



State of New Jersey

DEPARTMENT OF TRANSPORTATION
P.O. Box 600
Trenton, New Jersey 08625-0600

SEP 19 2018

PHILIP D. MURPHY
Governor

DIANE GUTIERREZ-SCACCETTI
Commissioner

SHEILA Y. OLIVER
Lt. Governor

September 14, 2018

Robert Clark, Division Administrator
Federal Highway Administration, New Jersey
Division 840 Bear Tavern Road, Suite 202
West Trenton, NJ 08628

Dear Mr. Clark:

As you know, the New Jersey Department of Transportation (NJDOT) is required to provide Safety (PM1), Infrastructure (PM2) and System Performance (PM3) targets to FHWA. In my April 27, 2018 letter to you, I provided the Safety targets. In a companion letter to this one, I will provide the System Performance targets. With this letter, I am pleased to provide New Jersey's Infrastructure Targets, as required by MAP-21 and subsequently the FAST Act. The NJDOT intends to include these targets in New Jersey's Initial Performance Report due by October 1, 2018. The Infrastructure performance category includes targets for pavement condition and bridge condition. Each of these performance areas is discussed separately below.

Pavement

The federal Performance Management (PM2) rule for pavement established national measures and metrics for NHS pavements, which differ from the more stringent ones that NJDOT had developed a decade ago to manage its network of pavements on the State Highway System (SHS). Although historically NJDOT has only managed the SHS, the PM2 rule now requires NJDOT to report and manage performance of the NHS, almost 40% of which is owned by others including authorities, counties and municipalities. Additionally, the federal baseline pavement condition had to be estimated, since the new data collection requirements to support the new measures did not take effect until January of 2018. This made target setting for the NHS based on federal measures very challenging, however with the benefit of the recent results of the Federal analysis of our 2018 NHS pavement data submission, some uncertainty has been alleviated. Understanding that the implementation of the new national pavement measures

would require a significant effort for all states, FHWA will not assess progress toward targets at the first mid-performance period review in two years. The rule allows state DOTs to revise their 4-year targets at that time, which we will consider. For these reasons, the Department has chosen conservative initial targets for their NHS pavement with the understanding that even as early as the mid-period performance review, the Department, as well as the other NHS owners will have better data as well as more experience and perspective regarding target setting.

Process

The federal PM rule directs that states use the best available data to perform the required analyses. NJDOT used its pavement management system and its own measures, metrics and budget information to predict performance on the State Highway System, where it has significant experience with performance management and forecasting. A correlation analysis was developed and applied to the State Highway System performance to try to predict corresponding performance on the NHS using the Federal measures and metrics. The results of this correlation analysis showed a gradually declining trend on both the Interstate and non-Interstate NHS pavements at the current funding level. Since comprehensive quantitative data regarding current and future investment levels on the NHS by other owners is not readily available, a survey was sent to all owners requesting information on past and future expenditures on NHS routes as well as qualitative information regarding future funding and pavement performance. This information was used to help validate the results of the correlation analysis.

Coordination

In addition to the survey outreach to the other 82 NHS pavement owners, a detailed description of the pavement target setting process and the recommended pavement targets was emailed to all owners and MPOs for review and comments. Coordination with owners and MPOs will continue as this process is refined. The Department will develop additional data reporting and analysis tools and the owners and MPOs will become more familiar with their roles in performance management resulting in increased coordination in the future.

To satisfy 23 CFR 490.307 requirements, the following are the 2018 targets set by New Jersey Department of Transportation for Pavement Performance Measures:

Performance Measure	Estimated Baseline	2 year Target *	4 year Target
Percentage of interstate pavement in Good condition	61.25%		50%
Percentage of interstate pavement in Poor condition	1.01%		2.5%
Percentage of non-interstate NHS pavement in Good condition	32.45%	25%	25%
Percentage of non-interstate NHS pavement in Poor condition	2.38%	2.5%	2.5%

*2 year targets for Interstates are not required for the first performance period

Bridge

The federal Performance Management rule (23 CFR 490) also established national measures and metrics for NHS bridges. We have historically collected National Bridge Inspection Standards (NBIS) bridge condition data, and reported this data to the FHWA, on almost all NBIS bridges statewide with the exception of two categories - Federally owned bridges and the border bridges reported by other States. As part of the target setting process we are required to conform to the following, which includes all NHS bridges in these two additional categories of bridges:

"Performance measures and targets cover 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 (23 CFR 490.403 and 23 CFR 490.41 l(a))."

Process

NJDOT will be utilizing the best available data to perform the required analyses for this and subsequent target settings. After this initial effort, which was mostly manual, we intend to utilize AASHTOware BrM (Bridge Management) software to perform the data analysis and to perform deterioration modeling in order to predict system performance over time. Various versions of this software is in use by over 40 other States. The process for establishing NHS bridge targets corresponds with the approach stated above for NHS pavements concerning target setting for the initial performance period. The rule allows state DOTs to revise their 4-year targets at the time of Mid Performance Period Progress Report, which we will explore as data analysis capabilities will have improved. For these reasons, the Department has chosen conservative initial targets for the NHS bridge inventory, with the understanding that even as early as the Mid Performance Period Progress Report the Department, as well as the other owners, will have much more experience and perspective regarding target setting.

Coordination

With 36 separate NHS NBIS bridge owners (55 separate NBIS bridge owners overall) coordination with the other NHS owners and MPOs will continue as the process, data and analytical tools are refined. The NJDOT has typically reported on 56.3 million sq. ft. (MSF) of NHS bridge deck area, of which 29.1 MSF is state maintained. When the federally owned bridges and the border bridges are included, the total increases to 60.6 MSF, which means that the NJDOT is directly responsible for only 48% of the total NHS square footage statewide. This greatly complicates our ability to develop targets for the statewide NHS inventory. For the initial target setting we have set targets based on the analysis we have performed on NJDOT bridges, including determining the likely delivery dates of projects in the pipeline as well as near-term uncommitted bridge funding, as well as the trends seen in the condition of the bridges for the other bridge owners.

To satisfy 23 CFR 490.407 requirements, the following are the 2018 baseline numbers, as well as the 2020 and 2022 targets set by the New Jersey Department of Transportation for Bridge

Performance Measures:

Performance Measure	Units	Baseline	2year Target	4year Target
Percentage of NHS bridges in Good condition	Percentage of NHS bridges by deck area classified as in Good condition	20.7%	19.4%	18.6%
Percentage of NHS bridges in Poor condition	Percentage of NHS bridges by deck area classified as in Poor condition	6.5%	6.5%	6.5%

If you have any questions, please contact my office.

Sincerely,



Diane Gutierrez-Scaccetti
Commissioner

bc M. Ameen, Acting Executive Director, NJTPA
B. Seymour, Executive Director, DVRPC
J. Marandino, Executive Director, SJTPO