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**MEMORANDUM**

**To:** STP Project Selection Committee  
**From:** CMAP Staff  
**Date:** May 7, 2026  
**Subject:** STP Shared Fund Methodology – Safety Need/Improvement  
**Action Requested:** Discussion

**CMAP Safe Systems Program**

CMAP’s newly established Safe Systems Program puts into action processes that direct the region toward a future where no one gets killed or seriously injured on our roadways. Among the program’s first directives is implementing the county-level Safety Action Plans (SAPs) adopted in 2025 and aligning CMAP’s programming and planning work with Safe System Principles.

The Safe System Approach, adopted by FHWA in 2022, and many partners since, aims to eliminate fatal and serious injuries for all road users. Historically, traffic safety approaches have focused on the most cost-effective way of reducing existing crashes; a Safe System Approach is a holistic view of the elements that can create layers of safety, and roadway designs that plan for inevitable human error and reduce the amount of kinetic energy in the network.

To better align CMAP’s project programming with a Safe System Approach, staff recommend near-term changes to the Surface Transportation Program-Shared Fund (STP-SF) evaluation methodology that employ the completed SAP work, take a more proactive approach to addressing known crash risk factors, and assess interventions for their effect on the overall system.



Source: FHWA.

## Current Methodology

Under the existing evaluation methodology for the STP-SF funding program, each candidate project is assessed for Transportation Impact (total 50 points)— comprised of scores for *existing condition/need* (up to 20 points), *improvement* (up to 20 points), and *jobs and housing benefit* (up to 10 pts). The Transportation Impact score is combined with other metrics, like Project Readiness and Subregional Priority to determine a project’s final evaluation score.

### Existing Condition/Need: Safety

Safety is considered in the following four existing condition/need project categories: Truck Route Improvement, Roadway Expansion, Roadway Reconstruction, and Corridor/Small Area Safety. Projects can earn up to 20 *existing condition/need* points (out of 100 total points) as follows, with weights in parentheses:

- Truck Route Improvements: Condition (10%), **Safety (10%)**, Reliability (20%), Mobility (20%), Truck Volume (20%), Geometric Deficiencies (20%)
- Roadway Expansion: Condition (15%), Mobility (30%), Reliability (30%), and **Safety (25%)**
- Roadway Reconstruction: Condition (50%), Mobility (10%), Reliability (20%), and **Safety (20%)**
- Corridor/Small Area Safety: **Safety need score (0-12 pts) + history of high-risk crash types (0-8 pts)**

A project’s “safety need” score relies on the location’s Illinois Department of Transportation (IDOT) Safer Roads Index (SRI) score, where a project in a “critical” tier location earns more points than a project in a “medium” tier location. The SRI methodology divides roads throughout the state into peer groups based on roadway features and then creates five tiers based on an analysis of the overrepresentation of crashes on roadways in each peer group. This designation is scaled from 0-100 points across candidates in the respective project category and then combined with remaining metrics to arrive at the total *existing condition/need* score.

### Improvement Score: Corridor/Small Area Safety Projects

Safety is also considered when determining *improvement* scores for projects in the Corridor/Small Area Safety category. Projects classified in other categories are not scored in this same way for their improvement impact. The Corridor/Small Area Safety project’s highest crash reduction factor (CRF), multiplied by the number of serious and fatal crashes at the project location– relative to the overall project cost – results in the *improvement* score.

## Proposed Methodology – Measuring Safety Need and Safety Improvement

The current evaluation methodology for *existing condition/need* and *improvement* follows a conventional safety framework that relies largely on crash history to determine need and misses the opportunity to reduce kinetic energy and minimize risk for all road users. While this framework is familiar to many, it is misaligned with a Safe System Approach.

The updated approach operationalizes the findings of the SAPs, a recent coordinated effort that integrates both conventional/reactive and Safe System/proactive strategies. It provides a more complete understanding of project context and supports county-identified safety priorities. Aligned with Safe System Principles, the proposed evaluation method departs from reliance on crash history and unreliable or irrelevant CRFs, which require a project to match a specific context to validate potential crash reductions. Moreover, many CRFs include minor injury and property damage crashes, instead of focusing solely on serious injury and fatal crashes. Instead, the Design Hierarchy method proactively evaluates countermeasures based on their expected effect on the transportation system and the potential to reduce fatal and serious injury crashes.

### Measuring Safety Need: Truck Route Improvements, Roadway Expansion, Roadway Reconstruction, and Corridor/Small Area Safety Projects

For all project types listed in the subtitle, CMAP staff propose refining how the safety element of the existing condition/need score is measured. Instead of relying on IDOT SRI scores, safety need will be evaluated using county-level High Injury Networks (HINs) and the systemic risk typologies identified in the SAPs. 25% of projects' safety need will be based on their location within the respective county HIN and 75% will be based on systemic risk needs outlined in the relevant county SAP.

This change will only apply to the safety element of the *existing condition/need* metric. For example, for roadway reconstruction projects, this safety score will still be weighted at 20% and combined with other *need* metrics.

### Measuring Safety Improvement: Corridor/Small Area Safety Projects

For projects in the Corridor/Small Area Safety category, staff propose using [FHWA's Safe System Design Hierarchy](#) to determine *improvement* score. This framework assigns tier values to countermeasures based on their impact on the roadway system and their overall potential to reduce serious injuries and fatalities. Tier 1 countermeasures remove severe conflicts; Tier 2 measures reduce vehicle speeds/kinetic energy; Tier 3 treatments help manage conflicts in time; Tier 4 elements increase user awareness and attentiveness.

Consistent with the current application method for safety *improvement*, project sponsors will indicate which countermeasures the proposed project will implement. The scores assigned to those countermeasures are totaled, compared with overall project cost, and scaled across all projects in the category to produce an *improvement* score of up to 20 points.

### Conclusion

The proposed *safety existing condition/need* and *improvement* methodology will better align CMAP programming with a Safe System approach and operationalize the completed county-level SAP efforts in the near-term. While more substantial changes are expected in the long term, staff intends for these minor adjustments to provide a smooth transition toward a more comprehensive Safe System-based evaluation framework in the future.