Chicago Metropolitan Agency for Planning

433 West Van Buren Street, Suite 450
Chicago, IL 60607

cmap.illinois.gov | 312-454-0400

MEMORANDUM

To: STP Project Selection Committee

From: CMAP Staff

Date: August 25, 2022

Subject: STP Shared Fund Methodology – Minimum scores for funding consideration

Purpose: Staff requests committee discussion regarding establishing minimum scoring for funding consideration

Action Requested: Discussion

During the public comment period for the development of the FFY 2022 – 2026 Shared Fund program, the Metropolitan Planning Council (MPC) provided the following comment:

> *Looking at the range of scores, it was notable that 12 projects received less than 40 points, and 57% of all projects received less than 50. This begs the question as to whether there should be a scoring threshold for projects to be considered for the STP shared fund. This is unlikely to ever be a major issue with the active program, but all qualifying projects not in the active program are automatically included on the contingency program. We recommend limiting the contingency program to projects above a certain point threshold. Projects which score poorly for transportation impact factors should also face additional scrutiny. While the primary motivating factors for establishing the STP shared fund was to ensure the region fully obligates all federal funds, we believe the shared fund can be most impactful by championing projects that are most closely in alignment with the region's policy goals and, in doing so, encouraging sponsors to develop higher-quality projects that will more quickly help us achieve regional goals. Projects with very low scores, therefore, should not be considered.*

This memo proposes adjustments to the methodology to mitigate the concerns raised by the comment.

The shared fund scoring methodology was purposely constructed to evaluate the need for and impact of projects relative to one another, and to also elevate projects that support ON TO 2050 planning priorities and those that are closest to being ready for implementation. While there is a maximum number of points (100) that can be awarded to projects, reaching this maximum is practically impossible due to scaling of raw scores either among all applications received (jobs/housing benefit) or all applications received within each project type (current

condition/need and improvement). The table below shows the evaluation criteria, points, and type of points assigned in the FFY 2022 – 2026 program cycle.

Evaluation criteria	Points	Absolute points or relative points
Project Readiness	**15**	**Absolute**
Engineering/Land Acquisition	10	Absolute
Financial Commitments	5	Absolute
Transportation Impact	**50**	**Mixed**
Current condition/need	20	Both (varies by project type)
Improvement	20	Relative (within project type)
Jobs/Housing benefit	10	Relative (to all projects)
Planning Factors	**30**	**Absolute**
Inclusive Growth	15	Absolute
Complete Streets	10 or 5	Absolute
Green Infrastructure	5	Absolute
Freight Movement	5	Absolute
Transit Supportive Density	10	Absolute
Subregional Priority	**5**	**Absolute**
Total possible points	**100**	

In the FFY 2022 – 2026 program development cycle, project total scores ranged from 28.6 points to 70.7 points. The individual component scores of the highest and lowest scoring projects were:

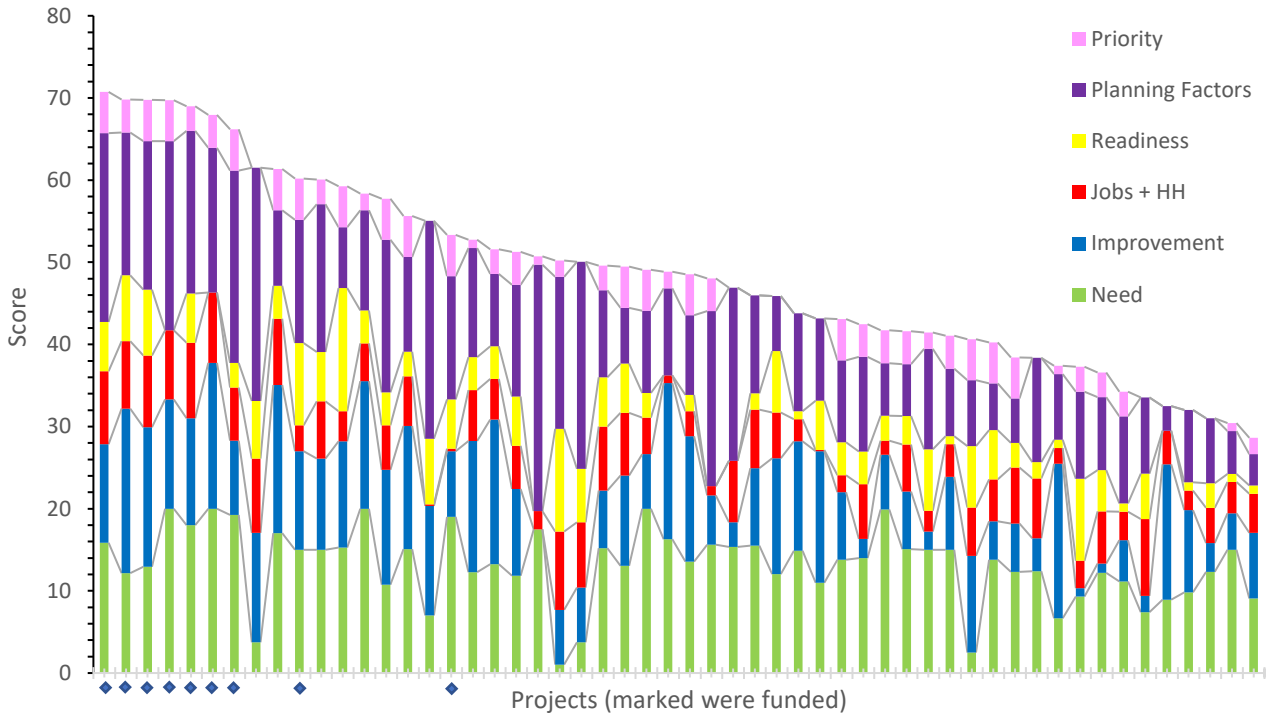
Readiness (max 15)	Need (max: 20)	Improvement (max: 20)	Jobs + HH (max: 10)	Planning Factors (max 30)	Subregional Priority (max 5)	Total
6	15.9	12.0	8.9	23	5	**70.7**
1	9.1	8.0	4.8	3.8	2	**28.6**

In the FFY 2020 – 2024 program development cycle, project total scores ranged from 25.2 points to 83.2 points. The individual component scores of the highest and lowest scoring projects were:

Readiness (max 25)	Need (max: 20)	Improvement (max: 20)	Jobs + HH (max: 10)	Planning Factors (max 25)	Subregional Bonus (max 25)	Total
16	18.6	5.7	5.4	13	25	**83.2**
1	2.5	11.2	3.5	7	0	**25.2**

Because of the scaling of projects relative to one another, it is difficult to predict what the range of scores will be from one cycle to another, therefore setting a minimum total score to qualify for funding would be inappropriate.

A plot of all scoring illustrates how the individual components influence total project scores. From the plot we can see that there are cases where the non-technical scores (readiness and planning factors) can elevate projects that have lower need and improvement scores.



The question when examining this data is whether projects with low relative need and/or improvement scores should continue to be considered for funding. The range of scores remains unpredictable, so setting a minimum points threshold would again be difficult, however within each project category it may be possible to set a minimum threshold to qualify for funding consideration. Potential thresholds for each project type are discussed below.

Bicycle/Pedestrian Barrier Elimination

This project type is meant to address physical barriers (rail, highway, or water) to bicycle and pedestrian mobility. Need scores are based on connectivity, market for the facility, and the characteristics of the route or barrier. Staff proposes that only projects with no physical barrier be eliminated from funding consideration.

Bridge Reconstruction or Rehabilitation

The need score in this category is the National Bridge Inventory Sufficiency Rating, which is a composite that includes bridge deck, superstructure, and substructure conditions and other factors. The sufficiency rating ranges from 0 (poor) – 100 (very

good). Historically, bridges with sufficiency ratings greater than 80 are not eligible for federal funding, therefore staff proposes that bridges with sufficiency ratings of 80 or higher be eliminated from funding consideration.

Bus Speed Improvements

The need score in this category includes on-time performance and a comparison of bus travel time and auto travel time on the route to be improved. Staff proposes that projects with an on-time percentage of 90% or higher or bus travel times that are the same as auto travel times be eliminated from funding consideration.

Corridor/small area safety improvements

The need score in this category is currently related to the Safety Road Index (SRI) and proposed to also include scoring for high-risk crash types. SRI rankings are "Minimal", "Low", "Medium", "High", and "Critical". Staff proposes that any project with a "Minimal" or "Low" ranking be eliminated from funding consideration.

Rail-Highway grade crossing improvements

The existing condition score is based on the crossing's rank in the 2019 Grade Crossing Prioritization, which is derived from vehicle delay, crash risk, truck volumes, and bus routes impacted by the crossing. This is a relative scoring criterion, not an absolute score, therefore staff does not propose eliminating any projects from funding consideration based on the scoring.

Road Expansions

The need score is based on condition, mobility, reliability, and safety. Each of these components have raw values from 0-100. The raw values are weighted and then scaled relative to all applications in the category. Mobility and reliability have the highest weights. The mobility component is based on the travel time index (TTI) and congested hours of traffic per weekday. TTI values are described as "Little", "Light", "Moderate", "Heavy", "Very Heavy", or "Extreme" congestion. Staff proposes that any project with "Little" or "Light" congestion be eliminated from funding consideration. Congested hours values range from 0 to 22.21 hours. Based on this range, 1.50 hours or less is viewed as acceptable, therefore staff proposes eliminating projects in this range from funding consideration. Finally, the reliability component is based on the planning time index (PTI), which includes ratings of "Generally Reliable" and "Moderately", Severely", "Very Severe", and "Extremely" unreliable. Staff proposes eliminating projects that are rated "Generally Reliable" from funding consideration.

Road Reconstructions

The need score is based on condition, mobility, reliability, and safety. Each of these components have raw values from 0-100. The raw values are weighted and then scaled relative to all applications in the category. Condition has the highest weight, and utilizes CRS or IRI, depending on data availability. CRS ratings are either "Excellent", "Good", "Fair", or "Poor" and IRI ratings are either "Good", "Fair", or "Poor". Typically, reconstruction is only recommended for projects with a "Poor" rating, however given the time between applying for funding and start of construction, locations currently rated "Fair" are likely to deteriorate to "Poor" before construction begins. Therefore,

staff proposes eliminating projects from funding consideration in this category if the pavement condition is “Excellent” (CRS) or “Good” (CRS or IRI).

Transit Station, Yard, and Terminal improvements

Need scores in this category are primarily derived from the TERM condition rating of station, yard, or terminal components. TERM ratings are either “Poor”, “Marginal”, “Adequate”, “Good”, and “Excellent”. For each project the cost-weighted average TERM score of all components is calculated. Staff proposes eliminating projects from funding consideration in this category if this average falls into the “Good” or “Excellent” range.

Truck Route improvements

This category of projects is intended to improve conditions and remove barriers to safe and efficient truck movement. Need scores for these projects are based on six factors: Condition, Safety, Reliability, Mobility, Truck Volume, and Geometric Deficiencies. Staff proposes eliminating projects from funding consideration in this category only if truck volumes are less than 2% and there are no geometric deficiencies identified.

In all project categories, regardless of the need score, staff proposes that any project that has a raw improvement score of zero be eliminated from funding consideration.