



# AASHTO SCOPM MAP-21 Checklist



## Performance Area—Safety

### Document Overview

MAP-21 legislation requires states to:

- Report the annual numbers of serious injuries and fatalities and serious injuries and fatalities per vehicle mile traveled—based on specific measures established by the Secretary of Transportation;
- Set performance targets for each of the established national measures;
- Submit biennial performance reports on the established measures and targets;
- Meet, or make significant progress toward meeting, established targets;
- Satisfy special rules for high-risk rural roads and older drivers; and
- Conform to additional Highway Safety Plan reporting requirements.

The Notice of Proposed Rulemaking (NPRM) for implementing the provisions of the legislation is expected to include more specific implementation details on measure calculation and definition, data sources, 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 Highway Safety NRPM. 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 Provision:** §1203(c); 23 USC 150(c)(4) The Secretary will establish measures for states to use to assess serious injuries and fatalities per vehicle mile traveled and the number of serious injuries and fatalities.

**Context:** To implement section 1203 of MAP-21, FHWA's rulemaking will define specific safety performance measures. The rulemaking is expected to clarify the methods state DOTs will use for calculating the required measures, detail procedures for collecting and processing the necessary data, and provide guidance on areas where states may have relatively greater discretion (e.g., definition of serious injuries).

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

### Safety Performance Measures

- Number of Fatalities**—Five-year moving average of the count of the number of fatalities on all public roads for a calendar year
- Fatality Rate**—Five-year moving average of the Number of Fatalities divided by the Vehicle Miles Traveled (VMT) for a calendar year.
- Number of Serious Injuries**—Five-year moving average of the count of the number of serious injuries on all public roads for a calendar year.
- Serious Injury Rate**—Five-year moving average of the Number of Serious Injuries divided by the Vehicle Miles Traveled (VMT) for a calendar year.
- Use of Moving Averages.** Use five year moving averages for all measures.
- All Public Roads.** Fatalities and serious injuries should be reported for all public roads
- Fatality Rate**—*five-year moving average* of the number of fatalities divided by the Vehicle Miles Traveled (VMT) for a *calendar year*.
- Calendar Year.** All measures should be reported by calendar year.
- HSP Consistency.** HSIP performance metrics and reporting should be consistent with those used for state Highway Safety Plans.
- VMT Source.** VMT data for rate calculation should be sourced from FHWA HPMS.

## Performance Measure Definitions and Data Sources (continued)

- **Fatality Source.** Fatality data should be sourced from the NHTSA FARS system. Steps to improve timeliness of fatality and VMT data should be taken as needed to support reporting requirements. (Currently, finalized fatality data may not be available in FARS for up to two years following the end of a given calendar year.)
- **Serious Injury Source.** Serious injury data should be sourced from state crash data files.
- **Serious Injury Definition.** Consistency in definition of Serious Injuries should not be required at this time, and therefore numbers and rates from individual states should not be aggregated.

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.

§31102; 23 USC 402(k) Highway Safety Plans must include quantifiable annual performance targets for each performance measure and a justification for each performance target.

**Context:** Per section 1203 of MAP-21, states have flexibility in setting targets. 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.

Because the safety performance area NRPM is the first to be released by FHWA, it is likely that the draft proposed rule will address issues that are pertinent not just to safety but to other performance areas as well (e.g., guidance may be provided on the use of flat or declining performance targets, the suitability of risk-based approaches, provisions for periodic readjustment, etc.)

**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.

<input type="checkbox"/>	<b>State Flexibility.</b> 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)
<input type="checkbox"/>	<b>Allow Flat or Declining Performance Targets.</b> States should have the flexibility to choose to set targets that have performance holding steady, or in some situations declining. (cross-cutting recommendation)
<input type="checkbox"/>	<b>Risk-Based Approaches.</b> 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. (cross-cutting recommendation)
<input type="checkbox"/>	<b>Interim Targets Independent of Safety Goals.</b> States with zero-based goals for fatalities should not be discouraged from also setting less aggressive interim targets.
<input type="checkbox"/>	<b>Urban vs. Rural.</b> Individual states should determine whether to report general measures by urban vs. rural geographies; if they do, these measures should be reported in a manner consistent with numbers and rates currently reported in the HSP.
<input type="checkbox"/>	<b>Provide Rationale.</b> Setting targets should be accompanied by a rationale for selecting the specific target value. (cross-cutting recommendation)

## Target-Setting Method and Process (continued)

- **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)
- **Allow for Periodic Target Adjustment.** At each DOT's discretion, targets should be regularly re-evaluated and adjusted to reflect evolving risks (e.g., new revenue expectations, changing strategic priorities, etc.) Targets should be reviewed and revised periodically to confirm the selected target is still suitable for achieving the required results.
- **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.

§1112; 23 USC 148(i) Failing to make adequate progress towards meeting safety performance targets by the date that is two years after targets are established will result in reduced flexibility in use of funds, and requirements for annual implementation plans.

§31102; 23 USC 402(k) Highway Safety Plan reporting requirements include: documentation of current safety levels for each performance measure; quantifiable annual performance targets for each performance measure; and a justification for each performance target.

For the first highway safety plan submitted under MAP-21, the measures will be limited to those developed by NHTSA and the Governor's Highway Safety Association and described in the report, *Traffic Safety Performance Measures for States and Federal Agencies* (DOT HS 811025). For subsequent highway safety plans, the Secretary will coordinate with the Governor's Highway Safety Association on revised measures.

**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.

Per section 1112, rulemaking is likely to describe the requirements and processes for a determination of significant progress. Additional information may be provided on the consequences of failing to achieve significant progress (e.g., reduced flexibility in use of funds, and requirements for annual implementation plans.)

**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.

**Target Based on 3–5 Year Projection.** In terms of assessing making progress towards targets established by the states, it is recommended that state-set targets be based on a three- to five-year projection of the five-year moving average data. Targets should be evaluated every two years. For example, in 2015 a 3-year (or 5-year) target is set for 2018 (or 2020). In 2017, FHWA assesses whether progress has been made toward the 2018 (or 2020) target based on what the five-year moving average is in 2017.

**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)

## Performance Reporting and Progress Evaluation (continued)

- Consider Contextual Factors.** Any U.S. DOT progress assessments take into account unique characteristics of a state's situation that would affect their ability to meet some targets and not others. For example, dramatic changes in VMT may affect a state's ability to meet both of the rate-based measures, but not the count-based measures (and vice-versa). Contextual information including trends in VMT, population, demographics, economic changes, licensing and registration, changes to crash reporting, and funding are important for understanding results.
- Consider Multiple Measures.** After considering the state's unique situations, for a state to be penalized it should fail to meet at least two of its targets. For example, if a state misses one target, such as serious injuries per VMT, it should not have the same effect as if all four targets had not been met.
- Consider "Good Faith Effort."** In determining "significant progress achieved", FHWA should consider the demonstration of a state's or MPO's "Good Faith Effort" towards meeting targets. This information should be documented and provided by states and MPOs to a reasonable level of detail.
- Consider Current and Historical Performance.** U.S. DOT should consider a state's current safety performance before assessing consequences of missed targets: long-term progress, fatality/injury rates relative to national average, best use of available resources, etc. If a state has been a historically high performer, it should not be penalized for failing to meet an aggressive target this first time.
- 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)
- Self-Evaluation/Telling the Story.** States and MPOs should be allowed to self-evaluate in determining whether "significant progress" has been made. This assessment should be based on quantitative and, if needed, qualitative data. In addition, determination of "significant progress" should be supported by narrative information if specific performance targets are not achieved. In this case, states and MPOs should provide narrative information and data to document the circumstances and assessment determination. (cross-cutting recommendation)
- Programmatic Approach:** The "significant progress" determination should be made based on a programmatic approach rather than based on separate evaluations for individual target areas. This approach would support states and MPOs in making balanced and sound investment decisions rather than trying to meet one target at the expense of another. (cross-cutting recommendation)

## Performance Reporting and Progress Evaluation (continued)

- Defining Significant Progress and Progress Agreements:** Consistent with current practice, states and their local FHWA Division offices should continue to work together and be
- empowered to consensually develop and determine what constitutes significant progress—at the program or performance measure level. Progress determination could be based on mutually agreed on templates and criteria.

Comments:

## Special Rules for HRRR and Older Drivers & Pedestrians

**Context:** Section 1112 establishes consequences for fatality rate increases within two targeted categories: high-risk rural roads (HRRR) and drivers and pedestrians over age 65. Rulemaking is expected to provide additional detail on the data sources, measure calculation methodologies, and reporting requirements for these special rules. In addition, rulemaking may clarify the consequences described in MAP-21 if states fail to achieve the specified performance objectives.

**Summary of Statutory Provision:** §1112; 23 USC 148(g) If the fatality rate on high-risk rural roads increases over the most recent two-year period for which data are available, in the next fiscal year the state must obligate for this purpose an amount at least equal to 200 percent of its FY 2009 HRRR set-aside.

If fatalities and serious injuries per capita for drivers and pedestrians over age 65 increases during the most recent two-year period for which data are available, a state is required to incorporate strategies focused on older drivers and pedestrians in the next SHSP update.

**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.

<input type="checkbox"/>	<b>Special Rules—Fatality Rates.</b> A special rule for rural roads is based on fatality rates, but rates are not defined. The rate should be based on VMT to be consistent with HSPs and with the required general fatality rate measure.
<input type="checkbox"/>	<b>Special Rules—Rolling Average.</b> Because the rules are based on the most recent two-year period and two years of data will not account for normal variation in crashes, states should be measured using the change in five-year moving averages during that two-year period, for both the older road user and rural road rules.
<input type="checkbox"/>	<b>Special Rules—Older Population.</b> It is recommended that the population that is used for the per capita rate of older driver and pedestrian fatalities is the older population of the state rather than the total population.
<input type="checkbox"/>	<b>Special Rules—Defer Assessment.</b> Since the determination of whether states are meeting requirements of the special rules (for older drivers, pedestrians and rural roads) could occur before evaluation of whether states are making significant progress toward their general safety targets, the special rules test should be deferred until the overall targets are evaluated.

## Special Rules for HRRR, Older Drivers & Pedestrians (continued)

- Special Rules—Consider Overall Progress.** The requirements and penalties for the special rules (for high-risk rural roads and older drivers and pedestrians) should be based on progress a state is making toward its required targets for the four performance measures. For example, if a state is making significant progress toward its performance targets, then
- the state should not be subject to the considerations mandated in law if the older road user fatality and serious injury rate per capita increases in a two-year period. If states are meeting their overall targets, but not experiencing a decrease in the rural fatality rates, they should not be required to obligate the FY2009 amount of high-risk rural road program funds for high-risk rural roads.
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- Consider Impacts of E-Reporting.** Transition to electronic crash reporting may result in an increase in the number of reported serious injuries. The program guidance should be
- built to allow states/territories the ability to explain how or if a movement to e-reporting has influenced their crash data file—since the baseline values for evaluation of serious injuries per capita may be impacted.

Comments: