

MEMORANDUM

Date: July 9, 2015

Project #:
17666.0

To: Claudia Wade, El Dorado County
County of El Dorado
2850 Fairland Court
Placerville, CA 95667



From: Robert D. Spencer, Urban Economics

Project: CIP & TIM Fee Update: Western Slope

Subject: DRAFT Technical Memorandum 3-2: TIM Fee Project Policy Guidance and Technical Standards (incl. Memoranda 2-4: Dwelling Unit Equivalent Metric and 2-6: Land Use Categories)

This Technical Memorandum 3-2 provides policy guidance and technical standards for the El Dorado County Traffic Impact Mitigation (TIM) Fee Program update. This memorandum also incorporates topics that originally were to be addressed in separate Technical Memorandum 2-4: Dwelling Unit Equivalent Metric, Technical Memorandum 2-6: Land Use Categories, and Technical Memorandum 3-4: Cost and Funding Alternatives.

GROWTH PROJECTIONS

As discussed in Technical Memorandum 3-1, the growth projections used in the El Dorado County (EDC) travel demand model and for the TIM Fee Program update nexus analysis are based on a combination of regional projections provided by the Sacramento Area Council of Governments (SACOG) and a rate based on historical trends within the unincorporated area of the County. El Dorado County could not use the SACOG growth projections for the unincorporated area due to their inconsistencies with the County's General Plan and historic growth trends. The County projects a slightly higher overall growth rate based on historic trends compared to SACOG's projections, and a different distribution of that growth within the unincorporated area based on the County's General Plan goals. Consequently the TIM Fee Program uses SACOG projections for incorporated areas (i.e. City of Placerville) within the County as well as areas outside the County, and El Dorado County's projections for the unincorporated area.

The growth projections used for the TIM Fee Program update are shown in **Table 1**, at the end of this memorandum.

The EDC travel demand model uses the number of jobs to reflect the level of nonresidential development, while the TIM Fee Program update nexus analysis uses building space. In Table 1, jobs are converted to building space based on the employment density factors shown in the table footnote. Data specific to El Dorado County was not available, so the

employment density factors shown reflect averages from the best available studies of metropolitan area development patterns.

Local government employment growth, including public education, represents about four percent of total projected employment growth. Local government services are exempt from paying the TIM fee because their expansion is caused by increased demands from other development. Therefore new jobs and associated building space from expansion of local government services are excluded from the nonresidential growth projection in Table 1 and the nexus analysis.

LAND USE CATEGORIES AND TRIP GENERATION RATES

Technical Memorandum 3-1 proposed several changes in the current TIM Fee Program land use categories, including:

- ◆ Combining the high trip commercial, general commercial, and gas station categories into a single commercial category
- ◆ Combining the industrial and warehouse categories into a single industrial category
- ◆ Eliminating the campground and golf course categories
- ◆ Expanding the bed and breakfast category to a hotel/motel category.

These revised categories and the trip end rates to be used in the TIM Fee Program update are shown in **Table 2**, at the end of this memorandum. The trip end rates shown in the table are based on the latest (9th) edition of the Institute of Transportation Engineers (ITE), *Trip Generation Manual*.

There are several differences between the land use categories used in the EDC travel demand model and the categories that will be used in the TIM Fee Program schedule to apply the fee to new development projects:

- ◆ The EDC travel demand model includes hotel/motel and church development within the general commercial category. The TIM Fee Program schedule will separate out these categories from the general commercial category and apply fees based on different trip generation rates drawn from the ITE manual referenced in Table 2.
- ◆ The EDC travel demand model includes a medical employment category while the TIM Fee Program schedule will include medical offices within the general office land use category. This approach recognizes the difficulty of determining the final use of an office building at the time of permit, and the potential for uses to change over time. Hospitals and other specialized medical facilities are relatively rare development projects. The County would calculate a specific fee for these medical land uses based on a per trip fee included in the fee schedule and multiplied by the estimated trip generation rate applicable to the project.

Table 2 provides a peak hour trip end rate for each land use category. A trip end represents either the origin or destination of a trip, or an intermediate stop between the origin and destination. Table 2 references evening (p.m.) peak hour trip end rates because roadway

demand at the peak hour determines the need for roadway capacity. This approach is consistent with General Plan policy TC-X(d).

The “% New Trip Ends” column reflects the share of trip ends that are either origins or destinations and excludes intermediate stops between an origin and a destination. Intermediate stops do not place additional demand on the roadway system because the trip would have occurred anyway between the origin and destination. Eliminating intermediate stops from the trip generation rates in a traffic impact fee nexus analysis provides a more reasonable estimate of the demand placed by a development project on the roadway system.

Total new trips over the next twenty years are shown in **Table 3** at the end of this memorandum based on the growth projections in Table 1 and the trip generation rates in Table 2.

ALTERNATIVE FUNDING FOR ROADWAY CAPACITY IMPROVEMENTS

The following section describes the alternative funding sources projected to be available for the West Slope Capital Improvement Program (CIP) that would complement revenues from the TIM Fee Program. All sources are limited to those that could fund roadway capacity improvements. Except where noted, funding estimates are provided by the El Dorado County Transportation Commission (EDCTC).

Funding Assumptions and Methodology

EDCTC works directly with SACOG and local jurisdictions to develop the financial forecasts used in the Regional Transportation Plan, a long-range transportation planning document for El Dorado County prepared by EDCTC. SACOG prepares regional revenue forecasts as part of the region’s Metropolitan Transportation Plan (MTP).

Developing the revenue forecasts included establishing regional assumptions for federal, state, and local transportation revenue expected during the planning horizon of 2015-2035. This effort included calculating the share of federal and state revenues that would come to the Sacramento Region and ultimately the proportionate share of that revenue that would be allocated to El Dorado County. Forecasts were based on the Draft 2036 MTP, historical precedence, and current statutory federal and state funding formulas.

Federal Funding Sources

Congestion Mitigation and Air Quality (CMAQ) Improvement Program

The Federal Highway Administration and the Federal Transit Administration jointly administer the CMAQ program. Congress adopted the CMAQ program to support surface transportation projects and other related efforts that contribute air quality improvements and provide congestion relief. Funding is targeted to areas that do not meet the National

Ambient Air Quality Standards (non-attainment areas) as well as former non-attainment areas that are now in compliance (maintenance areas).

The Moving Ahead for Progress in the 21st Century Act (MAP-21) reauthorized the program in July 2012. Project eligibility remains basically the same as prior acts. The formula for distribution of funds considers an area's population by county and the severity of its ozone and carbon monoxide problems within the non-attainment or maintenance area. Greater weight is given to areas that are both carbon monoxide and ozone non-attainment/maintenance areas.

The CMAQ program is competitive in which eligible projects are ranked and selected for programming based on their air quality benefits. Consequently award of CMAQ funding to support projects within the West Slope CIP is based upon the air quality merits of those projects relative to other projects submitted for CMAQ consideration. As CMAQ funds become available, EDCTC releases a call for projects to El Dorado County and the City of Placerville. The EDCTC reviews and ranks projects submitted for CMAQ funding based upon the criteria set forth in the CMAQ application process, and then awards funding based on those criteria.

Eligible CMAQ projects include public transit improvements; high occupancy vehicle lanes; Intelligent Transportation System Infrastructure; traffic management and traveler information systems (i.e., electric toll collection systems); employer-based transportation management plans and incentives; traffic flow improvement programs (signal coordination); fringe parking facilities serving multiple occupancy vehicles; shared ride services; bicycle and pedestrian facilities; flexible work-hour programs; outreach activities establishing Transportation Management Associations; fare/fee subsidy programs; and under certain conditions, Particulate Matter improvement projects.

Regional Surface Transportation Program (RSTP)

The RSTP utilizes federal Surface Transportation Program Funds identified in Section 133 of Title 23 of the United States Code. Approximately 76 percent of the state's RSTP funds must be obligated on projects which are located within the 11 urbanized areas of California with populations greater than 200,000 people (including the SACOG region). The apportionment and distribution for such obligation is calculated based on relative population. Use of RSTP funds is highly flexible and many, if not all, TIM Fee Program projects could be eligible. Examples of projects eligible for RSTP include highway projects; bridges (including construction, reconstruction, seismic retrofit, and painting); transit capital improvements; carpool, parking, bicycle, and pedestrian facilities; safety improvements and hazard elimination; research; traffic management systems; surface transportation planning; transportation enhancement activities and control measures; and wetland and other environmental mitigation.

Federal Discretionary Programs

MAP-21 did away with most of the previous Federal Discretionary programs and rolled them into other legislation and/or consolidated programs. However, those which remain and those which potentially may be added to future legislation are considered for the purposes of the financial forecast.

Additional funding may be available from future federal discretionary programs. The EDCTC estimates funding from this source based on prior success attracting discretionary funding to the County's transportation programs.

State Funding Sources

State Transportation Improvement Program (STIP)

The STIP is a five-year multimodal program which is funded through the State Highway Account and other sources. All STIP projects must be capital projects (including project development costs) needed to improve transportation. These projects generally include, but are not limited to, improving state highways, local roads, public transit, intercity rail, pedestrian and bicycle facilities, grade separations, transportation system management, transportation demand management, sound walls, intermodal facilities, safety, and environmental enhancement and mitigation.

STIP funding is split into two programs, 25 percent to the Interregional Transportation Improvement Program (ITIP) for projects nominated by Caltrans, and 75 percent to County Shares for the State's 58 counties for projects nominated in each county's Regional Transportation Improvement Program (RTIP). The overall STIP is adopted by the California Transportation Commission, which can accept or reject each RTIP and ITIP in its entirety.

State Discretionary Programs

Additional funding may be available from future Caltrans discretionary funding programs measures including future bond measures if proposed by the state legislature and approved by California voters. The EDCTC estimates funding from this source based on prior success attracting discretionary funding to the County's transportation programs.

Local Funding Sources

Gas Tax Swap (Gasoline Excise Tax Subvention)

Forty-four percent of the new gasoline excise tax is directed to local jurisdictions to support street and road maintenance to replace decreased Proposition 42 funding. The state will annually adjust the excise tax to account for the decreased gasoline sales tax.

Missouri Flat Master Circulation & Financing Plan (MC&FP)

The MC&FP was developed by El Dorado County to fund transportation improvements to the Missouri Flat area to support expanded retail development. The primary improvements are related to the Highway 50 overcrossing. The primary source of funding is an allocation of the County's share of the state sales tax that is generated by new retail development in the

Missouri Flats area (\$1 million annually). Unlike the other alternative funding sources described here, this source is constrained to uses related to the MC&FP area.

Alternative Funding Summary

Table 4 at the end of this memorandum summarizes the funding estimates for the sources described above. The funding sources and amounts shown in the table represent the full spectrum of funding potentially available for projects to be included in the TIM Fee Program update. Revenue estimates are based on continuation of current state and federal transportation funding policies and formulas.

Table 4 shows total estimated funding as well as an estimated share for the West Slope CIP. For all sources programmed through the EDCTC, the TIM Fee Program update assumes that 90 percent of total projected revenues will be available for CIP projects in the unincorporated area. This share is based on the unincorporated share of development on the West Slope compared to total development, including Placerville.

DRAFT

Table 1: Growth Projections (2015-2035)

Zone >	1	2	3	4	5	6	7	8	
		Hwy. 50 E. of EI Dorado Hills	Hwy. 50 W. of Placer- ville	Northern Area	Hwy. 50 E. of Placer- ville	S.E. of Placer- ville	Southern Area	EI Dorado Hills	
Land Use ¹	Eastern Area								Total
Residential (dwelling units)									
Single Family									
Not Restricted	-	2,389	1,004	104	196	-	(11)	4,927	8,609
Age Restricted	-	<u>561</u>	<u>334</u>	-	-	-	-	<u>526</u>	<u>1,421</u>
Subtotal	-	2,950	1,338	104	196	-	(11)	5,453	10,030
Multi-family									
Not Restricted	283	1,552	1,200	1,571	552	548	389	280	6,375
Age Restricted	-	<u>99</u>	<u>59</u>	-	-	-	-	<u>93</u>	<u>251</u>
Subtotal	<u>283</u>	<u>1,651</u>	<u>1,259</u>	<u>1,571</u>	<u>552</u>	<u>548</u>	<u>389</u>	<u>373</u>	<u>6,626</u>
Total	283	4,601	2,597	1,675	748	548	378	5,826	16,656
Nonresidential (jobs)¹									
Commercial	17	2,960	991	508	255	246	49	1,442	6,468
Office	85	380	249	263	55	60	25	4,538	5,655
Medical	-	71	74	276	340	316	31	883	1,991
Industrial	-	<u>291</u>	<u>157</u>	<u>2</u>	<u>22</u>	<u>9</u>	-	<u>680</u>	<u>1,161</u>
Total	102	3,702	1,471	1,049	672	631	105	7,543	15,275
Nonresidential (1,000 sq. ft.)²									
Commercial	9	1,480	496	254	128	123	25	721	3,236
Office	23	105	68	72	15	17	7	1,248	1,555
Medical	-	22	23	86	106	99	10	276	622
Industrial	-	<u>291</u>	<u>157</u>	<u>2</u>	<u>22</u>	<u>9</u>	-	<u>680</u>	<u>1,161</u>
Total	32	1,898	744	414	271	248	42	2,925	6,574

¹ Excludes local government employment growth.

² The following nonresidential building space area based on large regional surveys of employment, building space, and land use (see sources):

Commercial	500	sq. ft. per employee	Medical	312.5	sq. ft. per employee
Office	275	sq. ft. per employee	Industrial	1,000	sq. ft. per employee

Source: El Dorado County Travel Demand Model; Matt Kowta and Nina Miegs (BAE Urban Economics), memorandum to Shawna Purvines (El Dorado County), regarding 2035 Growth Projections, March 14, 2013, Appendix D, Urban Economics.

Table 2: Land Use Categories and Trip Generation Rates

Land Use	Institute for Transportation Engineers Category	Units	P.M. Peak Hour Total Trip End Rate	% New Trip Ends	P.M. Peak Hour Net New Trip End Rate
Residential					
SFD Not Restricted	210: Single Family Detached	Dwellings	1.00	86%	0.86
SFD Age Restricted	251: Senior Adult - Detached	Dwellings	0.27	86%	0.23
MFD Not Restricted	220: Apartment	Dwellings	0.63	86%	0.54
MFD Age Restricted	252: Senior Adult - Attached	Dwellings	0.25	86%	0.22
Nonresidential					
Commercial					
General Commercial	820: Shopping Center	1,000 Sq. Ft.	3.71	47%	1.74
Hotel/Motel	320: Motel	Rooms	0.47	58%	0.27
Church	560: Church	1,000 Sq. Ft.	0.55	64%	0.35
Office					
General Office	710: General Office	1,000 Sq. Ft.	1.49	77%	1.15
Medical	720: Medical-Dental Office	1,000 Sq. Ft.	3.57	60%	2.14
Industrial	110: General Light Industrial	1,000 Sq. Ft.	0.97	79%	0.77

Source: Institute for Transportation Engineers, *Trip Generation 9th Edition*, 2012; San Diego Association of Governments, *Brief Guide of Vehicular Trip Generation Rates*, April 2002.

Table 3: Net New Trips (2015-2035)

Zone >	1	2	3	4	5	6	7	8	
Land Use ¹	Eastern Area	Hwy. 50 E. of EI Dorado Hills	Hwy. 50 W. of Placer-ville	Northern Area	Hwy. 50 E. of Placer-ville	S.E. of Placer-ville	Southern Area	EI Dorado Hills	Total
Residential									
SFD Not Restricted	-	2,055	863	89	169	-	(9)	4,237	7,404
SFD Age Restricted	-	129	77	-	-	-	-	121	327
MFD Not Restricted	153	838	648	848	298	296	210	151	3,442
MFD Age Restricted	-	22	13	-	-	-	-	20	55
Nonresidential									
Commercial	16	2,575	863	442	223	214	44	1,255	5,632
Office	26	121	78	83	17	20	8	1,435	1,788
Medical	-	47	49	184	227	212	21	591	1,331
Industrial	-	<u>224</u>	<u>121</u>	<u>2</u>	<u>17</u>	<u>7</u>	-	<u>524</u>	<u>895</u>
Total	195	6,011	2,712	1,648	951	749	274	8,334	20,874

Note: Excludes trips from local government employment growth that would be exempt from TIM Fee.

Source: Tables 1 and 2.

Table 4: Alternative Funding For El Dorado County West Slope CIP

Funding Source	Annual Estimate (2015 \$)	Total 20-Year Estimate (2015 \$)	Estimated Unincorporated Share¹	Unincorporated 20-Yr. Estimate (2015 \$)
Federal				
Congestion Mitigation and Air Quality (CMAQ)	\$1,938,000	\$38,760,000	90%	\$34,884,000
Regional Surface Transportation Program (RSTP)	1,576,000	31,520,000	90%	28,368,000
Federal Discretionary Programs	<u>1,619,000</u>	<u>32,380,000</u>	90%	<u>29,142,000</u>
Subtotal	\$5,133,000	\$102,660,000		\$92,394,000
State				
State Transportation Improvement Program				
Interregional Transportation Improvement Program (ITIP)	783,000	15,660,000	90%	14,094,000
Regional Transportation Improvement Program (RTIP)	2,927,000	58,540,000	90%	52,686,000
Caltrans Discretionary	<u>2,058,000</u>	<u>41,160,000</u>	90%	<u>37,044,000</u>
Subtotal	\$5,768,000	\$115,360,000		\$103,824,000
Local				
Gas Tax Swap (Excise Tax Subvention)	<u>2,494,000</u>	<u>49,880,000</u>	90%	<u>44,892,000</u>
Total	\$13,395,000	\$267,900,000		\$241,110,000
Missouri Flat Master Circulation & Financing Plan (MC&FP)²				
Sales Tax	1,000,000	20,000,000	100%	20,000,000

¹ Unincorporated share based on western slope unincorporated population as a share of total western slope population (including Placerville).

² Unlike the other funding sources listed that may be applicable to a range of roadway improvement projects, Missouri Flat MC&FP funding is restricted to specified projects in the Missouri Flats area.

Source: El Dorado County, 2015 West Slope Capital Improvement Plan, Section 3 (Cash Proformas); El Dorado County Transportation Commission; California Department of Finance.