AGENCY: Federal Highway Administration (FHWA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The purpose of this final rule is to establish performance measures for State departments of transportation (State DOT) to use to carry out the Highway Safety Improvement Program (HSIP) and to assess the: number of motor vehicle crash-related serious injuries and fatalities; number of serious injuries and fatalities of non-motorized users; and serious injuries and fatalities per vehicle miles traveled (VMT).

The FHWA issues this final rule based on section 1203 of the Moving Ahead for Progress in the 21st Century Act (MAP-21), which identifies national transportation goals and requires the Secretary to promulgate a rulemaking to establish performance measures and standards in specified Federal-aid highway program areas. The FHWA also considered the provisions in the Fixing America’s Surface Transportation Act (FAST Act) in the development of this final rule. The HSIP is a Federal-aid highway program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal lands.
DATES: This final rule is effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. The incorporation by reference of certain publications listed in the regulation is approved by the Director of the Federal Register as of [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

FOR FURTHER INFORMATION CONTACT: Francine Shaw Whitson, Office of Infrastructure, (202) 366-8028, or Anne Christenson, Office of the Chief Counsel, (202) 366-0740, Federal Highway Administration, 1200 New Jersey Ave., SE., Washington, DC 20590. Office hours are from 8:00 a.m. to 4:30 p.m., e.t., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

Electronic Access and Filing

The notice of proposed rulemaking (NPRM) published at 79 FR 13846 on March 11, 2014, and all comments received may be viewed online through:


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   A. Purpose of the Regulatory Action
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I. Executive Summary

A. Purpose of the Regulatory Action

The MAP–21 (Pub. L. 112–141) and the FAST Act (Pub. L. 114-94) transform the Federal-aid highway program by establishing new performance management requirements to ensure that State DOTs and Metropolitan Planning Organizations (MPO) choose the most efficient investments for Federal transportation funds. Performance management refocuses attention on national transportation goals, increases the accountability and transparency of the Federal-aid highway program, and improves project decisionmaking through performance-based planning and programming. State DOTs will now be required to establish performance targets and assess performance in 12 areas\(^1\) established by the MAP-21, and FHWA will assess\(^2\) their progress toward meeting targets in 10 of these areas.\(^3\) State DOTs that fail to meet or make significant progress toward meeting safety targets will be required to direct a portion of their HSIP funding toward projects that will improve safety.

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\(^1\) These areas are listed within 23 U.S.C. 150(c), which requires the Secretary to establish measures to assess performance or condition.


\(^3\) Title 23, sections 119(e)(7), 148(i), and 167(j) require USDOT to assess significant progress in 10 of the 12 performance measure areas (5 for the NHPP, 4 for HSIP, and 1 for freight).
This rule establishes the performance measures to carry out the HSIP and to assess serious injuries and fatalities on all public roads. This is the first of 3 rules that will establish performance measures for State DOTs and MPOs to use to carry out Federal-aid highway programs and assess performance in each of 12 areas. In addition, this rule establishes the process for State DOTs and MPOs to use to establish and report their safety targets, the process for State DOTs and MPOs to report on their progress for their safety targets, and the process that FHWA will use to assess whether State DOTs have met or made significant progress toward meeting safety targets.

This rule establishes regulations to more effectively evaluate and report on surface transportation safety across the country. These regulations will: improve data by providing for greater consistency in the reporting of serious injuries; improve transparency by requiring reporting on serious injuries and fatalities through a public reporting system; enable targets and progress to be aggregated at the national level; require State DOTs to meet or make significant progress toward meeting their targets; and establish requirements for State DOTs that have not met or made significant progress toward meeting their targets. State DOTs and MPOs will be expected to use the information and data generated as a result of the new regulations to inform their transportation planning and programming decisionmaking and directly link investments to desired performance outcomes. In particular, FHWA expects that the new performance measures outlined in this rule will help State DOTs and MPOs make investment decisions that will result in the greatest possible reduction in fatalities and serious injuries. This regulation is also aligned with DOT support of the Toward Zero
Deaths (TZD) vision, which has also been adopted by many State DOTs. While MAP-21 does not specify targets for agencies, per the authorizing statute, this performance measures system is an important step in measuring and holding accountable transportation agencies as they work toward the goal of eliminating traffic deaths and serious injuries. These regulations will also help provide FHWA the ability to better communicate a national safety performance story.

B. Summary of Major Provisions

In this rule, FHWA establishes the measures to be used by State DOTs to assess performance and carry out the HSIP; the process for State DOTs and MPOs to establish their safety targets; the methodology to determine whether State DOTs have met or made significant progress toward meeting their safety targets; and the process for State DOTs and MPOs to report on progress for their safety targets.

This final rule retains the majority of the major provisions of the NPRM but makes significant changes by (a) establishing a fifth performance measure to assess the number of combined non-motorized fatalities and non-motorized serious injuries and (b) revising the methodology for assessing whether a State has met or made significant progress toward meeting its targets. The FHWA updates these and other elements of the NPRM based on the review and analysis of comments received.

The FHWA establishes 5 performance measures to assess performance and carry out the HSIP: (1) number of fatalities, (2) rate of fatalities per VMT, (3) number of serious injuries, (4) rate of serious injuries per VMT, and (5) number of combined non-motorized fatalities and non-motorized serious injuries. The FHWA sought comment on
how a non-motorized measure could be included in this rulemaking and, in response to comments establishes the non-motorized measure included in this final rule. The measures will be calculated based on a 5-year rolling average.

In response to comments, FHWA has made changes to the process for assessing whether a State met or made significant progress toward meeting its targets based on whether the process would meet the following criteria: (a) holds States to a higher level of accountability; (b) does not discourage aggressive targets; (c) supports the national goal to achieve a significant reduction in fatalities and serious injuries; (d) is fair and consistent/quantitative; (e) is simple/understandable/transparent; (f) is not based on historical trends; and (g) is associated with the targets. The FHWA adopts in this final rule that a State is determined to meet or make significant progress toward meeting its targets when four out of five targets are met or the outcome for the performance measure is better than the State’s baseline safety performance for that measure.

This rule establishes the processes for State DOTs and MPOs to establish their safety targets and to report on progress for their safety targets. State DOT targets shall be identical to the targets established by the State Highway Safety Office (SHSO) for common performance measures reported in the State’s Highway Safety Plan (HSP). Targets established by the State DOTs will begin to be reported in the first HSIP annual report that is due after 1 year from the effective date of this final rule and then each year thereafter in subsequent HSIP annual reports. Once submitted in an HSIP report, approval from FHWA (and from the National Highway Transportation Safety Administration (NHTSA) for the common performance measures in the HSP) would be
required to change a State’s performance target for that year. However, the State will be free to establish new targets for subsequent years in the following year’s HSIP report. States may choose to establish separate targets for any urbanized area within the State and may also choose to establish a single non-urbanized target for all of the non-urbanized areas in a State. These optional targets will not be included in assessing whether the State met or made significant progress toward meeting its targets.

The MPOs may choose between programing projects in support of all the State targets, establishing specific numeric targets for all of the performance measures (number or rate), or establishing specific numeric targets for one or more individual performance measures (number or rate) and supporting the State target on other performance measures. For MPOs with planning boundaries that cross State lines, the MPO must plan and program projects to contribute toward separate sets of targets—one set for each State in which the planning area boundary extends.

State DOTs that have not met or made significant progress toward meeting safety performance targets must: (1) use a portion of their obligation authority only for HSIP projects and (2) submit an annual implementation plan that describes actions the State DOT will take to meet their targets. Both of these provisions will facilitate transportation safety initiatives and improvements and help focus Federal resources in areas where Congress has deemed a national priority.

State DOTs and MPOs are expected to use the information and data generated as a result of this new regulation to better inform their transportation planning and
programming decisionmaking, and specifically to use their resources in ways that will result in the greatest possible reduction in fatalities and serious injuries.

The FHWA has decided to phase in the effective dates for the three final rules for these performance measures so that each of the three performance measures rules will have individual effective dates. This allows FHWA and the States to begin implementing some of the performance requirements much sooner than waiting for the rulemaking process to be complete for all the rules.

The FHWA also updates several other elements of the NPRM based on the review and analysis of comments received. Section references below refer to sections of the regulatory text for title 23 of the Code of Federal Regulations (CFR).


The FHWA updates the list of definitions in § 490.205 to remove definitions no longer required and to add new definitions based on the revised methodology for determining whether a State has met or made significant progress toward meeting its
performance targets. The FHWA also adds definitions to define explicitly the terms used in the new performance measures.

Section 490.207 establishes the safety performance measures State DOTs and MPOs shall use to assess roadway safety. State DOTs and MPOs shall measure serious injuries and fatalities per VMT, and the total numbers of both serious injuries and fatalities. In addition to those proposed in the NPRM, the FHWA adds a performance measure to assess the number of combined non-motorized fatalities and non-motorized serious injuries. Each of the performance measures use a 5-year rolling average. The exposure rate measures are calculated annually per 100 million VMT. Data for the fatality-related measures are taken from the Fatality Analysis Reporting System (FARS) and data for the serious injury-related measures are taken from the State motor vehicle crash database. The VMT are derived from the Highway Performance Monitoring System (HPMS). For MPOs that choose to establish a quantifiable rate target, the exposure data for serious injury and fatality rates are calculated annually per 100 million VMT from the MPO’s estimate of VMT that is consistent with other Federal reporting requirements, if applicable. The FHWA added the provision for MPO VMT estimates since the NPRM did not identify an appropriate source for MPO VMT, as it does not exist in the HPMS.

Section 490.209 describes the process State DOTs and MPOs shall use to establish their targets for each of the safety measures. The FHWA reduces the number of years of historical data that must be included in the HSIP report, consistent with changes to the methodology for assessing significant progress. In addition, FHWA revises the
option for States to establish separate urbanized and non-urbanized area targets. Rather than allowing States to establish one additional urbanized area target for all urbanized areas within the State, the final rule allows State DOTs to select any number and combination of urbanized area boundaries and a single non-urbanized area for the establishment of additional targets. This change provides flexibility for States because the rule does not include optional urbanized and non-urbanized targets in the assessment of whether a State has met or made significant progress toward meeting its targets. The FHWA retains the requirement that the performance measures common to the State’s HSP and the HSIP (number of fatalities, fatality rate, and number of serious injuries) be defined identically, as coordinated through the State Strategic Highway Safety Plan (SHSP). 4

Section 490.211 establishes the method FHWA will use to assess whether State DOTs have met or have made significant progress toward meeting their safety performance targets in accordance with 23 U.S.C. 148(i). Based on review and analysis of comments, FHWA revises the method proposed in the NPRM. In this final rule, a State DOT is determined to have met or made significant progress toward meeting its targets when at least four of the five required performance targets are either met or the safety outcome for the performance measure has improved (i.e., the number or rate of fatalities and/or serious injuries is less than the 5-year rolling average data for the

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4 The MAP-21 requires State Highway Safety Offices to use the “Traffic Safety Performance Measures for States and Federal Agencies” (DOT HS 811 025) to establish performance measures and targets in the HSP. The MAP-21 further requires NHTSA to coordinate with GHSA in making revisions to the performance measures identified in the report. Accordingly, any changes to the common performance measures, such as changes to the 5-year rolling average, are subject to the GHSA coordination requirement in MAP-21.
performance measure for the year prior to the establishment of the State’s target). The FHWA also reduces the time lag between when the State establishes the targets and when FHWA will assess whether the State has met or made significant progress toward meeting its targets. Instead of using Final FARS for all 5 years of data that comprise the rolling average, FHWA adopts the use of the FARS Annual Report File (ARF) if Final FARS data are not available. This approach allows FHWA to assess whether States met or made significant progress toward meeting their targets 1 year earlier than proposed in the NPRM. However, FHWA recognizes the timeframe for this determination remains lengthy. In order to accelerate the transparency that is one of the goals of the MAP-21, FHWA is in the process of creating a new public Web site to help communicate the national performance story. The Web site will likely include infographics, tables, charts, and descriptions of the performance data that the State DOTs would be reporting to FHWA. The FHWA will make publicly available postings of State performance statistics and other relevant data that relate to this performance measurement system as soon as the data are available.

The method by which FHWA will review performance progress of MPOs is discussed in the update to the Statewide and Metropolitan Planning regulation as described in 23 CFR part 450.

Section 490.213 identifies safety performance reporting requirements for State DOTs and MPOs. State DOTs establish and report their safety targets and progress toward meeting their safety targets in the annual HSIP report in accordance with 23 CFR part 924. As proposed in the NPRM, targets established by an MPO would be reported
annually to their State DOT(s). The FHWA revises this section to require MPOs to report their established targets to the relevant State DOT(s) in a manner that is agreed upon and documented by both parties, rather than requiring the procedure be documented in the Metropolitan Planning Agreement. The MPOs report on progress toward the achievement of their targets in their System Performance Report as part of their transportation plan, in accordance with 23 CFR part 450.

C. Costs and Benefits

The FHWA estimated the incremental costs associated with the new requirements in this rule that represent a change to current practices for State DOTs and MPOs. The FHWA derived the costs of each of these components by assessing the expected increase in level of effort from labor to standardize and update data collection and reporting systems of State DOTs, as well as the increase in level of effort from labor to establish and report targets.

To estimate costs, FHWA multiplied the level of effort, expressed in labor hours, with a corresponding loaded wage rate that varied by the type of laborer needed to perform the activity. Following this approach the 10-year undiscounted incremental cost to comply with this rule is $87.5 million.

The final rule’s 10-year undiscounted cost ($87.5 million in 2014 dollars) increased from the proposed rule ($66.7 million in 2012 dollars). The FHWA made several changes which affected cost. These changes include updating costs to 2014 dollars from 2012 dollars and updating labor costs to reflect current Bureau of Labor Statistics (BLS) data. In addition, FHWA revised the final rule Regulatory Impact
Analysis (RIA) to reflect (1) updated local law enforcement census data, (2) costs associated with establishing the new non-motorized fatalities and non-motorized serious injuries performance measure, (3) the removal of the proposed requirement for State DOTs to compile a 10-year historical trend line, (4) the deferred implementation of MMUCC, 4th edition compliance, (5) added effort required for MPOs to estimate MPO-specific VMT for performance targets, (6) a decrease in the number of MPOs expected to establish quantifiable targets, (7) costs of coordinating on the establishment of targets in accordance with 23 CFR part 450, (8) an increase in the estimated number of States that might not meet or make significant progress toward meeting their targets using the new methodology included in the final rule, and (9) a decrease in the number of years States that do not meet or make significant progress toward meeting their targets will incur costs.

The FHWA expects that the rule will result in some significant benefits, although they are not easily quantifiable. Specifically, FHWA expects the rule will allow for more informed decisionmaking at a regional, State, and Federal level on safety-related project, program, and policy choices. The rule will increase focus on investments that will help to reduce fatalities and serious injuries. The rule also will yield greater accountability on how States and MPOs are using Federal-aid highway funds because of the MAP-21 requirements for mandated reporting that will increase visibility and transparency.

The FHWA could not directly quantify the expected benefits discussed above due to data limitations and the amorphous nature of the benefits from the rule. Therefore, FHWA used a break-even analysis as the primary approach to quantify benefits. The
FHWA focused its break-even analysis on reduction in fatalities or serious injuries needed in order for the benefits of the rule to justify the costs. The results of the break-even analysis quantified the dollar value of the benefits that the rule must generate to outweigh the threshold value, the estimated cost of the rule, which is $87.5 million in undiscounted dollars. The results show that the rule must prevent approximately 10 fatalities, or 199 incapacitating injuries, over 10 years to generate enough benefits to outweigh the cost of the rule. The FHWA believes that the benefits of this rule will surpass this threshold and, as a result, the benefits of the rule will outweigh the costs.

Relative to the proposed rule, both of the break-even thresholds increased in the final rule. For both fatalities and incapacitating injuries, the break-even points were affected by the increase in the undiscounted 10-year cost, as well as by an increase in the Value of Statistical Life (VSL) for fatalities, currently valued at $9,200,000, and the average cost per incapacitating injury, currently valued at $440,000.

The table below displays the Office of Management and Budget (OMB) A-4 Accounting Statement as a summary of the cost and benefits calculated for this rule.

### OMB A-4 Accounting Statement

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<tr>
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</table>

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The rule is cost-beneficial if over the 10-year analysis period it reduces the number of fatalities by 9.5 or the number of incapacitating injuries by 198.8, which is equivalently 1.0 fatality or 19.9 incapacitating injuries per year in a 10-year study period, from its current base case projection. Because of this low threshold, FHWA determines that the rule benefits outweigh the costs.

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<th>Costs</th>
<th>Annualized Monetized ($/year)</th>
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<th>10 Years</th>
<th>Final Rule RIA</th>
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### II. Acronyms and Abbreviations

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<th>Acronyms and Abbreviations Table</th>
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<tr>
<td>AASHTO</td>
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<td>ARC</td>
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<tr>
<td>ARF</td>
</tr>
<tr>
<td>ATSSA</td>
</tr>
<tr>
<td>BLS</td>
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<td>Caltrans</td>
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<td>CODES</td>
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<tr>
<td>CY</td>
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<td>DOT</td>
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## Acronyms and Abbreviations Table

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVRPC</td>
<td>Delaware Valley Regional Planning Commission</td>
</tr>
<tr>
<td>EO</td>
<td>Executive Order</td>
</tr>
<tr>
<td>FARS</td>
<td>Fatality Analysis Reporting System</td>
</tr>
<tr>
<td>FAST Act</td>
<td>Fixing America’s Surface Transportation Act</td>
</tr>
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<td>FHWA</td>
<td>Federal Highway Administration</td>
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<td>FMCSA</td>
<td>Federal Motor Carrier Safety Administration</td>
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<td>GHSA</td>
<td>Governor Highway Safety Association</td>
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<tr>
<td>HIPPA</td>
<td>Health Insurance Privacy and Portability Act</td>
</tr>
<tr>
<td>HPMS</td>
<td>Highway Performance Monitoring System</td>
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<td>Highway Safety Improvement Program</td>
</tr>
<tr>
<td>HSP</td>
<td>Highway Safety Plan</td>
</tr>
<tr>
<td>IBR</td>
<td>Incorporation by reference</td>
</tr>
<tr>
<td>IFR</td>
<td>Interim Final Rule</td>
</tr>
<tr>
<td>KABCO</td>
<td>K, killed; A, disabling injury; B, evident injury; C, possible injury; O, no apparent injury</td>
</tr>
<tr>
<td>LAB</td>
<td>League of American Bicyclists</td>
</tr>
<tr>
<td>MAP-21</td>
<td>Moving Ahead for Progress in the 21\textsuperscript{st} Century Act</td>
</tr>
<tr>
<td>MARC</td>
<td>Mid-America Regional Council</td>
</tr>
<tr>
<td>MIRE</td>
<td>Model Inventory of Roadway Elements</td>
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<td>MMUCC</td>
<td>Model Minimum Uniform Crash Criteria</td>
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<tr>
<td>MPO</td>
<td>Metropolitan Planning Organizations</td>
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<td>NACCHO</td>
<td>National Association of County and City Health Officials</td>
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<td>NARA</td>
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<td>NHTSA</td>
<td>National Highway Traffic Safety Administration</td>
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<td>NPRM</td>
<td>Notice of proposed rulemaking</td>
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<tr>
<td>NTSB</td>
<td>National Transportation Safety Board</td>
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<td>NYMTC</td>
<td>New York Metropolitan Transportation Council</td>
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<td>NYSAMPO</td>
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<td>Office of Management and Budget</td>
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<td>PRA</td>
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<tr>
<td>RIA</td>
<td>Regulatory Impact Analysis</td>
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<td>Southeast Michigan Council of Governments</td>
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<td>SHSO</td>
<td>State Highway Safety Office</td>
</tr>
<tr>
<td>SHSP</td>
<td>Strategic Highway Safety Plan</td>
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<tr>
<td>SRTA</td>
<td>Shasta Regional Transportation Agency</td>
</tr>
<tr>
<td>SRTS</td>
<td>Safe Routes to Schools National Partnership</td>
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### Acronyms and Abbreviations Table

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>State DOT</td>
<td>State Department of Transportation</td>
</tr>
<tr>
<td>STIP</td>
<td>State Transportation Improvement Program</td>
</tr>
<tr>
<td>STP</td>
<td>Surface Transportation Program</td>
</tr>
<tr>
<td>TMA</td>
<td>Transportation Management Area</td>
</tr>
<tr>
<td>TPM</td>
<td>Transportation Performance Management</td>
</tr>
<tr>
<td>VMT</td>
<td>Vehicle miles traveled</td>
</tr>
<tr>
<td>VSL</td>
<td>Value of Statistical Life</td>
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### III. Background

On March 11, 2014, at 79 FR 13846, FHWA published an NPRM proposing the following: the definitions that will be applicable to the new 23 CFR part 490; the process to be used by State DOTs and MPOs to establish their safety-related performance targets that reflect the measures proposed in the NPRM; a methodology to be used to assess State DOTs’ compliance with the target achievement provision specified under 23 U.S.C. 148(i); and the process State DOTs must follow to report on progress toward meeting or making significant progress toward meeting safety-related performance targets. The NPRM also included a discussion of the collective rulemaking actions FHWA intends to take to implement MAP-21 performance-related provisions. On May 28, 2014, at 79 FR 30507, FHWA extended the comment period on the NPRM from June 9, 2014, to June 30, 2014.

### IV. Summary of Comments

The FHWA received 13,269 letters to the docket, including letters from 38 State DOTs, 27 local government agencies, more than 50 associations and advocacy groups, over 13,000 individuals and consultants, various other government agencies as well as 1
letter cosigned by 8 U.S. Senators. The FHWA has also reviewed and considered the implications of the FAST Act on the Safety Performance Management Final Rule.

Of all the letters to the docket, 99 percent specifically addressed bicycle and pedestrian safety issues or the need for a non-motorized performance measure. The FHWA received more than 11,000 verbatim duplicates of a letter written by the League of American Bicyclists (LAB) or a copy of the letter with additional commentary. Fifty-seven additional letters endorsed the LAB letter and provided additional comments. Smart Growth America submitted verbatim letters from 1,513 individuals and FHWA received 473 duplicate copies of letters supporting the Safety Routes to Schools National Partnership (SRTS) and 6 letters in support of America Walks. Another 84 letters from individuals provided comments focusing on bicycle/pedestrian issues without reference to specific organization letters.

Of the State DOT letters, 27 either (a) specifically mentioned their general or strong support for the first of two letters that the American Association of State Highway and Transportation Officials (AASHTO) submitted to the docket, (b) identified that they assisted with writing portions of the first AASHTO letter and were in general agreement with AASHTO’s letter; and/or (c) stated that they agreed with the letter and had additional comments specific to their State. Those included: Alaska, Arkansas, Colorado, Connecticut, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Montana, New Jersey, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, and Wyoming DOTs.
The FHWA carefully considered the comments received from the vast array of stakeholders. The comments, and summaries of FHWA’s analyses and determinations, are discussed in the following sections.

**Selected Topics for which FHWA Requested Comments**

In the NPRM, FHWA specifically requested comments or input regarding certain topics related to the safety performance measures rulemaking. Several of those have an overall impact on the regulatory language in this final rule, so are discussed in this section. The others are discussed in the Section-by-Section analysis.

**Effective Date**

In the NPRM, FHWA proposed to establish one common effective date for all three final rules for the performance measures established pursuant to 23 U.S.C. 150. The FHWA solicited comments on an appropriate effective date. While there were no comments suggesting a specific date, the American Traffic Safety Services Association (ATSSA) and Delaware DOT disagreed with the proposal for one effective date for all three rules for performance measures because fatalities and serious injuries are measured already, well known, and used in practice by virtually every State DOT. The commenters stated that especially with no firm timetable for the subsequent performance measure rulemakings, there is no reason to delay implementation of this congressional mandate to more effectively plan to save lives on our roadways. Michigan and Washington State DOTs and the Mid-America Regional Council (MARC) expressed support for one common effective date in order to reduce the burdens on States to manage multiple effective dates. Virginia DOT suggested that without knowing more about the other
proposed performance measures it was premature to seek opinions on effective dates.

Finally, in an Explanatory Statement accompanying the “Consolidated and Further
Continuing Appropriations Act, 2015,” published in the Congressional Record,\(^5\) Congress
directs FHWA to publish its final rule on safety performance measures no later than
September 30, 2015.

While FHWA recognizes that one common effective date could be easier for State
DOTs and MPOs to implement, the process to develop and implement all of the Federal-
aid highway performance measures required in MAP-21 has been lengthy. It is taking
more than 3 years since the enactment of MAP-21 to issue all three performance measure
NPRMs (the first performance management NPRM was published on March 11, 2014;
the second NPRM\(^6\) was published on January 5, 2015; and the third performance
management NPRM\(^7\) is expected to be published soon). Rather than waiting for all three
rules to be final before implementing the MAP-21 performance measure requirements,
FHWA has decided to phase in the effective dates for the three final rules for these
performance measures so that each of the three performance measures rules will have
individual effective dates. This allows FHWA and the States to begin implementing
some of the performance requirements much sooner than waiting for the rulemaking
process to be complete for all the rules. This approach would also implement the safety-

\(^5\) Congressional Record, December 11, 2014, page H9978,

\(^6\) NPRM for the National Performance Management Measures; Assessing Pavement Condition for the
National Highway Performance Program and Bridge Condition for the National Highway Performance
30085.pdf

\(^7\) NPRM for the 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.
related measures and requirements in this rule before the requirements proposed in the other two rules. Earlier implementation of the safety-related requirements in this rule is consistent with a DOT priority to improve the safety mission across the Department.  

The FHWA also believes that a staggered approach to implementation (i.e., implementing one set of requirements at the onset and adding on requirements over time) will better help States and MPOs transition to a performance-based framework. 

The FHWA believes that States are in a position to begin to implement the safety Transportation Performance Management (TPM) requirements now for several reasons. Since 2010, SHSO have been establishing and reporting annual targets for safety performance measures. Since MAP-21 was enacted, FHWA and the NHTSA have encouraged State SHSOs to coordinate with State DOTs as their targets are established. States are familiar with the safety data sources necessary to establish their targets (FARS, State motor vehicle crash databases and HPMS) as these have been in place for many years. The FHWA documented in the NPRM its assessment that the safety measures were appropriate for national use and that FHWA was ready to implement the measures in an accurate, reliable, and credible manner, with a few gaps that were addressed in the NPRM. There were no comments countering this assessment. Although FHWA believes that individual implementation dates will help States and MPOs transition to performance based planning, to lessen any potential burden of staggered effective dates on States and MPOs, FHWA will provide guidance to States and MPOs on how to carry out the new performance requirements. 

In addition to providing this guidance, FHWA is committed to providing stewardship to State DOTs and MPOs to assist them as they take steps to manage and improve the performance of the highway system. As a Federal agency, FHWA is in a unique position to utilize resources at a national level to capture and share strategies that can improve performance. The FHWA will continue to dedicate resources at the national level to provide technical assistance, technical tools, and guidance to State DOTs and MPOs to assist them in making more effective investment decisions. It is FHWA’s intent to be engaged at a local and national level to provide resources and assistance from the onset to identify opportunities to improve performance and to increase the chances for full State DOT and MPO compliance of new performance related regulations. The FHWA technical assistance activities include conducting national research studies, improving analytical modeling tools, identifying and promoting best practices, preparing guidance materials, and developing data quality assurance tools.

Principles Considered in the Development of the Regulations for National Performance Management Measures under 23 U.S.C. 150(c)

The FHWA listed nine principles in the NPRM preamble that were considered in the development of the proposed regulation⁹. The FHWA encouraged comments on the

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⁹ Nine principles used in the development of proposed regulations for national performance management measures under 23 U.S.C. 150(c), www.regulations.gov, Docket FHWA-2013-0020:

- Provide for a National Focus—focus the performance requirements on outcomes that can be reported at a national level.
- Minimize the Number of Measures—identify only the most necessary measures that will be required for target establishment and progress reporting. Limit the number of measures to no more than two per area specified under 23 U.S.C. 150(c).
- Ensure for Consistency—provide a sufficient level of consistency, nationally, in the establishment of measures, the process to set targets and report expectations, and the approach to assess progress so that transportation performance can be presented in a credible manner at a national level.
extent to which the approach to performance measures set forth in the NPRM supported these principles. Commenters were supportive of both the principles and the approach to establishing the performance measures. The AASHTO, Connecticut DOT, and Tennessee DOT expressed support for the nine guiding principles, stating that they are appropriate and that the approaches set forth in the NPRM supported these guiding principles. The AASHTO suggested revisions seeking to clarify and underscore several of these principles, particularly providing flexibility to States in target establishment and ensuring adequate time to phase in requirements. Connecticut DOT echoed the need for flexibility in target establishment and phase in time. The New York State Association of Metropolitan Planning Organizations (NYSAMPO) expressed overall agreement with the principles and indicated that the proposed safety performance measure rule generally meets the intent of these principles. This commenter did, however, suggest that the NPRM did not fully realize the opportunity for “increased accountability and transparency” as it relates to the proposed methodology for determining whether States

- Phase in Requirements—allow for sufficient time to comply with new requirements and consider approaches to phase in new approaches to measuring, target establishment, and reporting performance.
- Increase Accountability and Transparency—consider an approach that will provide the public and decisionmakers a better understanding of Federal transportation investment needs and return on investments.
- Consider Risk—recognize that risks in the target establishment process are inherent, and that performance can be impacted by many factors outside the control of the entity required to establish the targets.
- Understand that Priorities Differ—recognize that State DOTs and MPOs must establish targets across a wide range of performance areas, and that they will need to make performance trade-offs to establish priorities, which can be influenced by local and regional needs.
- Recognize Fiscal Constraints—provide for an approach that encourages the optimal investment of Federal funds to maximize performance but recognize that, when operating with scarce resources, performance cannot always be improved.
- Provide for Flexibility—recognize that the MAP-21 requirements are the first steps that will transform the Federal-aid highway program to a performance-based program and that State DOTs, MPOs, and other stakeholders will be learning a great deal as implementation occurs.
are making significant progress toward their performance targets and suggested this could be a “black box” analysis meant to obscure rather than inform. In addition, the NYSAMPO stated that it was not clear how the NPRM demonstrates an “understanding that priorities differ.” For example, improving safety in terms of reducing deaths and injuries for all users should be a high priority of both State DOTs and MPOs, but priorities may differ on modal issues, and trade-offs may need to be made with other national goals in a highly constrained funding environment.

Letters organized by Smart Growth America suggested that the proposed rulemaking did not meet the congressional intent of MAP-21. The commenters stated that without real targets and clearly defined measures of success, the proposed rules do not provide the necessary motivation to improve safety and reduce the number of fatalities and serious injuries suffered by motorized and non-motorized users.

The FHWA appreciates the comments on the guiding principles. Based on the general support of the principles, FHWA retains the principles in the development of this final rule. As outlined in the section-by-section discussion below, FHWA has made revisions to portions of the regulation to more closely match the principles, including adding an additional performance measure and the timing and methodology of the assessment of whether a State has met or made significant progress toward meeting its targets. The FHWA addresses AASHTO and Connecticut DOT concerns about providing flexibility to States in target establishment in the §490.209 discussion of identical targets. In response to the NYSAMPO’s comment on the principle of “understanding that priorities differ” and that States and MPOs need to make trade-offs,
FHWA believes that this issue applies to the entire performance management program, not just this rule. The FHWA provides State DOTs and MPOs flexibilities to make performance trade-offs as they make target establishment and programming decisions in FHWA proposals for 23 CFR part 490.\textsuperscript{10} The “Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning” NPRM (Planning NPRM)\textsuperscript{11} further supports this principle because, as described in that proposal, the planning process brings all of the elements of a performance management framework (such as establishment of performance measures and targets and reporting requirements) together by linking decisionmaking and investment priorities to performance targets in areas like safety, infrastructure condition, traffic congestion, system reliability, emissions and freight movement. Trade-offs and establishing local and regional priorities are key elements of the TPM framework and a performance based planning process.

**Separate Non-motorized Performance Measures**

In developing the NPRM, FHWA considered input from numerous sources in selecting the proposed measures to carry out the HSIP and for State DOTs and MPOs to use to assess safety performance. In the NPRM, FHWA explained that it received information from stakeholders before publishing the NPRM through listening sessions and letters, in which the stakeholders suggested that: FHWA account for the safety of all


\textsuperscript{11} The Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning NPRM: \url{http://www.regulations.gov/#!documentDetail;D=FHWA-2013-0037-0001}.
road users by including separate measures for motorized and non-motorized (e.g., pedestrian, bicycle) transportation; that FHWA should define performance measures that specifically evaluate the number of fatalities and serious injuries for pedestrian and bicycle crashes; and that FHWA should require that bicycle and pedestrian crashes and fatalities be reported nationally and by States and MPOs. In addition, following the passage of MAP-21 and before the issuance of the NPRM, 15 Senators and 77 Members of the House of Representatives submitted letters to the Secretary of Transportation that expressed concern over rising bicyclist and pedestrian fatalities and suggested separate measures for motorized and non-motorized transportation should be established.

The FHWA did not propose separate motorized and non-motorized performance measures in the NPRM, but requested comments on how DOT could address non-motorized performance measures in the final rule. In addition, FHWA requested input on the extent to which States and MPOs currently collect and report non-motorized data and the reliability and accuracy of such data, and how States and MPOs consider such data in their safety programs and in making their investment decisions. The FHWA desired to hear from stakeholders how non-motorized performance measures could be included in the final rule to better improve safety for all users.

The majority of the comment letters submitted to the docket can be directly attributed to the question of whether to include a non-motorized performance measure. The AASHTO and 23 State DOTs objected to creating a separate performance measure for non-motorized users. The AASHTO commented that safety measures should focus on all fatalities and serious injuries and not on emphasis areas, such as those for separate

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non-motorized users. Twenty-three States submitted letters to the docket either supporting AASHTO’s comments or expressing individual objections to the separate inclusion of non-motorized measures: Alaska, California, Connecticut, Delaware, Florida, Georgia, Indiana, Iowa, Kentucky, Maine, Michigan, Minnesota, Missouri, Montana, New Jersey, North Dakota, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, Vermont, and Utah. The AASHTO and these States suggested that focusing performance measures on a particular group, such as non-motorized users, would limit States’ ability to use a comprehensive evaluation strategy and data-driven approach to determine where the investment of limited resources can most effectively save lives and reduce serious injuries. The AASHTO and Delaware, Iowa, Kentucky, Michigan, Minnesota, Montana, and Vermont DOTs, as well as the California State Association of Counties, objected to a separate performance measure because non-motorized users are already addressed in the HSP that SHSOs submit to NHTSA and which includes analyses of non-motorized (pedestrian and bicyclists) fatalities. They indicated that the emphasis on non-motorized safety should remain in the HSP, which allows each State to focus on its individual safety problems, while minimizing the number of performance measures in the HSIP that require target establishment, measurement, and reporting. Delaware and Minnesota DOTs noted that introducing additional performance measures would conflict with the second principle used to develop the proposed performance management regulations (i.e., to minimize the number of measures). The AASHTO also noted that the option to require a non-motorized performance measure would be counter to several of the principles used to develop the
performance measures, namely, to minimize the number of measures, understand that priorities differ, and provide for flexibility. The AASHTO, along with the Florida, Michigan, Montana, North Dakota, and Vermont DOTs argued that expanding performance measures by segregating specific types of fatalities and serious injuries at the national level would be inappropriate and contrary to MAP-21 and against States’ desire to focus national performance efforts on a limited number of measures to implement 23 U.S.C. 150. Finally, many of these same commenters, as well as Texas DOT, pointed out that non-motorized exposure data are not sufficient to support these measures.

The Michigan DOT and AASHTO each submitted a letter after the close of the comment period, in reaction to the Explanatory Statement accompanying the “Consolidated and Further Continuing Appropriations Act, 2015.” These letters reiterated earlier AASHTO comments, emphasizing that performance measures should not focus on particular issues, which would limit States’ ability to use a comprehensive, data driven approach to improving safety; any non-motorized performance measure should be based on currently available data-counts of non-motorist fatalities and serious injuries that occur on public roadways and involve a motor vehicle; and non-motorized performance measures should not be included in the assessment of whether a State has met or made significant progress toward meeting its performance targets. Michigan DOT also suggested that if a non-motorized performance measure were required, fatality data should be combined with serious injury data to reduce the volatility of small data sets.
However, 99 percent of the letters submitted to the docket supported a non-motorized performance measure. Commenters who expressed support included letters organized by the LAB (11,175 commenters in general agreement), Smart Growth America (1,513 identical letters), and the SRTS (467 letters); as well as letters from Transportation for America, ATSSA, AARP, the American Heart Association, and 3 State DOTs (Oregon, Virginia, and Washington State). The Regional Transportation Council and the North Central Texas Council of Governments, Puget Sound MPO, Metropolitan Planning Organization for Portland, Oregon, and Fairbanks Metropolitan Area Transportation System all expressed support for a process to establish performance measures for non-motorized travel. These commenters expressed concern that while total roadway fatalities have been in decline over the past decade, non-motorized fatalities have been on the rise. Moreover, supporters of a non-motorized performance measure noted in their comments to the docket, that in 2012, 16 percent of all national roadway fatalities were non-motorized users and claim that less than 2 percent of HSIP funds were obligated on non-motorized projects. Specifically, the LAB, Smart Growth America, SRTS, Transportation Choices Coalition, Idaho Walks, Adventure Cycling, Washington Bikes, the National Association of Realtors, AARP, the National Association of County and City Health Officials (NACCHO), other advocacy groups and their supporters, and Nashville MPO believe Congress amended the HSIP in MAP-21 to clearly support projects, activities, plans, and reports for non-motorized safety. They state, for example, the HSIP was amended in MAP-21, in 23 U.S.C. 148(c)(2)(A)(vi) to improve the collection of data on non-motorized crashes, and 23 U.S.C. 148(d)(1)(B) requires that
States address motor vehicle crashes that involve a bicyclist or pedestrian. The commenters concluded that HSIP funding is explicitly eligible for projects addressing the safety needs of bicyclists and pedestrians. The LAB comments addressed the concern in the NPRM that there may be “too few” recorded non-motorized fatalities to make a performance measure statistically valid or useful by noting that in 3 out of 5 States, non-motorized fatalities already make up more than 10 percent of their total fatalities.

Supporters of SRTS letters note that children and families should have the option to safely walk or bicycle to and from school, yet too many communities lack the basic infrastructure necessary to make that choice safe or possible. They argue that non-motorized measures would lead to improvements in this area, and, without this change, States will continue to overlook bicycle and pedestrian deaths, continue to spend HSIP funds nearly exclusively on motorized safety issues, and bicycle and pedestrian deaths will continue to rise year after year. The Smart Growth America comments suggest that although data are not perfect, States already track non-motorized crashes and establishing targets would support significant safety improvements in the coming years.

A group of eight U.S. Senators also submitted a letter to the Secretary of Transportation expressing concern that the NPRM did not propose a measure for non-motorized users and encouraging the DOT to reevaluate the NPRM to address the safety of all public road users in the final rule by creating separate measures for motorized and non-motorized road users. Finally, the Explanatory Statement accompanying the “Consolidated and Further Continuing Appropriations Act, 2015,” published in the
Congressional Record,\textsuperscript{12} directs FHWA to “establish separate, non-motorized safety performance measures for the \[HSIP\], define performance measures for fatalities and serious injuries from pedestrian and bicycle crashes, and publish its final rule on safety performance measures no later than September 30, 2015.”

The FHWA includes in this final rule a non-motorized safety performance measure. This measure is established after considering a broad range of alternatives to address non-motorized safety, while maintaining the data-driven nature of the HSIP and the TPM program overall.

For example, FHWA considered a requirement for States to simply report on non-motorized safety without further comment or evaluation. This requirement would meet the concerns of AASHTO and many State DOTs by not adding another performance measure and has the advantage of keeping the regulatory requirement for non-motorized transportation safety simple. The FHWA concluded, however, that requiring States only to report would not improve non-motorized transportation safety, particularly since, beginning with the Fiscal Year (FY) 2015 HSPs, States must include an additional core outcome measure and establish targets for bicycle fatalities\textsuperscript{13} (complementing the core outcome measure and targets for the number of pedestrian fatalities measure, which has been included in the HSPs since FY 2010). Reporting non-motorized performance data in the HSIP reports would provide a visible, publicly accessible platform to demonstrate

\textsuperscript{12} Congressional Record, December 11, 2014, page H9978, \url{https://www.congress.gov/crec/2014/12/11/CREC-2014-12-11-bk2.pdf}

\textsuperscript{13} An additional core outcome measure for bicycle fatalities was added after NHTSA’s publication of the Interim Final Rule (Uniform Procedures for State Highway Safety Grant Programs, Interim final rule, 78 FR 4986 (January 23, 2013) (to be codified at 23 CFR part 1200)), and is available at \url{http://www.ghsa.org/html/resources/planning/index.html}
the progress States are making in improving non-motorized transportation safety. However, reporting alone will not result in the same level of accountability as performance targets. The FHWA believes any requirement should go beyond reporting, particularly since much of the information is already available in HSP reports, to have an impact on how infrastructure investment decisions are made in this performance area. As a result, a requirement for States to only report non-motorized performance data, without further comment or evaluation, is not adopted in the final rule.

The FHWA is aware that the magnitude and characteristics of non-motorized safety performance varies from State to State. Each State uses a data-driven approach to consider and account for its particular safety issues in its SHSP. Twenty-five States included pedestrians, bicyclists and/or vulnerable road users as emphasis areas in their SHSPs as of 2014. Therefore, FHWA contemplated establishing a threshold to identify only those States where non-motorized safety performance supports requiring a State to focus additional attention and action on non-motorized safety. The FHWA considered how to make the threshold data-driven so that a State in which non-motorized safety problems are not particularly high could focus attention and resources on aspects of safety that its data indicate is most important, but would require some States to establish targets for non-motorized safety. The FHWA considered a number of methodologies for establishing the threshold, including: (a) the national average of non-motorized fatalities, (b) the percent of a State’s total fatalities and serious injuries, and (c) the non-motorized fatality rate by population. The FHWA also considered exempting States that demonstrated improvements in past non-motorized safety performance from assessment
of the measure. Ultimately, FHWA determined that each methodology for establishing a threshold could be subject to criticism because the threshold is either too high – so not enough States are required to take action – or too low – including too many States. In keeping with FHWA’s principle articulated in the NPRM to “ensure for consistency,” FHWA does not include a threshold to avoid different requirements for different States.

After reviewing the comments and information received that addressed the questions in the NPRM on how DOT could address a non-motorized performance measure, FHWA establishes in this final rule an additional safety performance measure: the number of combined non-motorized fatalities and non-motorized serious injuries in a State. This performance measure is not identical to the measures in the HSP, as the HSP includes separate measures for the number of pedestrian fatalities and the number of bicycle fatalities. The single non-motorized performance measure included in this final rule will be treated equal to the other 4 measures proposed in the NPRM and included in this final rule: (1) total number of fatalities; (2) rate of all fatalities per 100 million VMT; (3) total number of serious injuries; and (4) rate of all serious injuries per 100 million VMT. All five safety performance measures are subject to the requirements of this rule, including establishing targets, reporting, and FHWA’s assessment of whether a State has met or made significant progress toward meeting its targets.

The FHWA establishes the additional non-motorized performance measure to accomplish a number of objectives:

1. Encourage all States to address pedestrian and bicycle safety;
2. Recognize that walking and biking are modes of transportation with unique crash countermeasures distinct from motor vehicles; and

3. Address the increasing trend in the total number of pedestrian and bicyclist fatalities in the United States. These fatalities have shown a 15.6 percent increase from 4,737 in 2009 to 5,478 in 2013. In addition, the percentage of total fatalities involving non-motorists has increased from 13.3 percent in 2005 to 17.1 percent in 2013.\(^\text{14}\)

Furthermore, establishing an additional non-motorized performance measure supports President Obama’s ‘Ladders of Opportunity’\(^\text{15}\) priority. The Ladders of Opportunity program at DOT helps ensure that the transportation system provides reliable, safe, and affordable options for reaching jobs, education, and other essential services.\(^\text{16}\) As part of DOT’s program, the Secretary of Transportation has an initiative that focuses on making streets and communities safer for residents that do not or cannot drive. Through this initiative, DOT encourages transportation agencies to consider the needs and safety of pedestrians and bicyclists when planning highways. Establishing a non-motorized performance measure is consistent with these priorities and initiatives as it focuses more attention on transportation safety problems for some of those residents that

\(^{14}\) http://www.nhtsa.gov/FARS

\(^{15}\) http://www.whitehouse.gov/issues/urban-and-economic-mobility

\(^{16}\) http://www.dot.gov/briefing-room/secretary-foxx-announces-ladderstep-technical-assistance-program
do not or cannot drive.\textsuperscript{17} It is also consistent with the Explanatory Statement accompanying the “Consolidated and Further Continuing Appropriations Act, 2015.”

The addition of a non-motorized performance measure addresses the concerns of the majority of comments to the NPRM by requiring all States and MPOs to establish targets for non-motorized safety. It adds only one additional performance measure to the required set of safety measures, thereby still limiting the overall total number of measures, addressing a concern of AASHTO and some State DOTs. As part of the overall TPM framework, this additional performance measure increases the accountability and transparency of the Federal-aid highway program and allows for improved project decisionmaking with respect to non-motorized safety. The data used for this additional measure address State DOTs’ and FHWA’s concern about small numbers of non-motorized fatalities in some States by combining non-motorized fatalities and serious injuries together in one measure. The combined total of non-motorized fatalities and serious injuries is not insignificant in any State. This approach is supported by Michigan DOT’s comments submitted after the close of the comment period. A single combined non-motorized fatality and serious injury performance measure reduces the additional burden for States and MPOs compared to two separate non-motorized performance measures.

The AASHTO and supporters of AASHTO’s comments on this issue indicated that adding non-motorized performance measures to the overall safety performance

measures could limit a State’s ability to use a data-driven approach to decide where to invest limited resources and could distort the analysis of whether a State met or made significant progress toward meeting its non-motorized safety targets, since these fatalities and serious injuries would be counted in both sets of performance measures. The FHWA disagrees. The additional combined non-motorized fatality and serious injury performance measure will not “double count” non-motorized fatalities and serious injuries or distort the assessment of whether a State has met or made significant progress toward meeting its targets. Because this performance measure combines fatalities and serious injuries, it is different from the other safety performance measures. For example, when the number of non-motorized serious injuries increases in a State, the total number and rate of serious injuries may or may not increase as well. The impact of the increase in non-motorized serious injuries will be different on each of the three performance measures that include serious injuries: the number of serious injuries; the rate of serious injuries; and, the number of non-motorized fatalities and non-motorized serious injuries.

The example below illustrates this point using data from Kansas (Table 1). The Kansas data are drawn from FARS, NHTSA’s State Data System18 (for serious injury data), and HPMS.

<table>
<thead>
<tr>
<th>Table 1: Kansas fatality and serious injury data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Data</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>2005</td>
</tr>
<tr>
<td>Non-Motorized Serious</td>
</tr>
</tbody>
</table>

18 http://www.nhtsa.gov/Data/State+Data+Programs/SDS+Overview
In this example, the number of combined non-motorized fatalities and non-motorized serious injuries increases from the 2007-2011 5-year rolling average to the 2008-2012 average. In the same time frame, the serious injury number and serious injury rate measures both decrease. States will need to consider how their programs, projects, and strategies will impact the number of non-motorized serious injuries and factor that impact into their methodology for establishing their safety performance targets each year.

<table>
<thead>
<tr>
<th>Injuries</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Motorized Fatalities</td>
<td>28</td>
<td>29</td>
<td>22</td>
<td>25</td>
<td>27</td>
<td>16</td>
</tr>
<tr>
<td>Total Non-Motorized Fatalities &amp; Serious Injuries</td>
<td>133</td>
<td>127</td>
<td>113</td>
<td>104</td>
<td>115</td>
<td>111</td>
</tr>
<tr>
<td>Total Serious Injuries</td>
<td>1,874</td>
<td>1,746</td>
<td>1,811</td>
<td>1,709</td>
<td>1,670</td>
<td>1,717</td>
</tr>
<tr>
<td>Total Serious Injury Rate</td>
<td>6.33</td>
<td>5.78</td>
<td>6.03</td>
<td>5.75</td>
<td>5.66</td>
<td>5.74</td>
</tr>
<tr>
<td>VMT (per 100 Million)</td>
<td>296.21</td>
<td>302.15</td>
<td>300.48</td>
<td>297.27</td>
<td>294.97</td>
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</tr>
</thead>
<tbody>
<tr>
<td>Non-Motorized Fatalities &amp; Serious Injuries</td>
<td>118.4</td>
<td>114.0</td>
<td>111.2</td>
<td>116.0</td>
</tr>
<tr>
<td>% Change</td>
<td>---</td>
<td>-3.72%</td>
<td>-2.46%</td>
<td>4.32%</td>
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<tr>
<td>Total Serious Injuries</td>
<td>1,762.0</td>
<td>1,730.6</td>
<td>1,697.6</td>
<td>1,653.8</td>
</tr>
<tr>
<td>% Change</td>
<td>---</td>
<td>-1.78%</td>
<td>-1.91%</td>
<td>-2.58%</td>
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<tr>
<td>Total Serious Injuries Rate</td>
<td>6.327</td>
<td>5.779</td>
<td>6.027</td>
<td>5.749</td>
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<tr>
<td>% Change</td>
<td>---</td>
<td>-8.66%</td>
<td>4.30%</td>
<td>-4.61%</td>
</tr>
</tbody>
</table>
As noted in the comments by AASHTO and supporters of the AASHTO comments, FHWA recognizes that fatal and serious injury crashes involving only non-motorists (e.g., a bicyclist crashing into a pedestrian) are not included in FARS or many State motor vehicle crash databases. There is no single national or State-by-State data source that includes fatal or serious injury crashes only involving non-motorists. Because FARS and the State motor vehicle crash databases already exist and are the data sources for the other safety performance measures, FHWA uses them as the data sources for the non-motorized performance measure. The FHWA recognizes that the calculation for the non-motorized performance measure may not include a small number of fatal and serious injury crashes involving only non-motorists because FHWA is relying on these data sources. The AASHTO comments submitted after the close of the comment period support using FARS and State motor vehicle crash databases as the source for any potential non-motorized safety performance measure data, since other crashes may not be recorded. The AASHTO’s position on this issue is thus consistent with the requirement in this rule.

The FHWA recognizes that non-motorized fatalities and non-motorized serious injuries will now be accounted for in more than one performance measure; however, FHWA believes that establishing this separate performance measure for the number of non-motorized fatalities and serious injuries will help States focus greater attention on the safety needs of these transportation users, can be accounted for in how the States and MPOs evaluate their data and select their investment priorities, and will contribute to decreases in the total number of fatalities and serious injuries.
The Consortium for People with Disabilities and America Walks suggested that FHWA consider including non-motorized and motorized wheelchairs and other mobility devices such as scooters in a performance measure. The FHWA agrees and defines the non-motorized performance measure to include the categories of persons classified as pedestrians and bicyclists as well as those using motorized and non-motorized wheelchairs and personal conveyances. The definition of the non-motorized performance measure is also consistent with 23 U.S.C. 217(j) which defines ‘pedestrian’ as “…any person traveling by foot and any mobility impaired person using a wheelchair” and defines ‘wheelchair’ as “a mobility aid, usable indoors, and designed for and used by individuals with mobility impairments, whether operated manually or motorized.”

The 23 U.S.C. 150 stipulates that the Secretary establish “measures for States to use to assess serious injuries and fatalities per VMT.” The Atlanta Regional Commission (ARC), State of New York Department of Transportation, NYSAMPO, and several individuals commented that VMT is the wrong exposure variable for a rate-based measure for non-motorized modes. The New York agencies suggested that FHWA commence a research effort to determine the most appropriate method for calculating non-motorized based crash rates. Tennessee DOT indicated that it does not collect miles traveled for non-motorized users; however, some MPOs in Tennessee collect this information. Tennessee cautioned that this could cause unbalanced and non-matching targets or goals. The MARC commented that it disaggregates crash data by non-motorized type through work with its regional transportation safety coalition. The MARC also indicated that it currently works with its State DOTs to collect and report
non-motorized fatality and serious injury data and to obtain motorized VMT, but do not have similar rate data for non-motorized travel. Oregon and New York City DOT expressed support for creation of a non-motorized safety performance measure that would count the rate of fatalities for bicyclists and pedestrians compared to population, not VMT. The LAB, Smart Growth America, and other supporters of a non-motorized performance measure recognize that there is no national dataset for a non-motorized rate measure. These commenters argued that adopting a non-motorized safety performance measure would create the expectation and incentive to collect this data. The Michigan DOT and AASHTO, in comments submitted after the close of the comment period, reiterated that a rate-based measure for non-motorized users is not appropriate at this time.

The FHWA agrees that VMT is not an appropriate exposure metric for a non-motorized performance measure and that there is no consensus on a national or State-by-State data source for bicycling and walking activity upon which to determine a rate in this rule. As a result, FHWA does not include a rate-based non-motorized measure at this time. The DOT is committed to improving the quality of data on non-motorist transportation and is engaged in a broad range of data-related activities concerning non-motorist transportation.\(^\text{19}\) This work, such as including guidance for collecting pedestrian and bicyclist count information in the most recent FHWA Traffic Monitoring Guide,\(^\text{20}\) should help pave the way for better methods to estimate exposure to risk for pedestrians and bicyclists. The FHWA encourages States and MPOs to use these resources in order

\(^{19}\) Information about on-going USDOT activities is available at http://www.dot.gov/bicycles-pedestrians

to develop and use exposure measures for non-motorized travel that will inform pedestrian and bicycle safety initiatives.

Met or Made Significant Progress Toward Meeting Targets Evaluation

In the NPRM, FHWA proposed a two-step process for determining whether a State met or made significant progress toward meeting its performance targets. The first step was to determine if each performance target had been met or if a State had made significant progress toward meeting each target based on a prediction interval around the projection of a historical trend line. The second step determined if a State had met or made significant progress toward meeting at least 50 percent of its performance targets, including optional targets. If they did, a State would be determined to have made “overall significant progress.” The FHWA specifically asked stakeholders to comment on the appropriateness of the trend line and prediction interval methodologies and whether 50 percent is the appropriate threshold for determining if a State had “overall made significant progress” toward meeting its performance targets.

The FHWA has evaluated the arguments made by commenters regarding the methodology for assessing whether a State DOT made significant progress, including the comment discussed earlier that the proposed methodology conflicted with the “increased accountability and transparency” principle, and has concluded that it is necessary and appropriate to revise this part of the regulation. The following summarizes the comments regarding the proposed significant progress methodology. In response to the comments below, FHWA developed a set of criteria to help develop and evaluate the methodology for assessing whether a State DOT made significant progress toward meeting its targets.
The AASHTO, New York Metropolitan Transportation Council, NYSAMPO, ARC, and Transportation for America expressed disagreement with what they considered to be a complex method for determining significant progress. Eight U.S. Senators, AARP, Adventure Cycling, ATSSA, America Walks, Boston Public Health Commission, California Walks, Living Streets Alliance, Rails-to-Trails Conservancy, Smart Growth America and SRTS and their supporters, Transportation for America, Tri-State Transportation Campaign (New York, New Jersey and Connecticut), and Walk Austin were among the commenters who suggested that States should be held to a higher level of accountability than meeting 50 percent of their targets for the “overall significant progress” determination proposed in the NPRM. The AASHTO, Delaware Valley Regional Planning Commission (DVRPC), NYSAMPO, Shasta Regional Transportation Agency (SRTA), and Delaware, Connecticut, Iowa, Kentucky, Missouri, New York, Ohio, Oregon, Pennsylvania, and Vermont State DOTs agreed with the 50 percent threshold; while MARC and Arkansas, Illinois, Louisiana, New York, Pennsylvania, and South Dakota DOTs specifically expressed a desire to account for unique or extenuating circumstances. The ATSSA, NACCHO, Smart Growth America, Transportation Choices Coalition, and Transportation for America argued that meeting only 50 percent of targets is not stringent enough and expressed strong support for significant progress to be defined as meeting at least 75 percent of targets. Further, this group of commenters called for a methodology that is simplified, not based on historical trend lines, and that holds States more accountable for reducing fatalities and serious injuries by not including a cushion for States that fail to meet or make significant progress toward meeting their
targets. The AARP, America Walks, BikeWalkLee, Boston Public Health Commission, Idaho Walk Bike Alliance, LAB, Lebanon Valley Bicycle Coalition, Living Streets Alliance, Rails-to-Trails Conservancy, SRTS, Trailnet, Trust for America’s Health, Walk Austin, and their supporters also argued that significant progress should not include outcomes that result in an increase in the number or rate of fatalities or of serious injuries. The FHWA agrees that the methodology should hold States to a high level of accountability. The methodology should also avoid determining that significant progress was made when the number or rate of fatalities or of serious injuries increased. The methodology must also support the national safety goal to achieve a significant reduction in fatalities and serious injuries.

The AASHTO, Arkansas, Colorado, Michigan, Missouri, Montana, New York, Ohio, Oklahoma, Oregon, Rhode Island, Texas, Utah State DOTs, Fairbanks Metropolitan Area Transportation System, Nashville MPO, NACCHO, and NYSAMPO, as well as the Association of Metropolitan Planning Organizations (AMPO), Smart Growth America and Transportation Choices Coalition commented that the determination of significant progress should not be based on historical trends. The FHWA agrees that the methodology should not be based on historical trends and should be associated with the targets the State establishes.

The AASHTO and Kentucky, Ohio, Oregon, and Rhode Island DOTs also advocated that the significant progress methodology should not discourage States from establishing aggressive targets and that the process should be flexible so as to not unduly
impose the “penalty.” The FHWA agrees that the methodology should not discourage aggressive targets.

The ATSSA, Delaware, Kentucky, and Washington State DOTs expressed support for the prediction interval, with Washington State DOT citing that it is necessary and appropriate to account for the normal variance in crashes. The AARP, ARC, Trust for America’s Health, several bicycling and walking organizations including America Walks, LAB, Lebanon Valley Bicycle Coalition, BikeWalkLee, Trailnet, and Idaho Walk Bike, the Tri-State Transportation Campaign Alliance (New York, New Jersey and Connecticut), and New York, Oregon, and Virginia DOTs expressed opposition to the prediction interval analysis proposed in the NPRM, stating that it was too complex, too confusing, or provided too great a cushion for States to not meet a target. The FHWA agrees that the prediction interval is too complex and that the methodology should be simple, understandable, and transparent.

Based on these comments, FHWA developed criteria to evaluate methodologies to assess whether a State met or made significant progress toward meeting its targets. The methodology should: (a) hold States to a higher level of accountability; (b) not discourage aggressive targets; (c) support the national goal to achieve a significant reduction in fatalities and serious injuries; (d) be fair and consistent/quantitative; (e) be simple, understandable, and transparent; (f) not be based on historical trends; and (g) be associated with the targets. The FHWA believes that using these criteria to develop a revised methodology to assess whether a State has met or made significant progress
toward meeting its targets results in an approach that addresses the commenters’ concerns.

With these criteria in mind, FHWA considered several options to determine whether a State has met or made significant progress toward meeting its targets: (1) State meets a defined range around each target; (2) State meets a range around a trend line for the performance measure; (3) State uses their own pre-determined and approved methodology; (4) State meets some percentage of all targets; and (5) State performs better than a baseline for a performance measure. Some of these methodologies were submitted to the docket.

First, FHWA eliminated the first and second options that would allow a State to meet a range around a target or a range around a trend line. Developing a range around targets or a trend line, as was proposed in the NPRM, would require FHWA to define the range and evaluate States using complex mathematical analyses. Such an effort was strongly criticized and would not be consistent with the preference for a simpler methodology.

Arkansas, Colorado, and Michigan State DOTs suggested that they should be able to develop their own methodology for assessing whether a target was met or significant progress was made. To meet the principle “to ensure for consistency,” FHWA did not consider the third option where it would use a different methodology for each State. However, FHWA did evaluate a variation of the third option that would allow States to select a methodology from a suite of options approved by FHWA. The State’s selected methodology would be approved by FHWA in much the same manner as FHWA
approves a State’s definition for “high risk rural roads” in the High Risk Rural Roads Special Rule (23 U.S.C. 148(g)). The FHWA carefully weighed this option against the criteria. This option does not seem to dis-incentivize States from setting aggressive targets and could incentivize some States to establish even more aggressive targets if the methodology were to reduce the risk of States failing to make significant progress. This option, however, does not necessarily further the national goal to significantly reduce traffic fatalities and serious injuries. This option also does not meet the criteria for being simple/understandable/transparent since it would be difficult, if not impossible, for the general public to follow the different methodologies and related assessments for each State. Lastly, it would not be possible for FHWA to tell a “national story” if States were to use different significant progress methodologies – contrary to one of FHWA’s principles considered in the development of these regulations. 21 For these reasons, FHWA did not adopt this option in the final rule.

The FHWA considered the fourth option -- State meets some percentage of all targets -- to be viable. This option is simple and was recommended by several commenters, including AASHTO, nine State DOTs, DVRPC, SRTA, NYSAMPO, ATSSA, NACCHO, Smart Growth America, and Transportation for America. This option is easy to understand and implement, does not require a complex mathematical analysis, and does not require 10 years of historical data (which some States commented would be difficult to obtain). Further, this option is clearly associated with the targets the

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State establishes and is not based on the historical trend in the State. Accordingly, FHWA concluded that it is appropriate to assess whether a State has met or made significant progress toward achieving its targets based on the State meeting or making significant progress toward meeting a defined percentage of its targets.

In further considering the fourth option, FHWA evaluated the responses to the NPRM request for comments on whether 50 percent is the appropriate threshold for determining whether a State has overall achieved or made significant progress toward achieving its performance targets. The FHWA agrees with the commenters who stated that the 50 percent threshold is too low. The AARP suggested that States be required to meet all targets. Transportation for America, Nashville MPO, NACCHO, Smart Growth America, Transportation Choices Coalition, and Ryan Snyder Associates also suggested that 100 percent of targets should be met, but recognized that some flexibility should be provided.

The MAP-21 requires the Secretary to make a determination whether a State has “met or made significant progress toward meeting” its targets.\(^\text{22}\) To satisfy this mandate, FHWA has determined that States must meet or make significant progress toward meeting four out of five targets. (The addition of the non-motorized performance measure in this final rule expands the number of required performance targets from the four proposed in the NPRM to five.) Requiring States to meet 100 percent of targets is not consistent with the “or made significant progress toward meeting” targets provision in 23 U.S.C. 148(i). Four out of five targets (80 percent) is more than the AASHTO and

\(^{22}\) 23 U.S.C. 148(i).
State DOT supported NPRM proposal to meet 50 percent of targets and similar to the 75 percent recommendation advocated by many commenters.

The AASHTO and Michigan DOT, in comments submitted after the close of the comment period, argued that non-motorized performance measures should not be considered in the determination of whether a State has met or made significant progress toward meeting targets because including them would limit a State’s ability to use a comprehensive, data-driven approach to determine the best set of safety investments to achieve performance targets and because MAP-21 does not require such measures. As explained earlier, FHWA agrees with many commenters that it is important to hold States accountable to improve non-motorized safety. Including non-motorized performance in the assessment of whether a State met or made significant progress toward meeting targets will ensure that these measures have an impact on how investment decisions are made in this performance area, will improve non-motorized transportation safety, and will provide a publicly available platform to show whether the progress States are making in non-motorized transportation safety. Further, including non-motorized performance targets in FHWA’s assessment of significant progress is consistent with the statutory requirements in 23 U.S.C. 150 and 148(i). The FHWA is establishing the non-motorized measure as part of its mandate in 23 U.S.C. 150(c)(4) to establish measures for States to use to assess the number of serious injuries and fatalities. For measures established by FHWA, including those identified in 23 U.S.C. 150(c)(4), States are required to establish targets reflecting these measures. 23 U.S.C. 150(d). Where States are required to establish targets, those targets are subject to the assessment under 23 U.S.C. 148(i)
(requiring a determination of whether a State has “met or made significant progress toward meeting the performance targets of the State established under section 150(d)”).

Therefore, FHWA includes the non-motorized performance measure in the assessment of whether a State met or made significant progress toward meeting targets.

Finally, FHWA also considered the fifth option: whether significant progress should be defined as an outcome that is better than the State’s performance for some year or years prior to when the target was established. This option supports several of FHWA’s evaluation criteria, as it is simple and encourages States to establish aggressive targets, while not subjecting them to additional requirements if they fail to meet the aggressive target when their performance still improves. It also supports the national goal to reduce traffic fatalities and serious injuries.\(^{23}\) Although this option does not associate the significant progress determination with the target the State establishes, it does further the national goal and the purpose of the HSIP, encourages aggressive targets, and acknowledges States that have achieved safety improvement. Therefore, FHWA includes this option in this final rule. This final rule allows States that do not meet a target to be considered as having made significant progress toward meeting the target if the outcome for that performance measure is better than the State’s performance for the year prior to the year in which target was established (i.e., baseline safety performance).

For example, Table 2 presents a fictitious State’s historical data, its Calendar Year (CY) 2018 targets, and FHWA’s assessment of those targets. As targets are established for CY 2018 in the HSIP report that is due in August 2017, “baseline safety performance”

\(^{23}\) 23 U.S.C. 150(b)(1).
is the performance data for CY2016. That is, the 5-year rolling average ending in CY2016 for each performance measure. (As the baseline performance year changes with the target year, if the example were for CY 2019 targets, “baseline safety performance” would be the performance data for CY 2017).

In this example, the only target the State met is its non-motorized safety performance target. This target is not evaluated further. The FHWA then assesses whether the State made significant progress for the other four performance measures, meaning whether the actual outcome for 2014-2018 was better than the baseline performance – 2012-2016 – for the Number of Fatalities, Number of Serious Injuries, Fatality Rate and Serious Injuries Rate performance measures. State performance did not improve for the Fatality Rate measure, but did improve for the other three. Therefore, for this example, FHWA would determine that the State met or made significant progress toward meeting its CY 2018 targets since 4 of the 5 targets were either met or were better than the baseline safety performance.

Table 2 - EXAMPLE OF THE DATA AND TARGET ASSESSMENT METHODOLOGY (For Illustrative Purposes)

<table>
<thead>
<tr>
<th>Performance Measures</th>
<th>5 Year Rolling Averages</th>
<th>2018 Target</th>
<th>Target Achieved?</th>
<th>Better than Baseline?</th>
<th>Met or Made Significant Progress?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Fatalities</td>
<td>501.2 486.6 478.0 476.0 474.0 473.0 472.4</td>
<td>468.0</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fatality Rate</td>
<td>1.052 1.018 1.000 0.994 0.988 0.990 0.990</td>
<td>0.980</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Number of Serious Injuries</td>
<td>2.740.8 2.613.6 2.517.0 2.447.8 2.310.4 2.219.2 2.185.6</td>
<td>2.160.0</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Serious Injury Rate</td>
<td>5.764 5.476 5.272 5.116 4.822 4.644 4.584</td>
<td>4.572</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Number of Non-motorized Fatalities and Serious Injuries</td>
<td>126.2 118.0 116.8 115.2 113.2 110.0 109.4</td>
<td>110.0</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
This option is similar to the significant progress methodology that FHWA proposed to assess pavement and bridge condition targets where an improvement above baseline is considered significant progress.24

In addition to the five options discussed above, FHWA considered three alternative methodologies that were suggested in public comments. These include: (1) providing additional flexibility for top performing States; (2) allowing a State to submit evidence of extenuating circumstances outside the State DOT’s control that contributed to the State not meeting its targets; and (3) assessing significant progress based on performance over a number of years, rather than annually.

The AASHTO suggested FHWA consider allowing certain top performing States to be exempt from the assessment regarding meeting or making significant progress toward meeting a target if a condition was met. Idaho, North Dakota, Michigan, Minnesota, Missouri, Montana, North Dakota, Oregon, Virginia, and Wyoming DOTs specifically stated that the proposed NPRM methodology may not be appropriate for all States, especially those that have already made large gains in reducing fatal and serious injury crashes. To address these comments, FHWA considered exempting a certain number of top performing States or States that had made large gains, a certain percentage of the States that had performed best in the past, or exempting the States that contribute the most toward the national goal (e.g. those States that reduce the largest number of fatalities or serious injuries). The FHWA determined that such options would be difficult

to implement and would not meet the evaluation criteria. Excluding some top performing States would not relate the target achievement and significant progress determination to the State’s target, since the top performing States would not be assessed at all. In addition, this option would not be simple, understandable, or transparent. Further, this option could place States in competition with each other since only the “top performing” States would benefit from this provision. This option could also be unfair to States with smaller overall numbers of fatalities or serious injuries. The purpose of implementing a transformational national performance management program is to measure performance by and within each State, not to assess performance by States against other States.

The AASHTO and States who supported AASHTO, along with individual comments from Arkansas, Illinois, Louisiana, New York, Pennsylvania, and South Dakota DOTs, and MARC specifically requested FHWA provide flexibility in the evaluation of meeting or making significant progress toward meeting targets for unforeseen circumstances or events outside of the State DOT’s control. In addition, the Santa Barbara County Association of Governments (SBCAG) commented that many improvements to highway safety are outside the control of State DOTs and MPOs and depend on factors other than transportation infrastructure. The FHWA recognizes these concerns but emphasizes that State DOTs and MPOs are provided with HSIP funds annually to reduce fatalities and serious injuries on all public roads. The FHWA accounts for unforeseen events and factors outside of a State DOT’s control in this rule in several ways. First, the 5-year rolling average provides a smoothing effect for variations in data that account, to a large degree, for such circumstances. Second, States that do not
meet their target are considered as having made significant progress toward meeting the target if performance for that measure is better than performance for the year prior to the year in which the target was established. Third, only requiring a State to meet four out of five targets allows a State not to meet or make significant progress toward meeting an individual target for a performance measure or even be worse than the baseline, yet still result in a determination that the State has met or made significant progress toward meeting its performance targets. Fourth, States are encouraged to include the risk of unforeseen events and circumstances outside their control as part of their considerations as they establish targets. Because unforeseen events and factors outside of State DOT control are already considered as described above, FHWA has decided not to include an option for a State DOT to indicate that unforeseen circumstances should allow it or one of its targets to be exempt from target assessment.

The SBCAG and the Transportation Agency for Monterey County also advocated for HSIP funds to be available for activities beyond HSIP projects, specifically to include projects that address driver behavior. Eligible use of HSIP funds is addressed in the HSIP regulation at 23 CFR part 924. Under 23 U.S.C. 148, an HSIP project is defined as strategies, activities, or projects on a public road that are consistent with a State SHSP and that either corrects or improves a hazardous road segment, location, or feature, or addresses a highway safety problem. Examples of projects are described in 23 U.S.C. 148(a). (See 23 CFR part 924).

The FHWA also evaluated an option that would apply the target achievement and significant progress assessment after a certain number of years, rather than annually.
Missouri and Rhode Island State DOTs commented that it would be difficult to adjust their State Transportation Improvement Program (STIP) annually to implement a different set of safety improvements if they are determined to not have met or made significant progress toward meeting targets annually. They state that more time between assessment periods could improve a State’s ability to determine what is working in its STIP and what is not, and to program/implement projects that have more impact to drive down fatality and serious injury numbers and rates. The FHWA did not pursue this approach because safety reporting is already required annually. For example, the HSIP reports submitted by States which include the fatality and serious injury data commensurate with the safety performance measures are transmitted on an annual basis.

States establish targets and report on safety performance measures to NHTSA as part of their HSP and Highway Safety Annual Reports. Conducting an annual assessment is also consistent with the requirement to submit an annual implementation plan if the State fails to meet or make significant progress toward meeting its targets. If target achievement and significant progress were evaluated over a longer time period, the assessment would no longer align with the other safety reporting. In addition, waiting longer to assess whether States met or made significant progress toward meeting targets would not necessarily address the concerns about modifying the STIP, since the requirement for States subject to the 23 U.S.C. 148 provisions to obligate funds within the subsequent fiscal year is not based on how much time elapses between target assessments. In its analysis of docket comments and deliberations regarding changes to the methodology for assessing whether a State has met or made significant progress toward meeting its targets,
FHWA was mindful of the provisions States must follow if FHWA determines they have not met or made significant progress toward meeting their performance targets. The 23 U.S.C. 148(i) requires States to: (1) use a portion of their obligation authority only for HSIP projects and (2) submit an annual implementation plan that describes actions the State DOT will take to meet their targets. Both of these provisions apply each year after FHWA determines that the State has not met or made significant progress toward meeting its performance targets.

The Virginia DOT interprets the statute to say that States have 2 years to meet their targets, since FHWA must make a determination whether States have met or made significant progress toward meeting their targets by the date that is 2 years after the date of the establishment of the performance targets. As a result, Virginia DOT asked how FHWA could apply the provisions of 23 U.S.C. 148(i) if the determination were not made within 2 years of the date the target was established. In MAP-21, the 23 U.S.C. 148(i) stated “If the Secretary determines that a State has not met or made significant progress toward meeting the performance targets of the State established under section 150(d) by the date that is 2 years after the date of the establishment of the performance targets, …” However, the FAST Act changed 23 U.S.C. 148(i) to state, “If the Secretary determines that a State has not met or made significant progress toward meeting the safety performance targets of the State established under section 150(d).” Since the FAST Act removed the 2 year reference that Virginia DOT commented on, the statute can no longer be interpreted the way the Virginia DOT suggests. The FHWA believes that its interpretation is consistent with the plain language of the statute. Similar to what
was proposed in the NPRM, FHWA establishes the safety performance measures as annual measures for a single performance year. The FHWA will determine whether a State has met or made significant progress toward meeting its targets when the outcome data for that calendar year is available and expects to notify States of its determination within 3 months. As described earlier in the document, FHWA has been able to shorten its evaluation of State targets by 1 year. The proposed and final approach to assessing significant progress, including the timing, is consistent with the revised language under the FAST Act

V. Section-by-Section Discussion of the General Information and Highway Safety Improvement Program Measures

1. Subpart A – General Information

Section 490.101 General Definitions

In the NPRM, FHWA proposed several definitions for terms used in this regulation and in subsequent performance management regulations. The FHWA received only one substantive comment on this section: the County of Marin, CA Department of Public Works, supported including the definition for “non-urbanized area” to include rural areas as well as other areas that do not meet the conditions of an urbanized area. To ensure consistency with revised § 490.209(b) specifying a single, collective non-urbanized area target, FHWA revises the definition for “non-urbanized area” to clearly indicate that a non-urbanized area is a single, collective area comprising all of the areas in the State that are not “urbanized areas” defined under 23 U.S.C. 101(a)(34). The FHWA also removed the reference to 23 CFR 450.104 from the definition for clarity. The
statutory definition provides for a State or local adjusted urbanized boundary based on
the area designated by the Bureau of the Census, which is what FHWA intended for
States to use when establishing the additional urbanized and/or non-urbanized targets,
whereas 23 CFR 450.104 only references the Bureau of Census designated area.

Section 490.111 Incorporation by Reference

The FHWA incorporates by reference the “Model Minimum Uniform Crash
Criteria (MMUCC) Guideline, 4th Edition (2012)” for the definition of serious injuries, as
described in § 490.207(c). This guide presents a model minimum set of uniform
variables or data elements for describing a motor vehicle crash. The Guide is available
at: http://mmucc.us/sites/default/files/MMUCC_4th_Ed.pdf. In the NPRM, FHWA
proposed the use of MMUCC, latest edition as part of § 490.207(c). Because the
regulations now refer to a specific edition of MMUCC, rather than the “latest edition,”
FHWA determined it was appropriate to incorporate by reference the specific edition.
The MMUCC, 4th Edition was included on the NPRM docket.

The FHWA also incorporates by reference the “ANSI D16.1-2007, Manual on
Classification of Motor Vehicle Traffic Accidents, 7th Edition” for the definition of non-
motorized serious injuries, as described in § 490.205. The document is available from
the National Safety Council, 1121 Spring Lake Drive, Itasca, Illinois 60143-3201,
(http://www-nrd.nhtsa.dot.gov/Pubs/07D16.pdf). As discussed above, a non-motorized
fatalities and non-motorized serious injuries performance measure has been added for this
final rule.
2. **Subpart B – National Performance Management Measures for the Highway Safety Improvement Program**

**Section 490.201 Purpose**

The FHWA includes a statement describing the general purpose of the subpart: to implement certain sections of title 23 U.S.C. that require FHWA to establish measures for State DOTs to use to assess the rate of serious injuries and fatalities and the number of serious injuries and fatalities. The Colorado DOT suggested that FHWA reverse the order of the measures, thus listing the number of serious injuries and fatalities followed by the rate of each, in order to show first the importance of each person. The FHWA adopts the language, as proposed in the NPRM, stating the rate first followed by the number, in order to reflect the order of the performance measures as listed in MAP-21.

**Section 490.203 Applicability**

As proposed in the NPRM, FHWA specifies that the safety performance measures are applicable to all public roads covered by the HSIP under 23 U.S.C. 130 and 23 U.S.C. 148. The FHWA did not receive any substantive comments regarding this section and adopts the language in the final rule.

**Section 490.205 Definitions**

In the NPRM, FHWA proposed several definitions for terms used in the regulation. The FHWA revises the final rule in several respects, resulting in the elimination of some terms and the addition of new terms. These changes are reflected in the definitions section and described below. In addition, FHWA revises some of the definitions to provide clarity based on docket comments.
The FHWA adopts a definition for “5-year rolling average” because it is used to define the performance measures in this final rule. In the NPRM, FHWA noted that the 5-year rolling average is the average of five individual, consecutive annual points of data for each proposed performance measure (e.g., 5-year rolling average of the annual fatality rate). Using a multiyear average approach does not eliminate years with significant increases or decreases. Instead, it provides a better understanding of the overall fatality and serious injury data over time. The 5-year rolling average also provides a mechanism for accounting for regression to the mean. If a particularly high or low number of fatalities and/or serious injuries occur in 1 year, a return to a level consistent with the average in the previous year may occur. Additionally, FHWA requested stakeholder comment on whether a 3-, 4-, or 5-year rolling average should be required for the HSIP performance measures and also encouraged comment on whether the use of moving averages is appropriate to predict future metrics. The AASHTO and 15 State DOTs, ATSSA, and local agencies including the Association of Monterey Bay Area Governments (AMBAG), ARC, DVRPC, MARC, Metropolitan Transportation Commission (California), SBCAG, and SRTA explicitly expressed support for the adoption of a 5-year rolling average for the performance measures. Commenters agreed that a 5-year rolling average allows for the smoothing out of statistical anomalies and provides a means to evaluate progress from year to year in a more consistent fashion than one based on single year peaks and valleys. The AASHTO suggested that the 5-year rolling average is consistent with most States’ current approach to evaluating many of their safety efforts and is an effective way to predict future performance over time and
help account for fluctuations in annual data. Several agencies within California including the California State Association of Counties, California Highway Patrol, California Walks, and Nevada County, as well as the NYSAMPO expressed concern that the 5-year rolling average may be too long, recommending that a 3-year rolling average be used instead. The NYSAMPO stated that a rolling average is the proper methodology for documenting trends in safety performance, because it smooths out the propensity for random crash events, but suggested that the 5-year period may be too long, since it uses historical data that looks backward when the intent of MAP-21 is to measure the outcomes of current State and MPO investment choices. Washington State DOT expressed a preference for a 7-year rolling average, but agreed that 5 years is an acceptable mid-point, and indicated that the 5-year rolling average is much preferred to a 1-, 3-, or 4-year period, as it better controls for regression to the mean and associated randomness of crash data. The FHWA maintains that a 5-year rolling average provides the appropriate balance between the stability of the data (by averaging multiple years) and providing an accurate trend of the data (by minimizing how far back in time to consider data). Five years is the best compromise for States with a small number of fatalities that may see wide fluctuations in the number of fatalities from year to year and the desire to minimize the use of historical data. The FHWA adopts a definition for “5-year rolling average” as proposed in the NPRM. Example calculations for all of the performance measures are provided in the discussion of § 490.207.

In the NPRM, FHWA solicited comments on whether the approximate 24-month time lag before FHWA assesses whether a State met or made significant progress toward
meeting its targets (time period between the end of the calendar year in which the data were collected and the date the data are available in the Final FARS and HPMS) is an issue and any impacts it may have on a State DOT’s ability to establish targets. Several commenters expressed concern that this time lag would create difficulties in establishing targets and reporting on meeting or making significant progress toward meeting targets. The AASHTO and several State DOTs recommended that States be allowed to use their own State crash databases for the fatality measures, as they would for the serious injury measures, since the fatality data would be available much earlier in the State databases.

The FHWA agrees that the data lag proposed in the NPRM is a concern. However, FHWA believes it is important to preserve the integrity of the national data wherever possible, and therefore does not believe it is appropriate to use State-certified fatality data if national data exist, due to the variability that could be introduced. To address concerns about the data time lag, FHWA revises the final rule regarding the use of FARS data and adds a definition for “Annual Report File (ARF),” modifies the definition for “Fatality Analysis Reporting System (FARS)” and adds a definition for “Final FARS.” The added and changed definitions clarify the data contained in each FARS file - Final FARS and FARS ARF - and that FARS ARF is available approximately 1 year earlier than Final FARS. These changes will allow FHWA to make the determination of whether a State has met or made significant progress toward meeting its targets approximately 1 year earlier than what was proposed in the NPRM. Further discussion regarding the use of these terms is provided in § 490.211.
As discussed above, in this final rule FHWA revises the methodology for determining whether a State has met or made significant progress toward meeting its performance targets to reflect numerous comments suggesting such changes. The FHWA deletes the definitions for “made significant progress,” “historical trend line,” “prediction interval,” and “projection point” proposed in the NPRM, as these are no longer used.

The FHWA adds a non-motorized performance measure to those proposed in the NPRM and adds definitions for the terms “number of non-motorized fatalities” and “number of non-motorized serious injuries” to explicitly define those terms and the associated data sources. Consistent with comments received on this issue, FHWA is broad and inclusive in defining the non-motorized performance measure. The FHWA considers non-motorists, consistent with 23 U.S.C. 217(j), to be those transportation system users who are not in or on traditional motor vehicles on public roadways. The FHWA intends to include in the non-motorized performance measure people using many non-motorized forms of transportation including: persons traveling by foot, children in strollers, skateboarders, persons in wheelchairs (both non-motorized and motorized), persons riding bicycles or pedalcycles, etc.

The FHWA recognizes that FARS uses slightly different coding conventions to input person types in its database from that used in State motor vehicle crash databases. Therefore, FHWA includes different non-motorist person-types in its definitions and coding conventions for the number of non-motorized fatalities and the definition of number of non-motorized serious injuries. For non-motorist fatalities, FHWA defines the
fatally injured non-motorist person, i.e. the “person type,” defined in FARS,\textsuperscript{25} to include
the person level attribute codes for (5) Pedestrians, (6) Bicyclists, (7) Other Cyclists, and
(8) Persons on Personal Conveyances. For non-motorist serious injuries, FHWA defines
the seriously injured person type as the codes and definitions for a (2.2.36) pedestrian or
Classification of Motor Vehicle Traffic Accidents}.\textsuperscript{26} The FHWA recognizes that not all
State crash databases use the ANSI D16.1 standard. Therefore, FHWA includes in the
number of non-motorized serious injuries definition that States may use definitions that
are equivalent to those in ANSI. Pedestrian and pedalcyclist person types, or an
equivalent, are universally used in State motor vehicle crash databases and are consistent
with the FARS person types included in the definition of non-motorized fatalities. For
those State motor vehicle crash databases where the person type definitions do not
conform to the ANSI D16.1 standard, FHWA will provide guidance on which person
types should be included in the non-motorized performance measure data report to
FHWA. The FHWA revises the definition for “number of serious injuries” to specifically
require compliance with the 4\textsuperscript{th} Edition of MMUCC, rather than the latest edition, as
proposed in the NPRM. The AASHTO and the Alaska, Arkansas, Delaware, Iowa, and
Maine DOTs expressed concern with MMUCC compliance if there are changes to the
definition in subsequent editions of MMUCC. Additional information regarding the

\textsuperscript{25} FARS/NAS GES Coding and Validation Manual \url{http://www-nrd.nhtsa.dot.gov/CATS/listpublications.aspx?Id=J&ShowBy=DocType}
\textsuperscript{26} ANSI D 16 (2007): \url{http://www-nrd.nhtsa.dot.gov/Pubs/07D16.pdf}
change to specifically require the 4th Edition of MMUCC is contained in the discussion of § 490.207.

The FHWA also clarifies the definition for “number of serious injuries” to specify that the crash must involve a motor vehicle traveling on a public road, which is consistent with FARS and State motor vehicle crash databases as discussed previously. Specifically, FARS only includes fatalities where a motor vehicle is involved in the crash. State crash databases may contain serious injury crashes that did not involve a motor vehicle. In order to make the data consistent for the performance measures in this rule, States will only report serious injury crashes that involved a motor vehicle. This clarification is particularly important when considering the non-motorized performance measure. Non-motorized fatalities and non-motorized serious injuries will only be considered in the performance measure if the crash involves a non-motorist and a motor vehicle. As AASHTO and the Michigan DOT noted in comments submitted after the close of the comment period, fatal and serious injury crashes involving only non-motorists (e.g., a bicyclist crashing into a pedestrian) are not included in FARS or many State motor vehicle crash databases. There is not a single national or State-by-State data source that includes these types of non-motorized fatal or serious injury crashes.

Finally, FHWA revises the definition of “serious injury” to reflect that agencies may use injuries classified as “A” on the KABCO scale through use of the conversion tables developed by NHTSA for the first 36 months after the effective date of this rule, and that after 36 months from the effective date of this rule agencies shall use, “suspected serious injury” (A) as defined in the MMUCC, 4th Edition. The AASHTO and Alaska,
California, Georgia, Florida, Missouri, Oregon, Pennsylvania, and Washington State DOTs commented that the 18-month time frame to adopt MMUCC proposed in the NPRM was too aggressive and feared that they or other State DOTs would not be able to comply with the requirement. The Oregon and Washington State DOTs commented that while they could meet the 18-month timeframe, other States may have a hard time meeting it. The AASHTO and the States that generally agree with AASHTO’s comments on this issue suggested that 36 months to adopt MMUCC would give States that have not planned or are early in the process of converting to MMUCC more time to make the change without placing an undue burden on States already facing limited resources. The FHWA adopts these revisions to extend the timeframe States have to comply with the definition in MMUCC, 4th Edition. Together, these requirements will provide for greater consistency in the reporting of serious injuries, allow for better communication of serious injury data at the national level and help provide FHWA the ability to better communicate a national safety performance story.

The FHWA retains definitions for “KABCO,” “number of fatalities,” “rate of fatalities,” and “rate of serious injuries” as proposed in the NPRM. There were no substantive comments regarding these definitions as proposed, therefore FHWA adopts these definitions in the final rule. Finally, FHWA adds a definition for “public road” to clarify that this rule uses the same definition as is used in the HSIP regulation at 23 CFR part 924.

Section 490.207 National Performance Management Measures for the Highway Safety Improvement Program
In § 490.207(a), FHWA describes the performance measures required under 23 U.S.C. 150 for the purpose of carrying out the HSIP. Upon consideration of docket comments and FHWA’s belief that it is important to hold States accountable to improve non-motorized safety, FHWA revises the final rule to include a performance measure to assess the number of combined non-motorized fatalities and non-motorized serious injuries in a State. New paragraph (a)(5), number of non-motorized fatalities and non-motorized serious injuries, is in addition to the four measures proposed in the NPRM: (1) number of fatalities; (2) rate of fatalities; (3) number of serious injuries; and (4) rate of serious injuries.

In § 490.207(b), FHWA adopts a methodology for calculating each performance measure based on a 5-year rolling average. The AASHTO as well as Maine, Michigan, and Pennsylvania DOTs suggested that more clarity was needed and suggested the potential to revise the calculation of 5-year rolling average to better define how it is calculated and the years to be included in the calculation. The FHWA clarifies that the 5-year rolling average covers the 5-year period that ends in the year for which targets are established. For example, the measures for target year 2018 would cover the years 2014, 2015, 2016, 2017, and 2018. Further, FHWA reviewed the performance measure calculations and recognized potential ambiguity in identifying changes from one 5-year rolling average to another. To rectify that ambiguity, for those performance measures calculated using annual data expressed as integers (i.e., number of fatalities or serious injuries), FHWA adopts a calculation of a 5-year rolling average that rounds to the tenths place; similarly, for those performance measures calculated using annual data that was
Initially rounded to the hundredths place (i.e., fatality rate per 100 million VMT), FHWA adopts a calculation of a 5-year rolling average that rounds to the thousandths place. Applying an additional place value to the numbers that are being used to produce a 5-year rolling average more accurately reveals the change from one 5-year rolling average to another that might be obscured if the 5-year rolling averages were rounded to the same place value, and alleviates some of the confusion about the methodology pointed out in the comments.

The following items describe the calculation for each of the five performance measures. In paragraph (b)(1), FHWA states that the performance measure for the number of fatalities is the 5-year rolling average of the total number of fatalities for each State and is calculated by adding the number of fatalities for the most recent 5 consecutive calendar years ending in the year for which the targets are established. The FARS ARF is used if Final FARS is not available. The sum of the fatalities is divided by five and then rounded to the tenth decimal place. The following example illustrates this calculation:

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Fatalities</td>
<td>694</td>
<td>739</td>
<td>593</td>
<td>533</td>
<td>514*</td>
</tr>
</tbody>
</table>

* From FARS ARF, if Final FARS is not available

1. Add the number of fatalities for the most recent 5 consecutive calendar years ending in the year for which the targets are established:

   \[694 + 739 + 593 + 533 + 514 = 3073\]

2. Divide by five and round to the nearest tenth decimal place:

   \[3073 / 5 = 614.6\]
The additional place value (the tenths place) in Step 2 reveals change from one 5-year rolling average to another that might be obscured if the 5-year rolling averages were rounded to the same place value. As proposed in the NPRM, FHWA adopts the data reported by the FARS database for each calendar year (FARS ARF if Final FARS is not available) as the number of fatalities for each State.

In paragraph (b)(2), FHWA adopts the calculation for the rate of fatalities performance measure as the 5-year rolling average of the State’s fatality rate per VMT as first calculating the fatality rate per 100 million VMT, rounded to the hundredths decimal place, for each of the most recent 5 consecutive years ending in the year for which the targets are established. The FARS ARF is used if Final FARS is not available. The FHWA also clarifies the different data sources for the VMT used to calculate the rate measures. State VMT data are derived from the HPMS. The MPO VMT is estimated by the MPO. The FHWA added the provision for MPO VMT estimates since the NPRM did not identify an appropriate source for MPO VMT, as it does not exist in the HPMS. For more information on MPO VMT, see the discussion of § 490.213. The sum of the fatality rates is divided by five and rounded to the thousandth decimal place. The AASHTO asked for clarification whether the same years of data must be used to calculate a rate for any one calendar year. The FHWA clarifies that rates are calculated using the same year of data (e.g. CY 2017 rates are calculated using CY 2017 FARS data and CY 2017 VMT data). The following example illustrates this calculation:

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatality Rate per 100 million VMT</td>
<td>0.91</td>
<td>0.89</td>
<td>0.88</td>
<td>0.86</td>
<td>0.98*</td>
</tr>
</tbody>
</table>

* Based on FARS ARF, if Final FARS is not available
1. Add the fatality rate, rounded to the hundredths decimal place, for the most recent 5 consecutive calendar years ending in the year for which the targets are established:

\[0.91 + 0.89 + 0.88 + 0.86 + 0.98 = 4.52\]

2. Divide by 5 and round to the nearest thousandths decimal place:

\[4.52 / 5 = 0.904\]

The additional place value (the thousandths place) in Step 2 reveals change from one 5-year rolling average to another that might be obscured if the 5-year rolling averages were rounded to the same place value.

In the NPRM, FHWA proposed that the VMT reported in the HPMS be used for the fatality and the serious injury rate measures. The New York Metropolitan Transportation Council (NYMTC), ARC, AMBAG, NYSAMPO, San Diego Association of Governments (SANDAG), and the Southern California Association of Governments (SCAG) commented that there are gaps in the quality and availability of safety, roadway, and volume data on roads off of the State system, including local and tribal roads. The FHWA acknowledges there are some data gaps, so includes provisions in this and the HSIP rule (23 CFR part 924) to address those gaps.

First, regarding safety data, FARS is a nationwide census providing NHTSA, Congress, and the American public yearly data regarding fatal injuries suffered in motor vehicle traffic crashes.\(^{27}\) The NHTSA administers FARS and works with States, as well as State and tribal governments, to improve crash reporting on all public roads including:

\(^{27}\) http://www.nhtsa.gov/FARS
a grant program under 23 U.S.C. 405(c), which supports State efforts to improve crash data systems; the Traffic Records Assessments programs which support peer evaluations and recommendations to improve State traffic records system capabilities; and the Crash Data Improvement Program, which examines the quality of each State’s crash data and provides States with specific recommendations to improve the quality, management and use of the data to support safety decisions.

Second, regarding roadway data, the HSIP rule requires States to collect and use a subset of Model Inventory of Roadway Elements (MIRE) for all public roadways, including local roads. These data elements will improve States’ and MPO’s ability to estimate expected number of crashes at roadway locations.

Third, regarding volume data, FHWA acknowledges that while the HPMS derives VMT for all public roads within the entire State boundary, it cannot provide VMT estimates for all public roads within a metropolitan planning area because it may not contain volume data on enough local roads within these areas. In the final rule, FHWA identifies the HPMS as the data source for the State VMT and the MPO VMT estimate as the source for MPO VMT. The FHWA added the provision for MPO VMT estimates since the NPRM did not identify an appropriate source for MPO VMT, as it does not exist in the HPMS. For more information on MPO VMT, see the discussion of § 490.213.

In paragraph (b)(3), FHWA adopts a calculation for the number of serious injuries performance measure as the 5-year rolling average of the total number of serious injuries for each State, to be calculated by adding the number of serious injuries for the most
recent 5 consecutive calendar years ending in the year for which the targets are established. The sum of the serious injuries is divided by five and then rounded to the tenth decimal place.

In paragraph (b)(4), FHWA adopts the calculation for the rate of serious injuries performance measure as the 5-year rolling average of the State’s serious injuries rate per VMT as first calculating the rate of serious injuries per 100 million VMT, rounded to the hundredths decimal place, for each of the most recent 5 consecutive years ending in the year for which the targets are established. The sum of the serious injury rates is divided by five and rounded to the thousandths decimal place. The FHWA also clarifies the different data sources for the VMT used to calculate the rate measures. State VMT data is derived from the HPMS. The MPO VMT is estimated by the MPO. The FHWA will provide technical guidance to support local computation of VMT-based safety performance targets.

The FHWA adds a new paragraph (b)(5) in the final rule to describe the calculation for the non-motorized fatalities and non-motorized serious injury performance measure as the 5-year rolling average of the total number of non-motorized fatalities and the total number of non-motorized serious injuries for each State. It is calculated by adding the number of non-motorized fatalities to the number of non-motorized serious injuries for each year for the most recent 5 consecutive years ending in the year for which the targets are established (FARS ARF is used if Final FARS is not available), dividing by five and rounding to the tenths decimal place.
As proposed in the NPRM, in § 490.207(c), FHWA requires that by the effective date of this rule, serious injuries shall be coded (A) on the KABCO injury classification scale through the use of the NHTSA serious injuries conversion tables. These serious injury conversion tables were available in the docket for review. Virginia DOT commented that their serious injury definition has changed over the time period of the conversion tables. The NHTSA State Data Systems team has reviewed the comment and notes that some changes were made over the years in Virginia State crash data, but these changes will not affect the serious injury crash counts that the State would report in compliance with this rule. Therefore, no change is needed to the conversion table.

In response to requests for comment on whether some other injury classification and coding system would be more appropriate, Kentucky, Missouri, and Washington State DOTs and the NYSAMPO supported the use of KABCO. Two professors from the University of Michigan commented that usage of the KABCO scale is known to vary from State to State and even locality to locality. As stated in the NPRM, FHWA recognizes that there is some variability in the injury assessments as well as the implementation of the KABCO reporting system across and within States. The FHWA believes that the KABCO injury classification scale, through the use of the NHTSA serious injury conversion tables, is the best option for documenting uniform serious injury coding for all motor vehicle crashes across all States until all States report serious injuries in accordance with MMUCC, 4th Edition. After MMUCC is fully instituted in all States, these variabilities will be resolved and the conversion tables will no longer be required. The ATSSA, Oregon, and Washington State DOTs suggested that some States
do not currently include the KABCO scale in their crash reporting, so the type “A” crash type from that scale would not be available in those States. The FHWA addresses this concern by requiring States that are not using KABCO to use the NHTSA serious injury conversion tables to convert crash reporting to type “A” on the KABCO scale.

The National Association of State Emergency Medical Service Officials indicated that it does not believe that even the most well-intended law enforcement officers can be expected to accurately make medical diagnoses at the scene of a crash and that research has confirmed that use of KABCO for this purpose is very unreliable and inaccurate. As a result, it suggested that FHWA move away from KABCO and accelerate the date for expecting States to determine serious injury by linking medical records. While FHWA understands that it is difficult for law enforcement officers to make medical diagnoses at crash scenes and that there may be some variability in the diagnoses as well as the implementation of the KABCO reporting system across and within States, FHWA believes that the KABCO injury classification scale, through the use of the NHTSA serious injury conversion tables, is an appropriate step toward providing greater consistency in defining serious injuries. The FHWA does not believe there is a way to implement a national medical records linkage system in time for the implementation of this rule.

In the NPRM, FHWA also proposed that within 18 months of the effective date of this rule, serious injuries were to have been determined using the latest edition of MMUCC. The FHWA received comments from AASHTO and eight State DOTs (see discussion above in § 490.205) regarding the 18-month timeframe suggesting that such a
timeframe would be difficult to meet. The AASHTO indicated that if a State is not currently using this definition, it will require a lengthy and resource-intensive process to work with law enforcement to change reporting processes, update manuals and training materials, and then train every law enforcement agency that reports crashes within each State. The AASHTO, and 7 of the 8 State DOTs, recommended that States need 36 months to complete this process, while Alaska DOT recommended 48 months. Washington State DOT and Oregon DOT agreed that 18 months is sufficient time for most agencies.

The FHWA understands that some States will need more than 18 months to come into compliance with MMUCC. The FHWA revises the timeframe for coming into compliance to 36 months based on the estimate provided by AASHTO and the majority of States that commented on this provision. Further, FHWA recognizes State DOT concerns that specifying “the latest edition of MMUCC” in the regulation could cause States to be in noncompliance as soon as a new edition of MMUCC is adopted. Therefore, as recommended by AASHTO and State DOTs that supported AASHTO comments, FHWA specifies the 4th Edition of MMUCC in this final rule. Should subsequent editions of MMUCC change the serious injury definition, FHWA would consider whether changes are required to this regulation.

The Texas DOT commented that whatever definition is used may not correspond with its pre-2009 crash data. As described in the NPRM, FHWA also recognizes that as serious injury data are migrated to the MMUCC definition, variances may occur in the data collected and reported by States. For example, a State may not be currently coding
an injury attribute that is included in the MMUCC and this could cause an over-counting or under-counting that would not occur once MMUCC is adopted. States should make necessary adjustments in establishing their targets to accommodate these potential changes.

In the NPRM, FHWA recommended, but did not require, in § 490.207(d) that States prepare themselves, no later than calendar year 2020, for serious injury data to be collected through and reported by a hospital records injury outcome reporting system that links injury outcomes from hospital inpatient and emergency discharge databases to crash reports. In the NPRM, FHWA gave the NHTSA Crash Outcome Data Evaluation System (CODES) as an example of a crash outcome data linkage system. The National Transportation Safety Board (NTSB) and the Northeast Ohio Areawide Coordinating Agency supported this approach. The AASHTO suggested that the use of a system like CODES that links collision and medical records to identify serious crash injury data has both benefits and drawbacks. The AASHTO indicated that the benefits will likely be better data, but the drawback is likely a longer delay in reporting (up to 3 years) and possibly a loss of some data due to records not matching or Health Insurance Privacy and Portability Act limitations. Both AASHTO and NTSB stated that there is no dedicated funding for CODES or a similar system. As a result, AASHTO suggested that the CODES program needs serious work before being rolled out and becoming part of the core requirement. Massachusetts DOT expressed concern that in smaller geographic States, where it is fairly common to cross State lines between place of incident and place of treatment, it would be extremely difficult to reconcile the two datasets. Minnesota
DOT suggested that the current lag between medical data and crash reporting is unacceptable for analysis and for developing countermeasures and as a result, the 2020 timeframe described in the NPRM is not feasible or appropriate. Florida, Louisiana, Maine, Michigan, Missouri, New York, Oklahoma, Texas, and Utah DOTs expressed similar concerns with the problematic nature of medical linkage systems due to lack of funding and associated expenses, privacy laws, and time lag and suggested that FHWA withhold recommending or requiring an implementation date for such linkage systems until such issues could be resolved.

Due to the unresolved issues associated with medical linkage systems and the docket comments suggesting that an implementation timeframe be omitted from the regulation, FHWA removes the recommendation from the rule. The FHWA believes that medical linkage systems are important and encourages States to embrace a framework to perform comprehensive linkage of records related to motor vehicle crashes resulting in serious injuries by collecting and analyzing data in a manner that will not preclude the use of such systems in their State in the future. As mentioned in the NPRM, DOT is an active liaison to the National Cooperative Highway Research Program Project 17-57 Development of a Comprehensive Approach for Serious Traffic Crash Injury Measurement and Reporting Systems. The DOT is awaiting completion of this project. The recommendations could then be effectively implemented in all States. This final rule does not prohibit a State from using a data linkage system like CODES, but requires States to use the MMUCC definition of “suspected serious injury” and the KABCO

system, through use of the NHTSA conversion tables, for reporting serious injuries data for purposes of this rule.

**Section 490.209 Establishment of Performance Targets**

As proposed in the NPRM, FHWA adopts § 490.209(a), which requires State DOTs to establish quantifiable targets for each performance measure identified in § 490.207(a). In paragraph (a)(1), FHWA adopts, as proposed in the NPRM, that State DOT targets shall be identical to the targets established by the SHSO for common performance measures reported in the State’s HSP, as required under 23 U.S.C. 402 and NHTSA’s regulations at 23 CFR part 1200. The three common performance measures are: (1) fatality number; (2) fatality rate; and (3) serious injury number.

The California Department of Transportation (Caltrans), Texas, and New York DOTs submitted comments in support of this requirement. Rhode Island and Washington State DOTs supported consistent measures and efforts to coordinate them. However, AASHTO opposed the requirement for identical targets. Thirty-six State DOTs submitted letters indicating overall support for AASHTO’s comments. Delaware, Florida, Idaho, Maine, Missouri, Montana, North Dakota, Oklahoma, South Dakota, and Wyoming State DOTs submitted individual letters opposing this requirement.

The AASHTO stated that the regulation should more clearly vest target establishment authority in States. One of AASHTO’s concerns with establishing identical targets is the resulting effect of the requirement under 23 U.S.C. 402(k)(4) that a State’s HSP be approved by NHTSA. In effect, AASHTO’s argument is that requiring identical targets in paragraph (a)(1) results in HSIP targets needing NHTSA’s approval,
notwithstanding 23 U.S.C. 150(d)(1), which provides States with target establishment authority not subject to FHWA approval. Another one of AASHTO’s concerns is that it believes there are fundamental differences between NHTSA and FHWA’s approaches to transportation safety. The AASHTO stated that State DOTs should be able to implement innovative safety projects and establish aggressive performance targets in their HSPs without fear of “MAP-21 penalties that are imposed” when States do not meet or make significant progress toward meeting these targets. The AASHTO stated that State DOTs should have flexibility to establish safety targets “that have performance holding steady, or in some situations declining, and are consistent with the [political and economic] realities present in their state,” not subject to DOT approval.

In MAP-21, Congress ordered FHWA to “promulgate a rulemaking that establishes performance measures and standards.” 23 U.S.C. 150(c)(1). While 23 U.S.C. 150(d) provides that States establish performance targets, FHWA was given the authority to determine the corresponding performance measures. The FHWA understands AASHTO’s concerns but, for the reasons discussed below, believes that it is consistent with FHWA’s statutory mandate to require that performance measures in a State’s HSIP be identical to those in a State’s HSP where common.

While there are fundamental differences between FHWA’s and NHTSA’s approaches to transportation safety, the connection between the HSIP and HSP has increased in recent years. In MAP-21, Congress required that the performance measures included in an HSP be those developed by NHTSA and the Governor’s Highway Safety Association (GHSA), as described in the report, “Traffic Safety Performance Measures
for States and Federal Agencies” (DOT HS 811 025). 23 U.S.C. 402(k)(4). In this report, States are required to establish goals for and report progress on 11 core outcome measures, agreed upon by NHTSA and GHSA, which include: the number of traffic fatalities, the number of serious injuries in traffic crashes, and fatalities per VMT (i.e., fatalities per mile of travel). Similarly, in MAP-21, Congress required that States’ HSIPs include these three performance measures: the number of fatalities, the number of serious injuries, and fatalities per vehicle mile traveled (i.e., fatalities per VMT). 23 U.S.C. 150(c)(4).

Not only did Congress require in MAP-21 the three common performance measures be included in State HSIPs and HSPs, Congress desired that the two programs work together. The MAP-21 amended 23 U.S.C. 402(b)(1)(F)(v) to require that each State coordinate its HSP, data collection, and information systems with the SHSP, as defined in 23 U.S.C. 148(a). The MAP-21 also amended 23 U.S.C. 148(c)(2)(D)(i) to require that as part of a State’s HSIP, each State “advance the capabilities of the State for safety data, collection, analysis, and integration in a manner that complements the State [HSP] . . .” Moreover, a State’s SHSP is to be developed after consultation with a highway safety representative of the State’s Governor, who is in fact the SHSO. 23 U.S.C. 148(a)(11)(i). The new and existing performance management linkages connecting the HSIP and HSP to the SHSP promote a coordinated relationship for common performance measures, resulting in comprehensive transportation and safety planning. The FHWA’s requirement for identical targets also is consistent with the
requirement in NHTSA’s regulations at 23 CFR part 1200\textsuperscript{29} to have common performance measures that are defined identically. See 23 CFR 1200.11(b)(2). If the measures are defined identically, any associated targets should also be identical. Requiring identical targets, therefore, takes advantage of and reinforces the linkages in MAP-21 between the HSIP and HSP and is consistent with NHTSA’s regulations. If States focus and apply Federal funds and requirements under both programs toward the same safety targets and goals, the opportunity to reduce traffic fatalities and serious injuries is maximized.

Notably, this approach is consistent with the national safety goals Congress established for the Federal-aid highway program and NHTSA’s mission: to reduce traffic fatalities and serious injuries (in the case of FHWA) and to reduce traffic accidents and the resulting deaths, injuries, and property damage (in the case of NHTSA) (23 U.S.C. 150(b)(1) and 23 U.S.C. 402(a)). To further these goals, FHWA strongly encourages State DOTs establish targets that represent improved safety performance.

In addition, allowing a State to establish two safety targets for common performance measures would be inefficient and could lead to public confusion, which is not what Congress intended. See 23 U.S.C. 150(a). Public transparency is vital to ensure that an effective performance management framework exists so that the public can

\textsuperscript{29} In the IFR NHTSA published, titled “Uniform Procedures for State Highway Safety Grant Programs,” on January 23, 2013. 78 FR 4986 (Jan. 23, 2013), NHTSA stated that due to the linkages between NHTSA-administered programs and other U.S. DOT programs under MAP-21, “[t]he Department will harmonize performance measures that are common across programs of [U.S. DOT] agencies (e.g., fatalities and serious injuries) to ensure that the highway safety community is provided uniform measures of progress. . . . NHTSA intends to collaborate with other [U.S.] DOT agencies to ensure there are not multiple measures and targets for the performance measures common across the various Federal safety programs.” 78 FR 4986-87.
encourage and hold accountable State decisionmakers to achieve aggressive safety targets. If there are two distinct and possibly competing safety targets for common performance measures, the public may have difficulty understanding or assessing a State’s overall performance in those safety areas. Separate targets could also be a burden on States by possibly requiring the collecting and reporting of two different sets of data for common performance measures in an HSIP and an HSP.

The FHWA believes States retain the authority and flexibility to establish safety targets for the common performance measures. The FHWA’s adoption of §490.209(a)(1) will not interfere with State discretion, because FHWA will not control, supplant, or make it more difficult for States to have their targets approved by NHTSA. Through collaborative discussions, both FHWA Division Offices and NHTSA Regional Offices work closely with each State as the State drafts its HSP targets. The FHWA anticipates that this increased coordination among the State behavioral and infrastructure safety offices during the target establishment process could result in better communication and working relationships in the States and could reduce the burden of collecting and submitting multiple sets of data.\(^{30}\)

Regardless of the DOT entity receiving the target from the State (NHTSA or FHWA), the data used to establish the performance measures and targets would be the same. The overlap between the HSP and this rule is in a single area—target establishment for three common performance measures—as NHTSA’s review of a State HSP includes target establishment. Under 23 U.S.C. 402(k)(5), disapproval of a State’s

\(^{30}\) Part of NHTSA’s HSP evaluation process includes ensuring that SHSO-submitted targets are coordinated with the State DOT.
plan, with respect to targets, may occur if “…the performance targets contained in the plan are not evidence-based or supported by data.” Under NHTSA’s Uniform Procedures for State Highway Safety Grant Programs, the State identifies its highway safety problems, describes its performance measures, defines its performance targets, and develops evidence based countermeasure strategies to address the problems and achieve the targets (23 CFR 1200.11(a)(1)). The State provides “quantifiable annual performance targets” and “justification for each performance target that explains why the target is appropriate and data driven” (23 CFR 1200.11(b)(2)). The NHTSA Regional Offices work closely with States while the HSPs are being developed, and may request additional information from the State to ensure compliance with these requirements. While NHTSA must ensure that performance targets under the HSP are appropriate and data-driven, it does so only through extensive coordination with the State. This collaborative process should ameliorate any concerns that States will be deprived of needed flexibility in establishing targets.

The FHWA adopts paragraph (a)(2) as proposed in the NPRM, which requires that the performance targets established by the State represent the safety performance outcomes anticipated for the calendar year following each HSIP annual report. As discussed in the NPRM, FHWA recognizes that the State DOT would use the most current data available to it when establishing targets required by this rule; that there are differences in the FARS ARF, Final FARS, and HPMS data bases and the State’s most current data; and that there is a time lag between the availability of FARS and HPMS data and the date by which the State needs to establish performance targets. For the
serious injuries number measure, this lag is not an issue because the serious injury
measures and reported outcomes are based on data contained in the State’s motor vehicle
crash database. The NPRM solicited comments specific to the time lag for the fatality
measures, any impacts the time lag may have on a State DOT’s ability to establish its
targets, and any suggestions that could help address the time lag. The AASHTO
expressed support for the use of the FARS database but noted concern with the timely
availability of FARS data. Caltrans, Connecticut, Florida, Missouri, Oregon, and Rhode
Island DOTs, as well as the DVRPC, New York Metropolitan Transportation Council
(NYMTC), Santa Cruz County Regional Transportation Commission, SRTA, Southeast
Michigan Council of Governments (SEMCOG), and the Tri-State Transportation
Campaign (New York, New Jersey, Connecticut) also raised this concern. Many of these
agencies indicated that without an improvement in the time lag it would be difficult for
States and MPOs to develop reasonable targets. The AASHTO and several States who
supported AASHTO suggested that to reduce the time lag, States should be allowed to
self-certify their fatality and serious injury data. The FHWA believes that it is important
to preserve the integrity of the national data wherever possible. Therefore, FHWA does
not believe it is appropriate to allow States to use State-certified fatality data, because
such an approach would introduce variability.

The SEMCOG and Pennsylvania DOT also expressed concern that a 3-year time
lag between a given fiscal year and when the FARS and HPMS data are available for
assessment of performance from that fiscal year, might result in the State being penalized
in the future for something that may have already been corrected, even with the 5-year
rolling average. They also suggested that the time lag may be such that projects may already have been implemented that correct the safety issue before the evaluation of significant progress. Finally, there is a perception by some State and local agencies, such as Caltrans and NYSAMPO, that because the data being assessed reflect past performance, the regulation does not meet the intent of MAP-21. Of the comments submitted, only Washington State DOT indicated that the lag time between establishing a target and reporting would not specifically be a problem.

The FHWA agrees that the time lag is an issue and has added the use of FARS ARF if Final FARS is not available to significantly reduce the time lag to assess whether States have met or made significant progress toward meeting their targets. Regardless, any performance management program relies on an evaluation step that must “look back” after programs and policies are applied and an outcome has occurred. Given the cyclical nature of a performance management framework (establish targets, implement policies and programs, document performance), target evaluation will always occur during or after the time States establish the next target. Each new opportunity to document and evaluate performance will allow States, MPOs, and FHWA to understand the impact of different policies, programs, and strategies on achieving targets and on attaining the national goal. This improved understanding can be applied in future performance management cycles. In this rule, FHWA has reduced the time lag by 1 year from what was proposed in the NPRM, so lessons from past performance can be applied sooner. This change is discussed further in § 490.211(a).
Paragraph (a)(3) requires that State DOTs establish targets that represent the anticipated performance outcome for all public roadways within the State regardless of ownership or functional classification. Rhode Island and Washington State expressed that there may be differences between the requirements to report fatalities on “all public roads” and the data available in FARS. For example, drive aisles and circulating roads in parking lots are included in FARS data. The FHWA acknowledges that FARS may include a very limited number of fatal crashes that do not occur on “public roads” as defined in the HSIP,\(^{31}\) since FARS includes all crashes occurring on “trafficways,”\(^{32}\) which does include drive aisles and circulating roads. The slight differences between the two terms could result in FARS including a fatal crash that did not occur on a “public road” as defined in the HSIP. In the definitions section (§ 490.205), FHWA modified the definition of FARS to account for this difference. The NHTSA believes such occurrences are extremely small. However, NHTSA has never quantified the number of such occurrences, since information on whether the trafficway meets the HSIP definition of “public road” is not collected in FARS. Nonetheless, since FARS is the recognized standard as a nationwide census of fatal injuries suffered in motor vehicle traffic crashes and is already used by the States for reporting fatalities, FHWA retains FARS as the data source for assessing whether a State has met or made significant progress toward meeting its fatality and fatality rate performance targets and the non-motorized fatality number portion of the non-motorized fatality and non-motorized serious injury performance target. States should be aware that FHWA will use FARS as the data source for these

\(^{31}\) 23 CFR 924.3
\(^{32}\) 2013 FARS/NASS GES Coding and Validation Manual, December 2014
assessments and factor that knowledge, including the potential including of a fatal crash that does not occur on a “public road,” into their process for establishing targets.

Virginia DOT recommended that the definition of “public roadways” be further clarified in this rulemaking, FHWA guidance, and in the MIRE. Virginia DOT suggested that by requiring performance targets to represent performance outcomes for all “public roadways within the State,” the proposed regulation would seem to require reporting and including fatality and serious injury data from and performance of Federal lands roadways, which may not be available to all State agencies. The FHWA confirms that “all public roads” includes Federal lands roadways within the State, per 23 CFR part 924. Virginia DOT also indicated that it is unclear as to whether the definition of “public road” includes public alleys and other service type laneways, typical in cities, and that inclusion of roadway inventory, traffic volumes and crashes for all public alleys would place additional compliance burdens on States. The FHWA confirms that the definition of a “public road” in 23 CFR part 924 includes crashes occurring on these facilities and that because States already collect crash data on these facilities, no additional burden will be realized in carrying out this requirement. The MAP-21 legislation requires that the safety performance targets apply to all public roads, since 23 U.S.C. 150(c)(4) requires performance measures for the purpose of carrying out the HSIP and the purpose of the HSIP is to “achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State owned public roads and roads on tribal land” (See 23 U.S.C. 148(b)(2)). In addition, 23 U.S.C. 150(b)(1) established the national safety goal “to achieve a significant reduction in traffic fatalities and serious injuries on all public
roads.” In addition to this final rule, FHWA is issuing a final rule for the HSIP (23 CFR part 924) that requires all public roads to be included in the HSIP. The types and ownership of roads included in the term “public road” are defined in that rule. To clarify that this rule uses the same definition, FHWA adds to this rule in § 490.205 the definition of public road as it is defined in 23 CFR part 924.

The ARC, AMBAG, and the NYSAMPO suggested that the quality, accuracy, and availability of serious injury data for roadways owned and maintained by local agencies present several challenges in the measurement and target establishment process. As discussed in the NPRM, FHWA recognizes that there is a limit to the quality, accuracy, and availability of some data, as well as to the direct impact the State DOT can have on the safety outcomes on all public roadways. State DOTs and MPOs need to consider this uncertainty in the establishment of their targets.

As proposed in the NPRM, paragraph (a)(4) requires that targets established by the State DOTs begin to be reported in the first HSIP annual report that is due after 1 year from the effective date of this final rule and in each subsequent HSIP annual report thereafter. The AASHTO and the Arizona, Missouri, and Tennessee DOTs, as well as NYSAMPO were in general agreement with the reporting requirements. The FHWA adopts this language in the final rule.

The FHWA revises paragraph (a)(5) from the proposal in the NPRM to require that for the purpose of evaluating the serious injury and non-motorized serious injury targets States are to report at a minimum the most recent 5 years of serious injury and non-motorized serious injury data, as compared to the 10 years proposed in the NPRM, in
their annual HSIP report (See 23 CFR part 924). The FHWA reduces the number of years of data required to reflect comments from State DOTs, such as Texas DOT, which reported that the State does not archive data back as far as the 10 years proposed in the NPRM, as well as a comment from ATSSA that many States have not archived their data for the last 10 years and that a 5-year archive is common for many States. In addition, 5 years of data will be sufficient for FHWA to assess whether States met or made significant progress toward meeting targets using the new methodology in that portion of the regulation. As part of this change, FHWA removes proposed paragraph (a)(5)(i) regarding the years required for the 10 years of data. However, FHWA encourages States to report as many years of additional crash data as they find appropriate for carrying out the HSIP. The FHWA adds the requirement for non-motorized serious injuries to correspond to the added performance target for non-motorized fatalities and serious injuries. The FHWA includes in paragraph (a)(5) (paragraph (a)(5)(ii) in the NPRM) the requirement that serious injury data be either MMUCC compliant or converted to KABCO system (A) to provide consistency throughout the regulation.

In response to comments from AASHTO, FHWA revises paragraph (a)(6) to clarify that, unless approved by FHWA, a State DOT shall not change one or more of its targets for a given year once it has submitted its target in the HSIP annual report. The AASHTO indicated that the regulation needs to clearly state that a State does not need FHWA approval to change its target in a subsequent year and that the restriction precluding a State from modifying its HSIP targets “unless approved by FHWA” once the target is submitted in the State’s HSIP annual report applies only for a given year.
The FHWA agrees with AASHTO that an important part of a performance management approach is to periodically evaluate targets and adjust them to reflect risks, revenue expectations, and strategic priorities. Since this rule requires States to establish safety performance targets each year, FHWA does not believe any changes are necessary to the regulation to allow States to change targets in subsequent years. If a State submits a target for CY 2017 in its 2016 HSIP report, it cannot change that CY 2017 target without approval from FHWA and from NHTSA for the common performance measures in the HSP because these targets are identical. The State will establish a new target for CY 2018 in its 2017 HSIP report.

The FHWA revises § 490.209(b) to clarify that in addition to targets described in § 490.209(a) (statewide targets), State DOTs may establish additional targets for portions of the State to give the State flexibility when establishing targets and to aid the State in accounting for differences in urbanized and non-urbanized areas consistent with 23 U.S.C. 150(d)(2). Nevada County, CA suggested that while additional measures may be appropriate, depending on the unique circumstance in a jurisdiction, all areas should be required to monitor the same four basic measures. It was FHWA’s intention in the NPRM to require State DOTs to establish targets for each of the performance measures proposed, yet allow States to choose to also establish different performance targets for urbanized and non-urbanized areas. The revised language in this final rule is meant to clarify that intent. The FHWA believes that this approach appropriately implements 23 U.S.C. 150(d)(2), providing that States may choose to establish different performance targets for urbanized and non-urbanized areas. The MARC and the Rails-to-Trails
Conservancy supported the concept of separating urbanized and non-urbanized areas for the purpose of performance measures, whereas the Tennessee DOT did not believe it is appropriate to create separate performance measures. Texas DOT requested clarification on how population growth would be accommodated. The SEMCOG requested clarification about how a change in the functional classification could affect the performance measure outcomes. As discussed in the NPRM, the U.S. Census Bureau defines urbanized area boundaries based on population after each decennial census. After the U.S. Census Bureau designates urbanized area boundaries, each State may adjust those Census-defined urbanized areas. While FHWA requests that States complete the process to adjust urbanized area boundaries within 2 years after the Census-defined boundaries are published, urbanized area boundaries could change on varying schedules. Designation of new urbanized areas or changes to the boundary of existing urbanized areas may lead to changes in the functional classification of the roads within those areas. Therefore, changes to the urbanized area boundaries affect the scope of the urbanized and non-urbanized targets.

Each performance measure in this rule is based on calendar year data. Section 490.209(b)(1) requires States, if they choose to establish additional targets, to identify the urbanized areas and non-urbanized area boundaries for each calendar year used for these targets. States must declare and describe these boundaries in the State HSIP annual report required by 23 CFR part 924. States should consider the risk for urbanized area boundary changes when establishing any urbanized area or non-urbanized areas target.
For example, the U.S. Census Bureau is expected to release new urbanized area boundaries in 2022, as a result of the 2020 census. A State may opt to establish an urbanized area fatality number target for the 5-year rolling average ending in 2023 in its HSIP report due August 2022. The State must establish its 2023 target using the number of fatalities in the urbanized area as that urbanized area was defined for each year in the 5-year rolling average. So, in the 5-year rolling average ending in CY 2023, the urbanized area boundary for years 2019, 2020, and 2021 is the one based on, or adjusted from, the 2010 census. For years 2022 and 2023, the urbanized area boundary is the one based on, or adjusted from, the 2020 census. The FHWA intends to issue additional guidance regarding the voluntary establishment of performance targets for urbanized and non-urbanized areas.

The FHWA adds four paragraphs to the final rule to provide States that decide to establish these targets with more specific information regarding requirements for these additional targets. Generally, a State DOT could establish additional targets for any number and combination of urbanized areas and could establish a target for the non-urbanized area for any or all of the measures described in paragraph (a). Paragraph (b)(1) requires States to declare and describe the boundaries used to establish each additional target in the State HSIP annual report (23 CFR part 924).

Paragraph (b)(2) indicates that States may select any number and combination of urbanized area boundaries and may also select a single non-urbanized area boundary for the establishment of additional targets. This provision is different from that proposed in the NPRM, which allowed only one aggregated urbanized area target for all urbanized
areas in the State. The NPRM limited States to one urbanized target for all urbanized areas in the State so that a State could not establish an unmanageable number of urbanized area targets, nor could it use success in meeting those targets to overall make significant progress even if the State did not meet its statewide safety targets. Smart Growth America and Transportation for America suggested that the additional, optional targets for portions of the State to account for urbanized and non-urbanized areas be treated differently from the statewide targets. Similarly, AASHTO, Iowa, Maine, Missouri, New York, Vermont, and Washington State DOTs preferred that only the statewide targets be included in the significant progress assessment.

The FHWA agrees and is not including assessment of the optional targets in determining whether the State met or made significant progress toward meeting its targets, as was proposed in the NPRM. Removing the optional targets from the significant progress assessment results in greater nationwide consistency in both the process of conducting the assessment and the transparency of the results. Because the optional targets are now not included in assessing whether the State met or made significant progress toward meeting its targets, FHWA is able to provide States the flexibility to establish separate targets for each urbanized area, as States determine appropriate. The FHWA also believes that this approach may encourage States to establish these additional targets. For States that want to establish a non-urbanized target, they are still restricted to a single non-urbanized target because there is no national standard for sub-dividing non-urbanized areas in a State. Establishing these additional targets could provide for additional transparency and accountability in a State’s
performance management program, and they could aid the State in accounting for differences in performance in urbanized areas and the non-urbanized area.

In paragraph (b)(3), FHWA requires that boundaries used by the State DOT for additional targets be contained within the geographic boundary of the State. Finally, in paragraph (b)(4), FHWA requires that State DOTs separately evaluate the progress of each additional target and report progress for each in the State HSIP annual report (23 CFR part 924). This provision would meet the requirements of 23 U.S.C. 150(e)(3).

As proposed in the NPRM, FHWA establishes in § 490.209(c) that MPOs shall establish their performance targets for each of the measures established in § 490.207(a), where applicable, in a manner that is consistent with elements defined in paragraphs (c)(1) through (5). Paragraph (c)(1) requires that MPOs establish their targets not later than 180 days after the State submits its annual HSIP report in which the State’s annual targets are established and reported. Washington State DOT, the AMPO, and the Puget Sound MPO supported the 180-day timeframe for MPOs to establish targets either through supporting the State target or by establishing targets unique to a metropolitan area. Caltrans did not support the 180-day timeframe because their experience shows that MPOs and Tribal governments will need resources, data expertise, and substantial coordination to establish targets, which cannot be accomplished within 180 days. The SCAG indicated that it is reasonable to require States to report annual targets, because State DOTs are already responsible for issuing the HSIP on an annual basis, yet most MPOs do not administer safety improvement plans on an annual basis, nor do they receive funding to do so. The statute (23 U.S.C. 134(h)(2)(C)) requires MPOs to
establish targets not later than 180 days of State DOTs establishing their targets. Therefore, FHWA retains that requirement in this final rule.

In the NPRM, FHWA requested stakeholder comment on alternative approaches to the required coordination with the long range metropolitan and statewide and nonmetropolitan transportation planning processes. The SCAG recommended that the MPO reporting requirements be aligned with the respective metropolitan transportation planning cycle of each MPO, which SCAG stated is consistent with the “Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning” NPRM released by FHWA and FTA on June 2, 2014 (FHWA-2013-0037). That NPRM for 23 CFR part 450 proposed that MPOs reflect performance targets required by MAP-21 in their metropolitan transportation plans. The NYSAMPO also suggested that establishing targets annually does not fit in with the time horizon of long range plans and that the time frame for target reporting in this rule is far more frequent than currently required on anything similar. They also questioned why MPOs should establish their targets if they are not held accountable and indicated this requirement may force the MPOs to choose to support the State target each year (due to time and resource limitations) and align project and program funds to State supported initiatives at the expense of the regional/local context at each MPO. The MARC expressed similar concern that annual target establishment would be overly burdensome and inconsistent with long-range planning.

Washington State DOT commented that there should be an emphasis on MPO participation in development of the SHSP.

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33 The Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning NPRM: http://www.regulations.gov/#!documentDetail;D=FHWA-2013-0037-0001.
The FHWA emphasizes that targets established under this final rule should be considered as interim condition/performance levels that lead toward the accomplishment of longer-term performance expectations in the State DOT’s and MPO’s long-range transportation plan. Furthermore, under 23 U.S.C. 148(a)(11)(A)(ii), States are required to consult with MPOs in the development of the State SHSP, and both should recognize that the annual targets should logically support, as interim levels of performance, the safety goals in that plan. Finally, 23 U.S.C. 134(h)(2)(D) and 135(d)(2)(C) require States and MPOs to integrate into the transportation planning process the goals, objectives, performance measures and targets described in other State transportation plans and processes required as part of a performance based program. In addition, the Planning NPRM proposed to require States to consider the performance measures and its performance targets when developing its planning documents and making investment priorities. State DOTs and MPOs will be expected to use the information and data generated as a result of this new regulation to better inform their transportation planning and programming decisionmaking. In particular, FHWA expects that these new performance requirements will help State DOTs and MPOs make better decisions on how to use their resources in ways that will result in the greatest possible reduction in fatalities and serious injuries, as well as to achieve their other performance targets. The FHWA acknowledges that we received several comments related to the planning process. For additional information on how the new performance management requirements fit into the statewide and metropolitan planning process, please review the Planning NPRM.34

34 The Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning
The FHWA adds paragraph (c)(2) to clarify that the MPO targets are established annually for the same calendar year period that the State targets are established. In paragraph (c)(3), FHWA clarifies the language in this final rule from what was proposed in paragraph (c)(2) in the NPRM to indicate that after the MPOs within the State establish the targets, FHWA expects that upon request, the State DOT can provide the MPOs targets to FHWA.

The AMPO and individual MPOs, including ARC, Hampton Roads Transportation Planning Organization, Puget Sound and Tennessee MPOs, as well as Iowa, Michigan, Tennessee, and Vermont State DOTs submitted comments regarding paragraph (c)(4) (paragraph (c)(3) in the NPRM). The AMPO expressed concern that the expectation of this requirement, as written in the NPRM, was that MPOs would program the very limited, regionally allocated, Surface Transportation Program (STP)\textsuperscript{35} funds toward additional specific projects in support of the State's targets. The AMPO suggested that MPOs be allowed to establish a numerical target for individual performance measures and support the State target on remaining targets. Recognizing the often limited STP funds allocated to MPOs and the desire of some MPOs to have flexibility to establish their own targets, FHWA modifies paragraph (c)(4) to indicate that MPO targets shall be addressed by either (i) agreeing to plan and program projects so that they contribute toward the accomplishment of the State DOT safety targets or (ii) committing to quantifiable targets for the metropolitan planning area. To provide MPOs

\textsuperscript{35} Section 1109 of the FAST Act (P.L. 114-94) converts the Surface Transportation Program found at 23 U.S.C. 133 into the Surface Transportation Block Grant Program.
with flexibility and to be respectful of the potential burden of establishing individual targets, FHWA allows MPOs to support all the State targets, establish specific numeric targets for all of the performance measures, or establish specific numeric targets for one or more individual performance measures and support the State target on other performance measures.

Caltrans and Washington State DOTs indicated that some MPOs do not have the capability or the finances to collect volume data; therefore it is difficult for them to have appropriate data for all public roads. To address this comment, in this final rule, FHWA adds paragraph (c)(5) that requires MPOs that establish targets for rates (fatality rate or serious injury rate) to report the VMT estimate used for such targets and the methodology used to develop the estimate. The methodology should be consistent with that used to satisfy other Federal reporting requirements, if applicable. In the NPRM, FHWA proposed that MPO VMT be derived from the HPMS. However, the HPMS does not provide sufficient information to derive complete VMT in an MPO planning area, since local roadway travel is only reported to HPMS in aggregate for the State and for Census urbanized areas. Therefore, consistent with the overall goals of performance management identified in 23 U.S.C. 150(a) to increase transparency and accountability, FHWA requires MPOs that establish rate targets to report the methodology used to estimate the MPO VMT. Many MPOs collect VMT data within their planning area and estimate VMT for the transportation planning process or for transportation conformity required under the Clean Air Act. The MPO VMT estimate used for rate targets for this rule should be consistent with these or other Federal reporting requirements, if applicable.
Consistency with other Federal reporting requirements and existing MPO efforts will minimize the burden on MPOs that choose to establish rate targets and increase the transparency of the MPO target establishment process. The FHWA will provide technical assistance to those MPOs that estimate their VMT and will review MPO VMT estimates as part of the MPO target achievement review process established in 23 CFR part 450.

As proposed in the NPRM, FHWA adopts paragraph (c)(6) that requires MPO targets established under paragraph (c)(4) to represent all public roadways within the metropolitan planning area boundary regardless of ownership or functional classification. Washington State DOT requested additional clarification in the language to clarify that the intention is not to have different targets based on functional class. The Washington State DOT further explained that most MPOs are interested in having the targets applied to all public roads within the MPO boundary regardless of functional class and that it does not support different targets for different functional classes of roadways. The FHWA agrees. An MPO is not expected to establish separate targets for each functional classification. It is required to support the State’s target or establish its own targets only for the five performance measures for which the State is required to establish targets under § 490.209(a). The MPO targets must include all public roads within the planning area, regardless of their functional classification. The FHWA retains the language, as proposed, in the final rule.

In paragraph (d), FHWA requires State DOTs and MPOs to coordinate on the establishment of the State targets or the MPO’s decision to either agree to plan or
program projects so that they contribute toward meeting the State targets or commit to their own quantifiable targets. The Washington State DOT suggested that the NPRM was unclear as to whether it would be appropriate for either the State target or the MPO target to have different boundaries and noted that the NPRM did not require coordination and agreement on target establishment. The FHWA believes it is appropriate for the State target and the MPO target to have different boundaries, since the metropolitan planning area does not necessarily coincide with State lines or urbanized area boundaries.

As proposed in the NPRM, and consistent with 23 U.S.C. 134(h)(2)(B)(i)(II) and 23 U.S.C. 135(d)(2)(B)(i)(II), FHWA requires coordination between the State DOT and relevant MPOs on target establishment in this rule in paragraph (d)(1) to ensure consistency, to the maximum extent practicable, but this rule does not require the MPO and State to reach a consensus agreement on their targets. The FHWA expects that States and MPOs will establish a process by which they will meet the coordination requirements in this rule. States and MPOs are expected to follow their established processes, as part of the on-going coordination that occurs during the statewide and metropolitan transportation planning processes. The Planning NPRM\(^\text{36}\) proposed requiring coordination, to the maximum extent practicable, among MPOs and State DOTs on their target setting efforts. The FHWA asked a series of questions in the Planning NPRM related to coordination among MPOs and State DOTs relating to target setting. As a result, FHWA expects to provide information in the preamble to the Planning Final Rule that will further describe how MPOs and States DOTs could coordinate on target setting.

efforts. Further, FHWA is conducting research and developing guidance documents and training courses to implement the new performance management requirements. In these materials, FHWA will emphasize the importance of MPO and State DOT coordination during target setting; provide examples of noteworthy target setting coordination efforts, and reference tools that States and MPOs can use to improve coordination.

In the NPRM, FHWA specified that “relevant” MPOs coordinate with the State because that is the requirement in 23 U.S.C. 135(d)(2)(B)(i)(II). Michigan and Washington State DOTs, Puget Sound MPO, NYSAMPO, and AMPO all requested clarification of the word “relevant.” For the measures in this rule, relevant MPOs are any MPO where all or any portion of the MPO planning area boundary is within the State boundary. The AMPO also expressed concern for potential issues with how multi-State MPOs establish targets, coordinate and report them. Tennessee DOT also questioned how MPOs should coordinate one target for the urbanized area while addressing performance targets for two or more State DOTs. The FHWA adds paragraph (d)(2) to address situations where metropolitan planning areas extend across multiple States. This addition clarifies that MPOs with multi-State boundaries that agree to plan or program projects so that they contribute toward State targets are to plan and program safety projects in support of the State DOT targets for each State that their metropolitan planning area covers. For example, MPOs that extend into two States are to contribute toward two separate sets of targets – one for each State. Through coordination with the State (or States for multi-State MPOs), MPOs that elect to establish quantifiable targets for their metropolitan planning area should consider each State’s target and ensure
consistency, to the maximum extent practicable, when establishing the MPO targets. An MPO with a planning area that crosses into two States may choose to agree to plan and program projects so that they contribute toward the State target for one State and establish a quantifiable target for the planning area in the other State.

**Section 490.211 Determining whether a State department of transportation has met or made significant progress toward meeting performance targets**

The FHWA changes the title and language within this section to provide consistency with legislative language regarding determining whether a State has met or made significant progress toward meeting its targets. Specifically, FHWA revises the terminology to reflect “met or made significant progress toward meeting performance targets” rather than “achieving” targets. The FHWA also adds paragraph numbering to improve readability of this section.

As proposed in the NPRM, in paragraph (a), FHWA lists the data sources that will be used in the determination whether a State has met or made significant progress toward meeting its targets. Based on a review of the comments related to data lag and FHWA’s own desire to decrease the lag, FHWA revises § 490.211(a) to reflect that meeting or making significant progress toward meeting targets will be determined based on the most recent available Final and FARS ARF data for the fatality number, fatality rate, and for the non-motorized fatality number. Final FARS will be used for all years for which it is available when FHWA makes an assessment of whether a State has met or made significant progress toward meeting its targets. If Final FARS is not available – usually the last year of the 5-year rolling average for the target being assessed – FARS ARF will
be used. The FARS ARF is published approximately 1 year before the Final FARs report, and as a result, using FARS ARF data reduces the data time lag by approximately 1 year. The FHWA believes that improvements in data systems will also enable the HPMS data to be available in this timeframe. As a result, FHWA is confident that Final FARS, FARS ARF, and HPMS data can be available within 12 months of the end of the calendar year for which the targets are being assessed. The FHWA believes this change addresses the concern over the time lag for assessing whether a State has met or made significant progress toward meeting its targets to the maximum extent possible.

As an example to illustrate the time between establishment of State targets and national and State data source availability to assess whether the State met or made significant progress toward meeting its targets, targets that represent anticipated safety performance measures outcomes for CY 2018 would need to be established by the State DOT and reported in its HSIP annual report due August 31, 2017. For the purposes of establishing targets, States are encouraged to use any and all data available, including data that go beyond traditional datasets, such as FARS, HPMS, and State crash databases to include current and pending legislation, political factors, available resources, etc. The FHWA will assess the targets established by the State for CY 2018 when the CY 2018 FARS and HPMS data become available in approximately December of 2019, 1 year earlier than proposed in the NPRM. The FARS ARF will be used for CY 2018 fatality data if Final FARS is not available. Final FARS data for CY 2014 to CY 2017 is expected to be available, as is CY 2014 to CY 2018 HPMS data. The State serious injury number and rate data used to evaluate the CY 2018 targets will be reported in the HSIP
report due August 31, 2019. The FHWA will assess whether States met or made significant progress toward meeting their CY 2018 targets and report findings to the States by March 31, 2020.

Paragraphs (a)(3) and (6) are added to indicate that FHWA will use the most recent available Final and FARS ARF data for the non-motorized fatality number and State reported data for the non-motorized serious injuries number, to evaluate the non-motorized performance target that FHWA adds in this final rule. To also address the non-motorized performance target, FHWA adds in paragraph (b) that non-motorized serious injury data will be taken from the HSIP report.

Paragraph (c) of the final rule (paragraph (b) of the NPRM) describes the process by which FHWA will evaluate whether a State DOT has met or made significant progress toward meeting performance targets. As discussed earlier in the Met or Made Significant Progress Toward Meeting Targets Evaluation section, FHWA adopts a revised methodology from what was proposed in the NPRM to address a wide variety of comments. In paragraph (c)(1), FHWA indicates that optional additional targets (urbanized and non-urbanized targets) established under § 490.209(b) will not be evaluated for whether the State met or made significant progress toward meeting its targets. The FHWA believes that excluding these additional targets from the significant progress assessment provides an opportunity for some flexibility with respect to these targets and may encourage State DOTs to establish these additional targets. In paragraph (c)(2) FHWA indicates that a State DOT is determined to have met or made significant progress toward meeting its targets when at least four of the five performance targets are
met or the outcome for the performance measure is better than the 5-year rolling average
data for the performance measure for the year prior to the establishment of the State’s
target (i.e., baseline safety performance), as described previously in the example for
Table 2.

In paragraph (d) of the final rule (paragraph (c) of the NPRM), FHWA adopts the
NPRM language with a clarification to specify that if it determines that a State has not
met or made significant progress toward meeting its safety targets, the State would need
to comply with 23 U.S.C. 148(i) for the subsequent fiscal year. Missouri and Rhode
Island DOTs objected to this “penalty,” because their STIP will already have been fully
committed by the time the significant progress evaluation occurs and the State is notified
that the provisions of 23 U.S.C. 148(i) apply. The FHWA recognizes that the STIP is a
commitment to the public regarding the projects and activities the State will implement.
The FHWA also considers the targets the State establishes as a commitment to the public
regarding the performance that will be achieved from those projects and activities and
expects that State DOTs already maximize the efficacy of the STIP to reduce fatalities
and serious injuries for all road users. The FHWA considers it reasonable to expect
States to reconsider and make any necessary changes to how funds will be spent if the
State fails its commitment to meet or make significant progress toward meeting its
targets. The implementation plan and funding obligation requirements would further
optimize safety projects in the STIP so that the State will meet or make significant
progress in a following year. The FHWA added language to paragraph (d) to clarify that
the 23 U.S.C. 148(i) provisions apply for the subsequent fiscal year after FHWA
determines a State has not met or made significant progress toward meeting its targets. States will have several months after they are informed that the 23 U.S.C. 148(i) provisions will apply to make any necessary adjustments to the STIP to accommodate the HSIP funding requirements and to prepare and carry out their implementation plan.

As explained in the NPRM, the performance provisions in 23 U.S.C. 148(i) require that a State DOT that has not met or made significant progress toward meeting safety performance targets must: (1) use obligation authority equal to the HSIP apportionment only for HSIP projects for the fiscal year prior to the year for which the safety performance targets were not met or significant progress was not made, and (2) submit an annual implementation plan that describes actions the State DOT will take to meet or make significant progress toward meeting its safety performance targets based on a detailed analysis, including analysis of crash types. Both of these provisions will facilitate transportation safety initiatives and improvements and help focus Federal resources in areas where Congress has deemed a national priority. In addition, these provisions help serve one of the overall goals of performance management – to improve accountability of the Federal-aid highway program (23 U.S.C. 150(a)). The implementation plan must: (a) identify roadway features that constitute a hazard to road users; (b) identify highway safety improvement projects on the basis of crash experience, crash potential, or other data-supported means; (c) describe how HSIP funds will be allocated, including projects, activities, and strategies to be implemented; (d) describe how the proposed projects, activities, and strategies funded under the State HSIP will allow the State DOT to make progress toward achieving the safety performance targets;
and (e) describe the actions the State DOT will undertake to meet or make significant progress toward meeting its performance targets.

The AASHTO and the States that supported AASHTO expressed concern that 23 U.S.C. 148(i) be implemented consistently and asked for clarification on several issues, including whether States subject to the 23 U.S.C. 148(i) provisions must obligate the funds in a single fiscal year or can program the funds over several years. The 23 U.S.C. 148(i)(1) states that “[the State shall] use obligation authority equal to the apportionment of the State for the prior year under section 104(b)(3) only for highway safety improvement projects…” The FHWA believes that, under this provision, States must obligate such HSIP funds during the next fiscal year after the State is notified that FHWA determined it did not meet or make significant progress toward meeting its targets. This provision reduces flexibility associated with a States’ HSIP funds and requires that those funds be focused on safety projects. In addition, this interpretation is consistent with how FHWA has proposed to implement the requirements related to the bridge and pavement minimum condition. The FHWA will require the funds to be obligated in the next fiscal year, rather than the fiscal year when the State is notified, to allow the State time to plan and program projects so that the required obligation authority can be used on HSIP projects. Likewise, when FHWA notifies a State that it has met or made significant

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37 23 U.S.C. 148(i)(1) requires States to “use obligation authority equal to the apportionment of the State for the prior year under section 104(b)(3) only for highway safety improvement projects under this section until the Secretary determines that the State has met or made significant progress towards meeting the safety performance targets of the State.”
progress toward meeting its performance targets, that determination will be applied to the
State’s obligation authority for the upcoming fiscal year, and the implementation plan
will be due by the beginning of that fiscal year.

The AASHTO and Minnesota DOT expressed concern that States may have
difficulty delivering a full year’s apportionment in these circumstances. The FHWA
appreciates that concern and will work with affected States to expedite any necessary
changes or project approvals. In order to give effect and meaning to 23 U.S.C. 148(i),
which holds States accountable for making performance targets, FHWA believes it is
appropriate to require that the obligation authority be used within the next fiscal year. As
discussed earlier, FHWA believes this approach is consistent with the national goal of
significantly reducing traffic fatalities and serious injuries. It would result in reducing
flexibility associated with a State’s HSIP funds and provide that the State focus those
funds on safety projects. However, FHWA notes that while a State will be required to
use obligation authority equal to a prior year HSIP apportionment on HSIP projects, the
State retains flexibility on the remainder of its obligation authority.

The DVRPC asked for clarification on whether the 23 U.S.C. 148(i) provisions
only apply to States that are determined to not meet or make significant progress toward
meeting their targets, and if the obligation authority restrictions are only for existing
safety funds. The Oklahoma DOT asked for clarification on the intent of the provisions.
As stated above, only States that do not meet or make significant progress toward
meeting their targets are subject to the 23 U.S.C. 148(i) provisions in the subsequent
fiscal year. In that year, such States must use obligation authority equal to the HSIP
apportionment only for HSIP projects for the fiscal year prior to the year targets were established. States retain the authority to decide which HSIP projects will be obligated. The implementation plan should guide the State’s project decisions so that the combined 23 U.S.C. 148(i) provisions lead to the State meeting or making significant progress toward meeting its safety performance targets in subsequent years.

The AASHTO commented that the implementation plan could lead to redundant, onerous reporting that adds no value to improving safety. The FHWA intends to issue additional guidance to States to meet the legislative requirements for the implementation plan while limiting redundancy and maximizing the opportunity to improve safety performance and States’ ability to meet their targets.

The AASHTO and Missouri DOT also recommended that States be granted a waiver if a State can demonstrate that it is using all its obligation authority under 23 U.S.C. 104(b)(3), and that obligating additional amounts up to the apportioned amount will negatively affect the State’s ability to meet or make significant progress toward meeting other required performance targets. The FHWA believes that both the plain language and intent of the statute (as this is one of the provisions where States are accountable for their targets) do not authorize FHWA to issue such waivers.

While Missouri DOT commented that the “penalties” imposed by the 23 U.S.C. 148(i) provisions are significant; many others, including the LAB and its supporters, the Tri-State Transportation Campaign, Smart Growth America and its supporters, and one citizen, commented that the provisions are meaningless and offer no real incentive for States to take the process seriously. The FHWA expects States and MPOs to be sincere
in their efforts to implement performance management and to contribute to the national safety goal, and FHWA will implement these regulations to that end. This rule includes the maximum incentive provided for in the statute for States to support the national safety goal.

The following example illustrates how these provisions would be carried out. A State DOT establishes targets for performance measures for CY 2018 and reports them in its 2017 HSIP annual report due by August 31, 2017. The targets established by the State for CY 2018 will be evaluated by FHWA when the CY 2018 FARS and HPMS data become available in approximately December of 2019, 1 year earlier than proposed in the NPRM. The FARS ARF will be used if Final FARS is not available. The serious injury data used for determining whether the State met or made significant progress toward meeting its serious injury targets will be taken from the State’s 2019 HSIP report due by August 31, 2019. The FHWA will make a determination, inform the State DOT if it met or made significant progress toward meeting its CY 2018 safety performance targets, and send results to the State by March 31, 2020. If FHWA determines that the State did not meet or make significant progress toward meeting its CY 2018 safety performance targets, 23 U.S.C. 148(i) will apply for FY 2021. For FY 2021, the State would need to use obligation authority equal to the HSIP apportionment only for HSIP projects for FY 2017 (the fiscal year prior to the year for which the target was established) and submit an annual implementation plan that describes actions the State DOT will take to meet or make significant progress toward meeting targets based on a detailed analysis, including analysis of crash types. The implementation plan is due to FHWA before October 1,
2020, the beginning of FY 2021. Similarly, by March 31, 2021, FHWA will make a determination and inform the State DOT if it met or made significant progress toward meeting its CY 2019 safety performance targets. If the State has met or made significant progress toward meeting its targets, the State will still be required to use its FY 2021 obligation authority equal to the HSIP apportionment only for HSIP projects for FY 2017. For FY 2022, FHWA would not place any restrictions on the State’s use of obligation authority since the State met or made significant progress toward meeting its CY 2019 safety performance targets.

For any year FHWA determines that a State DOT has met or made significant progress toward meeting its safety performance targets, that State DOT would not be required to use obligation authority or submit an implementation plan for the subsequent year. If, in some future year, FHWA determines that a State DOT does not meet or make significant progress toward meeting performance targets, the State DOT would at that time need to submit an implementation plan as well as use obligation authority as described above.

In paragraph (e) of the final rule (paragraph (d) of the NPRM), FHWA indicates that it will first evaluate whether States have met or made significant progress toward meeting their targets when the performance data are available for the year for which the first targets are established – the end of the following calendar year. For example, data to evaluate CY 2018 targets will be available at the end of CY 2019. (FARS ARF will be used if Final FARS is not available.) The FHWA will make a determination and inform the State DOT if it met or made significant progress toward meeting its CY 2018 safety
performance targets and send results to the State by March 31, 2020. The FHWA will make determinations annually thereafter. The language in the final rule is slightly different from what was proposed in the NPRM to provide consistency with statutory language regarding determining whether a State has met or made significant progress toward meeting its targets and because FHWA can make the evaluation earlier by using FARS ARF data if Final FARS is not available.

**Section 490.213 Reporting of Targets for the Highway Safety Improvement Program**

As proposed in the NPRM, FHWA adopts in § 490.213(a) reporting requirements, such that the State DOT reports its safety performance measures and targets in accordance with 23 CFR 924.15(a)(1)(iii) in the HSIP final rule published elsewhere in this issue of the Federal Register. The information in the HSIP reports, which are published on FHWA’s Web site, will improve the visibility and transparency of State fatal and serious injury data. In addition, FHWA is in the process of creating a new public Web site to help communicate the national performance story. The Web site will likely include infographics, tables, charts, and descriptions of the performance data that the State DOTs would be reporting to FHWA. The FHWA acknowledges that we received several comments related to the HSIP rule. For additional information on the new HSIP requirements, please review the HSIP final rule published elsewhere in this issue of the Federal Register.  

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40 [Highway Safety Improvement Program; Subchapter J – Highway Safety Rulemaking: http://www.regulations.gov/#!docketDetail;D=FHWA-2013-0019](http://www.regulations.gov/#!docketDetail;D=FHWA-2013-0019)
In the NPRM, FHWA proposed that the manner in which MPOs report their established safety targets be documented in the Metropolitan Planning Agreement, which is regulated under 23 CFR part 450. The AASHTO, Iowa, and New York State DOTs suggested that the language regarding targets and Metropolitan Planning Agreements be changed to specify that State DOTs and MPOs agree to a reporting methodology, working within the intent of the established Metropolitan Planning Agreement, without requiring a modification to the Agreement. Those agencies did not support explicitly addressing a reporting methodology within the planning agreement itself, but suggested instead that each State should be able to develop a reporting system for its MPOs within the framework of the agreement. The NYSAMPO indicated that the mechanics of how targets are to be reported to the State need to be worked out with each MPO through its metropolitan planning agreement. New York State DOT indicated that because Metropolitan Planning Agreements are formal legal documents, modifying such documents would require the approval of all signatories, including executive and legal review at the State DOT level. The FHWA understands these concerns and revises § 490.213(b) to indicate that MPOs shall annually report their established safety targets to their respective State DOT, in a manner that is documented and mutually agreed upon by both parties. While the process needs to be documented, it does not need to be incorporated into the Metropolitan Planning Agreement.

In paragraph (c), as proposed in the NPRM, FHWA requires MPOs to report baseline safety performance and progress toward achievement of their targets in the system performance report in the metropolitan transportation plan, as provided in 23
U.S.C. 134(i)(2)(c). In the final rule, FHWA adds a listing of data sources upon which the safety performance measures and progress for MPOs are to be based, since the MPO VMT data source differs from the State VMT data source. The FHWA intends to issue guidance on estimating MPO VMT. The list of data sources includes the use of Final and FARS ARF data for fatalities (FARS ARF is used if Final FARS is not available), including non-motorized fatalities, the MPO VMT estimate for rates, and State reported data for serious injuries, including non-motorized serious injuries.

VI. Rulemaking Analyses and Notices

The FHWA considered all comments received before the close of business on the extended comment closing date indicated above, and the comments are available for examination in the docket (FHWA-2013-0020) at Regulations.gov. The FHWA also considered comments received after the comment closing date to the extent practicable. The FHWA also considered the HSIP provisions of the FAST Act in the development of this final rule. The FAST Act did not require additional provisions beyond those discussed in the NPRM.

Rulemaking Analysis and Notices Executive Order 12866 (Regulatory Planning and Review), Executive Order 13563 (Improving Regulation and Regulatory Review), and DOT Regulatory Policies and Procedures

The FHWA has determined that this action is a significant regulatory action within the meaning of Executive Order (EO) 12866 and within the meaning of DOT regulatory policies and procedures due to the significant public interest in regulations related to traffic safety. It is anticipated that the economic impact of this rulemaking will
not be economically significant within the meaning of EO 12866 as discussed below. This action complies with EOs 12866 and 13563 to improve regulation. This action is considered significant because of widespread public interest in the transformation of the Federal-aid highway program to be performance-based, although it is not economically significant within the meaning of EO 12866. The FHWA is presenting an RIA (or regulatory analysis) in support of the final rule on Safety Performance Measures for the HSIP. The regulatory analysis evaluates the economic impact, in terms of costs and benefits, on Federal, State, and local governments, as well as private entities regulated under this action, as required by EO 12866 and EO 13563. The estimated costs are measured on an incremental basis, relative to current safety performance reporting practices.

This section of the final rule identifies the estimated costs resulting from the final rule—and how many serious injuries and fatalities would need to be avoided to justify this rule—in order to inform policymakers and the public of the relative value of the final rule. The complete RIA may be accessed from the rulemaking’s docket (FHWA–2013–0020). Each of the three performance measure final rulemakings will include a discussion on the costs and benefits resulting from the requirements contained in each respective rulemaking; however, the third performance measure rule will provide a comprehensive discussion on the costs and benefits associated with all three performance measure rules for informational purposes.

The cornerstone of MAP–21’s highway program transformation is the transition to a performance-based program. In accordance with the law, State DOTs will invest
resources in projects to meet or make significant progress toward meeting performance targets that will make progress toward national goals. Safety is one goal area where MAP–21 establishes national performance goals for Federal-aid highway programs. The MAP–21 requires FHWA to promulgate a rule to establish safety performance measures.

Estimated Costs of the Final Rule

To estimate costs for the final rule, FHWA assessed the level of effort, expressed in labor hours and the labor categories, needed for State and local transportation and law enforcement agencies to comply with each component of the final rule. Level of effort by labor category is monetized with loaded wage rates to estimate total costs.

Table 3 displays the total cost of the final rule for the 10-year study period (2015–2024). Total costs are estimated to be $87.5 million undiscounted, $65.6 million discounted at 7 percent, and $76.9 million discounted at 3 percent. Costs associated with the establishment of performance targets make up 57 percent of the total costs of the final rule. This is an increase of 4 percent from the NPRM estimates resulting from costs associated with the new non-motorized fatalities and non-motorized serious injuries performance measure, added effort required for MPOs to estimate MPO-specific VMT for performance targets, a decrease in the number of MPOs expected to establish targets, and costs associated with coordination between State DOTs and MPOs. The costs in the tables assume 201 MPOs would establish their own targets, and the remaining portion would adopt State DOT targets. It is assumed that State DOTs and MPOs serving
Transportation Management Areas (TMA)\textsuperscript{41} will use staff to analyze safety trends and establish performance targets on an annual basis, and MPOs not serving a TMA will adopt State DOT targets rather than establish their own safety performance targets and will therefore not incur any incremental costs. The FHWA made this assumption because larger MPOs may have more resources available to develop performance targets. The FHWA believes that this is a conservative estimate, as larger MPOs may elect not to establish their own targets for any variety of reasons, including resource availability.

\textsuperscript{41} A TMA is an urbanized area having a population of over 200,000 or otherwise requested by the Governor and the MPO and officially designated by FHWA or FTA. 23 U.S.C. 134(k).
TABLE 3 – TOTAL COST OF THE FINAL RULE

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<th>Cost Components</th>
<th>10-year Total Cost</th>
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*Totals may not sum due to rounding.

The final rule’s 10-year undiscounted cost ($87.5 million in 2014 dollars) increased relative to the proposed rule ($66.7 million in 2012 dollars). As discussed below, FHWA made a number of changes which affected cost.

General Updates

In the final rule RIA, FHWA updated all costs to 2014 dollars from 2012 dollars in the proposed rule. In addition, FHWA updated labor costs to reflect current BLS data. These general updates increased the estimated cost of the final rule relative to the proposed rule.
The FHWA also updated the estimated total number of MPOs to 409, which is less than the 420 MPOs used at the time that the NPRM was published. The estimated number of MPOs serving TMAs is now 201, less than the estimate of 210 in the NPRM, and the number of non-TMA MPOs is 208, less than the estimate of 210 in the NPRM. At the time the RIA was prepared for the NPRM, FHWA assumed that the 36 new urbanized areas resulting from the 2010 census would have MPOs designated for them. In reality, some of the newly designated urbanized areas merged with existing MPOs, resulting in the designation of fewer new MPOs than expected. The FHWA estimates that, on average, only the 201 larger MPOs serving TMAs will establish their own quantifiable performance targets and that the 208 smaller MPOs serving non-TMAs will choose to agree to plan and program projects so that they contribute toward the accomplishment of the State DOT safety targets. The reduction in the number of MPOs decreased the estimated costs MPOs incur to comply with the requirements of this final rule relative to the proposed rule.

Section 490.205: Definitions

The RIA estimates the cost of § 490.205 resulting from the requirements for KABCO compliance, MMUCC, 4th edition compliance, and 5-year rolling average calculations. The cost associated with these rule requirements increased from $26.3 million in the proposed rule to $28.2 million in the final rule. In addition to the general updates described above, FHWA revised the final rule RIA to reflect updated local law enforcement census data, costs associated with the new non-motorized fatalities and non-motorized serious injuries performance measure, the removal of the proposed
requirement for State DOTs to compile a 10-year historical trend line, and the deferred implementation of MMUCC, 4th edition compliance (required by 36 months after the effective date of the final rule, rather than the proposed 18 months).

Section 490.209: Establishment of Performance Targets

The RIA estimates the cost of coordination between State DOTs and MPOs as well as establishing performance targets under § 490.209. The cost of this section increased from $35.3 million for the proposed rule to $50.1 million for the final rule. In addition to the general updates described above, the increase in cost is attributable to the additional costs associated with establishing the new non-motorized fatalities and non-motorized serious injuries performance measure (which added a one-time cost of approximately $180,000, and approximately $8 million over the 10 year period of analysis), the added effort required for MPOs to estimate MPO-specific VMT for performance targets (which is partially offset by a decrease in the number of MPOs expected to establish quantifiable targets), and costs of coordinating on the establishment of targets in accordance with 23 CFR part 450.

Section 490.211: Determining Whether a State DOT has Met or Made Significant Progress Toward Meeting Performance Targets

In the RIA, FHWA estimates the cost associated with failing to meet or make significant progress toward meeting targets, as described in § 490.211. The cost of this section of the rule increased from $5.1 million in the proposed rule to $9.2 million in the final rule. In addition to the general updates described above, the increase in cost results from an increase in the estimated number of States that might not meet or make
significant progress toward meeting their targets using the new methodology included in the final rule. Based on the new methodology, FHWA conservatively assumed that 26 State DOTs will fail to meet or make significant progress toward meeting their targets, which is more than double the assumption used in the NPRM’s RIA (10 State DOTs would fail to meet or make significant progress toward meeting their targets). The cost was partially offset by a reduction in the number of years the costs accrued.

In the RIA, FHWA recognizes that States will not incur incremental costs for using obligation authority equal to the HSIP apportionment only for HSIP projects for the prior year because programming decisions are already realized as part of the State’s overall management of the Federal aid program.

**Break-Even Analysis**

Currently, there are many differences in the way State DOTs code and define safety performance measures (e.g., serious injuries). The rule will result in regulations that will: improve data by providing for greater consistency in the reporting of serious injuries; require reporting on serious injuries and fatalities through a more visible and transparent reporting system; require the establishment and reporting of targets that can be aggregated at the national level; require State DOTs to meet or make significant progress toward meeting their targets, and establish requirements for State DOTs that have not met or made significant progress toward meeting their targets.

Upon implementation, FHWA expects that the final rule will result in certain benefits. Specifically, FHWA expects safety investment decisionmaking to be more informed through the use of consistent and uniform measures; State DOTs and MPOs
will be expected to use the information and data generated as a result of the new regulations to better inform their transportation planning and programming decisionmaking and more directly link investments to desired performance outcomes. In particular, FHWA expects that these new performance aspects of the Federal-aid program will help State DOTs and MPOs make better decisions on how to use resources in ways that will result in the greatest possible reduction in fatalities and serious injuries. These regulations will also help provide FHWA the ability to better communicate a national safety performance story. Each of these benefits is discussed in further detail in the RIA, available in the docket.

These benefits resulting from the rule (i.e., more informed decisionmaking, greater accountability, and greater focus on making progress toward the national goal for safety) will lead to improved safety outcomes. However, the benefits from the rule, while real and substantial are difficult to monetize. Therefore, FHWA quantified these benefits of the rule by performing a break-even analysis, as described in OMB Circular A-4, that estimates the number of fatalities and incapacitating injuries the rule will need to prevent for the benefits of the rule to justify the costs.

Table 4 displays the results from a break-even analysis using fatalities and incapacitating injuries as its reduction metric. The results show that the rule must prevent approximately 10 fatalities over 10 years to generate enough benefits to outweigh the cost

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42 The FHWA used crash statistics from NHTSA’s Traffic Safety Facts 2012 to perform the break-even analysis. Because crash types are categorized using a KABCO scale in that report (i.e., fatality, incapacitating injury, non-incapacitating injury, or other injury), the results of the break-even analysis are expressed in terms of incapacitating injury, and not serious injury.
of the rule. This translates to one fatality per year nationwide.\textsuperscript{43} When the break-even analysis uses incapacitating injuries as the reduction metric, it shows that the rule must prevent 199 incapacitating injuries over 10 years, or approximately 20 a year, for benefits to outweigh the cost.\textsuperscript{44} In other words, the rule will need to prevent approximately 10 fatalities or approximately 199 incapacitating injuries over 10 years nationwide for the rule to be cost-beneficial. Due to the relatively small break-even number of fatalities and incapacitating injuries, FHWA believes that the rule will surpass this threshold and that the benefits of the rule will outweigh the costs.

TABLE 4 – BREAK-EVEN ANALYSIS USING FATALITIES AND INCAPACITATING INJURIES REDUCTION METRIC

<table>
<thead>
<tr>
<th>Undiscounted 10-Year Costs</th>
<th>Reduction in Fatalities Required for Rule to be Cost-Beneficial</th>
<th>Average Annual Reduction in Fatalities Required for Rule to be Cost-Beneficial</th>
<th>Reduction in Incapacitating Injuries Required for Rule to be Cost-Beneficial</th>
<th>Average Annual Reduction in Incapacitating Injuries Required for Rule to be Cost-Beneficial</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>b = a ÷ $9,200,000</td>
<td>c = b ÷ 10 years</td>
<td>d = a ÷ $439,990</td>
<td>d = c ÷ 10 years</td>
</tr>
<tr>
<td>$87,483,450</td>
<td>9.5</td>
<td>1.0</td>
<td>198.8</td>
<td>19.9</td>
</tr>
</tbody>
</table>

Both of the thresholds in the break-even analysis increased in the final rule relative to the proposed rule. Specifically, the reduction in fatalities required for the rule to be cost-beneficial increased from 7 in the NPRM to 10 in the final rule, while the

\textsuperscript{43} For reference, according to “NHTSA Traffic Safety Facts 2012,” there were 33,561 fatalities in 2012.

\textsuperscript{44} For reference, according to “NHTSA Traffic Safety Facts 2012,” there were 182,000 incapacitating injuries in 2012.
reduction in incapacitating injuries required for the rule to be cost-beneficial increased from 153 in the NPRM to 199 in the final rule. In both cases, the break-even points were affected by the increase in the undiscounted 10-year cost (which increased from $66.7 million to $87.5 million). In addition, the break-even points were affected by increases to both the VSL for fatalities and the average cost per incapacitating injury (the VSL for fatalities increased from $9.1 million to $9.2 million, while the average cost per incapacitating injury increased from $435,000 to $440,000).

**Regulatory Flexibility Act**

In compliance with the Regulatory Flexibility Act (Pub. L. 96–354, 5 U.S.C. 601–612), FHWA has evaluated the effects of this final rule on small entities and anticipates that this action would not have a significant economic impact on a substantial number of small entities. The rule affects three types of entities: State governments, MPOs, and local law enforcement agencies. State governments do not meet the definition of a small entity.

The MPOs are considered governmental jurisdictions, so the small entity standard for these entities is whether the affected MPOs serve less than 50,000 people. The MPOs serve urbanized areas with populations of more than 50,000. Therefore, MPOs that incur economic impacts under this rule do not meet the definition of a small entity.

Local law enforcement agencies, however, may be subsets of small governmental jurisdictions. Nonetheless, the RIA estimates minimal one-time costs to local law enforcement agencies, as discussed above, and these costs represent a fraction of a percent of revenues of a small government. Therefore, I hereby certify that this
regulatory action would not have a significant impact on a substantial number of small entities.

**Unfunded Mandates Reform Act of 1995**

The FHWA has determined that this final rule would not impose unfunded mandates as defined by the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4, March 22, 1995, 109 Stat. 48). This rule does not contain a Federal mandate that may result in expenditures by State, local, and tribal governments, in the aggregate, or by the private sector, of greater than $151 million or more in any 1 year (2 U.S.C. 1532). Additionally, the definition of “Federal mandate” in the Unfunded Mandates Reform Act excludes financial assistance of the type in which State, local, or tribal governments have authority to adjust their participation in the program in accordance with changes made in the program by the Federal Government. The Federal-aid highway program permits this type of flexibility.

**Executive Order 13132 (Federalism)**

The FHWA has analyzed this final rule in accordance with the principles and criteria contained in Executive Order 13132 dated August 4, 1999. The FHWA has determined that this action would not have sufficient federalism implications to warrant the preparation of a federalism assessment. The FHWA has also determined that this rulemaking would not preempt any State law or State regulation or affect the States’ ability to discharge traditional State governmental functions.

**Executive Order 12372 (Intergovernmental Review) Catalog of Federal Domestic Assistance program Number 20.205, Highway Planning and Construction.**
The regulations implementing EO 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program. This EO applies because State and local governments would be directly affected by the proposed regulation, which is a condition on Federal highway funding. Local entities should refer to the Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction, for further information.

**Paperwork Reduction Act**

Under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501, et seq.), Federal agencies must obtain approval from OMB prior to conducting or sponsoring a collection of information. Details and burdens in this final rule would be realized in Planning and HSIP reporting. The PRA activities are already covered by existing OMB Clearances. The reference numbers for those clearances are OMB: 2132–0529 (Planning) and 2125–0025 (HSIP), both with expiration date of May 31, 2017. Any increases in PRA burdens caused by MAP–21 in these areas were addressed in PRA approval requests associated with those rulemakings.

**National Environmental Policy Act**

The FHWA has analyzed this action for the purpose of the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.), and has determined that this action would not have any effect on the quality of the environment and meets the criteria for the categorical exclusion at 23 CFR 771.117(c)(20).

**Executive Order 12630 (Taking of Private Property)**
The FHWA has analyzed this rule under EO 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights. The FHWA does not anticipate that this action would affect a taking of private property or otherwise have taking implications under EO 12630.

**Executive Order 12988 (Civil Justice Reform)**

This action meets applicable standards in sections 3(a) and 3(b)(2) of EO 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

**Executive Order 13045 (Protection of Children)**

The FHWA has analyzed this rule under EO 13045, Protection of Children from Environmental Health Risks and Safety Risks. The FHWA certifies that this action would not cause an environmental risk to health or safety that might disproportionately affect children.

**Executive Order 13175 (Tribal Consultation)**

The FHWA has analyzed this action under EO 13175, dated November 6, 2000, and believes that the action would not have substantial direct effects on one or more Indian tribes; would not impose substantial direct compliance costs on Indian tribal governments; and would not preempt tribal laws. The final rule addresses obligations of Federal funds to States for Federal-aid highway projects and would not impose any direct compliance requirements on Indian tribal governments. Therefore, a tribal summary impact statement is not required.

**Executive Order 13211 (Energy Effects)**
The FHWA has analyzed this action under EO 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use. The FHWA has determined that this is not a significant energy action under that order and is not likely to have a significant adverse effect on the supply, distribution, or use of energy. Therefore, a Statement of Energy Effects is not required.

**Executive Order 12898 (Environmental Justice)**

The EO 12898 requires that each Federal agency make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minorities and low-income populations. The FHWA has determined that this rule does not raise any environmental justice issues.

**Regulation Identifier Number**

A RIN is assigned to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. The RIN contained in the heading of this document can be used to cross-reference this action with the Unified Agenda.

List of Subjects in 23 CFR Part 490

Bridges, Highway safety, Highways and roads, Incorporation by Reference, Reporting and recordkeeping requirements.

Issued on **March 2, 2016** under authority delegated in 49 CFR 1.85:
In consideration of the foregoing, FHWA amends title 23, Code of Federal Regulations, by adding part 490 to read as follows:

PART 490—NATIONAL PERFORMANCE MANAGEMENT MEASURES

Subpart A—General Information

Sec.
490.101 Definitions.
490.103 [Reserved]
490.105 [Reserved]
490.107 [Reserved]
490.109 [Reserved]
490.111 Incorporation by reference.

Subpart B—National Performance Management Measures for the Highway Safety Improvement Program

490.201 Purpose.
490.203 Applicability.
490.205 Definitions.
490.207 National performance management measures for the Highway Safety Improvement Program.
490.209 Establishment of performance targets.
490.211 Determining whether a State department of transportation has met or made significant progress toward meeting performance targets.
490.213 Reporting of targets for the Highway Safety Improvement Program.

Authority: 23 U.S.C. 134, 135, 148(i) and 150; 49 CFR 1.85.

Subpart A—General Information

§ 490.101 Definitions.
Unless otherwise specified, the following definitions apply to this part:

**Highway Performance Monitoring System** (HPMS) is a national level highway information system that includes data on the extent, condition, performance, use, and operating characteristics of the Nation’s highways.

**Measure** means an expression based on a metric that is used to establish targets and to assess progress toward meeting the established targets (e.g., a measure for flight on-time performance is percent of flights that arrive on time, and a corresponding metric is an arithmetic difference between scheduled and actual arrival time for each flight).

**Metric** means a quantifiable indicator of performance or condition.

**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).

**Target** means a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the Federal Highway Administration (FHWA).

§ 490.103 [Reserved]

§ 490.105 [Reserved]

§ 490.107 [Reserved]

§ 490.109 [Reserved]

§ 490.111 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, FHWA must publish a notice
of change in the Federal Register and the material must be available to the public. All approved material is available for inspection at the Federal Highway Administration, Office of Highway Policy Information (202-366-4631) and is available from the sources listed below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to


(b) [Reserved]

(c) [Reserved]


(2) [Reserved]


§ 490.201 Purpose.

The purpose of this subpart is to implement the requirements of 23 U.S.C. 150(c)(4), which requires the Secretary of Transportation to establish performance measures for the purpose of carrying out the Highway Safety Improvement Program (HSIP) and for State departments of transportation (State DOTs) to use in assessing:

(a) Serious injuries and fatalities per vehicle miles traveled (VMT); and

(b) Number of serious injuries and fatalities.

§ 490.203 Applicability.

The performance measures are applicable to all public roads covered by the HSIP carried out under 23 U.S.C. 130 and 148.

§ 490.205 Definitions.

Unless otherwise specified, the following definitions apply in this subpart:

5-year rolling average means the average of 5 individual, consecutive annual points of data (e.g., the 5-year rolling average of the annual fatality rate).

Annual Report File (ARF) means FARS data that are published annually, but prior to Final FARS data.

Fatality Analysis Reporting System (FARS) means a nationwide census providing public yearly data regarding fatal injuries suffered in motor vehicle traffic crashes.
Final FARS means the FARS data that replace the ARF file and contain additional cases or updates to cases that became available after the ARF was released, and which are no longer subject to future changes.

KABCO means the coding convention system for injury classification established by the National Safety Council.

Number of fatalities means the total number of persons suffering fatal injuries in a motor vehicle traffic crash during a calendar year, based on the data reported by the FARS database.

Number of non-motorized fatalities means the total number of fatalities (as defined in this section) with the FARS person attribute codes: (5) Pedestrian, (6) Bicyclist, (7) Other Cyclist, and (8) Person on Personal Conveyance.

Number of non-motorized serious injuries means the total number of serious injuries (as defined in this section) where the injured person is, or is equivalent to, a pedestrian (2.2.36) or a pedalcyclist (2.2.39) as defined in the ANSI D16.1-2007 (incorporated by reference, see § 490.111).

Number of serious injuries means the total number of persons suffering at least one serious injury for each separate motor vehicle traffic crash during a calendar year, as reported by the State, where the crash involves a motor vehicle traveling on a public road, and the injury status is “suspected serious injury (A)” as described in MMUCC, (incorporated by reference, see § 490.111). For serious injury classifications that are not MMUCC compliant, the number of serious injuries means serious injuries that are converted to KABCO by use of conversion tables developed by the NHTSA.
Public road is as defined in 23 CFR 924.3.

Rate of fatalities means the ratio of the total number of fatalities (as defined in this section) to the number of vehicle miles traveled (VMT) (expressed in 100 million VMT) in a calendar year.

Rate of serious injuries means the ratio of the total number of serious injuries (as defined in this section) to the number of VMT (expressed in 100 million vehicle miles of travel) in a calendar year.

Serious injuries means:

(1) From [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] to April 15, 2019, injuries classified as “A” on the KABCO scale through use of the conversion tables developed by NHTSA; and

(2) After April 15, 2019, “suspected serious injury (A)” as defined in the MMUCC.

§ 490.207 National performance management measures for the Highway Safety Improvement Program.

(a) There are five performance measures for the purpose of carrying out the HSIP. They are:

(1) Number of fatalities;

(2) Rate of fatalities;

(3) Number of serious injuries;

(4) Rate of serious injuries; and,

(5) Number of non-motorized fatalities and non-motorized serious injuries.
(b) Each performance measure is based on a 5-year rolling average. The performance measures are calculated as follows:

(1) The performance measure for the number of fatalities is the 5-year rolling average of the total number of fatalities for each State and shall be calculated by adding the number of fatalities for each of the most recent 5 consecutive years ending in the year for which the targets are established, dividing by 5, and rounding to the tenth decimal place. FARS ARF may be used if Final FARS is not available.

(2) The performance measure for the rate of fatalities is the 5-year rolling average of the State’s fatality rate per VMT and shall be calculated by first calculating the number of fatalities per 100 million VMT for each of the most recent 5 consecutive years ending in the year for which the targets are established, adding the results, dividing by 5, and rounding to the thousandth decimal place. The FARS ARF may be used if Final FARS is not available. State VMT data are derived from the HPMS. The Metropolitan Planning Organizations (MPO) VMT is estimated by the MPO. The sum of the fatality rates is divided by five and then rounded to the thousandth decimal place.

(3) The performance measure for the number of serious injuries is the 5-year rolling average of the total number of serious injuries for each State and shall be calculated by adding the number of serious injuries for each of the most recent 5 consecutive years ending in the year for which the targets are established, dividing by five, and rounding to the tenth decimal place.

(4) The performance measure for the rate of serious injuries is the 5-year rolling average of the State’s serious injuries rate per VMT and shall be calculated by first
calculating the number of serious injuries per 100 million VMT for each of the most recent 5 consecutive years ending in the year for which the targets are established, adding the results, dividing by five, and rounding to the thousandth decimal place. State VMT data are derived from the HPMS. The MPO VMT is estimated by the MPO.

(5) The performance measure for the number of Non-motorized Fatalities and Non-motorized Serious Injuries is the 5-year rolling average of the total number of non-motorized fatalities and non-motorized serious injuries for each State and shall be calculated by adding the number of non-motorized fatalities to the number non-motorized serious injuries for each of the most recent 5 consecutive years ending in the year for which the targets are established, dividing by five, and rounding to the tenth decimal place. FARS ARF may be used if Final FARS is not available.

(c) For purposes of calculating serious injuries in paragraphs (b)(3), (4), and (5) of this section:

(1) Before April 15, 2019, serious injuries may be determined by either of the following:

(i) Serious injuries coded (A) in the KABCO injury classification scale through use of the NHTSA serious injuries conversion tables; or

(ii) Using MMUCC (incorporated by reference, see § 490.111).

(2) By April 15, 2019, serious injuries shall be determined using MMUCC.

§ 490.209 Establishment of performance targets.

(a) State DOTs shall establish targets annually for each performance measure identified in § 490.207(a) in a manner that is consistent with the following:
(1) State DOT targets shall be identical to the targets established by the State Highway Safety Office for common performance measures reported in the State’s Highway Safety Plan, subject to the requirements of 23 U.S.C. 402(k)(4), and as coordinated through the State Strategic Highway Safety Plan.

(2) State DOT targets shall represent performance outcomes anticipated for the calendar year following the HSIP annual report date, as provided in 23 CFR 924.15.

(3) State DOT performance targets shall represent the anticipated performance outcome for all public roadways within the State regardless of ownership or functional class.

(4) State DOT targets shall be reported in the HSIP annual report that is due after April 14, 2017, and in each subsequent HSIP annual report thereafter.

(5) The State DOT shall include, in the HSIP Report (see 23 CFR part 924), at a minimum, the most recent 5 years of serious injury data and non-motorized serious injury data. The serious injury data shall be either MMUCC compliant or converted to the KABCO system (A) for injury classification through use of the NHTSA conversion tables as required by § 490.207(c).

(6) Unless approved by FHWA and subject to § 490.209(a)(1), a State DOT shall not change one or more of its targets for a given year once it is submitted in the HSIP annual report.

(b) In addition to targets described in paragraph (a) of this section, State DOTs may, as appropriate, for each target in paragraph (a) establish additional targets for portions of the State.
(1) A State DOT shall declare and describe in the State HSIP annual report required by § 490.213 the boundaries used to establish each additional target.

(2) State DOTs may select any number and combination of urbanized area boundaries and may also select a single non-urbanized area boundary for the establishment of additional targets.

(3) The boundaries used by the State DOT for additional targets shall be contained within the geographic boundary of the State.

(4) State DOTs shall evaluate separately the progress of each additional target and report that progress in the State HSIP annual report (see 23 CFR part 924).

(c) The Metropolitan Planning Organizations (MPO) shall establish performance targets for each of the measures identified in § 490.207(a), where applicable, in a manner that is consistent with the following:

(1) The MPOs shall establish targets not later than 180 days after the respective State DOT establishes and reports targets in the State HSIP annual report.

(2) The MPO target shall represent performance outcomes anticipated for the same calendar year as the State target.

(3) After the MPOs within each State establish the targets, the State DOT must be able to provide those targets to FHWA, upon request.

(4) For each performance measure, the MPOs shall establish a target by either:

(i) Agreeing to plan and program projects so that they contribute toward the accomplishment of the State DOT safety target for that performance measure; or
(ii) Committing to a quantifiable target for that performance measure for their metropolitan planning area.

(5) The MPOs that establish quantifiable fatality rate or serious injury rate targets shall report the VMT estimate used for such targets and the methodology used to develop the estimate. The methodology should be consistent with other Federal reporting requirements, if applicable.

(6) The MPO targets established under paragraph (c)(4) of this section specific to the metropolitan planning area shall represent the anticipated performance outcome for all public roadways within the metropolitan planning boundary regardless of ownership or functional class.

(d)(1) The State DOT and relevant MPOs shall coordinate on the establishment of targets in accordance with 23 CFR part 450 to ensure consistency, to the maximum extent practicable.

(2) The MPOs with multi-State boundaries that agree to plan and program projects to contribute toward State targets in accordance with paragraph (c)(4)(i) of this section shall plan and program safety projects in support of the State DOT targets for each area within each State (e.g., MPOs that extend into two States shall agree to plan and program projects to contribute toward two separate sets of targets (one set for each State)).

§ 490.211 Determining whether a State department of transportation has met or made significant progress toward meeting performance targets.
(a) The determination for having met or made significant progress toward meeting the performance targets under 23 U.S.C. 148(i) will be determined based on:

(1) The most recent available Final FARS data for the fatality number. The FARS ARF may be used if Final FARS is not available;

(2) The most recent available Final FARS and HPMS data for the fatality rate. The FARS ARF may be used if Final FARS is not available;

(3) The most recent available Final FARS data for the non-motorized fatality number. The FARS ARF may be used if Final FARS is not available;

(4) State reported data for the serious injuries number;

(5) State reported data and HPMS data for the serious injuries rate; and

(6) State reported data for the non-motorized serious injuries number.

(b) The State-reported serious injury data and non-motorized serious injury data will be taken from the HSIP report in accordance with 23 CFR part 924.

(c) The FHWA will evaluate whether a State DOT has met or made significant progress toward meeting performance targets.

(1) The FHWA will not evaluate any additional targets a State DOT may establish under § 490.209(b).

(2) A State DOT is determined to have met or made significant progress toward meeting its targets when at least four of the performance targets established under § 490.207(a) are:

(i) Met; or
(ii) The outcome for a performance measure is less than the 5-year rolling average data for the performance measure for the year prior to the establishment of the State’s target. For example, of the State DOT’s five performance targets, the State DOT is determined to have met or made significant progress toward meeting its targets if it met two targets and the outcome is less than the measure for the year prior to the establishment of the target for two other targets.

(d) If a State DOT has not met or made significant progress toward meeting performance targets in accordance with paragraph (c) of this section, the State DOT must comply with 23 U.S.C. 148(i) for the subsequent fiscal year.

(e) The FHWA will first evaluate whether a State DOT has met or made significant progress toward meeting performance targets after the calendar year following the year for which the first targets are established, and then annually thereafter.

§ 490.213 Reporting of targets for the Highway Safety Improvement Program.

(a) The targets established by the State DOT shall be reported to FHWA in the State’s HSIP annual report in accordance with 23 CFR part 924.

(b) The MPOs shall annually report their established safety targets to their respective State DOT, in a manner that is documented and mutually agreed upon by both parties.

(c) The MPOs shall report baseline safety performance, VMT estimate and methodology if a quantifiable rate target was established, and progress toward the achievement of their targets in the system performance report in the metropolitan
transportation plan in accordance with 23 CFR part 450. Safety performance and progress shall be reported based on the following data sources:

(1) The most recent available Final FARS data for the fatality number. The FARS ARF may be used if Final FARS is not available;

(2) The most recent available Final FARS and MPO VMT estimate for the fatality rate. The FARS ARF may be used if Final FARS is not available;

(3) The most recent available Final FARS data for the non-motorized fatality number. The FARS ARF may be used if Final FARS is not available;

(4) State reported data for the serious injuries number;

(5) State reported data and MPO VMT estimate for the serious injuries rate; and

(6) State reported data for the non-motorized serious injuries number.

[FR Doc. 2016-05202 Filed: 3/14/2016 8:45 am; Publication Date: 3/15/2016]