### Board of Supervisors Workshop June 30, 2020 Legistar #20-0606

LA

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EL DORADO COUNTY AND



Reduce greenhouse gas emissions



 Balance the needs of congestion management with statewide goals related to infill development



 Improve public health through active transportation





## STATE OF CALIFORNIA General Plan Guidelines



## What SB 743 Does Not Do...

No change to general plans, traffic impact fee programs, State Constitution, etc.





## What SB 743 Does Do...

- Eliminates Level of Service (LOS) / Delay
- Adds Vehicle Miles Traveled (VMT)
- Methods and Thresholds Guidance



- Traditional CEQA Focus: Measure impacts to driving
- Post-SB 743 CEQA Focus: Measure impacts <u>from</u> driving



**Higher VMT Per Capita** 



**Lower VMT Per Capita** 



## **SHIFTING CEQA METRICS**

- Impacts measured by LOS (Traditional CEQA Focus)
  - Travel time delays while driving
  - Traffic congestion

			HCM 2010 Planning Level Volumes <sup>1</sup>				
Code	Functional Class Codes (Updated to HCM 2010)	Α	В	С	D	E	
2A	Two-Lane Arterial	-	-	850	1,540	1,650	
4AU	Four-Lane Arterial, Undivided	-	-	1,760	3,070	3,130	
4AD	Four-Lane Arterial, Divided	-	-	1,850	3,220	3,290	
6AD	Six-Lane Arterial, Divided	-	-	2,760	4,680	4,710	
4M	Four-Lane Multi-Highway (Two Dir.)	-	2,240	3,230	4,250	4,970	
2F	Two Freeway Lanes (One Dir.)	-	2,070	2,880	3,590	4,150	
2FA	Two Freeway Lanes + Auxiliary Lane (One Dir.)	-	2,610	3,630	4,520	5,230	
3F	Three Freeway Lanes (One Dir.)	-	3,100	4,320	5,380	6,230	
3FA	Three Freeway Lanes + Auxiliary Lane (One Dir.)	-	3,640	5,070	6,320	7,310	
4F	Four Freeway Lanes (One Dir.)	-	4,140	5,760	7,180	8,310	
1	Freeway LOS based on HCM 2010, Exhibit 10-8, Urban Area, Rolling Terrain, K-factor of 0.09, and D-factor of 0.60						
	2-lane highway (and arterial 2-lane) LOS based on HCM 2010, Exhibit 15-30, Class II Rolling, .09 K-factor, of 0.6						
	Arterial LOS based on HCM 2010, Exhibit 16-14, K-factor of 0.09, posted speed 45 mi/h						
	Volumes are for both directions unless noted						

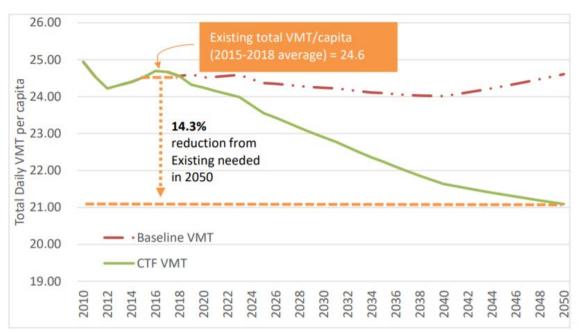
Table 1: El Dorado County Peak Hour Roadway Segment LOS Criterion

El Dorado County Community Development Agency. 2014. Transportation Impact Study Guidelines.

https://www.edcgov.us/Government/longrangeplanning/DOT/tis-guidelines/documents/TIS-Guidelines-November-2014-Final-01-08-14.pdf (pg. 11)

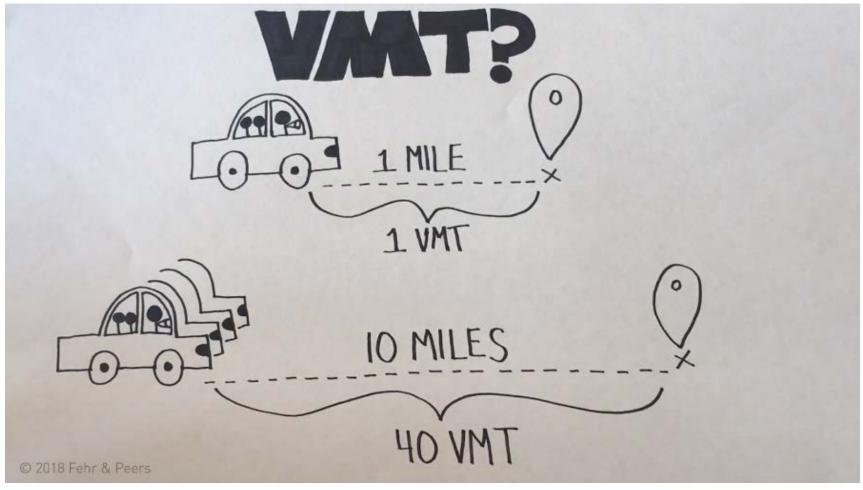


- Impacts measured by VMT (Post-SB 743)
  - Greenhouse Gas Emissions
  - Air pollution
  - Noise
  - Safety



California Air Resources Board. 2017. *Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals*. <u>https://ww2.arb.ca.gov/sites/default/files/2019-</u>01/2017\_sp\_vmt\_reductions\_jan19.pdf (pg. 10)

# What is VMT?

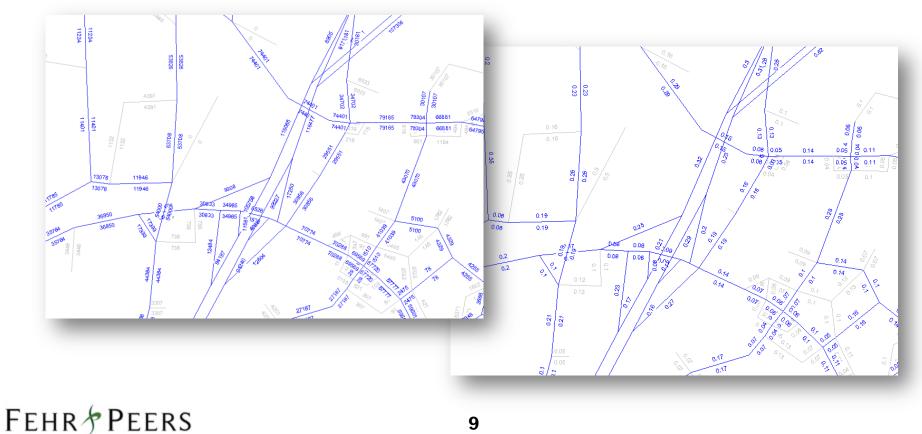


Source Video



VMT FORECASTING

## VMT = Volume x Distance or Trips x Trip Length





## **Project Generated VMT vs. the Project's Effect on VMT Project vs. Cumulative**





- In 2018, the El Dorado County Transportation Commission (EDCTC) hired Fehr & Peers to perform work to assist the County and the City of Placerville with implementation of SB 743.
- Fehr & Peers worked in direct partnership with County, City and EDCTC staff to review the existing General Plan policies, travel demand model metrics and other technical elements.
- The Plan was accepted by the EDCTC on August 1, 2019.



- The Plan produced an analysis tool for use by the jurisdictions that is based on the El Dorado County Travel Demand Model (EDCTDM).
- The Plan proposed using the County's Community Region Boundaries to set the thresholds instead of the Sacramento Area Council of Governments (SACOG) region.
- Updates to the TDM were needed to easily produce the analytics in the appropriate metrics to complete the transportation analysis for a CEQA document.



## **El Dorado County Travel Demand Model Update**

FEHR / PEERS



- Enhancements currently being made in response to SB 743:
  - Adjust the length of trips that travel across the EDCTDM's boundaries
  - Calculate SB 743 compliant VMT estimates
  - Enhance the models sensitivity to the built environment to test VMT mitigation measures (based on latest research)



## VMT FORECASTING

EL DORADO COUNTY TRAVEL DEMAND MODEL

- El Dorado County Travel Demand Model
  - Can estimate project generated VMT and the project's effect on VMT
  - Existing (2016) and future year (2040) conditions based on the General Plan





## **BUILT ENVIRONMENT**

- Built environment changes that can reduce VMT:
  - Increase employment and residential density
  - Improve jobs-to-housing balance
  - Increase access to nearby employment opportunities
  - Increase intersection density
- Sociodemographic characteristics that influence VMT:
  - Average household size
  - Average household vehicles per resident



- VMT Thresholds for Future Projects
  - Use Office of Planning & Research (OPR) Guidance or
  - Local Threshold
- What is the threshold for a significant impact?
  - For a Land Use Project
  - For a Transportation Project

# SB743 OPR SUGGESTED THRESHOLD



- OPR suggests a threshold of 15 percent below
  baseline for land use
  projects in Metropolitan
  Planning Organization
  (MPO) areas.
- El Dorado County is within the SACOG MPO.



- Absolute vs. Efficiency Metrics
  - Absolute: Total VMT
  - Efficiency: Total VMT per service population
- Project Effect vs. Project-Generated VMT
  - Project Effect: Captures changes in existing travel patterns
  - Project Generated: Captures project traffic only
- Qualitative Assessment

## **B743** POTENTIAL MITIGATION MEASURES



Provide rideshare or car-share programs

0.3 - 8.3%



Build low-stress bicycle network improvements & provide traffic calming measures

0-1.7%



Encourage tele-commuting & alternative work schedules

0.2 - 4.5%



Increase diversity of land use 0 – 12%



Improve pedestrian network 0.5 – 5.7%



Regional VMT Mitigation Program Unknown



- Additional Board Workshop if needed
- Staff return to Board with Resolution to adopt Significance Thresholds





## **Questions?**

