

## FAMPO RESOLUTION 19-02

### ADOPTING REGIONAL CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM PERFORMANCE MEASURE TARGETS

**WHEREAS**, the National Capital Region Transportation Planning Board (TPB), is the metropolitan planning organization (MPO) for the Washington-DC-VA-MD urbanized area (hereinafter referred to as “Urbanized Area”); and

**WHEREAS**, FAMPO works cooperatively with TPB to conduct metropolitan transportation planning for the FAMPO portion of the Urbanized Area, which is in northern Stafford County; and

**WHEREAS**, the Federal Highway Administration (FHWA) published the System Performance: Highway and Freight, Congestion Mitigation and Air Quality (CMAQ) Final Rule on January 18, 2017, with an effective date of May 20, 2017. The state departments of transportation (state DOTs) must set targets for performance measures in the rule by May 20, 2018 and must submit a Baseline Period Performance Report with the targets to FHWA by October 1, 2018. MPOs must work in coordination with state DOTs in the development of two-year and four-year targets and are required to set targets within 180 days after state DOTs set targets; and

**WHEREAS**, targets must be established for the CMAQ Program performance measures of: 1) Peak Hour Excessive Delay (PHED), 2) Mode Share – Non-Single Occupancy Vehicle (Non-SOV), and 3) Emissions Reductions; and

**WHEREAS**, the District Department of Transportation (DDOT), the Maryland Department of Transportation (MDOT), the Virginia Department of Transportation (VDOT) and the TPB are initially required to agree on and establish a single four-year target for the Urbanized Area for the PHED performance measure; and

**WHEREAS**, DDOT, MDOT and VDOT and the TPB are required to agree on and establish single two-year and four-year targets for the Urbanized Area for the Mode Share (Non-SOV) performance measure; and

**WHEREAS**, DDOT, MDOT and VDOT are required to establish two-year and four-year targets for the emissions reduction from CMAQ-funded projects and programs performance measure for their portion of the Washington DC nonattainment area for two applicable criteria pollutant and precursors: Volatile Organic Compounds (VOCs) and Nitrogen Oxides (NOx), and the TPB is required to coordinate with state DOTs in the establishment of two-year and four-year targets for emissions reduction from CMAQ-funded projects and programs for the portion of the Washington DC nonattainment area within the metropolitan planning area boundary; and

**WHEREAS**, TPB staff have coordinated with officials at DDOT, MDOT and VDOT to develop regional CMAQ Program targets that are evidence based, consistent with the targets submitted by each member state DOT, and reflective of the outcomes expected through the implementation of funded projects, programs and policies; and

**WHEREAS**, as of May 20, 2018, DDOT, MDOT and VDOT have set targets as specified above for the Urbanized Area; and

**WHEREAS**, these CMAQ Program targets have been adopted by the TPB;

**NOW, THEREFORE, BE IT RESOLVED** that the Fredericksburg Area Metropolitan Planning Organization adopts the following set of two-year and four-year CMAQ Program targets for the National Capital Region, as shown in the following tables and as described in the attached materials.

Adopted by the Policy Committee at its meeting on July 16, 2018.

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Timothy McLaughlin, Chair  
Fredericksburg Area Metropolitan Planning Organization  
Policy Committee

**Table 1: CMAQ Program Targets: Mode Share and Peak Hour Excessive Delay (PHED)**

<b>Performance Measures for the Washington DC-MD-VA urbanized area</b>	<b>CY 2018 – 2019 Two-Year Target</b>	<b>CY 2018 – 2021 Four-Year Target</b>
Peak Hour Excessive Delay (PHED)	Not Required	26.7 Hours
Mode Share (Non-SOV)	36.9%	37.2%

**Table 2: CMAQ Program Targets: On-Road Mobile Emissions Reductions**

<b>Total Emissions Reductions for the TPB portion of the Washington DC - MD-VA nonattainment area</b>		<b>FFY 2018 – 2019 Two-Year Target</b>	<b>FFY 2018 – 2021 Four-Year Target</b>
	Volatile Organic Compounds (VOCs)	1.838 Kg/Day	2.195 Kg/Day
	Nitrogen Oxides (NOx)	4.019 Kg/Day	4.703 Kg/Day

# PERFORMANCE BASED PLANNING & PROGRAMMING

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## Traffic Congestion and On-Road Emissions Performance Targets

Eric Randall, TPB Engineer

Transportation Planning Board  
June 20, 2018



# Contents of Presentation

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- CMAQ Program Performance Measures: Overview, Data, and Forecast
    - Traffic Congestion: Peak Hour Excessive Delay
    - Traffic Congestion: Mode Share (non-SOV)
    - On road Emissions Reduction
  - CMAQ Program Performance Targets for Approval
- ❖ These performance measures and draft targets were briefed to the board at the May 16 meeting

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

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



# Traffic Congestion: Peak Hour Excessive Delay Overview

The Peak Hour Excessive Delay (PHED) measure is the per capita excessive delay on all reported segments on the National Highway System in the urbanized area

- Excessive delay = when travel speed is less than 20 miles per hour or 60% of the posted speed limit

PHED is calculated by measuring <sup>1</sup> or forecasting:

- cumulative hours of excessive delay experienced by all people,
- travelling through all reported segments on the NHS in the urbanized area,
- during the peak period <sup>2</sup> (*even though titled Peak Hour*),
- for the full calendar year.

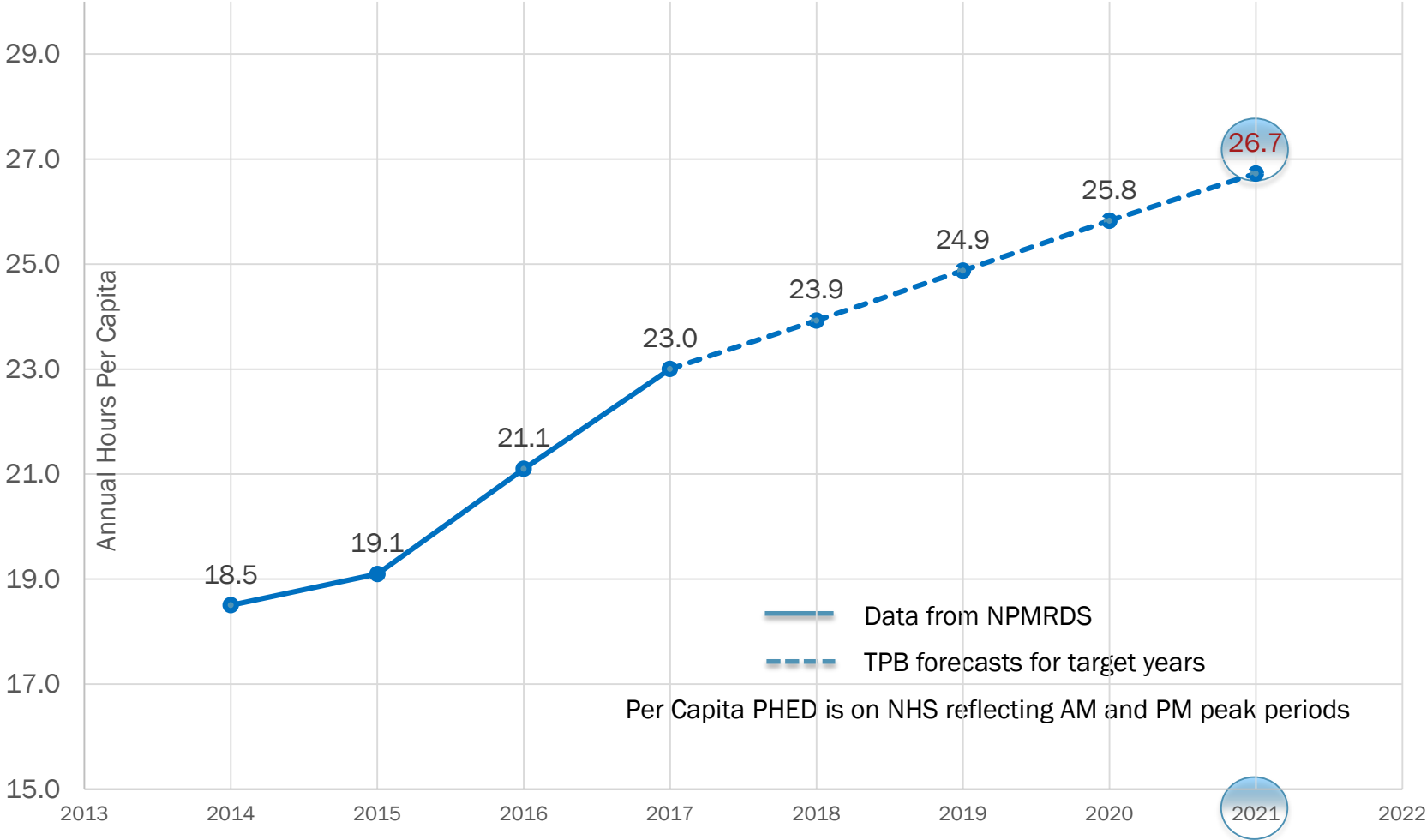
1. TPB urbanized area Peak travel hours:

Weekday morning: 6 a.m. to 10 a.m. And Weekday afternoon: 3 p.m. to 7 p.m.

2. Current year data collected using the National Performance Management Research Data Set (NPMRDS)



# Traffic Congestion: PHED - Recent Data and Short Term Forecast (Target)





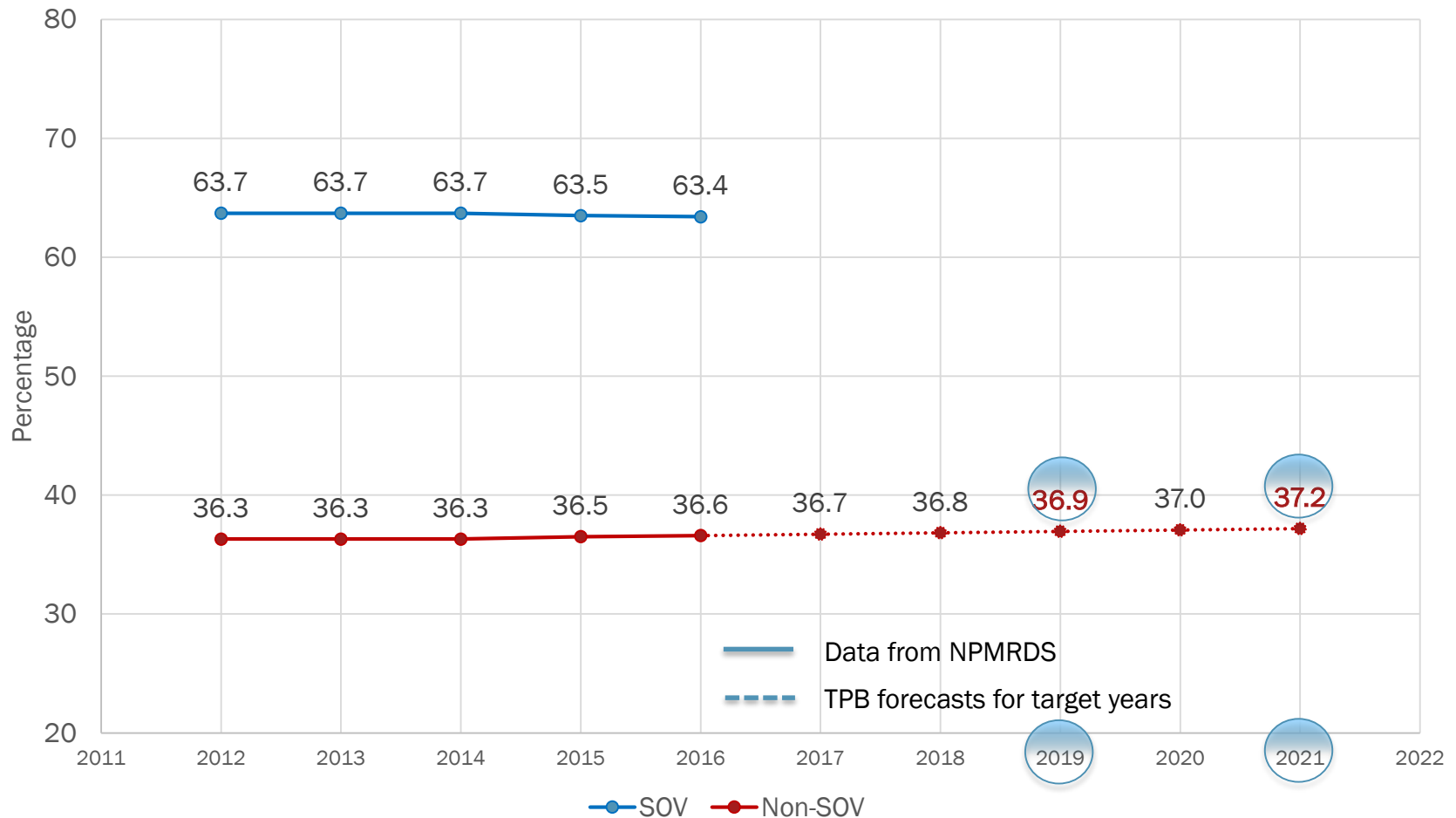
# Traffic Congestion: Mode Share Overview

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- Non-SOV (Single Occupancy Vehicle) mode share measure is for the commuting travel within the urbanized area.
- Includes carpools/vanpools, public transit, walking, biking, and teleworking.
- Non-SOV mode share data derived from the U.S. Census Bureau American Community Survey



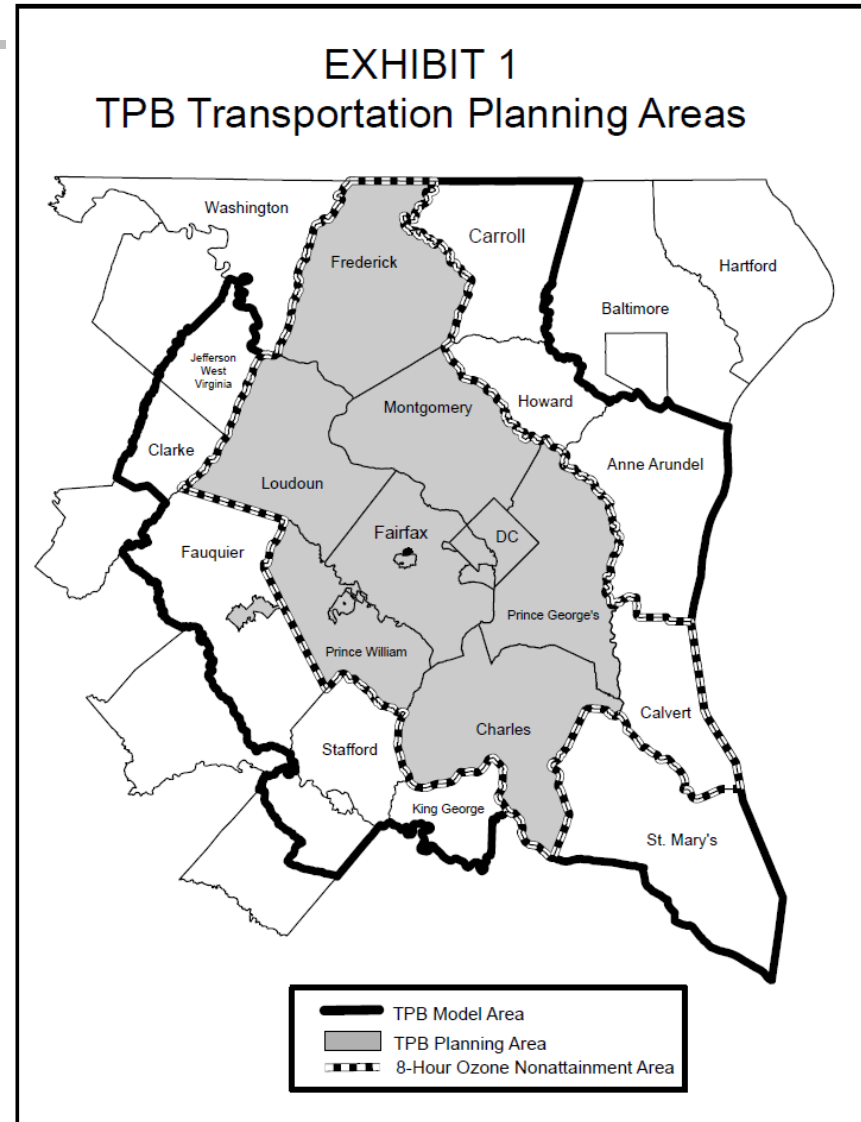
# Traffic Congestion: Mode Share–Recent Data And Short Term Forecast (Target)



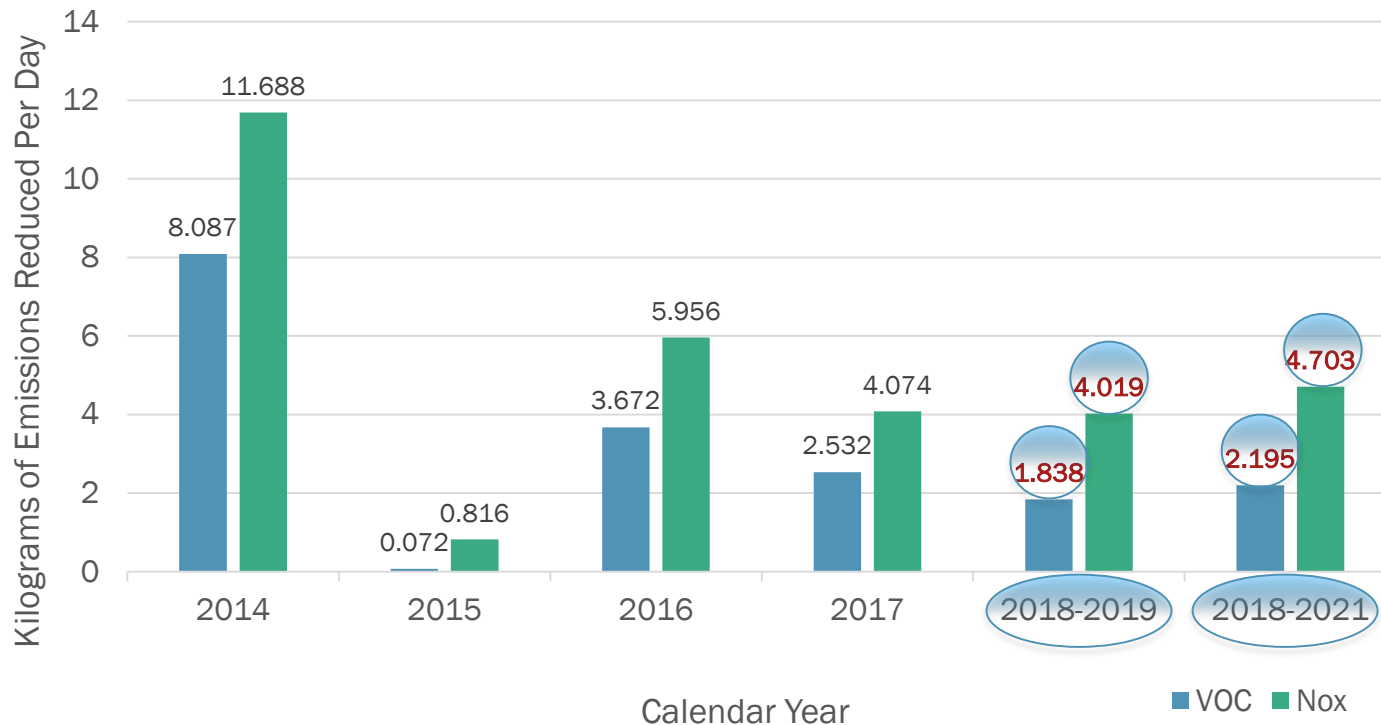
# On-road Emissions Reduction - Overview

- Applies to criteria pollutants in non-attainment or maintenance areas\*
- Emissions reductions data are estimates from (select) projects that have received CMAQ funds
- Forecast emissions reductions are estimates based on projects anticipated to receive CMAQ funds
- TPB targets reflect the anticipated cumulative emissions reduction to be reported by MDOT, VDOT, and DDOT for the region

\* Targets for Calvert County will be set by Calvert-St Mary's MPO (outside TPB planning area) .



# Emissions Reduction: Recent Data And Short Term Forecasts (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 Program Performance Targets

- Request adoption of Resolution R19-2018 to set the following targets

Performance Measures for the Washington DC-MD-VA urbanized area	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
Peak Hour Excessive Delay (PHED)	<b>Not Required</b>	<b>26.7 Hours**</b>
Mode Share (Non-SOV)	<b>36.9%</b>	<b>37.2%</b>

*\*\*Updated as of May 21, 2018 based on new FHWA guidance on calculation*

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



# Next Steps: TPB

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- Transmit approved targets to State DOTs and adjoining MPOs
- TPB Steering Committee approval of FAMPO and BRTB MPO targets for urbanized areas
- Complete the MPO CMAQ Performance Plan with MPO targets and submit to State DOTs by September
- Complete an overall system performance report as part of the Visualize 2045 long range plan



## Eric Randall

TPB Engineer

(202) 962-3254

[erandall@mwkog.org](mailto:erandall@mwkog.org)

[mwkog.org/tpb](http://mwkog.org/tpb)

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Metropolitan Washington Council of Governments

777 North Capitol Street NE, Suite 300

Washington, DC 20002



National Capital Region  
Transportation Planning Board