

Funding Clean Freight Corridors

Session 1A Overview Worksheet

Session Summary

Funding infrastructure is one of the key challenges to implementing clean corridors, as the upfront costs of the stations can be expensive relative to the expected near term use. A common approach to overcoming the upfront cost and usage risk barriers is to capture the public benefits of alternative fuels through public investment. In this session, we'll explore strategies to leverage public funding and deploy clean corridors during a period of low oil prices through public-private partnerships. Adam Ruder, Transportation Manager at NYSERDA, will give an overview of his agency's experience, including NYSERDA's use of funds from the federal Congestion Mitigation and Air Quality (CMAQ) program.

Background

In partnership with the private sector, federal and state agencies have used various approaches to deploy alternative fuel infrastructure along major roadways. Public agencies have given grants, loans, and other financial support to projects often through public-private partnerships. The success of these financing programs is exemplified by the CMAQ program, a two-decade old effort to use federal surface transportation program funds to reduce congestion and improve air quality. States have used these funds in innovative ways to help deploy alternative fuel vehicles and infrastructure. For example, the [ALT Fuels Colorado grant program](#) is using CMAQ funds to deploy clean corridor infrastructure.

Looking ahead, gasoline and diesel prices are projected to stay below \$2.50 per gallon through next year, according to the [U.S. Energy Information Administration](#). Alternative fuels, especially fuels that cannot easily offer a cost-savings over oil, will face near term headwinds. At the same time, policymakers at all levels continue to support the greater deployment of alternative fuels.

Federal Funding Opportunities

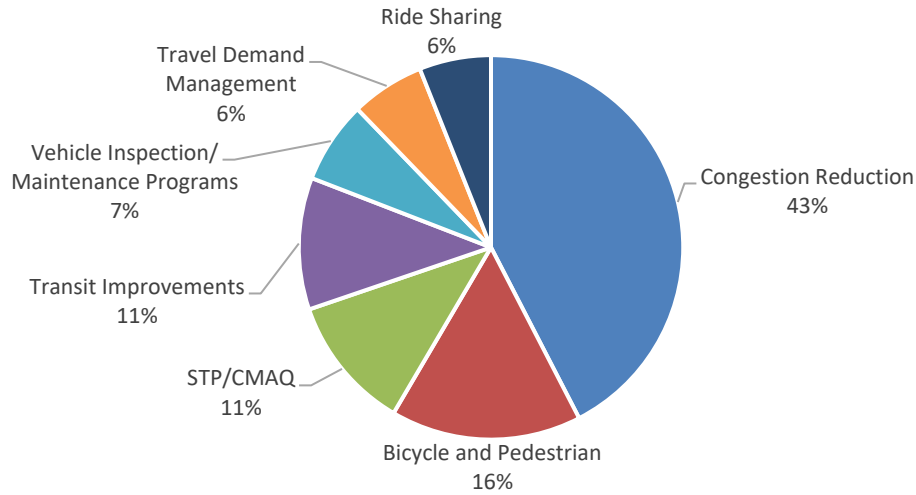
The CMAQ program provides \$2.3 to \$2.5 billion annually from 2016 through 2020. Congress placed increased emphasis on alternative fuel corridors in the latest reauthorization of the federal program, sending a clear signal to states.

Alternative fuel projects have been funded for various purposes over the years (see figure below). Many transit vehicle and public fleet purchases as well as alternative fuel infrastructure installations were included in the Transit Improvements and Vehicle Inspection/Maintenance Program categories, which together represented about 18 percent of the total CMAQ projects from 2005 to 2014.

Examples of CMAQ Funded AFV Projects in 2014

- Connecticut - \$2 million for a CNG fueling station in Norwich for public and private fleet use.
- Maryland - \$5.9 million for Montgomery County CNG buses and fueling station.
- Massachusetts - \$2.5 million for MassDOT AFV fleet purchase program.
- New York - \$5.8 million for E85 and B20 fueling infrastructure in Monroe County.
- North Carolina - \$37,000 for a public fleet electric vehicle and charging station.

CMAQ Projects by Type - 2005-2014

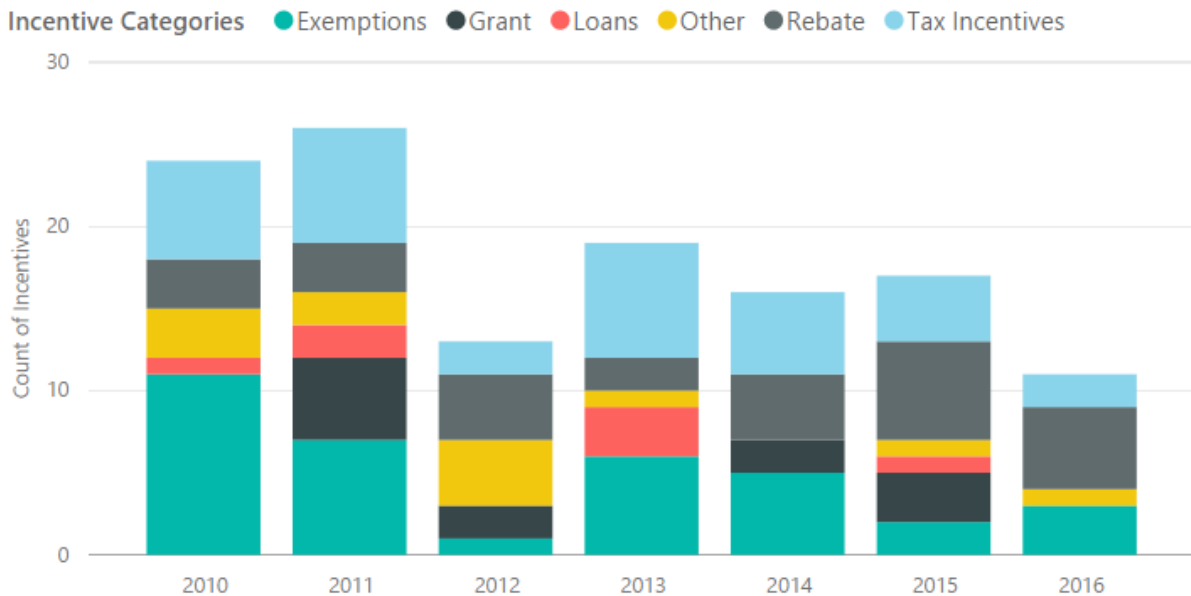


Source: FHWA CMAQ Public Access System https://fhwaapps.fhwa.dot.gov/cmaq_pub/Reports/Criteria

Innovative State Programs and Incentives

States have used tax incentives and exemptions, grant programs, innovative public-private partnerships, public fleet acquisition requirements, and other methods to deploy alternative fuel vehicles and fueling infrastructure (see figure below). For example, [Washington state created the EV infrastructure pilot program](#) to encourage the private sector to identify indirect value streams from electric vehicle charging stations; the program will provide funding to support the deployment of projects that successfully demonstrate this concept.

Figure 1: New state incentives added by type from 2010 to 2016



Source: Atlas Public Policy analysis of data from <http://www.afdc.energy.gov/laws>

Key Discussion Questions

1. What are the key funding and financing barriers to deploying clean corridors given current and near-term market conditions?
2. Can you contrast the differences between top-down and bottom-up funding approaches used by different states?
3. How can a greater share of CMAQ and state funds be directed towards clean corridors?
4. What are the most effective state policies and programs related to public-private partnerships for clean corridors that you've seen in your state or elsewhere? How could they be replicated?
5. Under what conditions can innovative finance mechanisms (such as the use of carbon credits by a "green bank") encourage private investment and be valuable, sustainable sources of funding?
6. What are the key elements of an online toolkit for funding clean corridors?

Notes
