

ITEM 9 – Information
June 20, 2018

Performance Based Planning and Programming – Draft Regional
Targets for Systems Performance and Highway Assets

Staff Recommendation: Briefing on a draft set of targets developed by staff in coordination with the state DOTs.

Issues: None

Background: The board will be briefed on requirements under the federal performance-based planning and programming (PBPP) rulemaking for MPOs to set targets for systems performance (travel time reliability) and highway assets (bridge and pavement condition). A draft set of targets developed by staff in coordination with the state DOTs will be presented. In July, the board will be asked to adopt systems performance (TTR) targets and highway assets (bridge and pavement) targets.

SYSTEM PERFORMANCE TARGETS TRAVEL TIME RELIABILITY AND TRUCK TRAVEL TIME RELIABILITY - **DRAFT** Performance-Based Planning and Programming

July 2018

DRAFT

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July xx, 2018

ABOUT THE TPB

The National Capital Region Transportation Planning Board (TPB) is the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 24 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

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SYSTEM PERFORMANCE

This report summarizes the federal requirements for the National Capital Region Transportation Planning Board (TPB), which is a Metropolitan Planning Organization (MPO), in the establishment of performance targets associated with System Performance. This includes performance concerning Travel Time Reliability (TTR) on both the Interstate and Non-Interstate roadways as well as the Truck Travel Time Reliability (TTTR) on Interstate roadways. The targets described in this report meet the MAP-21/FAST performance-based planning and programming (PBPP) requirements and are consistent with the target setting approaches of Maryland, Virginia, and the District of Columbia. These targets were approved by the National Capital Region Transportation Planning Board (TPB) at its regular meeting on (date).

Overview of Performance-Based Planning and Programming Requirements

Under the Moving Ahead for Progress in the 21st Century Act (MAP-21) and reinforced in the Fixing America's Surface Transportation (FAST) Act, federal surface transportation regulations require the implementation of performance management requirements through which states and MPOs will “transition to a performance-driven, outcome-based program that provides for a greater level of transparency and accountability, improved project decision-making, and more efficient investment of federal transportation funds.”

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have been gradually issuing a set of rulemakings, initially proposed and subsequently final, for the implementation of this performance-based planning and programming (PBPP) process. Each rulemaking lays out the goals of performance for an area of transportation, establishes the measures for evaluating performance, specifies the data to be used to calculate the measures, and then sets requirements for the setting of targets.

Under the PBPP process, states, MPOs, and providers of public transportation must link investment priorities to the achievement of performance targets in the following areas:

- Highway Safety;
- Highway Assets: Pavement and Bridge Condition;
- System Performance (Interstate and National Highway System, Freight Movement on the Interstate System, and the Congestion Mitigation and Air Quality Improvement Program); and
- Transit Safety and Transit Asset Management.

The final Statewide and Metropolitan Planning Rule, published May 27, 2016, provides direction and guidance on requirements for implementation of PBPP, including specified measures and data sources, forecasting performance, target-setting, documentation in the statewide and metropolitan long-range transportation plans and Transportation Improvement Programs (TIPs), and reporting requirements. The initial part of the PBPP process will require coordination and agreement on specific responsibilities for each agency in accordance with the planning rule.

NATIONAL HIGHWAY SYSTEM

A number of the MAP-21 performance measures are directly involved the National Highway System¹. The National Highway System (NHS) includes the Interstate Highway System as well as other roads important to the nation's economy, defense, and mobility. The NHS was developed by the Department of Transportation (DOT) in cooperation with the states, local officials, and metropolitan planning organizations (MPOs). With the adoption of MAP-21 on October 1, 2012, the NHS became the “enhanced-NHS” by adding roads that were previously classified as principal arterials but not yet part of the System. These Interstate and Non-Interstate roadways on the NHS are the primary roadways for the assessment of MAP-21 Performance-Based Planning and Programming. When performance measures are refereeing to the Interstate or Non-Interstate roadways on the NHS, it is refereeing to the MAP-21 “enhanced-NHS.”

States do have the ability to make modifications to the NHS by either removing or adding additional roadways. This can be done in writing to the FHWA Division Office. Supporting documents must be included such as maps and documentation of the coordination with the effected jurisdictions. Following that, FHWA will review, summarize, and move for recommendation to FHWA HQ. With the approval, FHWA HQ will make modifications to the map.

Overview of System Performance Measures

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, 2018, at which time the states are due to make their report to the FHWA. The rule requires states to set targets for four performance measures concerning Highway and Freight: 1) Interstate Travel Time Reliability (TTR), 2) National Highway System (NHS) TTR, 3) Greenhouse Gas Emissions, and 4) Freight Reliability (Truck Travel Time Reliability (TTTR)). In addition, the FHWA requires states to set three performance measures concerning CMAQ: 1) Peak Hour Excessive Delay (PHED), 2) Mode Share, and 3) Emissions.

This report will cover the Highway and Freight Performance Measures, specifically, TTR and TTTR. This report details the overview of the measures, data acquisition, as well as the methodology and forecasting methods recommended for future target setting.

¹ https://www.fhwa.dot.gov/planning/national_highway_system/nhs_maps/

Table 1: Summary of System Performance Measures

	Performance Measures
National Highway System	(1) Interstate Travel Time Reliability (TTR) - Percent of person-miles traveled on the Interstate System that are reliable
	(2) NHS (Non-Interstate) Travel Time Reliability (TTR) - Percent of person-miles traveled on the non-Interstate NHS that are reliable
	Performance Measures
Freight Movement	(4) Freight Reliability (TTTR) Measurement of travel time reliability on the Interstate System using Truck Travel Time Reliability (TTTR) Index.

TRAVEL TIME RELIABILITY AND TRUCK TRAVEL TIME RELIABILITY

The Travel Time Reliability (TTR) measure assesses the reliability of roadways on the Interstate and Non-Interstate (NHS) systems. TTR is defined by the FHWA as the percent of person-miles on the (Interstate/NHS) that are reliable. Concerning freight, reliability is the ratio of the Interstate System Mileage providing for reliable Truck Travel Time Reliability (TTTR). Data are derived from the travel time data set found in the National Performance Management Research Data Set (NPMRDS). The metrics to be used are Level of Travel Time Reliability (LOTTR) and the TTTR Index.

Regarding the roles and responsibilities of both states and MPOs, state DOTs are required to establish two and four-year targets for the Interstate, but only a four-year target for the TTR of the NHS by May 20, 2018. These targets will be included in the state’s baseline performance period report due to the FHWA on October 1, 2018. MPOs are required to either support the State targets or establish their own quantifiable four-year targets within 180 days of the State target establishment.

On December 18, 2017, TBP staff led a webinar with representatives of Virginia, Maryland, and the District of Columbia departments of transportation for the purposes of coordination and sharing information regarding these performance measures, particularly with regards for target setting and forecasting.

TPB Forecasting

After the collection of data there are three general approaches that could be utilized for forecasting performance: the extrapolation of measured performance or the use of travel demand model data.

- Extrapolation of Measured Performance
 - For this approach, measured data for the previous years of 2014 through 2017 would be selected either by month or year. This data would then be extrapolated, via polynomial regression, through the year 2021. This would cover both the two and

four-year targets. This approach would result in either a fitted line or a best fit curve as a means of forecasting.

- Travel Demand Model
 - In 2016 TPB produced a travel demand model which produced congestion/related outputs for modelled years 2016, 2020,2025, etc. Forecasting will be achieved by utilizing such outputs as Percentage of Congested AM Peak Hour VMT estimates to project change in congestion, applying the percentage changes to measured performance.
- Averaging
 - Taking the average of both the extrapolation of measured performance and the utilization of the Travel Demand Model as a means of forecasting the targets.

The following pages will show and explain charts of both approaches. The charts showing the TTR for Interstate and NHS roadways are in terms of the percent of person miles on a roadway that is reliable. Charts illustrating TTTR are measured using a scale/index to determine the reliability of conditions for trucks. In all cases, the percentages shown are based on the TTR or TTTR for the TPB region.

Table 2: Summary of Statewide Travel Time Reliability Targets for Interstate and Non-Interstate Roadways

State	Interstate or Non-Interstate	Two-Year State Target	Four-Year State Target
District of Columbia	Interstate	24.0%	23.0%
	Non-Interstate	Not Applicable	60.0%
Maryland	Interstate	72.1%	72.1%
	Non-Interstate	Not Applicable	81.7%
Virginia	Interstate	82.2%	82.0%
	Non-Interstate	Not Applicable	82.5%

Figure 2: Extrapolation of Interstate and Non-Interstate for Travel Time Reliability

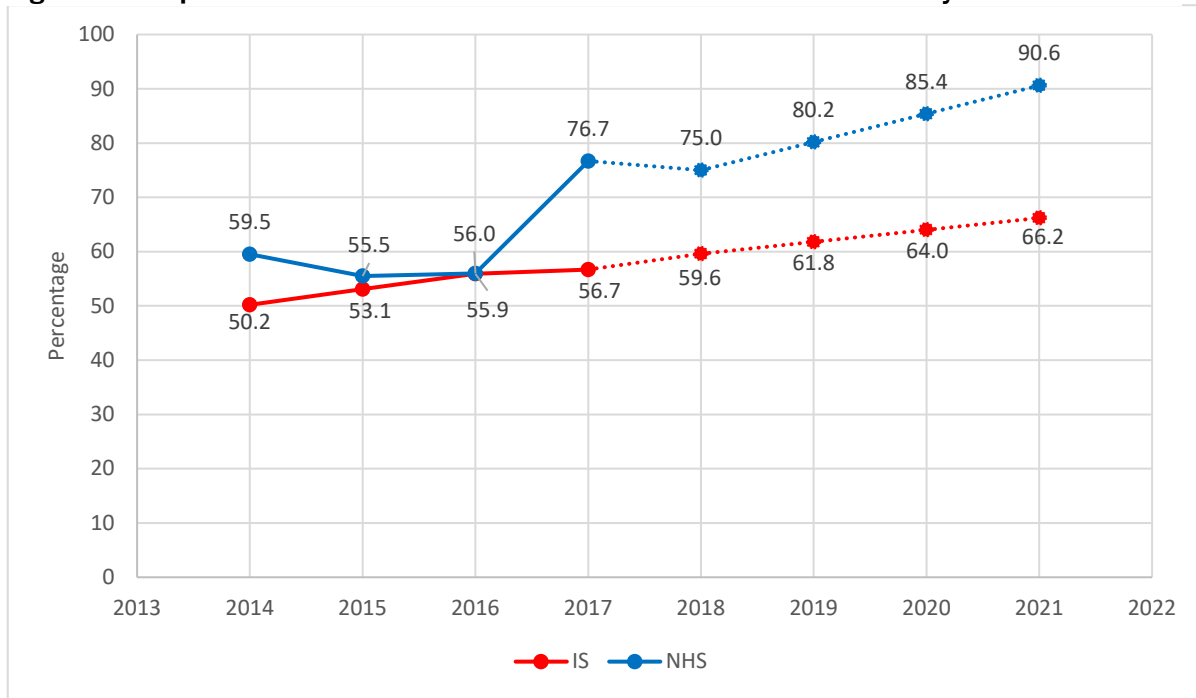
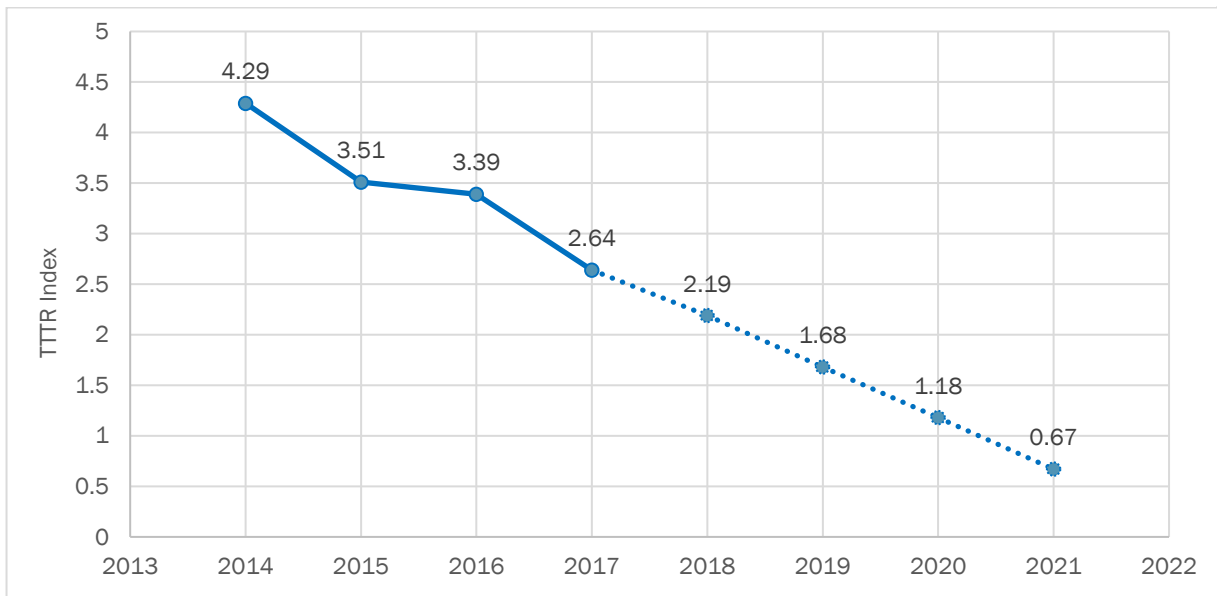


Figure 1: Extrapolation of Interstate for Truck Travel Time Reliability



Figures 1 and 2 illustrate the extrapolation of the previous NPMRDS data collected from years 2014, 2015, and 2016 for TTR and TTTR. Measures were extrapolated from 2018 to 2021, which cover both two and four-year target years of 2019 and 2021. The TTR for Interstate and Non- Interstate roadways shows an overall increase in the TTR, which translates into roadways are becoming more reliable in regard to congestion. Figure 2 shows a decreasing TTTR Index for the roadways. This

translates into commercial trucks having increased more reliable routes of transport, with respect to congestion.

Figure 3: Travel Demand Model for Interstate and Non-Interstate for Travel Time Reliability

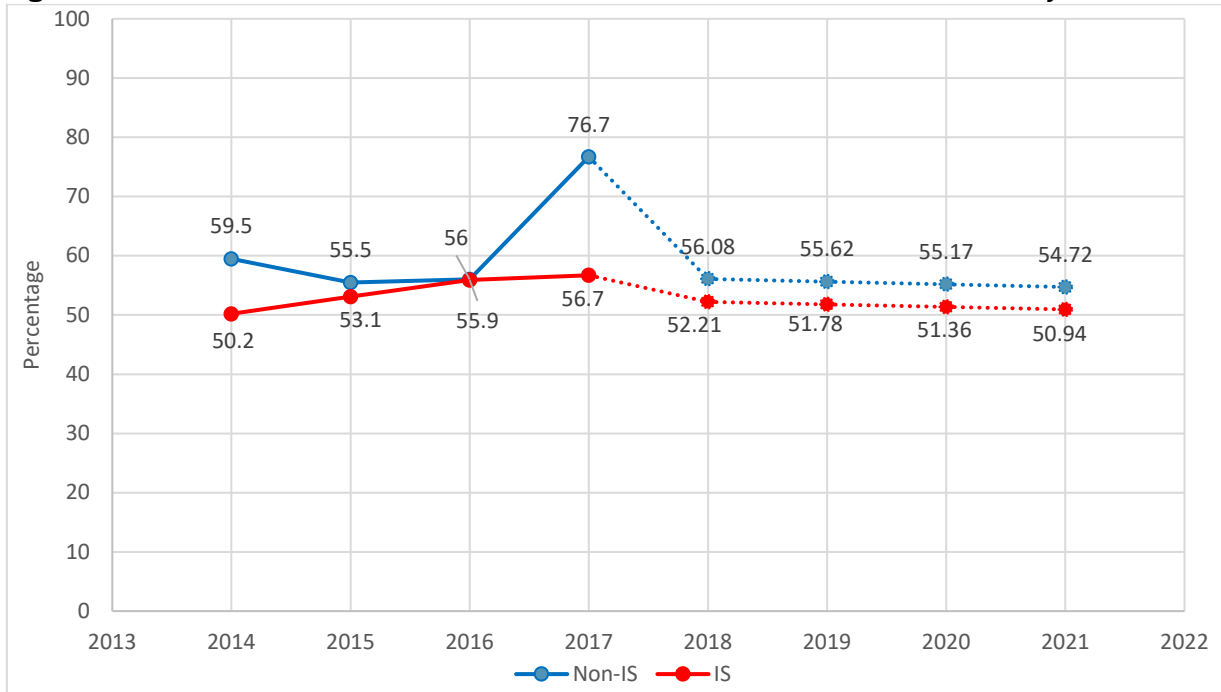


Figure 4: Travel Demand Model for Interstate for Truck Travel Time Reliability

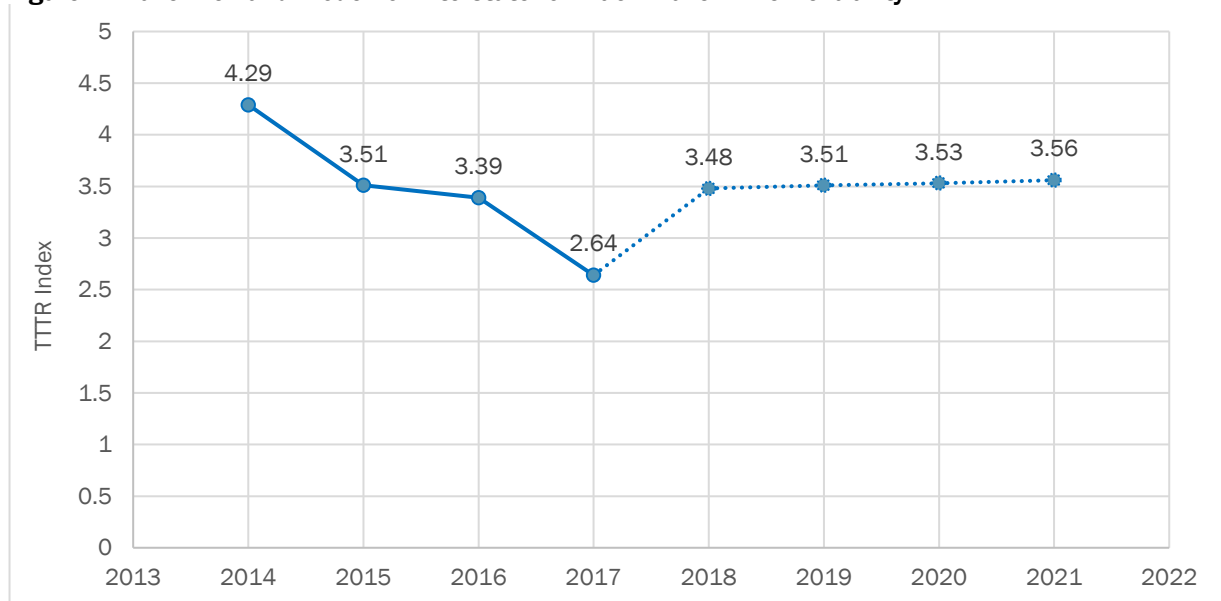


Figure 4 and 5 illustrate the application of the TPB Travel Demand Model on the performance measures TTR and TTTR. The Travel Demand Model does not provide a specific output for TTR or TTTR, however, it does provide called Percentage of Congested AM Peak Hour VMT. Taking this output its rate of change was calculated from the TPM Travel Demand Model from year 2017 to 2025. This rate of change was then applied to the 2016 recorded TTR and TTTR data. The 2016 data was utilized instead of 2017 data, due to the belief that 2017 data is an outlier. With this number and the collected data, a compounded growth rate was calculated far enough to capture both two and four-year target years. Figure 4 illustrates the reliability of roadways slowly decreasing over time. The same steady decrease of the TTTR is shown in Figure 5.

Figure 5: Averaging of Extrapolation and Travel Demand Model of Interstate and Non-Interstate for Travel Time Reliability

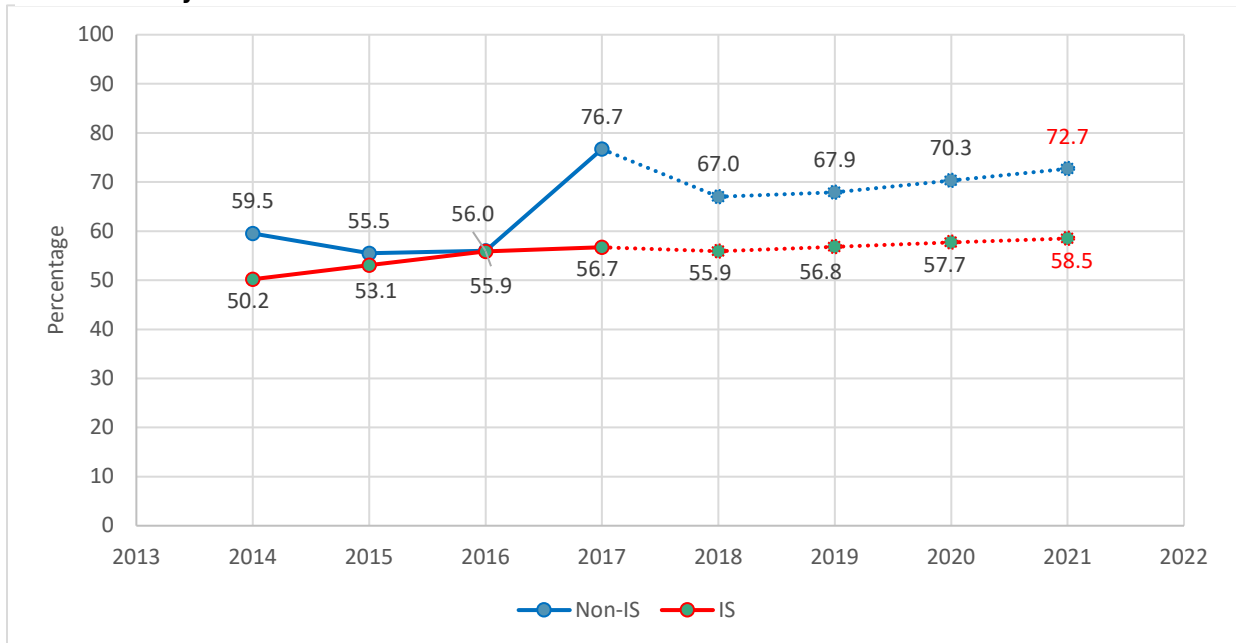
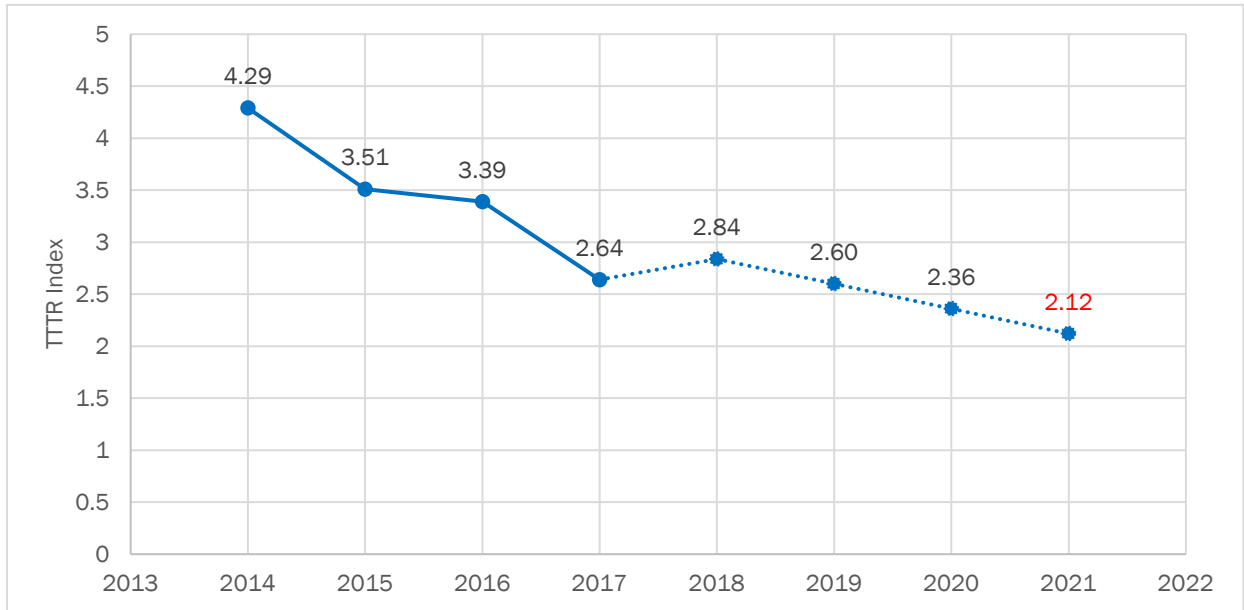


Figure 6: Averaging of Extrapolation and Travel Demand Model of Interstate for Truck Travel Time Reliability



TPB TARGET SETTING

Based on the performance data and forecasting methodology in the previous section, Tables 3 and 4 show the proposed regional targets for the TPB planning area for the three performance measures. These are four-year targets, covering the period 2018 through 2021.

Table 3: Regional Travel Time Reliability Targets for the Interstate and Non-Interstate Roadways

Travel Time Reliability	Four-Year Target (2018 - 2021)
Interstate (NHS)	58.5%
Non-Interstate (NHS)	72.7%

Table 4: Regional Truck Travel Time Reliability for the Interstate System Roadways

Truck Travel Time Reliability	Four-Year Target (2018 - 2021)
Interstate System	2.12

REGIONAL TARGETS FOR PAVEMENT AND BRIDGE - DRAFT

Performance-Based Planning and Programming

July 2018

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National Capital Region
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PAVEMENT AND BRIDGE

This report provides an overview of the performance measures concerning the condition of bridges and pavements within the National Capital Region Transportation Planning area. This information will be useful for determining performance targets and coordinating with the Departments of Transportation of the states of Maryland, Virginia, and the District of Columbia, as required by MAP-21. The National Performance Management Measures; Assessing Pavement Condition for the National Highway Performance Program and Bridge Condition for the National Highway Performance Program Final Rule addresses requirements established by the Moving Ahead for Progress in the 21st Century Act (MAP-21) and reflects passage of the Fixing America's Surface Transportation (FAST) Act. The rule is effective May 20, 2017.

Overview of Performance-Based Planning and Programming Requirements

Under the Moving Ahead for Progress in the 21st Century Act (MAP-21) and reinforced in the Fixing America's Surface Transportation (FAST) Act, federal surface transportation regulations require the implementation of performance management requirements through which states and MPOs will “transition to a performance-driven, outcome-based program that provides for a greater level of transparency and accountability, improved project decision-making, and more efficient investment of federal transportation funds.”

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The final Statewide and Metropolitan Planning Rule, published May 27, 2016, provides direction and guidance on requirements for implementation of PBPP, including specified measures and data sources, forecasting performance, target-setting, documentation in the statewide and metropolitan long-range transportation plans and Transportation Improvement Programs (TIPs), and reporting requirements. The initial part of the PBPP process will require coordination and agreement on specific responsibilities for each agency in accordance with the planning rule.

Pavement and Bridges Condition Performance Measures

The Pavement and Bridge Condition Performance Measures final rule, published in the Federal Register on January 18, 2017, establishes measures for State DOTs to assess the condition of pavements on the non-Interstate NHS (National Highway System); pavements on the Interstate System (IS); and bridges carrying the NHS, including on- and off-ramps connected to the NHS. Targets must be set for six particular areas; 1) Percent of pavements on the Interstate System in good condition, 2) Percent of pavements on the IS in poor condition, 3) Percent of pavements on the NHS in good condition, 4) Percent of pavements on the NHS in poor condition, 5) Percentage of NHS bridge deck classified in good condition, 6) Percentage of NHS bridge deck classified in poor condition.

Table 1: Summary of Pavement and Bridge Performance Measures

	Performance Measures
Pavement	Percent of pavements on the IS in good condition
	Percent of pavements on the IS in poor condition
	Percent of pavements on the NHS in good condition
	Percent of pavements on the NHS in poor condition
Bridge	Percentage of NHS bridge deck classified in good condition
	Percentage of NHS bridge deck classified in poor condition

In terms of calculating the metrics for this measure (pavement) the Highway Performance Monitoring System (HPMS) used by the FHWA to calculate good/poor metrics and the measures. Considerations include the roughness, cracking, and rutting for asphalt and faulting for concrete structures. The measures are to be aggregated by lane miles. Also, HPMS pavement data collection requirements have been revised to require more comprehensive collection of data for the NHS routes.

For the bridges performance measure, the measures are based on deck area. The classification is based on National Bridge Inventory (NBI) condition ratings for the Deck, Superstructure, Substructure, and Culvert. Condition is determined by the lowest rating of deck, superstructure, substructure, or culvert. If the lowest rating is greater than or equal to 7, the bridge is classified as good; if is less than or equal to 4, the classification is poor. (Bridges rated below 7 but above 4 will be classified as fair; there is no related performance measure.) Deck area is computed using NBI criteria of Structure Length, Deck Width or Approach Roadway Width (for some culverts).

STATE DOTs AND MPO TARGET SETTING AND REPORTING RESPONSIBILITIES

Pavement

State DOTs must establish targets, regardless of ownership, for the full extent of the Interstate and non-Interstate NHS. These must be statewide two and four-year targets for the non-Interstate NHS and four-year targets for the Interstate by May 20, 2018. Targets must subsequently be reported to

FHWA by October 1, 2018. MPO can either support the relevant State DOTs four- year target or establish their own by 180 days after the State DOT's target are established.

Bridges

State DOTs must establish targets for all bridges carrying the NHS, which includes on- and off-ramps connected to the NHS within a State, and bridges carrying the NHS that cross a State border, regardless of ownership. These must be statewide two and four- year targets by May 20, 2018, with subsequent reporting to FHWA by October 1, 2018. As with the pavement performance measures, MPOs can either support the relevant State DOT(s) four-year target or establish their own by 180 days after the State DOT's target are established.

Penalties

If FHWA determines the State DOT's Interstate pavement condition falls below the minimum level for the most recent year, the State DOT must obligate a portion of National Highway Performance Program (NHPP) and transfer a portion of Surface Transportation Program (STP) funds to address Interstate pavement condition. If for 3 consecutive years more than 10.0% of a State DOT's NHS bridges' total deck area is classified as Structurally Deficient, the State DOT must obligate and set aside National Highway Performance Program (NHPP) funds for eligible projects on bridges on the NHS.

Table 2: District of Columbia Statewide Pavement Targets

Interstate	CY 2018 – 2020 Two Year Target	CY 2018 – 2022 Four Year Target
Percent Good	10%	5%
Percent Poor	5%	5%
NHS (Non-Interstate)	CY 2018 – 2020 Two Year Target	CY 2018 – 2022 Four Year Target
Percent Good	67%	54%
Percent Poor	7.1%	14.1%

Table 3: Maryland Sub-Regional Pavement Targets

Interstate	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
Percent Good	45%	45%
Percent Poor	<3%	<3%
NHS (Non-Interstate)	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
Percent Good	25%	25%
Percent Poor	<5%	<5%

Table 4: Virginia Statewide Pavement Targets

Interstate	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
Percent Good	45%	45%
Percent Poor	<3%	<3%
NHS (Non-Interstate)	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
Percent Good	25%	25%
Percent Poor	<5%	<5%

Table 5: District of Columbia Statewide Bridge Performance Measure

Bridges	CY 2018 – 2020 Two Year Target	CY 2018 – 2022 Four Year Target
Deck Area Good	15.8%	24.9%
Deck Area Poor	8.6%	4.1%

Table 6: Maryland Statewide Bridge Performance Measure

Bridges	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
Deck Area Good	29.5%	27%
Deck Area Poor	2%	5%

Table 7: Virginia Statewide Bridge Performance Measure

Bridges	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
Deck Area Good	33.5%	33%
Deck Area Poor	3.5%	3%

TPB METHODOLOGY AND TARGET SETTING

The TPB targets for the metropolitan planning area for pavement and bridge condition were developed by taking the state DOT targets and applying them to the lane miles and bridge deck area in the TPB planning area for each state. Based on the performance data and forecasting methodology in the previous section, Tables 8 and 9 show the proposed regional targets for the TPB planning area for the three performance measures. These are four-year targets, covering the period 2018 through 2021.

Table 8: Regional Pavement Condition – DRAFT Targets

Interstate	CY 2018 – 2021 Four Year Target
(1) Percentage of pavements on the Interstate System in Good condition	52.7%
(2) Percentage of pavements on the Interstate System in Poor condition	1.7%

Table 9: Regional Bridge Condition – DRAFT Targets

NHS (Non-Interstate)	CY 2018 – 2021 Four Year Target
(3) Percentage of pavements on the NHS (excl. Interstate) in Good condition	31.1%
(4) Percentage of pavements on the NHS (excl. Interstate) in Poor condition	7.0%

PERFORMANCE BASED PLANNING & PROGRAMMING

National Highway System & Freight and Pavement & Bridge Performance Measures – Draft Targets

Eric Randall, TPB Engineer

Transportation Planning Board
June 20, 2018

Agenda Item 9



National Capital Region
Transportation Planning Board

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 - Truck Travel Time Reliability Data and Draft Targets
- Pavement and Bridge
 - Overview of the Measures
 - Pavement Condition Draft Targets
 - Bridge Condition Draft Targets
- Next Steps



National Highway System & Freight: Overview of Performance Measures

	Performance Measures
National Highway System	Interstate Travel Time Reliability (TTR) - Percent of person-miles traveled on the Interstate System that are reliable
	NHS (Non-Interstate) Travel Time Reliability (TTR) - Percent of person-miles traveled on the non-Interstate National Highway System (NHS) that are reliable

	Performance Measures
Freight Movement	Freight Reliability (TTTR) - Measurement of travel time reliability on the Interstate System using a Truck Travel Time Reliability (TTTR) Index.

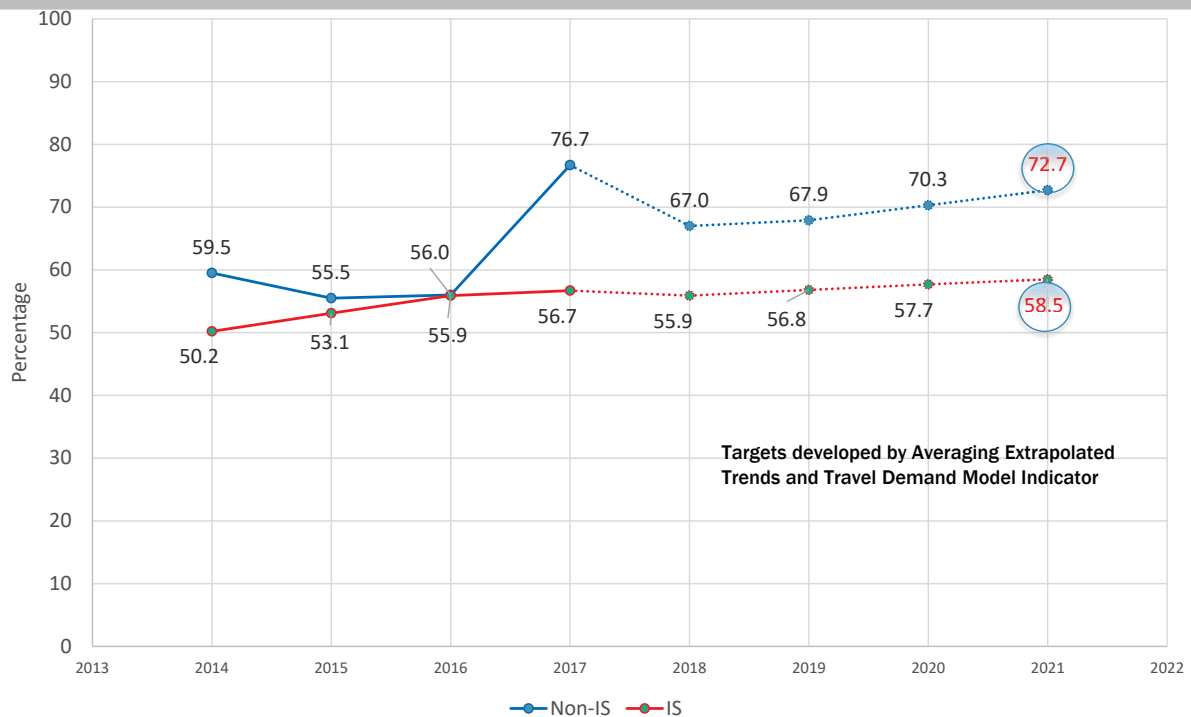
National Highway System & Freight – Target Requirements

- State DOTs must establish **two** and **four-year targets** (2019 and 2021 respectively) for the Interstate TTR and the TTTR, but only a four-year target for the Non-Interstate NHS, by May 20, 2018
- MPOs have 180 days from the establishment of state DOT targets to either support or establish their own **four-year targets** for the measures
- All TTR/TTTR targets will be reported in the states' baseline performance period reports due to FHWA by October 1, 2018

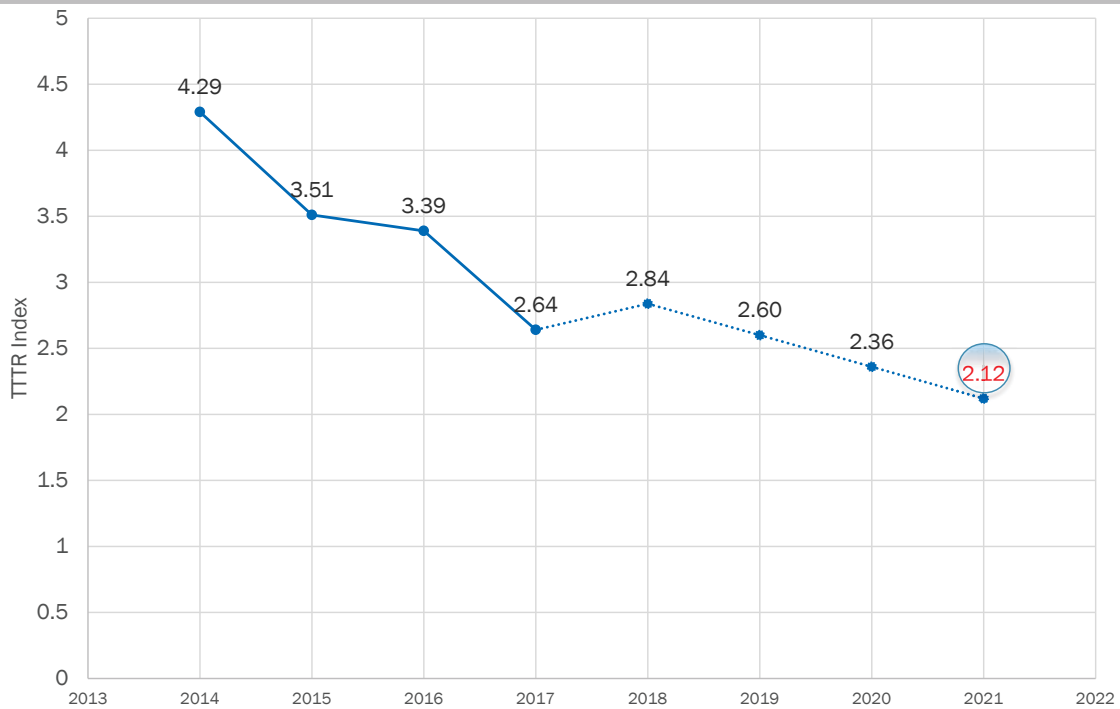
Travel Time Reliability (TTR) & Truck Travel Time Reliability (TTTR) Data

- Data is collected through the National Performance Management Research Data Set (NPMRDS)
 - Procured and sponsored by the Federal Highway Administration (FHWA), this is the designated source for TTR/TTTR data
 - It is an archived speed and travel time data set (including associated location data) covering the National Highway System (NHS)
 - Data available at 5 minute intervals for Passenger vehicles, Trucks, and Trucks and Passenger vehicles combined
- Travel Time Reliability (TTR): the percent of person-miles for which the ratio of a longer travel time (80th percentile) to a “normal” travel time (50th percentile) is < 1.5 for the reporting segment
- Truck Travel Time Reliability (TTTR) Index: the ratio of a longer travel times (95th percentile) to a “normal” travel time (50th percentile)

TTR: Recent Data and Short Term Forecast (Target)



TTR Index: Recent Data and Short Term Forecast (Target)



Regional Highway System and Freight – Draft Targets

	CY 2018 – 2021 Four Year Target
TTR – Interstate Percent of person-miles traveled on the Interstate System that are reliable	58.5%
TTR – Non-Interstate NHS Percent of person-miles traveled on the non-Interstate NHS that are reliable	72.7%
TTR Index Ratio of the Interstate System Mileage providing for Reliable Truck Travel Times	2.12



Pavement and Bridge Condition Performance Measures

Performance Measures
(1) Percentage of pavements on the Interstate System in Good condition
(2) Percentage of pavements on the Interstate System in Poor condition
(3) Percentage of pavements on the NHS (excl. Interstate System) in Good condition
(4) Percentage of pavements on the NHS (excl. Interstate System) in Poor condition
(5) Percentage of NHS Bridges Classified as in Good Condition
(6) Percentage of NHS Bridges Classified as in Poor Condition

Pavement and Bridge – Target Requirements

- Pavement: measurement of the condition (**good** or **poor**) of pavement on both the Interstate and Non-Interstate roadways on the NHS
 - For Pavement, State DOTs established **two** and **four-year targets** (2019 and 2021 respectively) for the NHS (Non-Interstate) roadways, but only a **four-year target** for the Interstate NHS, by May 20, 2018
- Bridge: Measurement of the bridge deck area condition (**good** or **poor**) for all bridges on the NHS
 - For Bridges, State DOTs established **two** and **four-year targets** for the bridge deck condition by May 20, 2018
- MPOs must either support the State targets or establish their own quantifiable **four-year targets** within 180 days
- All Pavement and Bridge targets will be reported in the states' baseline performance period reports due to FHWA by October 1, 2018

Pavement and Bridge Measures – Data

- Pavement: data is reported annually by State DOTs into the Highway Performance Monitoring System (HPMS)
- Bridge: data is reported annually by State DOTs into the National Bridge Inventory (NBI)
- TPB staff accessed this data to determine performance for the region for the pavement and bridge performance measures



- A map site for the pavement and bridge conditions has been developed: https://gis.mwcog.org/webmaps/tpb/pbpp/pavement_bridge/

Regional Pavement – Draft Targets

Interstate	CY 2018 – 2021 Four Year Target
(1) Percentage of pavements on the Interstate System in Good condition	52.7%
(2) Percentage of pavements on the Interstate System in Poor condition	1.7%
NHS (Non-Interstate)	CY 2018 – 2021 Four Year Target
(3) Percentage of pavements on the NHS (excl. Interstate) in Good condition	31.1%
(4) Percentage of pavements on the NHS (excl. Interstate) in Poor condition	7.0%

- The pavement targets for the state DOTs are based primarily on an assessment of future budget allocations for maintaining a state of good repair
- Regional targets were developed by taking the state DOT targets and applying them to the lane miles in the TPB planning area for each state

Regional Bridges – Draft Targets

Bridges	CY 2018 – 2021 Four Year Target
(5) Percentage of NHS Bridges Classified as in Good Condition	29.8%
(6) Percentage of NHS Bridges Classified as in Poor Condition	3.5%

- The bridge targets for the state DOTs are based primarily on an assessment of future budget allocations for maintaining a state of good repair
- Regional targets were developed by taking the state DOT targets and applying them to the bridge deck area in the TPB planning area for each state

Next Steps – TPB

- Receive and respond to comments on draft targets
- TPB adopts targets at July 18 meeting
- MPO provide all targets to state DOTs for inclusion in Baseline Period Performance reports to be submitted to FHWA by October 1, 2018
- Inclusion of targets in the System Performance report for Visualize 2045

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TPB Area: Summary of TTR Data for Interstate and Non-Interstate NHS

TTR Performance	2014	2015	2016	2017
Interstate Percent of person-miles traveled on the Interstate System that are reliable	50.2%	53.1%	55.9%	56.7%
Non-Interstate NHS Percent of person-miles traveled on the non-Interstate NHS that are reliable	59.5%	55.5%	56.0%	76.7%
TTR Performance	2014	2015	2016	2017
Interstate Ratio of the Interstate System Mileage providing for Reliable Truck Travel Times	4.29	3.51	3.39	2.64



District of Columbia Pavement Targets

- District of Columbia targets were established on May 20
- Statewide target percentage was applied to the total lane miles of both the Interstate and Non-Interstate roadways on the NHS

Interstate	CY 2018 – 2020 Two Year Target	CY 2018 – 2022 Four Year Target
Percent Good	10%	5%
Percent Poor	5%	5%
NHS (Non-Interstate)	CY 2018 – 2020 Two Year Target	CY 2018 – 2022 Four Year Target
Percent Good	67%	54%
Percent Poor	7.1%	14.1%

Maryland Sub-Region Pavement Targets

- Maryland targets were established on May 20.
- Sub-region targets at the county level were provided to TPB staff
- The Sub-region target percentage was applied to the total lane miles of both the Interstate and Non-Interstate roadways on the NHS

Interstate	CY 2016 – 2018 Two Year Target	CY 2016 – 2020 Four Year Target
Percent Good	Not Required	62.8%
Percent Poor	Not Required	0.3%
NHS (Non-Interstate)	CY 2016 – 2018 Two Year Target	CY 2016 – 2020 Four Year Target
Percent Good	32.4%	31.6%
Percent Poor	6.5%	7.2%

Virginia State Pavement Targets

- Virginia statewide targets were established on May 20
- Statewide target percentage was applied to the total lane miles of both the Interstate and Non-Interstate roadways on the NHS

Interstate	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
Percent Good	45%	45%
Percent Poor	<3%	<3%

NHS (Non-Interstate)	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
Percent Good	25%	25%
Percent Poor	<5%	<5%

District of Columbia Bridge Targets

- District of Columbia targets were established on May 20

Bridges	CY 2018 – 2020 Two Year Target	CY 2018 – 2022 Four Year Target
Deck Area Good	15.8%	24.9%
Deck Area Poor	8.6%	4.1%

- Statewide target percentage was applied to the bridge deck area condition (good or poor) for all bridges carrying NHS

Maryland State Bridge Targets

- Maryland targets were established on May 20.

Bridges	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
Deck Area Good	29.5%	27%
Deck Area Poor	2%	5%

- Statewide target percentage was applied to the bridge deck area condition (good or poor) for all bridges carrying NHS in the region

Virginia State Bridge Targets

- Virginia targets were established on May 20

Bridges	CY 2018 – 2019 Two Year Target	CY 2018 – 2021 Four Year Target
Deck Area Good	33.5%	33%
Deck Area Poor	3.5%	3%

- Statewide target percentage was applied to the bridge deck area condition (good or poor) for all bridges carrying NHS in the region