Document Overview

MAP-21 legislation requires States to:

- Establish performance targets for freight movement on the Interstate System – based on specific measures established by the Secretary of Transportation
- Submit biennial performance reports on the established measures and targets and the ways in which the State is addressing congestion at freight bottlenecks, including those identified in the National Freight Strategic Plan, within the State.

The Notice of Proposed Rulemaking (NPRN) for implementing the provisions of the legislation is expected to include more specific implementation details on freight movement measure definition, data sources, and calculation methods; and the processes for target-setting and performance reporting.

This document provides a set of checklists that can be used to assist in the review of the MAP-21 Congestion/System Performance NRPM provisions related to freight performance measurement. The checklists may suggest areas where comments are warranted to ensure that the final rules (1) support current or desired state performance management processes and (2) can be implemented in a manner that minimizes burdens on limited state resources. The checklists were based on the recommendations developed through the AASHTO Standing Committee on Performance Management (SCOPM) Task Force on Performance Measure Development, Coordination and Reporting. These checklists reflect the input that was provided by the Task Force to FHWA on rules related to national performance measures and targets.

Each section of this document presents a summary of the relevant statutory provisions, a statement of what additional guidance may be provided in the NPRM, and a checklist of considerations that some States may wish to see reflected in the final rules.

Performance Measure Definitions and Data Sources

Summary of Statutory Provisions: §1203(c); 23 USC 150(c)(6) The Secretary will establish measures for States to use to assess Interstate System freight movement.

Context: To implement section 1203 of MAP-21, FHWA's rulemaking will define specific freight movement performance measures. In addition to specifying the measures, the rulemaking is expected to clarify the methods state DOTs will use for calculating the required measures.

Checklist: The following checklist can be used as a guide for review of the NPRM; it may suggest areas where comments are warranted to ensure that the final rules support current or desired state performance management processes and can be implemented in a manner that minimizes burdens on limited state resources.

The freight performance measures shown below reflect the statutory requirements and incorporate the recommendations of the Task Force on measure calculation and definition.

In developing these recommendations, the Task Force noted the following concerns: (1) the emphasis in MAP-21 on highways/trucks as opposed to a more mode-neutral or multi-modal approach – which may drive suboptimal investments relative to a more holistic perspective, (2) the need to capture other aspects of freight movement, including system capacity and utilization – and reflect broader mobility and safety objectives, and (3) ambiguity in the scope of application of the measures (statewide, regional, corridor.)

	Task Force Recommended Measures
☐	**Annual Hours of Truck Delay (AHTD)**—Travel time above the congestion threshold in units of vehicle-hours for Trucks on the Interstate Highway System.
☐	**Truck Reliability Index (RI_{80})**—The RI is defined as the ratio of the total truck travel time needed to ensure on-time arrival to the agency-determined threshold travel time (e.g., observed travel time or preferred travel time).
	Measure Definition, Sources and Calculation Methods
☐	**Definition – AHTD.** AHTD is the amount of extra time spent by each truck on an Interstate corridor based upon a state- determined threshold of what constitutes congestion and/or other factors for trucks. Truck delay on the Interstate system may be caused by congestion and/or other factors such as severe weather, safety inspections or roadway geometrics. AHTD is a summation of the number of truck-hours of delay due to congestion along Interstate corridors within a State. It is composed of miles, trucks traveling, and the speed of travel.
☐	**Definition – Reliability Index.** The Reliability Index is defined as the ratio of the total travel time needed to ensure on-time arrival at the desired destination to the agency-determined threshold travel time.

Measure Definitions and Data Sources (continued)

☐	**80th Percentile Worst Travel Time.** Travel time is defined as the time taken to traverse a fixed distance between the origin and destination of the route and is not independent of the distance traveled. The Reliability Index will use the 80th percentile worst travel time recorded during the weekday peak periods each year. This is the amount of time that should be allowed to arrive on time for 4 out of 5 trips.
☐	**Data Sources – Federal Support.** Implementation of these performance measures is dependent on U.S. DOT providing to State DOTs and MPOs private sector speed data and vehicle miles traveled data from HPMS volume data and the respective analysis tools. USDOT must provide processed traffic data in a "ready to use format" that can be readily integrated with other existing datasets in a state (traffic volume, number of lanes, roadway type, etc.).
☐	**Option for FHWA Computation of Measures.** FHWA could compute the federally-mandated measure for States, but provide States with the option to use that result or supplement it with States' own speed data – should they choose to collect it
☐	**VMT Source.** VMT should be calculated for each corridor segment using the FHWA HPMS Average Annual Daily Traffic (AADT).
☐	**Travel Speed Source.** Travel speed data should be provided as part of the FHWA National Travel Data Set. This dataset will include hourly speeds for each day of the average week on each Corridor Segment. (There could be separate data sets for passenger vehicle and truck speeds.)
☐	**Corridor Selection.** Each state and MPO should have flexibility to select Interstate corridors for freight performance measure calculation. Each corridor should be defined by an origin and a destination. At a minimum, the Corridor Segments defined by the state would need to reflect congestion at freight bottlenecks and those corridors identified in the National Freight Strategic Plan located within the state.
☐	**Threshold for Determining Congestion.** Each state and MPO should have the flexibility to establish a threshold speed for congestion on each corridor – e.g. posted speed, maximum throughput speed, free-flow speed, severe congested speed. Threshold values should account for the different aspects of slowing trucks on the Interstate including weather conditions, enforcement, work zones, and congestion. Thresholds may be set based on several factors, including corridors' characteristics; freight movement goals; rural/urban routes; capacity assumptions and/or level of potential investment required to achieve performance levels. Both the freight delay and reliability measures should use the same Agency-Specified Threshold Speed determined by the State DOTs and MPOs.

Comments:

Target Setting Method and Process

Summary of Statutory Provisions: §1203; 23 USC 150(d) States have 12 months from final rulemaking to set targets reflecting the established measures, with the option of setting different targets for rural and urbanized areas.

Context: Per section 1203 of MAP-21, States have flexibility in setting target values of the established national measures. However, rulemaking is likely to provide additional information on the process by which States establish targets. It may discuss factors that States should consider as they set targets (e.g. implications of setting aggressive versus easily-attainable targets.) Guidance may also be provided on the relationship between existing state performance targets and those targets established in response to MAP-21.

Checklist: The following checklist can be used as a guide for review of the NPRM; it may suggest areas where comments are warranted to ensure that the final rules support current or desired state performance management processes and can be implemented in a manner that minimizes burdens on limited state resources.

☐	**Use of Performance Categories.** Performance targets for delay should be expressed in terms of numeric values – they should *not* be represented through categorical variables of good-fair-poor or similar.
☐	**Scope and Basis for Targets.** Targets set by States and MPOs may vary by facility, by corridor, by region, by rural or urban, by freight versus commute route or other factors such as investment levels, available transit options, remaining capacity and levels of recurrent versus non recurrent congestion levels. In addition to urban and rural interstates, other geographic constructs are critical for longer distance freight movements. For example, targets could be set for truck trips on multi-state corridors between major city pairs, and at major international border crossings, using cooperative target-setting between adjacent jurisdictions.
☐	**Allow Flat or Declining Performance Targets.** States should have the flexibility to choose to set targets that have performance holding steady, or in some situations declining. For example "annual delay should not increase more than 5 percent per year."
☐	**Allow Relative Targets.** States should have the flexibility to choose to set targets that are linked to the growth in the regional economy. Measuring the percent change in delay compared to percent change in gross metropolitan product could provide a more relevant comparison of the role of transportation and land use decisions during periods of rapid growth with periods of slow or no growth. An example target for this measure may state that the percent increase in delay should be no more than the percent increase of the gross metropolitan product.
☐	**Focus on Federal Objectives.** MAP-21 performance measure and target-setting rules should focus on federal objectives and state support of these objectives. The rules should be focused on the ability of states, using available federal funds, to deliver the desired results – not on how states manage their own programs that do not use federal funds. (cross-cutting recommendation)

Target Setting Method and Process (continued)	
☐	**Allow Flat or Declining Performance Targets.** States should have the flexibility to choose to set targets that have performance holding steady, or in some situations declining. (cross-cutting recommendation)
☐	**Allow States to Set Target Ranges.** The value of performance management is found in better decision-making, not target achievement. DOTs support the idea of allowing States to establish *ranges* of acceptable performance outcomes. Use of ranges can provide DOTs with a more nuanced way of discussing performance outcomes across multiple competing objectives. (cross-cutting recommendation)
☐	**Risk Based Approaches and Tradeoffs.** Allow flexibility for DOTs and MPOs to use a risk based target setting approach. Risk-based targets do not reflect optimal outcomes within a particular investment area; rather, risk-based targets represent strategic objectives within a plan to manage agency risks. Allowing states to approach target-setting for the entire set of national performance measures as a bundle accommodates states that have tradeoff processes across asset/program areas. (cross-cutting recommendation)
☐	**Allow for Target Adjustments.** If a State wants to adjust targets dynamically (on an ongoing basis as conditions change), they should be allowed to do so.
☐	**Targets for Trends Rather than Absolute Values.** Consider allowing targets in the form of percent change (slope or trend line rather than single number).
☐	**Acknowledge Risks in Target Setting.** The rules should acknowledge that target setting has risks – an agency that doesn't meet the target they have established could face public criticism or other unintended consequences (cross-cutting recommendation)
☐	**Provide Rationale.** Setting targets should be accompanied by a rationale for selecting the specific target value. (cross-cutting recommendation)
☐	**Rational Schedule.** The time periods for the performance measure data collection, target setting assessment, and target adjustments need to consider the varying processes each state has for these activities. (cross-cutting recommendation)
☐	**Target-Setting Timeline.** A State should have the flexibility to align their MAP-21 target-setting and performance reporting schedule with their TIP/STIP project cycle. (cross-cutting recommendation)
☐	**Coordination of State and MPO Targets.** The development of State and MPO targets should be coordinated through a 3C (continuing, cooperative and comprehensive) planning process. This process should result in MPO targets that are attainable given the level of investment a DOT plans to make in a metropolitan planning area (MPA) over a particular time-horizon. Whenever possible, DOTs and MPOs should use consistent (i.e. equivalent) targets to assess the condition and performance of state highways within an MPA. (cross-cutting recommendation)

Comments:

Performance Reporting and Progress Evaluation

Summary of Statutory Provisions: §1203; 23 USC 150(e) States have four years from the enactment of MAP–21 to submit a first biennial performance report addressing progress in achieving performance targets and the ways in which the State is addressing congestion at freight bottlenecks, including those identified in the National Freight Strategic Plan, within the State.

Context: Per section 1203, FHWA's rulemaking is likely to define more specific requirements and processes for state performance reporting. Guidance may be provided on the format, structure, and submittal requirements of the Biennial Performance Reports. Rulemaking may also address the relationship between existing state performance reporting processes and products and the reporting requirements established through MAP-21.

Checklist: The following checklist can be used as a guide for review of the NPRM; it may suggest areas where comments are warranted to ensure that the final rules support current or desired state performance management processes and can be implemented in a manner that minimizes burdens on limited state resources.

☐	**Reporting by Corridor.** AHTD and Reliability Index should be reported on individual corridors, as determined by the State DOT and MPOs.
☐	**Statewide Reporting - AHD.** AHTD should also be reported Statewide as the accumulation of AHD across selected Interstate corridors.
☐	**Statewide Reporting – Reliability Index.** Averages across Interstate corridors would be reported for locations where the reliability index is greater than 1.0. A statewide average RI value should be calculated by weighting the individual corridor RI values by the number of truck-miles traveled in each corridor.
☐	**Explanation for Results.** When States and MPOs do not meet performance targets, they should describe what they have done to improve performance, how those actions impacted the performance, and why they have not met the target. (cross-cutting recommendation)
☐	**Accountability Based on Control.** Only hold state DOTs and MPOs accountable for what they manage and control. Those who set targets should be those who manage and fund the system and are held responsible for compliance. Agencies should not be penalized for not meeting targets due to circumstances beyond their control. (cross-cutting recommendation)

Comments: