

AASHTO SCOPM MAP-21 Notice of Proposed Rule-Making Checklist (CMAQ)

Document Overview

MAP-21 legislation requires States and MPOs to:

- Establish performance targets for system performance on the National Highway System – based on specific measures established by the Secretary of Transportation
- Submit statewide biennial performance reports on the established measures and targets
- Submit MPO performance plans describing progress in achieving the performance targets, including a description of CMAQ projects identified for funding and how such projects will contribute to achieving emission and traffic congestion reduction targets.

The Notice of Proposed Rulemaking (NPRM) for implementing the provisions of the legislation is expected to include more specific implementation details on system performance 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 NHS CMAQ 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: Statutory Provision: §1203(c); 23 USC 150(c) §1203; 23 USC 150(c)(5)] For the purpose of carrying out section 149 (Congestion Mitigation and Air Quality Improvement Program), the Secretary will establish performance measures for States to use to assess traffic congestion and on-road mobile source emissions

Context: To implement section 1203 of MAP-21, FHWA’s rulemaking will define specific system 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 performance measures shown below reflect the statutory requirements and incorporate the recommendations of the Task Force on measure calculation and definition.

Members of the Task Force noted a number of potential issues with implementation of the CMAQ performance measures including: (1) lack of consistency across agencies in processes for modeling of CMAQ project impacts, particularly for delay, (2) concern that CMAQ-eligible projects may not be the best projects to improve performance; (3) concern that the measures may not favor use of CMAQ funds to address highly localized problems that would not show area-wide impacts; (4) concern about basing measure calculation on the annual CMAQ report, given that the set of projects in that report may be different than the set of projects that were adopted in that year and (5) concern that the measures may systematically favor some jurisdictions in project selection, undermining equitable distribution. Underlying this last point is the need to recognize differences between areas that already have low emissions and little congestion and areas with substantial air quality and congestion issues.

In addition, a Task Force request for stakeholder comment on the measures yielded suggestions for modifying the delay measure to be delay per capita (rather than total), and modifying the emissions measure to be per day (rather than total – for consistency with the existing FHWA database).

Task Force Recommended Measures	
<input type="checkbox"/>	Annual Hours of Delay (AHD). Travel time above a congestion threshold (defined by State DOTs and MPOs) in units of vehicle - hours of delay reduced by the latest annual program of CMAQ projects.
<input type="checkbox"/>	Criteria Pollutant Emissions. Daily kilograms of on-road, mobile source criteria air pollutants (VOC, NOx, PM, CO) reduced by the latest annual program of CMAQ projects.

Measure Definitions and Data Sources (continued)

Measure Definition, Sources and Calculation Methods

- CMAQ Measure Applicability.** CMAQ measures should apply only to MPOs that serve Transportation Management Areas (TMAs) with populations of over 1,000,000 and that are nonattainment or maintenance areas. This aligns current air quality measure reporting with the CMAQ ‘performance plan’ requirements in MAP-21, which apply only to those MPOs serving TMAs with populations of 1 million or more that are nonattainment or maintenance areas.
- Definition – AHD.** AHD is the amount of extra time spent by each vehicle traveling due to congestion (based on a state- determined threshold of congestion). AHD is a summation of the number of daily vehicle-hours of delay due to congestion. Extra travel time shows where long distance trips by many commuters are occurring in slow conditions. It is composed of miles traveled, vehicles traveling (volumes), and the speed of travel.
- Threshold for Determining Congestion.** Each state and MPO should have the flexibility to establish a threshold speed for congestion for purposes of calculating the AHD reduced by CMAQ projects.
- Scope - AHD.** Analyzing, calculating, target setting, and reporting of the CMAQ traffic congestion measure is to be limited only to annual hours of delay for portions of the system that are in areas designated as being in either nonattainment or maintenance status.
- Scope – Criteria Pollutant Emissions.** The criteria pollutant emissions measure should target mobile source criteria air pollutants only (VOC, NO_x, PM, CO). Greenhouse gases and mobile source air toxics (MSATs) are not pollutants targeted by CMAQ. Measures targeting these emissions would not relate to the purpose of CMAQ, and would expand beyond what is included in MAP-21.
- Conform to current estimation practices for Criteria Pollutant Emissions.** The calculation method for the emissions measure should conform to current CMAQ requirements. Currently, estimation of on-road mobile source criteria pollutants for areas where most CMAQ dollars are spent is already required as part of Clean Air Act Amendments requirements and CMAQ program administration responsibilities. FHWA currently requires states and MPOs to report a quantitative estimate of expected emissions reductions attributable to each CMAQ project, and in some instances, FHWA allows projects to be bundled together for purposes of estimating benefits, or a qualitative estimate may be used in place of quantitative data. AASHTO recommends continuing current practices.
- Flexibility in emissions modeling.** Because CMAQ project sponsors and project types differ greatly and no single model is currently required by FHWA to calculate emissions reductions. AASHTO supports continuation of a flexible approach for measuring CMAQ project emission reductions that is consistent with current CMAQ reporting practices and that gives states and MPOs freedom to choose calculation approaches that work best in the context of their region, while ensuring every effort is taken to make credible estimates that are based on reproducible and logical analytical procedures.

Measure Definitions and Data Sources (continued)

- Consistency across CMAQ National Measures.** There should be consistency between the national-level reporting of CMAQ traffic congestion (AHD) and on-road mobile source emissions performance measures. The methodology (including the procedures and tools) employed by most MPOs to calculate on-road mobile source emissions, could also be used to estimate traffic congestion reductions.

- Minimize new data requirements.** To the extent USDOT would consider making any changes to current practices in this regard, such changes should be minimal and any new performance data and reporting should be consistent with current requirements, and with outputs of existing travel demand and air quality models.

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.

- State-MPO Coordination.** The target setting approach should encourage states and MPOs to work together, given the central role of MPOs in the current air quality planning process and in the new CMAQ performance plan requirements.
- Flexibility in Target Setting.** AASHTO supports state flexibility in the setting of targets; as provided in MAP-21. To that end, affected states and MPOs should have flexibility to set their own targets for the national reporting of the CMAQ traffic congestion performance measure.
- Scope of Targets.** Targets should be required only for areas required to report emissions and delay reductions which are those States and MPOs that serve TMAs with populations of over 1 million and that are nonattainment or maintenance areas.
- State Flexibility.** States should have flexibility to set the target values for each of the required measures. Targets need to be set in the context of available funding and agency funding allocation decisions. (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)
- 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)

Performance Reporting and Progress Evaluation (continued)

- 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.

§1113; 23 USC 149(l) MPOs serving TMAs with population over one million representing a maintenance or non-attainment area must submit biennial performance plans including an analysis of the impact of the State's program of projects on achieving air quality and congestion targets.

Context: Per sections 1203 and 1113, 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.

- MPO-State Coordination on Reporting.** States and MPOs should work together to prepare reports detailing CMAQ program traffic congestion and emissions reductions.
- Recognize Existing Reporting Systems.** States already are required to prepare annual reports detailing how CMAQ funds have been invested. Since 2004, states have submitted their CMAQ annual reports electronically through FHWA's web-based CMAQ Tracking System.
- 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: