

## What Is the Track Record for Using CMAQ Funds to Support AFV programs?

As of 2001, about \$674 million in CMAQ funds have been used for AFV projects, representing a little more than five percent of all CMAQ obligations. The following table shows total expenditures by state (in thousands) on AFV projects for FY 2001.

State	CMAQ Funds	State	CMAQ Funds
AZ	3,228	MO	1,585
CA	45,836	NV	1,470
CT	2,372	NH	160
GA	6,502	NY	19,582
IN	2,500	PA	2,104
KY	578	TX	1,262
MA	1,578	WA	1,394
MI	6,663	WI	563

## Are There Other Reasons to Use AFVs?

### Alternative Fuel Vehicles Provide States and Metropolitan Planning Organizations an Opportunity to be Environmental Role Models.

Use of AFVs by high-profile fleets increases public awareness and approval of alternative fuels. This is especially true for public transit and school districts, where low emissions are very important. Operators of private delivery fleets often publicize their use of alternative fuels, even if they are only being tested.

**Alternative Fuel Vehicles Can Be Purchased for the Same Price as Conventional Vehicles.** Many times, the incremental cost of purchasing an AFV is offset by federal and state incentives and rebates offered by the auto manufacturers.

## CMAQ and the U.S. DOE's Clean Cities Program

Clean Cities is a voluntary, public-private partnership program coordinated by the U.S. Department of Energy (DOE). The program is designed to reduce dependence on imported oil, improve local air quality, and stimulate local economies by increasing the use of alternative fuels and AFVs. Clean Cities creates an effective plan, implemented at the local level, for developing a sustainable, nationwide alternative fuels market. Today, more than 80 cities or city coalitions are members of the Clean Cities Program, and many of them use CMAQ funds for numerous alternative fuel projects.

For more information on the Clean Cities Program, visit the DOE Web site at: [www.eere.energy.gov/cleancities/index.html](http://www.eere.energy.gov/cleancities/index.html)



Fueling the XCELLSIS fuel cell bus with compressed hydrogen. Photograph courtesy of Bob Barnitt, eTIAX LLC. (Department of Energy/National Renewable Energy Laboratory).

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*It all adds up to cleaner air*

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## **CMAQ and Alternative Fuel Vehicle Projects**

### **What Is CMAQ?**

The Congestion Mitigation and Air Quality (CMAQ) Improvement Program provides a flexible funding source for state and local governments to fund transportation projects and programs to help meet the requirements of the Clean Air Act (CAA) and its amendments. CMAQ money supports transportation projects that reduce mobile source emissions in areas designated by the U.S. Environmental Protection Agency (EPA) as in nonattainment or maintenance of national ambient air quality standards. Eligible activities include transit improvements, travel demand management strategies, traffic flow improvements, and public fleet conversions to cleaner fuels, among others.

### **What Are the Key CMAQ Funding Requirements?**

CMAQ funds must be invested in a state's nonattainment or maintenance area(s). The money must be spent on projects that reduce ozone (O<sub>3</sub>) precursors—volatile organic compounds (VOCs) and nitrogen oxides (NO<sub>x</sub>)—carbon monoxide (CO), or particulate matter (PM) from transportation sources. States without nonattainment or maintenance areas may use their CMAQ funds for projects eligible under the CMAQ or Surface Transportation Programs anywhere in the state. All CMAQ projects must come from a transportation plan and Transportation Improvement Program (TIP). The state transportation department is responsible for distributing CMAQ funds.

All projects must conform to established CMAQ guidance. The federal share for most CMAQ-eligible projects is 80 percent. The CMAQ program operates on a reimbursable basis, so funds are not provided until work is completed.

### **How Does the Use of Alternative Fuels Reduce Vehicle Emissions?**

Some alternative fuels are cleaner burning than gasoline and diesel, producing fewer tailpipe emissions. For example, a light-duty natural gas vehicle can produce 80 percent fewer tailpipe emissions than a gasoline vehicle. A light-duty propane vehicle can produce 60 percent fewer harmful emissions than its gasoline counterpart. Electric Vehicles (EVs) are classified as zero emission vehicles because they produce no tailpipe or evaporative emissions; however electricity generation usually creates emissions.



For heavy-duty vehicles, emissions reductions are also possible. Compressed Natural Gas (CNG) heavy-duty vehicles can emit less NO<sub>x</sub> than those fueled with conventional fuel. However, hydrocarbon emissions may slightly increase.



**Pierce Transit in Tacoma, Washington is “commuting without polluting” by running transit buses on clean compressed natural gas.**  
*Photograph courtesy of Pierce Transit (Department of Energy/National Renewable Energy Laboratory).*

The number of new vehicles designed for use with alternative fuels constitutes a relatively small percentage of the overall number of vehicles manufactured for use in the United States.

### **CMAQ and Alternative Fuel Vehicle Conversion Projects**

Fleet conversions no longer need to be specifically identified or included in the State Implementation Plan (SIP) or maintenance plan to be eligible for CMAQ funding. However, State DOTs and MPOs should coordinate with their air quality agencies before funding these projects. The proposal for CMAQ funding must demonstrate that the proposed conversion would reduce the pollutants causing the area's air quality violation.

### **Can CMAQ Funds Be Used to Establish Refueling Sites and Infrastructure?**

Establishment of Alternative Fuel Vehicles (AFV) refueling facilities and related other infrastructure is eligible for funding if the facility is publicly owned or leased. However, if private AFV stations are reasonably accessible, CMAQ funds may not be used to fund publicly-owned refueling stations.

### **CMAQ and Public-Private Partnerships in AFV Projects**

Because most AFV projects are undertaken in partnership with the private sector, the Transportation Equity Act for the 21<sup>st</sup> Century contained special provisions for alternative fuel projects that are part of a public-private partnership. For purchase of privately-owned vehicles or fleets using alternative fuels, CMAQ funds may be used for only the incremental cost of an AFV compared to a conventionally-fueled vehicle. Furthermore, if other federal funds are used for vehicle purchase, such funds must be applied to the incremental cost before CMAQ funds are applied.