

**CMAQ COST-EFFECTIVENESS THRESHOLD DOCUMENTATION
FOR THE
FRESNO COUNCIL OF GOVERNMENTS**

2015 FTIP

The Congestion Mitigation and Air Quality (CMAQ) Improvement Program provides funding for transportation projects or programs that contribute to attainment or maintenance of the National Ambient Air Quality Standards. All eight of the San Joaquin Valley Metropolitan Planning Organizations (MPOs), in the San Joaquin Valley Air Basin, 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 beginning in Fiscal Year (FY) 2011. For the 2015 Federal Transportation Improvement Program (FTIP), this applies to years 2012-2013 through 2015-2016. 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 the Fresno Council of Governments (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_x] and reactive organic gases [ROG]) and particulate matter (PM). 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. Cost-effectiveness is expressed as dollars spent per pound of pollutant reduced (ROG + NO_x + PM₁₀). The cost-effectiveness threshold for the 2015 FTIP has been maintained at the previously recommended level of \$30 per pound (\$60,000 per ton) and is based on CMAQ dollars only, not total project cost.

The Fresno Council of Governments has identified, through existing programmed projects in those years or other selection methods, projects that qualify for the cost-effectiveness policy. The full documentation of the process employed for project selection can be located at:
<http://www.fresnocog.org/>

Project Selection Methodology:

Briefly, the Fresno Council of Governments convenes a meeting of the Programming Subcommittee (committee members are from the county, cities, Caltrans and other non-member agencies.) The committee receives the funding information and provides direction for project selection. The “Call-For-Projects Project Application Packet” is prepared incorporating the

direction received from the Programming Subcommittee and is then presented to Fresno COG's Transportation Technical Committee (TTC), the Policy Advisory Committee (PAC) and the Policy Board. Each of Fresno COG's committees review the CMAQ application packet and the selection process, as detailed in the CMAQ Application Packet, and then approves the release of the Call-For-Projects announcement. Fresno COG then holds a separate CMAQ Workshop to thoroughly explain the application process including methodology to calculate the emission reductions from the various categories of projects. The project sponsors then submit their applications to Fresno COG, and are reviewed by the Project Scoring Committee using the methodology detailed below. The scored projects are then presented for discussion to the TTC, PAC and finally approved by the Fresno COG Policy Board and programmed into the FTIP.

For the 2015 FTIP cycle, Fresno COG held a Programming subcommittee meeting to set the procedures to be used on July 24, 2013. The guidance, at the time, for project eligibility, was FHWA *"The Congestion Mitigation and Air Quality (CMAQ) Improvement Program under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users"* October, 2008. New guidance was transmitted November 12, 2013, *"The Congestion Mitigation and Air Quality (CMAQ) Improvement Program Under the Moving Ahead for Progress in the 21st Century Act: Interim Program Guidance"*. Fresno COG uses ARB Guidance: *"Methods to Find the Cost-Effectiveness of Funding Air Quality Projects May 2005"* to estimate the emission reductions and cost effectiveness of each submitted project.

All projects and programs eligible for CMAQ funds must come from a conforming transportation plan and TIP, and be consistent with the conformity provisions contained in section 176(C) of the Clean Air Act (CAA) and the Transportation Conformity Rule.

Assembly Bill 1012 requires that both State and Federal funds be used in a "timely" manner. Each agency must be able to assure that their project(s) can be delivered timely. Therefore, each application must be accompanied by a formal Council/Board/District Resolution stating that each project will meet project delivery schedules and that staff be directed to insure that projects are delivered timely.

In addition, Fresno COG requires a signed statement from each applicant agency committing to deliver the project as described.

Please note: In late December of 2014, the eight Valley MPOs, who are required to coordinate our Regional Transportation Plan (RTP) and Transportation Improvement Programs (TIP) schedules, made the joint decision to expedite the release of the 2015 FTIP. As a result, Fresno COG's CMAQ call-for-projects was delayed and the results of the competitive bid process will be reported in the first amendment to the 2015 FTIP, anticipated for early January 2015. As such the latest CMAQ call-for-projects results and cost-effectiveness documentation is listed in the table below.

Project Category **Target Goals** for the March 2012 Call for Projects (2015 FTIP).
 Total available \$23,887,021

Project Type	Percentage	Available funding
Transit Improvements	20.00%	\$ 4,777,405
Cleaner Fuel Technology	15.00%	\$ 3,583,053
Traffic Flow Improvements	10.00%	\$ 2,388,702
Traffic Signal Projects	4.00%	\$ 955,481
Pedestrian/Bicycle	6.00%	\$ 1,433,221
PM-10 Reduction	3.50%	\$ 836,046
Miscellaneous	1.50%	\$ 358,305
Cost-Effective (any project type)	40.00%*	\$ 9,554,808

***Please Note: While the Policy commitment is set at 20%, Fresno COG sets the 'target goal' at 40% to insure compliance with the commitment.**

Scoring Criteria Used:

<i>20 Points</i>	<i>Congestion Relief</i>
	Has impact on congestion and increases service capacity and/or reliability.
<i>10 Points</i>	<i>Trip Reduction</i>
	Reduces vehicle trips and/or vehicle miles traveled.
<i>20 Points</i>	<i>Air Pollutant Emissions Reduction</i>
	Incorporates transportation control measure, reduces emissions of volatile organic compounds, nitrogen oxides, and/or particulate matter.
<i>30 Points</i>	<i>Cost-Effectiveness</i>
	Air pollutant emissions reduction divided by annualized project cost.
<i>20 Points</i>	<i>Subjective Evaluation</i>
	Consider factors of overriding concern, including, but not limited to supports economic development activities, promotes energy conservation, improves quality of life, leverage other funds, promotes system management, etc.
<i>100</i>	<i>TOTAL POINTS AVAILABLE</i>

Fresno COG's Cost-Effectiveness Results-All well above the 20% commitment

February 2008 "Call-for-Projects:"

- **48%** of the available funding was granted to "cost-effective" projects.

October 2009 CMAQ "Call-for-Projects:"

- **39 %** of the available funding was granted to "cost-effective" projects.
(This "Call" was held earlier than would have been normally scheduled to accommodate the work involved in the 2011 RTP/FTIP cycle and associated transportation conformity determination.)

March 2012 CMAQ "Call-for-Projects;"

- **52%** of the available funding was granted to "cost-effective" projects

As stated in the Cost-Effectiveness Policy, the Fresno Council of Governments has agreed to post information related to the implementation of the cost-effectiveness CMAQ policy on its website: <http://www.fresnocog.org/>

Attached is documentation that fulfills this requirement and demonstrates that the Fresno Council of Governments has estimated the amount of funding in the 2015 FTIP necessary to meet the 20 percent cost-effectiveness goal and provides a summary of the CMAQ projects that meet the minimum cost-effectiveness threshold.

BEFORE THE
COUNCIL OF FRESNO COUNTY GOVERNMENTS
RESOLUTION NO. 2007-17

In the Matter of:)
)
CONGESTION MITIGATION AND)
AIR QUALITY PROGRAM)
_____)

RESOLUTION ADOPTING THE
LOCAL COST-EFFECTIVENESS
CONGESTION MITIGATION AND
AIR QUALITY (CMAQ) POLICY

WHEREAS, the Council of Fresno County Governments is a Regional Transportation Planning Agency and a Metropolitan Planning Organization, pursuant to State and Federal designation; and

WHEREAS, federal transportation legislation provides states and Metropolitan Planning Organizations funding from the Congestion Mitigation and Air Quality (CMAQ) program for their region; and

WHEREAS, the San Joaquin Valley Air District has been designated by the Governor of California as the regional air quality planning agency in San Joaquin Valley; and

WHEREAS, the San Joaquin Valley Air District has requested an Extreme classification for the eight-hour ozone nonattainment designation, which would extend the attainment date to 2023; and

WHEREAS, the Metropolitan Planning Organizations in the San Joaquin Valley participated in the development of the eight-hour ozone plan and are committed to improving air quality in the region; and

WHEREAS, the Metropolitan Planning Organizations in the San Joaquin Valley are committed to identify methods of improving funding programs that affect air quality; and

WHEREAS, the resolution and Exhibit A have been reviewed by Council of Fresno County Governments advisory committees representing the technical and management staffs of the member agencies; representatives of other governmental agencies, including State and Federal; representatives of special interest groups; representatives of the private business sector; and residents of Fresno County; and

WHEREAS, the policy listed in Exhibit A only affects federal CMAQ funds and does not imply changes to other funding programs; and.

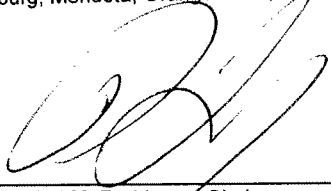
NOW, THEREFORE, BE IT RESOLVED, that Council of Fresno County Governments commits to implement the local cost-effectiveness CMAQ policy listed in Exhibit A.

THEREFORE, BE IT FURTHER RESOLVED, that Council of Fresno County Governments agrees to proceed with a good faith effort to implement the policy as scheduled and with the funding source identified. Recognizing, however, that the availability of necessary funding depends on the programs or processes of various state and federal agencies, the Council of Fresno County Governments will consider modifications or removal of policies, as necessary. Should future transportation legislation not include CMAQ funding, the cost-effectiveness policy listed in Exhibit A will no longer be in effect.

THE FOREGOING RESOLUTION was passed and adopted by Council of Fresno County Governments this 31st day of May 2007.

AYES: Clovis, Coalinga, Fowler, Fresno, Fresno County, Huron, Kingsburg, Mendota, Orange Cove, Parlier,
San Joaquin, Sanger and Selma
NOES:
ABSTAIN: None
ABSENT: None
ATTEST: Firebaugh, Kerman and Reedley

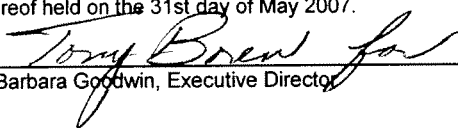
Signed:



Trinidad M. Rodriguez, Chairman

I hereby certify that the foregoing is a true copy of a resolution of the Council of Fresno County Governments duly adopted at a regular meeting thereof held on the 31st day of May 2007.

Signed:



Barbara Goodwin, Executive Director

EXHIBIT A

LOCAL COST-EFFECTIVENESS CMAQ POLICY

Summary

The Congestion Mitigation and Air Quality (CMAQ) program provides funding for transportation projects or programs that will contribute to attainment or maintenance of the national ambient air quality standards. The CMAQ program supports two important goals of the Department of Transportation: improving air quality and relieving congestion. SAFETEA-LU strengthens these goals by establishing priority consideration for cost-effective emission reduction and congestion mitigation activities. Exhibit A provides a summary of the policy for distributing at least 20% of the CMAQ funds to projects that meet a minimum cost-effectiveness threshold for emission reductions beginning in FY 2011. This policy will focus on achieving the most cost-effective emission reductions, while maintaining flexibility to meet local needs.

Estimates of Available Funds

Caltrans Programming provides apportionment estimates to all regions of the state. The FTIP is currently developed for a four-year programming cycle; with each new FTIP document, the Council of Fresno County Governments (Fresno COG) will use the Caltrans estimate to develop the available CMAQ funds over the four-year period. Fresno COG commits to dedicate at least 20% of the total funding for the four-year period of each FTIP as part of the local cost-effectiveness CMAQ policy. For example, if an agency is estimated to receive \$20 million over a four year period, it would allocate 20%, or \$4 million, of the CMAQ program to projects that meet a minimum cost-effectiveness.

The CMAQ allocation formula is currently based on population, ozone status, and carbon monoxide status. Revisions to the formula or updates to estimates may result in changes to available funds for the Fresno COG CMAQ program; such updates will also affect the funds available for the local cost-effectiveness policy. CMAQ estimates may be revised at any time due to changes from Caltrans, Federal legislation, or classification of the air quality standards in the San Joaquin Valley.

Timeframe

The local cost-effectiveness CMAQ policy is scheduled to be implemented in FY 2011 because the current federally approved 2007 Federal Transportation Improvement Programs (FTIPs) have committed CMAQ funds through FY 2009 and in some cases, regional commitments through FY 2010. In addition, the current CMAQ programming assists in implementing approved local RACM (Amended 2003 PM-10 Plan) that are committed through 2010.

The San Joaquin Valley Air Basin is currently classified as a serious ozone nonattainment area with an attainment deadline of 2013. As part of the 2007 Ozone plan, the Air District is requesting an "extreme" classification, which would delay the attainment deadline until 2023. If approved and assuming no change to the current funding formula, the MPOs may continue to receive CMAQ funding through that time (2023). The local cost-effectiveness CMAQ policy may remain in effect through 2023; however, continuation of the policy will be reviewed on a regular basis per the Policy Review section below.

Local Allocation of Funds

New CMAQ guidance based on SAFETEA-LU was released by the Federal Highway Administration (FHWA) on October 31, 2006. The new legislation and guidance clarifies project eligibility, including advanced truck stop electrification systems and the purchase of diesel retrofits. SAFETEA-LU directs States and MPOs to give priority to diesel retrofits and to cost-effective congestion mitigation activities that provide air quality benefits. Though SAFETEA-LU establishes these investment priorities, it also retains State and local agencies' authority in project selection, meaning that changes to local procedures are not required by SAFETEA-LU. Fresno COG has previously developed procedures for allocating CMAQ funds; the local cost-effectiveness CMAQ policy will be incorporated into existing procedures. Prioritization and funding of projects will continue to be based on criteria developed by Fresno COG.

Cost-Effectiveness Threshold

Cost-effectiveness is a key component of providing funding to projects that improve air quality and reduce congestion. The cost-effectiveness of an air quality project is based on the amount of pollution it eliminates for each dollar spent. Policies that focus on cost-effectiveness will result in the largest emission reductions for the lowest cost. Cost-effectiveness can be based on total project costs, including capital investments and operating costs. However, for the purposes of this policy, cost-effectiveness is based on CMAQ funding dollars only.

In the state of California, the Air Resources Board (ARB) provides funding for air quality improvement projects through the Carl Moyer Program, which requires that heavy-duty vehicle projects meet a cost-effectiveness threshold. The San Joaquin Valley Air Pollution Control District (SJVAPCD) also uses cost-effectiveness thresholds for projects funded through the REMOVE II and Heavy-Duty Incentive Programs. However, there is currently no minimum cost-effectiveness established for the CMAQ program, and according to recent studies, the numbers vary widely across the country and by project type.

Prior to allocation of CMAQ funds for the local cost-effectiveness policy with each FTIP, the SJV MPOs in consultation with the interagency consultation (IAC) partners will develop the minimum cost-effectiveness threshold. While other criteria may be developed at the discretion of Fresno COG, all projects funded by the 20% of CMAQ dollars related to the local cost-effectiveness CMAQ policy must meet that minimum threshold.

Expenditure of Funds under the Local Cost-Effectiveness Policy

Fresno COG will make every effort to expend the minimum 20% funding for the cost-effective projects as soon as possible beginning in FY 2011. However, recognizing that there are additional issues related to project delivery and financial constraint, Fresno COG will be allowed to meet the 20% funding over the course of the FTIP, beginning with the 2008 FTIP and each new FTIP thereafter. For example, if the four-year estimate is \$5 million, then the MPO could spend \$1 million per year over the four year FTIP cycle, \$5 million in one year, or other combination of funding.

Project eligibility will continue to be based on federal CMAQ guidance. MPOs can continue to fund projects within the local jurisdictions, or contribute funding to the SJVAPCD air quality grant incentive programs to meet their cost-effectiveness threshold requirements.

Emissions Estimates

CMAQ projects must demonstrate an air quality benefit, and the expected emissions reductions will continue to be estimated with the most recent methodology. As of 2007, the ARB “Methods to Find the Cost-Effectiveness of Funding Air Quality Projects” released in 2005 is the appropriate methodology. If necessary, interagency consultation will be used to reach agreement on the methodology for future estimates. Emission benefits and cost-effectiveness calculations will continue to be based on the applicable pollutants for the region, including nitrogen oxides (NOx), volatile organic compounds (VOC), and particulate matter (PM).

Reporting Requirements

Tracking of the CMAQ policy will be achieved through several methods. MPOs must develop annual reports for Caltrans and FHWA that specify how CMAQ funds have been spent and the expected air quality benefits. This report is due by the first day of February following the end of the previous Federal fiscal year (September 30) and covers all CMAQ obligations for that fiscal year. A copy of the CMAQ annual report will also be submitted to the Air District for information purposes. In addition to the required annual report, Fresno COG will post information related to the implementation of the local cost-effectiveness CMAQ policy on its website; this includes a summary of the projects selected for the minimum cost-effectiveness threshold that will be made available at the earliest opportunity.

Policy Review

Due to changes in project costs and technology over time, the MPOs will revisit the minimum cost-effectiveness threshold, as well as policy feasibility, at least once every four years prior to FTIP development. A periodic review of the policy is necessary due to potential changes in federal transportation legislation, apportionments, and project eligibility. This policy will only affect 20% of the allocated federal CMAQ funds, and does not imply changes to other funding programs. Should future transportation legislation not include CMAQ funding, this policy will no longer be in effect.

Example Schedule

The following is an example schedule of the policy implementation and updates. This information is only representative of the general approach and specific schedules will be developed in the future (annual reports will continue to be prepared and submitted as required).

Summer 2007	Develop cost-effectiveness threshold through interagency consultation
Fall 2007	Identify funding available in the 2008 FTIP related to the 20% local cost-effectiveness policy
Spring 2008	Fresno COG call for projects – Quantify, rank, and select CMAQ projects
Summer 2008	Approve 2008 FTIP
Summer 2011	Review policy feasibility. If policy is continued, proceed with following steps.
	Update cost-effectiveness threshold through interagency consultation
Fall 2011	Identify funding available in the 2012 FTIP related to the 20% local cost-effectiveness policy
Spring 2012	Fresno COG call for projects – Quantify, rank, and select CMAQ projects
Summer 2012	Approve 2012 FTIP

CMAQ Cost-Effectiveness Documentation									
2015 FTIP Fresno Council of Governments									
				Dollars in thousands					dollars/pound
LEAD AGENCY	PROJECT ID	PROJECT TITLE	PROJECT DESCRIPTION	FY12/13	FY13/14	FY14/15	FY15/16	TOTAL	ESTIMATED COST EFFECTIVENESS
Clovis, City of	FRE130028	Tollhouse and Fowler Sidewalks	850 Feet Southwest of Fowler Avenue along Tollhouse Road and 1,000 Feet South of Tollhouse Road along Fowler Avenue; Construct pedestrian sidewalk improvements, including ADA compliant curb returns, striping and relocation of utilities.	\$0	\$0	\$14	\$142	\$156	\$3
Clovis, City of	FRE130030	Willow and Alluvial Sidewalks	Willow Avenue-600 Feet North of Alluvial Avenue; Construct curb, gutter, AC pavement and pedestrian sidewalk improvements, including ADA compliant curb returns, striping, and the relocation of utilities.	\$0	\$0	\$11	\$112	\$123	\$3
Firebaugh, City of	FRE130033	Purchase of CNG Street Sweeper	Purchase of 1 CNG Street Sweeper; Replacement unit for City of Firebaugh	\$0	\$232	\$0	\$0	\$232	\$27
Fresno Area Express (FAX)	FRE111366	Purchase CNG Buses	Purchase fixed-route CNG buses to replace end-of-life vehicles.	\$3,250			\$0	\$3,250	\$25
Fresno Area Express (FAX)	FRE130035	Operating Support for Bus Rapid Transit	Bus Rapid Transit (BRT) operating support costs for first three years of new BRT service.	\$0	\$1,525	\$1,525	\$1,525	\$4,575	\$30
Fresno County	FRE130040	Placer Avenue Shoulder Improvements from Lincoln to the City of San Joaquin	Placer Avenue from Lincoln Avenue to the City of San Joaquin; Shoulder Improvements Paving/Stabilizations	\$0	\$69	\$317	\$0	\$386	\$10
Fresno County	FRE130038	California Avenue Shoulder Improvements from Derrick to Washoe	California Avenue from Derrick Avenue/SR 33 to 0.64 miles west of Washoe Avenue; Shoulder Improvements Paving/Stabilization	\$189	\$0	\$1,087	\$0	\$1,276	\$17

Fresno County	FRE130039	Fowler Avenue Shoulder Improvements from Elkhorn to Harlan	Fowler Avenue from Elkhorn Avenue to Harlan Avenue; Shoulder Improvements Paving/Stabilizations	\$0	\$0	\$152	\$877	\$1,029	\$18
Kings Canyon Unified School District	FRE130047	Purchase 2 Electric School Buses	Kings Canyon Unified School District Transportation Department; Purchase 2 all electric, zero emission school buses.	\$500	\$0	\$0	\$0	\$500	\$7
Kings Canyon Unified School District	FRE130048	Purchase Electric Delivery Truck	Kings Canyon Unified School District Transportation Department-Purchase 1 all electric, zero emission delivery truck.	\$210	\$0	\$0	\$0	\$210	\$28
SouthWest Transportation Agency	FRE130058	Purchase 3 CNG School Bus	Southwest Fresno County Transportation Agency; Replace 3 pre-1990 gross polluting buses with 3 Alternative Fuel CNG Powered School Buses.	\$0	\$0	\$690	\$0	\$690	\$20
	TOTAL							\$12,427	
2015 FTIP reporting: funding available \$23,887,021									
CMAQ Cost-effectivness 20% GOAL	\$4,777,404								
Fresno COG's ACHIEVED cost-effectivness \$12,427,000									
Percent of CMAQ funds Awarded to cost-effective Projects 52%									
Goal Met? YES									