

Appendix E, Addendum 4: Performance Based Planning and Programming – Highway System Performance

Performance Targets

In accordance with the requirements of MAP-21 and the FAST Act, Virginia has established performance targets for three reliability performance measures to assess the Highway System Performance. All three measures are included in Virginia’s Baseline Performance Period Report for 2018-2021 which was submitted to FHWA in October 2018. This report 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 and establishes baseline performance as of December 31, 2017.

Performance of the NHS is measured by the level of travel time reliability. The travel time reliability performance measures and performance targets for the 2018-2021 performance period are indicated in Table 1 below.

Table 1: National Highway System Travel Time Reliability Performance Measures and Targets

NHS Travel Time Reliability Performance	CY 2018-2019 Two Year Target	CY 2018-2021 Four Year Target
Percent of Person Miles Traveled on the Interstate That Are Reliable	82.2%	82.0%
Percent of Person Miles Traveled on the Non-Interstate NHS That Are Reliable	N/A ¹	82.5%

The assessment for freight reliability is based on the truck travel time reliability index. The truck travel time reliability performance measure and performance targets for the 2018-2021 performance period are indicated in Table 2 below.

Table 2: Freight Reliability Performance Measure and Targets

Truck Travel Time Reliability Performance	CY 2018-2019 Two Year Target	CY 2018-2021 Four Year Target
Truck Travel Time Reliability Index	1.53	1.56

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

¹ During this first performance period, States are not required to establish 2-year targets for the Non-Interstate NHS reliability measure.

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.

VTrans2040 identifies the most critical transportation needs in Virginia to ensure the overarching transportation goals in the long-range plan are achieved. The screening process was informed by a data-driven approach that considers highway system performance measures and targets in addition to other performance indicators.

Performance management, as it relates to the reliability of the NHS and freight, is included in the VTrans2040 Vision, Goals & Objectives, and Guiding Principles as noted below:

- Guiding Principle 4: Consider Operational Improvements and Demand Management First
 - Maximize capacity of the transportation network through increased use of technology and operational improvements as well as managing demand for the system before investing in major capacity expansions.
- Goal A – Economic Competitiveness and Prosperity: invest 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 B – Accessible and Connected Places: increase the opportunities for people and businesses to efficiently access jobs, services, activity centers, and distribution hubs.
 - Objectives:
 - Reduce average peak-period travel times in metropolitan areas.
 - Reduce average daily trip lengths in metropolitan areas.
 - Increase the accessibility to jobs via transit, walking and driving in metropolitan areas.

Additionally, the Virginia Freight Element (VFE), a component of VTrans2040, discusses freight system trends, needs, and issues. The VFE also includes freight policies, strategies, and performance measures that guide Virginia's freight-related investment decisions.

Projects included in the STIP are directly linked to the Highway System Performance objectives outlined in VTrans2040 and associated needs analysis, and the VFE through the strategies and actions that are priorities in Virginia.

Funding for Highway System Performance Projects

SMART SCALE, Virginia's data-driven prioritization process for funding transportation projects, considers the potential of a project to improve reliability. In order to be considered for SMART SCALE, a project must first meet a need identified in VTrans2040, thus strengthening the connection between the planning and programming processes. Congestion mitigation, safety, accessibility, economic development, environment, and land use are the factors used to score SMART SCALE projects. Freight considerations are included in the economic development factor.

The FAST Act established a National Highway Freight Program, including a freight-specific funding program to highlight the focus on freight transportation needs. Projects eligible for National Highway Freight Program (NHFP) funding must contribute to the efficient movement of freight on the National Highway Freight Network (NHFN) and be included in the VFE. VDOT uses NHFP funding to construct freight beneficial projects identified through the SMART SCALE process.

SMART SCALE screening and scoring results, along with public feedback and CTB guidance, are used to develop the SYIP.

Other projects selected for funding are subject to program specific prioritization processes approved by the CTB. All funding (federal, state, and other sources) for transportation projects are allocated to projects in the CTB approved SYIP.

How do Highway System Performance Projects Get Selected for Inclusion in the STIP?

As noted above, the funding for all transportation projects, including funding for projects to meet Virginia's NHS system performance and freight movement targets is allocated to projects in the CTB approved SYIP, and is consistent with VTrans2040 and the VFE. Since the SYIP is the foundation of the STIP, the program of projects in the STIP demonstrates support to achieve Virginia's NHS and Freight Reliability performance objectives and targets.