
GIAMPO – Policy Board

Tuesday, February 28, 2023

Regular Session

Item H4

Approval of MPO Targets for System Operations Performance Measures

Staff Contact: Allan Zafft, MPO Program Manager

Policy Board Agenda Report
February 28, 2023

Agenda Item No. H4

ISSUE

VOTE: MPO Targets for System Operations Performance Measures

BACKGROUND

The Federal Highway Administration requires State Department of Transportations (DOTs) and Metropolitan Planning Organizations (MPOs) to adopt targets for three performance measures every four years relating to system operations performance. Two of the three performance measures are for National Highway System (NHS) Travel Time Reliability, and one performance is for Freight Reliability (see attached fact sheets). State DOTs were required to establish performance targets for these measures by December 16, 2022. MPOs have the option of supporting the statewide targets, or establishing their own regional targets within 180 days of the establishment of state targets. After two years there will be a mid-point review, at which point the targets could be adjusted for NDOT and Nebraska MPOs based on collected data.

The Grand Island Area Metropolitan Planning Organization (GIAMPO) approved to support the state's system operations performance targets for the 4-year period of 2018 to 2021.

GIAMPO staff recommends to support the NDOT targets for system operations performance measures for the 4-year period of 2022 to 2025 (see attached NDOT System Operations Performance Measures) as the most prudent and feasible alternative. The core reasons to not establishing regional targets include the following:

- For the 4-year period of 2018 to 2021, Nebraska's actual performances met the adjusted 4-year targets for the three performance measures.
- GIAMPO region outperformed the State on all performance measures for the 4-year period of 2018 to 2021.
- The Interstate and Non-Interstate NHS routes in the GIAMPO metropolitan planning area are State NHS routes.
- The statewide 2022 baselines for the performance measures meet the 2-year and 4-year targets for the 4-year period of 2022 to 2025. The baselines are the following:
 - 98.8% of the person-miles traveled on the Interstate that are reliable
 - 96.2% of the person-miles traveled on the Non-Interstate NHS that are reliable
 - 1.14 for the Truck Travel Time Reliability (TTTR) Index

POLICY CONSIDERATIONS/DISCUSSION

Federal regulations require State DOTs and MPOs to adopt targets for system operations performance.

With supporting the statewide targets for the 4-year period of 2022 to 2025, GIAMPO is agreeing to plan and program projects in a manner that contributes towards the accomplishment of the NDOT system operations performance targets.

BUDGET CONSIDERATIONS

None.

COMMITTEE ACTION

The Technical Advisory Committee approved the recommendation to support the NDOT targets for system operations performance measures for the 4-year period of 2022 to 2025 on February 9, 2023.

RECOMMENDATION

Approve to support the NDOT targets for system operations performance measures for the 4-year period of 2022 to 2025.

STAFF CONTACT

Allan Zafft

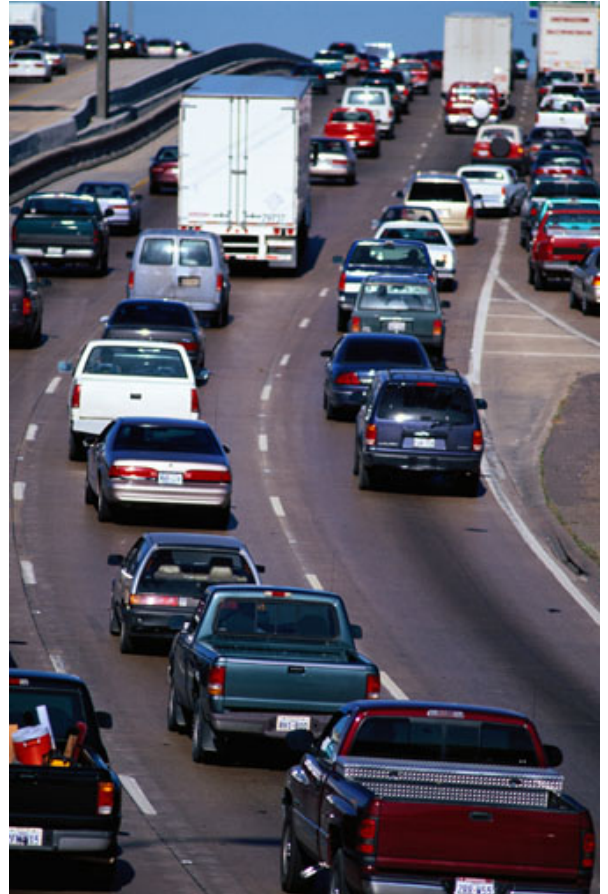
TRANSPORTATION PERFORMANCE MANAGEMENT

The Federal Highway Administration (FHWA) has finalized six interrelated performance rulemakings to implement the TPM framework established by the Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation (FAST) Act.

Collectively, the rules address challenges facing the U.S. transportation system, including:

- improving safety
- maintaining infrastructure condition
- reducing traffic congestion
- improving efficiency of the system and freight movement
- protecting the environment and
- reducing delays in project delivery.

The rules establish national performance measures; State Departments of Transportation (DOTs)



and metropolitan planning organizations (MPOs) will establish targets for applicable measures. New and existing plans will document the strategies and investments used to achieve the targets; progress toward the targets will be reported through new and existing mechanisms.

Learn more at the FHWA TPM web site:

[\(http://www.fhwa.dot.gov/tpm/\)](http://www.fhwa.dot.gov/tpm/)



U.S. Department of Transportation
Federal Highway Administration

NHS Travel Time Reliability Measures



WHAT: Measurement of travel time reliability on the Interstate and non-Interstate National Highway System (NHS). Read the final rule in the [Federal Register](#) [82 FR 5970 (January 18, 2017)].

WHO: State DOTs, as well as MPOs with Interstate and/or non-Interstate NHS within their metropolitan planning area.

WHY: Through MAP-21, Congress required FHWA to establish measures to assess performance in 12 areas, including performance on the Interstate and non-Interstate NHS. [See 23 CFR 490.507(a)]

WHEN: Implementation differs for the Interstate and non-Interstate NHS measures for the first performance period. State DOTs must establish 2- and 4-year targets for the Interstate, but only a 4-year target for the non-Interstate NHS, by **May 20, 2018**. Those targets will be reported in the State's baseline performance period report due by **October 1, 2018**. The State DOTs have the option to adjust 4-year targets in their mid performance period progress report, due **October 1, 2020**. For the first performance period only, there is no requirement for States to report baseline condition/performance or 2-year targets for the non-Interstate NHS before the mid performance period progress report. This will allow State DOTs to consider more complete data. The process will align for both Interstate and non-Interstate measures with the beginning of the second performance period on **January 1, 2022**.

MPOs must either support the State target or establish their own quantifiable 4-year targets within 180 days of the State target establishment.

HOW: Level of Travel Time Reliability (LOTTR) is defined as the ratio of the longer travel times (80th percentile) to a "normal" travel time (50th percentile), using data from FHWA's National Performance Management Research Data Set (NPMRDS) or equivalent. Data are collected in 15-minute segments during all time periods between 6 a.m. and 8 p.m. local time. The measures are the percent of person-miles traveled on the relevant portion of the NHS that are reliable. Person-miles take into account the users of the NHS. Data to reflect the users can include bus, auto, and truck occupancy levels.

Note: The FHWA is preparing guidance on how all rules should be implemented.



U.S. Department of Transportation
Federal Highway Administration

Note - The above dates in 2018 and 2020 relate to the first performance period of 2018 to 2021.

Freight Reliability Measure



WHAT: Measurement of travel time reliability on the Interstate System (Truck Travel Time Reliability (TTTR) Index). Read the final rule in the [Federal Register](#) [82 FR 5970 (January 18, 2017)].

WHO: State DOTs and MPOs.

WHY: Through MAP-21, Congress required FHWA to establish measures to assess performance in 12 areas, including freight movement on the Interstate. The measure considers factors that are unique to this industry, such as the use of the system during all hours of the day and the need to consider more extreme impacts to the system in planning for on-time arrivals. [23 CFR 490.607]

WHEN: State DOTs must establish 2- and 4-year targets by **May 20, 2018**. Those targets will be reported in the State's baseline performance period report due by **October 1, 2018**. The State DOTs have the option to adjust 4-year targets in their mid performance period progress report, due **October 1, 2020**.

MPOs must either support the State target or establish their own quantifiable 4-year targets within 180 days of the State target establishment.

HOW: Freight movement will be assessed by the TTTR Index. Reporting is divided into five periods: morning peak (6-10 a.m.), midday (10 a.m.-4 p.m.) and afternoon peak (4-8 p.m.) Mondays through Fridays; weekends (6 a.m.-8 p.m.); and overnights for all days (8 p.m.-6 a.m.). The TTTR ratio will be generated by dividing the 95th percentile time by the normal time (50th percentile) for each segment. The TTTR Index will be generated by multiplying each segment's largest ratio of the five periods by its length, then dividing the sum of all length-weighted segments by the total length of Interstate.

State DOTs and MPOs will have the data they need in FHWA's National Performance Management Research Data Set (NPMRDS) as data set includes truck travel times for the full Interstate System. State DOTs and MPOs may use an equivalent data set if they prefer.

Note: The FHWA is preparing guidance on how all rules should be implemented.



U.S. Department of Transportation
Federal Highway Administration

Note - The above dates in 2018 and 2020 relate to the first performance period of 2018 to 2021.

NDOT System Operations Performance Measures
4-year Performance Period (2022-2025)

PERFORMANCE MEASURES	BASELINE	2-YEAR TARGET	4-YEAR TARGET
Percent of the Person-Miles Traveled on the Interstate That Are Reliable	98.8%	98.5%	98.5%
Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable	96.2%	92.0%	92.0%
Truck Travel Time Reliability (TTTR) Index	1.14	1.20	1.20

GIAMPO RESOLUTION NO. 2023-3

Grand Island Area Metropolitan Planning Organization

A Resolution Approving the MPO Targets for System Operations Performance Measures

WHEREAS, the Grand Island Area Metropolitan Planning Organization (GIAMPO), is designated as the Metropolitan Planning Organization (MPO) for the Grand Island Urbanized Area, by the Governor acting through the Nebraska Department of Transportation in cooperation with locally elected officials of the Grand Island Urbanized Area; and

WHEREAS, the Moving Ahead for Progress in the 21st Century Act (MAP-21) required the U.S. Secretary of Transportation to develop rules to establish a system to monitor and manage public transportation assets, to improve safety and increase reliability and performance, and to establish performance measures, and the Fixing America's Surface Transportation (FAST) Act and the Infrastructure Investment and Jobs Act (IIJA) reaffirmed this requirement; and

WHEREAS, the National Performance Management Measures: Assessing Performance of the National Highway System, Freight Movement on the Interstate System, and Congestion Mitigation and Air Quality Improvement Program Final 23 CFR Part 490 became effective February 17, 2017 and establishes targets for the following seven performance measures:

Performance Measures
Performance of the National Highway System (NHS) <ul style="list-style-type: none">• Percent of the Person-Miles Traveled on the Interstate That Are Reliable• Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable• Percent Change in Tailpipe CO2 Emissions on the NHS Compared to the Calendar Year 2017 Level*
Freight Reliability <ul style="list-style-type: none">• Truck Travel Time Reliability (TTTR) Index
Congestion Mitigation and Air Quality Improvement (CMAQ) <ul style="list-style-type: none">• Annual Hours of Peak-Hour Excessive Delay per Capita**• Percent of Non-Single-Occupant Vehicle Travel**• Total Emissions Reduction**

* On May 31, 2018, the Federal Highway Administration (FHWA) published a final rule in the Federal Register repealing the performance management measure in 23 CFR 490.507(b) that assessed the percent change in tailpipe carbon dioxide (CO2) emissions, from the reference year 2017, on the National Highway System (NHS) (also referred to as the Greenhouse Gas (GHG) measure).

** Nebraska is exempt from CMAQ measures for a 4-year performance period (2022-2025).

WHEREAS, State Departments of Transportation (DOTs) must establish 2- and 4-year targets for the above applicable measures for a 4-year performance period (2022-2025) by October 1, 2022; and

WHEREAS, MPOs have 180 days following the establishment and reporting of the State targets to make a decision regarding whether to support each State's targets by agreeing to plan and program projects that contribute toward the accomplishment of the State's targets or to establish their own; and

WHEREAS, the 2- and 4-year targets for system operations performance measures for a 4-year performance period (2022-2025) adopted by NDOT are identified in Exhibit A attached to this resolution; and

WHEREAS, the Technical Advisory Committee (TAC) of the MPO reviewed the NDOT 2- and 4-year targets for system operations performance measures for a 4-year performance period (2022-2025) and recommended for adoption that GIAMPO will support these targets, and now the targets require official approval from the Policy Board of the MPO; and

NOW, THEREFORE BE IT RESOLVED, that the Policy Board of the Grand Island Area Metropolitan Planning Organization hereby approves that GIAMPO will support the Nebraska Department of Transportation 2- and 4-year targets for system operations performance measures for a 4-year performance period (2022-2025).

Certification:

The foregoing resolution was approved by the Grand Island Area Metropolitan Planning Organization Policy Board at its regularly scheduled meeting on February 28, 2023 and is effective immediately upon adoption.

By:

Attest:

Roger G. Steele, Mayor / Chairperson

Keith Kurz, Interim Public Works Director

Exhibit A, page 1 of 1

**Nebraska of Department of Transportation (NDOT) Targets for System Operations
Performance Measures for a 4-year Performance Period (2022-2025)**

PERFORMANCE MEASURES	BASELINE	2-YEAR TARGET	4-YEAR TARGET
Percent of the Person-Miles Traveled on the Interstate That Are Reliable	98.8%	98.5%	98.5%
Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable	96.2%	92.0%	92.0%
Truck Travel Time Reliability (TTTR) Index	1.14	1.20	1.20