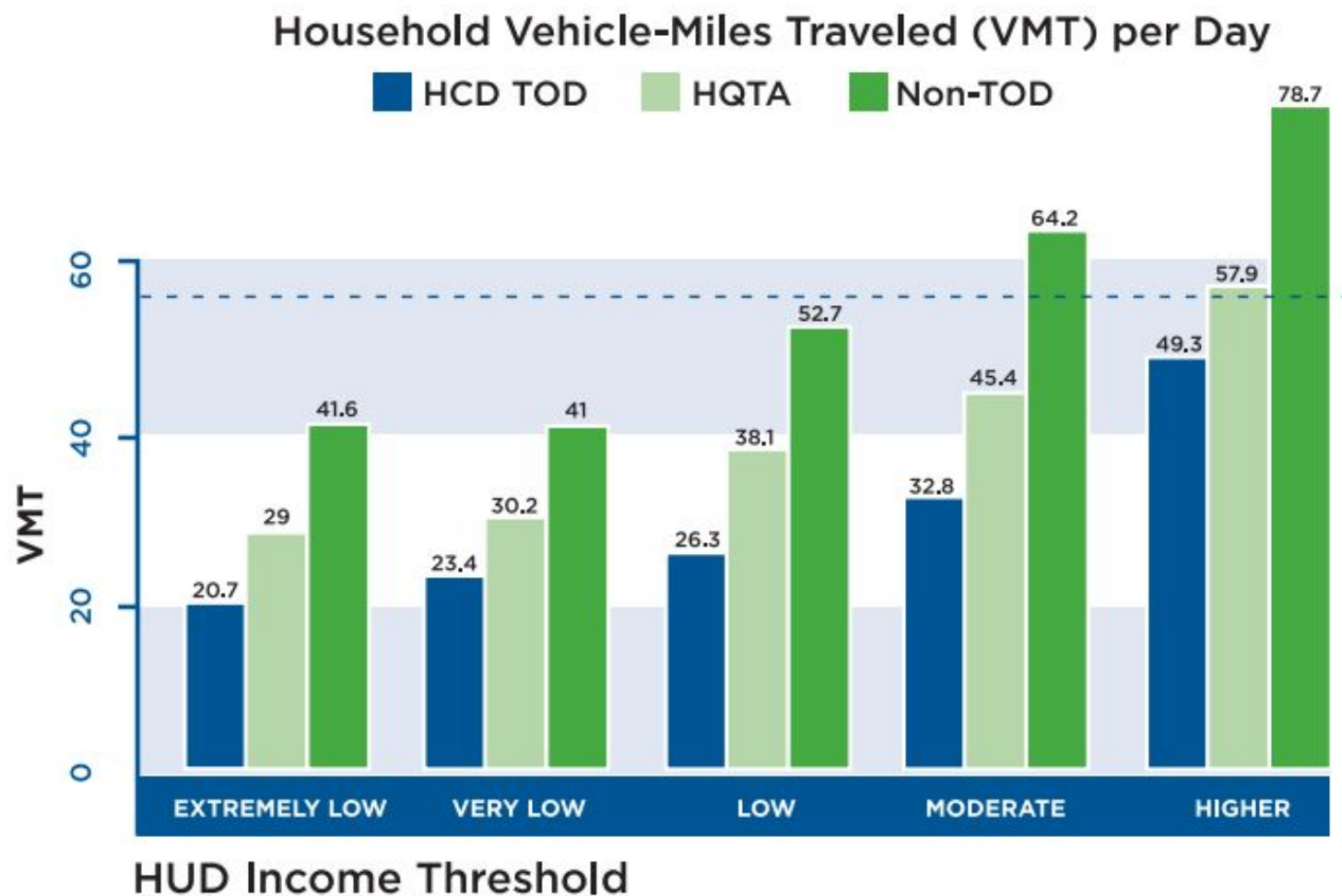
Los Angeles' Approach: Establishing a Threshold

Developed local VMT threshold that is context sensitive

Area Planning Commission	VMT per capita	VMT per employee
Central	6.0	7.6
East LA	7.2	12.7
Harbor	9.2	12.3
North Valley	9.2	15.0
South LA	6.0	11.6
South Valley	9.4	11.6
West LA	7.4	11.1

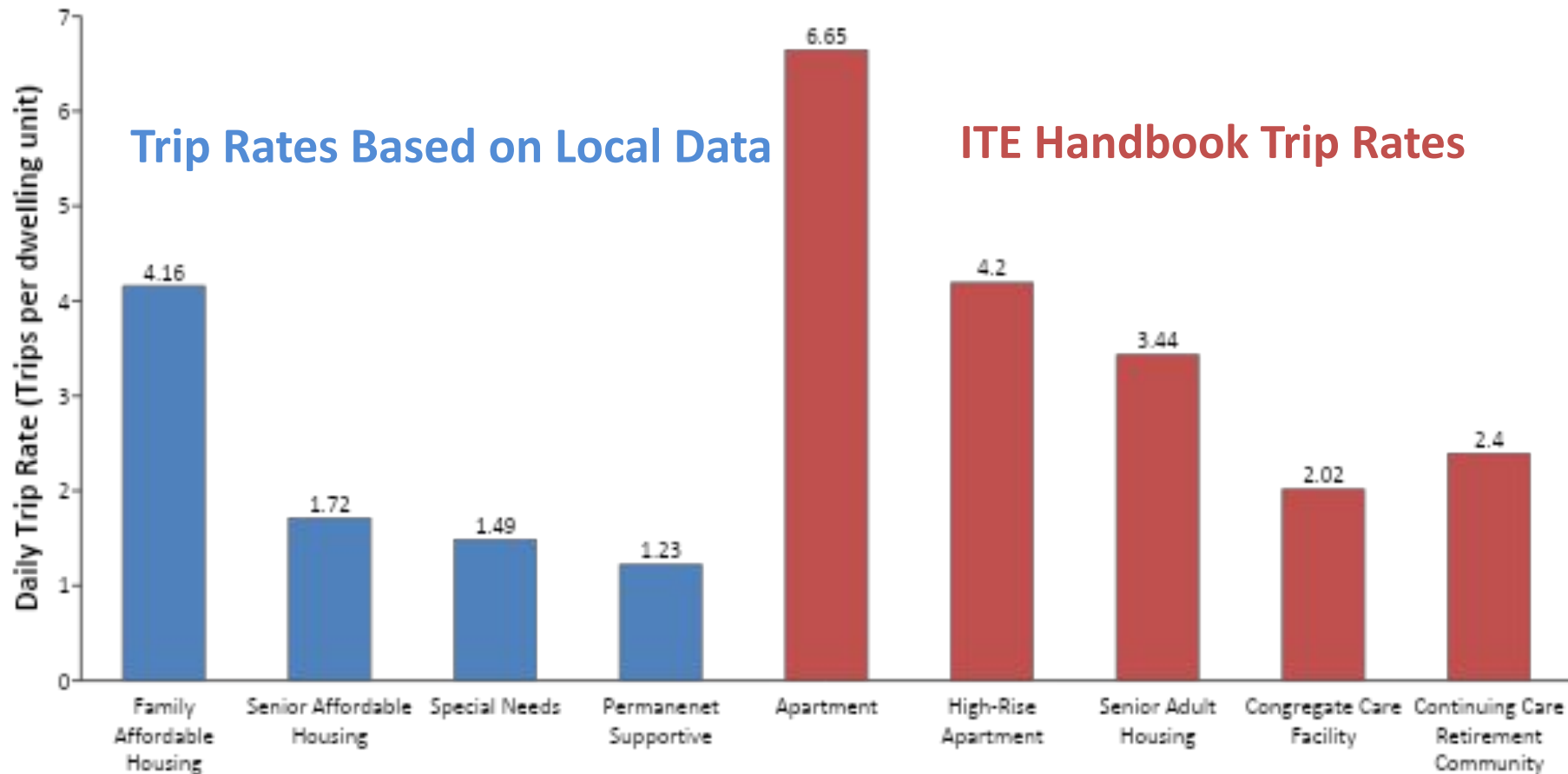


Affordable Housing Sites Generate Lower VMT



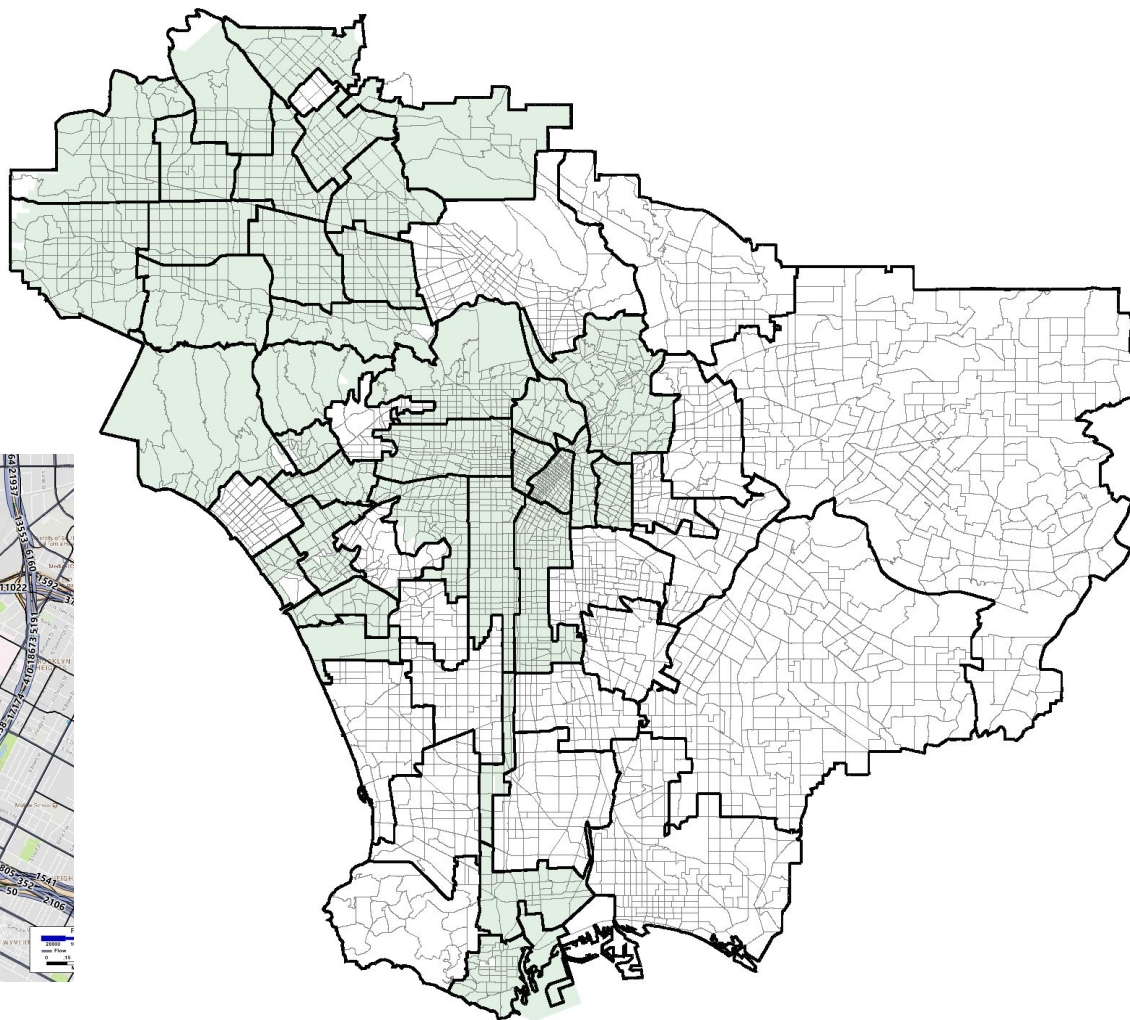
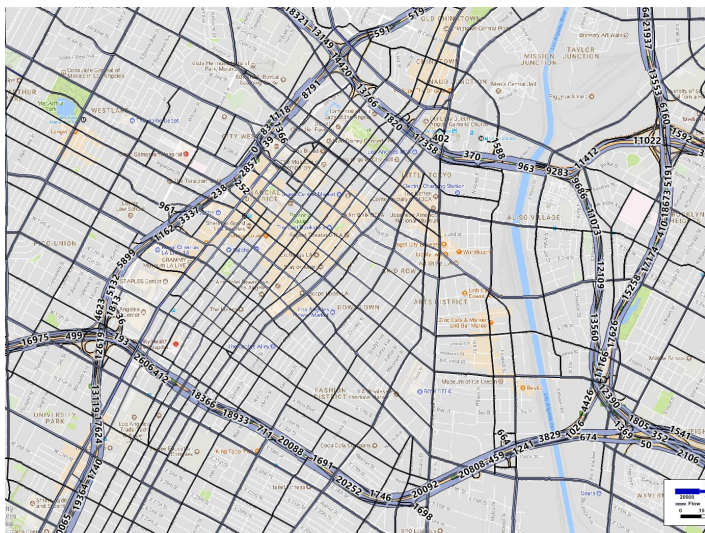
Source: 2013 California Household Travel Survey (CHTS)

Affordable Housing Trip Generation Rates in LA

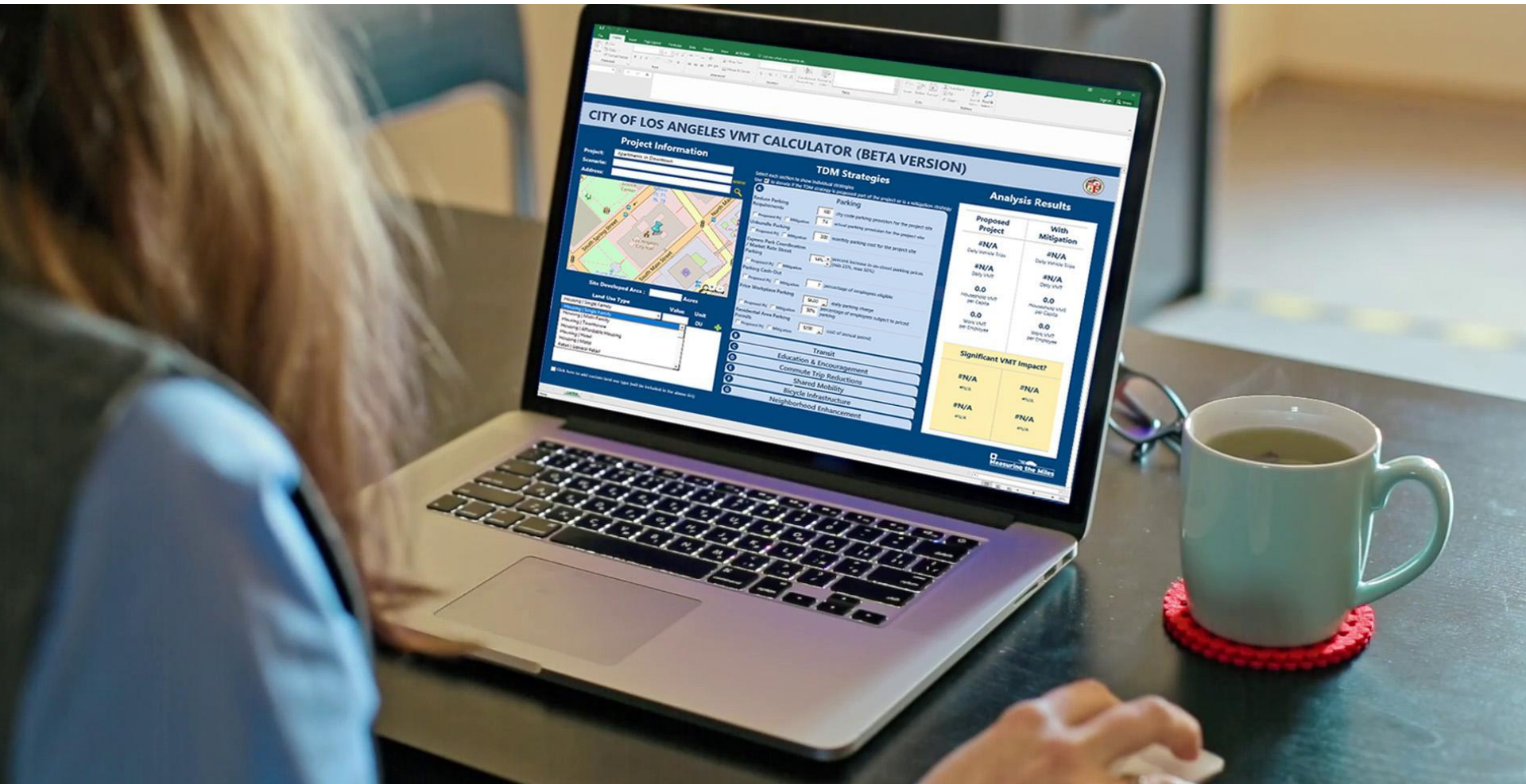


Los Angeles' Approach: Local TDF Model

Updated City Travel
Demand Forecasting
Model based on 2016
SCAG Model Update



Los Angeles' Approach: VMT Calculator




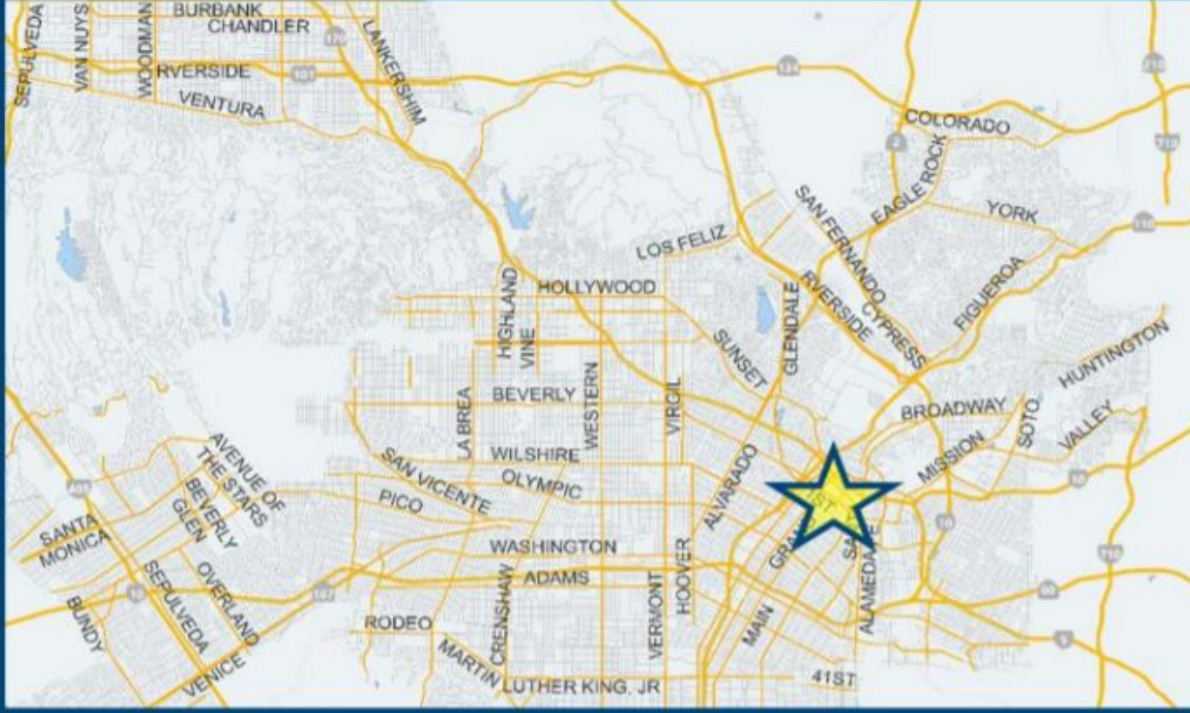
Los Angeles' Approach: VMT Calculator

Project Information

Project:

Scenario: [WWW](#)

Address: 



The map displays the Los Angeles metropolitan area with major freeways and streets. A yellow star is placed on the map to indicate the location of Los Angeles City Hall, which is situated at the intersection of Main Street and Spring Street in downtown Los Angeles. The star is positioned near the center of the map, between the 10th and 20th streets north-south and the 1st and 2nd streets east-west.

Los Angeles' Approach: VMT Calculator

TDM Strategies

Select each section to show individual strategies
Use to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	No	No
Max Work Based TDM Achieved?	No	No

A 1

Parking

Reduce Parking Supply 2

Proposed Prj Mitigation

<input type="text" value="100"/>	city code parking provision for the project site 3
<input type="text" value="74"/>	actual parking provision for the project site

Unbundle Parking

Proposed Prj Mitigation

<input type="text" value="150"/>	monthly parking cost (dollar) for the project site
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Parking Cash-Out

Proposed Prj Mitigation

<input type="text" value="50"/>	percent of employees eligible
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Price Workplace Parking

Proposed Prj Mitigation

<input type="text" value="6.00"/>	daily parking charge (dollar)
<input type="text" value="25"/>	percent of employees subject to priced parking

Residential Area Parking Permits

Proposed Prj Mitigation

<input type="text" value="200"/>	cost (dollar) of annual permit
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B 1

C 1

D 1

E 1

F 1

G 1

Analysis Results

Proposed Project ¹	With Mitigation ²
4,376 Daily Vehicle Trips	3,829 Daily Vehicle Trips
35,590 Daily VMT	31,141 Daily VMT
0.0 Household VMT per Capita	0.0 Household VMT per Capita
6.9 Work VMT per Employee	6.0 Work VMT per Employee
Significant VMT Impact?	
Household: No Threshold = 6.0 15% Below APC	Household: No Threshold = 6.0 15% Below APC
Work: No Threshold = 7.6 15% Below APC	Work: No Threshold = 7.6 15% Below APC

Los Angeles' Approach: TDM Mitigation Measures

Parking Management

- Reduce Parking Supply
- Unbundle Parking
- Parking Cash-Out
- Price Workplace Parking
- Residential Area Parking Permits

Transit Incentives

- Reduce transit headways
- Implement Neighborhood Shuttle
- Transit Subsidies

Education & Marketing

- Voluntary Travel Behavior Change Program
- Promotions & Marketing

Commute Trip Reductions

- Required Commute Trip Reduction Program
- Vanpool or Shuttle
- Rideshare Program

Shared Mobility

- Car share
- Bike share
- Schoolpool

Bicycle Infrastructure

- Improve Bicycle Facility
- Bike Parking
- Bike Parking and Showers

Neighborhood Enhancement





- Traffic Calming Improvements
- Pedestrian Improvements

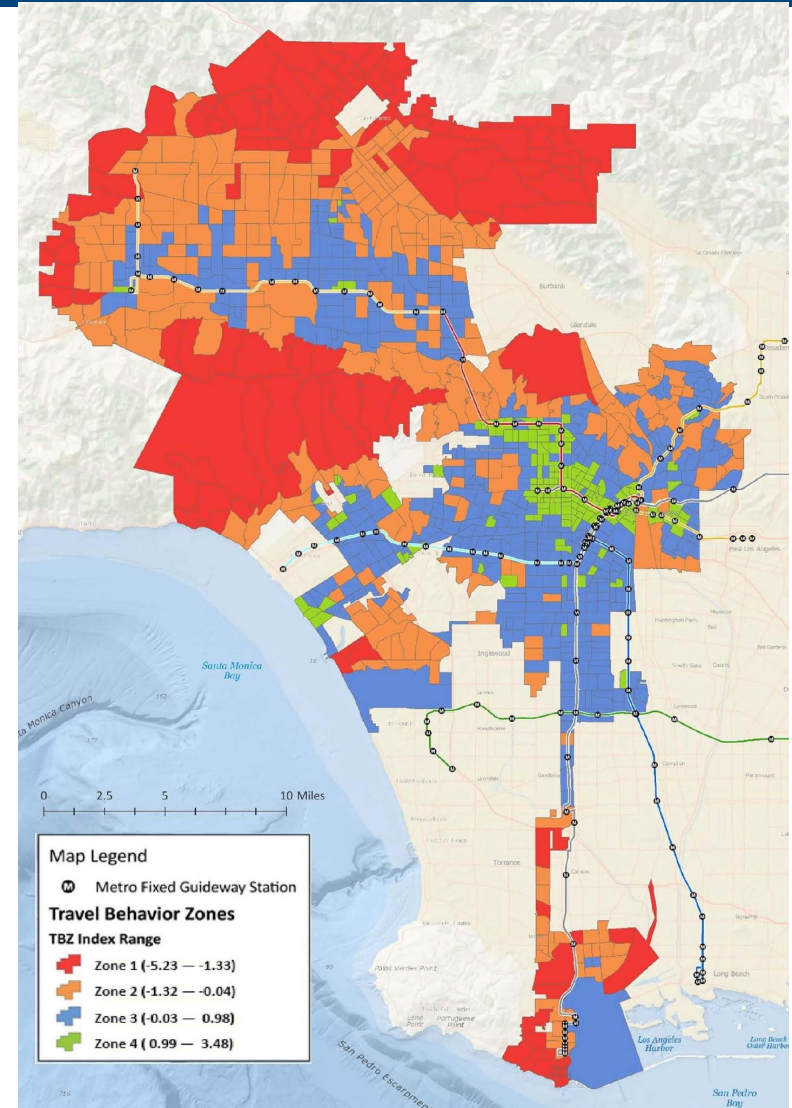
Los Angeles's Approach Travel Behavior Zones

Quantifying TDM

- Classified the City in four Travel Behavior Zones (TBZ) informed by four factors that inform travel in the built environment.
- Aligned with Place Types from CAPCOA's Quantifying GHG Mitigation Measures Report

Travel Behavior Zones

	Suburban (15% VMT Reduction Cap)
	Suburban Center (20% VMT Reduction Cap)
	Compact Infill (40% VMT Reduction Cap)
	Urban (75% VMT Reduction Cap)



Next Steps for Los Angeles

1. VMT Research



Parking



Infrastructure



Mobility Services

2. VMT-Based Fee Programs

- VMT Exchange/Bank
- Transportation Specific Plans

3. City of LA TDM Program Update

Questions?



Rubina Ghazarian

Supervising Transportation Planner II
LADOT Transportation Planning & Policy

Email: rubina.ghazarian@lacity.org

Project Website:

[ladot.lacity.org/businesses/development-review#
new-requirements-for-sustainable-developments](http://ladot.lacity.org/businesses/development-review#new-requirements-for-sustainable-developments)

