

This Webinar will begin at 10:00 EST

The Congestion Mitigation and Air Quality Improvement (CMAQ) Program: Policy Overview

Instructors

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Webinar Logistics

- **Screen**
- **Interactive Tools**
 - **Phone**
 - **Chat Box**
- **Questions**
- **Materials**
- **Agenda**

Topics/Overview

1. Background on the CMAQ Program

- Description and Purpose

2. Program Operation:

- Apportionment
- Eligibility requirements (general & geographic)
- Roles & Responsibilities

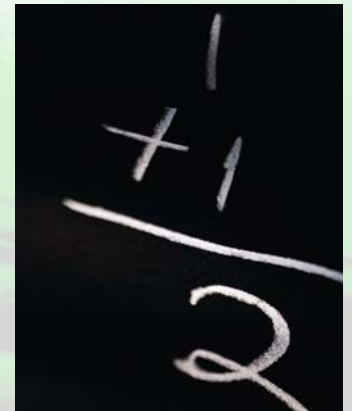
3. CMAQ Program: Historical Funding and Sample Projects

Objectives



- **Background on the CMAQ Program**
 - Describe the CMAQ program and its purpose
- **Program Operation**
 - Describe the apportionment process
 - List the basic and geographic project eligibility requirements
 - Describe the roles & responsibilities for agencies/organizations involved in the CMAQ program
- **CMAQ Program: Historical Funding and Sample Projects**
 - Describe funding trends and observe sample projects

1. Background on the CMAQ Program



Background on CMAQ program

- 1990:** **Clean Air Act Amendments** make new, strict deadlines to meet clean air standards
- 1991:** CMAQ program established (**ISTEA**) – primary policy focus to meet CAA goals by assisting nonattainment areas (\$6 billion)
- 1995:** **National Highway System Designation Act** authorizes states to use CMAQ funds in maintenance areas
- 1998:** CMAQ program reauthorized under **TEA-21** (\$8.1 billion)
- 2005:** CMAQ program reauthorized under **SAFETEA-LU** (8.6 billion)

Background on CMAQ program

- **CMAQ is first and only federal funded transportation program explicitly targeting air quality improvement.**
- **CMAQ program structure reflects ISTEA philosophy: DECENTRALIZED**
 - FHWA and FTA with EPA provide basic policy guidance and project eligibility criteria.
 - States and MPOs are responsible for project selection and implementation.

Background on CMAQ program

- **Funds transportation projects and programs to help achieve and maintain air quality standards (NAAQS)**
 - Promote cleaner motor vehicles
 - Improve travel efficiency (addresses congestion)
 - Provide alternatives to SOV travel

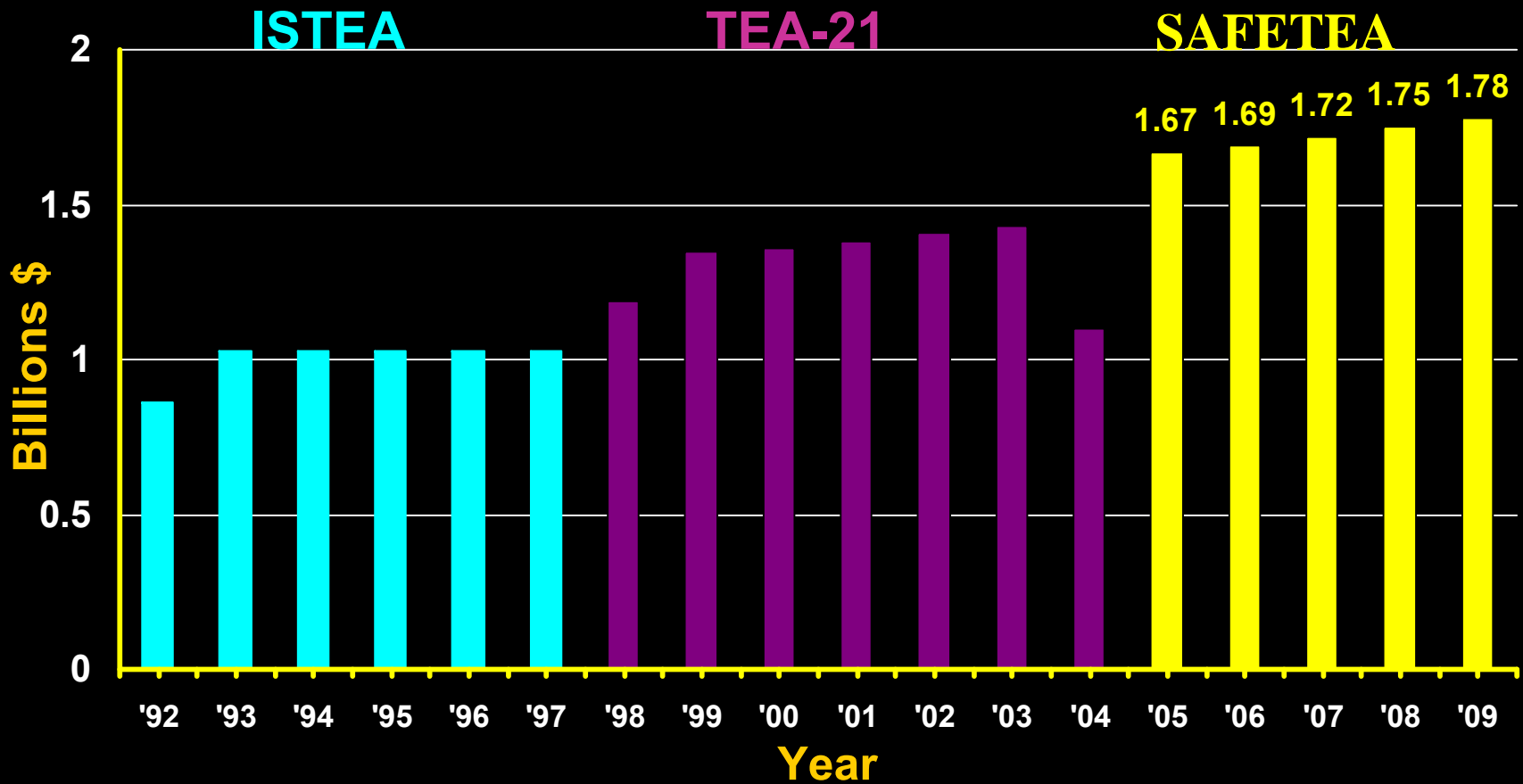


Background on CMAQ program

Context:

- **CMAQ funds constitute a relatively small fraction of a given area's regional transportation budget**
 - Typically, two to three percent
- **Typical CMAQ projects are highly local in scale, compared to new vehicle emissions and fuel standards**

CMAQ Authorization Levels



More Areas, More Funding?

112 new counties are nonattainment for 8-hour ozone

- 34 1-hour counties fell out of the apportionment formula

CMAQ Funding Levels (§1101)

SAFETEA-LU funds CMAQ at about \$1.7 billion per year, about a 27% increase over TEA-21

- This funding level will be augmented by a portion of Equity Bonus funds

	'05	'06	'07	'08	'09	Total
Authorization (millions)	1,667	1,694	1,721	1,749	1,777	8,609

2. Program Operation



Program Operation: Apportionment

- **Funding is apportioned to states by means of a formula, based on:**
 - Severity of air quality problem (ozone and CO)
 - Size of affected population
- **Apportionment is based on nonattainment/maintenance status existing at the time of apportionment**
 - Generally, prior to the beginning of the fiscal year
- **Apportionment \neq eligibility**
 - CMAQ funds may be spent in areas not included in the apportionment formula



Program Operation: Apportionment

Pollutant	Classification	Weighting Factor
Ozone or CO	Maintenance	1.0
Ozone	Subpart 1 (“Basic”)	1.0
Ozone	Marginal	1.0
Ozone	Moderate	1.1
Ozone	Serious	1.2
Ozone	Severe	1.3
Ozone	Extreme	1.4
Ozone and CO	Ozone and CO	1.2 x O ₃ factor
All states – minimum apportionment	½ of 1% total annual apportionment	na

Program Operation: Apportionment

- **Minimum apportionment = $\frac{1}{2}$ of 1% of annual apportionment**
 - Mandatory or flexible funds
- **Apportionment formula \neq state allocation**
 - States are not obligated to allocate funds according to apportionment

Program Operation: Matching Funds

Project Type	Federal Share	State/local match
Most eligible projects	80%	20%
Projects on interstate system	90%	10%
Activities in 23 U.S.C. 120(c)...signalization, car/vanpools, etc.	Up to 100% (if satisfy conditions)	Down to 0%
Public-private partnerships	NOT REQUIRED, but state/local officials may request higher local match from private sector partner...could leverage additional use of CMAQ funds	

Eligibility Requirements: Basic

- ✓ **Transportation project**
- ✓ **Reduces emissions**
- ✓ **Nonattainment or maintenance area**



Eligibility Requirements: Basic

- ✓ **Transportation project**
 - Eligible for Title 23 (highways) or Title 49 (transit)
- ✓ **Reduces emissions**
 - Quantitative (preferred) or qualitative estimate
- ✓ **Nonattainment or maintenance area**
 - Except: (a) states without such areas;
(b) “minimum apportionment” states

Eligibility Requirements: Basic

- Included in MPO's current transportation plan and TIP (or STIP in areas without MPOs)
- Meet conformity provisions (in nonattainment/maintenance areas)
- Complete NEPA requirements



Eligibility Requirements: Geographic

Funding is available for:

- Nonattainment areas, maintenance areas (designated by EPA)
 - CO, O₃, PM₁₀ and PM_{2.5}
- Minimum apportionment funds
 - additional spatial flexibility

Eligibility Requirements: Use of Funds

1. Capital Assistance

2. Operating Assistance

3. Planning and Project Development

Eligibility Requirements: Use of Funds

1. Capital Assistance

- Establish new or expanded transportation projects
- Transportation infrastructure, congestion relief efforts, diesel retrofits, vehicles, others

Eligibility Requirements: Use of Funds

2. Operating Assistance

- Limited to new transit service, intermodal facilities, TDM strategies, incremental cost of expanding existing transit services
- Includes all costs for new transportation services, such as labor, fuel, administrative costs, and maintenance
- Limited to first 3 years (except TDM, public education)
- Best use is start up new services with AQ benefits; when AQ returns are decreasing, other funds should be considered
- Non-federal share requirements still apply

Eligibility Requirements: Use of Funds

3. Planning and Project Development

- Activities in support of eligible projects
- Includes studies that are part of project development pipeline
- Specific projects, not general studies (such as transit master plans)

Eligibility Requirements: Eligible Projects

- ✓ **Transportation Control Measures (CAA Section 108(f))**
- ✓ **Extreme Low-Temperature Cold Start Programs**
- ✓ **Alternative Fuel Vehicles**
- ✓ **Congestion Reduction & Traffic Flow Improvements**
- ✓ **Transit Improvements**
- ✓ **Bicycle and Pedestrian Facilities and Programs**
- ✓ **Travel Demand Management**
- ✓ **Public Education and Outreach Activities**

Eligibility Requirements: Eligible Projects (con't)

- ✓ **Transportation Management Associations**
- ✓ **Car/Vanpooling**
- ✓ **Freight/Intermodal**
- ✓ **Diesel Engine Retrofits & Other Advanced Truck Technologies**
- ✓ **Idle Reduction**
- ✓ **Training**
- ✓ **Inspection/Maintenance (I/M) Programs**
- ✓ **Experimental Pilot Projects**

Eligibility Requirements: Ineligible Projects

- Light-duty vehicle scrapping programs
- Projects that add new capacity for SOVs (except HOV lanes)
- Routine maintenance and rehabilitation projects
- Administrative costs associated with operating CMAQ program
- Projects that do not meet specific eligibility requirements of Title 23 and 49 U.S.C.
- Stand alone projects to purchase fuel

Program Operation: Project Selection

- Processes vary at the State & local level
- FHWA encourages a competitive approach
- DOTs & MPOs should consult with each other and with environmental agencies
- First contact usually is MPO or other local government committee (e.g., air quality, etc.)

Program Operation: Project Selection

Priority Use of Funds

- **SAFETEA-LU provided for the “priority use of funds” for:**
 - Diesel retrofits and other cost-effective reduction activities
 - Cost-effective congestion mitigation activities with air quality benefit
 - (does not apply to minimum apportionment funds)
- **SAFTEA-LU retained state/local authority in making final project selection**

Am I eligible?...

- 1. Installation of bus shelters**
- 2. Repaving of HOV lanes**
- 3. New full-time staff person to manage new urban-suburban commuter bus route system**
- 4. New part-time staff person to manage DOT's CMAQ coordination process with state's MPOs**
- 5. Joint project to build biodiesel refueling facility; fuel for first 6 months of operation**



Roles & Responsibilities

- | | |
|-----------------------------|--|
| EPA----- | Designates nonattainment/ maintenance areas, participates in consultation |
| FHWA/FTA----- | Determines project eligibility, writes guidance |
| Project sponsor----- | Brings projects forward for funding, estimates emissions reductions |
| State/MPO----- | Makes project selections |
| ALL----- | Review emissions methodology, data, assumptions |

Highlighted Eligible Projects

- **Transportation systems management & operations that mitigate congestion & improve air quality**
- **Purchase of integrated, interoperable emergency communications equipment**



Highlighted Eligible Projects (cont.)

- **Advanced truck stop electrification systems**
- **Allows anti-idling facilities in Interstate ROW (§1412)**



Highlighted Eligible Projects (cont.)

Diesel retrofits for on-road and off-road engines used in construction projects in ozone or PM nonattainment or maintenance areas

- Includes replacement, repowering, rebuilding, after treatment technology.
- **Outreach activities for diesel retrofits**
- **Conformity credit**



3. CMAQ Program: Historical Funding and Sample Projects



Projects Funded

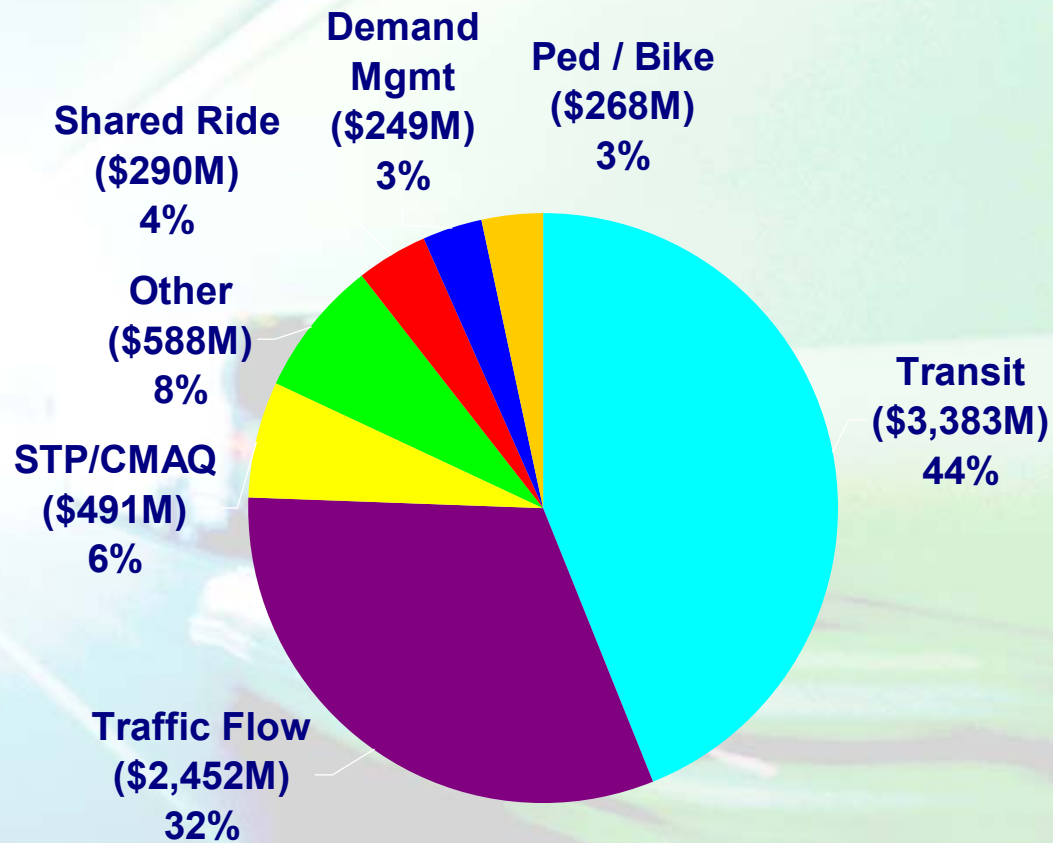
More than \$13 billion invested in over 16,000+ projects since 1992

Wide range of eligible projects

- transit improvements
- shared ride services
- traffic flow improvements
- demand management
- bicycle and pedestrian projects
- alternative fuels
- inspection & maintenance programs
- freight services
- experimental pilots
- public / private partnerships
- diesel retrofits
- anti-idling facilities



CMAQ Funding by Project Type (FY 1992-2000)



CMAQ & Freight: *Infrastructure*

**Intermodal truck-to-rail transfer in Maine,
New Hampshire, California**

**Rail upgrade projects in California,
Washington**

Port-rail project in Texas—Houston



CMAQ & Freight: *Infrastructure*

Con't...

Container-on-barge project in New York, New Jersey

Highway engineering project (truck route separation) in Maine

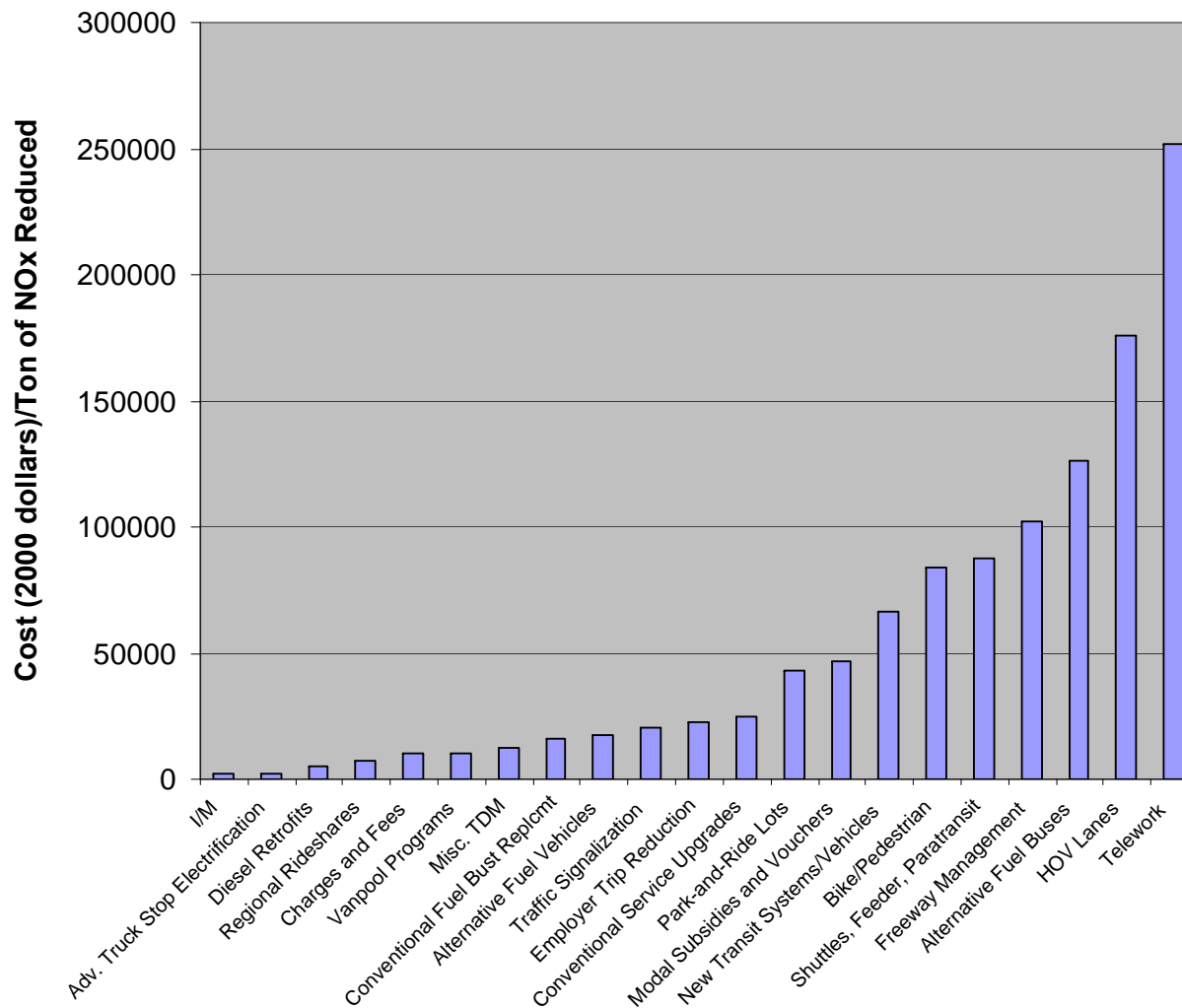
Rail-highway grade separation in Illinois



CMAQ & Freight: *Vehicle Emissions*

- **Truck stop electrification (TSE) projects in Alabama, Georgia, Indiana, New Jersey, New York, Tennessee, and Texas**
- **Diesel engine repower in California, vis-à-vis the Carl Moyer Program**
- **Diesel truck engine conversions to natural gas in Kentucky**

Cost-Effectiveness of Selected CMAQ Projects



Source: National Academy of Sciences, Environmental Protection Agency

Resources

FHWA Headquarters Contacts

- Michael.Koontz@dot.gov (CMAQ Coordinator)
- Victoria.Martinez@dot.gov

FHWA Resource Center Contacts

- Michael.Roberts@dot.gov

Web

- <http://www.fhwa.dot.gov/environment/cmaqpgs/index.htm>