Chicago Metropolitan Agency for Planning

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MEMORANDUM

To: STP Project Selection Committee

From: Doug Ferguson, Senior Analyst

Date: March 19, 2026

Subject: Safety – Corridor & Small Area Safety Improvements

Action Requested: Discussion

Purpose

Under the current STP Shared Fund methodology, corridor/small area safety Improvements project applications are scored for safety need and improvement. With safety action plans completed throughout the region last year, new data sets are available, and staff are exploring ways to incorporate them into the methodology. Staff will be presenting those data sets for the purpose of setting the stage for potential change recommendations which will be presented at a later meeting.

For reference, here is the current methodology as found on pages 29 and 30 of the Application Booklet from the last call for projects cycle:

> *Existing Condition/Need*
>
> The need score for safety projects consists of two parts: the safety road index (SRI) and the percentage of crashes that are considered high risk. High risk crashes are those that are speed related and/or involve vulnerable road users. The total need score will be the sum of the SRI Score and the High Risk Crash Types Score.
>
> SRI Score (0 – 12 points)
>
> The SRI score is calculated using IDOT's safety road index (SRI) for roadway segments and intersections. The SRI is based on the location's Potential for Safety Improvement[1] (PSI) score. IDOT developed SRI scores for local and state routes and categorized them by peer group into critical, high, medium, low, or minimal. Within each peer group, locations categorized as critical have the highest PSIs, and locations categorized as minimal are less likely to have safety benefits from treatments. The highest SRI category along the project location will be used to determine 60% of the project's need

[1] https://safety.fhwa.dot.gov/hsm/casestudies/il_cstd.cfm

score using the scale below. This will include both segment and intersection locations. Projects with an average SRI (all segments and intersections) of "Minimal" or "Low" will not be eligible for funding.

SRI Score	Points
Critical	12
High	8
Medium	4
Low	ineligible
Minimal	ineligible

High Risk Crash Types Score (0 – 8 points)

The CMAP Safety Resource Group has identified both speed-related crashes and crashes involving vulnerable road users (bicyclists, pedestrians, motorcyclists) as emphasis areas for improving safety. Locations with a high percentage of these types of crashes are therefore a higher priority for safety improvement projects, particularly when these crashes result in fatalities or serious injuries.

Up to eight additional points will be awarded based on the percentage crashes that occurred within the project limits that are one of the high risk crash types and the percentage of those high risk crashes that resulted in a fatality or serious injury:

Percentage of speed related crashes within the project limits x 2 points
Percentage of crashes involving vulnerable users within the project limits x 2 points
Percentage of speed related crashes resulting in a fatality or serious injury x 2 points
Percentage of vulnerable user crashes resulting in a fatality or serious injury x 2 points

Improvement

This score is based on the improvements made by the project and the planning level expected safety benefit (reduction of crashes) after implementing the improvement. CMAP staff has developed a list of common improvement types (countermeasures) and the accompanying planning level CRFs using information from IDOT, the Crash Modification Clearinghouse, and the Highway Safety Manual. These values are included in the Safety worksheet of the application workbook. CMAP staff will review project details to determine the relevant countermeasure and the assigned planning level CRF for that countermeasure. If multiple countermeasures are part of the project, CMAP staff will use the maximum planning level CRF for the project. The maximum CRF will be multiplied by the number of fatal and serious injury (K and A) crashes occurring within the project limits within the most recent five years for which data was available from IDOT or provided by the applicant, to determine the potential crash reduction due to the project. Cost effectiveness will be determined by dividing the project's total cost by the potential crash reduction to determine the cost per reduced crash.

The cost effectiveness of all projects within the corridor or small area safety category will be indexed to a scale of 0-20.