

# SPR-06: Safety Planning

For Regions

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 planning, design (including geometric, structural, ITS, and other disciplines), construction and operations & maintenance. These disciplines may be aligned to different organizations (e.g. MPOs and DOTs).
- **“System-wide”** for regional organizations, such as MPOs, means throughout the entire regional geography.

### Scoring Requirements

#### Requirement SPR-06.1

#### **1-2 points. Collaborate and Participate in the Update and Implementation of the State Strategic Highway Safety Plan**

To earn credit for this scoring requirement, MPO’s and other regional organizations must collaborate with DOT’s during their development and implementation of the statewide SHSP.

One of the following scores applies:

- **0 points.** Is not involved in the development of the State Strategic Highway Safety Plan (SHSP).
- **1 point.** Actively collaborates in the development and update of the SHSP but is not implementing the SHSP as part of agency-specific planning and programming activities.

- **2 points.** Actively collaborates in the development and update of the SHSP and implements the SHSP in agency-specific planning and programming activities.

#### **Requirement SPR-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 SPR-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 TZD 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 SPR-06-2b**

**2 points. Develop Strategies to Support Toward Zero Death Vision**

Develop strategies/plans 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 SPR-06.3**

**1-2 points. Coordinate in the Development of Plan and Incorporate Safety into Short- and Long-Range Planning**

Coordinate with DOT(s) in their development of system-wide plans and 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 the entire public transportation system 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 systemwide plan or a combination of SOPs or a plan for a county, metropolitan area, or regional council area.

One of the following scores applies:

- **0 points.** No plan exists and transportation plans do not align with the State SHSP.
- **1 point.** Develop a system-wide approach to identify expenditures on programs, projects, and activities targeting a reduction in fatalities and serious injuries in the region.
- **2 points.** Develop a regional specific approach/plan to identify expenditures on programs, projects, and activities targeting a reduction in fatalities and serious injuries in the region.

#### **Requirement SPR-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 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 serious injury crashes involving vulnerable users (e.g. pedestrians, bicyclists, motorcyclists, older users, and children). Network screening, as presented in Chapter 4 of the AASHTO *Highway Safety Manual*<sup>1</sup>, presents advanced measures that account for regression to the mean and offer higher statistical reliability than, for example, crash rate methods.

#### **Requirement SPR-06.5**

#### **1-2 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 SPR-06.5a**  
**1 point. Integrate Quantitative Safety Performance Measures for 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 SPR-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 SPR-06.6**

#### **3 points. Integrate Statistically Sound Approaches to Determine Projected Safety Performance as Part of the LRTP Process**

Coordinate with DOT and other partner agencies to obtain safety data and analysis. Adopt and integrate only data and analyses based on advanced, statistically sound quantitative methods to set performance baselines and estimate the anticipated future safety performance during the long-range transportation planning process. To meet this scoring requirement, the DOT and MPO coordinate data and use 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 SPR-06.7**

#### **1 or 2 points. Set Goals and Monitor Progress**

Scoring is based on the following, cumulative requirements. The first requirement must be accomplished to earn the second.

- **Requirement SPR-06.7a**  
**1 point. Establish Performance Metrics for Safety Planning**  
 The system plan or program includes safety-related performance measures that can be used to monitor the effects of plan implementation on safety.
- **Requirement SPR-06.7b**  
**1 additional point. Monitor Progress and Demonstrate Sustainable Outcomes**  
 Monitor progress towards goals for at least one year after goal establishment using the performance measures established in SPR-06.7a and can show measurable advancement towards stated goals.

## 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](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 (TIP, 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.
9. Evidence of correspondence and coordination with partner agencies supplying safety data and analyses.