



MEMORANDUM

TO: Transportation Planning Board Technical Committee
FROM: Ian Newman, AICP, TPB Transportation Planner
SUBJECT: Travel Time Reliability Targets: Interstates, NHS Non-Interstates, and Truck Travel Time-DRAFT
DATE: October 2, 2026

At the September 4, 2026 meeting of the TPB Technical Committee, staff presented draft Travel Time Reliability Targets which are federally required for TPB's performance-based planning and programming process. These draft targets were presented to the TPB at its September 16, 2026, meeting, and the TPB will be asked to adopt the targets at its upcoming October 21, 2026, meeting.

This memorandum provides an update on the performance measures tracking of Travel Time Reliability for Interstates (IS), Travel Time Reliability for non-IS National Highway System (NHS) roadways, and Freight Reliability as measured by the Truck Travel Time Reliability Index (TTTRI). The TPB evaluates and sets new targets every four years, with the option for reviewing targets every two years for potential modification.

The TPB has adopted targets for these three measures since 2018. At the September 4, 2026 Technical Committee meeting, TPB staff briefed members on the National Capital Region's progress in meeting its previous Travel Time Reliability and Freight Reliability targets and reviewed the process for establishing new targets for the 2026-2029 reporting period.

On September 17, 2026 the Center for Advanced Transportation Technology (CATT) Lab at the University of Maryland, who operates the Regional Integrated Transportation Information System (RITIS) platform in which TPB staff (staff) access data for these reliability performance measures, completed an update on data concerning these federally required metrics. This altered the 2025 observed data value for the TPB Region's Travel Time Reliability for Interstates and the Truck Travel Time Reliability Index. This resulted in a change to the two- and four-year targets for these two federal performance measures.

OVERVIEW OF TRAVEL TIME RELIABILITY REQUIREMENTS

The following table provides a description of these performance measures with references to the Federal Code, data sources, and the required frequency of reporting. This section also summarizes the coordination requirements with State DOTs, the MPO's reporting requirements, potential consequences for not meeting targets, and the TPB's goals supported by these performance measures.

Performance Measure	Description	Federal Code	Data Source	Frequency of Reporting
Travel Time Reliability-IS	The percentage of person-miles traveled, that are deemed reliable, by both trucks and passenger vehicles on the TPB Region's interstate facilities' aggregated general purpose and express lanes, over four observed time periods.	23 CFR 490.507	NPMRDS INRIX-TMC Segments	Every four years, set new two- and four-year targets.
Travel Time Reliability-non-IS NHS	The percentage of person-miles traveled, that are deemed reliable, by both trucks and passenger vehicles on the TPB Region's National Highway System (NHS) facilities, excluding its interstates, over four observed time periods.	23 CFR 490.507	NPMRDS-TMC Segments	Every four years, set new two- and four-year targets.
Truck Travel Time Reliability Index (TTTRI)	A ratio that illustrates the reliability of truck travel times on the TPB Region's interstate facilities, only by trucks, over five observed time periods	23 CFR 490.607	NPMRDS INRIX-TMC Segments	Every four years, set new two- and four-year targets.

Coordination Requirements with State DOTs

MPOs are required to establish their performance targets in coordination with all state DOTs and MPOs intersecting with the urban area, and these targets should be data-driven, realistic, and unified. The requirement for these targets to be evidence-based and predictive of anticipated outcomes does not supersede or diminish any aspirational targets to which local, regional, or state jurisdictions are committed.

MPO Requirements

MPOs that include any portion of the National Highway System (NHS) shall establish performance targets for the Travel Time Reliability and Freight Reliability performance measures in accordance with 23 CFR 490.507 and 23 CFR 490.607.

State DOTs and MPOs shall establish statewide and metropolitan planning area-wide targets, respectively, that represent the condition/performance of the transportation network or geographic area. After the state DOTs establish their Travel Time Reliability and Freight Reliability targets, MPOs have 180 days to adopt a target.

TPB Goals

The Travel Time Reliability and Freight Reliability measures support the TPB in assessing progress toward its established goal of planning a transportation network that delivers reliability.

TRAVEL TIME RELIABILITY-INTERSTATES

The following sections describe target-setting methodology and draft targets for Travel Time Reliability-IS as reported in and measured by the percentage of reliable person-miles traveled.

Methodology

TPB staff utilized the National Performance Management Research Data Set (NPMRDS) from the FHWA to collect data for Travel Time Reliability-IS on the Traffic Messaging Channel (TMC) segment level. This was gathered for the TPB Region's interstates' both general purpose and express lanes. This was done through the RITIS platform's NPMRDS Analytics and Probe Data Analytics suites' tools.

TPB staff used a combination of calendar year (CY)2016-2019 and CY2024-2025 data to serve as the observed data trend's data, due to the exceptional year-to-year variance from 2020-2023, to perform a simple linear regression. This was also performed for model data, using the *Percent Congested VMT During the AM Peak Hour* model data extrapolation for years 2026-2030. The model data is used to account for project impacts from both existing projects and project openings within the model data's timeframe in addition to population, land use, and job trend changes.

For both the observed data and model data trends, staff applied the regression slopes (annual rate of change) incrementally, year-over-year, from the 2025 observed Travel Time Reliability-IS value. The two trends were then averaged together to derive values for 2026-2029, in which the 2027 and 2029 values served as the two- and four-year targets, respectively.

Travel Time Reliability-IS Draft Targets

Using the described methodology, TPB staff developed regional Travel Time Reliability-IS targets for the 2026-2029 period, shown below.

- Draft Two-Year (CY2027) Target: **55.7%**
- Draft Four-Year (CY2029) Target: **55.0%**

These targets are different than the ones presented to the TPB Technical Committee during their September 4, 2026 meeting. This is due to the 2025 data update mentioned in the introduction of this memo. The previously presented targets are below.

- Previously Presented Two-Year (CY2027) Target: **55.3%**
- Previously Presented Four-Year (CY2029) Target: **54.6%**

TRAVEL TIME RELIABILITY-NON-IS NHS

The following sections describe target-setting methodology and draft targets for the Travel Time Reliability-non-IS NHS as reported in the percentage of reliable person-miles traveled.

Methodology

TPB staff utilized the National Performance Management Research Data Set (NPMRDS) from the FHWA, to collect data for Travel Time Reliability-non-IS NHS on the Traffic Messaging Channel (TMC) segment level, for the TPB Region's NHS facilities, excluding interstates. This was done through the RITIS platform's NPMRDS Analytics Suite's Dashboard tool's PM3 Widgets.

TPB staff used the last four years of observed Travel Time Reliability-non-IS NHS data, for CY2022-2025, to serve as the observed data trend. This data was used to perform a simple linear regression, to estimate the Travel Time Reliability-non-IS NHS for years 2026-2029 based on only the observed data. Similar to Travel Time Reliability-IS, TPB staff also used the model data, using the *Percent Congested VMT During the AM Peak Hour* model data extrapolation for years 2026-2030.

For both the observed data and model data trends, TPB staff applied the regression slopes incrementally, year-over-year, from the 2025 observed Travel Time Reliability-non-IS NHS value. The two trends were then averaged together to derive annualized values for each year between 2026-2029, in which the 2027 and 2029 values served as the two- and four-year targets, respectively.

Travel Time Reliability-non-IS NHS Draft Targets

Using the above methodology, TPB staff developed regional Travel Time Reliability-non-IS NHS targets for the 2026-2029 period shown below.

- Draft Two-Year (CY2027) Target: **81.3%**
- Draft Four-Year (CY2029) Target: **79.0%**

TRUCK TRAVEL TIME RELIABILITY INDEX-(TTTRI)

The following sections describe the target-setting methodology and draft targets for TTTRI.

Methodology

The methodology to derive TTTRI targets is similar to that of the two Travel Time Reliability measures. TPB staff utilized the NPMRDS to collect data for TTTRI on the TMC segment level, for the TPB Region's interstate's general purpose and express lanes. The express lanes were considered for I-66 Outside the Beltway only as this is the only interstate express lanes in the TPB Region that allow trucks, as measured by FHWA vehicle class 4 and above, to utilize the express lane facilities. This was done through the RITIS platform's NPMRDS Analytics Suite's Dashboard tool's PM3 Widgets.

TPB staff utilized the last four years of observed TTTRI data, 2022-2025, for the observed data trend, and similarly used the *Percent Congested VMT During the AM Peak Hour* for model years 2026-2030, for the model data trend. The observed-data regression slope was then incrementally, year-over-year applied from the 2025 observed value, for the observed-data trend. This was applied for the model-data trend as well, and then averages were taken for each year between 2026 through 2029. The 2027 and 2029 years were extracted as the two- and four-year targets, respectively.

TTTRI Draft Targets

Using the above methodology, TPB staff developed regional TTTRI targets for the 2026-2029 period shown below.

- Draft Two-Year (CY2027) Target: **2.53**
- Draft Four-Year (CY2029) Target: **2.60**

These targets are different than the ones presented to the TPB Technical Committee during their September 4, 2026 meeting. This is due to the 2025 data update mentioned in the introduction of this memo. The previously presented targets are below.

- Previously Presented Two-Year (CY2027) Target: **2.50**
- Previously Presented Four-Year (CY2029) Target: **2.56**

NEXT STEPS

October 21, 2026: TPB staff present final Travel Time Reliability targets to the TPB. TPB approves new targets.