

Appendix E, Addendum 5: Performance Based Planning and Programming – Congestion Mitigation and Air Quality Program Performance Measures

Performance Targets

In accordance with the requirements of MAP-21 and the FAST Act, Virginia has established performance measures for the Congestion Mitigation and Air Quality Program (CMAQ) as reported in Virginia’s Baseline Performance Period Report for 2018-2021¹. This report, submitted to FHWA in October 2018, satisfies the federal requirement that State DOTs submit a Baseline Performance Period Report to FHWA by October 1st of the first year in a performance period.

The CMAQ Program traffic congestion and on-road mobile source emissions performance measures and targets for the 2018-2021 performance period are indicated in Tables 1 and 2 below. The Northern Virginia region is the only area subject to the CMAQ performance measures. VDOT closely coordinated with the National Capital Region Transportation Planning Board (TPB, of the Metropolitan Washington Council of Governments (MWCOC)), the District Department of Transportation, and the Maryland Department of Transportation in developing the target setting methodology and measures and establishing performance targets.

Table 1: Traffic Congestion Performance Measures and Targets

CMAQ Program	Performance Measures	Federal Fiscal Year 2018-2019 Two Year Target	Federal Fiscal Year 2018-2021 Four Year Target
Traffic Congestion ²	Annual Peak Hour Excessive Delay (PHED) Per Capita	N/A ³	26.7 Hours
	Mode Share - Percent of Non-SOV Travel on the NHS	36.9%	37.2%

Table 2: Total Emissions Reduction Performance Measures and Targets

CMAQ Program	Type of Emissions	Federal Fiscal Year 2018-2019 Two Year Target	Federal Fiscal Year 2018-2021 Four Year Target
Total Emissions Reduction ⁴	Nitrogen Oxides (NOx)	3.744	4.230
	Volatile Organic Compounds (VOCs)	1.721	1.985

¹ Virginia’s Baseline Performance Period Report data is through December 2017.

² Traffic Congestion performance targets are applicable only to Northern Virginia.

³ During this first performance period, States are not required to establish 2-year targets for PHED.

⁴ Total Emissions Reduction performance targets are applicable only to the Virginia portion of the Washington, DC-MD-VA 8-hour ozone nonattainment area.

The Commonwealth Transportation Board (CTB) approves the performance measures and targets developed for Virginia's surface transportation network. Such targets, including those for the CMAQ Program, are linked to the goals and objectives in Virginia's long-range transportation plan, VTrans).

Connection to Other Performance Based Planning Documents

VTrans, the state's long-range multimodal plan, provides the overarching vision and goals for transportation in the Commonwealth. The long-range plan provides a vision for Virginia's future transportation system and defines goals, objectives, and guiding principles to achieve the vision. It also provides direction to state and regional transportation agencies on strategies and policies to be incorporated into their plans and programs. The most recent approved long-range multimodal plan is VTrans2040.

Performance management, specifically as it relates to the CMAQ Program, is included in the VTrans2040 Vision, Goals & Objectives, and Guiding Principles as noted below:

- Goal A – Economic Competitiveness and Prosperity: invests in a transportation system that supports a robust, diverse, and competitive economy.
 - Objectives:
 - Reduce the amount of travel that takes place in severe congestion.
 - Reduce the number and severity of freight bottlenecks.
 - Improve reliability on key corridors for all modes.
- Goal E – Healthy Communities and Sustainable Transportation Communities: support a variety of community types promoting local economies and healthy lifestyles that provide travel options, while preserving agricultural, natural, historic and cultural resources.
 - Objectives:
 - Reduce per-capita vehicle miles traveled.
 - Reduce transportation related NOx, VOC, PM and CO emissions.
 - Increase the number of trips traveled by active transportation (bicycling and walking).

The program of projects in the STIP are directly linked to the CMAQ Program performance goals and objectives outlined in VTrans2040 through the strategies and actions that are priorities in Virginia.

Funding for CMAQ Program Projects

The CMAQ Program is designed to help States and local governments meet the requirements of the Clean Air Act. To be eligible for CMAQ funds a transportation project or program must reduce congestion and improve air quality for nonattainment or maintenance areas.

In the Northern Virginia region the Northern Virginia Transportation Authority (NVTA), a regional governmental body established to plan, prioritize, and fund regional transportation

projects, coordinates the annual programming of federal CMAQ projects. Recommendations for programming are provided through the Regional Jurisdiction and Agency Coordinating Committee (RJACC) with final approval given by the CTB. Projects recommended for CMAQ programming go through an application process and must include an air quality benefit calculation, and a resolution of support from the respective governing bodies.

SMART SCALE, Virginia's data-driven prioritization process for funding transportation projects, considers congestion mitigation and the environment. In order to be considered eligible for SMART SCALE, a project must first meet a need identified in VTrans2040. Congestion mitigation, safety, accessibility, economic development, environment, and land use are the factors used to score SMART SCALE projects. The measures associated with the environment scoring factor are consistent with the CMAQ Program performance measures. SMART SCALE screening and scoring results, along with public feedback and CTB guidance, are used to develop the SYIP. All funding (federal, state, and other sources) for transportation projects are allocated to projects in the CTB approved SYIP.

How do Projects Get Selected for Inclusion in the STIP?

As noted above, the funding to meet Virginia's CMAQ Program objectives and targets is allocated to projects in the CTB approved SYIP, and is consistent with VTrans2040. Since the SYIP is the foundation for the STIP, the program of projects in the STIP demonstrates support to achieve Virginia's traffic congestion and on-road mobile source emissions performance measures and targets.