

SPS-06: Safety Planning

For States

1-15 points

Goal: Agency integrates quantitative measures of safety into regional planning policies, ordinances, activities, projects, and programs, and across all modes and jurisdictions.

Sustainability Linkage

Reducing fatalities and serious injuries contributes to the social and economic principles by reducing the impacts associated with personal and public property damage, injury, and loss of life.



Background and Scoring Requirements

Background

The purpose of this criterion is to recognize the efforts of agencies to reduce fatalities and serious injuries by integrating quantitative measures of safety into the transportation planning process, thereby assuring that consideration of meaningful measures of safety influences program development and implementation.

For the purposes of this criterion, the key terms are defined as follows:

- **“Reflects intention to cooperate and collaborate across all levels of government”** indicates that all levels of government, from executive level management to the management of day-to-day field operations and maintenance are aligned and will work together to implement strategies to achieve a common goal. These disciplines may be aligned to different organizations (e.g. MPOs and DOTs).
- **“Use multi-disciplinary and integrated approaches”** means combining and leveraging approaches from relevant disciplines to develop collaborative solutions to address a common issue. In this case, approaches for reducing fatalities and serious injuries in crashes would likely combine elements from geometric, structural, ITS, and other disciplines. These disciplines may be aligned to different organizations (e.g. MPOs and DOTs).
- **“System-wide”** means statewide for DOTs.

Scoring Requirements

Requirement SPS-06.1

1-2 points. Engage and Collaborate with Partner Agencies in the Update and Implementation of the State Strategic Highway Safety Plan (SHSP)

To earn credit for this scoring requirement, DOT’s must engage and collaborate with partner agencies throughout the state during the update and implementation of the statewide SHSP.

One of the following scores applies:

- **0 points.** Does not engage or collaborate with partner agencies in the update and implementation of the SHSP.
- **1 point.** Actively engages and collaborates with partner agencies in the update of the SHSP but is not implementing the SHSP as part of agency-specific planning and programming activities.
- **2 points.** Actively engages and collaborates in the update and implementation of the SHSP and implements the SHSP in agency-specific planning and programming activities.

Requirement SPS-06.2

1-3 points. Integrate and Develop Strategies to Support a Vision of Zero Traffic Fatalities (e.g. Toward Zero Death Vision, Target Zero, or Vision Zero, etc.)

Scoring is based on the following, cumulative requirements:

- **Requirement SPS-06.2a**

1 point. Integrate the Vision of Zero Traffic Fatalities into the Agency's Vision for Planning

Agency or office incorporates the vision of zero traffic fatalities. Implements this vision as part of planning activities (i.e., use multi-disciplinary and integrated approaches to reduce fatalities and serious injuries in crashes). The agency vision for planning reflects intention to cooperate and collaborate across all levels of government.

- **Requirement SPS-06.2b**

2 points. Develop Strategies to Support Toward Zero Death Vision

Develop strategies/plan to support the vision of zero traffic fatalities (plan similar to one in SPS 06.3 but specifically calls out strategies to support the vision of zero traffic fatalities).

Requirement SPS-06.3

1 point. Develop a Plan that Incorporates Safety into Short- and Long-Range Planning

Develop a plan that incorporates safety into short- and long-range planning that:

- Presents a system-wide approach to reduce the risk of fatalities and serious injuries based on data-driven, systematic, and scientific methods and approaches. These methods and approaches account for regression-to-the-mean and incorporate performance thresholds (quantify base performance).
- Includes safety-specific strategies and lead agencies.
- Supports integrated and multidisciplinary approaches to reduce the number of fatalities and serious injuries on all public roads in the region.
- Demonstrates a commitment from the agency to include quantitative safety into programming of projects and activities.

The plan could be a single statewide plan or a combination of SOPs at headquarters and district/regional levels, or a plan for a county, metropolitan area, or regional council area.

One of the following scores applies:

- **0 points.** No plan exists. The other safety plans for the state (LRTP, HSP, HSIP, CVSP) do not align with the SHSP.
- **1 point.** Develop a system-wide approach to identify expenditure on programs, projects, and activities targeting a reduction in fatalities and serious injuries in the region (could be a single statewide or regional safety plan as part of a collaborative effort across all, or a combination of SOPs at headquarters and district/regional levels of government [federal, state, and local]).

Requirement SPS-06.4

1 point. Integrate Quantitative Safety Performance Measures into Performance-Based Planning Processes

One of the following scores applies:

- **0 points.** Safety is not integrated into a performance-based planning process or the agency only uses crash rates as a measure to identify system needs.

- **1 point.** Integrate quantitative safety performance measures into a performance-based planning process. Use quantitative safety performance measure(s) to quantify safety performance in terms of the number of crashes or severity. For example, the number of fatalities and serious injury crashes, the number of fatalities and serious injuries, or the number of fatalities and injury crashes involving vulnerable users (e.g. pedestrians, bicyclists, motorcyclists, older users, children). Network screening, as presented in Chapter 4 of the AASHTO *Highway Safety Manual*¹, presents advanced measures that account for regression to the mean and offer higher statistical reliability than, for example, crash rate methods.

Requirement SPS-06.5

1 or 2 points. Integrate Quantitative Safety Considerations in the Selection and Evaluation of Strategies in the Planning Process

Scoring is based on the following, cumulative requirements:

- **Requirement SPS-06.5a**
1 point. Integrate Quantitative Safety Performance Measures in Project Prioritization
 Incorporate and integrate quantitative safety performance measures into the selection and evaluation of strategies for different user groups (for example, pedestrians, bicyclists, motorcyclists, vehicle occupants).
- **Requirement SPS-06.5b**
1 point. Select Systemic Treatment Strategies with Proven Safety Effectiveness
 Select strategies that include systemic treatments with proven effectiveness in reducing fatalities and serious injuries (may be operational or safety-specific in nature).

Requirement SPS-06.6

3 points. Integrate Statistically Sound Approaches to Determine Projected Safety Performance as Part of the Long-Range Transportation Planning Process

Adopt and integrate advanced, statistically sound quantitative methods to set performance baselines and estimate the anticipated future safety performance during the long-range transportation planning process. The agency is using tools that rely on macro-level predictive models to provide a quantitative and statistically reliable forecast of crashes for a given future travel demand (using output from travel demand models), and socio-demographics if no particular improvements in safety culture, infrastructure, EMS, and other areas occur other than what exists at the base year of the analysis.

Requirement SPS-06.7

1-3 points. Collect, Maintain and Use Data (Safety and Non-Crash Information) for all public roads for use in Activities Related to Planning for Safety and to Incorporate Safety into Long-Range Transportation Planning

Scoring is based on the following, cumulative requirements:

- **Requirement SPS-06.7a**
1 point. Actively Participate in State Traffic Records Coordinating Committee
 Actively participates and supports the state Traffic Records Coordinating Committee (TRCC) and jointly funds initiatives related to improvement of data management and linkage initiatives.
- **Requirement SPS-06.7b**
1 point. Develop, Maintain, and Use GIS-based Data
 Develops, maintains, and uses GIS-based data files for the entire public roadway system, crash and noncrash information in planning for safety and incorporating safety into long-range transportation planning.

- **Requirement SPS-06.7c**

1 point. Routinely Join Roadway, Operations, Asset Management, Medical and Other Datasets

Routinely joins roadway, operations, asset management, medical, and other datasets spatially with crash data in the analysis for identification of potential safety improvements and prioritization of planning programs, projects, and activities.

Resources

The following resources are referenced in this criterion and consolidated here:

1. AASHTO, *Highway Safety Manual*, First Edition with 2014 Supplement, https://bookstore.transportation.org/collection_detail.aspx?ID=135

Scoring Sources

The project is considered to have met this criterion if the requirements above can be reasonably substantiated through the existence of one or more of the following documentation sources (or equal where not available):

1. Documentation of agency vision statements and vision statements for planning and planning-related programs that reflect adoption and inclusion of a Toward Zero Death vision into the planning process and related activities.
2. Requirements set for safety project funding (e.g., HSIP).
3. Project reports documenting the evaluation of future anticipated safety performance for short-, medium-, and long-range transportation plans as part of the planning process.
4. Documentation on the processes the agency uses to select, evaluate, and prioritize projects for inclusion into short-, medium-, and long-range transportation planning activities.
5. Documentation to identify alignment across different state and regional plans (SHSP, STIP, CVSP, and HSIP), regardless of whether these plans have a safety focus or not.
6. Relevant agency policies or manuals.
7. Documentation of evaluation of policies, projects, and activities to assess the impact on fatal and serious injury crashes and fatal and serious injury crashes involving vulnerable users.
8. NHTSA State Traffic Records Assessment Report and FHWA State Data Capability Assessment Report for assessments performed within the last 3 years.