

# Congestion Mitigation and Air Quality Improvement (CMAQ) Program



U.S. Department of Transportation  
Federal Highway Administration



## Alternative Fuel Vehicle (AFV) Projects

Some alternative fuels are cleaner burning than gasoline and diesel and produce 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, emission reductions are also possible. Compressed Natural Gas (CNG) heavy-duty vehicles can emit less nitrogen oxides (NO<sub>x</sub>) than those fueled with conventional fuel. However, hydrocarbon emissions may slightly increase.

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.

Fleet conversions no longer need to be specifically identified or included in the TIP, 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 air quality violation.

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 reasonable accessible, CMAQ funds may not be used to fund publicly-owned refueling stations.

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.

Many times, the incremental cost of purchasing an AFV is offset by Federal and State incentives and rebates offered by the auto manufacturers. Additionally, 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.

## Program Features Specific to the FAST Act

The U.S. Department of Transportation's Federal Highway Administration (FHWA) designated 55 routes that will serve as the basis for a national network of "alternative fuel" corridors spanning 35 States. Though the network is nearly 85,000 miles long, more miles will be added in the future to accommodate electric, hydrogen, propane and natural gas vehicles as additional fueling and charging stations are built. This initial designation sets the stage for future rounds of nominations and begins a conversation with stakeholders about developing and implementing a vision to enable coast to coast travel using alternative fuels.

## 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 website at: <https://cleancities.energy.gov/>.

Photo: [www.istockphoto.com](http://www.istockphoto.com)



### For more information, please contact:

U.S. Department of Transportation Federal Highway Administration  
Office of Natural Environment  
1200 New Jersey Avenue, S.E., Washington, D.C. 20590  
202-366-4053

[http://www.fhwa.dot.gov/environment/air\\_quality/cmaq/](http://www.fhwa.dot.gov/environment/air_quality/cmaq/)