



Sections discussed in this NPRM for Part 490, National Performance Management Measures, include:

- Subpart A – General Information**
- Subpart E – Measures to Assess Performance of the National Highway System**
- Subpart F – Measures to Assess Freight Movement on the Interstate System**
- Subpart G – Measures to Assess the Congestion Mitigation and Air Quality Improvement Program – Traffic Congestion**
- Subpart H – Measures to Assess the Congestion Mitigation and Air Quality Improvement Program – On-Road Mobile Source Emissions**

Please see the technical fact sheet: *Assessing Performance of the National Highway System, Freight Movement on the Interstate System, and the Congestion Mitigation and Air Quality Improvement Program: Overview of the Proposed Rulemaking* at <http://www.fhwa.dot.gov/tpm/rule.cfm> for additional details on the proposals for:

- Establishing targets
- Schedules for performance and target reporting
- Significant progress assessment process
- Consequences

Assessing Performance of the National Highway System, Freight Movement on the Interstate System, and the Congestion Mitigation and Air Quality Improvement Program

Performance of the National Highway System (Subpart E)

This proposed rulemaking is available in docket number FHWA-2013-0054 at <https://www.regulations.gov>. The public is encouraged to review the proposed rule and submit comments, which will be considered in the process of writing the final rule. This technical fact sheet provides details on the National Highway System (NHS) performance measures, and is part of a series available at <http://www.fhwa.dot.gov/tpm/rule.cfm>.

State DOTs and MPOs would be required to establish targets for the following measures:

	Proposed Performance Measures*	Applicability
Travel Time Reliability	Percent of Interstate System providing for Reliable Travel Times	Interstate System mileage within the State or each MPA
	Percent of non-Interstate NHS providing for Reliable Travel Times	Non-Interstate NHS mileage within the State or each MPA
Peak Hour Travel Time	Percent of Interstate System where Peak Hour Travel Times meet expectations	Interstate System mileage within each urbanized area with a population over one million
	Percent of non-Interstate NHS where Peak Hour Travel Times meet expectations	Non-Interstate NHS mileage within each urbanized area with a population over one million

*Measures pertain to the mainline of the roadway for all applicable roadways.

Proposed Data Sources for Metric and Measure Calculation

Travel Time: Travel time data would come from the National Performance Management Research Data Set (NPMRDS) or an FHWA-approved equivalent data set. State DOTs, in agreement with MPOs, would be required to define reporting segments consistently for all measures and submit them to FHWA. In general, reporting segments in urbanized areas would have a maximum length of ½ mile, while the maximum length in non-urbanized areas would be 10 miles, unless an individual travel time segment is longer.

Urbanized Areas: The urbanized area population would be based on the most recent US Decennial Census data available at the time the State DOT Baseline Performance Period Report is due to FHWA. The urbanized area boundary would be based on the information in the Highway Performance Monitoring System (HPMS) at the time the Baseline Report is due. The urbanized area population and boundary would apply for the entire performance period.

Proposed Data Reporting Requirements

By June 15, 2018, and annually thereafter, State DOTs would be required to report the performance of the NHS metrics for the previous calendar year's data in HPMS.

Proposed Travel Time Reliability Metric

Metric: State DOTs would calculate the Level of Travel Time Reliability (LOTTR) metric for each reporting segment of the NHS for each of the required time periods:

- Non-Holiday weekdays (Monday through Friday) 6:00 to 10:00 am, 10:00 am to 4:00 pm, and 4:00 to 8:00 pm
- Weekends (Saturday and Sunday) 6:00 am to 8:00 pm

Any missing or null travel times for travel time segments contained within a reporting segment should be replaced with the calculated travel time for that segment, based on the segment length and posted speed limit (TT@PSL), rounded to the nearest second.

State DOTs would identify the Normal (50th Percentile) and 80th Percentile Travel Times using a full calendar year of data for each time period. They would determine Level of Travel Time Reliability (LOTTR) for each reporting segment to the nearest hundredth using the following formula:

$$\text{LOTTR} = \frac{\text{80th Percentile Travel Time}}{\text{50th Percentile Travel Time}}$$

Threshold: A reporting segment would provide for reliable travel times where the calculated value of the metric for all time periods is less than 1.50.

Proposed Peak Hour Travel Time Metric

Metric: State DOTs would calculate the Peak Hour Travel Time Ratio (PHTTR) for each reporting segment of the NHS within the boundaries of urbanized areas with populations over one million using the below steps.

Calculate annual average travel time for each reporting segment for each of the six single hour blocks within the peak periods (6:00 am to 9:00 am and 4:00 pm to 7:00 pm). All travel times equating to speeds less than 2 mph or greater than 100 mph, would be removed from the calculation. Then, select the highest numeric value of the annual average travel time among the hour blocks in the peak period as the Peak Hour Travel Time for calculating the PHTTR metric for each reporting segment.

State DOTs would assign Desired Peak Period Travel Times – one for the three morning peak hour blocks and one for the three evening peak hour blocks.

The Desired Peak Period Travel Time associated with the Peak Hour Travel Time would be used to calculate the PHTTR to the nearest hundredth using the following formula:

$$\text{PHTTR} = \frac{\text{Peak Hour Travel Time}}{\text{Desired Peak Period Travel Time}}$$

Threshold: A reporting segment would meet expectations where the calculated value of the metric is less than 1.50.

Proposed Performance of the NHS Measure

The Percent of the Interstate System and non-Interstate NHS providing for Reliable Travel Times and the Percent of the Interstate System and non-Interstate NHS where Peak Hour Travel Times meet expectations would be computed to the nearest tenth of a percent using the following formula:

$$100 \times \frac{\sum_{i=1}^R SL_i}{\sum_{i=1}^T SL_i}$$

Where:

- i = reporting segment
- R = total number of reporting segments operating at a specified performance level, as defined through a threshold proposed for each metric
- T = total number of reporting segments in the system and area applicable to the measure
- SL_i = length of the reporting segment, to the nearest thousandth of a mile

Additional Information:

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Please note:
The comment period on
this NPRM will be open for
120 days from publication.

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