

Final Rules: System Condition and System Performance

**Technical Committee
February 7, 2017**






Introduction

- FHWA is required to establish performance measures to assess performance in 12 areas
- State DOTs and MPOs required to establish performance targets and assess performance in these 12 areas
- FHWA will assess states' progress toward meeting targets in the first 10 of these areas



FHWA – Performance Areas

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| 1. Serious injuries per vehicle miles traveled (VMT) |  | System Safety –
final rules released
March 15, 2016;
includes non-
motorized |
| 2. Fatalities per VMT | | |
| 3. Number of serious injuries | | |
| 4. Number of fatalities | | |
| 5. Pavement condition on the Interstate System |  | System Condition –
final rules released
January 9, 2017 |
| 6. Pavement condition on the non-Interstate NHS | | |
| 7. Bridge condition on the NHS | | |
| 8. Traffic congestion |  | System Performance –
final rules released
January 9, 2017 |
| 9. On-road mobile source emissions | | |
| 10. Freight movement on the Interstate System | | |
| 11. Performance of the Interstate System | | |
| 12. Performance of the non-Interstate NHS | | |



System Condition – Pavement

- Four measures to assess pavement condition:
 1. Percentage of pavement on Interstate System in Good condition
 2. Percentage of pavement on Interstate System in Poor condition
 3. Percentage of pavement on NHS (excluding the Interstate System) in Good condition
 4. Percentage of pavement on NHS (excluding the Interstate System) in Poor condition



System Condition – Bridge

- Two measures to assess bridge condition:
 1. Percentage of NHS bridges classified as in Good condition
 2. Percentage of NHS bridges classified as in Poor condition



System Performance – Reliability

- Three measures to assess performance of NHS under the NHPP (two: reliability, one: environmental)
- Two measures assess Level of Travel Time Reliability (LOTTR), defined as ratio of 80th percentile travel time to a “normal” travel time (50th percentile)
 1. Percent of **Person-Miles Traveled** on Interstate System that are reliable (Interstate Travel Time Reliability measure)
 2. Percent of **Person-Miles Traveled** on Non-Interstate NHS that are reliable (Non-Interstate NHS Travel Time Reliability measure)



System Performance – Environmental

3. Third measure, Percent Change in Tailpipe CO₂ Emissions on NHS from CY 2017, assesses environmental performance
 - State DOTs will be required to estimate CO₂ emissions based on annual fuel sales, EPA published emission conversion factors, and proportion of statewide VMT that occurs on the NHS
 - MPOs will be provided options for calculating CO₂ emissions



System Performance – Freight

- One measure to assess freight movement on Interstate System:
 1. Percentage of Interstate System Mileage providing for Reliable Truck Travel Times, or Truck Travel Time Reliability (TTTR) Index (Freight Reliability measure)



System Performance – CMAQ

- Three measures established under CMAQ program (the CMAQ measures), including two measures for traffic congestion:
 1. Annual Hours of Peak-Hour Excessive Delay Per Capita (the PHED measure)
 2. Percent of Non-SOV (single-occupancy vehicle) Travel



System Performance – CMAQ

3. Third CMAQ measure is Total Emissions Reduction of CO₂
 - This measure includes total GHG emissions from NHS roadways

