STP (FFY2020-2024) Program Application Booklet
Draft for Discussion 8/8/2018

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Introduction

The Chicago Metropolitan Agency for Planning (CMAP), the metropolitan planning organization for the seven counties of northeastern Illinois, announces the availability of funding for transportation projects through the STP Shared Fund. This program is funded through the Federal Highway Administration (FHWA). The STP Shared Fund is designed to fund important regional projects that address regional performance measures and the goals of ON TO 2050.

Eligible Applicants and Projects

Projects eligible for the STP Shared Fund make large and lasting contributions to regional transportation priorities. The intention of the fund is also to encourage collaboration between municipalities and advance projects that local councils cannot readily fund on their own. Given these goals, projects must meet one of two eligibility requirements:

- Joint application from at least 3 local partners, including at least one municipality
- Total project cost of $5 million or more

For the STP Shared Fund, eligible sponsors or partners include any state agency or unit of government having the authority to levy taxes. Sponsors include but are not limited to municipalities, counties, townships, park districts, forest preserve districts, and transit agencies. Partners must demonstrate financial or in-kind project involvement. Private for-profit and non-profit organizations may partner with a public sponsor that meets the previously stated conditions, but may not submit applications or act as the lead agency for project implementation.

Eligible project types

While STP has very broad eligibility in comparison to other funding sources (CMAQ, TAP, HSIP), the STP shared fund is targeted toward the following priority project types:

- Road reconstructions
  Projects that address condition deficiencies on the road network and do not add roadway capacity
- Transit station rehabilitation/reconstructions
  Projects that enhance the existing transit system by improving or reconstructing transit stations
- Bridge rehabilitation/reconstructions
  Projects that address condition deficiencies on the region’s bridges
- Highway/rail grade crossing improvements
  Projects that reduce delay at highway/rail crossings, through grade separation or other improvements
- Road expansions
  Projects that add capacity to an existing road or involve construction of a new road
• **Bus speed improvements**  
  Projects that improve the speed and reliability of bus travel in the region

• **Corridor-level or small area safety improvements**  
  Projects that address safety issues

• **Truck route improvements**  
  Projects that improve truck movement through a corridor or area

These project types were chosen because of demonstrated demand in the form of unfunded or partially funded local projects, stakeholder input, ON TO 2050 implementation priorities, and an assessment of opportunities to leverage or fill gaps between other available fund sources.

**Rolling focus for STP funding**

The 2019 call for projects for the shared fund will be used to build a full five-year program (FFY 2020-2024), and projects in all priority project types are encouraged to apply. Subsequent semiannual calls will be to fill the out years of the program. Given the limited funding available in future calls and wide range of eligible project types, future calls will focus on a subset of project types (see the table below).

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Draft: update based on outcome of first call for projects</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Program years:</strong></td>
<td>2020-2024</td>
<td>2025-2026</td>
<td>2027-2028</td>
</tr>
<tr>
<td><strong>Focus areas:</strong></td>
<td>Grade crossing improvements</td>
<td>Road expansion</td>
<td>truck route improvements</td>
</tr>
<tr>
<td>ALL FOCUS AREAS ELIGIBLE</td>
<td>Road reconstruction</td>
<td>Bridge replacement/reconstruction</td>
<td>Road reconstruction</td>
</tr>
<tr>
<td>Bus speed improvements</td>
<td>Corridor/small area safety improvements</td>
<td>Transit station improvement</td>
<td></td>
</tr>
</tbody>
</table>
**Eligible Project Phases and Required Match**

**Phase I Engineering**
Phase I engineering will be the responsibility of the project sponsor to complete without funding from the STP Shared Fund. With limited exceptions, all other phases -- including phase II engineering, right-of-way acquisition, and construction (including construction engineering) - are eligible for STP Shared Fund funding. Sponsors may request STP Shared Fund funding for phase I engineering based on a hardship. If phase I engineering funding is sought, funding for the later phases of the project cannot be requested until the next call for projects, and such funding is not guaranteed. Sponsors seeking funding for phase I engineering should contact CMAP staff before doing so. Hardship is determined from an evaluation of municipal median income, tax base per capita, total tax base, and population. A list of municipalities meeting the phase I engineering hardship exemption is available at <link to be added>.

**Remaining Phases**
All eligible phases will be programmed at a maximum level of 80 percent federal funding for STP Shared Fund funding.

For projects requiring phase I engineering, one of the following must occur by **June 1, 2019:**

a. Design approval has been received.

b. IDOT has certified that a final Project Development Report has been submitted for signatures.

c. IDOT has certified that a preliminary Project Development Report has been received with an accurate cost and clear scope established.

For transit station improvement projects, the sponsor must demonstrate that sufficient engineering and/or architectural work has been completed to establish accurate costs and a clear scope.

**Local Match**
The sponsor must have already committed matching funds when the project is submitted. Proposals which indicate that the sponsor will pay more than the minimum local match will receive points as part of the project readiness portion of the scoring process (see below). Local match is a minimum of 20 percent of the total funds being requested. The local match does not necessarily have to be provided directly by the sponsor but it must be a non-federal source to qualify as match.
**Project Selection Process**

The program of projects selected by the STP Project Selection Committee will consider the results of the project evaluation in three categories: project readiness, transportation impact, and planning factors (see table below). Programmed projects will be subject to Active Program Management procedures (detailed separately).

<table>
<thead>
<tr>
<th>Project types</th>
<th>Project readiness</th>
<th>Transportation impact</th>
<th>Planning factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Engineering/ROW inclusion financial completion in plans commitments</td>
<td>current condition/need improvement Jobs/housing benefit</td>
<td>green infrastructure movement freight inclusive complete streets transit supportive density</td>
</tr>
<tr>
<td>Highway/rail grade crossing improvements</td>
<td>10 10 5</td>
<td>20 20 10</td>
<td>5 - 10 10 -</td>
</tr>
<tr>
<td>Truck route improvements</td>
<td>5 - 10 10 -</td>
<td>5 5 10 5 -</td>
<td>- 5 10 10 -</td>
</tr>
<tr>
<td>Road expansions</td>
<td>5 5 10 5 -</td>
<td>- 5 10 10 -</td>
<td>- 5 10 10 -</td>
</tr>
<tr>
<td>Road reconstructions</td>
<td>5 5 10 5 -</td>
<td>- 5 10 10 -</td>
<td>- 5 10 10 -</td>
</tr>
<tr>
<td>Bridge rehab/reconstructions</td>
<td>- - 10 5</td>
<td>- - 10 5</td>
<td>- - 10 5 10</td>
</tr>
<tr>
<td>Corridor-level or small area safety improvements</td>
<td>- - 10 5</td>
<td>- - 10 5</td>
<td>- - 10 5 10</td>
</tr>
<tr>
<td>Transit station rehab/reconstructions</td>
<td>- - 10 5</td>
<td>- - 10 5</td>
<td>- - 10 5 10</td>
</tr>
<tr>
<td>Bus speed/reliability improvements</td>
<td>- - 10 5</td>
<td>- - 10 5</td>
<td>- - 10 5 10</td>
</tr>
</tbody>
</table>

| Maximum: 25                        | Maximum: 50       | Maximum: 25           |

Total: 100 + Council/CDOT support bonus
Project Readiness
CMAP and partners are committed to timely obligation and completion of projects to protect the region’s funding from lapse and rescission, and deliver on the significant transportation benefits of selected projects. The Active Program Management policies provide a framework for strong project and program management of selected projects, and the evaluation process for Shared Fund projects complements these policies by awarding points to projects that demonstrate financial commitment, local planning, and engineering work.

Engineering and Right of Way Acquisition
Projects can receive up to 10 points, 5 if they demonstrate substantial completion of phase II engineering and 5 for the completion or lack of need for right of way acquisition. Sponsors need not have submitted pre-final plans to IDOT, but should be able to demonstrate that engineering is 85%-90% complete.

Inclusion in Local/Agency Plans
Projects can receive up to 10 points if they are included in local or agency plans. Acceptable plans include long range transportation plans, ITS plans, transit agency long range plans, capital improvement plans, and other local planning efforts, including those completed with CMAP LTA assistance. Projects receive 7 points if they are specifically named in the plan, and 3 points if the plan offers more general support for the project type.

Financial Commitment
Projects can receive up to 5 points in this category based on their demonstrated leveraging of other funding sources. Points are awarded as follows to projects based on the amount of funding requested from the shared fund as a percent of federally-eligible share of the total project cost:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 20%</td>
<td>5</td>
</tr>
<tr>
<td>20%-40%</td>
<td>4</td>
</tr>
<tr>
<td>40%-60%</td>
<td>3</td>
</tr>
<tr>
<td>60%-80%</td>
<td>2</td>
</tr>
<tr>
<td>80%-100%</td>
<td>1</td>
</tr>
</tbody>
</table>

Transportation Impact
A project’s transportation impact score is worth 50% of the total project score, and measures the existing condition of the transportation asset or need for the project, the cost effectiveness of the improvement that would be made by the project, and the number of households and jobs that could benefit from the project’s completion.
**Existing Condition/Need**

Each project will receive an existing condition/need score on a scale of 0 to 20. Each project type will have a different measure of project need, but all will be converted to a 20 point scale for the purposes of analysis. Scores will be calculated as follows:

**Transit station reconstructions/rehabs**
The existing condition score will be the cost-weighted average Transit Economic Requirements Model (TERM) condition score of station components, converted to a 20 point scale. For station reconstructions that increase passenger area, 25% of this score will be based on the extent of the existing capacity constraint.

**Bus speed improvements**
The existing condition score will measure the current on-time performance of bus routes being improved as well as the difference between bus travel time and auto travel time on the road(s) being improved. Both factors are worth 50% of the score.

**Bridge reconstruction**
The existing condition score will be the sufficiency rating calculated by the National Bridge Inventory, converted to a 20 point scale.

**Rail-Highway grade crossing**
The existing condition score will be the project’s score from the total points from the Grade Crossing Screening Level 2 evaluation (currently being finalized, see current data [here](#)), converted to a 20 point scale.

**Corridor/Small Area Safety**
The safety need score is calculated using IDOT’s safety road index (SRI) for roadway segments and intersections. The SRI score is based on the location’s Potential for Safety Improvement (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 proposed project’s safety need score will be the highest SRI category along the project location. This will include both segment and intersection locations.

**Road reconstructions, expansions and truck routes**
The road reconstructions and expansions need score will be calculated in a similar method to the highway needs score for regionally significant projects in ON TO 2050. This score incorporates information about pavement condition, safety, reliability, and mobility. Pavement condition is the length weighted average of either the road’s Condition Rating Score (CRS) or international roughness index (IRI), depending on data availability. Mobility is the length weighted average of the travel time index (the ratio of peak period travel time to free flow travel time) and the number of at least lightly congested hours of traffic per weekday. Reliability is measured by the length-weighted average of the planning time index (95th percentile travel time divided by free flow...
The safety score will be calculated using IDOT’s safety road index (SRI). Weights for these factors will be as follows:

<table>
<thead>
<tr>
<th></th>
<th>Road Reconstruction</th>
<th>Road Expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition</td>
<td>50%</td>
<td>15%</td>
</tr>
<tr>
<td>Mobility</td>
<td>10%</td>
<td>30%</td>
</tr>
<tr>
<td>Reliability</td>
<td>20%</td>
<td>30%</td>
</tr>
<tr>
<td>Safety</td>
<td>20%</td>
<td>25%</td>
</tr>
</tbody>
</table>

The truck routes need score will be calculated in a similar method to the road reconstruction and expansion score, with the addition of a length weighted average of truck volumes. All factors are weighted equally.

**Improvement**

Improvement will be calculated as the cost effectiveness of the proposed improvements involved in the project. Improvements will be indexed on a scale of 0-20 within project type. Total project cost will be used to evaluate cost effectiveness. The improvements for each project type will be calculated as described below:

**Transit station reconstructions/rehabs**
The difference in cost-weighted average Transit Economic Requirements Model (TERM) condition score of station components before and after the project. For station reconstructions that increase passenger area, 25% of this score will be based on the extent that the project addresses an existing capacity constraint.

**Bus speed improvements**
The improvement to on-time performance of bus routes being improved as well as the change in the bus-auto travel time differential. Both factors are worth 50% of the score.

**Bridge reconstruction**
The bridge sufficiency rating, adjusted based on the type of work being done and the functional class of the road. Adjustment factors based on IDOT’s major bridge program.

**Rail-Highway grade crossing**
The improvement to delay and safety as a result of the project.

**Corridor/Small Area Safety**
This score is based on the improvement of the project and the planning level expected safety benefit (reduction of crashes) after implementing the improvement. The planning level safety improvement score is modeled after the SMART SCALE Safety Factor Evaluation method developed by the Virginia Department of Transportation (VDOT). Similar to VDOT’s method, CMAP staff will develop a list of common improvement types (countermeasures) and the accompanying planning level CRFs. The planning level CRFs will be developed using information from IDOT, Crash Modification Clearinghouse, and Highway Safety Manual. 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 take the maximum planning level CRF for the project.

Road reconstructions, expansions, and truck routes
Ten of the improvement points for road reconstructions and enhancements will come from
improvements to the condition in the case of road reconstructions and mobility in the case of
expansions. Projects can also receive a maximum of ten points if the project has any of the
following characteristics or helps implement any of the following as part of a larger program:

<table>
<thead>
<tr>
<th>Systematic Improvements</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Corridor Management</td>
<td>5</td>
</tr>
<tr>
<td>Work zone management (traveler information improvements)</td>
<td>5</td>
</tr>
<tr>
<td>Truck travel information systems</td>
<td>4</td>
</tr>
<tr>
<td>Strategies to improve transit on-time performance</td>
<td>4</td>
</tr>
<tr>
<td>Ramp metering</td>
<td>4</td>
</tr>
<tr>
<td>Road weather management systems</td>
<td>2</td>
</tr>
<tr>
<td>Special event management</td>
<td>3</td>
</tr>
<tr>
<td>Traffic signal interconnect</td>
<td>4</td>
</tr>
<tr>
<td>Adaptive signal control</td>
<td>5</td>
</tr>
</tbody>
</table>

Incident Detection:
- Traffic Management Center (TMC) to TMC Communications            | 4     |
- Computer-aided dispatch (911 call center) to (TMC) communications| 4     |
- Extension or improvement of real-time traffic surveillance on regional expressways and tollways, including video and detectors | 3 |
- Integration of real-time probe data into incident detection procedures | 3 |
- Establishment of detector health program                          | 3     |

Incident Response:
- Expansion of response operations capabilities (e.g., minutemen)   | 5     |
- Dispatch improvements, including center-to-operator and supervisor-to-operator communications (including supervisor-bus communications) | 4 |
- Response equipment (e.g., minuteman vehicles)                    | 4     |

Incident Recovery:
- Expediting coroner’s/medical examiner’s accident investigation process | 5 |
- Dynamic message signs (DMS, multiple, including arterial DMS)    | 3     |
- Incident-responsive ramp meters                                  | 3     |
- Speed Management Systems                                          | 2     |
- On-scene communication, coordination, and cooperation            | 2     |
- Development and improvement of highway closure detour routes      | 2     |
**Household/Job Impact**

The benefits of a transportation project often cross municipal and county borders, and can provide significant improvements to people who are not located in the project’s immediate vicinity. For each project, CMAP uses the travel model to generate a travel shed of the places people come from and go to using the facility. The score in this category is calculated by adding up the total number of jobs and households in each project’s travel shed and converting the total to a score out of 10, indexed to the other submitted projects.

**Planning Factors**

In addition to the transportation benefits and readiness scores explained above, all projects are evaluated on their support for regional priorities, identified as part of ON TO 2050, the region’s long range comprehensive plan.

**Inclusive growth (all project types)**

Long-term regional prosperity requires economic opportunity for all residents and communities. **Inclusive growth, one of the ON TO 2050 plan principles**, focuses on strategies, including transportation investments, that can increase access to opportunity for low income residents and people of color, and help the region to be stronger and more successful economically.

All projects are evaluated based on the percent of travelers using a facility that are people of color below the poverty line, as modeled by the CMAP travel demand model. Projects can receive a maximum of 10 points, which are awarded as follows (also see draft map below, which shows both roads and facilities):

**Percent of facility users who are nonwhite and under poverty line**

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%-5%</td>
<td>0</td>
</tr>
<tr>
<td>5%-10%</td>
<td>2</td>
</tr>
<tr>
<td>10%-15%</td>
<td>4</td>
</tr>
<tr>
<td>15%-20%</td>
<td>6</td>
</tr>
<tr>
<td>20%-25%</td>
<td>8</td>
</tr>
<tr>
<td>25% or more</td>
<td>10</td>
</tr>
</tbody>
</table>
One of ON TO 2050’s recommendations is to support development of compact, walkable communities. Complete streets policies require streets to be planned, designed, operated, and maintained to enable safe, convenient, and comfortable travel and access for all anticipated...
roadway users, regardless of their age, abilities, or mode of travel. The adoption of complete streets policies and incorporation of complete streets design elements into all projects is encouraged. A project receives half of the points in this category if the project sponsor has adopted complete streets policies, and the other half if the project contains complete streets elements. For more information about complete streets policies and project design, see the CMAP complete streets toolkit. Transit station, bus speed improvement, road reconstruction, and road expansion projects can receive a total of 5 points in this category (2.5 from policies, 2.5 from project elements), while grade crossings, bridge reconstructions, safety projects, and truck routes can receive a maximum of 10 points (5 from policies, 5 from project elements).

**Green infrastructure (grade crossings, truck route improvements, road reconstructions and road expansions)**

Implementing green infrastructure as part of transportation investments can help achieve a number of regional priorities, including reducing flooding, improving water quality, and mitigating the urban heat island effect. The maximum score in this category is 5 points, 2.5 if sponsors have implemented policies that support green infrastructure, 2.5 if the project has green infrastructure components.

**Freight movement (road expansions, road reconstructions, bridge rehab/reconstructions, and safety projects)**

Maintaining the region’s status as North America’s Freight hub is one of the recommendations of ON TO 2050. While some of the shared fund priority project types are specifically aimed at improving freight movement in the region (rail-highway grade crossings, and truck route improvements), other project types can also have substantial freight benefits. Projects receive points in this category as follows based on the truck volume on the road segment:

<table>
<thead>
<tr>
<th>Percent heavy duty vehicles</th>
<th>Max Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%–2%</td>
<td>0 points</td>
</tr>
<tr>
<td>2%–4%</td>
<td>1 points</td>
</tr>
<tr>
<td>4%–6%</td>
<td>2 points</td>
</tr>
<tr>
<td>6%–8%</td>
<td>3 points</td>
</tr>
<tr>
<td>8%–10%</td>
<td>4 points</td>
</tr>
<tr>
<td>10% or more</td>
<td>5 points</td>
</tr>
</tbody>
</table>

**Transit-supportive land use (transit stations and bus route improvements)**

ON TO 2050 includes the recommendation to make transit more competitive. Transit agencies cannot sustain fast, frequent, reliable service without accompanying supportive land use changes. Transit investments receive points if they are located in areas where zoning and urban design requirements are transit-supportive. This will be scored as follows:

<table>
<thead>
<tr>
<th>Max Score</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Up to 4.5 points will be awarded based on the permitted density for residential and non-residential land uses within one-half mile of the transit station. If more than one residential or non-residential classification is zoned</td>
</tr>
</tbody>
</table>
Max Score | Criteria
---|---
within the station area, points will be assigned to the classification with the highest permitted density.

Points will be assessed based on both residential and non-residential densities. If the two categories yield different point totals, the average of the two point totals will be awarded.

**Permitted Densities:**

<table>
<thead>
<tr>
<th>Residential (DU/buildable acre)</th>
<th>Non-Residential (Building Height*)</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 6</td>
<td>1 story (12 ft.)</td>
<td>0</td>
</tr>
<tr>
<td>&gt; 6 and ≤ 10</td>
<td>2 story (24 ft.)</td>
<td>1.0</td>
</tr>
<tr>
<td>&gt; 10 and ≤ 16</td>
<td>3 story (36 ft.)</td>
<td>2.0</td>
</tr>
<tr>
<td>&gt; 16 and ≤ 24</td>
<td>4 story (48 ft.)</td>
<td>3.0</td>
</tr>
<tr>
<td>&gt; 24</td>
<td>&gt; 4 story (&gt; 48 ft.)</td>
<td>4.5</td>
</tr>
</tbody>
</table>

*Building height given in feet based on 12 feet per story.

AND

Up to 2.5 points will be awarded based on **innovative parking requirements**, which supports denser development by increasing space available for other uses (one point for each strategy implemented):

- Reduced minimum parking requirements
- Enacted maximum parking requirements
- Shared parking permitted
- In-lieu parking fees permitted
- Enacted bicycle parking requirements
- Off-street parking is required behind or underneath buildings
- Off-street parking is permitted off-site

3.0 Up to 3 points will be awarded for the **presence of mixed-use zoning** within one-half mile of transit project (1 point for each strategy implemented):

- Zoning allows vertical mixing of uses (e.g., residential units above ground-level retail or office).
- Zoning allows pedestrian-friendly diverse land uses (e.g., drugstores, groceries, dry cleaning, banks, restaurants, gyms, hardware stores, etc.).
- Zoning excludes car-dependent land uses (e.g., drive-through stores, strip malls, etc.).

Communities that have implemented form-based codes may require additional qualitative analysis from CMAP staff to ensure their zoning meets the above standards.
**Bonus**

Each council and CDOT will have 25 points to allocate amongst the submitted projects to indicate local support and priorities. No project may receive more than 15 of any one council or CDOT’s points, but collaboration amongst councils is encouraged. Councils may give bonus points to projects outside their jurisdiction up to a maximum of 25 total bonus points for any one project. Councils and CDOT must submit allocations of bonus points to CMAP by a deadline yet to be determined, but in advance of the release of initial evaluation results.