

## **CMAQ Cost-Effectiveness Threshold Documentation for the *Fresno Council of Governments* 2019 FTIP**

The Congestion Mitigation and Air Quality (CMAQ) program provides funding for transportation projects or programs that contribute to attainment or maintenance of the national ambient air quality standards. All San Joaquin Valley Metropolitan Planning Organizations (MPOs) adopted policies in 2007 for distributing at least 20 percent of the CMAQ funds to projects that meet a cost-effectiveness threshold for emission reductions. For the 2019 Federal Transportation Improvement Program (FTIP), this applies to years 2018-2019 through 2021-2022. *The Fresno Council of Governments (Fresno COG)* has made every effort to expend the minimum 20 percent funding for cost-effective projects over the course of the FTIP and the attached documentation demonstrates that *Fresno COG* has met the 20 percent funding goal.

Project eligibility continues to be based on federal CMAQ guidance. MPOs can fund projects within local jurisdictions or contribute funding to the San Joaquin Valley Air Pollution Control District (SJVAPCD) grant incentive programs to meet the cost-effectiveness threshold requirements. Funds contributed to the SJVAPCD grant incentive programs will be assumed to have met the threshold, as that threshold is more stringent than the one established by the CMAQ cost-effectiveness policy.

Emission benefits and cost-effectiveness calculations are based on the applicable pollutants for the region, including the components of ozone (nitrogen oxides (NO<sub>x</sub>) and reactive organic gases (ROG) and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>). The “Methods to Find the Cost-Effectiveness of Funding Air Quality Projects” document developed by the Air Resources Board (ARB) is currently the appropriate methodology for calculating cost-effectiveness. In addition, FHWA has published “CMAQ Improvement Program Cost-Effectiveness Tables and Development Methodology” on December 3, 2015 and this methodology will be used to establish project eligibility for project types not addressed in the state guidance. Another appropriate cost-effectiveness calculation methodology may be used upon consultation with interagency partners. Cost-effectiveness is expressed as dollars spent per pound of pollutant reduced (ROG + NO<sub>x</sub> + PM<sub>2.5</sub> + PM<sub>10</sub>). The cost-effectiveness threshold for the 2019 FTIP was recommended to be maintained at \$45 per pound (\$90,000/ton). The threshold is based on CMAQ dollars only, not total project cost.

*Fresno COG* has identified, through existing programmed projects in those years or other selection methods, projects that qualify for the cost-effectiveness policy

When unobligated and programmable CMAQ capacities exist, staff would present the recommendation to do a “call for projects.” This staff recommendation will be presented to Fresno COG’s Transportation Technical Committee, Policy Advisory Committee, and Policy Board. This presentation will contain information on present and future CMAQ capacities, eligibility, selection process and scoring, and schedule. Staff will also provide a reminder of the Board-approved CMAQ Programming Policy and Guidance. This guidance addresses the goal to program 20 percent of the 2019 FTIP’s total CMAQ capacity to highly cost-effective projects/programs. Following Board approval, staff will release the “call for projects.” The CMAQ scoring committee, which is made up of technical staff of local agencies and Caltrans, will be convened to review and score the submitted applications, and make a recommendation for programming.

During the evaluation process, the CMAQ committee will prioritize and recommend highly cost-effective projects/programs, which will help to achieve the region's 20 percent programming goal. This recommendation will be put before the committees before going to the Policy Board for official approval of FTIP programming.

As stated in the Cost-Effectiveness Policy, *Fresno COG* has agreed to post information related to the implementation of the cost-effectiveness CMAQ policy on its website. Attached is documentation that fulfills this requirement and demonstrates that *Fresno COG* has estimated the amount of funding in the 2019 FTIP necessary to meet the 20 percent cost-effectiveness goal and provided a summary of the CMAQ projects that meet the minimum cost-effectiveness threshold.

Fresno COG will release the next "Call for Projects" in the Fall of 2019 to identify and program new projects/programs for the latter two years of the 2019 FTIP and/or the 2021 FTIP. Cost-effectiveness will continue to be a major factor in the project selection process.

# CMAQ Cost-Effectiveness Documentation for the *Fresno Council of Governments* 2019 FTIP

Year	Estimated CMAQ Apportionments	20 Percent Minimum
FY 2018-2019	\$ 14,869,487.00	\$ 2,973,897.40
FY 2019-2020	\$ 14,869,487.00	\$ 2,973,897.40
FY 2020-2021	\$ 14,583,406.00	\$ 2,916,681.20
FY 2021-2022	\$ 14,583,406.00	\$ 2,916,681.20
Totals	\$ 58,905,786.00	\$ 11,781,157.20

Year	FTIP ID	Agency	Project Description	CMAQ Funding Amount	Estimated Cost-Effectiveness <sup>(1)</sup>
2019	LSTMP643	County of Fresno	Goodfellow Shoulder Improvements	3917265	6.12
2019	LSTMP644	County of Fresno	Mountain View Shoulder Improvements	2683849	4.22
2019	LSTMP646	Kings Canyon Unified School District	Purchase 2 CNG School Buses	381457	20.69
2022	LSTMP648	Southwest Transportation Agency	Purchase 2 CNG School Buses	424944	32.35
2022	LSTMP647	Sanger Unified School District	Purchase 2 CNG School Buses	389532	25.36
2020	LSTMP638	City of Parlier	Chavez Elementary Alley Paving	222100	2.82
2022	FRE190012	City of Reedley	CNG Street Sweeper Replacement Project	307766	15.2
2021	LSTMP534	County of Fresno	American Ave Shoulder Improvements	2311052	22.51
2019	LSTMP535	County of Fresno	Jensen Ave Shoulder Improvements	1985664	23.86
2019	LSTMP533	County of Fresno	North Ave Shoulder Improvements	1080168	24.45
2019	FRE170017	City of Coalinga	Paving Project - Forest/Elm; Glenn/Hawthorn; Pleasant/Houston	531180	1
2019	FRE170019	City of Parlier	Merced/Tulomne Alley Paving	383477	8.7
2019	FRE170018	City of Huron	Alley Paving: Railroad/Lassen; Huron/Fifth; Azteca/O	420518	0.98
2019	FRE170021	City of Selma	Street Sweeper Replacement	221325	16.6
2019	LSTMP527	Fresno Unified School District	Purchase 3 CNG School Buses	474290	6.76
2019	LSTMP526	Clovis Unified School District	Purchase 3 CNG School Buses	557739	13
2022	LSTMP529	Sanger Unified School District	Purchase 2 CNG School Buses	371826	19
2019	LSTMP528	Kings Canyon Unified School District	Purchase 2 CNG School Buses	348879	28
2019	LSTMP523	Southwest Transportation Agency	Purchase 2 CNG School Buses	371826	18
2019	LSTMP522	Southwest Transportation Agency	Purchase 1 Clean Diesel School Buses	168207	28

Total CMAQ Funding Amount      \$      17,553,064.00

CMAQ Cost-Effectiveness Goal      \$      11,781,157.20

CMAQ Cost-Effectiveness Goal Met?      **YES**

Percent of CMAQ Funds Awarded to Cost-Effective Projects      30%

(1) Cost-effectiveness for each project identified as meeting the cost effectiveness threshold must be below \$45 per pound, or \$90,000 per ton.

The following sections come from Fresno COG’s adopted CMAQ Policies and Procedures. When sufficient CMAQ capacity warrants, staff will seek the Board’s approval to release a competitive “Call for Projects.” Staff will review and assess project applications for their completeness and CMAQ eligibility. The CMAQ committee, will be convened to evaluate and score project applications, and make a recommendation for programming.

**Category Funding Goals:**

The following category funding goals are established:

<b>Project Type</b>	<b>Percentage**</b>
Transit Improvements	20.0%
Cleaner Fuel Technology	15.0%
Traffic Flow Improvements	10.0%
Traffic Signal Projects	4.0%
Pedestrian/Bicycle	6.0%
PM-10 Reduction	3.5%
Miscellaneous	1.5%
Cost-Effective (any project type)*	40.0%
<b>Total</b>	<b>100%</b>

**Project Application Scoring:**

The following scoring factors (totaling a maximum of 50 points) will be used to rank the project applications.

<b>20 Points</b>	<b>Congestion Relief</b> Has impact on congestion and increases service capacity and/or reliability.
<b>10 Points</b>	<b>Trip Reduction</b> Reduces vehicle trips and/or vehicle miles traveled.
<b>20 Points</b>	<b>Air Pollutant Emissions Reduction</b> Incorporates transportation control measure, reduces emissions of volatile organic compounds, nitrogen oxides, and/or particulate matter.
<b>30 Points</b>	<b>Cost-Effectiveness</b> Project cost- effectiveness is determined by the California Air Resource Board’s (ARB) Air Quality Cost-Effectiveness Calculations Methodology: <a href="http://www.arb.ca.gov/planning/tsaq/eval/eval.htm">http://www.arb.ca.gov/planning/tsaq/eval/eval.htm</a>
<b>18 Points</b>	<b>Subjective Evaluation</b> The subjective evaluation category allows the scorer the flexibility to decide that some aspect of the project that was not already considered in prior criteria should, in fact, be given consideration. The items listed under the subjective category are examples only and the list is not meant to all-inclusive of what might be considered under subjective evaluation. The scorer may consider other important factors including, but not limited to: the prioritization importance placed on the project by the project’s sponsor, support for multimodal access, and enhancing connectivity of transportation systems. Projects which minimize the loss of prime farmland, unique farmland, farmland of statewide importance and farmland of local importance are to be awarded additional consideration in this category. Also considered may be projects that promote energy conservation, improves quality of life, leverages other funds, promotes system management such as supporting other modes of transportation; reduces greenhouse gas emissions and supports Sustainable Communities Strategies. Since the issue of “timely project delivery” is so important, the <i>CMAQ Scoring Committee</i> may take into consideration, as a part of a project’s “subjective” evaluation score, the local agency’s ability to deliver projects on timely basis (i.e. past performance/current ability to deliver projects on schedule).
<b>2 Points</b>	<b>Project is on Fiscally Constrained List in Regional Transportation Plan (RTP)</b>
<b>100</b>	<b>TOTAL POINTS AVAILABLE</b>