Agenda Item 5.01

Chicago Metropolitan Agency for Planning

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MEMORANDUM

To: STP Project Selection Committee

From: Kate Evasic, Program Lead
Aspen Walters, Analyst

Date: July 9, 2026

Subject: STP Shared Fund Methodology – Resilience planning factor

Action Requested: Discussion

Staff are making modest changes to incorporate *Transportation Resilience Improvement Plan* (TRIP) strategies into the resilience planning factor for the FY2028-32 project cycle. The changes will support expanding the list of eligible resilience elements and aligning project scoring with the TRIP priority project list.

At the May meeting, staff provided an overview of TRIP and discussed how it can inform the resilience planning factor for the FY2028-32 project cycle. Since then, staff have developed a proposed scoring methodology that seeks to align with the TRIP priority project list while also considering STP Project Selection Committee member feedback. At the July meeting, staff will present the proposed resilience planning factor scoring methodology for discussion.

Current resilience scoring

The application materials from the last call for projects states:

Projects in the eligible categories below will receive resilience policy points if the local jurisdiction (municipality, township, and/or county) in which they are located has an adopted policy with the goal of increasing transportation resilience (Table 1). A green streets policy is one example of a resilience policy.

These projects will also receive resilience elements points if the project includes elements that improve the ability of an existing surface transportation asset to withstand one or more elements of a weather event or natural disaster, or to increase the resilience of surface transportation infrastructure from the impacts of changing conditions, such as flooding, extreme heat, and other weather events or natural disasters (Table 1). Projects that are located where there are higher flood and heat exposure scores from the Transportation Resilience Improvement Plan climate vulnerability assessment will receive more points for inclusion of

resilience elements that address the vulnerability than those located where the TRIP vulnerability scores are lowest or that include resilience elements that are not directly related to the vulnerabilities. evidence

Bridge rehab/reconstruction, bus speed improvements, and corridor/small area safety improvement projects are ineligible to receive resilience points.

Table 1. Current scoring for resilience planning factor

Project type(s)	Maximum resilience policy points	Maximum resilience elements points
Bicycle/pedestrian barrier elimination; Highway-rail grade crossing improvements; Road expansion; Road reconstruction; Transit station, yard, or terminal improvements; Truck route improvements	**1**	**4**

Eligible elements vary based on the function of the resilience improvement. Some elements are eligible outright, while others must exceed the established design standards to receive points. For example, a project that provides stormwater storage using gray infrastructure would need to provide additional capacity than what is currently required in order to be eligible.

Proposed resilience scoring

Staff recommend modest changes to incorporate TRIP strategies into the resilience planning factor for the FY2028-32 project cycle. The changes will support expanding the list of eligible resilience elements and aligning project scoring with the TRIP priority project list.

List of eligible resilience elements

Staff recommend using TRIP's more expansive suite of structural, nature-based, and hybrid strategies as an approved list of resilience elements (Table 2), while still allowing other elements to be considered on a case-by-case basis. This change acknowledges the resilience benefits of structural solutions or gray infrastructure in addition to nature-based solutions or green infrastructure.

Table 2. List of project resilience strategies[1]

Resilience elements	Hazard
Structural solutions	
Elevate bridges	Flooding
Elevate or relocate roadways	Flooding
Install flood walls to prevent flooding of roadway	Flooding
Install geotextiles on embankments	Flooding
Improve or deepen drainage ditches	Flooding

[1] For more information on TRIP's project resilience strategies, see page 28: https://cmap.illinois.gov/wp-content/uploads/dlm_uploads/Transportation-Resilience-Improvement-Plan-2026.pdf.

Resilience elements	Hazard
Structural solutions (cont.)	
Upgrade or install culverts and other stormwater management infrastructure	Flooding
Implement flood protection measures for transit tunnels	Flooding
Upgrade rail infrastructure, particularly interlockings	Extreme heat
Install shade structures and shelters along sidewalks and at outdoor transit stops	Extreme heat
Use cool pavement technologies	Extreme heat
Nature-based solutions	
Manage streams to reduce erosion and overtopping	Flooding
Implement natural revetments	Flooding
Reconnect river floodplains to increase flood storage	Flooding
Use flood buyouts in flood-prone areas	Flooding
Create a natural high-flow bypass	Flooding
Restore, enhance, and create wetlands	Flooding
Install stormwater detention facilities	Flooding
Install swales and infiltration practices (e.g., bump-outs)	Flooding
Use permeable pavements and grass medians	Flooding
Recycle greywater on site	Flooding
Provide shade trees along trails, sidewalks, and at transit stops	Extreme heat

Source: CMAP, Transportation Resilience Improvement Plan, 2026.

Proposed scoring

Projects in the eligible categories listed in Table 1 will be reviewed for eligible resilience elements in Table 2. If the project does not feature at least one element, it will receive a score of zero. Projects that feature one or more resilience element will then be scored for system need and project impact (Figure 1). The weights for both system need and project impact are 50 percent.

Figure 1. Summary of proposed scoring approach

System need will still be determined based on the exposure score of the TRIP vulnerability assessment, which was implemented in the previous cycle. Exposure represents the degree to which an asset may be affected by a given hazard. Project sponsors can refer to the TRIP Risk-

based Vulnerability Assessment Data Viewer[2] to look up risk scores for flooding (all assets) and extreme heat (CTA/Metra rail and train stations, CTA/Pace bus stations). Project sponsors can also provide their own risk information to be considered where data does not exist or if the TRIP flood risk scores deviate from known flood events.

Project impact will be assessed based on the project's ability to mitigate the need and/or build additional resilience and co-benefits. This change will ensure consistency between efforts and lessen the effort required by sponsors when submitting projects that are on the TRIP priority project list.[3]

Staff propose scoring project impact based on three of the eight criteria used in TRIP. These criteria include risk mitigation, green/gray infrastructure, and broader environmental benefits. Other impact criteria used to score TRIP priority projects include modernization, extent of benefits, service continuity, recovery time, and innovation. While these criteria can help understand the broader impact of resilience projects, they require an additional level of detail that would be required of project sponsors. In contrast, the four proposed criteria align well with the previous scoring methodology and would require a similar level of information within the project submission.

Each criterion will be rated on a scale of 1 (lowest impact) to 5 (highest impact). The final impact score will be calculated by assigning equal weights to each criterion and averaging the resulting values. When a project that is on the TRIP priority project list is submitted for the STP Shared Fund program, CMAP will use the previously calculated scores for the selected scoring criteria shown in Table 3.

Table 3. Impact scoring criteria

Criterion	Definition
Risk mitigation	To what extent does the project protect transportation assets from extreme weather events and climate hazards? Does the project go beyond standard design requirements to build resilience and future climate adaptation?
Green/gray infrastructure	How well does the project integrate green or gray infrastructure solutions for long-term resilience?
Broader environmental benefits	Does the project provide additional co-benefits beyond resilience, such as improvements in air quality, water quality, or ecosystem health?

[2] TRIP Risk-based Vulnerability Assessment Data Viewer: https://cmapgis.maps.arcgis.com/apps/mapviewer/index.html?webmap=08a4d59480b14660ad9f375306677ee9

[3] For the TRIP priority project list, see Table 9 and Table 10 beginning on page 63 and page 71, respectively: https://cmap.illinois.gov/wp-content/uploads/dlm_uploads/Transportation-Resilience-Improvement-Plan-2026.pdf.