## CMAQ COST-EFFECTIVENESS THRESHOLD DOCUMENTATION FOR THE COUNCIL OF FRESNO COUNTY GOVERNMENTS 2011 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 beginning in Fiscal Year (FY) 2011. For the 2011 Federal Transportation Improvement Program (FTIP), this applies to years 2010-2011 through 2013-2014. THE COUNCIL OF FRESNO COUNTY GOVERNMENTS (COFCG) 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 COUNCIL OF FRESNO COUNTY GOVERNMENTS 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). 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<sub>x</sub> + PM<sub>10</sub>). The cost-effectiveness threshold for the 2011 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 COUNCIL OF FRESNO COUNTY 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 Council of Fresno County Governments (COFCG) 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 COFCG's Transportation Technical Committee, the Policy Advisory Committee and the Policy Board. Each of COFCG's committees review the CMAQ application packet and selection process as detailed in the CMAQ Application Packet and then approves the Call-For-Projects release announcement. COFCG holds a CMAQ Workshop to thoroughly explain the application

process including methodology to calculate the emission reductions from the various categories of projects. The applications are submitted to COFCG, they are reviewed by the Project Scoring Committee using the methodology detailed below. The projects are then programmed into the FTIP.

The guidance for project eligibility is currently based on 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. COFCG 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.

Approval of AB 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.

## Timeline for the 2009 CMAQ Call for Projects:

August 24, 2009 Programming Subcommittee Meeting

September 17,2009 CMAQ Workshop

September 24,2009 COG Policy Board Approves/Initiates "Call for Projects"

October 23,2009 Project Submittals Due

Nov. 19, 2009 Fresno COG Board Project Approvals/Council resolutions due
 July 2010 FTIP/RTP Approval/Conformity Determination Adoption

August 1, 2010 FTIP Submitted to Caltrans

Project Category Goals for the 2009 Call for Projects

Project Type	Percentage	Available funding
Transit Improvements	20.00%	\$2,684,959
Alternative Fuel	12.00%	\$1,610,976
Diesel Retrofits (non-transit)	3.00%	\$402,744
Traffic Flow Improvements	14.00%	\$1,879,472
Pedestrian/Bicycle	6.00%	\$805,488
PM-10 Reduction	3.50%	\$469,867
Miscellaneous	1.50%	\$201,373
Cost-Effective (any project type)	40.00%	\$5,369,917

## Scoring Criteria Used:

20 Points	Congestion Relief
	Has impact on congestion and increases service capacity and/or
	reliability.
10 Points	Trip Reduction
	Reduces vehicle trips and/or vehicle miles traveled.
20 Points	Air Pollutant Emissions Reduction
	Incorporates transportation control measure, reduces emissions of volatile organic compounds, nitrogen oxides, and/or particulate matter.
30 Points	Cost-Effectiveness
	Air pollutant emissions reduction divided by annualized project cost.
20 Points	Subjective Evaluation
	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.
100	TOTAL POINTS AVAILABLE

CMAQ funding is allocated in 6 year increments, three cycles of "Call-for-Projects" is held approximately every two years.

Call #1: During the February 2008 "Call-for-Projects" 48% of the available funding was granted to "cost-effective" projects-well above our stated commitment of 20%.

Call #2: During the October 2009 CMAQ "Call for Projects" 39 % of the available funding was granted to "cost-effective" projects-well above our stated commitment of 20%. 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.

Call #3: Is anticipated to be held February 2012. Fresno COG will continue our commitment to achieving well beyond the 20% commitment.

As stated in the Cost-Effectiveness Policy, THE COUNCIL OF FRESNO COUNTY GOVERNMENTS has agreed to post information related to the implementation of the cost-effectiveness CMAQ policy on its website. Please see: <a href="http://www.fresnocog.org/">http://www.fresnocog.org/</a>

Attached is documentation that fulfills this requirement and demonstrates that THE COUNCIL OF FRESNO COUNTY GOVERNMENTS has estimated the amount of funding in the 2011 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.

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

In the Matter of:	RESOLUTION ADOPTING THE LOCAL COST-EFFECTIVENESS
CONGESTION MITIGATION AND ) AIR QUALITY PROGRAM )	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:

None

ABSTAIN:

ABSENT: 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.

C:----

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 costeffectiveness 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 Fall 2007	Develop cost-effectiveness threshold through interagency consultation 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

The following is documentation of the projects selected for funding that meet "cost-effectiveness protocol.  The following is documentation of the projects selected for funding that meet "cost-effectiveness protocol.  Included are projects from the October 2009 "Call-for-Projects" FTIP ID # series FRE11xxxx  Projects from the February 2008 "Call-for-Projects" are identified by FTIP ID series FRE09xxxx  Projects from the February 2008 "Call-for-Projects" are identified by FTIP ID series FRE09xxxx  FY10/11 FY11/12 FY12/13 FY13/14  Avanue.  Shaw:  Traffic Flow  Clovis, City of Inspendence and McKevy  Altuvial Avenue.  Altuvial Avenue.  Altuvial Avenue.  Altuvial Avenues:  In Selected for funding that meet "cost-effectiveness protocol.  The following file & WB  FRE111337 Clovis, City of Autuvet Avenues.  TYS Weet August  TYS Weet A		THE RESERVE THE PROPERTY OF TH	
	l of Fresno County Governme	ents 2011 FTIP	
	that meet "cost-effectiveness prot	ocol.	
rojects from the February 2008 "Call-for-Projects" are identified.  Temperance Avenue, between Hemdon-Shaw: Traffic Flow Improvements Clovis, City of Improvements Clovis, City of Installation Alluvial Avenue, between Fowler and McKelvy Avenues: Install 4 wide shoulder along EB & WB  RE110337 Clovis, City of Alluvial Avenue.  Traffic Signal Installation Alluvial Avenues: Install 4 wide shoulder along EB & WB	cts" FTIP ID # series FRE11xxxx		
Clovis, City of Clovis, City o	tified by FTIP ID series FRE09xxx		
Clovis, City of Clovis, City of Clovis, City of	FY10/11 FY11/12 FY12/13 dollars in thousands	FY13/14 FY14/15	Estimated Cost Effectivness dollars/pound
Clovis, City of Clovis, City o			
Clovis, City of	\$35	4366	\$6.93
Clovis, City of	4	43 271	18.4
ITS West Ave.	CV	26 266	98.6
FRE110130 Fresno, City of Hemdon to Olive	44 381	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	30
ITS Bullard Ave- FRE110131 Fresno, City of Marks to Willow	70	· σ.	29.9

FRE110132	Fresno, City of	ITS First Street- Nees to Ventura	68		1239	na marana manana ma	27.6
FRE110133	Fresno, City of	ITS Ashlan- Blackstone to Peach		62	514	mananan na dara dara sa mara sa na palamini e e e e e e e e e e e e e e e e e e	18.8
FRE110134	Fresno, City of	ITS Nees Ave -Palm to Willow Ave			398		20.6
FRE110135	Fresno, City of	ITS McKinley- SR99 to Clovis Ave			753		29.4
FRE110136	Fresno, City of	ITS Tulare St- Clovis Ave to C St				999	29.6
FRE110143	Kingsburg, City of	Sierra Street Traffic Synchoronization		52	210		29.92
FRE110146	Kings Canyon Unified	Furchase of 3 Plug-in Hybrid Electric Powered Utility School Buses	635				10.32
FRE110127	County of Fresno	Fowler Avenue from South Avenue to Elkhorn Avenue. Shoulder Improvements Paving/Stabilization		658		1590	19.76
FRE090106	Fresno, City of	ITS Clovis Ave Dakota to American	1046				22.86
FRE090107	Fresno, City of	TIS Fresho St Hemdon to Olive	1771				29
FRE090110	Fresno, City of	Park and Hide Lot Construction Near SR 99			295		21.86
FRE090119	County of Fresno	Commute Green Fresno County	272	251			6.25
FRE090118	County of Fresno	stabilization on Cedar Ave. between Lincoln Ave. to Adams Ave.	20	159			8.03

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	FRE090101	Clovis, City of	Traffic Flow Improvements	42	505		21.51
			Sunnyside to Armstrong: Shoulder				
	FRE090103	Clovis, City of	Improvements	43	157		8.08
	FRE090104	Clovis, City of	Installation of Shaw/ DeWolf traffic signal.	55	495		27.48
	FRE090109	Fresno, City of	-Ashlan to International	88	•	1150	29.87
	FRE090113	Fresno FAX	Purchase 6 CNG Buses	2161			19.22
	FRE090111	Fresno FAX	Transit Signal Prioritization	1386			12.75
And the state of t	FRE090114	City of	Sierra Street Transit Stop	6	43		27.55
	FRE090102		Clovis Averiue Shoulder Improvements	4	115		2.67
	FRE090120	FCRTA	r dorage 2. 22 passenger CNG Vans to replace fleet.	255			25
	FRE090122	Parlier Unified	2 gross polluting school buses with cleaner Diesel Buses.	300			10.92
	FRE090121	Fresno Unified	Expand CNG Filling Facility	191			19.85
	FRE090116	Reedley, City of	Garbage Trucks to replace existing fleet.	164	301		18.23
	FRE090115	Reedley, City of	Olean All Alternative Fueling Center	666			15.51
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