



Sections discussed in this proposed 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

Freight Movement on the Interstate System (Subpart F)

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 Freight Movement on the Interstate System 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
Truck Travel Time Reliability	Percent of the Interstate System Mileage providing for Reliable Truck Travel Times	Interstate System mileage within the State or each MPA
Mileage Uncongested	Percent of the Interstate System Mileage Uncongested	Interstate System mileage within the State or each MPA

*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 will be 10 miles, unless an individual travel time segment is longer.

Using the NPMRDS or an FHWA-approved equivalent data set, State DOTs would create a truck travel time data set, which would include truck travel times, to the nearest second, for each 5-minute bin. Any truck travel times that are missing or not available would be replaced with an observed time that represents all traffic on the roadway during the same 5-minute interval, provided this time is associated with speeds that are less than the posted speed limit. In all other cases, a truck travel time based on the segment length and posted speed limit (TTT@PSL), rounded to the nearest second, would be used.

Proposed Data Reporting Requirements

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

Proposed Truck Travel Time Reliability Measure

Metric: State DOTs would identify the Normal (50th Percentile) and 95th Percentile Truck Travel Times for each reporting segment of the Interstate System using a full calendar year of data from the truck travel time dataset for each time period. Truck Travel Time Reliability would be then calculated to the nearest hundredth using the following formula:

$$\text{Truck Travel Time Reliability} = \frac{95\text{th Percentile Truck Travel Time}}{50\text{th Percentile Truck Travel Time}}$$

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

Measure: The Percent of the Interstate providing for Reliable Truck Travel Times would be computed for the Interstate System to the nearest tenth of a percent using the following formula:

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

Where:

- a = an Interstate System reporting segment exhibiting Reliable Truck Travel Times
- SL_a = segment length, to the nearest thousandth of a mile, of Interstate System reporting segment "a"
- R = total number of Interstate System reporting segments exhibiting Reliable Truck Travel Times
- i = an Interstate System reporting segment
- SL_i = segment length, to the nearest thousandth of a mile, of Interstate System reporting segment "i"
- T = total number of Interstate System reporting segments

Proposed Mileage Uncongested Measure

Metric: State DOTs would calculate the Average Truck Speed metric for each Interstate System reporting segment to the nearest hundredth using the following formula:

$$\text{Average Truck Speed (s)} = \frac{\left[\sum_{b=1}^T \frac{\text{Segment Length (s)}}{\text{Truck Travel Time}_b} \right]}{T} \times 60 \times 60$$

Where:

- b = a 5-minute time interval of a travel time reporting segment "s"
- s = a travel time reporting segment
- T = total number of time intervals in a calendar year
- Segment Length (s) = length of "s" to the nearest thousandth of a mile
- $\text{Truck Travel Time}_b$ = travel time of trucks for time interval "b" in the Travel Time Dataset or TTL@PSL for the reporting segment s to the nearest second
- Average Truck Speed (s) = average annual speed of trucks traveling through the reporting segment "s", to the nearest hundredth mile per hour

Threshold: A reporting segment is considered uncongested where the Average Truck Speed for the reporting segment is greater than 50.00 mph.

Measure: The Percent of the Interstate System Mileage Uncongested would be computed for the Interstate System to the nearest tenth of a percent using the following formula:

$$100 \times \frac{\sum_{g=1}^U SL_g}{\sum_{i=1}^T SL_i}$$

Where:

- g = an uncongested Interstate System reporting segment
- SL_g = segment length, to the nearest thousandth of a mile, of Interstate System reporting segment "g"
- U = total number of uncongested Interstate System reporting segments
- i = an Interstate System reporting segment
- SL_i = segment length, to the nearest thousandth of a mile, of Interstate System reporting segment "i"
- T = total number of Interstate System reporting segments

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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