

# BRIDGE PERFORMANCE MEASURES

NYS National Highway System  
NYS Department of Transportation, Office of Structures

May 2018

## Overview

On January 18, 2017, the Federal Highway Administration (FHWA) published the final rules that established regulations to assess the condition and performance of bridges on the NHS (23 CFR Part 490 “Subpart D—National Performance Management Measures for Assessing Bridge Condition”). This was issued to implement performance provisions established by the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21) and the Fixing America’s Surface Transportation (FAST) Act.

## Key Points

- Regulation applies to highway bridges carrying the NHS, which includes on- and off- ramps connected to the NHS and NHS border bridges.
- The regulation defines three classes for bridge condition assessment—percent of deck area of bridges in good, fair and poor conditions using the lowest of the four NBI ratings (Deck, Superstructure, Substructure and Culverts) on a 0-9 Scale:
  - Good when the lowest rating is  $\geq 7$
  - Fair if lowest rating is 5 or 6
  - Poor if lowest rating is  $\leq 4$

## Target Setting

- Establish targets for:
  - % NHS Bridge by Deck Area in Good Condition.
  - % NHS Bridge by Deck Area in Poor Condition.
- Must establish statewide 2-year and 4- year targets by May 20, 2018 and report targets by October 1, 2018, in the Baseline Performance Period Report.
- May adjust 4-year targets at Mid Performance Period Progress Report (October 1, 2020).

## Condition-Based Performance Measures

Requires State DOTs to maintain bridges so that the percentage of the deck area of bridges classified as Structurally Deficient (SD) does not exceed 10%.

## Bridge Analysis Methodology

- Four-year analysis of all NHS bridges in the State.
- Bridge condition data baseline September 7, 2017.
- Includes programmed projects as of December 2, 2017 and tool selected projects with remaining budget.

## MPO Requirements

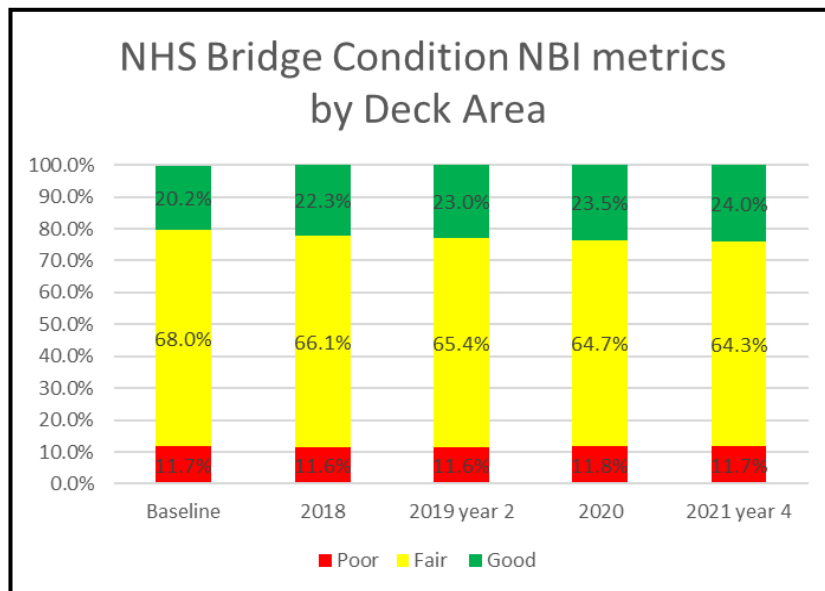
- Support the relevant State DOT 4-year target or
- Establish their own target by 180 days after the State DOT target is established.

## Penalties

- Condition-Based: If for 3 consecutive years more than 10.0% of a State DOT’s NHS bridges’ total deck area is classified as Poor, the State DOT must obligate and set aside National Highway Performance Program (NHPP) funds for eligible projects on bridges on the NHS. This means that NYSDOT must set aside NHPP funds to be used exclusively for eligible bridge projects in the NHS before we can use the funding flexibility of the FAST Act.
- Target Setting: If significant Progress is not made for either target established for the NHS bridge condition measures, then the State DOT shall document the actions it will take to achieve NHS bridge condition target.

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## NHS Bridges by Owner

Owner	Deck Area (SF)	% Good	% Fair	% Poor
NYSDOT	57,579,039	28.7	59.4	11.9
Authorities & Commissions	23,352,906	9.4	79.4	11.2
Municipalities	10,637,953	19.4	67.9	12.7
Other	293,361	72.6	24.4	3
<b>Total</b>	<b>91,863,259</b>	<b>20.2</b>	<b>68.0</b>	<b>11.7</b>

## Initial Targets

NHS Bridge Condition Metrics by Deck Area			
Metric	Baseline	Year 2	Year 4
Good	20.2%	23.0%	24.0%
Poor	11.7%	11.6%	11.7%