

PERFORMANCE MEASURES AND TARGETS: ON-ROAD VOC AND NO_x EMISSIONS REDUCTIONS (FROM CMAQ FUNDED PROJECTS)

TPB Performance Measures and Targets

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(Toni Genberg/Flickr)



National Capital Region
Transportation Planning Board

Agenda Item #4

Contents of Presentation

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Joshua Roberts, International Monetary Fund/Flickr



TPB Goals and this Performance Measure

- TPB’s Goals: Safety, Maintenance, Reliability, Affordable and Convenient, Efficient System Operations, **Environmental Protection**, Resilient Region, and Livable and Prosperous Communities.
- The federally-required performance measure will help assess progress towards this goal:
 - **Environmental Protection:**

Performance Measure	What is it?	Data Source
Volatile Organic Compounds (VOCs) Reductions	Sum of the VOC emissions reductions for projects receiving CMAQ funding	FHWA CMAQ Public Access System
Nitrogen Oxides (NO _x) Reductions	Sum of the NO _x emissions reductions for projects receiving CMAQ funding	FHWA CMAQ Public Access System



Emissions Reduction Target - Overview of Requirements

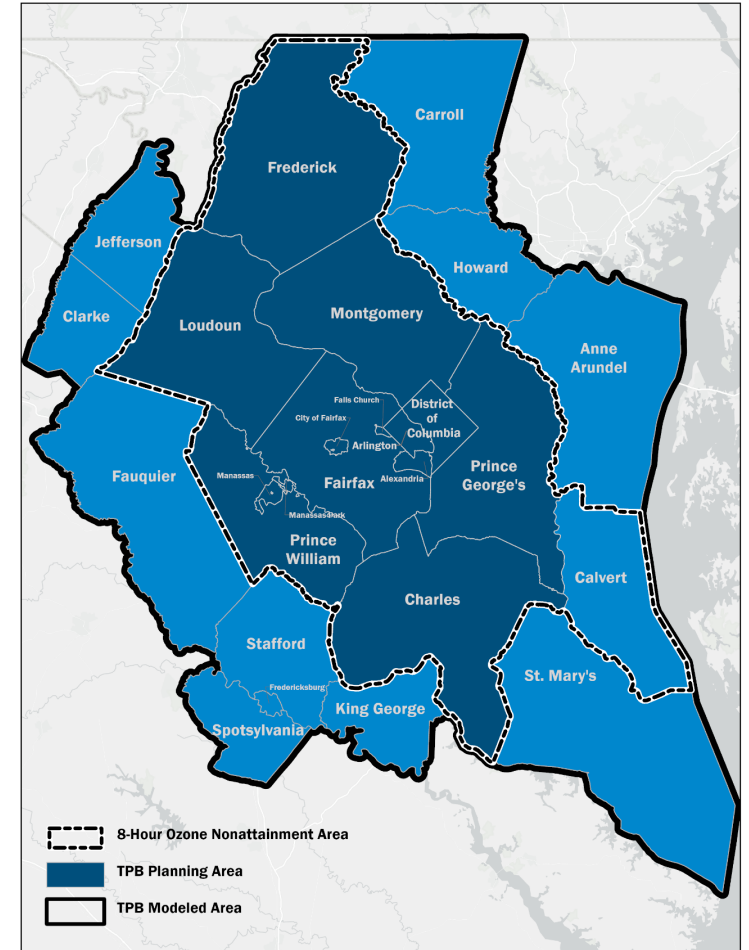
Frequency: Set/Update Two and Four-year targets *Quadrennially*

Targets: Sum of (2-year and 4-year) total emissions reductions of Volatile Organic Compounds (VOCs) and Nitrogen Oxides (NO_x) from CMAQ-funded projects.

CMAQ Performance Plan: To include following components and updated every two years:

- 1 Baseline performance
- 2 Targets
- 3 Description of CMAQ Funded Projects to achieve the targets
- 4 Assessment of Progress.

Consequences: *Not achieving a target may require the states to more clearly demonstrate that CMAQ-funded investments are effectively contributing to emissions reductions.*



Map of DC-MD-VA Nonattainment Area, (COG)



Explanation of Past Performance

- Past Performance is the sum of the emissions reductions for the projects recorded in the CMAQ Public Access System (CPAS).
- The original CMAQ emissions reductions targets were based on the projects that were anticipated to occur in 2022-2025.
- Projects are subject to change and substitution over the course of the reporting period.
- For the 2022-2025 period, MD and DC funded Commuter Connections and (in DC) goDCgo using CMAQ. This was not anticipated when the targets were set.
- Travel Demand Management (TDM) projects, specifically Commuter Connections and goDCgo, have greater emissions reductions compared to other CMAQ Projects.
- This accounts for the significant exceedance of the 2022-2025 targets.



Development of Future Targets 2026-2029

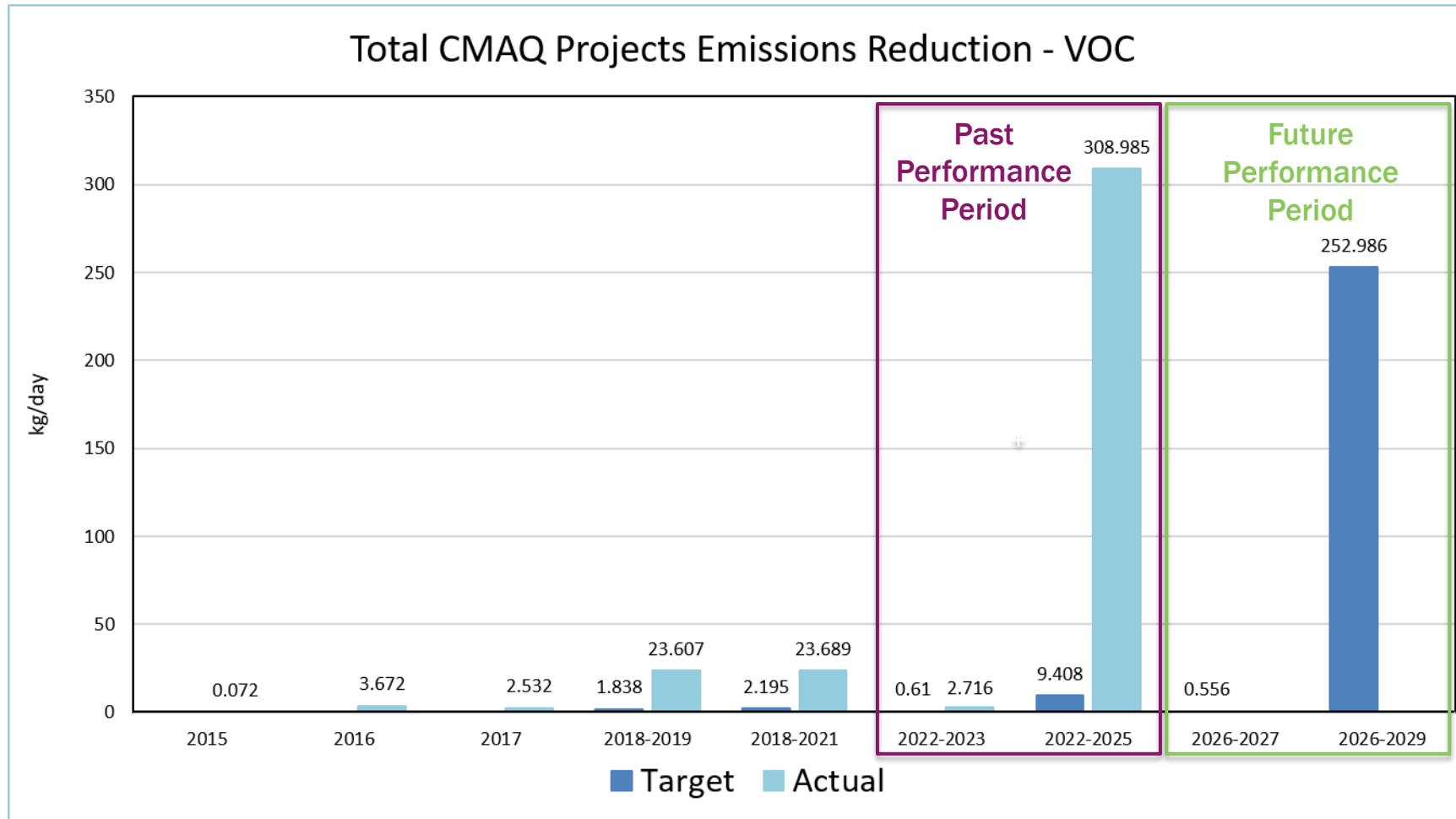
- Target emissions reductions are estimates based on projects anticipated to receive CMAQ funds.
- As in the past performance period, MD and VA provided a list of anticipated CMAQ projects with calculated emissions reductions.
- Since DC programs its CMAQ funding annually, estimates of future project benefits are not available.
 - Targets are instead based on past performance.
- TPB targets reflect the anticipated cumulative emissions reduction to be reported by MDOT, VDOT, and DDOT for the region.




(Pierre Gaunard/COG)



Emissions Reductions Targets: VOC





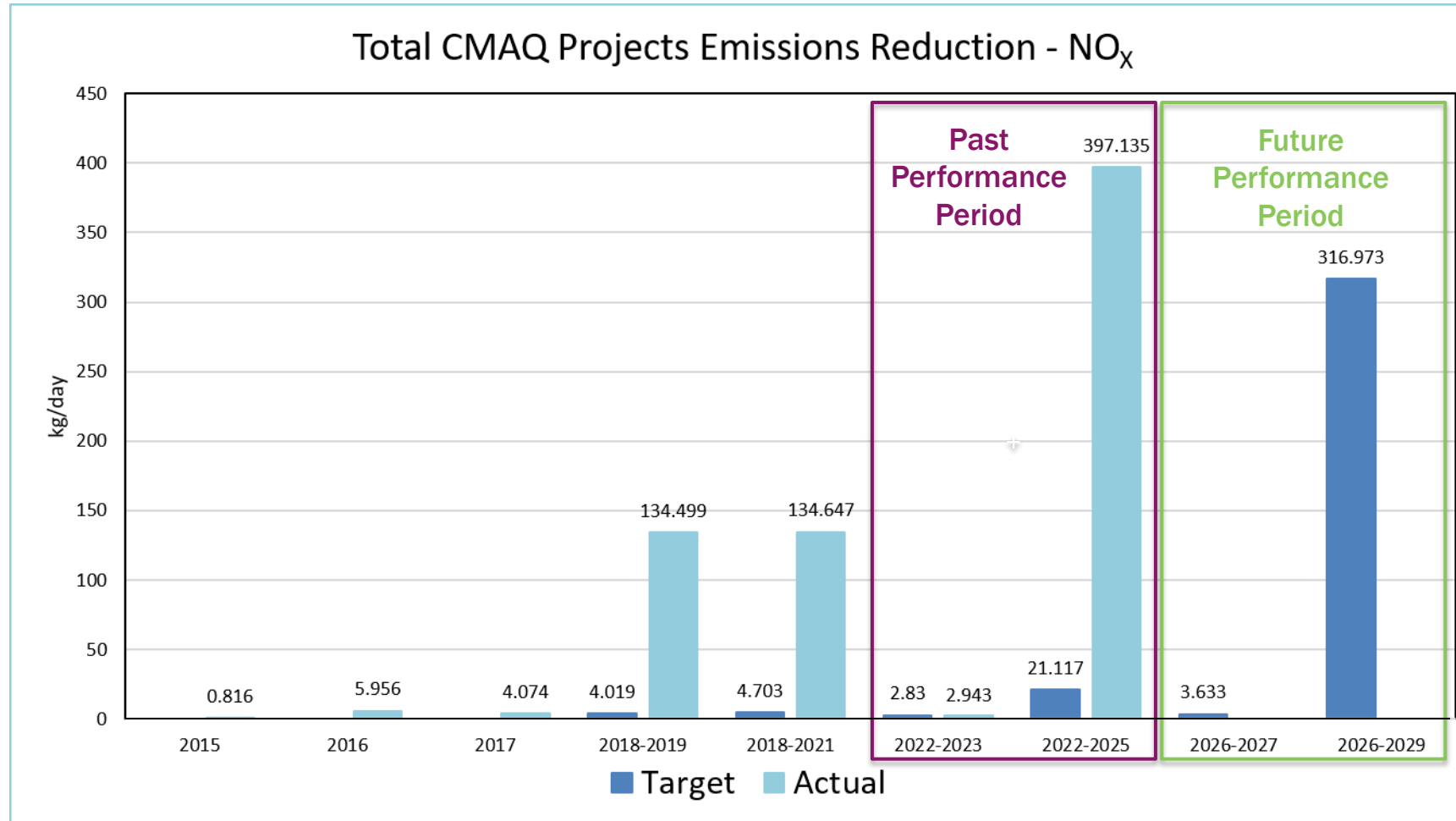
 Desired Trend




 Expected Trend




Emissions Reductions Targets: NO_x





 Desired Trend

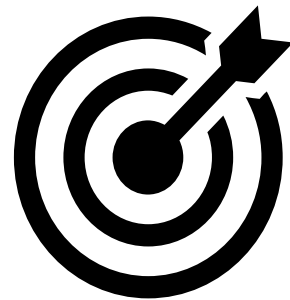


 Expected Trend



Future Targets for TPB Approval

Performance Measure	Two-Year Targets 2026–2027	Four-Year Targets 2026–2029
Emissions Reduction for CMAQ-Funded Projects – VOC	0.556 kg/day	252.986 kg/day
Emissions Reduction for CMAQ-Funded Projects – NO _x	3.633 kg/day	316.973 kg/day



Next Steps

- July 2026: TPB staff present final measures and targets to the TPB and Technical Committee. **TPB approves new targets.**
- July - September 2026: Three states to adopt targets no later than September. TPB finalizes the region's 2022-2025 and 2026-2029 MPO CMAQ Performance Reports for inclusion in the state Performance Management Forms (PMFs). All three states notify TPB that the PMF is complete.



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