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 ¹ | | | | |
|------|---|---|--|-------|-------|-------|--|
| 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 | | | | | | |

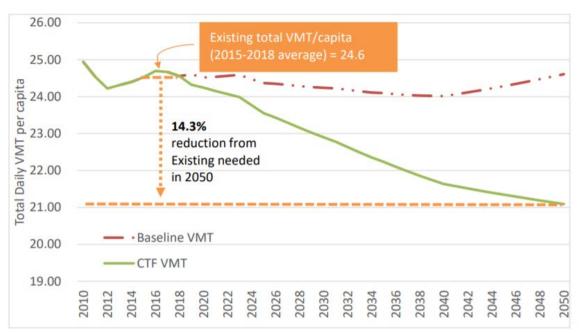
Table 1: El Dorado County Peak Hour Roadway Segment LOS Criterion

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)

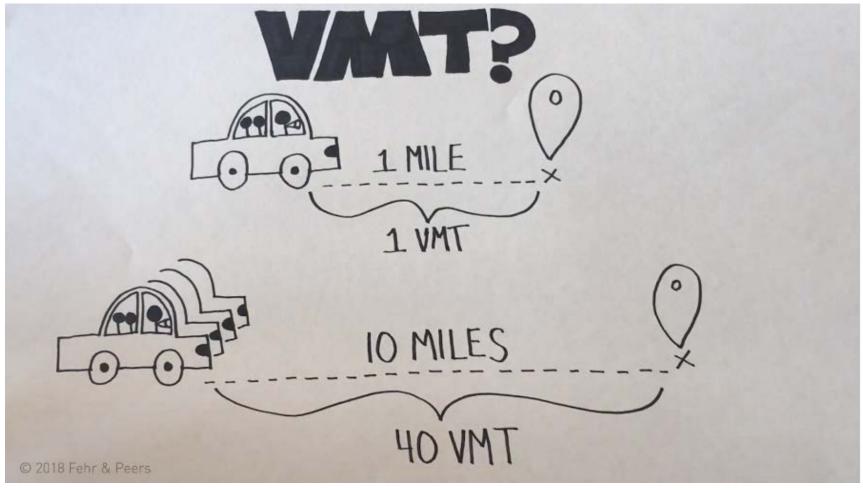


- Impacts measured by VMT (Post-SB 743)
 - Greenhouse Gas Emissions
 - Air pollution
 - Noise
 - Safety



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?

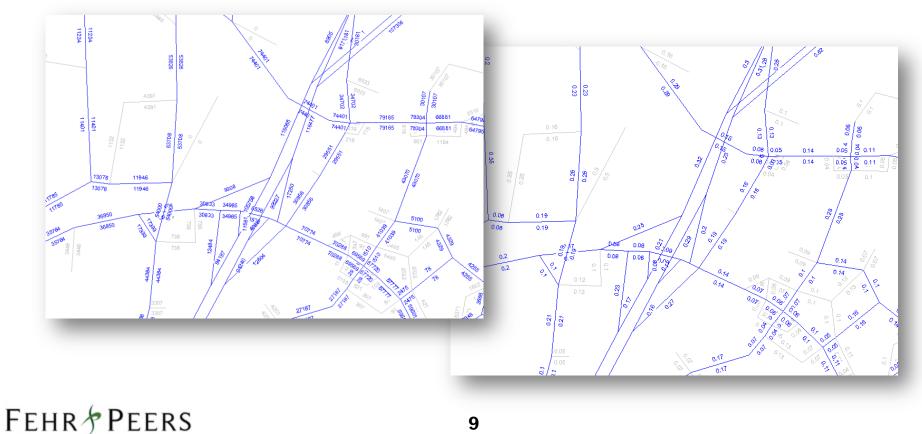


Source Video



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?

