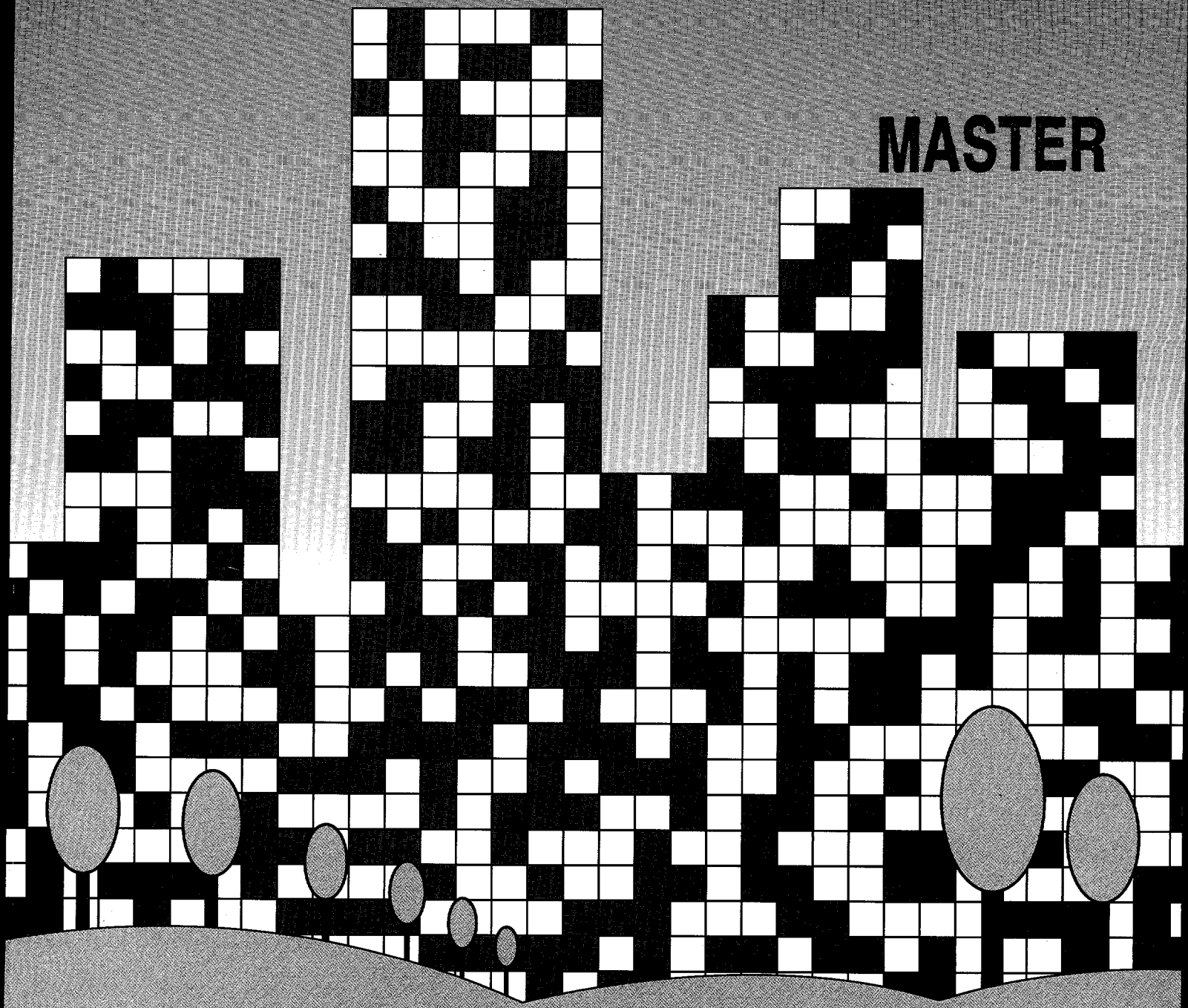
Applying for and Using CMAQ Funds

Putting the Pieces Together



A CLEAN CITIES GUIDE

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A CLEAN CITIES GUIDE

Applying for and Using CMAQ Funds

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National Clean Cities

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Introduction

ICON KEY
✓ Valuable information
✓ Checklist

The U.S. Department of Energy's Clean Cities Program is an aggressive, forward-thinking alternative fuel vehicle (AFV) market development program. The stakeholders in any Clean Cities Program subscribe to the common philosophy that, through participation in a team-oriented coalition, steady progress can be made toward achieving the critical mass necessary to propel the AFV market into the next century.

An important component in the successful implementation of Clean Cities Program objectives is obtaining and directing funding to the capital-intensive AFV market development outside of the resources currently offered by the Department of Energy.

Several state and local funding sources have been used over the past decade, including Petroleum Violation Escrow funds, vehicle registration fees, and state bond programs. However, federal funding is available and can be tapped to implement AFV market development programs across the nation.

Historically, opportunities to use federal funding for AFV projects have been limited; however, the one remaining federal program that must be tapped into by Clean Cities Programs is the Congestion Mitigation and Air Quality (CMAQ) Improvement Program. CMAQ is a 6-year, $6 billion federal program formed by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA).

The CMAQ Program can help to defray a portion of investment into vehicle purchases/conversions, and in some cases, fueling infrastructure. It is important to note that no two regions are subject to the same rules for funding their CMAQ projects. These policy decisions are made at the state and local levels from region to region.

It is impossible to make blanket statements to accurately describe the "best" approach for *all* Clean Cities Programs to apply for CMAQ funds. However, this guide will provide the basic concepts to help you understand the game. Then you must play the game on your own home field.

An Overview of CMAQ

Why was CMAQ instituted?

The CMAQ Program is designed to help the states implement their air quality plans in conformity with the Clean Air Act Amendments of 1990 (CAAA). The goal of these plans, known as State Implementation Plans, or SIPs, is to attain the national ambient air quality standards (NAAQS) for the criteria pollutants:

- Carbon monoxide (CO)
- Ozone (O_3), and in some cases
- Small particulate matter (PM_{10}).

What is special about CMAQ?

The primary focus of the CMAQ program is on transportation-related capital investment in projects that demonstrate substantial air quality improvements. CMAQ is an innovative program that was developed to promote and fund non-traditional projects, such as vehicle emissions testing, inspection and maintenance (I/M), and alternative fuels utilization. CMAQ projects can also include traditional areas, such as highway and transit.

Public/Private Partnerships

The public/private partnerships allowed by CMAQ serve to provide private-sector AFV and fueling infrastructure investors with lower risk opportunities to participate in AFV market development. The market stimulation anticipated from CMAQ projects encourages this partnership through a reasonable return on investment (ROI) to the private-sector. This level of ROI could not be earned if the federal government undertook the customary private-enterprise role.

Projects funded under CMAQ must be administered by a public agency, or a formal agreement must be made between the public agency and the private-sector entity. According to the FHWA, CMAQ funds may be used for projects initiated by the private sector if:

- The project is normally a public sector responsibility
- The project is shown to be cost-effective under private ownership or operation
- The state maintains responsibility for protecting the public interest and public investment inherent in the use of federal funds.

The private sector cannot pursue CMAQ funds without public-sector sponsorship. Although restrictive, this provides significant opportunity for the private sector to participate in the development of the AFV market while minimizing risk and capital expenditures.

How Much CMAQ money is available?

The CMAQ Program provided $828 million for FY 1992 and $1.028 billion annually for FY 1993-FY 1997. Each state receives a minimum of 0.5% of the annual CMAQ appropriation or approximately $5 million per year.

The remaining CMAQ funds are then allocated to states for areas in O_3 and CO nonattainment. The funds are distributed based on a formula specified in ISTEA, which considers the severity of the air pollution problems in each state and the population in areas in nonattainment for O_3.

The federal government awards up to 80% for most eligible CMAQ projects, including AFV projects. The balance of project funding must be secured from a local source prior to approval of the federal CMAQ share. In states with a high percentage of federally controlled land, the federal funding can be up to 95% of the total project cost.

The CMAQ program provides for reimbursement of funds for projects once work is completed. CMAQ funds are available for 4 years from the time the funds are apportioned to the state, after which any remaining funds lapse and are no longer available to the project. This means that funds appropriated for FY 1997 have until the end of FY 2000 to be obligated to specific projects by the state or they will be rescinded.

See Table 1: State-by-State Review of CMAQ Funds FY1992 through FY1994.

The initial difficulties in understanding the CMAQ approval process resulted in substantial unspent funding during the first 3 years of the program; however, this carryover has been reduced considerably since FY 1995.

Eligible Projects

Although no two CMAQ projects are exactly alike, typical CMAQ projects have a few characteristics in common:

- CMAQ projects involve public fleets at the state or local level.
- CMAQ projects target the nonattainment pollutants, which include CO, O_3 precursors (oxides of nitrogen or NO_x and volatile organic compounds or VOCs) and, in some cases, PM_{10}.
- CMAQ projects promote NAAQS attainment within the timeframes mandated in CAAA.

See Appendix A for TCMs detailed in Section 108(f)(1)(A) of CAAA

- Many CMAQ projects are recognized by EPA as traffic control measures (TCMs) and are eligible for emission reductions credits.

Feasibility studies that provide air quality analyses in support of projects promoting NAAQs attainment can be eligible for CMAQ funding. In addition, operating expenses can be eligible in limited circumstances. For example, the Clean Community of Central New York was awarded $12,000 in 1996 to partially fund its operation.

Generally, TCMs will fall under one or more of the seven categories identified by the FHWA:

- Transit Improvements
- Shared-Ride Services
- Traffic-Flow Improvements
- Demand Management Strategies
- Pedestrian and Bicycle Programs
- Inspection and Maintenance Programs (I/M)
- Other, including **Alternative Fuels**.

These categories provide general parameters for CMAQ projects. Other projects that introduce innovative technologies and practical approaches to improving transportation problems may be also eligible.

Ineligible Projects

Projects not funded by CMAQ include those that:

- Reduce emissions from extreme cold-start conditions
- Encourage the removal of pre-1980 vehicles
- Increase road capacity for Single Occupancy Vehicles (SOVs)
- Maintain existing transportation systems
- Implement general planning studies
- Collect traffic data
- Are mandated by the CAAA for the private sector.

Funding Requirements

- Funds must be directed to projects that promote NAAQS attainment
- Funds must be spent on projects that are consistent with the State's SIP
- Funds must be focused in a nonattainment area, if one exists within the state
- Funds must be used in maintenance areas, if no nonattainment areas exist within the state
- Funds can be used for areas in PM_{10} nonattainment only if CO or O_3 attainment is not jeopardized
- Funds can be used anywhere in the state for eligible activities only if all areas are considered as attainment or maintenance areas.

See Table 2: Areas Covered in CAAA

The state is accountable for the distribution of CMAQ funds if multiple nonattainment areas exist within the state. In states with no CO or O_3 nonattainment areas, CMAQ funding for projects that reduce transportation-related PM_{10} emissions is encouraged if a PM_{10} nonattainment area exists within the state. Otherwise, CMAQ funds may be used anywhere in the state for any eligible CMAQ activity.

States such as Montana, North Dakota, and Hawaii, which have no O_3, CO, or PM_{10} nonattainment areas, can use their annually apportioned CMAQ funds for any eligible projects. These factors are important because CMAQ allocations were originally intended to be eliminated from areas redesignated as in attainment and not allowed in maintenance areas after 2 years.

However, the National Highway System Designation Act of 1995 (NHS) expanded eligibility to areas designated as nonattainment under CAAA, but were since redesignated to attainment status by EPA. Specifically, NHS froze the CMAQ allocations for FY 1996 and FY 1997 to reflect the nonattainment area status in FY 1994, including any changes that occurred during that year. This means that CMAQ can be used in areas such as Charlotte (North Carolina) and Detroit (Michigan), where, although attainment has been achieved, maintaining that status is of critical concern. NHS also served to lift the 2-year limitation for the use of CMAQ funds in maintenance areas contained in the Guidance Update of July 13, 1995.

CMAQ funds still cannot be used for projects in areas designated as "transitional," "submarginal," or "incomplete data" for O_3 or "not classified" for CO.

Air Quality Officials

Federal Officials

EPA's vehicle certification requirements are an essential element for consideration in the development of AFV projects. Existing vehicles converted to alternative fuels have historically made insignificant air quality improvements, and in many cases, have demonstrated even higher levels of polluting emissions than before their conversion.

See Table 3: CARB Vehicle Emission Standards

EPA endorses *only* Original Equipment Manufacturer (OEM) vehicles equipped with alternative fuel options, and new vehicles converted with certified alternative fuel components and systems that provide emission reductions and air quality improvements in accordance with established standards.

State Officials

State air quality authorities, such as the Texas Natural Resources Conservation Commission (TNRCC) and the North Carolina Department of Environment, Health and Natural Resources (DEHNR), prepare periodic SIPs to show EPA that NAAQS will be attained by particular metropolitan statistical areas (MSAs) in accordance with CAAA. The SIPs are then reviewed and approved by EPA.

AFV projects must be consistent with the state's SIP for achieving attainment and show the rate of progress toward attainment. In addition, if an AFV project will occur in an area designated as attainment, the project must be consistent with the area's plan to maintain attainment, also known as a Maintenance SIP.

Several states have incorporated AFVs directly into their SIPs, either as primary measures to reduce criteria pollutants or as secondary or contingency measures. Traditionally, however, the use of AFVs has not been regarded by many states as a pollution mitigation strategy. If AFVs are not consistent with the state's SIP, your Clean Cities organization must work aggressively to achieve inclusion of AFVs in the SIP. This can be accomplished through initiatives carried out by the working groups, stakeholder companies, elected officials, and other public- and private-sector champions.

Local Officials

At the local level, air quality impact is a major concern of many metropolitan planning organizations (MPOs) during the development of transportation programs. These transportation improvement plans, or TIPs, include every transportation-related project approved by the MPO in coordination with state and federal air quality, energy and transportation authorities. CMAQ is just one of many sources of potential funding for projects included in the TIP.

CMAQ and Alternative Fuels

In general, the conversion of individual conventionally powered vehicles to alternative fuels is not eligible for funding under the CMAQ Program. However, the conversion or replacement of vehicles capable of being centrally fueled is eligible provided that the fleet is publicly owned or leased (such as municipal or state vehicle fleets) and one of the following conditions is met:

- The fleet conversion or replacement is in response to a specific requirement in the CAAA

- The fleet conversion or replacement is specifically identified in the SIP as part of the emissions reduction strategy of a nonattainment area, or in the Maintenance SIP for purposes of maintaining the air quality standards.

There is one exception—replacement of a standard size, conventionally fueled transit bus with a new, dedicated AFV is eligible under the transit provisions of the March 7, 1996 CMAQ Guidance Update and does not have to meet either of the above requirements.

Conversions of existing transit buses to alternative fuels and replacements with new dual-fuel vehicles must be included in the SIP or Maintenance SIP to be eligible for CMAQ funding. As with all CMAQ proposals, it must be demonstrated that the proposed fleet conversion or replacement is effective in reducing specific pollutant(s) causing the air quality violation.

The establishment of on-site fueling facilities and other infrastructure needed to fuel AFVs is also an eligible expense under the above conditions. This means that the vehicles and facilities must be publicly owned or leased and that the use of AFVs must be either required under CAAA or in the SIP or Maintenance SIP, with one exception. If private fueling stations, which are reasonably accessible and convenient, exist to fuel the AFVs, CMAQ funds may not be used to fund publicly owned fueling stations. Such an activity would interfere with private enterprise, and needlessly use transportation and air quality funds for services available in the area.

CMAQ Funding of AFV Projects

See Table 4: CMAQ-Funded AFV Projects

Over the past 4 years, more than $275 million of CMAQ funding has been allocated to AFV projects throughout the country, including, but not limited to, Anchorage (Alaska), Coachella Valley (California), Albuquerque (New Mexico), Dallas (Texas), Louisville (Kentucky), New York City (New York), and Boston (Massachusetts). These have been some of the most successful AFV projects and illustrate the benefits of using CMAQ funds as a catalyst for developing the AFV market. In many instances, the CMAQ funding has been authorized for AFV projects where the affected MSAs have either achieved or were pursuing designation as a Clean City under the U.S. Department of Energy's Clean Cities Program.

With a preliminary understanding of CMAQ and the fact that it has been used to fund a number AFV projects as background, the following section details the steps to follow in applying for CMAQ.

Steps in Applying for CMAQ Funds

Case Study

In mid-1991, Lone Star Gas Company decided to undertake a significant effort to develop the natural gas vehicle (NGV) market in the Dallas/Fort Worth Metroplex, a moderate ozone nonattainment area. After evaluating the options for utility company involvement in this emerging market, the parent company, Enserch Corporation, decided the best way to profitably enter this market was through a non-regulated subsidiary. This subsidiary, Lone Star Energy (LSE), would be a sister company to Lone Star Gas and focus its efforts on both converting vehicles to natural gas and installing public-access fueling stations.

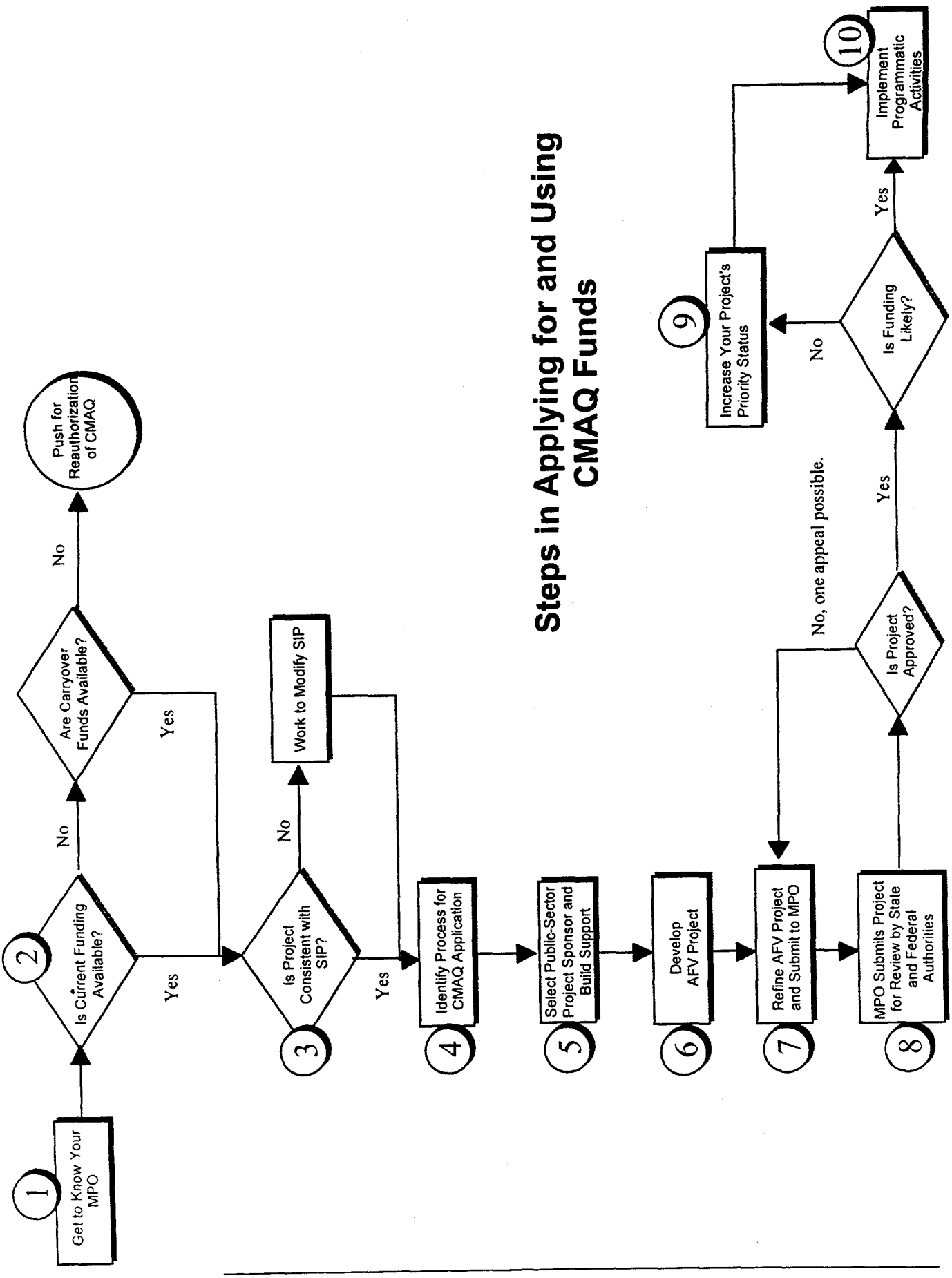
Although successful in convincing selected public and private fleets to convert existing vehicles and purchase dedicated NGVs, the numbers of vehicles appeared short of what would be needed to provide an acceptable rate of return on infrastructure investment in a reasonable amount of time. LSE concluded that the incremental cost associated with NGVs was too high to be covered exclusively by the fuel-cost differential between gasoline and natural gas. There would have to be an alternative!

With passage of ISTEA and CMAQ, LSE decided to seize the opportunity and propose CMAQ funding for an NGV project in the Metroplex. That decision, made in early 1992, began what would be a 4-year effort to apply for and use CMAQ funding for public fleets in the Metroplex.

See Appendix B: Consolidated Checklist for CMAQ Application Steps

This guide will primarily use the Lone Star Energy story to help explain the process and the realities of trying to tap into CMAQ funding. Other examples, including the CMAQ process in North Carolina, will also be given. Each step concludes with a checklist of activities to complete before moving to the next step.

The first step is to get to know the metropolitan planning organization(s) serving your Clean Cities Program…


Steps in Applying for and Using CMAQ Funds
1
Get to Know Your MPO
2
Is Current Funding Available?
No
Are Carryover Funds Available?
No
Push for Reauthorization of CMAQ
Yes
Yes
3
Is Project Consistent with SIP?
No
Work to Modify SIP
Yes
4
Identify Process for CMAQ Application
5
Select Public-Sector Project Sponsor and Build Support
6
Develop AFV Project
7
Refine AFV Project and Submit to MPO
8
MPO Submits Project for Review by State and Federal Authorities
Is Project Approved?
No, one appeal possible.
Yes
Is Funding Likely?
No
9
Increase Your Project's Priority Status
Yes
10
Implement Programmatic Activities

Get To Know Your MPO (Metropolitan Planning Organization)

LSE reviewed the booklet "A Guide to the Congestion Mitigation and Air Quality Improvement Program" prepared by the FHWA to obtain a preliminary understanding of the program. Next, LSE determined that the MPO for the Dallas/Ft. Worth Metroplex is the North Central Texas Council of Governments (NCTCOG).

See Appendix C: MPOs for the Clean Cities Programs

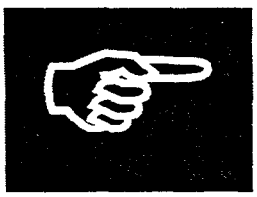
A metropolitan planning organization (MPO) is a regional coordinating council that organizes and implements the urban planning activities of common interest for a metropolitan area. Each of the 339 MPOs throughout the United States are responsible for preparing its area's Transportation Improvement Program, or TIP, which prioritizes projects to be funded each year.

All projects, including those developed in nonattainment and attainment areas, that hope to be funded under the CMAQ program must first be selected for inclusion in the TIP. In nonattainment areas, those projects in the TIP that are to be funded by CMAQ must also be in conformity with the State Implementation Plan, or SIP. In attainment areas, CMAQ projects in the TIP must be in conformity with the Maintenance SIP. The *highest funding priority* under CMAQ is given to TCMs included in the state's SIP.

The TIP includes projects to be funded through various sources, and must be updated periodically. Your project must be placed on this list of priority projects in order to be funded through CMAQ.

Strategies

- Locate the MPO serving your Clean Cities Program by contacting:
  - The MPO listed for your area in Appendix C
  - Your regional DOE Regional Support Office
  - Your State Energy Office or Department of Transportation in Appendix D
  - The Association of Metropolitan Planning Organizations (202/457-0710)
- Meet with the Executive Director or Senior Transportation Planner of the MPO in your Clean Cities region to become acquainted and discuss the goals and objectives of your Clean Cities Program.
- Ask your MPO to review its transportation and air quality priorities with you.



Take advantage of your MPO's experience and knowledge of the CMAQ process! Because your MPO is actively involved in every aspect of CMAQ-funded projects, it can be a strategic resource during the development and review of your AFV Project.

- Advise your MPO of your intention to pursue CMAQ funding for an AFV Project.

✓ Checklist

- ☐ Meet with the executive director or senior transportation planner of the MPO(s) in your Clean Cities region to promote the activities of your Clean Cities Program.
- ☐ Ask your MPO to review its transportation and air quality priorities with you.
- ☐ Advise your MPO of your intention to pursue CMAQ funding for an AFV project.

LSE met with the director of NCTCOG, Michael Morris, to discuss its NGV efforts in the area and the potential for having an NGV project in the Metroplex supported by NCTCOG for funding through CMAQ...

Step 2

Determine Availability of Funding

LSE then met with Everett Bacon, a transportation planner for NCTCOG, who discussed the types of projects that currently and historically qualified for inclusion in TIPs, as well as the sources and uses of funding for approved projects, and provided a copy of the TIP for FY 1992.

All MPOs, in nonattainment as well as attainment areas, prepare TIPs as multi-year plans for funding approved projects. Through discussions with your MPO, you must become familiar with the characteristics unique to your MPO's TIP funding process. A stated goal of ISTEA is to "efficiently minimize transportation-related fuel consumption and air pollution." Under ISTEA, MPOs have greater decision-making responsibilities and performance requirements in terms of TIP development and implementation.

A TIP is a program developed cooperatively by the MPO, local governments, transit agencies, and the state Department of Transportation, that is used for identifying and programming transit, highway, and traffic improvements, as well as other transportation and air quality-related activities within the urbanized area served by the MPO.

TIPs include not only a priority list of projects, but a financial plan showing the sources of funding for each project in the TIP, including the federal or state share, local share, and total project cost.

Working together with your MPO to determine available funds and criteria for inclusion of projects in the TIP, you will gain an understanding of projects that have been awarded CMAQ funds, and how to structure your project for success.

Strategies

- Request a copy of the TIP and review it, focusing on the MPO's immediate and long-term transportation improvement goals, and projects for which funding has been approved in the current fiscal year.

The TIP will describe the level of funding for the year, unspent funding from previous years, and the types and numbers of approved projects. It will contain a detailed recitation of projects with relatively little narrative description. Summary tables, selected narrative, and statistics will provide some assistance to Clean Cities in determining if adequate CMAQ funds (usually up to 80% of the total project cost) will be available to implement your AFV project.

Your review of the TIP, and your discussions with the MPO, will help guide you in deciding the magnitude of the funding request to be made of CMAQ for use in your AFV project. For example, if only $2 million of CMAQ funding is available, you will not submit a request for $3 million. It is worthwhile to discuss the amount most likely to be received and, if possible, begin to develop a sense for the level of support from the MPO staff.

Ask these preliminary questions of your MPO staff:

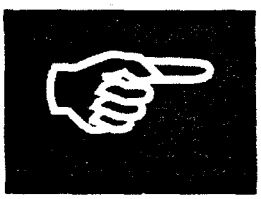
1. With which nonattainment areas, if any, does this MPO compete for CMAQ funds?

2. What types of projects does the MPO consider priorities (i.e., highway expansion, air quality improvement)?

3. How much CMAQ funding is apportioned in the current year?

4. How much unspent funding is available from prior years, if any?

Until recently, the level of fiscal accountability of the MPOs was not monitored by the states, and often TIPs were no more than "project wishlists." MPOs are now required to exercise "Fiscal Constraint," meaning that they cannot approve more projects for the TIP than can be funded with available CMAQ funds.



In some areas, the state imposes an "Obligation Ceiling" on the money made available to the MPO. This means that, for example, if an MPO receives $50 million in a given fiscal year, they may only be able to spend up to 90% of those dollars on approved TIP projects. The remaining 10% is held in the state's federal trust fund. This means that not all approved CMAQ projects are guaranteed funding in the current fiscal year.

In addition, because there are almost always more projects that meet CMAQ eligibility requirements than CMAQ allocations in a given fiscal year, many eligible projects cannot be approved for inclusion in the TIP. These projects may remain on a sort of "pending list" until approved projects are either implemented and funded, or not implemented, in which case any unspent funds could potentially become available to projects on the "pending list."

- Discuss the TIP with MPO staff, and ask if an Obligation Ceiling is imposed on their CMAQ funds.

FY 1997 is the final year of current CMAQ authorization. Although the 1997 TIPs are currently under way, there may be unspent funds from FY 1994-FY 1995 and some delay in obtaining funding for FY 1996. As a result, it may be possible to fund your AFV project with funds from prior years.

Good News . . .

Primarily because of an initial period of adjusting to the project approval process, a large amount of unspent CMAQ funding remains available around the country. The amount of unspent funds has gradually reduced over the past 2 years as MPOs become more familiar with the process and catch up with funding obligated in past years. Even though this is the case generally, many MPOs still have unspent funds that must be used within 3 years or the funding reverts back to the federal government.

Now that the process is better understood, MPOs will try to eliminate the unspent funding from all prior fiscal years as soon as possible. Understanding this strategy, it is important for Clean Cities Programs to target their discussions with MPO staff on the ability to submit an AFV project to help in obligating the remaining unspent funds.

Note

Remember that the MPOs will be working to ensure that no FY 1994 funds lapse, effective September 30, 1997.

If all funds from the previous year's projects have been depleted, your clean Cities Working Group should develop the project and push for its inclusion in the FY 1997 TIP. Although the ideal time has already passed to be included in the initial version, it is possible to amend the TIP during the fiscal year to include the project. If some form of CMAQ or ISTEA is not reauthorized to allow funding of AFV projects, FY 1997 is the last opportunity to obtain such funding.

✓ Checklist

- ☐ Request a copy of the TIP and review it, focusing on the MPO's immediate and long-term transportation improvement goals, and projects for which funding has been approved in the current fiscal year.
- ☐ Ask your MPO about the availability of current and/or unspent funds from prior years, to establish the magnitude of your AFV project funding request.
- ☐ Discuss the TIP with MPO staff, and find out if an Obligation Ceiling is imposed on their CMAQ funds.

LSE continued to meet with representatives of NCTCOG periodically to discuss its NGV project. Throughout the process, they gained a better understanding of the TIP and its development, including the fact that considerable CMAQ funding might be available. Once NCTCOG understood LSE's commitment to provide fueling and service infrastructure, training and education, it was time to review the Texas SIP for the Metroplex...

Step 3

Confirm Your AFV Project's Consistency with the State Implementation Plan (SIP)

LSE reviewed the provisions of CAAA outlining the Clean Fuel Fleet Program and the opportunity for EPA-approved equivalents in states with nonattainment areas. They then met with representatives of the Texas Air Control Board (TACB), the predecessor of the state air quality official, TNRCC, to understand the provisions of the SIP prepared for the Dallas/Fort Worth Metroplex.

The CAAA require that all states, under the direction of the EPA, prepare periodic SIPs, which outline the initial steps to be taken to bring each nonattainment MSA into attainment of the NAAQS. These SIPs are followed by Rate-of-Progress SIPs, which define steps to be taken in subsequent years, as well as different steps if results from the original SIP differ from those initially projected. Once attainment is achieved, Maintenance SIPs are developed to ensure that areas within the state remain in attainment.

See Appendix D: State Energy Offices & Departments of Transportation

Because CMAQ projects must be consistent with the SIP, and can only be approved with the support of the state air quality personnel, your contact at the MPO should be able to provide you with an introduction.

Strategies

- Meet with state air quality authorities to introduce your Clean Cities AFV project and discuss the goals of the SIP, especially the potential utilization of AFVs as a contingency measure.

- Obtain and review a copy of the SIP, focusing on the state's ambient air quality status, nonattainment triggers, and attainment or maintenance strategies (contingency measures). Like the TIP, the SIP contains detailed statistics and narrative describing how the affected area will either achieve attainment or remain in attainment.

  The SIP is the result of a planning process that incorporates emissions inventories, required emission reductions, and deadlines for meeting EPA's requirements for the pollutants causing violation of NAAQS. It includes a stated commitment to implement programs to avoid having economic and growth sanctions imposed by EPA in accordance with the provisions of the CAAA.

  The programs identified in the SIP are intended to prioritize options available to the state and to offer potential methods available to meet 100% of the targeted emission reductions.

- With the assistance of your MPO and state air quality contacts, become familiar with the general makeup of the SIP and the direct or indirect role that will or can be played y AFVs.

For states that have nonattainment areas, CMAQ funding can only be approved for projects consistent with the SIP. Many states have incorporated AFVs directly into their SIPs, either as primary measures to reduce criteria pollutants or as secondary or contingency measures.

In states with attainment or maintenance areas, CMAQ funding can be used for any eligible purpose, including AFV projects, provided that the project contributes to accomplishment of the objectives stated in the state's Maintenance SIP.

Contingency measures may include:

1. *Mechanisms to track air quality and traffic congestion*
2. *Methods for determining when contingency measures are needed*
3. *A process for implementing appropriate control measures to maintain compliance with NAAQS*
4. *Provisions for triggering the implementation of contingency measures.*

Violation of NAAQS is a primary trigger, causing contingency measures to be implemented. A secondary trigger applies where no actual violation has occurred, but may be imminent. In North Carolina, an oxygenated fuels program was selected as the contingency measure for Charlotte, a CO maintenance area, because it would be most effective in reducing CO emissions in the area.

For example, if a primary or secondary trigger was activated in a North Carolina maintenance area, the following measures would be considered:

1. *Amending the oxygenated fuels program*
2. *Expanding the coverage of oxygenated fuels to include counties where a strong commuting pattern into the core area exists*
3. *Expanding coverage of basic inspection/maintenance (I/M) to include counties where a strong commuting pattern into the core area exists*
4. *Enhanced I/M*
5. ***AFV projects to include compressed natural gas and electric vehicles***
6. *Implementing TCMs*
7. *Employee commuting options.*

If the use of AFVs can be proven to reduce the criteria emissions, and the SIP includes the use of AFVs as contingency measures, conformity with the SIP is achieved.

- If AFVs are not currently consistent with the SIP, mobilize your Clean Cities Legislative/Regulatory Working Group, stakeholder organizations, and other public- and private-sector AFV proponents, to work with the Department of Environmental Quality, the State Energy Office, or the appropriate governing agency in your area to modify the SIP to include the use of AFVs as a pollution mitigation strategy.

✓ Checklist

- ☐ Meet with state air quality authorities to introduce your Clean Cities AFV project and discuss the goals of the SIP, especially the potential utilization of AFVs as a contingency measure.
- ☐ Review a copy of the SIP, focusing on the state's air quality status, nonattainment triggers, and attainment or maintenance strategies.
- ☐ If AFVs are not currently consistent with the SIP, mobilize your Clean Cities Legislative/Regulatory Working Group, stakeholder organizations, and other AFV proponents, to modify the SIP, working with the state agency responsible for SIP preparation in your area.

In the Attainment and Rate-of-Progress SIPs for the Dallas/Fort Worth Metroplex, the use of AFVs was found to be a primary mobile source pollution mitigation strategy with an amount of pollution reduction projected in tons per day. In fact, LSE found that increasing the number of AFVs significantly beyond those projected in the SIP would provide the most cost-effective means of bringing the Metroplex into attainment within the time limits prescribed by EPA. This became a strong argument in support of a CMAQ-funded AFV Project in the Metroplex. LSE was now ready to work with NCTCOG to understand the application process for an NGV project...

Step 4

Identify the MPO's Process for CMAQ Application

In mid-1992, LSE met with Michael Morris and Everett Bacon of NCTCOG to discuss the CMAQ application process.

Each MPO has a written procedure for applying for CMAQ funds, including how the project will be reviewed and accepted by state air quality officials and the regional office of the FHWA.

These procedures define eligible projects, describe the application and review process, outline the submission schedule for proposals, and provide a contact name and address.

It should also include a discussion of the nonattainment or maintenance area, and what will take place if the area is redesignated. For example, a nonattainment area would likely lose eligibility for CMAQ funding if redesignated as a maintenance area—but only if other nonattainment areas exist within the state.

In addition, some MPOs offer suggested methods for analyzing the costs and air quality benefits of a proposed project. Examples provided in the CMAQ application procedures may include planning methodologies that can be used during initial project analysis, or where more intensive studies or data are not available.

Work with your MPO to determine the best strategy for calculating the emissions reduction benefits of your project.

Strategies

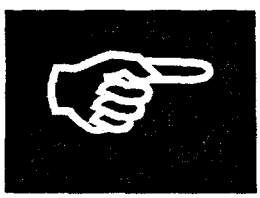
Discuss the following with your MPO contact:

- When are projects due for consideration?
- How long is the decision-making process on approving a project?
- What method does your MPO use to prioritize projects in the TIP (evaluation criteria, staff recommendation to the board, executive committee decision)?

An evaluation criteria is often used by MPOs in determining which projects deliver the most significant overall contribution to the area's transportation improvement goals.

In 1995, for example, CMAQ project proposals in the Dallas/Fort Worth Metroplex were scored according to the following Project Evaluation Criteria:

Criteria	*Possible Points*
Current Cost Effectiveness	*20*
Air Quality/Energy Conservation	*20*
Local Cost Participation	*20*
Intermodal/Multimodal/Social Mobility	*20*
Congestion Management Plan/ Transportation Control Measures	*20*
Total Points	*100*



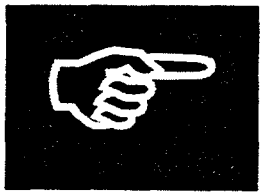
Projects are not just added to the TIP on a first-come, first-served basis. Projects are approved and included in the TIP based on their contribution to improving the transportation and air quality problems of that particular MPO in its efforts to comply with the requirements of NAAQS. The evaluation criteria and subsequent scoring system provide a method for determining which projects provide the greatest contribution.

Until recently, the level of fiscal accountability of the MPOs was not monitored by the states. MPOs are now required to exercise "Fiscal Constraint," meaning that they cannot approve more projects for the TIP than can be funded with available CMAQ funds.

Because there are almost always more projects that meet CMAQ eligibility requirements than CMAQ funding can support in a given fiscal year, many eligible projects cannot be approved for inclusion in the TIP. Many of these projects may remain on a sort of "pending list" until approved projects are either implemented and funded, or not implemented, in which case any unspent funds potentially become available to projects on the "pending list."

With the periodic update of the TIP, projects not included in a previous year may be selected for funding in the current year. In the case of multi-year projects, funding the first year does not guarantee funding in subsequent years. Substantial progress must be demonstrated in order to maintain sufficient funding priority status.

Once you understand the MPO's process of TIP project selection, find out how you can structure your AFV project to achieve a high score during the evaluation process. One way is to work with the MPO staff and Clean Cities stakeholders to actively promote the project's benefits. This will include a discussion of the ways the project will further the goals and objectives of the SIP (air quality, energy security) and stimulate local economic development.



Another alternative to expedite approval of CMAQ funding and convince the MPO to place higher priority on your AFV project is to secure a greater percentage of private-sector investment and request a federal cost share of less than 80%.

✓ Checklist

- ☐ Identify the MPO's CMAQ application process for project approval and inclusion in the current TIP.
- ☐ Find out when projects are due for consideration and request an estimation of time for the review process.
- ☐ Confirm the MPO's method for prioritizing approved projects within the TIP.

In this case, NCTCOG had an interest in developing and managing the application process for an AFV project. Like most MPOs, NCTCOG has a philosophy of spreading around as much funding as possible among its constituent counties and cities. A project limited to NGVs might not have widespread appeal, but an AFV project might. To move the effort forward, NCTCOG established and funded an Alternative Fuels Task Force in early 1993 to consider the development of an AFV project for CMAQ funding...

Step 5

Select A Project Sponsor & Build Support

The two primary objectives of the Task Force were to identify the most viable alternative fuel(s) and prepare the parameters for an AFV project to submit for funding. The Task Force reviewed the potential for the use of natural gas, propane, electricity, methanol, and ethanol in the Metroplex. The AFV project ultimately was limited to natural gas and propane, because only these fuels had the commitment of private sector organizations to invest sufficient capital to develop necessary fueling and service infrastructure. The Task Force decided that any CMAQ funding would be devoted strictly to incremental vehicle costs for non-transit vehicles in public fleets in the four counties making up the Metroplex. Because a number of public entities could benefit from this project, NCTCOG decided to act as the Project Sponsor of the AFV Project.

A project to be submitted for CMAQ funding can be developed by any public or private entity. If initiated by the private sector, a public entity "Project Sponsor" must be designated. The sponsor is responsible for formally submitting the project to the MPO and administering the funds during project implementation. Once submitted, the MPO becomes responsible for guiding the project through the appropriate channels for consideration.

Strategies

- Solicit ideas from your Clean Cities Stakeholders for an appropriate Project Sponsor. Even though one organization will be the formal Project Sponsor, it is important to understand the views of all relevant organizations and win the support of as many as possible or else the project risks losing that critical momentum, even before being formally submitted.

These AFV project stakeholders may include:

- *Fuel providers*
- *Public and private fleets*
- *State departments of air quality, energy, and transportation*
- *Vehicle conversion companies (EPA-certified)*
- *OEMs*
- *Community organizations*
- *Environmental and health organizations.*

- Select a public-sector Project Sponsor to represent your AFV project and formally submit your AFV project proposal to the MPO. The Project Sponsor should be a strategic selection, perhaps based on political connections.

  Examples of Project Sponsors include:

  - *Transit operators*
  - *Municipal and state transportation and environmental departments*
  - *State energy offices*
  - *Transportation management associations*
  - *Neighborhood associations*
  - *MPOs.*

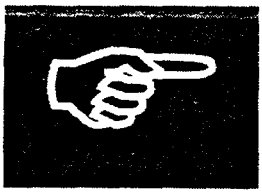
- From the initial stages, tap into the highest possible levels of Clean Cities Stakeholders, elected officials, and local resources to establish visibility for your AFV project.

- Identify the causes of resistance to CMAQ-funded AFV projects and work with your Clean Cities stakeholders to develop strategies to overcome such resistance. Note that your selection of a well-connected Project Sponsor can be an effective strategy to promote acceptance of your AFV project.

Some hesitancy or even resistance to the idea of a CMAQ-funded AFV project should be expected, given the limited amount of funding and the intense competition by projects promoting other TCMs. One reason for this resistance was stated during the ISTEA reauthorization hearing in September 1996. State Departments of Transportation made the case that CMAQ should not be reauthorized because excessive funds were accumulating because of a low rate of funding requests. Those funds, according to the Transportation Departments, could be reallocated to other transportation improvements outside of CMAQ.

Another reason for the slow acceptance of AFV projects may be their non-traditional nature—they introduce unfamiliar concepts and new technologies. However, a significant increase in the CMAQ-funded AFV projects has recently been observed. In fact, more than $275 million of CMAQ funds were obligated to AFV projects in the first 4 years of the program. This suggests that the process has gained substantial momentum, as the percentage of CMAQ-funded AFV projects continues to increase.

- Embark on an aggressive campaign to promote awareness and win community support for your AFV project.



The vocal and written endorsement of prominent, high-level Project Sponsors is essential. Initiate a letter writing campaign to promote awareness of your AFV project and stimulate far-reaching support from civic groups, such as the Lion's Club; health-related organizations like hospitals and the American Lung Association; and elected officials, such as the mayor, governor, and legislators.

✓ Checklist

- ☐ Select a public-sector Project Sponsor to represent your AFV project and formally submit your AFV project proposal to the MPO.
- ☐ From the initial stages, tap into the highest possible levels of Clean Cities stakeholders, elected officials, and local resources to establish visibility and build support for your AFV project.
- ☐ Identify the causes of resistance to CMAQ-funded AFV projects and work with your Clean Cities stakeholders to develop strategies to overcome such resistance. Note that your selection of an well-connected Project Sponsor can be an effective strategy to promote acceptance of your AFV project.
- ☐ Embark on an aggressive campaign to promote awareness and win the support of civic groups, health-related organizations, and elected officials.

With NCTCOG acting as the Project Sponsor, the members of the Task Force developed a consensus on the parameters of the AFV project...

Step 6

Develop Your AFV Project

With the commitment of LSE, the Task Force moved on to developing the specific components of the AFV Project.

Once you have selected a Project Sponsor and have the "buy-in" of the supporting organizations, focus on developing and refining your AFV project. The AFV project must be well-thought-out, to ensure that it meets eligibility requirements for CMAQ funding. Fuel neutrality is recommended to help ensure support for the project from all fuel providers, an important facet of the project.

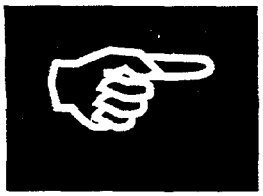
Although fueling infrastructure can be funded by CMAQ, FHWA prefers non-transit projects to exclude funding for fueling infrastructure; this is seen as part of the leverage provided by use of the CMAQ funds. In special instances, CMAQ funds can and have been used for fueling infrastructure, but only when such infrastructure would not otherwise be developed.

In cases where the private sector is willing to fund the installation of fueling infrastructure, CMAQ funds can only be used for vehicles. In fact, in Anchorage, CMAQ funding had been approved for fueling infrastructure; however, when the private sector indicated a willingness to fund the fueling infrastructure, the CMAQ funds were redirected to provide additional funding to reimburse the incremental cost of acquiring AFVs. This worked to everyone's advantage because the increased number of AFVs provided for a better economic return on the private capital investment.

Strategies

- Utilize your Clean Cities Stakeholders to develop targeted AFV projects.

  Your AFV project may not have yet been conceived; however, many Clean Cities Programs already have AFV projects targeted and funding issues are all that remain.



It is also important that throughout the development of your AFV project, all relevant organizations contribute to its formulation, from fuel providers to local government fleets to state energy, air quality, and transportation authorities. Beyond participation in the development of the AFV project, they will be essential in its approval and finally, its implementation.

- Answer the following eight questions about the project size, scope, air quality benefits, and timetable in developing your proposal:

  1. What is the project's overall vision?
  2. What does the project accomplish (OEM AFV purchases /replacements, and/or new vehicle conversions using EPA-certified components and systems)?
  3. When will the project be initiated and completed?
  4. Who are the stakeholders in the project and what are each of their roles?
  5. Who will be the day-to-day administrator of the project?
  6. Where will the project be implemented?
  7. What are the estimated costs for project implementation?
  8. How much will this project reduce transportation emissions, vehicle miles traveled (VMT), and number of trips?

- Organize the AFV project proposal into the following eleven components:

Background

Describe the relevant aspects of the state or region where your AFV Project is to take place. This narrative should include the mobile source provisions of the CAAA and the Energy Policy Act (EPAct) that affect your area. For example, certain areas in nonattainment of NAAQS are mandated to adopt clean fuel fleet programs that include the use of AFVs.

The background language should also include information regarding the state's attainment status, and provisions of the SIP, outlining how your AFV project is consistent with the State's measures to bring the area into attainment, or contingency measures to keep the area in attainment of NAAQS.

For proposals involving the private sector, provide a discussion of the public/private partnership and its commitment to the project's implementation by providing private funding resources, and in most cases, infrastructure development. Also, take advantage of this opportunity to promote the activities of your Clean Cities Program, including your initiatives in AFV market development in the area.

Project Benefits

Outline the basic benefits of your AFV project, such as improved air quality, energy security, development of fueling infrastructure, economic development, accelerated use of AFVs, and public recognition.

Indicate that the emissions reductions achieved by your AFV Project will be substantial in comparison to in-use emissions by the gasoline vehicles being displaced. In addition, point out that because of the inherently low-emission characteristics of alternative fuels, improvements in air quality would provide health benefits and would assist in attaining or maintaining NAAQS status.

The goal of EPAct is to reduce national reliance on foreign sources of oil. The use of abundant, indigenous transportation fuels can have significant local, as well as national economic benefits, including the creation of employment opportunities. Include language that the AFVs acquired as a part of your AFV project will help to spur greater private-sector production of AFVs and the development of fueling infrastructure to meet the growing demand for alternative fuels.

Another project benefit is that the presence of AFVs and public access to fueling facilities will increase public awareness and recognition of AFVs and their availability. The employees of the agencies participating in this AFV project are likely to become AFV advocates.

Your Clean Cities stakeholders, who represent an informed cross-section of the local public- and private-sector AFV industry, are an excellent resource for qualifying and quantifying each of these benefits.

Project Summary

Describe your AFV project, especially the total cost and the amount to be provided by CMAQ, local cost share, and other. Provide details regarding the source of the local cost share, and assurance that the local cost share has been secured, as FHWA considers this a critical component of the project.

Indicate that your MPO is responsible for reviewing and funding projects for the current fiscal year, and is in the process of funding projects from last year. If your AFV project is to be funded during FY 1997, the final year of current CMAQ authorization, your project must be submitted in an expeditious manner for review, approval, and submission to the state and federal authorities for final authorization.

Upon approval of your AFV project, funds provided by the MPO through the CMAQ program would be allocated for the purchase/replacement of state and local public fleets to alternative fuels over a specified period of time. Indicate the total cost of the project over that time period, identifying the amount that would be spent for each of the project's activities, such as vehicle acquisition, project management, data collection, and training/education.

See Table 5: AFV Project Sample Budget

CMAQ usually requires a local cost share of at least 20% of the total project cost. Outline the activities on which the local cost share will be spent, and likewise, where the requested CMAQ funds will be spent. For example, given a total project cost of $1 million, your proposal might request $800,000 in reimbursement for the incremental cost of purchasing OEM AFVs for state and local government fleets, and programmatic activities. Private-sector fueling infrastructure development might be offered as the $200,000 local cost share.

Application of CMAQ Funds

Specify which public fleets can participate in the AFV project (state and local government) and the types of vehicles (OEMs, conversions), along with their funding priority, which may be determined under the conditions of the criteria evaluation performed by the Project Administrator.

Your AFV project might allow all state and local government-operated fleets only in a specific geographic area. Emphasis might be placed on fleets operating in the metropolitan area. Funds provided under the project would be directed to public fleet operators to reimburse incremental costs.

The "incremental cost" is defined as:

The additional cost of purchasing a new OEM vehicle equipped to operate on at least one alternative fuel over the actual cost of the new vehicle equipped to operate on a conventional fuel (gasoline or diesel), or

The entire cost of a certified (as described below) conversion of a new vehicle to use at least one alternative fuel.

To receive reimbursement, the fleets would either have access to alternative fueling facilities or submit documentation that a station would be provided based on the threshold established by the fuel providers to bear the capital cost of developing new fueling locations.

Contact:
Cliff Tyree, U.S EPA National Vehicle Fuel & Emission Laboratory (313/668-4310) for more information

Your project should stipulate that the AFV or new vehicle conversion kit must be in compliance with EPA's proposed Small Volume Manufacturers' Certification Program (40 CFR 86.092.14), EPA's full certification program (40 CFR 86.094.23), or the California Air Resource Board's (CARB) certifications. An updated series of compliance requirements is currently in process.

AFVs can also be classified as either an OEM or an aftermarket conversion. An OEM vehicle is a dedicated or bi-fuel AFV that is manufactured and warranted by an OEM, including the use of OEM-approved vehicle modifiers. A converted vehicle is a dedicated or bi-fuel AFV that has been modified to add AFV components to a new vehicle and is warranted by the conversion company or vehicle manufacturer.

You should stipulate CMAQ fleet reimbursement priority.

For example:

1. State agencies; then
2. Local government organizations

Fuel/Vehicle Type Requirements

Detail the eligible alternative fuels (electricity, ethanol, methanol, natural gas, propane) and vehicle classes (light, medium, heavy-duty). The eligible vehicles might be considered in the following descending priority, based upon their potential to reduce emissions:

- New, dedicated OEM vehicles
- New, bi-fuel OEM vehicles
- New, converted vehicles (to be converted within a specified time from acquisition, usually a few months).

Qualify each vehicle type (dedicated or bi-fuel) and the amount of reimbursement for each.

For example:

Vehicle Type	Funding Allowance	
	Bi-Fuel	Dedicated
Automobile	$4,000	$5,000
Light-Duty Truck - < 8,500 lb. GVW*	$4,000	$5,000
Medium-/Heavy-Duty Truck - > 8,500 lb GVW (Including School and Shuttle Buses)	$7,000	$15,000

* gross vehicle weight

Energy Security Impact of Project

Describe the amount of equivalent gallons of fuel or barrels of oil that will be offset/displaced by your AFV project. Calculate this through an initial assumption about the number and types of vehicles that will participate in your AFV project.

With this in mind, you might estimate the annual volume of conventional fuel displaced based on the assumption that each vehicle consumes an averaged volume of fuel per day, each week, 50 weeks per year (providing for 2 weeks of scheduled facility closure, and/or service-related down-time). Also, assume the percentage of total vehicle usage that the alternative fuel is being used (for example, 90% of the time).

Air Quality Impact of Project

Describe the amount of reductions of selected criteria pollutants that will take place through implementation of your AFV project relying on your energy security assumptions.

The following table provides assumptions for electric, natural gas, and propane vehicles for the 1996 federal standards, alternative fuel emission factors, and the resultant reductions for one vehicle (in grams/mile) and then for the total number estimated above (in kg per day and kg per year), for nonmethane organic gases (NMOG), CO, and NO_x:

Vehicle Type	NMOG	CO	NO_x
Mobile5a 1996 Standards (g/mi)	2.45	18.66	1.52
LD Electric Vehicle	0.00	0.00	0.00
Reduction	2.45	18.66	1.52
LD Natural Gas Vehicle	0.03	3.60	0.36
Reduction	2.42	15.06	1.16
LD Propane Vehicle	0.43	4.12	0.97
Reduction	2.02	14.54	0.55

The emission factors for the natural gas vehicles and propane vehicles presented above reflect conservative levels that would approximate a split between dedicated OEM vehicles, bi-fuel OEM vehicles, and bi-fuel converted vehicles.

The above results, in grams/mile, are multiplied by the gallons per day (5), the miles per gallon (20), and the number of vehicles of each fuel type, and divided by the number of grams in a kilogram (1,000) to calculate the total reductions detailed below:

	NMOG	CO	NO_x
Total EV Reduction	24.50	186.60	15.20
Total NGV Reduction	90.75	564.75	43.50
Total LPG Reduction	75.75	545.25	20.63
Total Reduction	**191.00**	**1,296.60**	**79.33**

The approximate NMOG, CO and NO_x emission reductions are summarized below:

Pollutant	Emission Reductions (kg/day)	Emission Reductions (kg/year)
NMOG	191.00	47,750.0
CO	1,296.60	324,150.0
NO_x	79.33	19,832.5

Consult your MPO or state air quality office to request additional suggestions for emission reduction calculation formulas and strategies. In addition to providing you with useful historical data, their review of the AFV project proposal will be facilitated by presenting emissions calculations in a familiar format.

NCTCOG was initially skeptical about the emission reductions estimated by LSE. During the proposal-writing process, LSE built provisions into the specifications requiring before and after emissions testing for vehicle conversions.

Project Administration

Indicate which organization(s) will be responsible for management and administration of your AFV project. The Project Administrator will provide technical reviews of the work plan and final products in the areas of transportation and air quality, facilitate reimbursement to the fleets, and maintain an accounting of all project costs incurred in relation to the project budget.

Programmatic Activities

Provide detail regarding the programmatic activities and their costs, including evaluation criteria development and application; data collection, information dissemination, project monitoring; training and education; vehicle acquisition; and project management.

Programmatic Activities may include:

- Evaluation Criteria Development and Application

  A detailed evaluation criteria for determining eligibility for reimbursement should be prepared. This criteria should include a methodology for prioritizing fleets and funding requests. During the vehicle acquisition phase, this task will also include, but not be limited to, evaluation of sufficient fueling infrastructure and application of local cost share funding in order to ascertain the order of reimbursement funding to requesting organizations.

- Data Collection, Information Dissemination, and Project Monitoring

  A key element of your AFV project implementation is emissions, performance, and operating data collection. Once collected, the information must be analyzed and then

disseminated in a form useful to the target audience (public and private fleets, air quality regulators, fuel providers, etc.).

During the data collection process, you will obtain relevant emissions, performance and operating data from each of the fleets receiving reimbursement of incremental cost from forms that will be developed and distributed to each fleet. Once obtained, the information will be tabulated and analyzed. An analysis and summary should be developed and submitted to the appropriate state and federal air quality and transportation authorities.

This information should also be made available at Clean Cities meetings, specific training and education seminars, and meetings with candidate fleets. Review of the data is essential in order to monitor the effectiveness of the project from both an air quality and energy security aspect.

- Training and Education

Design a training and education component for your AFV project. Throughout the life of the project, organize and facilitate meetings with fleet managers, purchasing officials, air quality and transportation planners and policy makers, energy officials, fuel providers, and others to share knowledge and experience regarding alternative fuels and the status of the project.

An important role in this effort will be played by the Clean Cities stakeholders, who can provide forums for identifying and providing training and education. A series of training seminars, ranging from basic to advanced, might be offered for drivers, technicians, mechanics, and managers in all aspects of the AFV market. In addition, technical and administrative assistance to eligible organizations can be offered.

The training can be divided into eight areas:

1. Training Needs Assessment
2. A Project Briefing
3. Conversion and Maintenance of AFVs
4. Regulatory Code Compliance
5. Fueling Provider Safety and Emergency Procedures
6. AFV Fueling Station Sizing, Design, Construction, Operation and Maintenance
7. AFV Driver Training
8. AFV Marketing and Sales Training.

- Vehicle Acquisition

Approximate the number of vehicles using the different alternative fuels. Based on the recommendations and criteria stated above, a discussion of the call(s) for projects and/or tracking methodology for reimbursement of vehicle costs is appropriate.

- Project Management

  The Project Administrator will be responsible for managing the proposed project. This will include coordinating reviews of the project's progress with and preparing regular briefings to various state agencies, MPOs, fuel providers, fleets participating in the project, and appropriate federal agencies.

  The Project Administrator will monitor fleet contracts, complete quarterly Progress Reports, and prepare a Final Project Summary Report to include the air quality benefits from a regional perspective and highlight your AFV project's contribution to maintaining attainment of NAAQS.

Fuel/Vehicle Usage Requirements

Outline requirements for use of the alternative fuel(s), how long the applicable vehicles must remain in use, what compliance and verification procedures will be followed, and what may occur if these requirements are not met.

The agency, department, or organization receiving reimbursement for AFVs under CMAQ must operate the vehicle(s) using the alternative fuel for a minimum percentage of the total vehicle miles traveled (VMT) and maintain the vehicle in its fleet for a specified number of years.

Further, each vehicle should be required to travel a minimum number of miles in order to displace the estimated volumes of conventional fuel. Recognizing that there are a number of applications and circumstances in which the VMT and fuel use requirements may not be met, reimbursement funding to fleets that do not meet these requirements might be left to the discretion of the Project Administrator. If the minimum fuel usage or VMT requirements are not met, the organization should be prohibited from receiving additional funding. Documentation of these VMT and usage requirements must be provided to the Project Administrator on a pre-defined, but regular basis.

In the event a vehicle is destroyed or lost through fire, theft, or accident, the MPO might not seek reimbursement for the investment. However, should the government entity or organization decide to sell a vehicle or otherwise voluntarily remove it from service, a prorated amount of the investment would be refunded to the project. The amortized amount of the refund could be based on the number of months (out of 36) that the vehicle was driven on the alternative fuel for at least 90% of the VMT during the month.

Fleets operating bi-fuel vehicles should be required to certify that those vehicles funded through the project will operate on the alternative fuel for at least the minimum percent of the VMT. The fleet operator must keep accurate records of the amount of fuel used by the AFVs under your project.

To verify compliance, the fuel-use records of the AFVs funded by the project should be made available for inspection. Compliance records should be transmitted to the Project Administrator on a regular basis in accordance with state rules and the CAAA. If no fuel records exist to substantiate fuel use, or there is evidence that the vehicles have not met the minimum mileage criterion, the Project

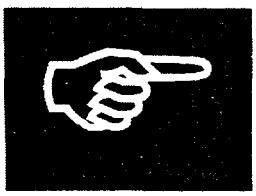
Administrator may seek reimbursement of the payment for the incremental cost of the vehicles in question. The amount of the reimbursement would be based on the number of months that the vehicle was not driven on the alternative fuel in compliance with the minimum requirement of VMT during the month, and the amount of funds allocated to the purchase or conversion of the vehicle.

For converted, non-electric vehicles, the results of an emissions test taken at the time of conversion should be provided to the Project Administrator. For non-electric OEM vehicles, the emissions certification should be required by the Project Administrator.

Fueling Capability

Discuss the fueling requirements of your AFV project, including the role the fuel providers will play and most likely, that fueling infrastructure will not be part of the funding request.

By requiring applicants to indicate the location at which they will refuel their vehicles, the private-sector AFV fueling facilities owners and investors are assured of the demand necessary to substantiate their investment.



It is also important that throughout the development of the AFV project, all relevant organizations contribute to its formulation, from fuel providers to local government fleets to state energy, air quality and transportation authorities. Beyond participation in the development of the AFV project, they will be essential in its approval and finally, its implementation.

After the AFV project proposal has been completed, send the final draft to all relevant organizations for a final review prior to submission.

As the final step in completing your AFV project proposal, it is important to encourage all public- and private-sector organizations involved in the AFV project's development to write letters of support for the project.

In general, a CMAQ support letter should be prepared at the highest level within the supporting stakeholder organization. It should promote CMAQ funding to facilitate energy security, air quality improvement and economic growth by assisting in the development of a sustainable AFV market in your area.

The letter should recognize the leadership efforts being undertaken by the Clean Cities coalition in establishing its AFV Market Plan and the proposal to use CMAQ funds as a catalyst for market development. Letters of support should reflect the organization's role as a stakeholder in the project, its understanding of the implementation activities, and its commitment to participating in the process.

✓ Checklist

- ☐ Utilize your Clean Cities stakeholders to develop targeted AFV Projects.
- ☐ Answer the eight questions in developing the AFV project proposal.
- ☐ Organize the AFV project proposal into eleven components.
- ☐ Circulate the draft AFV project proposal to all relevant organizations for final review.
- ☐ Solicit letters of support for the project from public- and private-sector organizations and fleets interested in participating once the project is approved. Attach all letters of support to the proposal.

Working with LSE, the Task Force completed the AFV project proposal in mid-1993, including gathering letters of support from the participating organizations as well as those that would apply for reimbursement from NCTCOG if the AFV project was approved...

Step 7

Submit Your AFV Project Proposal to MPO for Review

The complete AFV Project proposal, including letters of support, was then submitted formally by the Task Force to NCTCOG.

Your MPO is actively involved in the CMAQ process and has the knowledge and experience necessary to help you troubleshoot the proposal for the following:

1. Clear compatibility between the AFV project and the SIP
2. Assurance of the local cost share component of the proposal as well as any other contribution to the AFV project, such as the private sector commitment to develop the fueling infrastructure
3. Review of the assumptions made in calculating the air quality impact (emissions reduction) of the AFV project
4. Detail of the programmatic activities and the responsible parties for each of these activities.

Strategies

- Schedule a review of the AFV project proposal with your MPO to determine if any changes would facilitate approval. During this review, all of the questions relating to the project's size, scope, air quality benefits, and timetable should be considered. All 11 components of the AFV project proposal should be carefully read.
- If any refinements need to be made to the proposal in these or other areas, incorporate those comments provided by your MPO staff prior to final submission.

- Once the refinements have been completed, formally submit your complete AFV project to the MPO through your Project Sponsor. In most cases, this submission is a staff-to-staff transfer. However, to raise the level of consideration for your AFV project, senior management from the Project Sponsor may attach a cover letter and submit to the MPO director with a copy to the MPO staff.

✓ Checklist

- ☐ Schedule a review with the MPO staff.
- ☐ Complete any resultant refinements to your AFV project.
- ☐ Formally submit your AFV project to the MPO through your Project Sponsor, preferably at the highest possible level.

NCTCOG accepted the proposal and became the Project Sponsor. As the MPO, NCTCOG then began to move the proposal through the approval channels...

Step 8

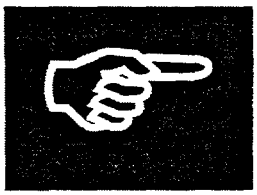
Review and Approval by State & Federal Authorities

Having passed successfully through NCTCOG's internal screening effort, the AFV project moved on to formal review by state and federal authorities.

Once your AFV project proposal is formally submitted, the MPO evaluates the proposal in cooperation with state and local air quality authorities to determine if the proposed project will sufficiently contribute to improving the area's air quality problems.

When your proposal has successfully passed through this initial review, the MPO submits the proposal to state transportation authorities and, in some cases, the Governor's office, for review and comment. This process may require a couple of weeks or several months, depending on the level of involvement of each reviewing agency during the developmental process.

After the project is approved by the MPO and the State, it is submitted to the FHWA division office and/or the Federal Transit Administration (FTA) regional office for approval. As part of its approval process, FHWA forwards the project to EPA for comments.



If your proposal successfully passes through all levels of review, the project may be added to the TIP. However, it is in competition with other proposals that also passed the review. The MPO and the State must work together for final TIP project selections, based on the amount of allocated CMAQ funding.

Policies regarding the disposition of projects that are not selected for the TIP vary from region to region. If your AFV project is not selected, your Project Sponsor may consider pursuing other sources of funding.

Strategies

- During the review process, periodically check on the progress of the project approval process by contacting your MPO.

- If your AFV project passes successfully through the review process but is not a high enough priority for inclusion in the TIP, it may be placed on a "pending list" until other approved projects are either implemented and funded or not implemented. At that time, any unspent funds could potentially become available to projects on the "pending list." If this happens, **go to Step 9.**

- If your approved AFV project is added to the TIP and funded, **go to Step 10.**

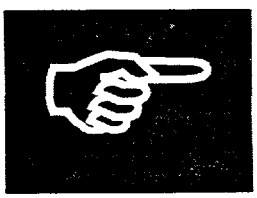
  Remember, however, that in areas where MPOs are subject to obligation ceilings, the MPO may reach the monetary limits of its obligation ceiling prior to funding lower priority TIP projects.

  To prevent your AFV project from receiving low-priority TIP funding status, create a strong proposal showing that your AFV project will further the goals of the SIP, demonstrate substantial air quality improvements, stimulate economic development, and do so in a cost-effective and timely manner.

- If your AFV project is not approved, FHWA and EPA should provide comments and reasoning for the rejection. If not approved, and a reasonable case can be made, an appeal is possible by preparing a justification and resubmitting the proposal.

  A CMAQ Proposal prepared by the New York Department of Environmental Protection involved taxicab conversions to natural gas within the City of New York. Because the taxis were privately owned, the reviewing authorities initially rejected the project.

  The proposal was then revised and resubmitted, justifying the project's eligibility by demonstrating that the taxis provided a public transportation service that: 1) would otherwise be a public-sector responsibility; and 2) had been proven to be cost-effective under private ownership and operation--two stipulations drawn directly from CMAQ Guidance. The appeal was successful.



- It is important to note that a project decision can only be appealed once. If the appeal is denied, the project is dead until the next fiscal year.

✓ Checklist

- ☐ Periodically check on the progress of the project approval process by contacting your MPO.
- ☐ If your AFV project does not score enough points on the MPO's evaluation criteria, or through the state and federal review process, to be added to the TIP, it may be placed on a "pending list." If this happens, go to Step 9.
- ☐ If your AFV project is approved, go to Step 10.
- ☐ If your AFV Project is denied and a reasonable case can be made, appeal the decision by revising and resubmitting the proposal.

The LSE AFV project successfully navigated the approval process and was included in the FY 1994 TIP as a 3-year, $8.5 million effort funded by CMAQ to convert approximately 4,000 vehicles to natural gas and propane...

Step 9

Increase Your AFV Project's Priority on the Pending List

If your AFV project is not added to the TIP, it may be placed on a "pending list." Although this provides no guarantee of automatic inclusion on the next TIP, it is possible that funds will become available in the current fiscal year. Proactive steps must be taken to increase your project's priority status in the event a project already on the TIP is not implemented, or an implemented project has excess funds, potentially freeing up funding for the next project on the pending list.

Strategies

- Work with the MPO staff and the other organizations mentioned in Step 8 to promote the project's benefits, including the ways the project will further the goals and objectives of the SIP (air quality, energy security) and stimulate local economic development.

  If your AFV project is not included in the FY 1997 TIP and there is no reauthorization of CMAQ, it may be possible to fund your project with unspent funds from FY 1995-FY 1997. Should some form of CMAQ be reauthorized, it may be possible to develop and submit your AFV project for fiscal years beyond 1997.

  Remember that the MPOs will be working to ensure that no FY 1994 funds lapse effective September 30, 1997.

- Work with the state and local elected officials, such as the governor and/or mayor, to apply pressure to adjust the priority during the planning process for the TIP or at any time during the current fiscal year.

  It is important to begin immediately; otherwise you may not be successful during the current fiscal year. However, growing support for the project will, at least, facilitate its inclusion on the TIP in a subsequent fiscal year.

- Secure a greater percentage of private-sector investment (local cost share) and request a federal cost share of less than 80%.

Houston, Texas, for example, obtained approval for a $20 million multi-year AFV project from its MPO, the Houston/Galveston Area Council (HGAC), by requesting only a 50% federal cost share.

- Don't wait to find out if CMAQ will be reauthorized!

Be creative! Your Clean Cities stakeholders and MPO staff can be instrumental in providing ideas and implementing strategies to get your AFV project funded.

✓ Checklist

- ☐ Pursue adjustment of your AFV project's priority status on the pending list, especially if you can secure an increase in local cost share, and/or have strong political support.
- ☐ Work with your Clean Cities stakeholders and MPO staff to brainstorm for other creative ideas to adjust your AFV project's priority status.
- ☐ Don't wait to find out if CMAQ will be reauthorized!

With AFV project funding secured for at least FY 1994, LSE and NCTCOG moved to implement programmatic activities...

Step 10

Implement Programmatic Activities

As FY 1994 began in September 1993, the staff of NCTCOG, working with the Task Force, developed a Call for Projects to solicit projects from the public fleets in the Metroplex.

When your AFV project has been added to the TIP, you should be ready to immediately implement your project to assure its funding within the obligation ceiling, if any.

In your proposal, you identified the public fleet(s) that would participate in the AFV project (state and local government), the types of qualified vehicles (OEM, EPA-certified conversions), along with their funding priority, and the types of alternative fuels to be used.

Your proposal most likely allowed for OEM AFVs, and new vehicle conversions in compliance with the EPA's proposed Small Volume Manufacturers' Certification Program (40 CFR 86.092.14), EPA's full certification program (40 CFR 86.094.23), or CARB certifications.

Reimbursement of project costs can occur once the public fleet purchases or converts its vehicles. The Project Administrator will undertake the administration efforts required by FHWA: data collection, reporting, and project monitoring.

Make every attempt to expend all funding, given the MPO's ability to reassign any remaining dollars to other projects.

Strategies

- Execute your AFV project implementation plan.

  If your AFV project provides for single public-fleet vehicle purchases or EPA-certified conversions to alternative fuels, the project can move forward with reimbursement provided by CMAQ to cover the incremental cost of the alternative fuel option of the replacement vehicle or the cost of conversion.

The actual reimbursement takes place after the fleet purchases or converts the vehicles.

Your Project Administrator will monitor the vehicle acquisition activities, facilitate reimbursement to the fleet owner for purchases through CMAQ, and provide administration as required by FHWA.

If your project involves multiple public fleets, the Project Administrator, usually the MPO, but in some cases an agent (such as the state energy office), issues a Call for Projects. In addition to prioritizing fleet requests and reimbursement funding, the Project Administrator in this second scenario must also undertake the administrative efforts dictated by FHWA.

Much like the MPO prioritized projects for the inclusion in the TIP, the Project Administrator will use a set of evaluation criteria to prioritize the multiple fleet projects and select those that will receive reimbursement funding until the CMAQ funds are expended. The Project Administrator also will facilitate reimbursement to fleets, and provide administration as required by FHWA.

If you do not spend all the funding after the initial call for projects, go to a second round and, if necessary, subsequent rounds of calls for projects until all available funding is depleted.

Maintain political support and strong project management to assure funding in subsequent fiscal years.

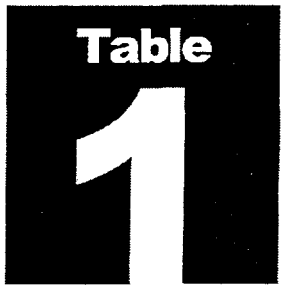
If the AFV project assumes funding for more than one fiscal year, strong support must be present to assure funding in subsequent fiscal years. In this regard, excellent project management, along with monitoring and information dissemination, is vital for the project's complete success.

✓ Checklist

- ☐ For a single public fleet AFV project, the Project Administrator will monitor the vehicle acquisition activities, facilitate reimbursement to the fleet owner for purchases through CMAQ, and provide administration as required by FHWA.
- ☐ For a multiple public fleet project, the Project Administrator will issue a Call(s) for Projects to identify and prioritize projects, facilitate reimbursement to fleets, and provide administration as required by FHWA.
- ☐ Maintain political support and strong project management to assure funding in subsequent fiscal years.

The North Central Texas Council of Governments issued its first call for projects in the form of a "Notice of Project Selection" for conversion of vehicles. The Notice, which included project specifications, evaluation criteria, and a sample format and due date for responses, was issued to public fleets in the four-county Metroplex area. The Notice was careful to remind potential project participants that 20% of the conversion cost would be borne by the public fleet, and that CMAQ reimbursements would be made after conversions and EPA-certifications were complete.

During FY1994-FY 1996, four Calls for Projects were issued. NCTCOG received more than 2,700 requests for vehicle conversions to natural gas (60%) and propane (40%). As part of its commitment, LSE has constructed fueling stations, maintained a vehicle conversion and servicing facility, and continued its market development efforts. In 1995, the Dallas/Fort Worth region became a designated Clean City.



State-by-State Review of CMAQ Funds from FY1992 through FY1994

State-by-State Review of CMAQ Funds

State	FY1992 Appropriated ($000)	FY1992 Obligated ($000)	FY1992 %	FY 1993 Appropriated ($000)	FY 1993 Obligated ($000)	FY 1993 %	FY1994 Appropriated ($000)	FY1994 Obligated ($000)	FY1994 %
Alabama	4,048.00	0.00	0.0	4,812.29	1,973.40	41.0	4,812.29	257.00	5.3
Alaska	4,048.00	275.00	6.8	4,812.29	4,242.00	88.1	4,812.29	1,510.92	31.4
Arizona	10,848.00	10,812.56	99.7	12,922.64	12,118.47	93.8	12,922.64	9,737.36	75.4
Arkansas *	4,048.00	3,885.92	96.0	4,812.29	2,150.95	44.7	4,812.29	51.44	1.1
California	119,881.00	94,155.69	78.5	142,198.39	113,774.48	80.0	142,198.39	117,737.44	82.8
Colorado	4,048.00	4,048.00	100.0	4,812.29	4,048.00	84.1	4,812.90	6,108.52	126.9
Connecticut	19,007.00	19,007.78	100.0	22,643.88	21,374.00	94.4	22,643.88	20,997.02	92.7
Delaware	4,048.00	3,193.04	78.9	4,812.29	0.00	0.0	4,812.29	787.36	16.4
District of Columbia	4,048.00	394.00	9.7	4,812.29	2,215.61	46.0	4,812.29	10,965.95	227.9
Florida	24,154.00	0.00	0.0	28,775.23	19,419.92	67.5	28,775.23	34,338.97	119.3
Georgia	12,509.00	1,500.00	12.0	14,902.46	2,449.50	16.4	14,902.46	18,333.30	123.0
Hawaii *	4,048.00	4,047.70	100.0	4,812.29	0.00	0.0	4,812.29	7,472.70	155.3
Idaho *	4,048.00	1,532.54	37.9	4,812.29	6,032.00	125.3	4,812.29	4,982.00	103.5
Illinois	39,583.00	16,867.96	42.6	47,155.24	49,173.36	104.3	47,155.24	20,459.20	43.4
Indiana	9,103.00	1,437.60	15.8	10,844.54	2,566.76	23.7	10,844.54	7,708.40	71.1
Iowa *	4,048.00	0.00	0.0	4,812.29	0.00	0.0	4,812.29	9,936.88	206.5
Kansas *	4,048.00	0.00	0.0	4,812.29	2,149.36	44.7	4,812.29	10,184.99	211.6
Kentucky	5,940.00	1,291.89	21.7	7,076.80	7,424.62	104.9	7,076.80	5,276.61	74.6
Louisiana	4,048.00	8.80	0.2	4,812.29	0.00	0.0	4,812.29	729.98	15.2
Maine	4,048.00	905.56	22.4	4,812.29	5,451.18	113.3	4,812.29	7,570.98	157.3
Maryland	25,451.00	11,253.00	44.2	29,875.13	22,900.00	76.7	29,875.13	42,900.00	143.6
Massachusetts	33,270.00	27,595.40	82.9	39,633.80	38,368.42	96.8	39,633.80	24,745.00	62.4
Michigan	23,565.00	30.00	0.1	27,998.28	12,469.41	44.5	27,998.28	49,956.99	178.4
Minnesota	4,048.00	40.00	1.0	4,812.29	7,464.67	155.1	4,812.29	3,212.36	66.8
Mississippi *	4,048.00	0.00	0.0	4,812.29	8,429.40	175.2	4,812.29	4,812.29	100.0
Missouri	8,015.00	0.00	0.0	9,548.06	0.00	0.0	9,548.06	3,944.56	41.3
Montana	4,048.00	0.00	0.0	4,812.29	2,061.58	42.8	4,812.29	1,818.55	37.8
Nebraska *	4,048.00	3,570.01	88.2	4,812.29	5,300.00	110.1	4,812.29	0.00	0.0
Nevada	4,048.00	0.00	0.0	4,812.29	8,038.27	167.0	4,812.29	298.85	6.2

Source: Federal Highway Administration

State-by-State Review of CMAQ Funds

State	FY1992 Appropriated ($000)	FY1992 Obligated ($000)	FY1992 %	FY 1993 Appropriated ($000)	FY 1993 Obligated ($000)	FY 1993 %	FY1994 Appropriated ($000)	FY1994 Obligated ($000)	FY1994 %
New Hampshire	4,048.00	0.00	0.0	4,812.29	0.00	0.0	4,812.29	3,882.35	80.7
New Jersey	46,600.00	45,959.40	98.6	55,514.47	56,959.00	102.6	55,514.47	45,417.64	81.8
New Mexico	4,048.00	1,619.00	40.0	4,812.29	5,081.00	105.6	4,812.29	6,880.00	143.0
New York	85,151.00	37,516.00	44.1	101,002.80	96,000.00	95.0	101,002.80	73,920.00	73.2
North Carolina	9,983.00	2,243.27	22.5	11,892.95	961.08	8.1	11,892.95	5,275.66	44.4
North Dakota *	4,048.00	3,047.34	75.3	4,812.29	5,827.31	121.1	4,812.29	3,943.77	82.0
Ohio	35,493.00	13,400.00	37.8	42,282.92	10,403.71	24.6	42,282.92	15,562.01	36.8
Oklahoma *	4,048.00	1,396.00	34.5	4,812.29	7,222.33	150.1	4,812.29	1,542.48	32.1
Oregon	4,337.00	646.06	14.9	5,644.59	4,590.23	81.3	5,644.59	6,521.11	115.5
Pennsylvania	48,836.00	825.00	1.7	58,177.63	6,852.00	11.8	58,177.63	23,163.86	39.8
Puerto Rico *	4,048.00	0.00	0.0	4,812.29	0.00	0.0	4,812.29	13,697.21	284.6
Rhode Island	4,730.00	381.91	8.1	5,635.23	300.00	5.3	5,635.23	1,500.00	26.6
South Carolina *	4,048.00	0.00	0.0	4,812.29	40.00	0.8	4,812.29	90.80	1.9
South Dakota *	4,048.00	0.00	0.0	4,812.29	8,498.11	176.6	4,812.29	438.79	9.1
Tennessee	9,021.00	1,546.12	17.1	10,749.25	7,382.28	68.7	10,746.25	2,391.02	22.2
Texas	80,399.00	0.00	0.0	95,366.41	30,625.16	32.1	95,366.41	72,842.91	76.4
Utah	4,048.00	133.00	3.3	4,812.29	4,318.33	89.7	4,812.29	3,832.17	79.6
Vermont *	4,048.00	2,089.98	51.6	4,812.29	2,089.98	43.4	4,812.29	2,779.82	57.8
Virginia	17,201.00	14,384.10	83.6	20,490.88	10,049.44	49.0	20,490.88	18,515.95	90.4
Washington	12,946.00	1,266.71	9.8	15,309.66	19,088.90	124.7	15,309.66	19,995.32	130.6
West Virginia	4,048.00	1,054.90	26.1	4,812.29	392.95	8.2	4,812.29	257.04	5.3
Wisconsin	10,180.00	2,318.40	22.8	12,075.49	11,679.70	96.7	12,075.49	8,578.18	71.0
Wyoming *	4,048.00	4,008.82	99.0	4,812.29	4,008.82	83.3	4,812.29	9,220.32	191.6
Totals	809,547.00	339,688.45		962,460.84	653,965.68		962,458.45	767,083.00	

* States with no nonattainment areas

Source: Federal Highway Administration

Table 2

Areas Covered in CAAA

CITY	STATE
Atlanta	GA
Baltimore	MD*
Baton Rouge	LA
Beaumont-Port Arthur	TX*
Boston, Lawrence	MA*
Chicago	IL
Denver	CO
El Paso	TX*
Gary	IN
Greater Connecticut	CT*
Houston, Galveston, Brazoria	TX*
Los Angeles	CA*
Milwaukee	WI
New York, Long Island	NY*
Northern New Jersey	NJ*
Philadelphia, Wilmington	PA*, DE*
Trenton	NJ*
Providence, Pawtucket, Fall River	RI*, MA*
Sacramento	CA*
San Diego	CA*
San Joaquin Valley	CA*
Southeast Desert	CA*
Springfield	MA*
Ventura County (Fresno)	CA*
Washington	DC*, MD*, VA*

* These states have the potential to opt-out of the CFFP, subject to EPA approval: California with its LEV Program, the Northeast States with the Ozone Transport Commission (OTC) Program, and Texas with the Texas Alternative Fuel Program (TAFP).

Source: NGV Resource Guide, Fourth Edition, RP Publishing, Inc., p. 9.

Table 3

CARB Vehicle Emission Standards

California Air Resources Board Vehicle Emission Standards				
		Emissions (grams/mile)		
		NMOG	CO	NOx
Low Emission Vehicle Standards (*mileage @ 50,000 or below*)	TLEV	0.125	3.4	0.4
	LEV	0.075	3.4	0.2
	ULEV	0.04	1.7	0.2
	ZEV	zero	zero	zero
Gasoline Standards	TLEV	0.25	3.4	0.4
Flexible and Dual-Fuel Low Emission	LEV	0.125	3.4	0.2
Vehicle Standards (*mileage @ 50,000 or below*)	ULEV	0.075	1.7	0.2
Low Emission Vehicle Standards	TLEV	0.156	4.2	0.6
(*mileage higher than 50,000-100,000*)	LEV	0.09	4.2	0.3
	ULEV	0.055	2.1	0.3
	ZEV	zero	zero	zero
Gasoline Standards	TLEV	0.301	4.2	0.6
Flexible and Dual-Fuel Low Emission	LEV	0.156	4.2	0.3
Vehicle Standards (*mileage higher than 50,000-10,000*)	ULEV	0.09	2.1	0.3

Source: NGV Resource Guide, Fourth Edition, RP Publishing, Inc., p. 10.

Table 4

CMAQ-Funded AFV Projects

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
CNG	Graysville	Alabama	Birmingham Regional Planning Commission	Fleet Conversion / Construct CNG Fueling Facility	93	398.9	319.1	Implemented
CNG	Jefferson County Transit	Alabama	Birmingham Regional Planning Commission	Construct CNG Fueling Facility	93	250.0	200.0	Implemented
EV	Jefferson County Transit	Alabama	Birmingham Regional Planning Commission	Purchase Electric Buses	93	975.0	780.0	Implemented
CNG	Anchorage Metro	Alaska	Anchorage Area Transportation Study	Bi-Fuel State/Muni CNG Vehicle Conversions, Training, Program Admin.	95-96	625.0	500.0	In Progress
CNG	Anchorage Metro	Alaska	Anchorage Area Transportation Study	Bi-Fuel State/Muni CNG Vehicle Conversions, Training, Program Admin.	96-97	900.0	720.0	Programmed
CNG	Anchorage Metro	Alaska	Anchorage Area Transportation Study	Bi-Fuel State/Muni CNG Vehicle Conversions, Training, Program Admin.	97-98	562.5	450.0	Programmed
CNG		Arizona		Purchase 16 CNG Replacement Vehicles	92	7125.0	5700.0	Obligated
EV	Monterey	California	Association of Monterey Bay Area Governments	Purchase Electric Vehicles	93	113.8	91.0	Obligated
EV	Pacific Grove	California	Association of Monterey Bay Area Governments	Purchase Electric Vehicles	93	113.8	91.0	Obligated
EV	Salinas	California	Association of Monterey Bay Area Governments	Purchase 2 Electric Vehicles	93	146.9	117.5	Obligated
CNG	Monterey	California	Association of Monterey Bay Area Governments	Construct CNG Fueling Facility	96	187.0	149.0	Programmed
CNG	Monterey County Public Works	California	Association of Monterey Bay Area Governments	Purchase 1 CNG Carpool Van	96	29.5	26.0	In Progress
CNG	Monterey/Salinas Transit	California	Association of Monterey Bay Area Governments	Purchase 3 CNG Replacement Buses & Infrastucture	97	1152.0	1020.0	Programmed
CNG	City of Monterey	California	Association of Monterey Bay Area Governments	Construct CNG Fueling Facility	93-94	343.0	304.0	Complete
AFV	Monterey Transit Agency	California	Association of Monterey Bay Area Governments	Purchase up to 10 AFV Buses & Infrastructure		1771.0	1203.0	Obligated

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
EV	Watsonville Parks & Streets Dept.	California	Association of Monterey Bay Area Governments	Purchase Electric Vehicle		28.0	18.0	Implemented
AFV	King County	California	Council of Fresno County Governments	Study to Selected Preferred AFV Program	93	38.6	30.9	Obligated
CNG	King County	California	Council of Fresno County Governments	Construct CNG Fueling Facility	95	376.0	31.0	Obligated
CNG	Fresno County Rural Transit Agency (Orange Cove Transit)	California	Council of Fresno County Governments	Purchase 2 CNG 24-Passenger Buses	92-93	159.9	141.6	Programmed Contract 95-96 Delivery 7/97
CNG	Fresno County Rural Transit Agency (Coalinga Transit)	California	Council of Fresno County Governments	Purchase 2 CNG 30-Passenger Buses	93-94	320.0	283.3	Programmed Contract 95-96 Delivery 7/97
EV	Fresno County Rural Transit Agency (Sanger Transit)	California	Council of Fresno County Governments	Purchase 1 Electric, Battery-Powered Bus	94-95	180.0	159.4	Programmed Contract 96-97 Delivery 7/97
EV	Fresno County Rural Transit Agency (Selma Transit)	California	Council of Fresno County Governments	Purchase 1 Electric, Battery-Powered Bus	94-95	180.0	159.4	Programmed Contract 96-97 Delivery 7/97
CNG	Fresno County Rural Transit Agency (Friant Transit)	California	Council of Fresno County Governments	Purchase 1 CNG Modified Van	94-95	55.0	48.7	Programmed Contract 96-97 Delivery 7/97
CNG	Fresno County Rural Transit Agency	California	Council of Fresno County Governments	Purchase 10 CNG 15-Passenger Modified Replacement Van	96-97	600.0	531.2	Programmed Contract Pending 96-97
CNG	Fresno County Rural Transit Agency (SE & W Corridor)	California	Council of Fresno County Governments	Purchase 3 CNG 30-Passenger Buses	96-97	540.0	478.1	Programmed Contract 96-97 Delivery 7/97
CNG	Kern County	California	Kern Council of Governments	Construct Natural Gas Storage Tank	93	1700.0	1360.0	Obligated
CNG	Bakersfield Golden Empire Transit District	California	Kern Council of Governments	Purchase 3 CNG Buses, 11 Engines	94	1438.5	1150.8	Obligated
CNG	Bakersfield Golden Empire Transit District	California	Kern Council of Governments	Purchase 3 CNG Buses, 11 Engines	94	187.5	150.0	Obligated

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
CNG	City of Arvin	California	Kern Council of Governments	Construct CNG Fueling Facility	95	125.0	63.8	Obligated
CNG	City of Delano's Corporation Yard	California	Kern Council of Governments	Convert 4 City Buses to CNG	95	100.0	88.5	Programmed
CNG	Kern County	California	Kern Council of Governments	Purchase 1 CNG Vehicle for Backup	93-94	140.0	123.9	Programmed
CNG	Kern County	California	Kern Council of Governments	Purchase 2 CNG Buses	93-94	280.0	247.9	Programmed
CNG	Tehachapi	California	Kern Council of Governments	Purchase CNG 20-passenger Replacement Bus	93-94	83.3	73.7	Programmed
AFV	Bakersfield	California	Kern Council of Governments	(Bakersfield Senior Center) Purchase 2 AFV Replacement Passenger Buses	94-95	130.0	115.1	Programmed
CNG	City of Arvin	California	Kern Council of Governments	Purchase Natural Gas Fueling Facility	94-95	200.0	128.8	Programmed
AFV	City of Arvin	California	Kern Council of Governments	Purchase 1 AFV 15-Passenger Bus	94-95	70.0	62.0	Programmed
CNG	Delano	California	Kern Council of Governments	Purchase CNG Fueling Facility	94-95	250.0	161.3	Obligated
CNG	Delano	California	Kern Council of Governments	Convert City Vehicles to CNG	94-95	100.0	88.5	Obligated
AFV	City of Arvin	California	Kern Council of Governments	Purchase 1 AFV 15-Passenger Bus	95-96	65.0	57.5	Programmed
CNG	Golden Empire Transit	California	Kern Council of Governments	Purchase 2 CNG Replacement and 1 CNG Expansion Bus	95-96	750.0	664.0	In Progress
CNG	Golden Empire Transit	California	Kern Council of Governments	Purchase 4 CNG Replacement Vans	95-96	280.0	247.9	In Progress
CNG	Golden Empire Transit	California	Kern Council of Governments	Purchase 4 CNG Replacement Buses	95-96	1139.6	1008.9	In Progress
CNG	Golden Empire Transit	California	Kern Council of Governments	Purchase 5 CNG Replacement Buses	95-96	1424.5	1261.1	In Progress
CNG	Golden Empire Transit	California	Kern Council of Governments	Construct CNG Fueling Facility	95-96	1500.0	588.0	In Progress

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
CNG	Golden Empire Transit	California	Kern Council of Governments	Shop Modifications for CNG	95-96	500.0	309.9	In Progress
CNG	Kern County	California	Kern Council of Governments	Shop Modifications for CNG	95-96	100.0	88.5	In Progress
CNG	Golden Empire Transit	California	Kern Council of Governments	Purchase 7 CNG Replacement Buses	96-97	1995.0	1765.6	Programmed
CNG	Taft	California	Kern Council of Governments	Purchase 1 CNG 18-Passenger Mini-Bus	96-97	55.0	48.7	Programmed
CNG	Kern County	California	Kern Council of Governments	Purchase 1 CNG Replacement Bus	97-98	240.0	212.5	Programmed
CNG	Taft	California	Kern Council of Governments	Purchase 1 CNG Replacement Stationwagon	97-98	25.0	22.1	Programmed
CNG	Wasco	California	Kern Council of Governments	Construct CNG Fueling Facility	97-98	275.0	243.5	Programmed
CNG	Bakersfield Senior Citizen Center	California	Kern Council of Governments	1 CNG ReplacementPassenger Bus	98-99	65.0	57.5	Programmed
CNG	Golden Empire Transit	California	Kern Council of Governments	Purchase 5 CNG 35 ft. Buses	98-99	1750.0	1549.3	Programmed
CNG	Kern County	California	Kern Council of Governments	Purchase 1 Replacement CNG Bus	98-99	240.0	212.5	Programmed
CNG	Wasco	California	Kern Council of Governments	Purchase 1 CNG 20-Passenger Bus	98-99	120.0	106.2	Programmed
CNG	Freeway Service Patrol	California	Metropolitan Transportation Commission Service Authority	Purchase 1 CNG Bi-fuel Tow Truck	95	77.5	62.0	Implemented
AFV	Morongo Basin Transit Authority	California	Riverside County Transportation Commission	Purchase 4 Alt. Fuel Vehicles	95	280.0	166.9	Obligated
AFV	Riverside Trolley	California	Riverside County Transportation Commission	Purchase or Convert Alt. Fuel Trolley Vehicles for Shuttle Service	95	1239.7	1097.5	Implemented

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
CNG	Riverside County	California	Riverside County Transportation Commission	Improvements to CNG Fueling Facility	92-93	500.0	400.0	Obligated
AFV	Riverside Trolley	California	Riverside County Transportation Commission	Purchase Alt. Fuel Shuttle Buses and Trolley	93-94	1403.3	1242.3	Obligated
CNG	Sacramento/Yolo County Transit Authority	California	Sacramento Area Council of Governments	Purchase CNG Vans and Fueling Facility	93	1241.6	993.3	Obligated
CNG	Sacramento/Yolo County Transit Authority	California	Sacramento Area Council of Governments	Purchase CNG Vans and Fueling Facility	93	500.0	400.0	Obligated
CNG	Sacramento/Yolo County Transit Authority	California	Sacramento Area Council of Governments	Purchase CNG Vans and Fueling Facility	94	1.4	1.1	Obligated
CNG	Sacramento	California	Sacramento Area Council of Governments	Purchase CNG Fueling Facility	95	1.4	1.1	Obligated
AFV	San Francisco	California	Sacramento Area Council of Governments	Station/Car Program	95	18750.0	15000.0	Obligated
CNG	Sacramento	California	Sacramento Area Council of Governments	Purchase CNG Fueling Facility	96	1.4	1.1	Obligated
AFV	San Francisco	California	Sacramento Area Council of Governments	Purchase Alt. Fuel Buses	96	239.1	191.3	Obligated
CNG	Sacramento Regional Transit District	California	Sacramento Area Council of Governments	Purchase 20 CNG Replacement Buses	92-93	5522.6	4418.1	Obligated
AFV	Yolo County Transit	California	Sacramento Area Council of Governments	Purchase Alt. Fuel Vans	92-93	1106.6	885.3	Obligated
CNG	Yolo Solano	California	Sacramento Area Council of Governments	Purchase CNG Conversion, Modify Maintenance Facility	93-94	100.0	88.5	Obligated
AFV	Barstow City/County Transit	California	San Bernadino Associated Governments	Purchase 2 Replacement 15-Passenger Alt. Fuel Paratrans Vehicles	00-01	176.0	156.0	Programmed
AFV	Barstow City/County Transit	California	San Bernadino Associated Governments	Purchase 1 25-Passenger Alt. Fuel Bus	96-97	110.0	97.0	Programmed

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
AFV	Barstow City/County Transit	California	San Bernadino Associated Governments	Purchase 2 Replacement 15-Passenger Alt. Fuel Paratrans Vehicles	96-97	133.0	118.0	Programmed
CNG	Victor Valley Transit Authority	California	San Bernadino Associated Governments	Purchase 5 CNG Fleet Expansion Bus	96-97	750.0	664.0	Programmed
AFV	Victor Valley Transit Authority	California	San Bernadino Associated Governments	Purchase 8 Replacement Alt. Fuel Paratransit Vehicles	96-97	429.0	356.0	Programmed
AFV	Morongo Basin Transit Authority	California	San Bernadino Associated Governments	Purchase 4 Replacement Lift-equipped Alt. Fuel Paratrans Vehicles	96-97	281.0	249.0	Programmed
AFV	Morongo Basin Transit Authority	California	San Bernadino Associated Governments	Purchase 4 Replacement Lift-equipped Alt. Fuel Paratrans Vehicles	98-99	386.0	342.0	Programmed
AFV	Barstow City/County Transit	California	San Bernadino Associated Governments	Purchase 4 Replacement 15-Passenger Alt. Fuel Paratrans Vans	97-98	293.0	259.0	Programmed
AFV	Morongo Basin Transit Authority	California	San Bernadino Associated Governments	Purchase 1 Replacement 25-Passenger Alt. Fuel Trolley	97-98	115.0	102.0	Programmed
AFV	Morongo Basin Transit Authority	California	San Bernadino Associated Governments	Purchase 3 Replacement 15-Passenger & 1 Replacement 24-Passenger Paratrans Vehicle	97-98	309.0	274.0	Programmed
AFV	Victor Valley Transit Authority	California	San Bernadino Associated Governments	Purchase 5 Replacement Alt. Fuel Paratransit Vehicles	97-98	278.0	231.0	Programmed
AFV	Morongo Basin Transit Authority	California	San Bernadino Associated Governments	Purchase 3 Replacement Lift-equipped Alt. Fuel Paratrans Vehicles	97-98	365.0	177.0	Programmed
AFV	Morongo Basin Transit Authority	California	San Bernadino Associated Governments	Purchase 3 Replacement Lift-equipped Alt. Fuel Paratrans Vehicles	99-00	241.0	213.0	Programmed
AFV	Morongo Basin Transit Authority	California	San Bernadino Associated Governments	Purchase 2 Replacement 25-Passenger Alt. Fuel Trolley	98-99	252.0	223.0	Programmed
AFV	Barstow City/County Transit	California	San Bernadino Associated Governments	Purchase 3 Replacement 25-Passenger Alt. Fuel Bus	99-00	375.0	332.0	Programmed

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
AFV	Victor Valley Transit Authority	California	San Bernadino Associated Governments	Purchase 6 Replacement 35-Passenger Alt. Fuel Bus	99-00	1140.0	1009.0	Programmed
CNG	San Bernadino County	California	San Bernadino Association of Governments	Purchase 6 CNG and 10 Gasoline Vans	92-93	298.1	238.5	Obligated
CNG	Metropolitan Transit Development Board	California	San Diego Association of Governments	Purchase 35 CNG Vehicles	96-03	11.1	11.1	Implemented
AFV		California	San Joaquin Council of Governments	Purchase 5 Replacement Alt. Fuel Paratransit Buses	94	294.4	260.6	Obligated
LPG	Fresno County Rural Transit Agency	California	San Joaquin Council of Governments	Purchase 2 LPG 24-Passenger Vehicles	93-94	159.9	141.6	Obligated
CNG	San Joaquin County Public Works Dept.	California	San Joaquin Council of Governments	Purchase 5 Replacement CNG Paratransit Vehicles	94-95	300.0	260.6	Obligated
EV	Metropolitan Transit District	California	Santa Barbara County Association of Governments	Provide Electric Shuttle Service	93	656.3	525.0	Obligated
CNG	Santa Barbara	California	Santa Barbara County Association of Governments	Purchase 2 CNG Buses	94	585.0	468.0	Obligated
CNG	City of Lompoc	California	Santa Barbara County Association of Governments	Purchase 5 CNG Coaches, and Convert Additional Vehicles	94	1235.0	988.0	Obligated
CNG	City of Lompoc	California	Santa Barbara County Association of Governments	Purchase 4 CNG Buses	94	1235.0	988.0	Obligated
EV	Santa Barbara	California	Santa Barbara County Association of Governments	Purchase 2 Electric Vehicles	92-93	416.1	332.9	Obligated
CNG	Santa Barbara	California	Santa Barbara County Association of Governments	Convert 5 Paratransit Vans to CNG	92-93	28.1	22.5	Obligated

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
CNG	Lompoc Transit	California	Santa Barbara County Association of Governments	Purchase 4 CNG Buses	93-94	1116.0	998.0	Obligated
CNG	Lompoc Transit	California	Santa Barbara County Association of Governments	Convert 3 Buses to CNG	93-94	1116.0	998.0	Obligated
CNG	Air Pollution Control District	California	Santa Barbara County Association of Governments	Purchase 4 CNG Clean Air Express Buses		995.0	796.0	Obligated
CNG	Lompoc Transit	California	Santa Barbara County Association of Governments	Convert 3 Buses to CNG		240.0	192.0	Programmed
CNG	Lompoc Transit	California	Santa Barbara County Association of Governments	Convert 17 City Fleet Vehicles to CNG		450.0	325.0	Obligated
CNG	Lompoc Transit	California	Santa Barbara County Association of Governments	Purchase 2 CNG Replacement Bus		400.0	354.0	Programmed
CNG	Lompoc Transit	California	Santa Barbara County Association of Governments	Purchase 1 CNG Clean Air Express Bus		325.0	288.0	Obligated
EV	Metropolitan Transit District	California	Santa Barbara County Association of Governments	Operating Assistance for Coast Village Road Electric Shuttle Service		114.0	101.0	Implemented
EV	Metropolitan Transit District	California	Santa Barbara County Association of Governments	Operating Assistance for Downtown Grid Electric Shuttle Service		897.0	634.0	Programmed
CNG	Santa Maria	California	Santa Barbara County Association of Governments	Purchase 2 CNG Bus		406.0	349.0	Obligated
CNG	Santa Maria	California	Santa Barbara County Association of Governments	Convert 26 City Fleet Vehicles to CNG		551.0	250.0	Programmed

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
CNG	Los Angeles Metro Transit Authority	California	Southern California Association of Governments	Lincoln Corridor CNG Shuttle	92	437.5	350.0	Implemented
EV	Los Angeles Metro Transit Authority	California	Southern California Association of Governments	El Monte Electric Shuttle	92	500.0	400.0	Implemented
EV	Rapid Transit District	California	Southern California Association of Governments	Electric Bus Demonstration Program, Phase 1	93	10375.0	8300.0	Obligated
EV	Rapid Transit District	California	Southern California Association of Governments	Electric Bus Demonstration Program, Phase 1	93	9925.5	7940.4	Obligated
EV	Rapid Transit District	California	Southern California Association of Governments	Electric Bus Demonstration Program, Phase 1	93	3425.1	2740.1	Obligated
LPG	Los Angeles Metro Transit Authority	California	Southern California Association of Governments	Purchase 4 LPG Shuttles	93	190.0	152.0	Implemented
EV	Rapid Transit District	California	Southern California Association of Governments	Electric Bus Demonstration Program, Phase 1	94	9209.0	7367.2	Obligated
CNG	Los Angeles Metro Transit Authority	California	Southern California Association of Governments	Purchase or Convert 98 Buses to CNG, Support Equipment & Facility	95	40670.0	32536.0	Programmed
CNG	Los Angeles	California	Southern California Association of Governments	Develop CNG Shuttle Route near Airport	92-93	2060.5	1648.4	Obligated
CNG	South Coast Area Transit Agency	California	Southern California Association of Governments	Purchase 5 CNG Replacement Buses	93-94	8875.0	1128.8	Obligated
AFV	South Coast Area Transit Agency	California	Ventura County Transportation Commission	Purchase 15 Alt. Fuel Buses & Equipment	93	4221.5	4117.0	Implemented

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
AFV	City of Thousand Oaks	California	Ventura County Transportation Commission	Purchase 4 Alt. Fuel Replacement Buses	94	1383.8	1107.0	Implemented
AFV	City of Thousand Oaks	California	Ventura County Transportation Commission	Purchase 3 Alt. Fuel Buses	94	828.8	663.0	Obligated
AFV	South Coast Area Transit Agency	California	Ventura County Transportation Commission	Calen Fuel Buses	94	1411.0	1128.8	Implemented
AFV		California	Ventura County Transportation Commission	Study for Alt. Fuel Bus	93-94	79.9	70.5	Obligated
CNG	Sun Line Transit	California		Improvements to CNG Facility	93	500.0	400.0	Obligated
CNG	City of Davis	California		CNG Facility and Equipment Upgrade	94	110.6	88.5	Obligated
CNG	Dial-A-Life	California		Purchase 3 CNG Transit Buses	94	1991.8	1593.4	Obligated
EV		California		Electric Vehicles for Parks	94	22.5	18.0	Obligated
CNG	California Department of Transportation	California		Purchase CNG Bus	96	215.9	172.7	Obligated
CNG	Norwalk Transit District	Connecticut	FHWA	Purchase 16 Dual-fuel CNG Transit Buses	94	1174.6	939.7	Implemented
EV	Broward County Public Works Department	Florida	Broward County Metropolitan Planning Organization	Purchase 8 Electric Replacement Vehicles	95-96	280.0	224.0	Programmed
Hyd	Broward County Public Works Department	Florida	Broward County Metropolitan Planning Organization	Purchase 2 Hydrogen-powered Vehicles	95-96	90.0	72.0	Programmed
EV	Broward County Public Works Department	Florida	Broward County Metropolitan Planning Organization	Install Mobile Data Acq. System for EVs	95-96	30.0	24.0	Programmed
AFV	Broward County	Florida	Broward County Metropolitan Planning Organization	Alt. Fuels Study	96-97	1375.0	1100.0	Programmed

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
EV	Pinellas Suncoast Transit Authority	Florida	Pinellas County Planning Department	Alt. Fuels Study and Demonstration, Park Shuttle Service	93-94	100.0	80.0	In Progress
CNG	Pinellas Suncoast Transit Authority	Florida	Pinellas County Planning Department	Bus Fleet Replacement	95-96	1200.0	960.0	In Progress
AFV		Florida		Alternative Fuel Program	94	102.4	81.9	Obligated
AFV	Metropolitan Atlanta Rapid Transit Authority	Georgia	Atlanta Regional Commission	Purchase 5 Clean Engine MARTA Buses	95	1480.0	1184.0	Obligated
AFV	Georgia Environmental Facilities Authority	Georgia	Atlanta Regional Commission	Alternative Fuel Vehicle Revolving Loan Program	95-96	1000.0	800.0	In Progress
CNG	Boise City	Idaho	Ada Planning Association	Purchase or Convert 16 CNG Shuttle Buses & Construct Fueling Facility	93	3005.0	2404.0	Obligated
CNG	Boise City	Idaho	Ada Planning Association	Construct CNG Fueling Facility	93	600.0	480.0	Obligated
CNG	Boise City	Idaho	Ada Planning Association	CNG Fueling Facility Expansion	94	200.0	160.0	Obligated
CNG	Boise City	Idaho	Ada Planning Association	Purchase 1 CNG Bus & 2 Vans	97	750.0	600.0	Programmed
CNG		Idaho	Ada Planning Association	Purchase 2 CNG Buses	98	450.0	360.0	Programmed
CNG	Pocatello Urban Transit	Idaho	Bannock Planning Organization	Purchase AFI Bus	94	270.0	216.0	Obligated
CNG	Pocatello Urban Transit	Idaho	Bannock Planning Organization	Purchase 2 CNG Replacement Buses	95	630.0	504.0	Obligated
CNG		Idaho		Purchase 4 CNG Replacement Buses	92	1087.5	870.0	Obligated
AFV	Chicago Transit Authority	Illinois	Chicago Area Transportation Study	Engineering - Fueling Facility for 25 Buses	93	814.0	651.2	Programmed
AFV	Chicago Department of Transportation	Illinois	Chicago Area Transportation Study	Alternatives Analysis	94	1000.0	800.0	Obligated
EV	Chicago Transit Authority	Illinois	Chicago Area Transportation Study	R&D Fuel Cell Development (5 Buses)	96	3500.0	2800.0	Obligated

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
CNG	Chicago Transit Authority	Illinois	Chicago Area Transportation Study	CNG Vanpool Service	96	291.4	233.1	Obligated
EV	Chicago Transit Authority	Illinois	Chicago Area Transportation Study	R&D Fuel Cell Development (5 Buses)	97	2250.0	1800.0	Obligated
CNG	City of Evansville	Indiana	Evansville Urban Transportation Study	Convert 60 Vehicles to CNG	97	2844.0	1416.0	Obligated
LNG	Gary Public Transportation Corporation	Indiana	Northwestern Indiana Regional Planning Commission	Purchase 2 LNG Replacement Buses	93	525.0	420.0	Implemented
LNG	Gary Public Transportation Corporation	Indiana	Northwestern Indiana Regional Planning Commission	Purchase 1 LNG Replacement Bus	94	262.5	210.0	In Progress
LNG	Gary Public Transportation Corporation	Indiana	Northwestern Indiana Regional Planning Commission	Purchase 1 LNG Replacement Bus	95	290.0	232.0	Programmed
LNG	Gary Public Transportation Corporation	Indiana	Northwestern Indiana Regional Planning Commission	Construct LNG Fueling Facility	95	500.0	400.0	In Progress
CNG	Lake County Economic Opportunity Council	Indiana	Northwestern Indiana Regional Planning Commission	Purchase 4 CNG Replacement Vehicles	95	175.0	140.0	In Progress
CNG	Gary Public Transportation Corporation	Indiana	Northwestern Indiana Regional Planning Commission	Purchase CNG Streetcar	96	287.3	229.8	Programmed
CNG	Lake County Economic Opportunity Council	Indiana	Northwestern Indiana Regional Planning Commission	Purchase or Convert 1 CNG Vehicle	96	57.5	46.0	Obligated
CNG	South Bend	Indiana		Purchase 3 CNG Conversion Kits, 3 Vans	94	105.0	84.0	Obligated
CNG	South Bend	Indiana		Purchase 5 CNG Conversion Kits	94	20.0	16.0	Obligated
CNG	South Bend	Indiana		Convert Bus to CNG	94	130.0	104.0	Obligated
CNG	St. Joseph & Elk	Indiana		Purchase Minivan & CNG Conversion Kit	94	22.0	17.6	Obligated

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
CNG	Jefferson County Air Pollution Control District	Kentucky	Kentuckiana Regional Planning and Development Agency	Convert 500 Public Vehicles to CNG	94	1875.0	1500.0	Obligated
AFV	East Baton Rouge Department of Public Works	Louisiana	Capital Region Planning Commission	Construct Fueling Facility	94-95	498.0	398.4	Implemented
AFV	East Baton Rouge Department of Public Works	Louisiana	Capital Region Planning Commission	Purchase Vehicle Conversions	95-96	250.0	200.0	Programmed
EV	Greater Portland Transit District	Maine	Portland Area Comprehensive Transportation Study	Develop 2 EV Shuttle Routes		1003.5	802.8	Implemented
CNG	Greater Portland Transit District	Maine	Portland Area Comprehensive Transportation Study	Purchase 2 CNG Buses, Facilities, Marketing, & Education		979.5	783.6	Programmed
AFV	Boston	Massachusetts	Executive Office of Transportation and Construction	Purchase Alt. Fuel Buses	96	856.3	685.0	Obligated
CNG	Blue Water Transit Commission	Michigan	Southeast Michigan Council of Governments	Purchase 1 CNG Bus	94	195.0	156.0	Obligated
CNG	Blue Water Transit Commission	Michigan	Southeast Michigan Council of Governments	Purchase 1 CNG Bus & Fueling Facility	94	244.0	195.0	Obligated
CNG	St. Clair County	Michigan	Southeast Michigan Council of Governments	Purchase 2 CNG Buses	94	195.0	156.0	Obligated
CNG		Michigan	Southeast Michigan Council of Governments	Purchase 2 CNG Vanpool Vehicles	94	60.0	48.0	Obligated
CNG	Blue Water Transit Commission	Michigan	Southeast Michigan Council of Governments	Purchase 2 CNG Buses	95	291.0	233.0	Obligated
CNG	Blue Water Transit Commission	Michigan	Southeast Michigan Council of Governments	Purchase 1 CNG Bus	96	250.0	200.0	Obligated
CNG	District 9	Michigan		Purchase CNG Van	93	31.3	25.0	Obligated
CNG	Ann Arbor Transportation Authority	Michigan		Purchase 1 CNG Bus	94	225.0	180.0	Obligated

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
CNG	Ottawa County	Michigan		Purchase 4 Small CNG Buses	94	280.0	224.0	Obligated
EV	Minnesota Department of Public Service	Minnesota	Metropolitan Council	Purchase 2 EV 19-Passenger Buses	94	600.0	480.0	Programmed
CNG	City of Nashua	New Hampshire	Nashua Regional Planning Commission	Construct CNG Fueling Facility for City Transit	98	100.0	80.0	Programmed
CNG	City of Nashua	New Hampshire	Nashua Regional Planning Commission	Construct CNG Fueling Facility for City Transit	00	950.2	760.2	Obligated
LPG	Atlantic County	New Jersey	South Jersey Transportation Planning Organization	Purchase LPG Replacement Buses	97	500.0	400.0	Obligated
AFV		New Jersey		Admin. Plan for Implementation of Non-traditional Transit Services	94	6250.0	5000.0	Obligated
CNG	City of Albuquerque Parks & General Services	New Mexico	Middle Rio Grande Council of Governments	Purchase CNG Vehicles or Replacements	00-01	625.0	500.0	Programmed
CNG	City of Albuquerque Parks & General Services	New Mexico	Middle Rio Grande Council of Governments	Purchase CNG Vehicles or Replacements	93-94	1024.0	500.0	In Progress
CNG	City of Albuquerque Transit Department	New Mexico	Middle Rio Grande Council of Governments	Construct a CNG Fueling Facility	93-94	2575.0	2100.0	Programmed
CNG	City of Albuquerque Parks & General Services	New Mexico	Middle Rio Grande Council of Governments	Purchase CNG Vehicles or Replacements	95-96	475.0	380.0	Programmed
CNG	City of Albuquerque Transit Department	New Mexico	Middle Rio Grande Council of Governments	Construct a CNG Fueling Facility	95-96	1375.0	1100.0	Programmed
CNG	City of Albuquerque Parks & General Services	New Mexico	Middle Rio Grande Council of Governments	Purchase CNG Vehicles or Replacements	96-97	475.0	380.0	Programmed
CNG	City of Albuquerque Parks & General Services	New Mexico	Middle Rio Grande Council of Governments	Purchase CNG Vehicles or Replacements	97-98	625.0	500.0	Programmed

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
CNG	City of Albuquerque Parks & General Services	New Mexico	Middle Rio Grande Council of Governments	Purchase CNG Vehicles or Replacements	98-99	625.0	500.0	Programmed
CNG	City of Albuquerque Parks & General Services	New Mexico	Middle Rio Grande Council of Governments	Purchase CNG Vehicles or Replacements	99-00	625.0	500.0	Programmed
AFV		New Mexico		Westside Transit Fueling Facility	94	2625.0	2100.0	Obligated
AFV		New Mexico		Alt. Fuel Vehicle Program	94	625.0	500.0	Obligated
CNG	Syracuse CYNTRA	New York	Syracuse Metropolitan Transportation Council	Purchase 7 CNG Buses, CNG Fueling Facility, Bus Shelters, 12 Vans	93	6898.0	5518.4	Obligated
CNG	Syracuse CYNTRA	New York	Syracuse Metropolitan Transportation Council	Purchase CNG Buses and Fueling Facility	93	5100.0	4080.0	Obligated
AFV		New York		Taxi Fleet Alt. Fuels Demo	93	1470.0	1176.0	Obligated
CNG		New York		Construct CNG Fueling Facility	93	3793.8	3035.0	Obligated
CNG		New York		Construct CNG Fueling Facility	93	100.0	80.0	Obligated
AFV		New York		ECO NYC Alt. Fuel Program	94	4686.3	3749.0	Obligated
CNG	Triangle Transit Authority	North Carolina		Purchase 20 CNG Buses & Fueling Facility	94	7000.0	5600.0	Obligated
CNG	Metro Regional Transportation Authority	Ohio	Akron Metropolitan Area Transportation Study	Purchase 20 CNG Buses	94	1200.0	1200.0	Obligated
CNG	Metro Regional Transportation Authority	Ohio	Akron Metropolitan Area Transportation Study	Construct CNG Fueling Facility	96	2815.0	2815.0	Obligated
CNG	Metro Regional Transportation Authority	Ohio	Akron Metropolitan Area Transportation Study	Purchase 4 CNG Buses	97	1132.0	1132.0	Programmed
CNG	Metro Regional Transportation Authority	Ohio	Akron Metropolitan Area Transportation Study	Purchase 4 CNG Buses	99	1170.0	1170.0	Programmed
EV	Miami Valley Regional Transit Authority	Ohio	Miami Valley Regional Planning Commission	Purchase 4 EV Buses	97	1350.0	1080.0	Programmed
CNG	Greater Cleveland Regional Transportation Authority	Ohio	Northeast Ohio Areawide Coordinating Agency	Construct CNG Fueling facility	93	3000.0	2400.0	Implemented

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
CNG	Greater Cleveland Regional Transportation Authority	Ohio	Northeast Ohio Areawide Coordinating Agency	Purchase CNG Bus, etc.	95	20310.0	16248.0	Programmed
CNG	LAK Laketran	Ohio	Northeast Ohio Areawide Coordinating Agency	Purchase CNG Bus	95	4075.0	3260.0	Programmed
CNG	OKI Rideshare	Ohio	Ohio Kentucky Indiana (OKI) Regional Council of Governments	Convert Vans to CNG	94	62.5	50.0	In Progress
EV		Ohio		Electric Bus Demo	94	1917.4	1533.9	Obligated
AFV	Metro Tulsa Transit Authority	Oklahoma	Indian Nations Council of Governments	Purchase 10 Alt. Fuel Vans	93	500.0	400.0	Obligated
EV		Oregon		Purchase Electric Vehicles	94	83.8	67.0	Obligated
CNG	Berks Area Reading Transportation Authority	Pennsylvania	Berks County Planning Commission	Purchase 5 CNG, low-floor, 40-foot Buses & Fueling Facility Upgrade	94	1700.0	1360.0	Implemented
CNG	Berks Area Reading Transportation Authority	Pennsylvania	Berks County Planning Commission	Construct Commercial CNG Facility	96	500.0	400.0	In Progress
CNG	Haverford Township	Pennsylvania	Delaware Valley Regional Planning Commission	Purchase or Convert 21 Vehicles to CNG, Construct 1 CNG Fueling Facility		355.0	284.0	Programmed
AFV	Lower Merion Township	Pennsylvania	Delaware Valley Regional Planning Commission	Purchase or Convert 72 AFVs & Construct Fueling Facility		770.0	616.0	Programmed
CNG	Philadelphia Energy Office	Pennsylvania	Delaware Valley Regional Planning Commission	Convert 350 City Vehicles to CNG & Construct 2 Fueling Facilities		3910.0	3128.0	Programmed
CNG	Radnor Township	Pennsylvania	Delaware Valley Regional Planning Commission	Convert 25 Vehicles to Bi-fuel CNG		125.0	100.0	Programmed
CNG	SEPTA	Pennsylvania	Delaware Valley Regional Planning Commission	Convert Buses and Support Facilities, Construct 1 Fueling Facility		8800.0	7040.0	FY96 Obligated, Balance Programmed
CNG	University of Pittsburgh	Pennsylvania	Southwestern Pennsylvania Regional Planning Commission	Purchase 20 Dedicated CNG 15-passenger Vanpool ehicles & Construct Fueling Facility	95-96	1434.3	1121.0	In Progress
AFV		Pennsylvania		Purchase Alt. Fuel Transit Shuttles	93	1600.0	1280.0	Obligated

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
AFV		Texas	Houston-Galveston Area Council	Purchase or Convert Vehicles	96	875.0	700.0	Obligated
AFV		Texas	Houston-Galveston Area Council	Purchase or Convert Vehicles	97	200.0	160.0	Obligated
AFV		Texas	Houston-Galveston Area Council	Purchase or Convert Vehicles	98	400.0	320.0	Obligated
LPG	City of Addison	Texas	North Central Texas Council of Governments	Purchase or Convert 11 LPG Vehicles	94-96	21.9	17.5	In Progress
LPG	City of Allen	Texas	North Central Texas Council of Governments	Purchase or Convert 5 LPG Vehicles	94-96	105.0	84.0	In Progress
CNG	City of Arlington	Texas	North Central Texas Council of Governments	Purchase or Convert 58 CNG Vehicles	94-96	159.5	127.6	In Progress
LPG	City of Bedford	Texas	North Central Texas Council of Governments	Purchase or Convert 15 LPG Vehicles	94-96	33.0	26.4	In Progress
CNG	City of Carrollton	Texas	North Central Texas Council of Governments	Purchase or Convert 86 CNG Vehicles	94-96	262.3	209.8	In Progress
LPG	City of Colleyville	Texas	North Central Texas Council of Governments	Purchase or Convert 10 LPG Vehicles	94-96	17.0	13.6	In Progress
AFV	City of Coppell	Texas	North Central Texas Council of Governments	Purchase or Convert 24 Vehicles	94-96	47.8	38.2	Programmed
CNG	City of Dallas	Texas	North Central Texas Council of Governments	Purchase or Convert 624 CNG Vehicles	94-96	1718.3	1374.7	In Progress
CNG	City of Denton	Texas	North Central Texas Council of Governments	Purchase or Convert 15 Vehicles	94-96	41.3	33.0	In Progress
AFV	City of Duncanville	Texas	North Central Texas Council of Governments	Purchase or Convert 30 Vehicles	94-96	82.5	66.0	Programmed
LPG	City of Euless	Texas	North Central Texas Council of Governments	Purchase or Convert 29 LPG Vehicles	94-96	63.8	51.0	In Progress
EV	City of Farmers Branch	Texas	North Central Texas Council of Governments	Purchase Electric Vehicles	94-96	40.0	32.0	Programmed
CNG	City of Farmers Branch	Texas	North Central Texas Council of Governments	Purchase or Convert Approx. 50 CNG Vehicles	94-96	152.0	121.6	In Progress

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
CNG	City of Flower Mound	Texas	North Central Texas Council of Governments	Purchase or Convert 12 CNG Vehicles	94-96	33.0	26.4	In Progress
AFV	City of Forest Hill	Texas	North Central Texas Council of Governments	Purchase or Convert 30 Vehicles	94-96	83.5	66.8	Programmed
LPG	City of Fort Worth	Texas	North Central Texas Council of Governments	Purchase or Convert 822 LPG Vehicles	94-96	1511.5	1209.2	In Progress
LPG	City of Frisco	Texas	North Central Texas Council of Governments	Purchase or Convert 31 LPG Vehicles	94-96	74.4	59.5	In Progress
LPG	City of Grand Prairie	Texas	North Central Texas Council of Governments	Purchase or Convert 123 LPG Vehicles	94-96	337.5	270.0	In Progress
LPG	City of Grapevine	Texas	North Central Texas Council of Governments	Purchase or Convert 29 LPG Vehicles	94-96	55.5	44.4	In Progress
LPG	City of Hurst	Texas	North Central Texas Council of Governments	Purchase or Convert 9 LPG Vehicles	94-96	23.8	19.0	In Progress
CNG	City of Irving	Texas	North Central Texas Council of Governments	Purchase or Convert 77 CNG Vehicles	94-96	324.5	259.6	In Progress
LPG	City of Lake Worth	Texas	North Central Texas Council of Governments	Purchase or Convert 18 LPG Vehicles	94-96	43.3	34.6	In Progress
LPG	City of Lancaster	Texas	North Central Texas Council of Governments	Purchase or Convert 3 LPG Vehicles	94-96	8.3	6.6	In Progress
CNG	City of Lewisville	Texas	North Central Texas Council of Governments	Purchase or Convert 54 CNG Vehicles	94-96	148.5	118.8	In Progress
AFV	City of Mansfield	Texas	North Central Texas Council of Governments	Purchase or Convert 22 Vehicles	94-96	67.0	53.6	Programmed
LPG	City of Mesquite	Texas	North Central Texas Council of Governments	Purchase or Convert 21 LPG Vehicles	94-96	27.3	21.8	In Progress
LPG	City of North Richland Hills	Texas	North Central Texas Council of Governments	Purchase or Convert 6 LPG Vehicles	94-96	10.0	8.0	Implemented
LPG	City of Plano	Texas	North Central Texas Council of Governments	Purchase or Convert 160 Vehicles	94-96	496.3	397.0	In Progress
CNG	City of Richardson	Texas	North Central Texas Council of Governments	Purchase or Convert 39 CNG Vehicles	94-96	106.3	85.0	In Progress

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
AFV	City of Seagoville	Texas	North Central Texas Council of Governments	Purchase or Convert 12 Vehicles	94-96	17.0	13.6	Programmed
LPG	Collin County Area Rural Transit	Texas	North Central Texas Council of Governments	Purchase or Convert 16 LPG Vehicles	94-96	29.1	23.3	In Progress
LPG	Community Homes for Adults	Texas	North Central Texas Council of Governments	Purchase or Convert 2 LPG Vehicles	94-96	3.1	2.5	In Progress
CNG	Dallas County	Texas	North Central Texas Council of Governments	Purchase or Convert 112 Vehicles	94-96	308.0	246.4	In Progress
CNG	Denton County	Texas	North Central Texas Council of Governments	Purchase or Convert 34 CNG Vehicles	94-96	93.5	74.8	In Progress
AFV	DFW Airport	Texas	North Central Texas Council of Governments	Purchase or Convert 50 Vehicles	94-96	132.5	106.0	Programmed
AFV	Duncanville I.S.D.	Texas	North Central Texas Council of Governments	Purchase or Convert 10 Vehicles	94-96	27.5	22.0	Programmed
CNG	Fort Worth Transit Authority	Texas	North Central Texas Council of Governments	Purchase or Convert 11 CNG Vehicles	94-96	30.3	24.2	In Progress
CNG	Garland I.S.D.	Texas	North Central Texas Council of Governments	Purchase or Convert 22 CNG Vehicles	94-96	66.0	52.8	In Progress
AFV	Keller I.S.D.	Texas	North Central Texas Council of Governments	Purchase or Convert 20 Vehicles	94-96	60.0	48.0	Programmed
AFV	Lake Worth I.S.D.	Texas	North Central Texas Council of Governments	Purchase or Convert 7 Vehicles	94-96	16.9	13.5	Programmed
LPG	Lancaster Outreach Center	Texas	North Central Texas Council of Governments	Purchase or Convert 1 LPG vehicle	94-96	3875.0	3100.0	Programmed
AFV	Mansfield I.S.D.	Texas	North Central Texas Council of Governments	Purchase or Convert 6 Vehicles	94-96	12.0	9.6	Programmed
AFV	Plano I.S.D.	Texas	North Central Texas Council of Governments	Purchase or Convert 50 Vehicles	94-96	139.0	111.2	Programmed
AFV	Tarrant County	Texas	North Central Texas Council of Governments	Purchase or Convert 78 Vehicles	94-96	156.0	124.8	Programmed
CNG	Texas Dept. of Transportation, Dallas District	Texas	North Central Texas Council of Governments	Purchase or Convert 231 CNG Vehicles	94-96	621.8	497.4	In Progress

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
AFV	Texas Dept. of Transportation, Fort Worth District	Texas	North Central Texas Council of Governments	Purchase or Convert 93 Vehicles	94-96	259.5	207.6	Programmed
LPG	Texas Turnpike Authority	Texas	North Central Texas Council of Governments	Purchase or Convert 6 LPG Vehicles	94-96	16.5	13.2	Implemented
CNG	University of Texas at Arlington	Texas	North Central Texas Council of Governments	Purchase or Convert 2 CNG Vehicles	94-96	5.8	4.6	Implemented
AFV	City of Cedar Hill	Texas	North Central Texas Council of Governments	Purchase or Convert 5 Vehicles	95-96	13.8	11.0	Programmed
AFV	City of Cockrell Hill	Texas	North Central Texas Council of Governments	Purchase or Convert 14 Vehicles	95-96	39.5	31.6	Programmed
LPG	City of Glenn Heights	Texas	North Central Texas Council of Governments	Purchase or Convert 10 LPG Vehicles	95-96	20.4	16.3	In Progress
AFv	City of McKinney	Texas	North Central Texas Council of Governments	Purchase or Convert 21 Vehicles	95-96	63.0	50.4	Programmed
AFV	Dallas Area Rapid Transit	Texas	North Central Texas Council of Governments	Purchase or Convert 76 Vehicles	95-96	209.8	167.8	Programmed
LPG	Dallas County Schools	Texas	North Central Texas Council of Governments	Purchase or Convert 400 Vehicles	95-96	850.0	680.0	In Progress
AFv	Dallas I.S.D.	Texas	North Central Texas Council of Governments	Purchase or Convert 238 Vehicles	95-96	664.5	531.6	Programmed
AFV	The Colony	Texas	North Central Texas Council of Governments	Purchase or Convert 9 Vehicles	95-96	24.8	19.8	Programmed
AFV	University Park	Texas	North Central Texas Council of Governments	Purchase or Convert 23 Vehicles	95-96	63.3	50.6	Programmed
AFV	State of Vermont	Vermont	FHWA	Purchase 2 Alt. Fuel Buses	93	150.0	120.0	Obligated
AFV	Greater Richmond Transit	Virginia	Richmond Regional Planning District Commission	Alt. Fuel Project	94	308.8	247.0	Obligated
AFV	Richmond	Virginia	Richmond Regional Planning District Commission	Alt. Fuel Project	95	23.8	19.0	Obligated
AFV		Virginia		Purchase Alt. Fuel Buses	93	367.0	367.0	Obligated

CMAQ-FUNDED AFV PROJECTS
FY1992-FY1996

Fuel Type	Applicant	State	MPO	Project Description	Project FY	Total Project $(000)	CMAQ Funding $(000)	Status
AFV	Seattle Metro	Washington	Puget Sound Regional Council	Purchase 26 Alt. Fuel Buses	93	12621.3	10097.0	Obligated
LNG		Washington		Purchase 5 LNG Buses	94	4155.0	3324.0	Obligated
TOTAL PROJECT COSTS / CMAQ FUNDING						**350436.7**	**275638.2**	

Table 5

Sample Project Budget

AFV PROJECT FUNDING

CMAQ FUNDING:	Year 1	Year 2	Year 3	Total $
Programmatic Activities				
Evaluation Criteria	5,000	10,000	10,000	25,000
Monitoring/Data Collection	5,000	15,000	25,000	45,000
Training and Education	5,000	10,000	15,000	30,000
Project Management	10,000	20,000	20,000	50,000
Total Programmatic Activities	25,000	55,000	70,000	150,000
Vehicle Acquisition	100,000	200,000	350,000	650,000
TOTAL CMAQ FUNDING	125,000	255,000	420,000	800,000
LOCAL COST SHARE:				
Private-Sector Infrastructure Funding (20% Cost Share)				
TOTAL COST SHARE	100,000	100,000	0	200,000
TOTAL PROJECT FUNDING	**225,000**	**355,000**	**420,000**	**1,000,000**

TCMs in Section 108(f)(1)(A) of CAAA

(i)	programs for improved public transit;
(ii)	restriction of certain roads or lanes to, or construction of such roads or lanes for use by, passenger buses or high-occupancy vehicles (HOVs);
(iii)	employer-based transportation management plans, including incentives;
(iv)	trip-reduction ordinances;
(v)	traffic flow improvement programs that achieve emissions reductions;
(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 single-occupant vehicle 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;
(xv)	programs for new construction and major reconstruction of paths, tracks or areas solely for use by pedestrian or other non-motorized means of transportation when economically feasible and in the public interest. For purposes of this clause, the Administrator shall also consult with the Secretary of the Interior;
(xvi) *	programs to encourage removal of pre-1980 vehicles.

* Excluded by ISTEA

Source: Federal Highway Administration

Appendix B

Consolidated Checklist for CMAQ Application Steps

Consolidated Checklist of Steps for CMAQ Application

Step 1: Get to Know your MPO

- ☐ Meet with the MPO(s) in your Clean Cities region to promote your Clean Cities Program.
- ☐ Ask your MPO to review its transportation and air quality priorities with you.
- ☐ Advise your MPO of your intention to pursue CMAQ funding for an AFV Project.

Step 2: Determine Availability of Funding

- ☐ Request a copy of the TIP and review it, focusing on the MPO's projects and transportation goals.
- ☐ Ask your MPO about the availability of current and/or unspent funds from prior years.
- ☐ Discuss the TIP with MPO staff, find out if an Obligation Ceiling is imposed on their CMAQ funds.

Step 3: Confirm Project Consistency With State Implementation Plan (SIP)

- ☐ Meet with state air quality authorities to introduce your AFV Project and discuss the goals of the SIP.
- ☐ Review a copy of the SIP, focusing on the State's air quality strategies.
- ☐ If AFVs are not consistent with the SIP, mobilize your Clean Cities organization to modify SIP.

Step 4: Identify Process for CMAQ Application

- ☐ Identify the MPO's CMAQ application process for project approval and inclusion in the current TIP.
- ☐ Find out when projects are due for consideration and request an estimation of time for review process.
- ☐ Confirm the MPO's method for prioritizing approved projects within the TIP.

Step 5: Select a Project Sponsor and Build Support

- ☐ Select a public-sector Project Sponsor to formally submit your proposal to the MPO.
- ☐ Establish visibility and build support at the highest possible levels, from the initial stages.
- ☐ Identify the causes of, and develop strategies to overcome, resistance to CMAQ-funded AFV projects.
- ☐ Embark on an aggressive campaign to promote awareness and win support of the community.

Step 6: Develop Your AFV Project

- ☐ Utilize your Clean Cities Stakeholders to develop targeted AFV Projects.
- ☐ Answer the eight questions in developing the AFV Project proposal.
- ☐ Organize the AFV Project into eleven components.
- ☐ Circulate the draft AFV Project proposal to all relevant organizations for final review.
- ☐ Solicit letters of support from public- and private-sector organizations, and interested fleets.
- ☐ Attach all letters of support to the proposal.

Step 7: Submit Your AFV Project to MPO for Preliminary Review

- ☐ Schedule a review with the MPO staff.
- ☐ Complete any resultant refinements to your AFV Project.
- ☐ Formally submit your AFV Project to the MPO through your Project Sponsor.

Step 8: Review & Approval by State & Federal Authorities

- ☐ Periodically check on the progress of the Project approval process through contact with your MPO.
- ☐ If your Project is approved but not added to the TIP, go to Step 9.
- ☐ If your approved AFV Project is added to the TIP, go to Step 10.
- ☐ If your Project is denied, you can appeal the decision one time by revising/resubmitting the proposal.

Step 9: Increase Your AFV Project's Priority Status on the Pending List

- ☐ Pursue adjustment of Project priority status by increasing local cost share, and/or political support.
- ☐ Work with Stakeholders and MPO staff to brainstorm for other creative ideas.

Step 10: Implement Programmatic Activities

- ☐ Execute your AFV Project Implementation Plan.
- ☐ Maintain political support and strong project management to assure funding in subsequent fiscal years.

Appendix C

Metropolitan Planning Organizations (MPOs)

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Source: Profiles of Metropolitan Planning Organizations, Association of Metropolitan Planning Organizations, 1996.

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Appendix D

State Energy Offices & Transportation Departments

	Energy Offices	Transportation Departments
Alabama	205/242-5294	205/242-6078
Arizona	602/280-1430	602/255-7431
Arkansas	501/682-7377	501/569-2241
California	916/654-4652	916/654-2503
Colorado	303/620-4292	303/757-9525
Connecticut	203/566-3394	203/566-4629
Delaware	302/739-5644	302/739-3056
District of Columbia	202/673-6710	202/939-8012
Florida	904/488-2475	904/488-3329
Georgia	404/656-5176	404/656-0610
Hawaii	808/587-3809	808/587-1845
Idaho	208/327-7978	208/334-8204
Illinois	217/785-3969	217/782-6289
Indiana	317/281-7018	317/232-5473
Iowa	515/281-7018	515/239-1660
Kansas	913/271-3117	913/296-2252
Kentucky	502/564-7192	502/564-3730
Louisiana	504/342-2133	504/358-9131
Maine	207/287-3261	207/289-3131
Maryland	410/974-2511	410/859-7943
Massachusetts	617/727-4732	617/973-7313
Michigan	517/334-6262	517/373-0343
Minnesota	612/296-7606	612/296-9072
Mississippi	601/359-6600	601/944-9142
Missouri	573/751-4000	573/751-3758
Montana	406/444-6764	406/444-3143
Nebraska	402/471-2867	402/479-4519
Nevada	702/687-7674	702/687-5440
New Hampshire	603/271-2711	603/271-3735
New Jersey	609/984-3058	609/530-2866
New Mexico	505/827-5999	505/827-5549
New York	518/465-6251	518/457-7055
North Carolina	919/733-1892	919/733-3141
North Dakota	701/328-2094	701/224-2673

Sources: U.S. Department of Energy, The Road to Clean Cities, February 1996, and Federal Highway Administration

	Energy Offices	Transportation Departments
Ohio	614/466-6797	614/644-7085
Oklahoma	405/843-9770	405/521-2927
Oregon	503/378-5981	503/378-8486
Pennsylvania	717/783-9981	717/787-3154
Puerto Rico	809/724-8774	809/722-0965
Rhode Island	401/277-3370	401/277-2694
South Carolina	803/737-8030	803/737-1444
South Dakota	605/773-5032	605/773-3174
Tennessee	615/741-6671	615/741-3412
Texas	512/463-1931	512/416-2606
Utah	801/538-5428	801/965-4377
Vermont	802/828-4053	802/828-3441
Virginia	804/692-3226	804/786-2964
Washington	360/956-2083	206/705-7383
West Virginia	304/558-0350	304/558-3156
Wisconsin	608/266-7312	608/266-6479
Wyoming	307/777-7716	307/777-4484