

NYS TARGET SETTING METHODS FOR SYSTEM PERFORMANCE ON THE NATIONAL HIGHWAY SYSTEM

NYS Department of Transportation (NYSDOT)

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Overview

Measures for the System Performance on the National Highway System are found in 23 CFR Part 490, Subpart E. This section defines two measures for Level of Travel Time Reliability (LOTTR):

1. % of Person Miles Traveled (PMT) on the Interstate that are reliable.
2. % of PMT on the non-Interstate National Highway System (NHS) that are reliable.

These measures compare longer travel time (80th percentile) to average travel time (50th percentile) during specified time periods.

Less than 1.5 is considered "reliable".
1.5 or greater is consider "unreliable".

Mileage that is "reliable" is multiplied by traffic volume, and an average vehicle occupancy factor to determine the PMT that is reliable.

The measures are the % that results from dividing reliable PMT by total PMT.

Date Sources

Speed Data: National Performance Management Research Data Set (NPMRDS)

Traffic Volume Data: Highway Performance Monitoring System (HPMS)

Average Vehicle Occupancy Factor: 1.7 (provided by FHWA for all vehicles)

Timeline

- State DOTs establish targets by May 20, 2018.
- MPOs must agree to support state targets or establish their own within 180 days of the State establishing its targets.
- FHWA assesses performance in 2020. If 2020 targets are not met, states must document actions taken to achieve the targets.
- 2022 targets may be adjusted in 2020.

NYSDOT's Target Setting Process

1. Establish trend:
 - Estimate the linear trend for both measures using data from 2014 to 2016. (Note: 2014 is first full year of NPMRDS data; in 2017, NPMRDS data was provided by a different vendor with different data specifications.)
2. Determine Baseline:
 - Calculate LOTTR based on actual 2017 data. This is the 2018 baseline.
3. Consider data challenges, including:
 - 2017 is the only available full year of data using the new vendor and revised data specifications.
 - There is no existing framework for forecasting future trends for these measures.
 - The NPMRDS data is improving each year, which could affect future results.
 - Future guidance on specific calculation methods could affect future results.
 - It is unclear if the linear trend developed using 2014-2016 NPMRDS data will be representative of future data trends.
 - Performance is expected to be judged on the data reported in 2020 and 2022.
4. Establish Targets:
 - Use the 2014-2016 linear trend to determine baseline data for 2020 and 2022.
 - Adjust trend by decreasing the resulting values by 10%.
 - Reconsider targets in 2020 based on additional data, guidance, and analysis.

Historic Data

Year	LOTTR- Interstate	LOTTR Non- Interstate NHS
2014	83.2	47.8
2015	82.6	46.2
2016	83.1	44.5
2017*	81.3	77.0

* Data vendor for NPMRDS changed in 2017.

Initial Targets*
LOTTR

Year	LOTTR Interstate	LOTTR Non- Interstate NHS*
2018 (Baseline)	81.3	77.0
2020	73.1	NA
2022	73.0	63.4

* Only a four-year target is required for the Non-Interstate NHS

Important Notes on Targets:

- The declining targets are **NOT** reflective of an analysis of future performance. The targets have been intentionally set to reflect the unknown and emerging nature of this data, as described in Step 3, above.
- 2017 is the only available full year of data. Targets are speculative pending a reliable data trend.
- Targets will be revisited in 2020.