

# PERFORMANCE BASED PLANNING & PROGRAMMING

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## CMAQ Program: Emissions Reduction

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TPB Technical Committee  
March 2, 2018



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# CMAQ Program - Purpose

- The Congestion Mitigation and Air Quality (CMAQ) program was implemented to support surface transportation projects and other related efforts that contribute air quality improvements and provide congestion relief.
  - Provides a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act.
- CMAQ Funds are used for:
  - Transportation projects or programs that reduce congestion and improve air quality in areas that do not meet the National Ambient Air Quality Standards.



# CMAQ Program – Requirements and Projects

- Three federal requirements for CMAQ Funding:
  - Must be a transportation project, it must generate an emissions reduction, and it must be located in or benefit a nonattainment or maintenance area.
- Some types of projects eligible for CMAQ Programming:
  - Bicycle and Pedestrian Facilities and Programs (Bike Paths)
  - Travel Demand Management (Telecommuting)
  - Transit Improvements (New transit vehicles)
  - Congestion Reduction & Traffic Flow Improvements (HOT & HOV Lanes)



# CMAQ Program – Project Information

- Proposals for CMAQ funding should include a precise description of the project, providing information on its size, scope, location, and timetable.
- Additionally, an assessment/analysis of the project's expected emission reduction benefits should be completed prior to project selection to better inform the selection of CMAQ projects.
  - Quantitative Analysis
  - Qualitative Assessment
  - Analyzing Groups of Projects
  - Tradeoffs



# System Performance: CMAQ Program (Congestion Mitigation and Air Quality)

	Performance Measures
<b>CMAQ Program: Traffic Congestion</b>	(5) <b>Peak Hour Excessive Delay</b> – Annual hours of peak hour excessive delay per capita
	(6) <b>Mode Share</b> - Percent of Non-SOV Travel on the NHS
<b>CMAQ Program: Emissions Reduction</b>	(7) <b>Emission</b> - CMAQ-funded projects on-road mobile source total emission reductions for each applicable criteria pollutant and precursor

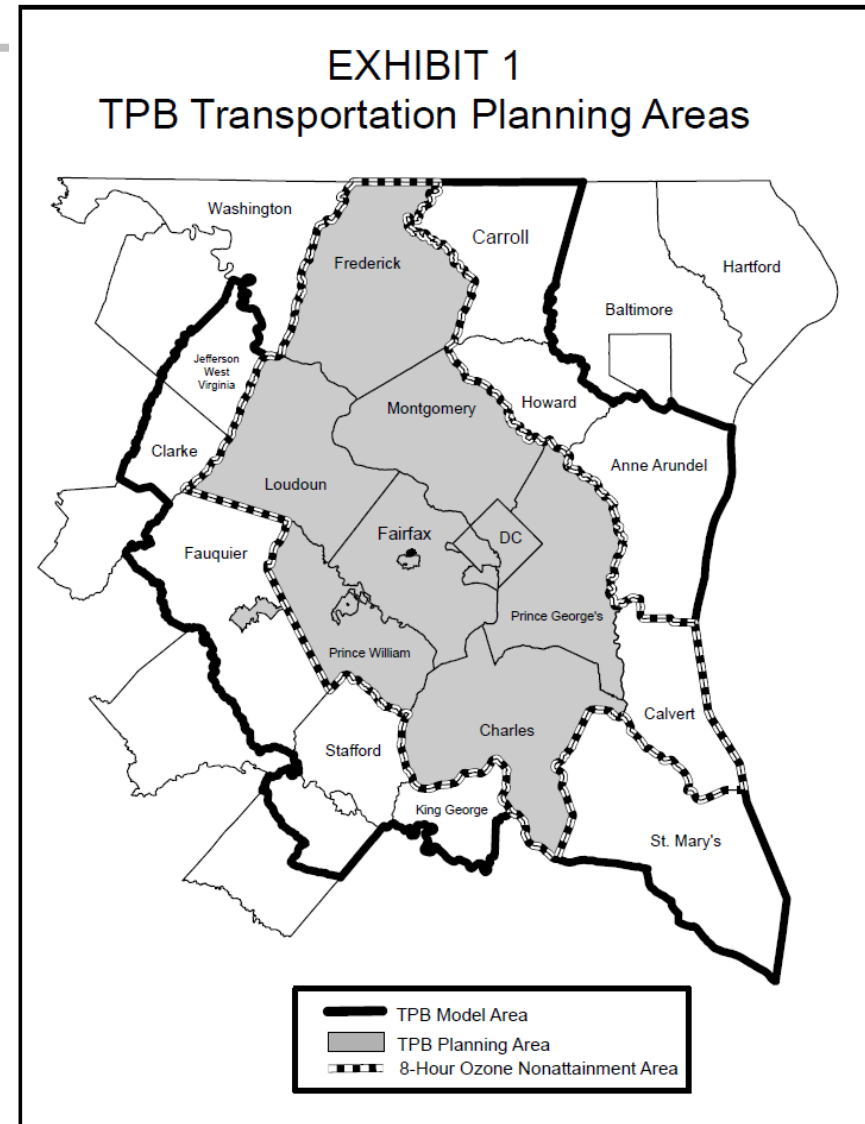
# CMAQ Program: Emissions Measures

- CMAQ Emissions measure applies to non-attainment or maintenance areas.
  - Applicable State DOTs and MPOs (serving a TMA with a population over 1 million) must coordinate on and collectively establish a methodology for developing 2-year and 4-year targets for each applicable pollutant and precursor for all non-attainment or maintenance areas.
  - State DOTs must develop targets with the coordination from MPOs by May 20, 2018. MPOs must establish targets six months after State DOTs.
- A baseline report from the DOTs for the first performance period (2018-2021) is due October 1, 2018, and must include baseline data for CMAQ projects from FY2014-2017, 2- and 4-year targets, and a description of the data collection method used.



# Ozone Nonattainment Area

- Ozone precursors Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx) are the only pollutants for which the region needs to report on CMAQ Program Emissions Reductions.
- Calvert County is inside the Washington DC-MD-VA nonattainment area, but outside TPB's planning area.
  - Responsibility handled by Calvert-St Mary's MPO (C-SMMPO).





# CMAQ Program: Emissions Measures

- Measure: Total Emissions Reduction
  - Total emissions reduction is calculated by summing 2-and 4-year totals of emissions reductions of applicable criteria pollutant and precursor, in kilograms per day, for all projects funded with CMAQ funds.
- Calculation: Cumulative two and four-year emissions reductions for CMAQ funded projects:
- Targets will reflect the anticipated cumulative emissions reduction to be reported in the CMAQ Public Access System.



# CMAQ Public Access System

- Database used to collect information for the emissions reduction measure.
- State DOTs are required to provide FY data by the following March 1.
  - After review by the FHWA data is released to the public (MPOs have access) September 30.
- Navigation of the CMAQ PAS
  - Reports
  - Program Information
    - Project Year
    - Project Reporting Category
  - Program Location
    - Project State
    - Project MPO

U.S. Department of Transportation  
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Office of Planning, Environment, & Realty (HEP)  
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Air Quality  
CMAQ Public Access System

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All 50 states and the District of Columbia submit annual reports of their CMAQ project obligations in March of every year. The FHWA uses these yearly submissions to maintain an active database of CMAQ investments, air quality benefits, project trends within the program, and other anecdotal information focusing on the program's performance.

This database of CMAQ Project information had been reserved for internal planning purposes by authorized FHWA personnel, for Congressional reporting and made available to state DOTs and MPOs on an individual request basis.

The release of the CMAQ Public Access System was the first opportunity that the general public could have full access to FHWA approved CMAQ Project data submitted through the annual reporting process. The CMAQ Public Access System makes available searchable, read only, project information from 1992 to present in various reporting formats.

CMAQ system support and guidance information are available through the FHWA, [Air Quality CMAQ](http://www.fhwa.dot.gov/environment/air_quality/cmaq/) ([http://www.fhwa.dot.gov/environment/air\\_quality/cmaq/](http://www.fhwa.dot.gov/environment/air_quality/cmaq/)) website.

**Disclaimer** **Note to User:** Data present in the CMAQ Public Access System (PAS) is composed solely of projects from state DOT annual reports submitted and approved by FHWA, HQ Staff. Availability of project data for the previous fiscal year and subsequent years will be lagged and will be complete on September 30 of the succeeding calendar year.

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# CMAQ Performance Plan

- In addition to the MPO coordinating and establishing 2-and 4-year targets, the MPO is required to complete a CMAQ Performance Plan.
- This is a requirement for MPOs that contain nonattainment or maintenance areas with a population over 1 million.
- CMAQ Performance Plan includes:
  - CMAQ: Mobile Source Emissions
  - CMAQ: Mode Share (Non-SOV)
  - CMAQ: Peak Hour Excessive Delay (PHED)
- The Performance Plan will provide information on projects associated with the reduction of emissions/congestion.
- Anticipating additional guidance on the CMAQ Performance Plan from FHWA.



# Next Steps

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- CMAQ Program: Emissions Reductions measure
  - TPB staff will continue work on developing a forecasting methodology that could be used for target setting.
  - Coordinate with DOTs and other parties on data, measures, forecasting methodology, and targets.
  - Brief TPB and Tech on measures and draft targets at June meeting.
  - TPB adopt targets at July meeting.
  - Complete CMAQ Performance Plan and submit to State DOTs by September



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