# PERFORMANCE BASED PLANNING & PROGRAMMING

#### **On-Road Emissions Performance Targets**

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# Performance Based Planning and Programming (PBPP)

Requirements for States and MPOs to "transition to a performance-driven, outcome-based program that provides for a greater level of transparency and accountability, improved project decision-making, and more efficient investment of federal transportation funds"



# Performance Based Planning and Programming (PBPP)

States and MPOs must link investment priorities to the achievement of performance targets in the following areas:

- Highway Safety
- Highway Assets: Pavement and Bridge Condition
- System Performance (Interstate and National Highway System, Freight Movement on the Interstate System, and the Congestion Mitigation and Air Quality Improvement Program)
- Transit Safety and Transit Asset Management



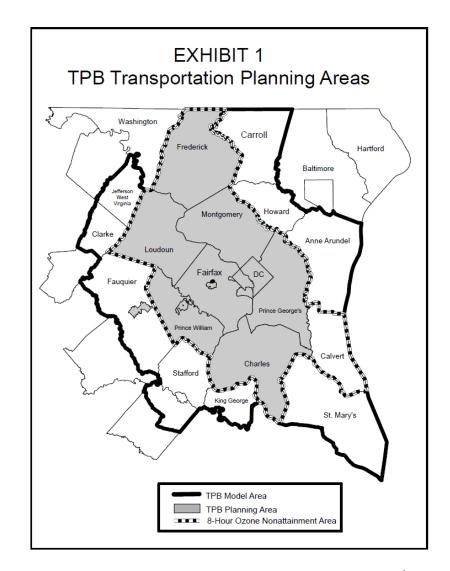
## **PBPP: CMAQ Emissions Reduction**

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





- 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 Reduction
- 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) and MDOT





#### 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.
- ➤ Targets must reflect cumulative emissions reduction for CMAQ funded projects in federal fiscal years FY 2018-2019 (2-year) and FY 2018-2021 (4-year)



CMAQ PAS is a national database containing CMAQ projects emissions reduction benefits

- Projects are not required to have a quantitative benefit analysis
- Projects with quantitative analysis list the project's benefits in the first year only
- No required nor consistent method for conducting quantitative analyses





# CMAQ Emissions Reduction from the Public Access System for the TPB portion of the Washington DC-MD-VA Ozone nonattainment area

FISCAL YEAR	VOC (kg/day)	NOx (kg/day)
2014	8.087	11.688
2015	0.072	0.816
2016	3.672	5.956
2017	2.532	4.074



### **CMAQ Emissions Reduction: Setting Targets**

The State DOTs set individual targets for their portion of the nonattainment area and the MPO sets targets for the MPO portion of the nonattainment area.

- ➤ MDOT Targets: Used combined approach with historic trends and anticipated CMAQ projects programmed over the next four years
- VDOT Targets: Used anticipated CMAQ projects programmed over the next four years
- > **DDOT Targets:** Used anticipated CMAQ projects programmed over the next four years
- > TPB Targets: Summed MDOT, VDOT, and DDOT targets



## **CMAQ Emissions Reduction: Setting Targets**

The TPB approved the following targets at the June 20<sup>th</sup> Board meeting:

		FFY 2018 - 2019	FFY 2018 - 2021
		Two Year Target	Four Year Target
Total Emissions Reductions for the TPB portion of the Washington DC-MD-VA nonattainment area	Volatile Organic Compounds (VOCs)	1.8376 Kg/Day	2.1950 Kg/Day
	Nitrogen Oxides (NOx)	4.0194 Kg/Day	4.7026 Kg/Day



### **CMAQ Emissions Reduction: Setting Targets**



Data source for past years: FHWA Public Access System
Emissions reductions from select CMAQ funded projects only for the TPB planning area within the Washington DC-MD-VA Ozone nonattainment area



#### **CMAQ EMISSIONS REDUCTION: NEXT STEPS**

MPOs are required to complete a CMAQ Performance Plan and submit it to State DOTs in order for it to be included in the Baseline performance Period Report due to FHWA by October 1, 2018.

#### The CMAQ Performance Plan Must Include:

- Baseline Condition/Performance
- Targets (2-year and 4-year)
- Description of projects and how the projects will contribute to achieving the targets



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