

NOTICE OF PROPOSED RULEMAKING

23 CFR Part 490

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

COMMENTS on behalf of the

NEW YORK STATE ASSOCIATION OF METROPOLITAN PLANNING ORGANIZATIONS

The New York State Association of Metropolitan Planning Organizations (NYSAMPO) represents the 14 MPOs in New York. These MPOs generally support the intent of performance based planning and programming as a means to make it easier for decision makers and the public to understand the outcomes of transportation investments. However, NYSAMPO has significant concerns about how this is being implemented through the series of rulemakings, of which this is the third.

This proposed rule addresses these goals that are stated in MAP-21:

- Congestion reduction. To achieve a significant reduction in congestion on the NHS.
- System reliability. To improve the efficiency of the surface transportation system.
- Freight movement and economic vitality. To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- Environmental sustainability. To enhance the performance of the transportation system while protecting and enhancing the natural environment.

We recognize that FHWA has proposed to narrow the definition of the goals to be implemented by these performance measures to make them more manageable for States and MPOs by using only available data sources, and for selected systems or locations. However, we believe that the in some cases the final proposal bears little relationship to the goals stated by Congress. For example, the freight metrics of uncongested and reliable travel on the Interstate Highway system do not address the goals of rural accessibility and regional economic development. Also, many MPOs recognize that congestion is a direct result of the increased economic activity to which their elected officials aspire. While implementing strategies to mitigate congestion and its associated costs is important, these strategies are typically multimodal and often incorporate policy and programmatic actions that do not appear in a TIP.

If performance-based, outcome-oriented planning is to drive our transportation investments, then we must ensure that the metrics lead toward the stated outcomes.

NYSAMPO proposes that FHWA revisit the system performance metrics so that States and MPOs will in fact make the best investment choices to support the attainment of national goals.

NYSAMPO also expresses concern about the multiple “clocks” for the implementation of the three performance management rules and the Final Rule on Statewide and Nonmetropolitan Transportation Planning and Metropolitan Transportation Planning (Planning Rule). We supported FHWA’s initial proposal that while the performance management rulemaking would move ahead in three separate rules, there would be single Final Rule and a single effective date. We had also proposed that the effective date be coordinated with the effective date of the Planning Rule. Because of the lengthy delays in the rulemaking, which may not be completed until 2017 or beyond, FHWA now asserts that there is value in a sequential rollout, so States and MPOs can learn from implementing the Safety Performance Management rule, the first to become finalized. NYSAMPO does not agree. While the topical areas of performance based planning are diverse, based on the National Goals in MAP-21, target setting and investment decision making must be based on a comprehensive view of constructing, managing, operating, and maintaining transportation assets. That approach is in fact at the core of metropolitan and statewide transportation planning. Looking at the entire transportation system and the outcomes that will best serve customers across modes and function, assembling the MPO and State Transportation Improvement Programs is necessarily about trade-offs in a fiscally constrained environment. Setting a safety target sooner, simply because that rule got done first, will interfere with the understanding of the public and MPO member agencies when subsequent targets must be set as new clocks kick in. Achieving or making significant progress on targets is central to performance based planning and programming, as is developing an ever better understanding of the outcomes of specific kinds of investments. MPOs will find it increasingly difficult to address and explain sequential effective dates.

NYSAMPO proposes that FHWA reconsider its approach to individual effective dates for the performance management rules.

Finally, NYSAMPO is concerned about the complexity of the various methodologies required to implement these rules. Neither MPOs nor State DOTs have excess staff capacity to assign to this work. The stated notion that MPOs in urbanized areas of greater than 1 million population have greater staff capacity ignores the fact that those MPOs also have far greater planning responsibilities. Our concern is that all of the analytic work that will be required to satisfy the performance management rules will consume substantial resources, but in the end may do little to meet the intent of Congress for a process that better matches investments to desired outcomes for the travelling public. A solution is that FHWA take primary responsibility for evaluating the required performance metrics and measures on behalf of states and MPOs, given that FHWA owns and maintains data sets that could be used to perform the analysis. States and MPOs should have the option to do their own calculations of the performance metrics and measures using an alternative data set that meets the requirements laid out in the NPRM, but this should be an “opt-out” provision. FHWA should develop a standard methodology for defining reporting segments, assigning desired peak period travel times, and conflating travel time and volume data sets consistently across the entire National Highway

System, so as to remove the requirement that states and MPOs perform these laborious tasks requiring extensive coordination among MPO members.

NYSAMPO proposes that FHWA directly support simplified data management and analytic methods for use by States and MPOs in meeting the intent of Federal law for a more transparent, outcome-oriented process of investment Federal transportation funds.

NYSAMPO notes that the focus of this proposed rule is on measuring current performance of the National Highway System and Interstate Highway component. However, the required actions of target setting and selecting projects to make progress on achieving targets necessarily involves being able to forecast performance. There is no established methodology available that can be used to forecast the proposed measures. This task will be challenging, with many uncertainties to consider, including VMT growth or lack of growth; the deployment of connected vehicle technology and penetration of autonomous vehicles into the fleet; and the impact of state energy and GHG reduction policies. There is also no way of estimating with certainty the impact of policies and investments in projects on the performance measures. FHWA has long supported the application of scenario planning practices in recognition of uncertainty and the constraints of forecasting,

NYSAMPO proposed that FHWA should encourage flexibility to accommodate this uncertainty related to target setting.

COMMENTS ON SPECIFIC SECTIONS

§490.101 – Definitions

Freight Bottleneck is defined as a segment of the Interstate System not meeting thresholds for freight reliability and congestion, as identified in § 490.613; and any other locations the State DOT wishes to identify as a bottleneck based on its own freight plans or related documents, if applicable.

NYSAMPO Comment: The proposed definition excludes MPOs; but bottlenecks on the non-Interstate NHS in urban areas are often critical to the efficient movement of truck freight. NYSAMPO proposes expanding the definition to include “any other locations the State DOT or MPO wishes to identify...”

“Non-urbanized area means a single geographic area that comprises all of the areas in the State that are not “urbanized areas” under 23 U.S.C.101(a)(34).”

NYSAMPO Comment: Since the MPO Metropolitan Planning Area must include not only the UZA, but also adjacent areas that are likely to become urbanized during the planning horizon, the MPOs should remain responsible for all planning activities in the MPA, including those subject to this rule. NYSAMPO proposes modifying the definition to state “all areas in the State that are not “urbanized areas” or otherwise included in Metropolitan Planning Areas established by MPOs in the State...”

NYSAMPO Comment: MPA geography is, in the case of large urbanized areas like the NY-NJ-CT New York UZA, an unwieldy basis for any analysis and application of performance measures. NYSAMPO recognizes that this issue is being addressed in a separate rulemaking, and therefore proposes that FHWA consider holding on all definitions related to areas of analysis and reporting until the MPA issue is resolved.

“Reporting segment means the length of roadway that the State DOT and MPOs define for metric calculation and reporting and is comprised of one or more Travel Time Segments.”

NYSAMPO Comment: The definition does not clarify which agency defines reporting segments within the UZA or MPA. Acknowledging that the State has a strong interest in the NHS, even in urbanized areas, this definition should address the process. NYSAMPO proposes that modifying the definition to state “...the State and MPOs cooperatively define...”

§490.103 – Data Requirements

NYSAMPO supports the use of the NPMRDS dataset because it is provided by FHWA and provides full coverage of the NHS. However, as FHWA acknowledges the limitations of NPMRDS, we share these concerns:

- Prohibiting the use of imputation (§(E)(5)(iii)) in proposed equivalent datasets. It is broadly recognized that probe vehicle data is improving, but still leaves gaps in the data when there are insufficient entries. Imputation is an accepted means for filling those gaps, and should be permitted as long as the data vendor provides explicit information on the imputation methodology.
- In §(f)(2), FHWA proposes minimum length of urban and non-urban Travel Time Segments, where the former is ½ mile and the latter 10 miles. Conflating Traffic Messaging Channels from NPMRDS to these standards will be resource intensive. NYSAMPO is also concerned that the short segment length for urban facilities will have unintended consequences. MPOs are generally aware of recurring congestion bottlenecks, and locations that contribute to non-recurring congestion. Having

to report on short segments of urban freeways may confuse the public and not contribute to better investment decisions.

NYSAMPO proposes permitting MPO defined urban Travel Time Segments up to 5 miles in length

- NYSAMPO agrees that States and MPOs create an explicit coordination process for defining Travel Time Segments. This recognizes that both have a stake in the functionality of the urban transportation system. However, we reiterate that all coordination becomes a challenge in multi-state MPOs; and that these MPOs and States be afforded additional time and flexibility to reach these conclusions.

§490.105 – Establishment of Performance Targets

NYSAMPO acknowledges that FHWA recognizes that target setting by States and MPOs may be the most difficult element of performance based planning and programming. The exercise involves not only reliable data and transparent analytic methodologies, but also demonstrating an understanding of public expectations and constraints on decision makers.

NYSAMPO proposes that States and MPOs be given substantial flexibility in establishing performance targets, especially if FHWA retains its approach of using multiple implementation clocks. As practitioners better understand the new performance measures and the data and analytics that support them, target setting is likely to become more comprehensive. The proposed rule provides the opportunity to adjust targets biennially within the four year reporting period.

NYSAMPO proposes that States and MPOs should be afforded the option of annual adjustments, at least in the near term.

In the narrative, “FHWA recognizes the need for State DOTs and MPOs to have a shared vision on expectations for future condition/performance in order for there to be a jointly owned target establishment process”. NYSAMPO appreciates this recognition, but notes that this will be much more difficult for bi-state MPOs, when the two states may have very different visions and policies that control transportation investment. It would be helpful for FHWA to assist with multistate coordination but also to not over-regulate this difficult process.

We note that within New York, there is an excellent model of cooperation between New York State DOT and our MPOs. This includes joint involvement in a project with the University at Albany Visualization and Informatics Lab (AVAIL) in the development of a web-based tool for analyzing the NPMRDS data. This may provide a model for other states.

We further note that five MPOs in the New York metropolitan region have a longstanding model of cooperation through their Metropolitan Area Planning (MAP) Forum. It would be inappropriate for FHWA to impose regulatory coordination requirements that would complicate existing voluntary agreements that proven to be effective.

NYSAMPO agrees with the proposed rule that when MPOs choose to set their own quantifiable target, and the State makes a mid-period target adjustment, that those MPOs be afforded a new 180 day period to decide whether they will then support the State target or continue with an MPO defined target.

§490.107 – Reporting on Performance Targets

NYSAMPO recognizes that reporting is primarily a State responsibility, but nonetheless believes that it is important that the reporting process not be overly burdensome. It is often the case that the manner in which reporting is devised consumes significant amount of resources.

NYSAMPO appreciates that FHWA proposed to develop an electronic reporting template, as this will result in uniform reporting. However, time needs to be provided for testing to ensure the functionality and usability of the template.

The proposed date of October 1, 2016 for the initial Baseline Performance Report is too soon. With only the Safety Performance Management rule being final, States may not be clear on what aspects of system performance and condition they should be reporting.

NYSAMPO also notes that biennial reporting will give a snapshot of performance, but will also necessarily not reflect the results of projects that have not been in place long enough for their impact to be measured. It may be useful to include in the report a list of projects implemented since the previous reports.

NYSAMPO proposes that the performance reporting process be initiated after promulgation of all final rules, and no sooner than October 1, 2018.

§490.109 – Assessing Significant Progress

With regard to schedule, it would be helpful if FHWA imposed upon itself a deadline for reporting its determination of significant progress back to the State.

NYSAMPO agrees with the flexibility afforded in the determination of significant progress as being either an improvement in the baseline condition or in relation to the State's adopted target. However, FHWA must recognize that with fiscal constraint and required trade-offs, there are likely to be situations in which conditions deteriorate during a reporting period. We are concerned that in the public forum, the media may assign declining performance to agency mismanagement rather than circumstances of limited funding and competing priorities.

With regard to extenuating circumstances, NYSAMPO recognizes that there are situations other than the three listed that are out of the control of the State. Chief among these is the diversion or reduction of funding.

NYSAMPO proposes that language be added to Subsection (5)(i) that will state that an additional extenuating circumstance is a diversion or reduction of federal funding.

In Subsection (f)(2) regarding freight bottlenecks, FHWA must recognize the effect of the regional, state, and even national economy. As seen with the 2008 recession, truck volumes can fluctuate substantially in response to global economic trends. A highway section that is reliable today may become unreliable or congested next year, or vice versa. States should be permitted to report on the impact of the economy, rather than simply on how they are addressing freight bottlenecks.

Subpart E—National Performance Management Measures to Assess Performance of the National Highway System

§490.505 – Definitions

Desired Peak Period Travel Time is defined as “the desired travel time on a specific reporting segment during the peak period that is defined in coordination between the State DOT and MPO.”

NYSAMPO expresses concern with this definition. First, it requires the conversion of speed data from NPMRDS to travel time by segment, which can be cumbersome. More importantly, it is not clear how the coordination process is expected to work, and what happens if the State and MPO cannot agree.

§490.509 – Data Requirements

NYSAMPO disagrees with proposed language in Subsection (b) that missing speed data should be replaced with posted speed. For example, if data improves as time goes on, the performance of the system in the baseline year may have been overstated by assuming that congested links that are missing data operate at the speed limit. This may indicate a trend of worsening congestion which is incorrect. Using an accepted method of imputation would likely produce better results.

One example comes from TRANSCOM in the New York metropolitan area, which has created a Data Fusion Engine to calculate travel time. The methodology produces well-accepted results.

NYSAMPO proposes that §490.509(b) be changed to allow the State or MPO to select the most appropriate method for replacing empty cells in the NPMRDS data, including imputation. Use of 80th percentile observed speed is one method that may be considered.

Further analysis is needed to determine if the calculation of performance measures should be based on 15 minute time periods rather than 5 minute time periods. Developing an aggregated regional or statewide measure from such highly disaggregated data may not be appropriate. In addition, given that there may be segments with low sample sizes, basing measures on 15 minute time periods may increase the sample size represented in each TMC and therefore may increase the accuracy of the data.

NYSAMPO proposes that FHWA study how the use of 15 minute time periods may affect the determination.

§490.511 – Calculation of System Performance Metrics

NYSAMPO is concerned that the time span for measuring reliability proposed in subsection (b)(1) may not provide an accurate picture. For example, there are urban areas where the peak period has ended by 6:30 pm; the period until 8:00 pm is likely to be much more reliable. By using the longer peak period, FHWA may have devised a methodology that in fact masks the problem.

NYSAMPO finds the proposal to use 80th percentile, and segments meeting 50% of that, are acceptable.

In subsection 490.511(c)(3), FHWA proposes that segments with travel speed <2 mph be eliminated. NYSAMPO finds that in major metropolitan areas, there will be many peak hour epochs of 0 – 2 mph that are not statistical outliers, and should not be removed.

NYSAMPO proposes that there be no lower limit for travel speed.

Subpart F—National Performance Management Measures to Assess Freight Movement on the Interstate System

NYSAMPO is concerned that by limiting this to the Interstate system, the results will not be helpful to States and MPOs in selecting investments to improve the efficiency and safety of freight movement. Many of the key truck bottlenecks are not on the Interstate or even the NHS, but are instead in the “first/last mile” NHS connectors that serve sea and land ports of entry, intermodal terminals, and major freight generators. This will become more of an issue, both for data collection and performance reporting, when Critical Urban Freight Corridors and Critical Rural Freight Corridors are designated.

§490.605 – Definitions

Since this section is about measuring truck performance on the Interstate System, it would be helpful to define “truck” in terms of the standard FHWA classifications.

NYSAMPO proposes use of Classes 8-13, as these represent the most significant means of freight movement.

§490.609 – Data Requirements

NYSAMPO is aware that the truck portion of the NPMRDS is the least well populated. It is also not known what classes of trucks are providing the probe data. As such, we support the option to replace empty cells with observed travel time for all vehicles or other methods proposed by the responsible agency and reviewed by FHWA.

NYSAMPO disagrees with the proposal in subsection (b)(1)(ii)(3) to use the 95th percentile as the measure for truck travel time reliability. It makes no sense to use a different standard for trucks and “all traffic” when they are moving on the same facility in the same traffic stream. Achieving this level of reliability for trucks, which may indeed be desirable from a logistics perspective, essentially requires States and MPOs to use the 95th percentile for all traffic.

NYSAMPO proposes using the 80th percentile as the travel time reliability measure for trucks, as for all traffic.

NYSAMPO has concerns about the use of 50mph as the threshold for determining congestion. Particularly in older urban areas like those in New York, NHS facilities may have average speeds of less than 50 mph even in uncongested conditions as a result of constrained geometrics. In fact, there are many segments of urban Interstate highways where the posted speed limit is less than 50 mph.

NYSAMPO proposes to permit States in cooperation with MPOs to establish either an urban speed threshold, or facility-based threshold. Consideration may be given to permitting the use of 60% of posted speed limit.

Subpart G—National Performance Management Measure for Assessing the Congestion Mitigation and Air Quality Improvement Program—Traffic Congestion

§490.703 Applicability

FHWA proposes that this Subpart, and Subpart H apply only to urbanized areas whose population exceeds 1 million, and are at least part non-attainment areas.

NYSAMPO supports the use of the 1 million population threshold, but expresses concern about the applicability of UZA as the appropriate geography. We note that a separate NPRM on MPO Coordination and Planning Area Reform was issued jointly by FHWA and FTA on June 27. That proposed rule addresses MPO geography. NYSAMPO proposes that consideration of the application of this Rule be suspended until that Rule becomes final.

§490.705 – Definitions

Excessive Delay: FHWA proposes that the speed threshold used to define Excessive Delay be 35 mph on highways defined as Functional Class 1 and 2; and 15 mph on all other NHS roads. NYSAMPO notes that these thresholds may not be appropriate for MPOs in the large urban areas. MPOs should have the flexibility to select regionally-appropriate thresholds, similar to the opportunity to set a Desired Peak Period Travel Time for purposes of calculating the Peak Hour Travel Time Ratio.

NYSAMPO proposes that FHWA provide the travel speeds of 35 mph and 15 mph only as guidance, and that MPOs be permitted to establish thresholds.

§490.711 – Calculation of Congestion Metric

NYSAMPO notes that an important missing tool that is required to calculate “Total Excessive Delay” is one to conflate a Traffic Message Channel (TMC) network with a linear referencing system GIS shapefile. Moreover, this process must be easily replicable to maintain segment-level relationships through regular TMC network updates. Some agencies may also need tools to conflate the two commonly used TMC networks.

NYSAMPO proposes that FHWA conduct this conflation on behalf of States and MPOs or provide readily-available and easy-to-use tools for States and MPOs that will perform this operation.

Subpart H—National Performance Management Measures to Assess the Congestion Mitigation and Air Quality Improvement Program—On-Road Mobile Source Emissions

Monitoring and reporting on emissions relies on the CMAQ Public Access System (PAS). FHWA has acknowledged the quality of the data and the quantitative emission estimates need to be improved in the PAS system to meet the performance plan requirements included in this rulemaking; however, the specific improvements and the tool kit to assist in quantifying emissions has yet to be released. Since the PAS system is essentially a “read-only” version of the User Profile and Access Control System (UPACS) that MPOs use to enter CMAQ project and emissions data, it is assumed the same issues in UPACS are present in PAS. Although the UPACS system is sufficient to report general trends, the UPACS/PAS needs significant improvements prior to any use national or state-level decision-making. Current deficiencies in the UPACS to meet the requirements of this rulemaking include the fact that emissions estimates are based on project expenditures, not when a project is operational. Since UPACS/PAS is intended to track emissions benefits, it is not as well suited to evaluate attainment of targets.

NYSAMPO proposes that the CMAQ measure be aligned to current CMAQ reporting requirements, practices, and data systems until FHWA can develop better reporting tools and metrics to determine the effectiveness of CMAQ funds at reducing emissions.