

Nashua Regional Planning Commission Pavement and Bridge Condition Performance Targets

In 2012 Congress passed the surface transportation legislation known as MAP-21, which introduced the requirement that states and MPOs use performance measures to work towards specific goals and targets. Subsequent transportation legislation, the FAST Act, modified the time frames for these requirements. A series of final rules by FHWA and FT provided further definition to the required performance targets.

The Pavement & Bridge Condition (PM2) targets include the following federally-required performance measures:

- Percentage of pavements on the Interstate System in Good condition;
- Percentage of pavements on the Interstate System in Poor condition;
- Percentage of pavements on the non-Interstate National Highway System in Good condition;
- Percentage of pavements on the non-Interstate National Highway System in Poor condition;
- Percentage of National Highway System bridges classified as in Good condition; and
- Percentage of National Highway System bridges classified as in Poor condition.

MPOs have the option of adopting statewide targets as detailed by NHDOT in a State Performance Report. The applicable targets for the Nashua Region MPO are shown below, with data developed by NHDOT shown in green that provide the basis for setting these targets. For each performance measure NHDOT has provided a cushion to allow some slippage in performance and still meet the target. For example, non-interstate highways in good condition now constitute 70% of the total but could fall back to 65% and still meet the adopted target.

NHDOT STATEWIDE PERFORMANCE TARGETS

<u>PM2</u>		Baseline Estimate	2-Year Target	4-Year Target
Pavement Condition	Non-Interstate NHS: Good	70.1%	65.0%	65.0%
	Non-Interstate NHS: Poor	9.8%	12.0%	12.0%
Bridge Condition	NHS: Good	57.0%	57.0%	57.0%
	NHS: Poor	7.0%	7.0%	7.0%

However, MPOs were made aware of federal regulations that make adoption of the statewide target for NHS pavement problematic. The pavement measures are defined as the overall roadway condition based on several factors, including the International Roughness Index (IRI), cracking, rutting and others. State DOTs have some flexibility and may use the simple IRI measure for the first reporting period to allow them time to collect any additional data needed for a more thorough analysis. MPOs are required to use the combined factors even for the initial performance period.

The PM conditions for the non-interstate NHS network statewide and for the NRPC region are shown below. The statewide measures are very different than those obtained using the IRI-only factor. The Good category changes from 70% to 44% and Poor from 10% to 3%. Under the combined measures, NRPC NHS roadways stand at 50% Good and 4.5% Poor.

Given the difference in results using different pavement performance factors, NRPC must adopt its own NHS pavement target. At its meeting of September 19, 2018, the NRPC MPO Policy Committee adopted targets of 50% Good and 5% Poor.

HPMS PAVEMENT DATA MANDATED FOR MPO PM2

Non-Interstate NHS - NHDOT

	Miles 2015 #	2015%	Miles 2016 #	2016%	Miles 2017 #	2017%
Fair	1,331	77.6%	1,225	71.1%	1,331	53.0%
Good	372	21.7%	472	27.4%	372	44.3%
Poor	13	0.8%	25	1.5%	13	2.7%
Total	1,716		1,722		1,716	

Non-Interstate NHS - NRPC

	Miles 2015 #	2015%	Miles 2016 #	2016%	Miles 2017 #	2017%
Fair	162	73.8%	140	63.3%	124	45.5%
Good	55	25.0%	74	33.1%	136	50.0%
Poor	3	1.2%	8	3.6%	12	4.5%
Total	219		222		273	

For bridge conditions we do not have a problem in meeting the statewide targets using the comparable measures. As shown below, bridges score more favorable in the NRPC region than statewide. However, as this is newly processed data without having undergone review at a disaggregated level, the NRPC MPO Policy Committee adopted the statewide target of 57% Good and 7% Poor.

BRIDGE CONDITION DATA BASED ON DATA MANDATED FOR MPO PM2

Bridge - NHDOT

	Sq ft 2015 #	2015%	Sq ft 2016 #	2016%	Sq ft 2017 #	2017%
Fair	2,412,867	34.7%	2,392,748	34.4%	2,485,887	35.7%
Good	4,055,999	58.3%	3,981,302	57.2%	3,975,619	57.1%
Poor	424,633	6.1%	556,353	8.0%	498,190	7.2%
Total	6,893,499		6,930,403		6,959,697	

Bridge -NRPC

	Sq. ft 2015 #	2015%	Sq. ft 2016 #	2016%	Sq. ft 2017 #	2017%
Fair	93,707	15.2%	85,198	13.9%	81,942	13.3%
Good	521,803	84.8%	521,318	84.8%	521,318	84.8%
Poor	0	--	8,510	1.4%	11,765	1.9%
Total	615,510		615,026		615,026	

It should be noted that although Performance Measures and Targets are mandated by federal law for States and MPOs, there is no penalty or mandated action that would be triggered should future data indicate targets are not being met. Prolonged periods of not meeting targets could result in States being required to target highway funds to remedy deficient performance.