



*City of Ceres • City of Hughson • City of Modesto • City of Newman • City of Oakdale • City of Patterson
City of Riverbank • City of Turlock • City of Waterford • County of Stanislaus*

Congestion Mitigation & Air Quality (CMAQ) Program Cycle FFY 2010/11, 2011/12

**CALL FOR PROJECTS
APPLICATION PACKET**

August 2009

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INTRODUCTION

The purpose of the Congestion Mitigation and Air Quality (CMAQ) program is to fund transportation projects or programs that will contribute to attainment or maintenance of the national ambient air quality standards (NAAQS). Funding can be expended on projects to reduce ozone precursor emissions (including nitrogen oxides (NOx) and volatile organic compounds (VOC)), carbon monoxide (CO), and particulate matter (PM) emissions.

In 1990, Congress amended the Clean Air Act (CAA) to accelerate efforts to attain the NAAQS. The amendments required further reductions in the amount of permissible tailpipe emissions, initiated more stringent control measures in nonattainment areas, and provided for a stronger linkage between transportation and air quality planning. In 1991, Congress adopted the Intermodal Surface Transportation Efficiency Act (ISTEA). This law authorized the CMAQ program to provide funding for surface transportation and related projects that contribute to air quality improvements and congestion mitigation. The CAA amendments, ISTEA and the CMAQ program were intended to focus transportation planning toward a more inclusive, environmentally-sensitive, and multimodal approach to addressing transportation problems.

The CMAQ Program enables communities to increase public awareness regarding the link between transportation and air quality, fund technological applications to improve transportation systems, or increase transit services, as a few examples. Most of the CMAQ project categories include a wide variety of measures to decrease vehicle emissions. Policy considerations exclude highway maintenance and reconstruction projects because these activities preserve existing levels of service and are unlikely to contribute to further improvements in air quality.

OVERVIEW

StanCOG, acting in its role as a Metropolitan Planning Organization (MPO), is in the process of programming the future federal transportation revenues that will come to the Stanislaus Region. CMAQ funds are reimbursable federal aid funds, subject to the requirements of Title 23, United States code. Eligible costs for funds include preliminary engineering, right-of-way acquisition, capital costs, and construction costs associated with an eligible activity.

Approximately \$12.2 million in CMAQ funding is available for the Federal Fiscal (FFY) years 2010/11 and 2011/12 Call for Projects. Once projects have been approved by the MPO, they must be included in the Federal Transportation Improvement Program (FTIP) prior to reimbursement of federal funding. Due to the time and effort required to process federal-aid funds, these projects should be included in the FTIP in a timely manner in order to ensure sufficient time for project delivery.

TIMELINE

The “Call for Projects” schedule and related Federal Transportation Improvement Programming and Air Quality Conformity processes are as follows:

Friday, August 7 th , 2009	Call for Projects
Friday, November 20, 2009	Project Applications due to StanCOG
November 23 rd – December 11 th	Verification Committee Review & Selection
December – January	Prepare Draft FTIP Amendment
Wednesday, January 13, 2009	Policy Board adopts prioritization

ELIGIBLE PROJECTS

The guidance for project eligibility is currently based on FHWA memo “The Congestion Mitigation and Air Quality (CMAQ) Improvement Program under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users” dated October, 2008. *A copy of that guidance is available in Appendix A.* If you have any questions or need additional clarification on project eligibility, please contact StanCOG.

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. Projects need to be included in TIPs or state-wide transportation improvement projects developed by MPOs or States respectively, under the metropolitan or statewide planning regulations. Projects also need to complete the National Environmental Policy Act (NEPA) requirements and meet basic eligibility requirements for funding under titles 23 and 49 of the United States Code. In cases where specific guidance is not provided, the following should guide CMAQ eligibility decisions.

Capital Investment

CMAQ funds may be used to establish new or expanded transportation projects or programs that reduce emissions, including capital investments in transportation infrastructure, congestion relief efforts, diesel engine retrofits, or other capital projects.

Operating Assistance

There are several general conditions that must be met for operating assistance to be eligible under the CMAQ program.

- Operating assistance is limited to new transit services, intermodal facilities, and travel demand management strategies (including traffic operation centers); and the incremental cost of expanding existing transit services.

- In using CMAQ funds for operating assistance, the intent is to help start up viable new transportation services that can demonstrate air quality benefits and eventually cover their costs as much as possible. Other funding sources should supplement and ultimately replace CMAQ funds for operating assistance, as these projects no longer represent additional, net air quality benefits but have become part of the baseline transportation network.
- Operating assistance includes all costs of providing new transportation services, including, but not limited to, labor, fuel, administrative costs, and maintenance.
- When CMAQ funds are used for operating assistance, non-Federal share requirements still apply.
- With the focus on start-up costs only, operating assistance under the CMAQ program is limited to three years. The provisions in 23 U.S.C. §116 place responsibilities for maintenance on States. Since facility maintenance is akin to operations, three years of CMAQ assistance provides adequate incentive and flexibility while not creating a pattern of excessive or even perpetual support. Exceptions are listed under VII.D.7 Travel Demand Management, VII.D.8 Public Education, and VII.D.10 Carpooling and Vanpooling.

Emission Reduction

Air quality improvement is defined by several distinct terms in 23 U.S.C. §149. These terms include contribution to attainment, reduction in pollution, air quality benefits, and others. For purposes of this guidance, the FHWA uses emission reduction to represent this group of terms. CMAQ-invested projects or programs must reduce CO, ozone precursor (NO_x and VOCs), PM, or PM precursor (e.g., NO_x) emissions from transportation. These reductions must contribute to the area's overall clean air strategy and can be demonstrated by the assessment that is required under this guidance. States and MPOs also may consider the ancillary benefits of eligible projects, including greenhouse gas reductions, congestion relief, safety, or other elements, when programming CMAQ funds, though such benefits do not alone establish eligibility.

Planning and Project Development

Activities in support of eligible projects also may be appropriate for CMAQ investments. Studies that are part of the project development pipeline (e.g., preliminary engineering) under the National Environmental Policy Act (NEPA) are eligible for CMAQ support, as are FTA's Alternatives Analyses. General studies that fall outside specific project development do not qualify for CMAQ funding. Examples of such efforts include major investment studies, commuter preference studies, modal market polls or surveys, transit master plans, and others. These activities are eligible for Federal planning funds.

Projects Not Eligible for CMAQ Funding

The following projects are ineligible for CMAQ funding:

- Light-duty vehicle scrappage programs.
- Projects that add new capacity for SOVs are ineligible for CMAQ funding unless construction is limited to high-occupancy vehicle (HOV) lanes.
- Routine maintenance and rehabilitation projects (e.g., replacement-in-kind of track or other equipment, reconstruction of bridges, stations, and other facilities, and repaving or repairing roads) are ineligible for CMAQ funding as they only maintain existing levels of highway and transit service, and therefore do not reduce emissions. Other funding sources, such as STP and FTA's Section 5307 program, are available for such activities.
- Administrative costs of the CMAQ program may not be defrayed with program funds, e.g., support for a State's "CMAQ Project Management Office" is not eligible.
- Projects that do not meet the specific eligibility requirements of titles 23 and 49 U.S.C. are ineligible for CMAQ funds.
- Stand-alone projects to purchase fuel.

COST-EFFECTIVENESS POLICY

All San Joaquin Valley Metropolitan Planning Organizations (MPOs) adopted policies for distributing at least 20% of the Congestion Mitigation and Air Quality (CMAQ) funds to projects that meet a cost-effectiveness threshold for emission reductions beginning in FY 2011.

The policies indicate that prior to allocation of CMAQ funds with each new FTIP, the SJV MPOs in consultation with the interagency consultation (IAC) partners will develop the cost-effectiveness threshold. The threshold is \$30 per pound (\$60,000 per ton) as described below.

Methodology

The appropriate methodology for calculating cost-effectiveness is the 2005 ARB "Methods to Find the Cost-Effectiveness of Funding Air Quality Projects". Other methodology may be used for projects not included in the guidance or upon agreement. Cost-effectiveness for CMAQ projects should be expressed as dollars spent per pound of pollutant reduced (VOC + NO_x + PM₁₀). CO emissions are not included in the formula. CO is several orders of magnitude larger than ozone precursors and

overwhelms cost-effectiveness ratios unless CO emission reductions are scaled back significantly, typically by a factor of seven.

As with the state Carl Moyer Heavy-Duty Program, diesel particulate matter can be given an additional weighting factor of 20, since exhaust PM10 has also been identified as a toxic air contaminant. As indicated in the policy, cost-effectiveness is based on CMAQ dollars only (vs. total project costs which include capital investments and operating costs). The funding dollars are amortized over the expected project life using a discount rate. The amortization formula yields a capital recovery factor, which, when multiplied by the funding, gives the annual funding for the project over its expected lifetime. Cost-effectiveness is determined by dividing annualized funds by annual emission reductions (VOC+ NOx + PM10).

Example Formula

Cost-Effectiveness = (Capital Recovery Factor* Funding) / (VOC + NOx + PM10)
dollars/pound

METHODOLOGY FOR THE DISTRIBUTION OF CMAQ FUNDS

General Intent: The CMAQ Program provides funding for transportation projects or programs that will reduce transportation-related emissions. The StanCOG CMAQ Program is aimed toward providing a balanced program of transportation projects that will improve our air quality. Major emphasis is placed upon projects that support alternative modes of transportation, provide congestion relief measures, provide low-polluting transit vehicles and equipment, and provide new technologies/improvements geared toward providing a more efficient and safer transportation system.

On June 10, 2009 the Stanislaus Council of Governments Policy Board approved the following Methodology for the Distribution of CMAQ Funds:

- 50% Formula (Based on Percent by Population)
- 50% Competitive (Cost Effective)
- Rideshare taken off the top
- \$100,000 Floor for the Cities of Hughson, Waterford, and Newman
(Supplemented by the Competitive Share of Funds)

All projects being submitted as “Competitive” will contend based on “Cost-Effectiveness” and will abide by the methodology as described in the section of this document titled “Cost-Effectiveness Policy”.

**STANISLAUS COUNCIL OF GOVERNMENTS
CMAQ PROJECT APPLICATION**

Agency

Application Prepared By:

Name	Title	Phone#
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.....
(ONLY SELECT ONE)

TARGET FUNDS: **COMPETITIVE FUNDS:**

Priority #: ____ of ____

If "Target Fund" Project, Project is Being Submitted in the Following Category:

- Transit
- Alternative Fuel/Diesel Retrofit
- Traffic Flow Improvements
- Bicycle/Pedestrian
- PM-10 Reduction
- Miscellaneous
- Cost-Effective (\$30/lb. or less)

Project Description (Purpose of Project/Scope of Work):

Warrant Study/Level of Service and Traffic Volume (Submit calculations as attachment):

Route # or Name:

Postmile/Project Limits/Length:

Air Pollution Reduction (kg/day):

Cost-Effectiveness (Submit calculations as attachment):

Average Daily Traffic Volume (ADT):

Photo of Facility/Project (Optional-Please Attach):

Air Quality Screening Criteria Code:

*The following information will be used directly in the development of the FTIP.
Please use care in writing the descriptions.*

*Please note if you are programming a lump sum each project in the lump sum
must have an individual delivery schedule submitted.*

FTIP Proposed Project Title (34 Characters Max):

FTIP Proposed Description of Location and Work (156 Characters Max):

PROJECT DELIVERY SCHEDULE

<i>FUND</i>	<i>WORK PHASE</i>	<i>10-11</i>	<i>11-12</i>	<i>TOTAL</i>
CMAQ ___% (typically 88.53%)				
	<i>PE</i>			
	<i>ROW</i>			
	<i>CONST.</i>			
	<i>TOTAL</i>			
Local ___% (most projects require minimum 11.47% match)				
	<i>PE</i>			
	<i>ROW</i>			
	<i>CONST.</i>			
	<i>TOTAL</i>			
Project Total				
	<i>PE</i>			
	<i>ROW</i>			
	<i>CONST.</i>			
	<i>TOTAL</i>			

Please identify where local matching funds for this project will be coming from:

PLEASE SUBMIT ASSURANCE FORM WITH APPLICATION

CMAQ PROJECT SUBMITTAL INSTRUCTIONS

Step #1 (Agency): Indicate the name of your Jurisdiction or Agency. Indicate the Name, Title, and Phone Number of the person who prepared the application.

Step #2 (Target/ Competitive): Indicate whether the project is a "Target" or "Competitive" project by checking the appropriate box.

Step #3 (Priority #): The proposing agency should rank the projects that are submitted in accordance with their own priorities.

Step #4 (Category): The proposing agency should indicate the proposed category for any "Competitive" projects. Any project submitted in the cost-effective category must include documentation that the project meets the threshold of \$30/lb. or less.

Step #5 (Project Description): Describe the type of project that you propose **with sufficient detail so that the Scoring Committee can understand the purpose and extent of your project.** It may be expansion of transit services to reduce air pollutant emissions (i.e. purchase clean air buses), or conversion of an abandoned right-of-way (i.e. rail line to a bicycle path) etc. Please refer to the "Eligible Projects" Section for proper descriptions.

Step #6 (Warrant Study): If project is a traffic signal project, include "Warrant Study" to include level of service and traffic volumes (on each leg).

Step #7 (Route # or Name): List the name of the road or highway if applicable.

Step #8 (Project Location/ Length): Indicate the length of the facility (road, highway, bikeway, etc.) measured in miles including tenths of a mile. If postmiles are available, indicate postmile limits if applicable. Indicate the nearest cross-street at each end of the travel way. (Example: Charles Avenue between Walnut and Clover Avenues)

Step #9 (Air Pollution Reduction): Utilizing the ARB "Methods to Find the Cost-Effectiveness of Funding Air Quality Projects".

Step #10 (Cost-Effectiveness): Funding Air Quality Projects" Guidelines, you must calculate the kilograms per day of VOC, NOx, and PM10 pollutants that will be eliminated if the project is implemented. Using this guide, you will also determine the cost effectiveness of the project measured in total cost per pound of pollutants reduced.

Step #11 (ADT): Average Daily Traffic Volume on a road facility, or equivalent volume levels for transit/bicycle/pedestrian facilities if applicable.

Step #12 (Photo of Facility/Project): Although photos are optional, they are highly recommended.

Step #13 (Air Quality Screening): Please select the applicable “air quality screening” code from the attached list.

Step #14 (FTIP Project Title): Please write the title for the project as it would appear in the FTIP. Please note character limit.

Step #15 (FTIP Description): Please write the description for the project as it would appear in the FTIP. Must include project limits and describe all work being completed. Please note character limit.

Step #16 (Project Delivery): Please program the specific work phase and dollar amount into the appropriate Fiscal Year.

Please note that the MINIMUM local match for most projects is 11.47%. Agencies may provide a higher percentage match, if possible.

CODES (for Fund Type and Work Phase):

FUND TYPE:

CMAQ Congestion Mitigation & Air Quality
Local Local Agency Funds

WORK PHASE:

PE Preliminary Engineering/Development
ROW Right-of-Way Acquisition
CONST Construction

Please specify sources and amounts of local funding.

Step #17 (Local Funds): Please indicate the anticipated source of local funds that will be used to match the federal fund requested.

SAMPLE PROJECT APPLICATION

City of Sample
Agency

Application Prepared By:

Joe Smith

Director of Public Works

209 333-3333

Name

Title

Phone#

.....

(ONLY SELECT ONE)

TARGET FUNDS: COMPETITIVE FUNDS:

Priority #: 1 of 7

If "Target Fund" Project, Project is Being Submitted in the Following Category:

- Transit
- Alternative Fuel/Diesel Retrofit
- Traffic Flow Improvements
- Bicycle/Pedestrian
- PM-10 Reduction
- Miscellaneous
- Cost-Effective (\$30/lb. or less)

Project Description (Purpose of Project/Scope of Work):

Transit Van Purchase/ Purchase of 10 Compressed Natural Gas Modified Vans. To expand existing City of Sample Transit System in order to provide greater levels of service and meet the present and future transportation needs of the County. Major air quality benefits include reduction of ozone, carbon monoxide, and particulate by using "clean air vans."

Warrant Study/Level of Service and Traffic Volume (Submit calculations as attachment): N/A

Route # or Name: N/A (City of Sample Sub-Systems)

Postmile/Project Limits/Length: N/A

Air Pollution Reduction (kg/day): Kilograms Per Day Reduced

ROG = 0.37

NOX = 0.50

Cost-Effectiveness (Submit calculations as attachment):

\$25.00/lb. reduced

(See attached calculations)

Average Daily Traffic Volume (ADT): N/A

Photo of Facility/Project (Optional-Please Attach): Information regarding the proposed buses is attached.

Air Quality Screening Criteria Code: 4.02

***The following information will be used directly in the development of the FTIP.
Please use care in writing the descriptions.***

Please note if you are programming a lump sum each project in the lump sum must have an individual delivery schedule submitted.

FTIP Proposed Project Title (34 Characters Max):

Purchase of 10 Compressed Natural Gas Modified Vans to increase transit service.

FTIP Proposed Description of Location and Work (156 Characters Max):

Purchase of 10 Compressed Natural Gas Modified Vans to expand existing City of Sample Transit System.

PROJECT DELIVERY SCHEDULE

FUND	WORK PHASE	10-11	11-12	TOTAL
CMAQ 88.53% (typically 88.53%)				
	<i>PE</i>	44,500		44,500
	<i>ROW</i>			
	<i>CONST.</i>		872,700	872,700
	TOTAL	44,500	872,700	917,200
Local 11.47% (most projects require minimum 11.47% match)				
	<i>PE</i>	5,800		5,800
	<i>ROW</i>			
	<i>CONST.</i>		113,100	113,100
	TOTAL	5,800	113,100	118,900
Project Total				
	<i>PE</i>	50,300		50,300
	<i>ROW</i>			
	<i>CONST.</i>		985,800	985,800
	TOTAL	50,300	985,800	1,036,100

Please identify where local matching funds for this project will be coming from:

City Sales Tax

PLEASE SUBMIT ASSURANCE FORM WITH APPLICATION

AIR QUALITY SCREENING CRITERIA

1.00 SAFETY PROGRAMS

- 1.01 Railroad/Highway Crossing
- 1.02 Hazard Elimination Program
- 1.03 Safer non Federal-aid system roads
- 1.04 Shoulder improvements
- 1.05 Increasing sight distance
- 1.06 Safety Improvement Program
- 1.07 Traffic control devices and operating assistance other than signalization projects
- 1.08 Railroad/highway crossing warning devices
- 1.09 Guardrail, median barriers, crash cushions
- 1.10 Pavement resurfacing and/or rehabilitation
- 1.11 Pavement marking demonstration
- 1.12 Emergency Relief (23 U.S.C. 125)
- 1.13 Fencing
- 1.14 Skid treatments
- 1.15 Safety roadside rest areas
- 1.16 Adding medians
- 1.17 Truck climbing lanes outside the urbanized area
- 1.18 Lighting improvements
- 1.19 Widening narrow pavements or reconstructing bridges (no additional travel lanes)
- 1.20 Emergency truck pullovers

2.00 MASS TRANSIT

- 2.01 Operating assistance to transit agencies
- 2.02 Purchase of support vehicles
- 2.03 Rehabilitation of transit vehicles
- 2.04 Purchase of office, shop and operating equipment for existing facilities
- 2.05 Purchase of operating equipment for vehicles (e.g. radios, fareboxes, lifts, etc.)
- 2.06 Construction or renovation of power, signal, and communications systems
- 2.07 Construction of small passenger shelters and information kiosks
- 2.08 Reconstruction or renovation of transit buildings and structures
- 2.09 Rehabilitation or reconstruction of track structures, track, and trackbed in existing right-of-way
- 2.10 Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of fleet
- 2.11 Construction of new bus, rail storage/maintenance facilities categorically excluded (23 CFR 771)

3.00 AIR QUALITY

- 3.01 Continuation of ride-sharing and van-pooling promotion activities at current levels
- 3.02 Bicycle and pedestrian facilities

4.00 LANDSCAPING/SIGNS

- 4.01 Specific activities which do not involve or lead directly to construction
- 4.05 Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action
- 4.06 Noise attenuation
- 4.07 Emergency or hardship advance land acquisitions [23 CFR 712.204(d)].
- 4.08 Acquisition of scenic easements
- 4.09 Plantings, landscape, etc.
- 4.10 Sign removal
- 4.11 Directional and informational signs
- 4.12 Transportation enhancement activities (excepting rehabilitation and operation of historic buildings, structures, or facilities).
- 4.13 Repair of damage caused by natural disasters, civil unrest, or terrorist acts, except projects involving substantial functional, locational or capacity increase

5.00 OTHER

- 5.01 Intersection channelization projects
- 5.02 Intersection signalization projects at individual intersections
- 5.03 Changes in vertical and horizontal alignment
- 5.04 Interchange reconfiguration projects
- 5.05 Truck size and weight inspection stations
- 5.06 Bus terminals and transfer points
- 5.07 Traffic signal synchronization

CMAQ DELIVERY SCHEDULE SUPPORT FORM

Approval of AB 1012 requires that both State and Federal funds be used in a “timely” manner. In order to avoid losing any Federal or State funds to our Region, the “use it or lose it” requirements of AB 1012 place local governmental agencies in a position that they must be able to deliver their projects on time as proposed and as programmed within the Federal Transportation Improvement Program (FTIP).

Each agency must be able to assure that their project(s) can be delivered timely. Therefore, **the following “Delivery Schedule Support Form”** will be required one month after CMAQ projects have been selected **stating that each project will meet project delivery schedules and that staff be directed to insure that projects are delivered timely. Failure to submit such resolution will put at risk CMAQ funds for the agency.** The “Delivery Schedule Form” is attached.

**Congestion Mitigation and Air Quality (CMAQ)
Program Cycle FFY 2010/11 & 2011/12
Delivery Schedule Support Form**

AB 1012 has been enacted into State Law in part to provide for the "timely use" of State and Federal funding; and the **(City/County)** _____ is able to apply for and receive Federal funding under the FFY 2010/11 – FFY 2011/12 Congestion Mitigation Air Quality (CMAQ) Program.

The **(City/County)** _____ desires to ensure that the following CMAQ projects:

(Identify Projects) If more space is needed please attach list to this form.

are delivered in a timely manner to preclude the Stanislaus Region from losing those funds for non-delivery; and

It is understood by the **(City/County)** _____ that failure for not meeting project delivery dates for any phase of a project may jeopardize federal funding to the Region; and the **(City/County)** _____ must demonstrate dedicated and available local matching funds.

The **(City/County Authorized Authority)** _____ hereby agrees to ensure that all project delivery deadlines for all project phases will be met or exceeded.

Failure to meet project delivery deadlines may be deemed as sufficient cause for the Stanislaus Council of Governments Policy Board to terminate an agency's project and reprogram Federal funds as deemed necessary.

The **(City/County Authorized Authority)** _____ does direct its management and engineering staffs to ensure all projects are carried out in a timely manner as per the requirements of AB 1012.

***** (City/County Authorized Authority)**

Signature: _____

Date: _____

Print Name: _____

CMAQ Programming Criteria

TEA-21, SB 1435, and AB 1012 impose certain requirements on StanCOG regarding the allocation, programming, and monitoring of CMAQ funds. These procedures augment the requirements of Federal and State legislation, and provide a greater level of fund management flexibility of StanCOG, local governments, and Caltrans.

Projects are proposed to be selected and programmed according to the following criteria:

1. Projects must meet the CMAQ program eligibility requirements.
2. Projects may NOT increase capacity for single occupant vehicles.
3. Projects must have a positive air quality benefit measured in terms of a reduction in reactive organic gases (ROG), oxides of nitrogen (NOx), and/or particulate matter less than 10 micron (PM-10).
4. Congestion relief benefits, if any, must be documented.
5. The administering agency must be able to enter into a Master Agreement and must complete the Assurances form of the application.
6. Project must be able to be obligated by the end of the fiscal year for which funding is being sought.
7. The project must be consistent with the policies and programs in the most currently adopted Regional Transportation Plan.
8. Total project programming must be constrained to the available funding as provided in the annual funding estimates prepared by StanCOG and cited in the request for projects.
9. Program funds for projects, or project phases, may be allocated by StanCOG in a different federal fiscal year than requested in the project nomination form based on estimates of the total CMAQ funding available and the total amount of funds requested for all projects in a given year.
10. Project sponsors should contact the appropriate regulatory/resource agencies, such as CALTRANS, prior to submitting an application for CMAQ funds. For projects involving work in the Caltrans' right-of-way, the project schedule should be concurred with by Caltrans with respect to encroachments permits, cooperative agreements, signal warrants, etc.
11. Once a CMAQ project has been programmed and approved in the FTIP, jurisdictions will participate in the project tracking and monitoring system developed by StanCOG and Caltrans. This system will include the establishment of quarterly progress reports to ensure that projects, or project phases, are delivered in a timely manner.

12. Jurisdiction must receive StanCOG's approval before Caltrans may approve the "Request for Authorization to Proceed" (FNM-76) (Adopted by Resolution by the StanCOG Policy Board on April 21, 1999). The FNM – 76 may be submitted concurrently to StanCOG and Caltrans.
13. Jurisdiction must submit a copy of approved (signed) "Authorization to Proceed," or FNM-76, to StanCOG within fourteen (14) calendar days of receipt from Caltrans.
14. Jurisdictions must submit copies of "Summary of Completion" and a "Report of Expenditures" to StanCOG at the same time the forms are submitted to Caltrans.
15. In cases where a jurisdiction's project is voluntarily canceled, or is completed for "less" than the amount originally programmed in the FTIP, the dollar amounts not expended will revert to the original project sponsor for reprogramming.
16. In cases where a jurisdiction's project "exceeds" the amount originally programmed, local agencies may:
 - a) complete the project using their own non-federal sources; or
 - b) complete the project from a same-source (CMAQ) cost savings from another programmed project (s), assuming such savings exist for the fiscal year in question (NOTE: this policy does not allow a jurisdiction to cancel a programmed FTIP project to fund cost overrun on another project without a formal FTIP amendment); or
 - c) or must submit a Revised Detail Estimate along with a request for modification of the Authorization to Proceed E-76, and a revised finance letter. The Revised Detail Estimate should include the effects of all change orders and anticipated changed work through the end of the contract. This is to avoid future revisions. It be the administering agencies responsibility to ensure that there are enough federal-aid funds programmed by their MPO/RTPA (STP, TEA, or CMAQ) or Caltrans (HSIP, HBP, ER, and RRX), to cover an increase due to a revised detail estimate. If additional federal funds are required, the local agency must obtain written approval from the MPO/RTPA or Caltrans prior to submitting a Revised Detail Estimate." (LAPM CH 15, pg 16)

Assurances

This page must be signed for the project to be considered for funding.

Commitment/Prior Commitment:

Has the project Administering Agency certified that it is willing and able to maintain and operate the project?

Yes No

Please describe the best evidence of the certification available. If none is available, when can one be provided?

Project Administering Agency possesses legal authority to nominate Congestion Mitigation and Air Quality (CMAQ) Improvement projects and to finance, acquire, and construct, the proposed project; and by formal action (e.g. a resolution) the Administering Agency governing body authorizes the nomination of the CMAQ project, including all understanding and assurances contained therein, and authorizes the person identified as the official representative of the Administering Agency to act in connection with the nomination and to provide such additional information as may be required.

Project Administering Agency will maintain and operate the property acquired, developed, rehabilitated, or restored for the life of the resultant facility(ies) or activity. With the approval of the California Department of Transportation, the Administering Agency of its successors in interest in the property may transfer the responsibility to maintain and operate the property.

Project Administering Agency will give the California Department of Transportation representative access to and the right to examine all records, books, papers, or documents related to the CMAQ project.

Project Administering Agency will cause work on the project to be commenced within a reasonable time after receipt of notification from the State that funds have been approved by the Federal Highway Administration and that the project will be carried to completion with reasonable diligence.

Project Administering Agency will comply where applicable with provisions of the California Environmental Quality Act, the National Environmental Policy Act, the Americans with Disabilities Act, the Secretary of the Interior Standards and Guidelines for Archaeology and Historic Preservation, and any other federal, state, and/or local laws, rules and/or regulations.

I certify that the information contained in this CMAQ application, including required attachments, is accurate and that I have read and understand the important information and agree to the assurances on this form.

Signed

Date

(CMAQ Administering Agency Representative as shown in Resolution)

Printed (Name and Title):

Administering Agency: _____



CONTACT INFORMATION

For further information on eligible projects, submittal of applications or other questions related to the CMAQ program, please contact Scott Philips at (209) 525-4644 or Jeanette Fabela at (209) 525-4645.

Please submit all applications by **5:00 pm on November 20, 2009** and mail all correspondence to:

**Stanislaus Council of Governments
900 H Street, Suite D
Modesto, CA 95354
Attention: Scott Philips, Interim Senior Planner**

APPENDIX A PROGRAM GUIDANCE

**The Congestion Mitigation and Air Quality (CMAQ) Improvement
Program**

under the

**Safe, Accountable, Flexible, Efficient Transportation Equity Act: A
Legacy for Users**

FINAL PROGRAM GUIDANCE

October, 2008

The guidance contained in this document is intended to be nonbinding, except insofar as it references existing statutory requirements. In this guidance document, the use of mandatory language such as “shall,” “must,” “required,” or “requirement” is only used to reflect statutory or regulatory mandates and does not create new requirements. This guidance does not create or confer any rights for or on any person and should not be construed as rules of general applicability and legal effect.



Federal Highway Administration

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I. INTRODUCTION

The CMAQ program was created under the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, continued under the Transportation Equity Act for the 21st Century (TEA-21), and reauthorized by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).¹ Over \$8.6 billion is authorized over the five-year program (2005-2009), with annual authorization amounts increasing each year during this period. Through 2005, the program has supported nearly 16,000 transportation projects across the country.

This guidance replaces the April 1999 version and provides information on the CMAQ program, including:

- Authorization levels and apportionment factors specific to the SAFETEA-LU
- Flexibility and transferability provisions available to States
- Geographic area eligibility for CMAQ funds
- Project eligibility information
- Project selection processes
- Program administration

Appendices 1-3 provide updated statutory language relating to the CMAQ program. Appendix 4 provides supplemental information on diesel retrofit projects. **[NOTE: Appendices 1 and 2 provide updated statutory language. Appendix 3 provides information on diesel retrofits, while original Appendix 4 on cost-effectiveness has been dropped in deference to EPA's referenced research on this subject].**

Information on the current annual apportionment to each State and an electronic version of this guidance are available at <http://www.fhwa.dot.gov/environment/cmaqpgs/index.htm>.

This guidance document has been prepared by the Air Quality Team in FHWA's Office of Environment and Planning.

II. PROGRAM PURPOSE

The purpose of the CMAQ program is to fund transportation projects or programs that will contribute to attainment or maintenance of the national ambient air quality standards (NAAQS) for ozone, carbon monoxide (CO), and particulate matter (PM).

The CMAQ program supports two important goals of the Department of Transportation: improving air quality and relieving congestion. While these goals are not new elements of the program, they are strengthened in a new provision added to the CMAQ statute by SAFETEA-LU, establishing priority consideration for cost-effective emission reduction and congestion mitigation activities when using CMAQ funding.²

Reducing pollution and other adverse environmental effects of transportation projects and transportation system inefficiency have been long-standing objectives of the Department of

¹ Pub. L. 109-59, 119 Stat. 1144 (Aug. 10, 2005).

² 23 U.S.C. §149(f)(3) (SAFETEA-LU §1808(d))



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Transportation. The strategic plans for the Department of Transportation and for the Federal Highway Administration both include performance measures specifically focused on reducing air pollution from transportation facilities. The CMAQ program provides funding for a broad array of tools to accomplish these goals. By choosing to fund a CMAQ project, a State or local government can improve air quality and make progress towards achieving attainment status and ensuring compliance with the transportation conformity provisions of the Clean Air Act.³

Reducing congestion is also a key objective of the Department of Transportation, and one that has gained increasing attention in the past several years. The cost of congestion, which negatively affects the U.S. economy, quality of life, and air quality, has risen dramatically in the last 25 years despite record levels of transportation investment. Some economists estimate that the overall cost of congestion to the U.S. economy approaches \$200 billion a year. As a result, in May 2006, the Department of Transportation announced its *National Strategy to Reduce Congestion on America's Transportation Network* (the Congestion Initiative) that aims to meaningfully reduce the economic and social costs of congestion on our nation's highways and in other transportation facilities.⁴ This strategy can be found at: <http://isddc.dot.gov/OLPFiles/OST/012988.pdf>.

Since congestion relief projects also reduce idling, the negative emissions impacts of "stop and go" driving, and the number of vehicles on the road, they have a corollary benefit of improving air quality. Based on their emissions reductions, these types of projects, including investments in improved system pricing and operations, are eligible for CMAQ funding.⁵ The Department believes State and local governments can simultaneously reduce the costly impacts of congestion while also improving air quality.

III. AUTHORIZATION LEVELS UNDER THE SAFETEA-LU

A. Authorization Levels

Table 1 shows the SAFETEA-LU CMAQ authorization levels by fiscal year. The CMAQ funds will be apportioned to States each year based upon the apportionment factors discussed in Section V.

TABLE 1
SAFETEA-LU CMAQ AUTHORIZATION LEVELS

Fiscal Year Authorization	Amount Authorized
FY 2005	\$1,667,255,304
FY 2006	\$1,694,101,866
FY 2007	\$1,721,380,718
FY 2008	\$1,749,098,821

³ 42 U.S.C. §7506 Section 176(c)

⁴ Speaking before the National Retail Federation's annual conference on May 16, 2006, in Washington, D.C., former U.S. Transportation Secretary Norman Mineta unveiled a new plan to reduce congestion plaguing America's roads, rails, and airports. The *National Strategy to Reduce Congestion on America's Transportation Network* includes a number of initiatives designed to reduce transportation congestion. The transcript of these remarks is available at the following URL: <http://www.dot.gov/affairs/minetasp051606.htm>

⁵ 23 U.S.C. §149(b)(5)



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FY 2009	\$1,777,263,247
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B. Equity Bonus

Similar to the minimum guarantee under the TEA-21, the Equity Bonus in SAFETEA-LU provides additional funding beyond the authorized levels so that each State receives a minimum percentage of its gas tax receipts back in the form of Federal-aid funds.⁶

C. Transferability of CMAQ Funds

Since transportation and environmental program priorities fluctuate, States may choose to transfer a limited portion of their CMAQ apportionment to the following Federal-aid highway programs: Surface Transportation Program (STP), National Highway System (NHS), Highway Bridge Program (HBP), Interstate Maintenance (IM), Recreational Trails Program (RTP), and the Highway Safety Improvement Program (HSIP).

States may transfer CMAQ funds according to the following provision: An amount not to exceed 50 percent of the quantity of the State's annual apportionment less the amount the State would have received if the CMAQ program had been authorized at \$1,350,000,000.⁷ For example, if the annual national apportionment is \$1.75 billion and a State receives \$10 million more than it would have received if the national apportionment had been \$1.35 billion, the State can transfer up to \$5 million to other programs. Any transfer of such funds must still be obligated in nonattainment and maintenance areas.⁸ The amount of transferable funds will differ each year and by State, depending on overall authorization levels. Each year, the FHWA will inform States how much, if any, CMAQ funding is transferable and will track this movement of CMAQ funds. States also may transfer CMAQ funds to other Federal agencies. The SAFETEA-LU provides additional flexibility to complete such transfers when the receiving Federal agency has entered into an agreement with the State to undertake an eligible Federal-aid project.⁹ These opportunities apply to projects that have met all CMAQ eligibility requirements prior to the transfer.

D. CMAQ and Innovative Finance: State Infrastructure Bank (SIB) and Section 129 Loans

Projects with dedicated repayment streams, i.e., a consistent source of revenue, may be financed with loans through DOT's innovative finance program as an alternative or supplement to CMAQ funding.

State Infrastructure Banks are State-directed programs that allow Federal-aid funds to be lent to sponsors of eligible Federal-aid projects (any project under Title 23 or capital projects, as defined by 49 U.S.C. §5302, are eligible). SIBs may be capitalized with several Federal-aid highway apportionments including the National Highway System Program, the Surface Transportation Program, the Highway Bridge Program, the Interstate Maintenance Program, and the Equity Bonus program. (Note: CMAQ may not be used to *capitalize* a SIB, but SIB funds may be used to *finance* CMAQ projects). State funds also may be used to capitalize the SIB. The State then receives repayments over time that can be directed toward other transportation

⁶ 23 U.S.C. §105 (SAFETEA-LU §1104)

⁷ 23 U.S.C. §126(c)

⁸ 23 U.S.C. §149(b)

⁹ 23 U.S.C. §132(a) (SAFETEA-LU §1119)



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projects. For example, New York State was successful in utilizing its SIB to implement two truck stop electrification projects along the New York State Thruway.

Section 129 loans (23 U.S.C.129(a)(7)) allow states to use Federal-aid highway apportionments to make loans for projects with dedicated revenue streams (this is only applicable to highway, bridge, tunnel, ferry boat, and ferry terminal projects). A Section 129 loan may be used to construct a truck stop electrification facility if the facility is located on the Interstate right-of-way.¹⁰ **[NOTE: The provision for construction in the Interstate ROW has since been removed via Public Law No. 110-244, 122 Stat. 1572 the SAFETEA-LU Technical Corrections Bill]**

The SAFETEA-LU establishes a new SIB program under which all States are authorized to enter into cooperative agreements with the U.S. DOT to establish infrastructure revolving-funds eligible to be capitalized with Federal transportation funds.¹¹ The key difference between a Section 129 loan and a SIB is that a Section 129 loan usually provides financing to an individual project and funding a SIB capitalizes a financial entity that can assist multiple projects. The two loan programs have similar maximum allowable terms established by Federal law:

- Both public and private entities are eligible to be project sponsors
- Repayments begin within 5 years of project completion
- Maximum loan term is 30 years after project authorization (Section 129) or 30 years after first repayment (SIB)
- Interest rate may be set by State, at or below market rates
- Loans can only be made up to 80 percent of eligible project costs (Section 129). For SIBs, loans can be made up to 80 percent of eligible project costs (although the non-Federal share can be reduced under 23 U.S.C. §120(b) if the sliding scale rate is used).

These innovative loan programs can increase the efficiency of States' transportation investments and significantly leverage Federal resources by attracting non-Federal public and private investment, and provide greater flexibility to the States by allowing other types of project assistance in addition to grant assistance. This type of financing is important for new technologies or start-up businesses that may have difficulty finding financing in the private capital markets. In addition to SIBs and section 129 loans, the FHWA also administers the Transportation Infrastructure Finance and Innovation Act (TIFIA) program, which provides Federal credit assistance to large-scale projects greater than \$50 million.

The following example illustrates how a Section 129 loan could work to construct an idle-reduction facility on an Interstate right-of-way. A private party intends to build a stationary idle-reduction facility, and seeks grant funding for it from the State DOT. The idle reduction facility will eventually earn a profit by charging user fees, but since the capital costs are high, the private party needs assistance with financing the initial construction. Instead of providing an outright grant, the State could offer a loan of Federal-aid funds with flexible repayment terms. If the facility required \$1 million for initial construction, the State could make a loan at five percent over fifteen years. The State could accelerate the payments if the facility were more successful than expected, and delay repayment if the facility failed to meet revenue targets. The State could also build in credits for additional emissions reductions, providing incentives for additional loans

¹⁰ 23 U.S.C. §111(d) (SAFETEA-LU §1412)

¹¹ 23 U.S.C. §190 (SAFETEA-LU §1602)



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or grants to idle reduction projects. More information on the DOT's innovative finance program is available at <http://www.fhwa.dot.gov/innovativefinance/>.

IV. PRIORITY FOR USE OF CMAQ FUNDS

The SAFETEA-LU directs States and MPOs to give priority to two categories of funding. First, priority is for diesel retrofits, particularly where necessary to facilitate contract compliance, and other cost-effective emission reduction activities, taking into consideration air quality and health effects. Second, priority is to be given to cost-effective congestion mitigation activities that provide air quality benefits.¹² Other projects also may be cost-effective. The priority provisions in the statute apply to the portion of CMAQ funds derived from the application of sections 104(b)(2)(B) and 104(b)(2)(C) of SAFETEA-LU, i.e., the CMAQ apportionment formula. They do not apply to areas where CMAQ funding has been derived from the minimum apportionment provisions.

In accordance with the SAFETEA-LU,¹³ the EPA has released a guidance document, *The Cost Effectiveness of Heavy-Duty Diesel Retrofits and Other Mobile Source Emission Reduction Projects and Programs*, which provides cost-effectiveness data on diesel engine retrofit technologies and other CMAQ-eligible activities. It is available online at: <http://www.epa.gov/cleandiesel/publications.htm>

In addition, the Transportation Research Board published *The Congestion Mitigation and Air Quality Improvement Program: Assessing 10 Years of Experience* in 2002, providing a number of effectiveness measures for both emissions and travel activity.

Though SAFETEA-LU establishes these CMAQ investment priorities, it also retains State and local agencies' authority in project selection. The law maintains the existing roles and authorities of public agencies, and substantial shifts in local procedures are not required by the SAFETEA-LU.¹⁴ However, project selection should reflect the positive cost-effectiveness relationships highlighted in the EPA guidance. State and local transportation programs that implement a broad array of these cost-effective measures may record a more rapid rate of progress toward their clean air goals, since many of these endeavors generate immediate benefits. Local procedures that elevate the importance of these efforts in project selection—and rate them accordingly—may accelerate the drive to air quality attainment.¹⁵

In addition to the SAFETEA-LU priority on cost-effectiveness, Section 176(c) of the Clean Air Act¹⁶ requires that the FHWA and FTA ensure timely implementation of transportation control measures (TCMs) in applicable State Implementation Plans (SIPs). These and other CMAQ-eligible projects identified in approved SIPs should receive funding priority.

The FHWA recommends that States and MPOs develop their transportation/air quality programs using complementary measures that provide alternatives to single-occupant vehicle (SOV) travel

¹² 23 U.S.C. §149(f)(3) (SAFETEA-LU §1808(d))

¹³ 23 U.S.C. §149(f)(2)(c) (SAFETEA-LU §1808(d))

¹⁴ 23 U.S.C. §149(f)(3)(B) (SAFETEA-LU §1808(d))

¹⁵ U.S. House, *Safe, Accountable, Flexible, Efficient Transportation Equity Act, a Legacy for Users, Conference Report* (to accompany H.R. 3) (109 H. Rpt. 203), Section 1938, *Priorities Provision in Diesel Retrofit*

¹⁶ 42 U.S.C. §7506 Section 176(c)(2)(B)



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while improving traffic flow through operational strategies and balancing supply and demand through pricing, parking management, regulatory, or other means.

V. ANNUAL APPORTIONMENTS OF CMAQ FUNDS TO STATES

A. CMAQ Apportionments

Federal CMAQ funds are apportioned annually to each State according to the severity of its ozone and CO problem (see Appendix 2). The population of each county (based upon Census Bureau data) that is in a nonattainment or maintenance area for ozone and/or CO is weighted by multiplying by the appropriate factor listed in Table 2. PM nonattainment and maintenance areas and former 1-hour areas, except those few 1-hour maintenance areas participating in Early Action Compacts, are not included in the apportionments.

Note: CMAQ apportionments and CMAQ eligibility are two different things. Some areas in which CMAQ funds may be spent are not included in the apportionments (see Section VI.).

TABLE 2
SAFETEA-LU CMAQ APPORTIONMENT FACTORS¹⁷

POLLUTANT	CLASSIFICATION AT THE TIME OF ANNUAL APPORTIONMENT	WEIGHTING FACTOR
Ozone (O ₃) or (CO)	Maintenance (these areas had to be previously eligible as nonattainment areas - See Section VI.)	1.0
Ozone	Subpart 1 ("Basic")	1.0
Ozone	Marginal	1.0
Ozone	Moderate	1.1
Ozone	Serious	1.2
Ozone	Severe	1.3
Ozone	Extreme	1.4
CO	Nonattainment	1.0
Ozone and CO	Ozone nonattainment or maintenance and CO nonattainment or maintenance	1.2 x O ₃ factor
All States - minimum apportionment	1/2 of 1 percent total annual apportionment of CMAQ funds	N/A

CMAQ apportionments are calculated based on the nonattainment and maintenance areas that exist at the time of apportionment. Generally, apportionments are calculated prior to the beginning of each fiscal year.

B. Area Designations: Attainment vs. Nonattainment

Each State is guaranteed a minimum apportionment of one-half percent of the year's total program funding, regardless of whether the State has any nonattainment or maintenance areas.

¹⁷ 23 U.S.C. §104(b)(2) (SAFETEA-LU §1103(d))



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These flexible funds or minimum apportionment funds can be used anywhere in the State for projects eligible for either CMAQ or the STP.¹⁸

The FHWA Budget Division identifies annual apportionments of CMAQ funds as either *mandatory* or *flexible*. All funding is considered mandatory for States with weighted populations yielding one-half percent or more of the authorized funds (based on the table above). Annual CMAQ funding apportioned through the application of sections 104(b)(2)(B) and 104(b)(2)(C) must be used for projects in nonattainment/maintenance areas.¹⁹

States with weighted populations yielding at least some apportioned value but less than one-half percent of the authorized funds receive both mandatory and flexible funds to reach the minimum apportionment. For example, if a State's weighted population yields two tenths of one percent of the authorized funds, it would receive two tenths of one percent of the national funds as mandatory funds, and three tenths of one percent as flexible funds. Thus, 40 percent of the State's funds would be mandatory and 60 percent would be flexible.

For States with no areas applicable to the apportionment table, their minimum apportionment, one-half percent, is all flexible funding. The FHWA reports the breakdown of mandatory and flexible funds by State in its fiscal year apportionment tables.

C. Apportionments and State Allocation

Notwithstanding the statutory formula for determining the apportionment amount, the State may use its CMAQ funds in any ozone, CO, or PM nonattainment or maintenance area. A State is under no statutory obligation to allocate CMAQ funds in the same way they are apportioned. States are encouraged to consult affected MPOs to determine regional and local CMAQ priorities and work with them to allocate funds accordingly.

D. Federal Share and State/Local Match Requirements

The Federal share for most CMAQ projects, generally, has been 80 percent. However, under the Energy Independence and Security Act of 2007,²⁰ the Federal share for eligible CMAQ projects carried out with funds obligated in fiscal year 2008 or 2009, or both, may be, at the discretion of the State, up to 100 percent of the cost of the project or program.

VI. GEOGRAPHIC AREAS THAT ARE ELIGIBLE TO USE CMAQ FUNDS

A. Eligible Areas

CMAQ funds may be invested in all ozone, CO, and PM nonattainment and maintenance areas. Funds also may be spent in the few remaining 1-hour ozone maintenance areas (these counties also have Early Action Compacts in place), since the 1-hour standard remains in effect for these areas.

¹⁸ 23 U.S.C. §149(c) (SAFETEA-LU §1808(c))

¹⁹ 23 U.S.C. §149(b)

²⁰ Pub. L. 110-140, Sect. 1131 (December 20, 2007).



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Funds also may be used for projects in proximity to nonattainment and maintenance areas if the benefits will be realized primarily within the nonattainment or maintenance area. The delineation of an area considered “in proximity” should be discussed with the FHWA and FTA field offices and elevated to headquarters if necessary.

B. Maintenance Areas

CMAQ funds may be invested in maintenance areas that have approved maintenance plans under CAA section 175A. In States with ozone or CO maintenance areas but no nonattainment areas, mandatory CMAQ funds must be used in the maintenance areas.²¹

C. Maintenance Plan Requirement, SAFETEA-LU

CMAQ funds may be invested in former 1-hour ozone areas that were not designated under the 8-hour standard but where the 1-hour standard has been revoked. Since these areas are required to file maintenance plans, they are considered eligible for CMAQ funding under provisions of the SAFETEA-LU.²²

D. Flexible Funds in PM Areas

While States may use flexible CMAQ funding anywhere and for any CMAQ- or STP-eligible project (see V.B. on minimum apportionment), the FHWA encourages States and MPOs to evaluate the cost-effectiveness and benefits to public health of targeting flexible CMAQ funding to projects that reduce PM. Examples of such projects include implementing a diesel retrofit or idle reduction program, constructing freight/intermodal transfer facilities, traffic signalization, or ITS projects that reduce congestion; paving dirt roads, and purchasing street sweeping equipment.

VII. PROJECT ELIGIBILITY PROVISIONS

A. Project Eligibility: General Conditions

To be eligible for CMAQ funds, a project must be included in the MPO’s current transportation plan and TIP (or the current STIP in areas without an MPO). In nonattainment and maintenance areas, the project also must meet the conformity provisions contained in section 176(c) of the Clean Air Act and the transportation conformity regulations.²³ In addition, all CMAQ-funded projects need to complete National Environmental Policy Act (NEPA) requirements and meet basic eligibility requirements for funding under titles 23 and 49 of the United States Code.

The following should guide CMAQ eligibility decisions:

1. Capital Investment

²¹ 23 U.S.C. §149(b)

²² 23 U.S.C. §149(b) (SAFETEA-LU §1808(a))

²³ 40 CFR Parts 51 and 93



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CMAQ funds may be used to establish new or expanded transportation projects or programs that reduce emissions, including capital investments in transportation infrastructure, congestion relief efforts, diesel engine retrofits, or other capital projects.



2. Operating Assistance

There are several general conditions that must be met for operating assistance to be eligible under the CMAQ program:

- a. Operating assistance is limited to new transit services, intermodal facilities, and travel demand management strategies (including traffic operation centers); and the incremental cost of expanding existing transit services.
- b. In using CMAQ funds for operating assistance, the intent is to help start up viable new transportation services that can demonstrate air quality benefits and eventually cover their costs as much as possible. Other funding sources should supplement and ultimately replace CMAQ funds for operating assistance, as these projects no longer represent additional, net air quality benefits but have become part of the baseline transportation network.
- c. Operating assistance includes all costs of providing new transportation services, including, but not limited to, labor, fuel, administrative costs, and maintenance.
- d. When CMAQ funds are used for operating assistance, non-Federal share requirements still apply.
- e. With the focus on start-up costs only, operating assistance under the CMAQ program is limited to three years. The provisions in 23 U.S.C. §116 place responsibilities for maintenance on States.²⁴ Since facility maintenance is akin to operations, three years of CMAQ assistance provides adequate incentive and flexibility while not creating a pattern of excessive or even perpetual support. Exceptions are listed below under VII.D.7 Travel Demand Management, VII.D.8 Public Education, and VII.D.10 Carpooling and Vanpooling.

3. Emission Reduction

Air quality improvement is defined by several distinct terms in 23 U.S.C. §149. These terms include contribution to attainment, reduction in pollution, air quality benefits, and others. For purposes of this guidance, the FHWA uses *emission reduction* to represent this group of terms. CMAQ-invested projects or programs must reduce CO, ozone precursor (NOx and VOCs), PM, or PM precursor (e.g., NOx) emissions from transportation; these reductions must contribute to the area's overall clean air strategy and can be demonstrated by the assessment that is required under this guidance.²⁵ States and MPOs also may consider the ancillary benefits of eligible projects, including greenhouse gas reductions, congestion relief, safety, or other elements, when programming CMAQ funds, though such benefits do not alone establish eligibility.

²⁴ 23 U.S.C. §116

²⁵ 23 U.S.C. §149(b)



4. Planning and Project Development

Activities in support of eligible projects also may be appropriate for CMAQ investments. Studies that are part of the project development pipeline (e.g., preliminary engineering) under NEPA are eligible for CMAQ support, as are FTA's Alternatives Analyses. General studies that fall outside specific project development do not qualify for CMAQ funding. Examples of such efforts include major investment studies, commuter preference studies, modal market polls or surveys, transit master plans, and others. These activities are eligible for Federal planning funds.

B. Projects Ineligible for CMAQ Funding

The following projects are ineligible for CMAQ funding:

1. Light-duty vehicle scrappage programs.²⁶
2. Projects that add new capacity for SOVs are ineligible for CMAQ funding unless construction is limited to high-occupancy vehicle (HOV) lanes.²⁷ This HOV lane eligibility includes the full range of HOV facility uses authorized under 23 U.S.C §166, such as high-occupancy toll (HOT) and low-emission vehicles.
3. Routine maintenance and rehabilitation projects (e.g., replacement-in-kind of track or other equipment, reconstruction of bridges, stations, and other facilities, and repaving or repairing roads) are ineligible for CMAQ funding as they only maintain existing levels of highway and transit service, and therefore do not reduce emissions.²⁸ Other funding sources, such as STP and FTA's Section 5307 program, are available for such activities.
4. Administrative costs of the CMAQ program may not be defrayed with program funds, e.g., support for a State's "CMAQ Project Management Office" is not eligible.
5. Projects that do not meet the specific eligibility requirements of titles 23 and 49 U.S.C. are ineligible for CMAQ funds.
6. Stand-alone projects to purchase fuel. One exception is listed below in Section VII.D.3.²⁹

C. Public-Private Partnerships (PPPs)

In a PPP, a private or non-profit entity's resources replace or supplement State or local funds and possibly a portion of the Federal-aid in a selected project. The PPP elements of the program have been refined over the last two transportation reauthorizations, and these partnerships have become a critical part of CMAQ.³⁰

Partnerships should have a legally-binding written agreement in place between the public agency and the private or non-profit entity before a CMAQ-funded project may be implemented. These agreements should be developed under relevant Federal and State law and should specify the intended use for CMAQ funding; the roles and responsibilities of the participating entities; and how the disposition of land, facilities, and equipment

²⁶ 23 U.S.C. §149(b)

²⁷ 23 U.S.C. §149(b)

²⁸ 23 U.S.C. §116

²⁹ 23 U.S.C. §149(k)

³⁰ 23 U.S.C. §149(e)



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will be carried out should the original terms of the agreement be altered (e.g., due to insolvency, change in ownership, or other changes in the structure of the PPP).

Public funds should not be invested where a strong public benefit cannot be demonstrated. Consequently, CMAQ funds should be devoted to PPPs that benefit the general public by clearly reducing emissions, not for financing marginal projects. Consistent with the planning and project selection provisions of the Federal-aid highway program, the FHWA considers it essential that all interested parties have full, open, and timely access to the project selection process.

There are several other statutory restrictions and special provisions on the use of CMAQ funds in PPPs. Eligible costs under this section should not include costs to fund an obligation imposed on private sector or non-profit entities under the CAA or any other Federal law.³¹ However, if the private or non-profit entity is clearly exceeding its obligations under Federal law, CMAQ funds may be used for that incremental portion of the project.

Eligible non-monetary activities that satisfy the non-Federal match requirements under the partnership provisions include the following:

- Ownership or operation of land, facilities, or other physical assets
- Construction or project management
- Other forms of participation approved by the U.S. DOT

Sharing of total project costs, both capital and operating, is a critical element of a successful public-private venture, particularly if the private entity is expected to realize profits as part of the joint venture. State and local officials are urged to consider a full range of cost-sharing options when developing a PPP, including a larger State/local match. For detailed information on cost principles beyond the scope of this guidance, please consult *OMB Circular A-87*, which focuses on determining allowable costs for State, local, and tribal governments; and 49 CFR Part 18, which provides direction on administering Federal grants to State and local governments.

D. Eligible Projects and Programs

Eligibility information is provided below. Not all possible requests for CMAQ funding are covered—this section provides examples of activities eligible for CMAQ funds.

1. Transportation Control Measures (TCMs)

Most of the TCMs included in Section 108 of the CAA, listed below, are eligible for CMAQ funding. One CAA TCM, programs to encourage removal of pre-1980 light-duty vehicles, is specifically excluded from CMAQ eligibility.³²

- i. programs for improved public transit;

³¹ 23 U.S.C. § 149(e)(5)

³² 23 U.S.C. §149(b)(1)(A)(i)



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- ii. restriction of certain roads or lanes to, or construction of such roads or lanes for use by, passenger buses or HOV;
- iii. employer-based transportation management plans, including incentives;
- iv. trip-reduction ordinances;
- v. traffic flow improvement programs that reduce emissions;
- vi. fringe and transportation corridor parking facilities serving multiple-occupancy vehicle programs or transit service;
- vii. programs to limit or restrict vehicle use in downtown areas or other areas of emission concentration particularly during periods of peak use;
- viii. programs for the provision of all forms of high-occupancy, shared-ride services;
- ix. programs to limit portions of road surfaces or certain sections of the metropolitan area to the use of non-motorized vehicles or pedestrian use, both as to time and place;
- x. programs for secure bicycle storage facilities and other facilities, including bicycle lanes, for the convenience and protection of bicyclists, in both public and private areas;
- xi. programs to control extended idling of vehicles;
- xii. reducing emissions from extreme cold-start conditions;
- xiii. employer-sponsored programs to permit flexible work schedules;
- xiv. programs and ordinances to facilitate non-automobile travel, provision and utilization of mass transit, and to generally reduce the need for SOV travel, as part of transportation planning and development efforts of a locality, including programs and ordinances applicable to new shopping centers, special events, and other centers of vehicle activity; and
- xv. programs for new construction and major reconstructions of paths, tracks, or areas solely for the use by pedestrian or other non-motorized means of transportation when economically feasible and in the public interest.

2. Extreme Low-Temperature Cold Start Programs

Projects intended to reduce emissions from extreme cold-start conditions are eligible for CMAQ funding. Such projects include retrofitting vehicles and fleets with water and oil heaters and installing electrical outlets and equipment in publicly-owned garages or fleet storage facilities (See Section VII.C. for a possible expansion to privately-owned equipment and facilities).

3. Alternative Fuels and Vehicles

Fuel

With the exception of Missouri, Iowa, Minnesota, Wisconsin, Illinois, Indiana, and Ohio, fuel costs are not an eligible expense as a stand-alone project.³³ Only these seven States may use CMAQ funds to purchase the alternative fuels defined in section 301 of the 1992 Energy Policy Act (natural gas, ethanol, etc.) or biodiesel, assuming such projects meet other applicable eligibility requirements noted in Section VII.B. above.

³³ SAFETEA-LU, §1808(k)



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Establishing publicly-owned fueling facilities and other infrastructure needed to fuel alternative-fuel vehicles is an eligible expense, unless privately-owned fueling stations are in place and reasonably accessible. Additionally, CMAQ funds may support converting a private fueling facility to support alternative fuels through a public-private partnership agreement (See Section VII.C.).

Non-transit Vehicles

CMAQ funds may be used to purchase publicly-owned alternative fuel vehicles, including passenger vehicles, refuse trucks, street cleaners, and others. Costs associated with converting fleets to run on alternative fuels are also eligible. When private vehicles are purchased, only the cost difference between the alternative fuel vehicles and comparable conventional fuel vehicles is eligible. Such vehicles should be fueled by one of the alternative fuels identified in section 301 of the 1992 Energy Policy Act or biodiesel. Eligible projects also include alternatives to diesel engines and vehicles.

Hybrid Vehicles

Although not defined by the Energy Policy Act of 1992 as alternative fuel vehicles, certain hybrid vehicles that have lower emissions rates than their non-hybrid counterparts may be eligible for CMAQ investment. Hybrid passenger vehicles must meet EPA's low emissions and energy efficiency requirements for certification under the HOV exception provisions of the SAFETEA-LU to be eligible for CMAQ funding.³⁴ **[NOTE: The final rule is in the last stages of review, although no date set for publication in the Federal Register, as of November 14, 2008].**

Projects involving heavier vehicles, including refuse haulers and delivery trucks, also may be appropriate for program support. Eligibility should be based on a comparison of the emissions projections of these larger candidate vehicles and other comparable models.

4. Congestion Reduction & Traffic Flow Improvements

Traffic flow improvements may include the following:

a. Traditional Improvements

Traditional traffic flow improvements, such as the construction of roundabouts, HOV lanes, left-turn or other managed lanes, are eligible for CMAQ funding provided they demonstrate net emissions benefits.

b. Intelligent Transportation Systems

Intelligent Transportation Systems (ITS) projects, such as traffic signal synchronization projects, traffic management projects, and traveler information

³⁴ 23 U.S.C. §166(e) (SAFETEA-LU §1121(a)). The required rulemaking developed by EPA has been published in the *Federal Register* at 72 FR 29102, <http://www.epa.gov/fedrgstr/EPA-AIR/2007/May/Day-24/a9821.htm>



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systems, can be effective in relieving traffic congestion, enhancing transit bus performance, and improving air quality. The following have the greatest potential for improving air quality:

- Regional multi-modal traveler information systems
- Traffic signal control systems
- Freeway management systems
- Electronic toll-collection systems
- Transit management systems
- Incident management programs

A lengthier discussion of the benefits associated with various operational improvements can be found at:

http://ops.fhwa.dot.gov/program_areas/programareas.htm

c. Value/Congestion Pricing

As part of its Congestion Initiative referenced above, the Department broadly promotes highway congestion pricing and is also seeking an area-wide demonstration of the effectiveness of congestion pricing (along with other elements). Congestion pricing is a market-based mechanism that allows tolls to rise and fall depending on available capacity and demand. It has gained increasing attention and popularity in recent years following several highly successful facility demonstrations in the U.S. and several network wide demonstrations abroad. Tolls can be charged electronically, thereby eliminating the need for tollbooths. In addition to the benefits associated with reducing congestion, revenue is generated that can be used to pay for a wide range of transportation improvements, including Title 23-eligible transit services in the newly tolled corridor.

Parking pricing can include time-of-day parking charges that reflect congested conditions. These strategies should be designed to influence trip-making behavior and may include charges for using a parking facility at peak periods, or a range of employer-based parking cash-out policies that provide financial incentives to avoid parking or driving alone. Parking pricing integrated with other pricing strategies is encouraged.

Pricing encompasses a variety of market-based approaches such as:

- **HOT lanes**, or High Occupancy Toll lanes, on which variable tolls are charged to drivers of low-occupancy vehicles using HOV lanes, such as the “FasTrak” Lanes on I-15 in San Diego and the recently converted I-394 in Minneapolis in which prices vary dynamically every two minutes based on traffic conditions
- **New variably tolled express lanes** on existing toll-free facilities, such as the “91 Express Lanes” on State Route 91 in Orange County, CA
- **Variable tolls on existing or new toll roads**, such as on the bridges and tunnels operated by the Port Authority of New York and New Jersey



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- **Network-wide or cordon pricing**, such as implemented in Stockholm, London and Singapore
- **Usage-based vehicle pricing**, such as mileage-based vehicle taxation being explored by the State of Oregon, or pay-per-mile car insurance

As with any eligible CMAQ project, value pricing should generate an emissions reduction. Marketing and outreach efforts to expand and encourage the use of eligible pricing measures may be funded indefinitely. Eligible expenses for reimbursement include, but are not limited to: tolling infrastructure, such as transponders and other electronic toll or fare payment systems; small roadway modifications to enable tolling, marketing, public outreach, and support services, such as transit in a newly tolled corridor. Innovative pricing approaches yet to be deployed in the U.S. also may be supported through the *Value Pricing Pilot Program*. A more complete discussion of projects currently underway in the U.S. can be found at:

http://ops.fhwa.dot.gov/tolling_pricing/value_pricing/index.htm.

Operating expenses for traffic flow improvements are eligible for CMAQ funding for three years if they can be shown to produce air quality benefits, if the expenses are incurred from new or additional services, and if previous funding mechanisms, such as fares or fees for services, are not displaced.

Projects or programs that involve the purchase of integrated, interoperable emergency communications equipment are eligible for CMAQ funding.³⁵

5. Transit Improvements

Many transit projects are eligible for CMAQ funds. The general guideline for determining eligibility is whether the project increases capacity and would likely result in an increase in transit ridership and a potential reduction in congestion. As with other types of CMAQ projects, there should be a quantified estimate of the project's emissions benefits accompanying the proposal.

The FTA administers most transit projects. Once the FTA determines a project eligible, CMAQ funds will be transferred from the FHWA to the FTA, and the project will be administered according to the requirements of the FTA's Urbanized Area Formula Grant Program.³⁶ Certain types of transit projects for which the FTA lacks statutory authority, such as diesel retrofit equipment for public school bus fleets, are administered by the FHWA.

a. Facilities

New transit facilities (e.g., lines, stations, terminals, transfer facilities) are eligible if they are associated with new or enhanced mass transit service. Routine maintenance or rehabilitation of existing facilities is not eligible, as it does not reduce emissions. However, rehabilitation of a facility may be eligible if the vast

³⁵ 23 U.S.C. §149(b)(6) (SAFETEA-LU §1808(b)(4))

³⁶ 49 U.S.C. §5307