

To: Transportation Technical Committee
From: Karissa Pavek
Date: February 14, 2025
Re: Performance Measure 3 (PM 3) System Performance & Freight
Movement – 2025 Minnesota

Overview

On November 14, 2021, President Biden signed the Infrastructure Investment and Jobs Act (IIJA) into law. This continued the performance management requirements that aimed to increase investments of Federal transportation funds that focus on national transportation goals. These revisions include the establishment of quantifiable targets for each performance measure identified in §490 Subpart E to assess performance on the National Highway System (NHS) and §490 Subpart F to assess freight movement on the Interstate.

As part of the Mid Performance Period, Metro COG is required by the Federal Highway Administration (FHWA) to:

1. Report adjusted targets for the respective State DOT (resolutions) and/or,
2. Report the baseline condition/performance and progress toward the achievement of the targets in the system performance report in the long-range transportation plan (LRTP) also known as the Metropolitan Transportation Plan (MTP) – Metro 2050: Transportation Moving Ahead.

§490 Subpart E – Travel Reliability Performance Measure

- Percent of person-miles traveled on the Interstate that are reliable
- Percent of person-miles traveled on the Non-Interstate NHS that are reliable

FHWA requires the use of National Performance Management Research Data Set (NPMRDS) to calculate the travel reliability for each roadway segment. NPMRDS uses passive travel data (probe or cellphone data) to anonymously record how people travel and at what speed they travel on various roadway

segments. The NPMRDS provides a monthly archive of probe data that includes the average travel times that are reported every 5 minutes when data is available on the NHS.

NPMRDS separates time segments. These segments are Morning Weekday, Midday Weekday, Afternoon Weekday and Weekends. Using the NPMRDS probe data, the Level of Travel Time Reliability (LOTTR) can be calculated for four (4) analysis time periods using the following ratio:

$$\frac{\text{Longer Travel Times} - 80\text{th percentile of travel times}}{\text{Normal Travel Times} - 50\text{th percentile of travel times}} = \text{Level of Travel Time Reliability (LOTTR)}$$

§490 Subpart F – Travel Time Reliability Index

Each four-year period State Department of Transportation (DOT) is required by FHWA to establish travel reliability performance measure targets. Travel time reliability is defined by the consistency or dependability of travel times from day to day or across different times segments. The NPMRDS provides truck travel times on the interstate system in 15-minute increments.

- Truck Travel Time Reliability Index
 - Good (9 – 7), Fair (6 – 5), and Poor (4 – 0)

The State DOTs also need to report annually on each of the targets. Below are the performance measure targets for travel reliability:

Targets and Data

§490 Subpart E – Travel Reliability Performance Measure

With in the Minnesota portion of our MPA the Travel Time Reliability has been assessed and illustrated in the following table.



Minnesota PM 3	MnDOT Targets for 2023 and 2025	State Actual Performance	MPO Actual Performance
Percent Reliable Person Miles on the Interstate	82%	91.2%	100%
Percent Reliable Person Miles on the Non-Interstate NHS	90%	93.2%	99.3%

Travel time reliability is about consistency, meaning the higher the percentage of reliability the more often the travel time is the same. For example, it takes a person 15 minutes to travel from point A to point B. If the travel time index is 90%, it will take 15 minutes to travel 9 times out of 10. The 10th time will take longer than 15 minutes due to various traffic delays.

§490 Subpart F – Truck Travel Time Reliability Index

The Minnesota portion of our MPA, the Truck Travel Time Reliability (TTTR) Index has been assessed and is illustrated in the following table.

Minnesota PM 3	MnDOT Targets for 2023 and 2025	State Actual Performance	MPO Actual Performance
Truck Travel Time Reliability Index	1.4	1.33	1.22

The TTTR Index is meant to assess the reliability of the travel time it takes a truck to travel a segment of the Interstate System. The higher the number means the segment of roadway is more unreliable. The Twin Cities MPA had a TTTR Index greater than our MPA due to the significantly more congested interstate system than the portion of interstate within our boundaries.

Summary

System Reliability targets were set by the State DOT in 2022 for the Performance Period of 2022 – 2025. The Mid Performance Period of 2023 is the year that we are currently reporting on. Since the state did not adjust their targets at the mid performance period Metro COG will reaffirm our support for the State of



Minnesota's Targets. New targets will be released later in 2025 for the next Performance Period. The current targets are as follows:

Percent Reliable Person Miles on the Interstate	82%
Percent Reliable Person Miles on the Non-Interstate	90%
Truck Tavel Time Reliability Index	1.4

The TTC reviewed this item on February 13, 2025, and recommended approval.

Requested Action: Recommend Policy Board support of MnDOT's 2025 Reliability Performance Measure Targets by signing the enclosed MnDOT resolution.

**RESOLUTION 2025-R015
OF THE FARGO-MOORHEAD
METROPOLITAN COUNCIL OF GOVERNMENTS**

Performance Targets to Assess NHS Performance and Freight Movement on the
Interstate System – Minnesota

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 E, National Performance Management Measures to Assess Performance of the National Highway System, and 23 CFR 490, Subpart F, National Performance Management Measures to Assess Freight Movement on the Interstate System;

WHEREAS, the Minnesota Department of Transportation (MnDOT) established performance targets for each of the two Travel Time Reliability performance measures in accordance with 23 CFR 490.507(0); and

WHEREAS, MnDOT established a performance target to calculate the Freight Reliability performance measure in accordance with 23 CFR 490.607; and

WHEREAS, metropolitan planning organizations (MPOs) must establish performance targets for the Travel Time Reliability and Freight Reliability measures; and

WHEREAS, MPOs establish Travel Time Reliability and Freight Reliability targets by either agreeing to plan and program projects so that they contribute to the accomplishment of the State DOT Travel Time Reliability target or Freight Reliability target or commit to a quantifiable target for the metropolitan planning area; and

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 PM 3 System Reliability targets for calendar years of 2022 through 2026:

Percentage of Person Miles Traveled on the Interstate that are Reliable: 82%;
Percentage of Person Miles Traveled on the Non-Interstate NHS that are Reliable: 90%;
Truck Travel Time Reliability Index: 1.4.

Approved this 20th day of February, 2025.



Jenny Mongeau
Metro COG Policy Board Chair



Ben Griffith
Metro COG Policy Board Secretary

To: Transportation Technical Committee
From: Karissa Pavek
Date: February 14, 2025
Re: Performance Measure 3 (PM 3) System Performance & Freight
Movement – 2025 North Dakota

Overview

On November 14, 2021, President Biden signed the Infrastructure Investment and Jobs Act (IIJA) into law. This continued the performance management requirements that aimed to increase investments of Federal transportation funds that focus on national transportation goals. These revisions include the establishment of quantifiable targets for each performance measure identified in §490 Subpart E to assess performance on the National Highway System (NHS) and §490 Subpart F to assess freight movement on the Interstate.

As part of the Mid Performance Period, Metro COG is required by the Federal Highway Administration (FHWA) to:

1. Report adjusted targets for the respective State DOT (resolutions) and/or,
2. Report the baseline condition/performance and progress toward the achievement of the targets in the system performance report in the long-range transportation plan (LRTP) also known as the Metropolitan Transportation Plan (MTP) – Metro 2050: Transportation Moving Ahead.

§490 Subpart E – Travel Reliability Performance Measure

- Percent of person-miles traveled on the Interstate that are reliable
- Percent of person-miles traveled on the Non-Interstate NHS that are reliable

FHWA requires the use of National Performance Management Research Data Set (NPMRDS) to calculate the travel reliability for each roadway segment. NPMRDS uses passive travel data (probe or cellphone data) to anonymously record how people travel and at what speed they travel on various roadway segments. The NPMRDS provides a monthly archive of probe data that includes

the average travel times that are reported every 5 minutes when data is available on the NHS.

NPMRDS separates time segments. These segments are Morning Weekday, Midday Weekday, Afternoon Weekday and Weekends. Using the NPMRDS probe data, the Level of Travel Time Reliability (LOTTR) can be calculated for four (4) analysis time periods using the following ratio:

$$\frac{\text{Longer Travel Times} - 80\text{th percentile of travel times}}{\text{Normal Travel Times} - 50\text{th percentile of travel times}} = \text{Level of Travel Time Reliability (LOTTR)}$$

§490 Subpart F – Travel Time Reliability Index

Each four-year period State Department of Transportation (DOT) is required by FHWA to establish travel reliability performance measure targets. Travel time reliability is defined by the consistency or dependability of travel times from day to day or across different times segments. The NPMRDS provides truck travel times on the interstate system in 15-minute increments.

- Truck Travel Time Reliability Index
 - Good (9 – 7), Fair (6 – 5), and Poor (4 – 0)

The State DOTs also need to report annually on each of the targets. Below are the performance measure targets for travel reliability:

Targets and Data

§490 Subpart E – Travel Reliability Performance Measure

With in the North Dakota portion of our MPA the Travel Time Reliability has been assessed and illustrated in the following table.

North Dakota PM 3	NDDOT Targets for 2023 and 2025	State Actual Performance	MPO Actual Performance
Percent Reliable Person Miles on the Interstate	85.5%	100%*	93%
Percent Reliable Person Miles on the Non-Interstate NHS	85%	92.4%	76%

Travel time reliability is about consistency, meaning the higher the percentage of reliability the more often the travel time is the same. For example, it takes a person 15 minutes to travel from point A to point B. If the travel time index is 90%, it will take 15 minutes to travel 9 times out of 10. The 10th time will take longer than 15 minutes due to various traffic delays.

§490 Subpart F – Truck Travel Time Reliability Index

The North Dakota portion of our MPA, the Truck Travel Time Reliability (TTTR) Index has been assessed and is illustrated in the following table.

North Dakota PM 3	NDDOT Targets for 2023 and 2025	State Actual Performance	MPO Actual Performance
Truck Travel Time Reliability Index	2.0	1.33	1.22

The TTTR Index is meant to assess the reliability of the travel time it takes a truck to travel a segment of the Interstate System. The higher the number means the segment of roadway is more unreliable. The Twin Cities MPA had a TTTR Index greater than our MPA due to the significantly more congested interstate system than the portion of interstate within our boundaries.

Summary

System Reliability targets were set by the State DOT in 2022 for the Performance Period of 2022 – 2025. The Mid Performance Period of 2023 is the year that we are currently reporting on. Since the state did not adjust their targets at the mid performance period Metro COG will reaffirm our support for the State of North



Dakota's Targets. New targets will be released later in 2025 for the next Performance Period. The current targets are as follows:

Percent Reliable Person Miles on the Interstate	85%
Percent Reliable Person Miles on the Non-Interstate	85%
Truck Tavel Time Reliability Index	2.0

The TTC reviewed this item on February 13, 2025, and recommended approval.

Requested Action: Recommend Policy Board support of NDDOT's 2025 Reliability Performance Measure Targets by signing the enclosed NDDOT resolution.

**RESOLUTION 2025-R014
OF THE FARGO-MOORHEAD
METROPOLITAN COUNCIL OF GOVERNMENTS**

Reaffirming Performance Targets to Assess NHS Performance and Freight Movement
on the Interstate System – North Dakota

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 E, National Performance Management Measures to Assess Performance of the National Highway System, and 23 CFR 490, Subpart F, National Performance Management Measures to Assess Freight Movement on the Interstate System;

WHEREAS, the North Dakota Department of Transportation (NDDOT) established performance targets for each of the two Travel Time Reliability performance measures in accordance with 23 CFR 490.507(0); and

WHEREAS, NDDOT established a performance target to calculate the Freight Reliability performance measure in accordance with 23 CFR 490.607; and

WHEREAS, metropolitan planning organizations (MPOs) must establish performance targets for the Travel Time Reliability and Freight Reliability measures; and

WHEREAS, MPOs establish Travel Time Reliability and Freight Reliability targets by either agreeing to plan and program projects so that they contribute to the accomplishment of the State DOT Travel Time Reliability target or Freight Reliability target or commit to a quantifiable target for the metropolitan planning area; and

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 System Reliability targets for calendar years of 2022 through 2026:

Percentage of Person Miles Traveled on the Interstate that are Reliable: 85.5%;
Percentage of Person Miles Traveled on the Non-Interstate NHS that are Reliable:
85%;
Truck Travel Time Reliability Index: 2.0.

Approved this 20th day of February, 2025.



Jenny Mongeau
Metro COG Policy Board Chair



Ben Griffith
Metro COG Policy Board Secretary