

From: Ari Del Rosario
Date: February 12, 2021
Re: Technical Report on FHWA National Performance Management Measure 2 – Pavement Condition (Subpart C) & Bridge Condition (Subpart D) MN

Overview

On December 4, 2015, the Fixing America's Surface Transportation (FAST) Act was passed. This law continues the performance measure methodology established in MAP-21 with further clarification and the establishment of performance measure targets. These revisions include the establishment of quantifiable targets for each performance measure identified in §490 Subpart C to assess NHS pavement condition and §490 Subpart D to assess NHS bridge condition.

As part of the target establishment, Metro COG must (1) report their established targets to the respective State DOTs (i.e. resolutions) and (2) report the baseline condition/performance and progress toward the achievement of the targets in the system performance report in the LRTP.

§490 Subpart C

Per §490 Subpart C every four years each State DOT is required by Federal Highway Administration (FHWA) to establish four (4) pavement condition performance measure targets. The State DOTs also need to report annually on each of these targets. Below are the performance measure targets for pavement conditions:

- Percent of Interstate Pavement in Good Condition
- Percent of Interstate Pavement in Poor Condition
- Percent of Non-interstate NHS Pavement in Good Condition
- Percent of Non-interstate NHS Pavement in Poor Condition

Each jurisdiction assesses a variety of roadway factors for each segment to calculate the pavement condition. Then those assessments are combined and an output of a standard Pavement Condition Index (PCI) is produced. The following are PCI ratings and their associated range of scores:

Excellent	86-100
Good	71-85
Fair	56-70
Poor	0-55

§490 Subpart D

Per §490 Subpart D every four years each State DOT is required by Federal Highway Administration (FHWA) to establish two (2) bridge condition performance measure targets. The State DOTs also need to report annually on each of these targets. Below are the performance measure targets for bridge conditions:

- Percent of NHS Bridges in Good Condition
- Percent of NHS Bridges in Poor Condition

Each bridge on the NHS system is assessed annually and the score is entered into the National Bridge Inventory (NBI). The score is based on the inspection ratings of the bridge's deck, superstructure, and substructure. Each bridge is given an overall rating based on the lowest score of the three elements. The scores are based on the following ranges:

Good	7-9
Fair	5-6
Poor	0-4

Data

§490 Subpart C – Pavement Condition Data

Within each portion of the MPA the pavement condition has been assessed. The following table illustrates the PM2 – pavement conditions within the MN portion of the MPA and the associated State DOT set performance targets.

	MN Portion of MPA	MnDOT set Targets
% of Interstate Pavement in Good Condition	74.24%	55%
% of Interstate Pavement in Poor Condition	0%	2%
% of Non-interstate NHS Pavement in Good Condition	66.92%	50%
% of Non-interstate NHS Pavement in Poor Condition	0.44%	4%

* Cells filled in green mean that the relative portion of the MPA meets or exceeds the associated State DOT's set targets.

The type of target depends on how the measurement is determined to meet or not meet the target. To meet a good condition target, the percentage needs to be equal to or greater than the target percentage. In order to meet a poor condition target, the percentage needs to be less than or equal to the target percentage.

§490 Subpart D – Bridge Condition Data

Within the MN portion of the MPA the bridge condition has been assessed. The following table illustrates the PM2 – bridge conditions within MN's portion of the MPA and the associated State DOT set performance targets.

	MN Portion of MPA	MnDOT set Targets
% of NHS Bridges in Good Condition	11.87%	50%
% of NHS Bridges in Poor Condition	5.97%	4%

* Cells filled in pink mean that the relative portion of the MPA does not meet the associated State DOT set targets.

The type of target depends on how the measurement is determined to meet or not meet the target. To meet a good condition target, the percentage needs to be equal to or greater than the target percentage. In order to meet a poor condition target, the percentage needs to be less than or equal to the target percentage.

Penalties

There are no penalties for not meeting the “good condition” targets. Although, if a “poor condition” percentage is exceeded (i.e. not met), at the State DOT level, the penalty is that according to 23 CFR 490.413 “(1) during the fiscal year following the determination, the State DOT shall obligate and set aside in an amount equal to 50 percent of funds apportioned to such State for fiscal year 2009 to carry out 23 U.S.C. 144 (as in effect the day before enactment of MAP-21) from amounts apportioned to a State for a fiscal year under 23 U.S.C. 104(b)(1) only for eligible projects on bridges on the NHS. (2) The set-aside and obligation requirement for bridges on the NHS in a State in paragraph (a) of this section for a fiscal year shall remain in effect for each subsequent fiscal year until such time as less than 10 percent of the total deck area of bridges in the State on the NHS is located on bridges that have been classified as Structurally Deficient as determined by FHWA.”

Recommendation

For PM2 – Pavement and Bridge Conditions, Metro COG staff recommends the adoption of the respective State DOT performance measure targets for calendar year 2018-2021.

The MPA is meeting and exceeding the targets related to pavement condition. Metro COG funds some of the Non-Interstate NHS roadways and can plan and maintain those roadways through the LRTP, TIP, and UPWP. The Interstate roadways are planned and maintained by the respective State DOTs, so Metro COG will support the planning and maintenance efforts in order to achieve those associated targets.

In regards to bridge conditions, Metro COG does not fund the maintenance of the bridges on the NHS. Thus, Metro COG will support the planning and maintenance efforts of the respective State DOTs in order for those targets to be met.

At their February 18, 2021 meeting, the Policy Board approved the MnDOT 2021 Pavement and Bridge Performance Measure targets for the Minnesota portion of the MPO, and were adopted with the signing the enclosed resolution.

RESOLUTION 2021-R003
OF THE FARGO-MOORHEAD
METROPOLITAN COUNCIL OF GOVERNMENTS

Adopting NHS Pavement and Bridge Condition Performance Targets

Whereas, the U.S. Department of Transportation established performance measures for pavement and bridge condition on the National Highway System as detailed in 23 CFR 490, Subpart C, National Performance Measures for Assessing Pavement Condition, and 23 CFR 490, Subpart D, National Performance Measures for Assessing Bridge Condition;

Whereas, the Minnesota Department of Transportation (MnDOT) established performance targets for each of the four NHS pavement condition performance measures in accordance with 23 CFR 490.307(a); and

Whereas, MnDOT established performance targets for each of the two NHS bridge condition performance measures in accordance with 23 CFR 490.407(c); and


Whereas, metropolitan planning organizations (MPOs) must establish performance targets for each of the NHS pavement and bridge condition performance measures; and

Whereas, MPOs establish NHS pavement and bridge condition targets by either agreeing to plan and program projects so that they contribute to the accomplishment of the State DOT NHS pavement or bridge condition target or commit to a quantifiable target for the metropolitan planning area;

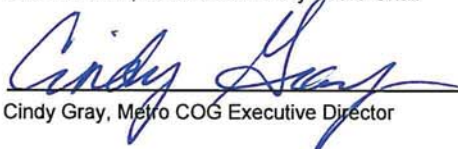
Now, therefore, be it resolved, that the Fargo-Moorhead Metropolitan Council of Governments agrees to plan and program projects so that the projects contribute to the accomplishment of MnDOT's NHS pavement and bridge condition targets for the calendar years of 2018 through 2021:

Percentage of NHS Bridges in Good Condition: 35%;
Percentage of NHS Bridges in Poor Condition: 4%;
Percentage of Interstate Pavement in Good Condition: 55%;
Percentage of Interstate Pavement in Poor Condition: 2%;
Percentage of Non-Interstate Pavement in Good Condition: 50%;
Percentage of Non-Interstate Pavement in Poor Condition; 4%.

Fargo-Moorhead Metropolitan Council of Governments



Dave Fenelon, Metro COG Policy Board Chair



Cindy Gray, Metro COG Executive Director

Date: _____

2/18/21

From: Ari Del Rosario
Date: February 12, 2021
Re: Technical Report on FHWA National Performance Management Measure 2 – Pavement Condition (Subpart C) & Bridge Condition (Subpart D) ND

Overview

On December 4, 2015, the Fixing America's Surface Transportation (FAST) Act was passed. This law continues the performance measure methodology established in MAP-21 with further clarification and the establishment of performance measure targets. These revisions include the establishment of quantifiable targets for each performance measure identified in §490 Subpart C to assess NHS pavement condition and §490 Subpart D to assess NHS bridge condition.

As part of the target establishment, Metro COG must (1) report their established targets to the respective State DOTs (i.e. resolutions) and (2) report the baseline condition/performance and progress toward the achievement of the targets in the system performance report in the LRTP.

§490 Subpart C

Per §490 Subpart C every four years each State DOT is required by Federal Highway Administration (FHWA) to establish four (4) pavement condition performance measure targets. The State DOTs also need to report annually on each of these targets. Below are the performance measure targets for pavement conditions:

- Percent of Interstate Pavement in Good Condition
- Percent of Interstate Pavement in Poor Condition
- Percent of Non-interstate NHS Pavement in Good Condition
- Percent of Non-interstate NHS Pavement in Poor Condition

Each jurisdiction assesses a variety of roadway factors for each segment to calculate the pavement condition. Then those assessments are combined and an output of a standard Pavement Condition Index (PCI) is produced. The following are PCI ratings and their associated range of scores:

Excellent	86-100
Good	71-85
Fair	56-70
Poor	0-55

§490 Subpart D

Per §490 Subpart D every four years each State DOT is required by Federal Highway Administration (FHWA) to establish two (2) bridge condition performance measure targets. The State DOTs also need to report annually on each of these targets. Below are the performance measure targets for bridge conditions:

- Percent of NHS Bridges in Good Condition
- Percent of NHS Bridges in Poor Condition

Each bridge on the NHS system is assessed annually and the score is entered into the National Bridge Inventory (NBI). The score is based on the inspection ratings of the bridge's deck, superstructure, and substructure. Each bridge is given an overall rating based on the lowest score of the three elements. The scores are based on the following ranges:

Good	7-9
Fair	5-6
Poor	0-4

Data

§490 Subpart C – Pavement Condition Data

Within each portion of the MPA the pavement condition has been assessed. The following table illustrates the PM2 – pavement conditions within the ND portion of the MPA and the associated State DOT set performance targets.

	ND Portion of MPA	NDDOT set Targets
% of Interstate Pavement in Good Condition	78.78%	75.6%
% of Interstate Pavement in Poor Condition	0%	3%
% of Non-interstate NHS Pavement in Good Condition	13.86%	58.3%
% of Non-interstate NHS Pavement in Poor Condition	1%	3%

* Cells filled in green mean that the relative portion of the MPA meets or exceeds the associated State DOT's set targets. Cells filled in pink mean that the relative portion of the MPA does not meet the associated State DOT set targets.

The type of target depends on how the measurement is determined to meet or not meet the target. To meet a good condition target, the percentage needs to be equal to or greater than the target percentage. In order to meet a poor condition target, the percentage needs to be less than or equal to the target percentage.

§490 Subpart D – Bridge Condition Data

Within the ND portion of the MPA the bridge condition has been assessed. The following table illustrates the PM2 – bridge conditions within ND's portion of the MPA and the associated State DOT set performance targets.

	ND Portion of MPA	NDDOT set Targets
% of NHS Bridges in Good Condition	59.57%	60%
% of NHS Bridges in Poor Condition	0%	4%

*Cells filled in green mean that the relative portion of the MPA meets or exceeds the associated State DOT's set targets.

The type of target depends on how the measurement is determined to meet or not meet the target. To meet a good condition target, the percentage needs to be equal to or greater than the target percentage. In order to meet a poor condition target, the percentage needs to be less than or equal to the target percentage.

Penalties

There are no penalties for not meeting the “good condition” targets. Although, if a “poor condition” percentage is exceeded (i.e. not met), at the State DOT level, the penalty is that according to 23 CFR 490.413 “(1) during the fiscal year following the determination, the State DOT shall obligate and set aside in an amount equal to 50 percent of funds apportioned to such State for fiscal year 2009 to carry out 23 U.S.C. 144 (as in effect the day before enactment of MAP-21) from amounts apportioned to a State for a fiscal year under 23 U.S.C. 104(b)(1) only for eligible projects on bridges on the NHS. (2) The set-aside and obligation requirement for bridges on the NHS in a State in paragraph (a) of this section for a fiscal year shall remain in effect for each subsequent fiscal year until such time as less than 10 percent of the total deck area of bridges in the State on the NHS is located on bridges that have been classified as Structurally Deficient as determined by FHWA.”

Recommendation

For PM2 – Pavement and Bridge Conditions, Metro COG staff recommends the adoption of the respective State DOT performance measure targets for calendar year 2018-2021.

The MPA is meeting and exceeding most targets related to pavement condition. Metro COG funds some of the Non-Interstate NHS roadways and can plan and maintain those roadways through the LRTP, TIP, and UPWP. The Interstate roadways are planned and maintained by the respective State DOTs, so Metro COG will support the planning and maintenance efforts in order to achieve those associated targets.

In regards to bridge conditions, Metro COG does not fund the maintenance of the bridges on the NHS. Thus, Metro COG will support the planning and maintenance efforts of the respective State DOTs in order for those targets to be met.

At their February 18, 2021 meeting, the Policy Board approved the NDDOT 2021 Pavement and Bridge Performance Measure targets for the North Dakota portion of the MPO, and were adopted with the signing the enclosed resolution.

RESOLUTION 2021-R004
OF THE FARGO-MOORHEAD
METROPOLITAN COUNCIL OF GOVERNMENTS

Adopting NHS Pavement and Bridge Condition Performance Targets

Whereas, the U.S. Department of Transportation established performance measures for pavement and bridge condition on the National Highway System as detailed in 23 CFR 490, Subpart C, National Performance Measures for Assessing Pavement Condition, and 23 CFR 490, Subpart D, National Performance Measures for Assessing Bridge Condition;

Whereas, the North Dakota Department of Transportation (NDDOT) established performance targets for each of the four NHS pavement condition performance measures in accordance with 23 CFR 490.307(a); and

Whereas, NDDOT established performance targets for each of the two NHS bridge condition performance measures in accordance with 23 CFR 490.407(c); and

Whereas, metropolitan planning organizations (MPOs) must establish performance targets for each of the NHS pavement and bridge condition performance measures; and

Whereas, MPOs establish NHS pavement and bridge condition targets by either agreeing to plan and program projects so that they contribute to the accomplishment of the State DOT NHS pavement or bridge condition target or commit to a quantifiable target for the metropolitan planning area;

Now, therefore, be it resolved, that the Fargo-Moorhead Metropolitan Council of Governments agrees to plan and program projects so that the projects contribute to the accomplishment of NDDOT's NHS pavement and bridge condition targets for the calendar years of 2018-2021:

Percentage of NHS Bridges in Good Condition: 60%;
Percentage of NHS Bridges in Poor Condition; 4%;
Percentage of Interstate Pavement in Good Condition: 75.6%;
Percentage of Interstate Pavement in Poor Condition: 3%;
Percentage of Non-Interstate Pavement in Good Condition: 58.3%;
Percentage of Non-Interstate Pavement in Poor Condition; 3%.

Fargo-Moorhead Metropolitan Council of Governments



Dave Fenelon, Metro COG Policy Board Chair



Cindy Gray, Metro COG Executive Director

Date: 2/18/2021