

# PERFORMANCE BASED PLANNING & PROGRAMMING

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## Traffic Congestion and On-Road Emissions Performance Targets

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Transportation Planning Board  
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# Contents of Presentation

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- Draft Near Term Performance Targets
    - Traffic Congestion
    - On-road emissions
- } Collectively called: *CMAQ Program*
- Next Steps
  - Performance Measures Table
  - Details on performance measures and targets
    - Requirements
    - Overview of each measure
    - Data for each measure
    - Forecasting targets for each measure

# 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 Measures & Draft Targets

## Measures: \*

- **Peak Hour Excessive Delay (PHED):**  
Annual hours of peak hour excessive delay per capita
- **Mode Share (Non-SOV):**  
Percent of Non-SOV Travel on the National Highway System (NHS)

## Targets:

Performance Measure	CY 2018 - 2019 Two Year Target	CY 2018 - 2021 Four Year Target
Peak Hour Excessive Delay (PHED)	<b>Not Required</b>	<b>26.5 Hours**</b>
Mode Share (Non-SOV)	<b>36.9%</b>	<b>37.2%</b>

\*Prescribed by FHWA rulemaking on System Performance: Highway and Freight, Congestion Mitigation and Air Quality (CMAQ), published on January 18, 2017, with an effective date of May 20, 2017.

\*\*Updated as of May 14, 2017



# On-road Emission Measures & Draft Targets

## Measures: Total Emissions Per day <sup>1</sup>

Of applicable criteria pollutants from on-road projects receiving federal CMAQ funds

## Targets: <sup>2</sup>

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

1. Prescribed by FHWA rulemaking on System Performance: Highway and Freight, Congestion Mitigation and Air Quality (CMAQ), published on January 18, 2017, with an effective date of May 20, 2017.
2. MPO targets reflect the anticipated cumulative emissions reduction to be reported MDOT, VDOT, and DDOT for the region



# Next Steps: TPB

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- Receive and respond to draft targets
- TPB Adopts targets on June 20, 2018
- Complete the MPO CMAQ Performance Plan with MPO targets and submit to State DOTs by September
- Approval of FAMPO and BRTB MPO targets



# Next Steps: Overall

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- States and MPOs agree on identified CMAQ (Traffic Congestion and Emission Reductions) targets for the urbanized areas
- States identified CMAQ targets May 20, 2018
- States and MPOs develop a CMAQ Performance Plan for the targets
- States submit CMAQ targets and the State and MPO Performance Plans to the FHWA by October 1, 2018



# 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 (NHS; *NOT all roads*) 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:

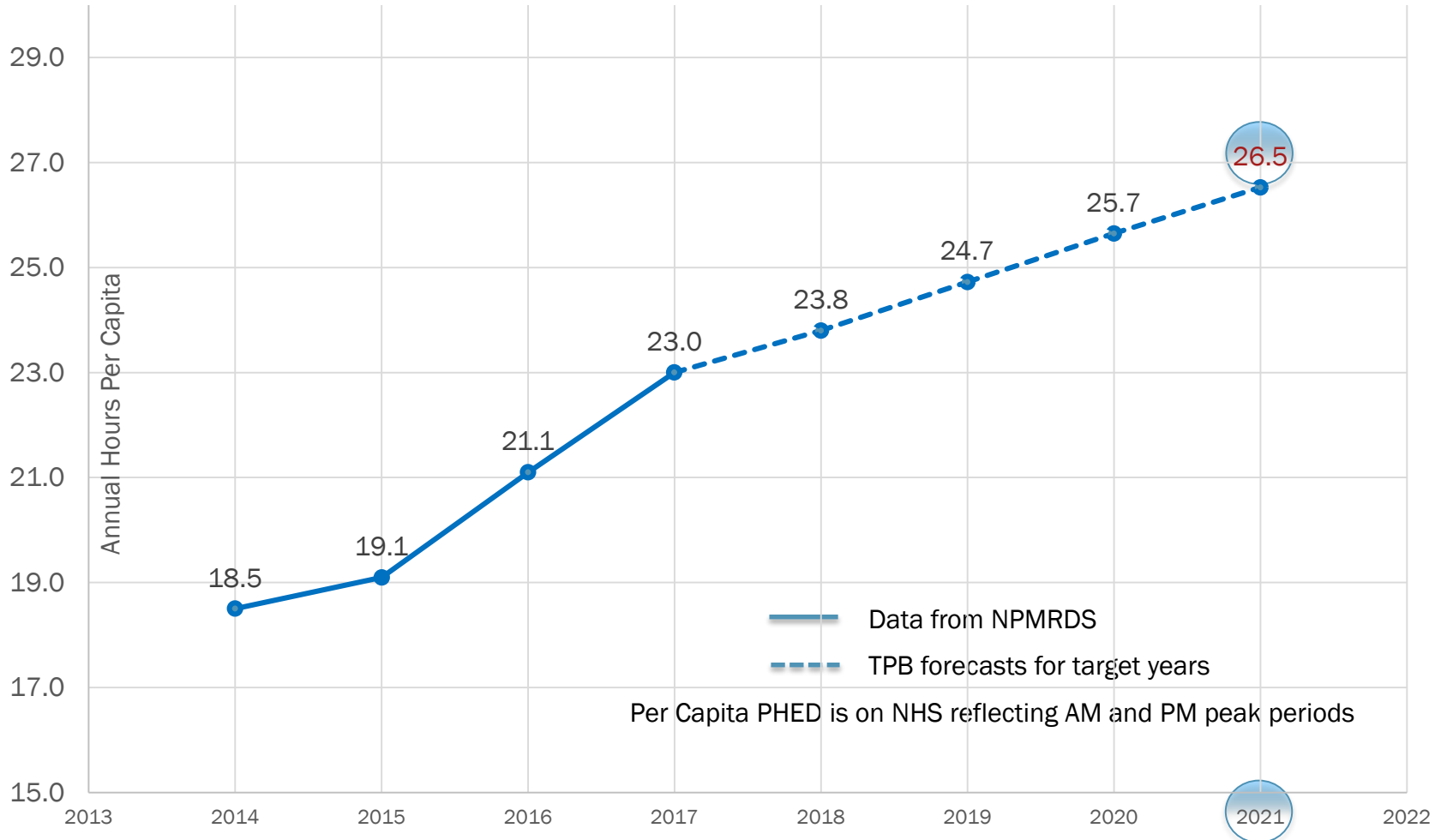
Weekday morning: 6 a.m. to 10 a.m. And Weekday afternoon: 3 p.m. to 7 p.m.

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





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



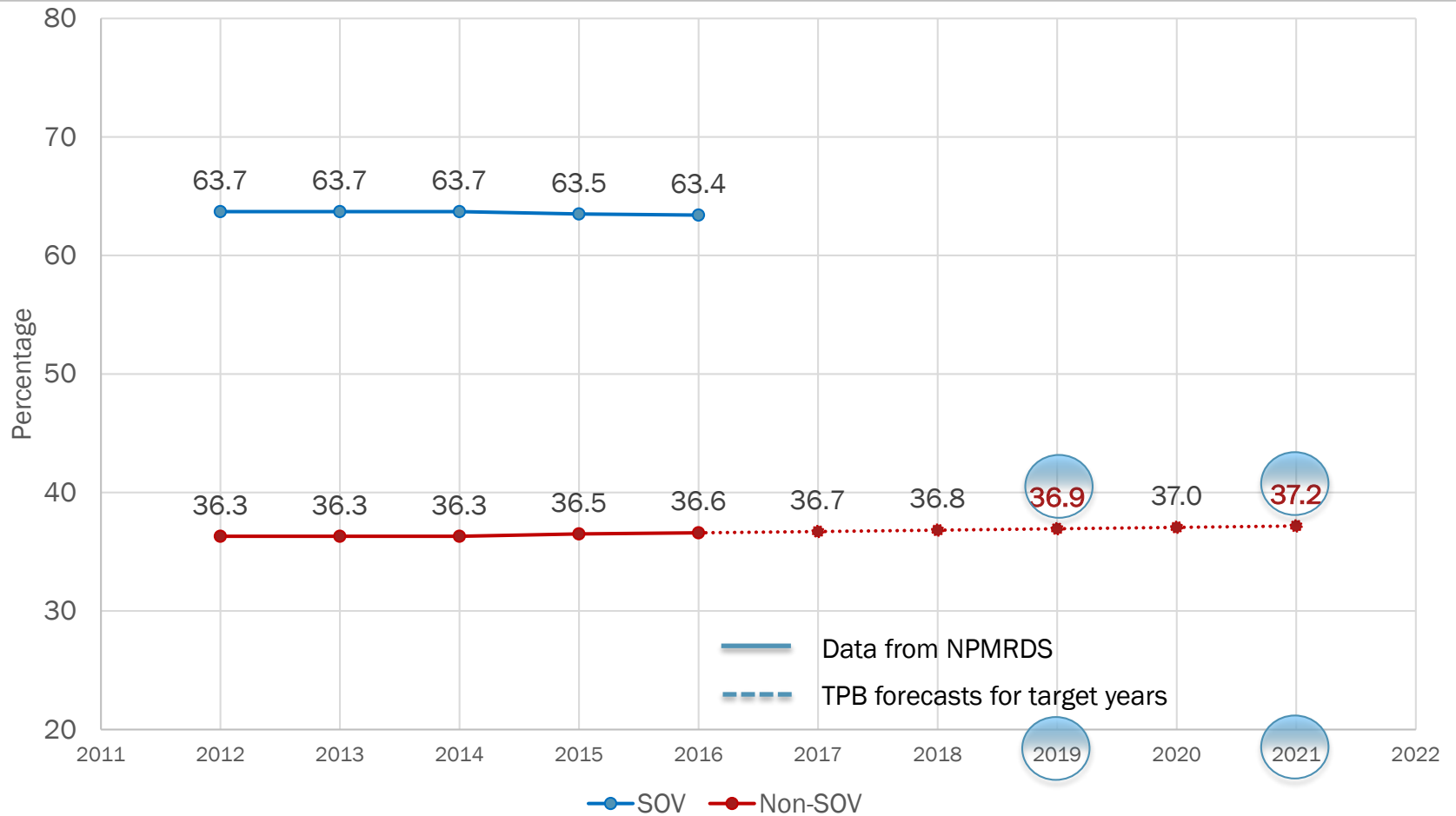
# Traffic Congestion: Mode Share–Overview

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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



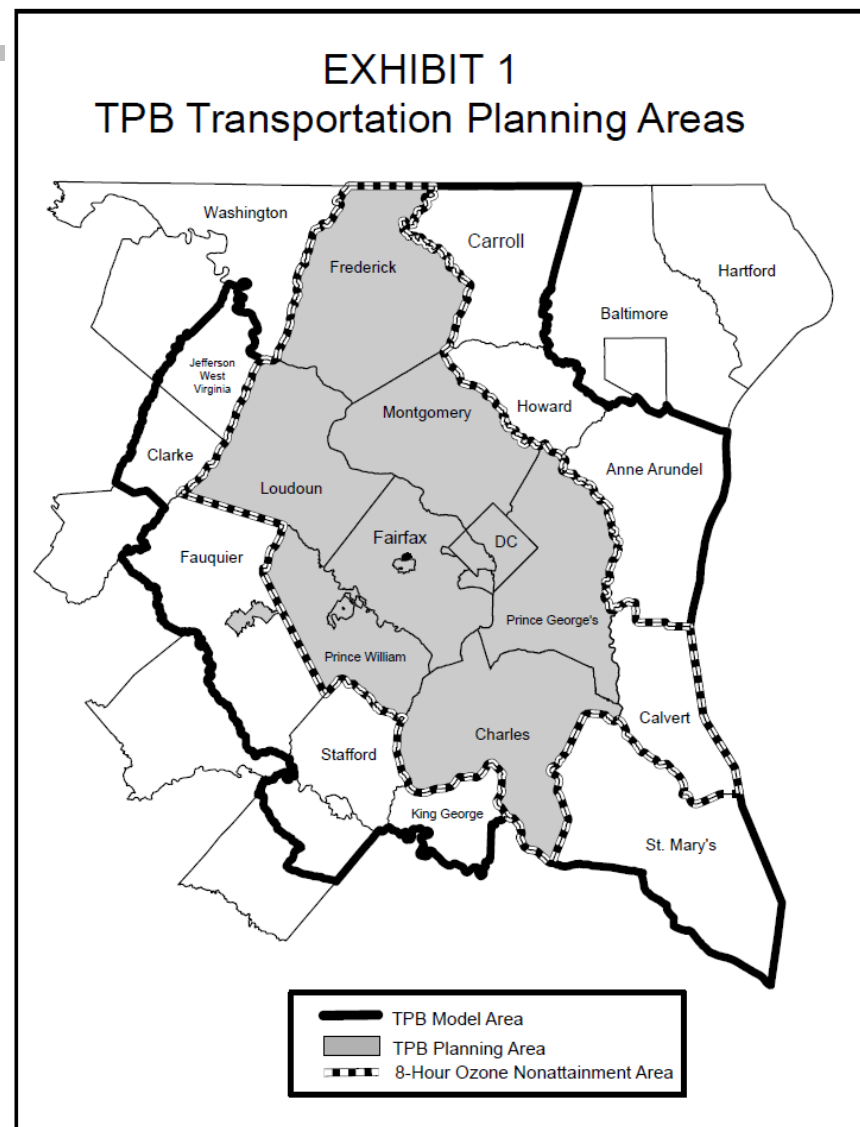
# Traffic Congestion: Mode Share–Recent Data And Short Term Forecast (Target)



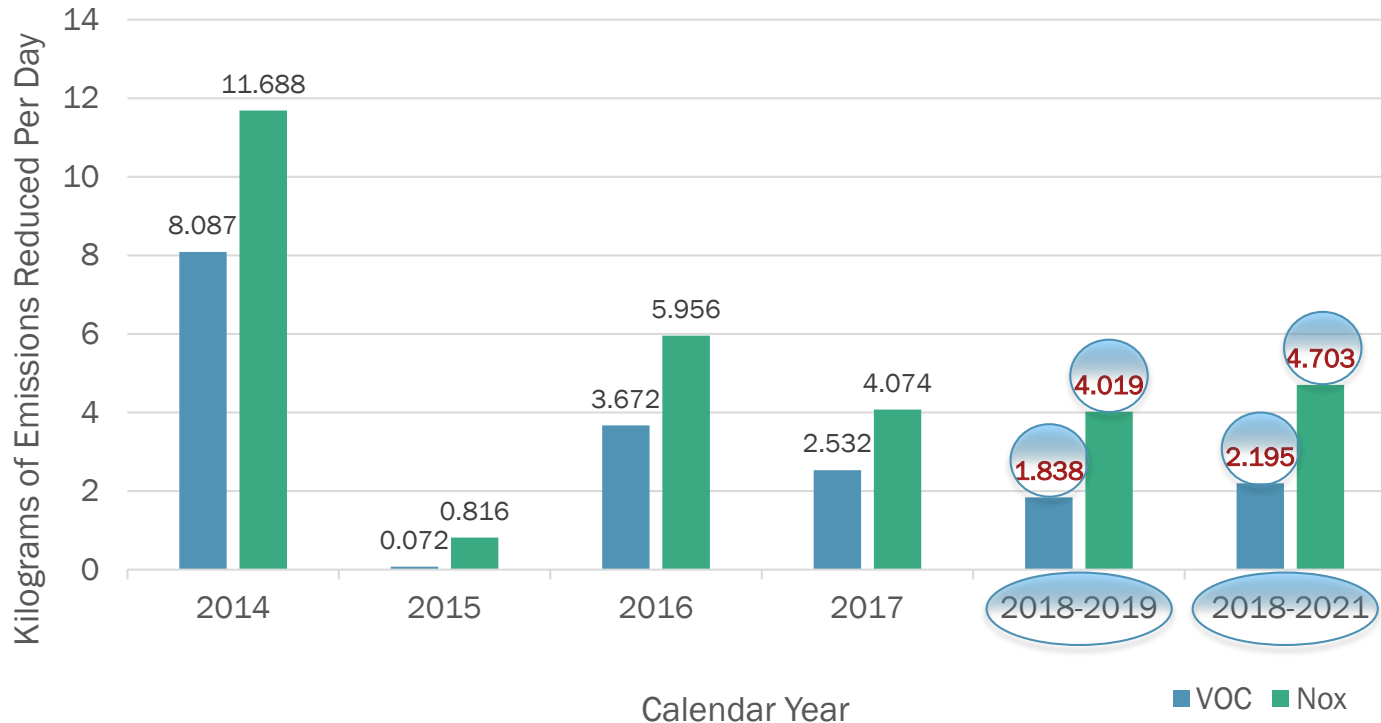
# On-road Emissions Reduction - Overview

- 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.

\* 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



# Next Steps: TPB

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- TPB Adopts targets on June 20, 2018
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- Approval of FAMPO and BRTB MPO targets
- Questions



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