

2023 PM2 – Pavement and Bridge Condition Statewide Performance Measure Targets Update

Background

In January 2017 FHWA published the Pavement and Bridge Condition Performance Measures Final Rule. This rule, which is also referred to as the PM2 rule, established six performance measures for pavement and bridge condition on interstate and non-interstate National Highway System (NHS) roads. The PM2 measures are:

- Percent of Interstate Pavements in Good Condition
- Percent of Interstate Pavements in Poor Condition
- Percent of Non-Interstate NHS Pavements in Good Condition
- Percent of Non-Interstate NHS Pavements in Poor Condition
- Percent of NHS bridges (by deck area) in Good Condition
- Percent of NHS bridges (by deck area) in Poor Condition

The pavement condition measures represent the percentage of lane-miles on the Interstate and non-Interstate National Highway System (NHS) that are in good or poor condition using five pavement condition metrics: International Roughness Index (IRI); cracking percent; rutting; faulting; and Present Serviceability Rating (PSR). FHWA set a threshold for each metric to establish good, fair, or poor condition. Each section of pavement is classified as being in good condition or poor condition based upon the ratings of the metrics applicable to that pavement type. Pavement sections that are not in good or poor condition are classified as fair.

The bridge condition measures represent the percentage of bridges, by deck area, on the NHS that are in good condition or poor condition. The condition of each bridge is evaluated by assessing four bridge components: deck, superstructure, substructure, and culverts. The Final Rule created a metric rating threshold for each component to establish good, fair, or poor condition. If the lowest rating of the four metrics is greater than or equal to seven, the structure is classified as good. If the lowest rating is less than or equal to four, the structure is classified as poor. If the lowest rating is five or six, it is classified as fair.

Trends

The table below lists the newly established New York State (NYS) performance targets for the baseline year, the 2-year, and 4-year reporting periods. The table also includes the most recent conditions in the CDTC planning area for comparison purposes. *Please Note that due to available data, CDTC current pavement conditions (2021) are based on NYSDOT surface score conditions and not the federal performance metrics (i.e., IRI, Rutting, Cracking, Faulting, etc.).*

Performance Measures	CDTC Conditions*	New York State Baseline 2022	New York State Proposed 2-year Target	New York State Proposed 4-year Target
Percent of Interstate pavements in good condition ¹	32.2%	45.3%	53.2%	54.3%
Percent of Interstate pavements in poor condition ¹	0.4%	1.1%	1.4%	1.7%
Percent of non-Interstate NHS pavements in good condition ¹	24.4%	18.9%	22.3%	20.7%
Percent of non-Interstate NHS pavements in poor condition ¹	11.4%	7.6%	9.3%	10.9%
Percent of NHS bridges (by deck area) in good condition ²	21.1%	25.3%	24.1%	21.1%
Percent of NHS bridges (by deck area) in poor condition ²	5.9%	11.3%	12.5%	12.8%

¹ Interstate and NHS Non-Interstate pavement data was collected from the 2021 NYSDOT Pavement Condition Inventory.

² NHS Bridge data was collected from the 2022 FHWA National Bridge Inventory (NBI) condition database.

* Please Note that due to available data, CDTC current pavement conditions (2021) are based on NYSDOT surface score conditions and not the federal performance metrics (i.e., IRI, Rutting, Cracking, Faulting, etc.)

Recommendation

NYSDOT established the statewide Pavement and Bridge condition performance measure targets on December 16, 2022. Per Federal requirements, CDTC has 180 days to support the NYSDOT targets or establish its own targets. CDTC Staff recommends supporting the 2-year and 4-year statewide Pavement and Bridge condition performance measure targets established by NYSDOT as follows:

- Percent of Interstate Pavements in Good Condition
 - 2-year target – 53.2%
 - 4-year target – 54.3%
- Percent of Interstate Pavements in Poor Condition
 - 2-year target – 1.4%
 - 4-year target – 1.7%
- Percent of Non-Interstate NHS Pavements in Good Condition
 - 2-year target – 22.3%
 - 4-year target – 20.7%
- Percent of Non-Interstate NHS Pavements in Poor Condition
 - 2-year target – 9.3%
 - 4-year target – 10.9%
- Percent of NHS bridges (by deck area) in Good Condition
 - 2-year target – 24.1%
 - 4-year target – 21.1%
- Percent of NHS bridges (by deck area) in Poor Condition
 - 2-year target – 12.5%
 - 4-year target – 12.8%