



Chicago Metropolitan Agency for Planning

MEMORANDUM

Agenda Item No. 6.0

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To: CMAQ Project Selection Committee

From: CMAP Staff

Date: July 9, 2020

Re: Changes to Project Evaluations and Program Development for FFY 2022-2026
CMAQ and TAP-L Call for Projects

The FFY 2022-2026 Congestion Mitigation and Air Quality Improvement (CMAQ) program and Transportation Alternatives Program for Locals (TAP-L) call for projects is on schedule for opening in January 2021. In preparation for the new call CMAP staff have been reviewing the evaluation criteria and scoring process for potential improvements. This memo lays out those improvements and discusses some comments that were made by committee members at the end of the last call.

Intersection Improvement Projects

At the end of the last call, several sponsors requested more information about the analysis of intersection improvement projects and specifically roundabout projects given that they had not scored as well as the sponsors expected.

Staff reviewed the last two CMAQ cycles to any reasons that intersection improvement projects would rank lower than some other project applications. After verifying that there were no errors in the analysis itself, staff concludes that traffic volumes for the intersections played the largest role in determining whether a project was selected or not. In the 2020-2024 call there were eight intersection improvement (II) projects selected for funding. All eight were among the top 15 projects ranked by traffic volumes out of 27 project applications. For the 2018-2022 call the five II projects selected were among the top 15 by traffic volumes out of 29 applications.

Total cost also plays a significant role for applications as it directly affects the cost-effectiveness of the project. If an application has low traffic volumes and a high cost, it probably will not rank well among the rest of the applications. Over the last two funding rounds, the average traffic volumes for roundabout projects was 15,000 ADT and the total project cost was \$6.5 million. For comparison, the funded II projects had an average of 46,000 ADT and \$4.2 million.

Finally, staff will be revising the Input Module worksheets that are required to provide data for the simulation to make it easier for applicants to provide the information needed to conduct the analysis.

Total Project Cost

Committee members also questioned what should make up the total cost of the project. It has always been the policy of the CMAQ program in northeastern Illinois to consider all phases (engineering, right-of-way acquisition and construction) as contributing to total project cost. Nevertheless, if the scope of the application is part of a larger project and the application has independent utility, then only the costs associated with the application project scope need to be given. Engineering and ROW costs can be estimated for the application based upon the percentage of the construction cost of the scope of the application out of the larger project construction cost. An example would be an application for a bicycle sidepath that is being done as part of larger road reconstruction project. The sidepath has independent utility but the engineering is being done as part of the larger reconstruction project. The engineering cost for the sidepath still needs to be included in the total project cost for the application but it can be estimated based upon the percentage of the sidepath construction cost out of the construction cost of the sidepath and the road reconstruction. Staff will update the language in the application booklet to help reduce confusion for applicants.

Changes to Regional Priorities and TICs

Staff are proposing several changes to the Regional Priorities and Transportation Impact Criteria (TIC). The following table reflects the changes to the Transportation Impact Criteria (TIC) and Regional Priorities scoring with a description of the individual changes following.

Project Type	Criteria and Weights		
Highway	Reliability 15	Safety 5	Corridor/Transit Improvement 10
Transit	Ridership 10*	Reliability (service) or Asset Condition (facilities) 10*	Transit Supportive Land Use* 10
Bicycle	Safety & Attractiveness 10	Transit Accessibility 10	Facility Connectivity* 10
Direct Emissions Reduction	Benefits Sensitive Population* 25	Improves Public Fleets 5	

* Indicates a change from the previous call for projects.

1. The first change is a recommendation to drop the Regional Priorities scoring category. Currently there are three regional priorities being scored.
 - a. Project is a component of an ON TO 2050 Regionally Significant Project (RSP).
 - b. Project is supportive of inclusive growth principles that can increase access to opportunity for low income residents and people of color
 - c. The zoning and urban design requirements in the area around a proposed transit project are supportive of transit (transit supportive land use).

Each regional priority can earn a project 10 points but the Regional Priority total score is capped at 10 points. This mutes the effect on the project score when a project qualifies for multiple regional priorities.

The RSP scoring would be dropped entirely from the evaluation of projects. Only a few projects every cycle qualify for RSP points, and because of their regional scope they already tend to do well in both the emission benefit evaluation and TIC scoring.

The Inclusive Growth scoring would stay as a stand-alone score for every application. The pursuit of equity is one of the core values of CMAP and staff recommends that it remain a priority for the scoring of CMAQ applications. By keeping Inclusive Growth as stand-alone scoring criterion it will not be overshadowed by the other scoring measures. Inclusive Growth is already a stand-alone measure for the TAP-L program.

The Transit Supportive Land Use score would be incorporated into the Transit TIC scoring.

With these changes project scoring would be weighted as follows:

- a. Emissions Reduction Cost Benefit = 60 points (except for Other project category)
 - b. TIC Scoring = 30 points (except for Other project category)
 - c. Inclusive Growth Scoring = 10 points
2. By moving Transit Supportive Land Use to the Transit TIC, the scoring weights for the other Transit TICs will need to be adjusted. Currently Ridership and Reliability/Asset Condition are weighted at 15 points each. To accommodate Transit Supportive Land Use, they will all be weighted at 10 points each.
3. Currently the Facility Connectivity score for Bicycle Facilities is evaluated by using the greater of either (a) the connectivity of bikeways resulting from the project (shown in the table below), or (b) the project's street network connectivity rating, measured with the pedestrian environment factor (PEF) and then weighted by the land use diversity index.

Connectivity of bikeways resulting from the project	Value assigned
Project fills a gap between existing bikeways	10
Project intersects an existing bikeway	6
Project extends an existing bikeway	3
Project is a new isolated bikeway segment	0

Staff recommends replacing the PEF measure with Level of Traffic Stress (LTS) for the roadways connecting to the proposed bicycle facility. Originally the PEF measure was used as way to accommodate bicycle facilities that may not connect into other bikeways but do connect to road networks which were already conducive to bicycling. The LTS works on a 1 to 4 scale, with 1 being the least stressful and 4 being the most. Each roadway link is given a numeric LTS Score based upon based on physical and operational characteristics of the roadway links and traffic volumes.

Connectivity of bikeways – Level of Traffic Stress	Value assigned
Low LTS	10
Medium-Low LTS	6
Medium-High LTS	3
High LTS	0

The bicycle facility applications will receive whichever connectivity score is higher from the two methods.

4. For the last recommended TIC change, staff proposes removing the Annual Health Benefit score from Direct Emissions Reduction TIC. Currently the Annual Health Benefit score is generated based upon the total particulate matter (PM) being reduced by the project. The emissions reduction benefit already calculates PM2.5 reductions and incorporates it into the emissions reduction cost benefit score. The Benefits Sensitive Populations TIC uses PM concentrations as part of its evaluation process as well. With PM emissions already incorporated, there may be a case of double counting the PM benefits into the overall score. The 5 points from the Annual Health Benefit would be reassigned to the Benefits Sensitive Populations score for a total of 15 points.

Local Match and High Need Communities

In an effort to promote equity in our regional programming decisions, staff proposes changing the local match requirements so that Transportation Development Credits for Highways (TDCH) may assist high need communities. Prior to the last programming cycle, the STP-Shared Fund (STP-SF) developed [a policy for the use of TDCHs](#). This policy would be modified to include CMAQ and TAP-L funds. High need communities would be able to request the use of TDCHs as match for their federal funds. The high need communities would be defined as the Cohort 4 communities, the same way as the STP-SF and the Local Technical Assistance (LTA) programs.

The use of TDCHs does reduce the overall pot of funds available to program as it is granting 100 percent federal funding for the qualified applicants. But the STP-SF in the last cycle only saw a total \$1.7 million in TDCHs being used in its program development. For many communities, the ability to provide local match is an impediment to accessing federal transportation funds.

Inclusion of Greenhouse Gas Emissions

Addressing climate change is a major goal of ON TO 2050 and staff reviewed the possibility of including greenhouse gas (GHG) emissions in the CMAQ analysis of potential projects. Staff found that the GHG emissions rates had almost the same speed curve as Volatile Organic Compounds (VOCs) emissions rates. The results showed that project applications which provide excellent VOC reduction benefits also showed excellent GHG reduction benefits. Based upon these results, there would not be an added benefit to the overall project scoring to include GHG. Staff plans to include total estimated GHG emission reductions along with the project scores for informational purposes.

ACTION REQUESTED: Discussion

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