



BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

Stephanie Pollack, MassDOT Secretary and CEO and MPO Chair
Karl H. Quackenbush, Executive Director, MPO Staff

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U.S. Department of Transportation
Docket Operations, M-30
West Building Ground Floor
Room W12-140
1200 New Jersey Avenue SE
Washington, DC 20590

Re: System Performance Notice of Proposed Rulemaking

To the Docket:

The Boston Region Metropolitan Planning Organization (MPO) understands that the Federal Highway Administration (FHWA) has developed the System Performance Notice of Proposed Rulemaking (NPRM) to address system performance monitoring required by Moving Ahead for Progress in the 21st Century Act. The Boston Region MPO has successfully engaged in congestion monitoring, with FHWA guidance, for more than 20 years. However, after reviewing the NPRM, which proposes new requirements for congestion monitoring, we offer the comments herein.

Our primary concern is that performance monitoring should gauge more than reliability and delays on roadways. Effective congestion monitoring needs to focus on moving people instead of vehicles. Performance measures should be multi-modal rather than exclusively for roadways. Performance monitoring should not promote roadway expansion unless all other alternatives for ameliorating congestion have been exhausted. We also are concerned about measuring the reliability of arterials. In some cases, delays on arterials do not necessarily indicate congested travel conditions. Some arterials benefit from slower travel speeds, as this can increase the walkability and safety of a particular location for both pedestrians and motorists. This is especially true in business districts, which often promote and require multiple modes of transportation.

The performance monitoring standards in the NPRM are identical for every metropolitan area in the United States. Although the objective of the NPRM is to practice consistent congestion monitoring for the entire country, it ignores the fact that US metropolitan areas have very diverse characteristics; some locations are auto-oriented, while others are transit-oriented, for example.

In addition, we are concerned about the requirement to include data from every day, month, and season of the year for monitoring performance targets. In the Boston region, congestion patterns vary by season. For example, Boston's population generally decreases in the summer

because of vacation schedules at local universities; and in the winter, severe weather can cause an increase in non-recurring congestion.

The National Performance Management Research Data Set (NPMRDS)—the required dataset of the NRPM—should be user friendly, as many MPOs may not have the technical expertise on staff to manipulate the data. In 2015, our staff analyzed the NPMRDS and presented the findings in a memorandum. We found that travel times in the NPMRDS are inconsistent with the Boston Region MPO's past monitoring. Staff applied an outlier removal process; once the outliers were removed, the NPMRDS was suitable for congestion monitoring. We recommend developing a confidence score for the NPMRDS, which will allow users to filter outliers in the dataset easily. The NPRM recommends the practice of replacing blank records in the NPMRDS with the posted speed limits; doing so can incur a sudden spike in speeds in specific five-minute periods. In turn, this anomaly can cause the NPMRDS to appear inconsistent during specific time periods of an average day.

The Boston Region MPO's 2015 memorandum also examined the NPMRDS freight data. The MPO concluded that freight data coverage is limited on arterial roadways and is only marginally useful on freeways in the Boston region. We do not recommend this freight dataset for performance monitoring because the freight dataset is not as accurate as the automobile vehicle dataset. However, the automobile dataset could be used to measure freight congestion.

Because monitoring of this depth and precision has not been achieved on a large scale yet, that is, for the entire United States, and as the relationships between MPOs and state departments of transportation (DOTs) differ by region, the Boston region MPO recommends conducting the first two years of performance targeting as a trial. Many MPOs and state DOTs have not yet used the NPMRDS, nor the required performance measures. Thus, their inexperience could cause initial errors in setting performance targets or analyzing data.

Thank you for considering the Boston Region MPO's concerns regarding the NPRM. Please do not hesitate to contact us if you would like further information about our analysis of the NPMRDS.

Sincerely,

Jay Monty, Chair
Boston Region MPO Congestion Management Committee