



COMMONWEALTH of VIRGINIA

Commonwealth Transportation Board

W. Sheppard Miller, III
Chairperson

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Agenda item # 12

RESOLUTION OF THE COMMONWEALTH TRANSPORTATION BOARD

September 21, 2022

MOTION

Made By: Mr. Kasprowicz **Seconded By:** Mr. Coleman
Action: Motion carried, unanimously

Title: Approval of Asset Condition and System Performance Targets

WHEREAS, pursuant to §2.2-229 of the *Code of Virginia*, it is the responsibility of the Office of Intermodal Planning and Investment (OIPI) to develop measures and targets related to the performance of the Commonwealth's surface transportation network for the Commonwealth Transportation Board's (Board) approval, including any performance measurement required by Title 23 or 49 of the United States Code (U.S.C.); and

WHEREAS, 23 U.S.C. § 150 provides that, “[p]erformance management will transform the Federal-aid highway program and provide a means to the most efficient investment of Federal transportation funds by refocusing on national transportation goals, increasing the accountability and transparency of the Federal-aid highway program, and improving project decision-making through performance-based planning and programming.” Pursuant to 23 § U.S.C. 150, the Federal-aid highway program is to be focused on national transportation goals in the areas of safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays; and

WHEREAS, 23 U.S.C. § 150 also directs the United States Secretary of Transportation, in consultation with State Departments of Transportation, Metropolitan Planning Organizations, and other stakeholders, to promulgate a rulemaking that establishes performance measures and standards relating to the national transportation goals and for each state to set performance targets that reflect the performance measures established in said rule(s); and

WHEREAS, various federal regulations were promulgated to address and set forth the requirements for, among other things, measures and targets relating to asset condition, system performance, congestion, and air quality, including 23 C.F.R. §§ 490.105, 490.307, 490.407, 490.507, 490.607, 490.707, and 490.807, which require State Departments of Transportation and Metropolitan Planning Organizations to set targets for twelve measures; and

WHEREAS, more specifically, 23 C.F.R. §§ 490.307 and 490.407 require the state to set Asset Condition Performance Targets, which apply to the National Highway System (NHS), for the following six measures: percentage of pavement in good condition and percentage of pavement in poor condition on Interstate highways; percentage of pavement in good condition and percentage of pavement in poor condition on Non-Interstate NHS highways; and percentage of deck area of bridges in good condition and percentage of deck area of bridges in poor condition on the NHS; and

WHEREAS, 23 C.F.R. §§ 490.105, 490.507, 490.607, 490.707, and 490.807 set forth measures and require the state to set targets for system performance, congestion, and air quality relating to the highways on the NHS or portions thereof (collectively, System Performance Measures or Targets), which include the following six measures: travel time reliability on Interstate highways and travel time reliability on Non-Interstate NHS highways; freight reliability on Interstate highways; annual hours of peak hour excessive delay per capita on NHS highways (certain areas in Northern Virginia only); percent of non-single occupancy vehicle travel (certain areas in Northern Virginia only); and on-road mobile source emissions reductions from the Congestion Mitigation and Air Quality Improvement Program (CMAQ) (certain areas in Northern Virginia only); and

WHEREAS, pursuant to 23 CFR §§ 490.105 and 490.107, two- and four-year targets for Asset Condition Performance Measures and System Performance Measures were adopted by the Board on September 18, 2018 for the first performance period beginning January 1, 2018 through December 31, 2021; and

WHEREAS, pursuant to 23 CFR § 490.107, Virginia submitted to the Federal Highway Administration (FHWA) its targets for Asset Condition Performance Measures and System Performance Measures in a baseline report for the first performance period on October 1, 2018, and a mid-period progress report on October 1, 2020; and

WHEREAS, pursuant to 23 CFR §§ 490.107, Virginia will submit a final progress report for the first performance period by October 1, 2022; and

WHEREAS, in accordance with 23 CFR §§ 490.105 and 490.107, two- and four-year targets for Asset Condition Performance Measures and System Performance Measures must be established for the second performance period beginning January 1, 2022 through December 31,

2025¹ and must be reported to FHWA by October 1, 2022, with progress reports due by October 1 every two years; and

WHEREAS, OIPI, working collaboratively with the Virginia Department of Transportation (VDOT), has for 2022-2025 established proposed Asset Condition Performance Targets and System Performance Targets set out in Tables A and B, having complied with the target setting and reporting requirements set forth in 23 C.F.R. §§ 490.105, 490.107, 490.307, 490.407, 490.507, 490.607, 490.707, and 490.807; and

WHEREAS, in July 2022, the Board was presented with information for a final progress report for the first performance period ending on December 31, 2021 and proposed Asset Condition Performance Targets and System Performance Targets set forth in Tables A and B for the second performance period; and

WHEREAS, OIPI, in consultation with VDOT, recommends adoption of the proposed Asset Condition Performance Targets and System Performance Targets set forth in Tables A and B, respectively:

Table A

Asset Condition Measures	Scope	2-Year Target¹ (2023)	4-Year Target¹ (2025)
Percentage of Pavement in Good Condition	Interstate	45%	45%
Percentage of Pavement in Poor Condition	Interstate	3%	3%
Percentage of Pavement in Good Condition	NHS (non-Interstate)	25%	25%
Percentage of Pavement in Poor Condition	NHS (non-Interstate)	5%	5%
Percentage of Deck Area of Bridges in Good Condition	NHS	27.2%	25.1%
Percentage of Deck Area of Bridges in Poor Condition	NHS	3.3%	3.6%

¹ All two and 4-year targets cover the time period of Jan. 1, 2022 to Dec. 31, 2025, except for the CMAQ targets which follow the federal fiscal year (Oct. 1, 2022 to Sept. 30, 2025).

Table B

System Performance Measures	Scope	2-Year Target¹ (2023)	4-Year Target¹ (2025)
Percentage of Person-Miles Traveled that are Reliable	Interstate	85%	85%
Percentage of Person-Miles Traveled that are Reliable	NHS (non-Interstate)	88%	88%
Truck Travel Times Reliability Index	Interstate	1.64	1.64
Annual Hours of Peak Hour Excessive Delay Per Capita ²	NHS	22.5 hrs/capita	22.7 hrs/capita
Percentage of Non-SOV Travel ²	NHS	37.4%	37.7%
Total Emission Reductions for Volatile Organic Compounds ³	CMAQ Projects	0.323 kg/day	3.013 kg/day
Total Emission Reductions for Nitrogen Oxides (NOx) ³	CMAQ Projects	0.612 kg/day	4.911 kg/day

NOW THEREFORE, BE IT RESOLVED, that the Commonwealth Transportation Board hereby approves, for each of the performance measures referenced therein, the Asset Condition Performance Targets and System Performance Targets set forth in Tables A and B for 2022-2025.

¹ All two and 4-year targets cover the time period of Jan. 1, 2022 to Dec. 31, 2025, except for the CMAQ targets which follow the federal fiscal year (Oct. 1, 2022 to Sept. 30, 2025).

² Targets apply only to certain urbanized areas designated as nonattainment or maintenance for specified pollutants under National Ambient Air Quality Standards (NAAQS) (the Virginia portion of the Washington, DC-MD-VA 8-hour ozone nonattainment area).

³ Targets apply to CMAQ projects in areas designated as nonattainment or maintenance for certain NAAQS (the Virginia portion of the Washington, DC-MD-VA 8-hour ozone nonattainment area).

CTB Decision Brief

Approval of Asset Condition and System Performance Targets

Issue: In accordance with § 2.2-229 of the *Code of Virginia*, the Commonwealth Transportation Board (CTB) must approve measures and targets related to the performance of the Commonwealth's surface transportation network, including any performance measurement required by Title 23 or 49 of the United States Code. In accordance with 23 C.F.R. §§ 490.105 and 490.107, targets for twelve federally mandated asset condition, system performance, congestion, and air quality measures must be established and reported to the Federal Highway Administration (FHWA) for a four-year performance period beginning in 2018, with progress reports due by October 1 every two years. CTB approval of Office of Intermodal Planning and Investment (OIPI) and Virginia Department of Transportation (VDOT) proposed targets for the aforementioned performance measures is requested for the second four-year performance period beginning January 1, 2022 through December 31, 2025¹.

Facts: In 2012 Congress passed the Moving Ahead for Progress in the 21st Century Act (MAP-21) and in 2015, the Fixing America's Surface Transportation (FAST) Act amending 23 U.S.C. § 150 to mandate/continue the mandate for establishment of performance management to transform the Federal-aid highway program and provide a means to the most efficient investment of Federal transportation funds by refocusing on national transportation goals, increasing the accountability and transparency of the Federal-aid highway program, and improving project decision-making through performance-based planning and programming. The national transportation goals focus on safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays.

Pursuant to 23 U.S.C. § 150, various federal regulations were promulgated to address and set forth the requirements for, among other things, performance measures and targets relating to asset condition (Asset Condition Measures/Targets) and system performance, congestion, and air quality (collectively, System Performance Measures/Targets), including 23 C.F.R. §§ 490.105, 490.307, 490.407, 490.507, 490.607, 490.707, and 490.807, which require State Departments of Transportation (DOT) and Metropolitan Planning Organizations to set targets for twelve measures. Two- and four-year targets for Asset Condition Measures and System Performance Measures were first established and reported in 2018 with CTB approval for the first performance period from January 1, 2018 to December 31, 2021.

Pursuant to 23 C.F.R. § 490.107, State DOTs must report by October 1 to Federal Highway Administration (FHWA) a baseline report at the beginning of a performance period that includes performance targets with progress reports due by October 1 every two years. The first performance period report was submitted to FHWA on October 1, 2018 with a mid-period progress report submitted on October 1, 2020. At its July 2022 meeting, the CTB was presented

¹ All two and 4-year targets cover the time period of Jan. 1, 2022 to Dec. 31, 2025, except for the Congestion Mitigation and Air Quality Improvement Program (CMAQ) targets which follow the federal fiscal year (Oct. 1, 2022 to Sept. 30, 2025).

with information for a final progress report for the first performance period ending on December 31, 2021. A final progress report is due by October 1, 2022.

The OIPI has coordinated and worked collaboratively with VDOT and agreed on target setting methodologies and proposed targets for the second federal performance period. The proposed targets for the twelve asset condition, system performance, congestion, and air quality measures are set forth in Tables A and B.

At its July 2022 meeting, the CTB was also presented with information and proposed two- and four-year Asset Condition Performance Targets and System Performance Targets for the second performance period representing January 1, 2022 through December 31, 2025. Once adopted, targets must be reported to FHWA by October 1, 2022, with a mid-period progress report due October 1, 2024, and a final report for the second performance period due October 1, 2026.

Table A

Asset Condition Measures	Scope	2-Year Target¹ (2023)	4-Year Target¹ (2025)
Percentage of Pavement in Good Condition	Interstate	45%	45%
Percentage of Pavement in Poor Condition	Interstate	3%	3%
Percentage of Pavement in Good Condition	NHS (non-Interstate)	25%	25%
Percentage of Pavement in Poor Condition	NHS (non-Interstate)	5%	5%
Percentage of Deck Area of Bridges in Good Condition	NHS	27.2%	25.1%
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¹ All two and 4-year targets cover the time period of Jan. 1, 2022 to Dec. 31, 2025, except for the Congestion Mitigation and Air Quality Improvement Program (CMAQ) targets which follow the federal fiscal year (Oct. 1, 2022 to Sept. 30, 2025).

Table B

System Performance Measures	Scope	2-Year Target¹ (2023)	4-Year Target¹ (2025)
Percentage of Person-Miles Traveled that are Reliable	Interstate	85%	85%
Percentage of Person-Miles Traveled that are Reliable	Non-Interstate (NHS)	88%	88%
Truck Travel Time Reliability Index	Interstate	1.64	1.64
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Percentage of Non-SOV Travel ²	NHS	37.4%	37.7%
Total Emission Reductions for Volatile Organic Compounds ³	CMAQ Projects	0.323 kg/day	3.013 kg/day
Total Emission Reductions for Nitrogen Oxides (NOx) ³	CMAQ Projects	0.612 kg/day	4.911 kg/day

Recommendations: OIPI in consultation with VDOT recommends the approval of proposed Asset Condition and System Performance Targets.

Action Required by CTB: The CTB will be presented with a resolution for a formal vote to approve the proposed Asset Condition and System Performance Targets for 2022-2025.

Result, if Approved: If approved, targets will be reported to FHWA prior to the October 1 deadline.

Options: Approve, Deny, or Defer.

Public Comments/Reactions: None

¹ All two and 4-year targets cover the time period of Jan. 1, 2022 to Dec. 31, 2025, except for the Congestion Mitigation and Air Quality Improvement Program (CMAQ) targets which follow the federal fiscal year (Oct. 1, 2022 to Sept. 30, 2025).

² Targets apply only to certain urbanized areas designated as nonattainment or maintenance for specified pollutants under National Ambient Air Quality Standards (NAAQS) (the Washington, DC-MD-VA 8-hour ozone nonattainment area).

³ Targets apply to CMAQ projects in areas designated as nonattainment or maintenance for certain NAAQS (the Virginia portion of the Washington, DC-MD-VA 8-hour ozone nonattainment area).