



Using CMAQ Program Funds to Finance Freight and Intermodal Projects

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Talking Freight Seminar: Advancing Clean Air Projects at Ports through the CMAQ Program

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Federal Highway Administration



Content

- Basic CMAQ Program Overview and Eligibility
- FAST Act Changes
- Federal Aid Process and Project Selection
- Port-related CMAQ Eligible Practices
- Resources



CMAQ: A Basic Overview

- Congestion Mitigation and Air Quality Improvement (CMAQ) Program
- Established in 1991 under ISTEA (23 U.S.C. Section 149)
- Reauthorized in all subsequent transportation reauthorization acts, most recent the FAST Act



Annual funding = \$2.3-2.5 billion
(FY 2016-2020)



CMAQ Program Purpose

The CMAQ program is established for transportation projects that contribute to the attainment or maintenance of the national ambient air quality standards (NAAQS) for ozone, carbon monoxide, or particulate matter.





Basic CMAQ Project Eligibility

Each CMAQ project must:

- ✓ Be a transportation project
- ✓ Generate emission reductions
- ✓ Be located in or benefit a nonattainment or maintenance area

Emission Reductions:

- Must reduce emissions from transportation sources
 - ❖ Carbon monoxide (CO)
 - ❖ Ozone precursors (NO_x/VOC)
 - ❖ Particulate matter (direct and applicability precursors)
- Contribute to the area's overall clean air strategy
- Should be demonstrated by emissions analysis required by FHWA

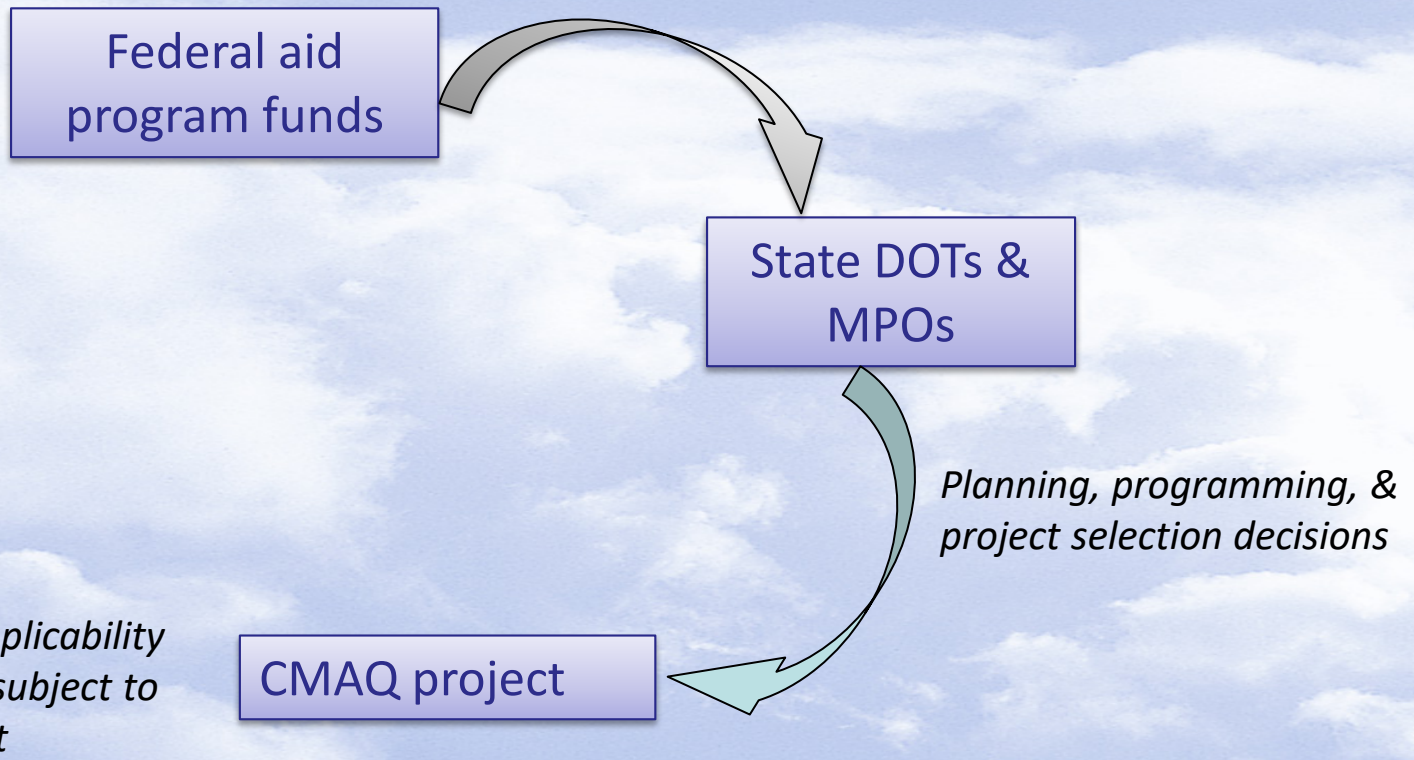


Wide Range of Eligible Project Types

- Diesel engine retrofits and advanced truck technologies
- Idle reduction
- Congestion reduction and traffic flow improvements
- Freight/Intermodal
- Transportation Control Measures (TCM)
- Transit improvements
- Bicycle and pedestrian facilities and programs
- Travel demand management
- Carpooling and Vanpooling
- Carsharing
- Alternative fuels and vehicles
- Inspection and maintenance programs
- Public education and outreach activities
- Innovative projects



Federal Air Process Overview



No Federal role in project selection



CMAQ Project Selection

- State DOTs, MPOs, and transit agencies have processes for programming CMAQ projects in metropolitan transportation plans, TIPs, and STIPs

- To learn about the process in your area, contact:
 - ❖ MPO in metropolitan area
 - ❖ State DOT in non-metropolitan area (no MPO)
 - ❖ FHWA Division Office ([each state](#))

- ✓ Must meet basic eligibility requirements



Project Eligibility under the FAST Act

- Diesel emission control technology for non-road diesel vehicles and engines used in construction projects or port-related freight operations
- Port related landside non-road or on road equipment
- Priority consideration of electric vehicle and natural gas infrastructure within designated corridors.



Port-related CMAQ Eligible Practices

Diesel Engine Retrofit and Other Advances Truck Technologies

- Gantry Cranes
- Drey Trucks
- Switcher Locomotives

Idle Reduction

- Heavy Duty Trucks
- Switcher Locomotives

Freight / Intermodal

- Primary projects: port-related vehicles
- Secondary projects: infrastructure additions or modifications

Alternative Fuels and Vehicles

- Vehicle conversions or replacements
- Electric or natural gas refueling infrastructure



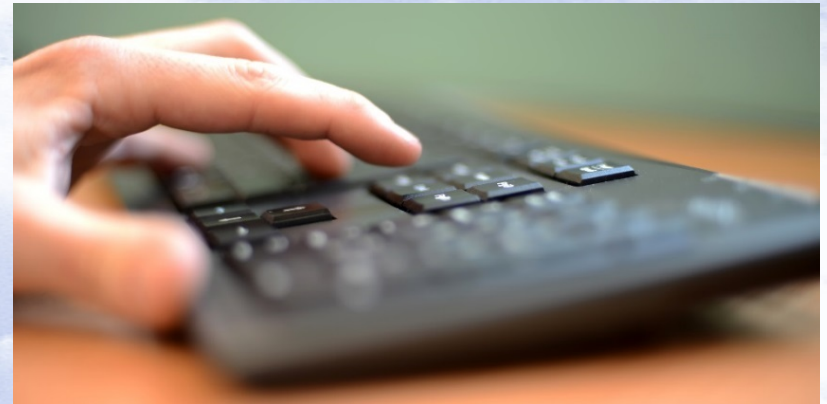
Resources

FHWA Air Quality CMAQ Website:

- https://www.fhwa.dot.gov/environment/air_quality/cmaq

CMAQ Public Access System

- https://fhwaapps.fhwa.dot.gov/cmaq_pub/



More Resources

FHWA Freight and Air Quality Handbook

- <https://ops.fhwa.dot.gov/publications/fhwahop10024/index.htm>

FHWA CMAQ Factsheets

- https://www.fhwa.dot.gov/environment/air_quality/cmaq/reference/

FHWA CMAQ 101 Training Course (22 mins)

- <https://www.youtube.com/watch?v=XKXcs0WtNHA&feature=youtu.be>

Congestion Mitigation and Air Quality Improvement (CMAQ) Program

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Photos: FHWA

Intermodal Freight Transportation

In an intermodal transportation network, trains, trucks, ships, and aircraft are connected in a seamless system that is efficient and flexible, and meets the needs of the nation's consumers, carriers, and shippers. An intermodal system includes both origins and destinations (e.g. ports, railheads and warehouses) and the links between them (e.g. roads or rail). Intermodal describes an approach to planning, building, and operating the transportation system that emphasizes optimal use of transportation resources and connections between modes. Intermodal partnerships offer environmental benefits and enhanced mobility by shifting traffic from congested highways to rail or water.

CMAQ Funds in the Intermodal Freight Sector

Intermodal operations can increase transportation efficiency, reduce emissions, and improve energy efficiency. A train loaded with containers can carry the same load as dozens of heavy-duty diesel trucks. This, in turn, can contribute to reduced long-haul truck traffic on congested highways, reduced damage to highways from heavy trucks, and improved air quality.

There are many challenges in developing an efficient intermodal transportation system. Solutions to issues like inadequate infrastructure or operational inefficiencies may be eligible for CMAQ funds. Funding under CMAQ has been used to improve intermodal freight facilities and operations, where air quality benefits can be shown. Capital improvements and up to five



FHWA Contacts

FHWA Division Offices

- <https://www.fhwa.dot.gov/about/field.cfm>

FHWA Headquarters

- *(general questions)*

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