

Information Item

Transportation Advisory Board



Meeting Date: April 5, 2023

Topic

Potential 2024 Regional Solicitation Changes

To: Technical Advisory Committee

From: Metropolitan Transportation Staff

Increasing the Weight of Safety and Safety-Related Criteria and Scoring Measures

This section presents an analysis of the impact of increasing Safety scoring in the Regional Solicitation. The impetus for considering these options is a nearly unanimous opinion from technical and policy committee members that more emphasis should be placed on Safety for the 2024 Regional Solicitation.

Two options for consideration are summarized in Table 1 below and include adding 100 and 300 points respectively to safety-related criteria across all application categories. The 100-point option results in adding 6%-8% to the safety-related criteria and the 300-point option results in adding 15%-20% to the safety-related criteria. It should be noted that some application categories do not have a direct safety criterion. In these cases, 100 and 300 points have been added to criteria that represent safety, for example in the Transit Expansion application category, points have been added to the Multimodal criterion as this represents investment in facilities that increase the safety of pedestrian and bicyclists accessing transit.

In addition, Attachments 1 and 2 show the impact of the 100- and 300-point Safety criteria increases with the proportional decreases to all the other criteria weighting (with crossed-out percentages representing the current criteria weighting and the red underlined percentage indicating the new weighting).

Table 1: Impact of 100- and 300-Point Safety Increases

| Category | Criterion | Current Criteria Weight | 100-Pt Increase to Safety Criteria Weight | 300-Pt Increase to Safety Criteria Weight |
|-----------------------|----------------------|-------------------------|---|---|
| Traffic Mgmt Tech | Safety | 18% | 25% | 36% |
| Spot Mob/Safe | Safety | 30% | 36% | 45% |
| Strat Cap. | Safety | 14% | 21% | 32% |
| Roadway Recon/Mod | Safety | 16% | 23% | 34% |
| Bridge | Multimodal | 9% | 17% | 29% |
| Transit Expansion | Multimodal | 9% | 17% | 29% |
| Transit Modernization | Transit Improvements | 18% | 25% | 36% |
| TDM | Congestion/Air Qual | 27% | 33% | 43% |
| Multiuse Trail / Bike | Safety/Deficiencies | 23% | 29% | 39% |
| Pedestrian Facilities | Safety/Deficiencies | 27% | 33% | 43% |
| Safe Routes to School | Safety/Deficiencies | 23% | 29% | 39% |

The bullets below describe how the Safety criteria point increases would be distributed across specific scoring measure(s) within each application category.

- **Traffic Management Technologies category:** Points added 50% to Crashes Reduced measure and 50% to Safety Issues in Project Area measure.
- **Roadway Spot Mobility and Safety, Strategic Capacity, and Reconstruction/Modernization categories:** Points added 50% to Crashes Reduced measure and 50% Pedestrian Crash Reduction measure.
- **Multiuse Trails and Bicycle Facilities, Pedestrian Facilities and Safe Routes to School categories:** Points added 50% to Barriers Overcome measure and 50% to Deficiencies Corrected measure.
- **Bridges and Transit Expansion categories:** All points added to the Multimodal Elements and Connections measures.
- **Transit Modernization category:** All points added to the Project Improvements for Transit Users measure.
- **Travel Demand Management category:** All points added to the Vehicle Miles Traveled (VMT) Reduction measure.

The Bridges and Transit Expansion application categories do not have direct safety measures however, adding points to the Multimodal Elements and Connections measure is proposed because safety is considered by the scorers in this measure.

For the Transit Modernization application category, the Transit Planning Technical Work Group suggested adding points to the Project Improvements for Transit Users measure. Overall, the group preferred not to add any points to the Transit application criteria as there is currently no direct safety measure within the Transit application categories. (However, TAB also expressed a desire to have all application categories with the same number of total points.)

For the TDM category, the safety points were added to VMT reduced as this seemed to be the best link to safety as promoting reduced VMT may result in reduced crash risk exposure for all users of the transportation system.

Table 2 below seeks to indicate how these scoring changes might have impacted project selection in the 2022 Solicitation.

Table 2: Impact of 100- and 300-Point Safety Increases on the 2020 Regional Solicitation

| Category | Total Apps | # Funded | # Apps that Change Rank added 100 pts | # Apps funded in place of another 100 pts | # Apps that Change Rank added 300 pts | # Apps funded in place of another 300 pts |
|-----------------------|------------|----------|---------------------------------------|---|---------------------------------------|---|
| Traffic Mgmt Tech | 4 | 3 | 0 | 0 | 0 | 0 |
| Spot Mob/Safe | 10 | 6 | 0 | 0 | 4 | 1 |
| Strat Cap. | 11 | 4 | 2 | 0 | 7 | 1 |
| Roadway Recon/Mod | 31 | 18 | 17 | 1 | 21 | 1 |
| Bridge | 5 | 5 | 0 | N/A* | 0 | N/A* |
| Transit Expansion | 7 | 6 | 0 | 0 | 2 | 0 |
| Transit Modernization | 6 | 5 | 0 | N/A* | 0 | N/A* |
| TDM | 7 | 5 | 2 | 0 | 6 | 1 |
| Multiuse Trail / Bike | 49 | 18 | 29 | 1 | 45 | 2 |
| Pedestrian Facilities | 10 | 10 | 0 | N/A* | 0 | N/A* |
| Safe Routes to School | 10 | 10 | 3 | N/A* | 7 | N/A* |

* Because the Transit Modernization category funded all but the fifth-ranked project out of six, no funding line was considered. Funding lines are also not considered for the Bridges, Pedestrian Facilities, and Safe Routes to School categories because all projects were funded.



Breaking Ties – Staff Recommendation

Historically, TAB has been unwilling to “break” ties (i.e., fund one out of two projects with the same score within a funding category). This can lead to suboptimal outcomes such as under or overfunding an application category. TAB and Technical Committee members have expressed willingness to allow for tie breakers, based on the higher safety score, provided that the process is documented. Staff currently suggests the following language to break ties at the scoring committee level:

Scoring committees should use a tiebreaker to sort the ranking of two or more projects with the same score. Going into the 2026 Regional Solicitation further consideration of tied, or even close, scores will occur. For the 2024 Regional Solicitation, ties will be broken within by favoring the higher-scoring project in a key scoring measure within each category. These are:

- a) Traffic Management Technologies (6A), Spot Mobility and Safety (4B), Strategic Capacity (6A), and Roadway Reconstruction/Modernization (6A): Crashes Reduced*
- b) Bridge Rehabilitation/Replacement: Distance to Nearest Parallel Bridge (Measure 1A)*
- c) Transit Expansion (4) and Transit Modernization (5): Bicycle and Pedestrian Elements of and Connections*
- d) Travel Demand Management: Project Innovations & Geographic Expansion (Measure 5)*
- e) Multiuse Trails and Bicycle Facilities, Pedestrian Facilities and Safe Routes to School: Deficiencies Corrected / Safety Problems Addressed (Measure 4B)*

Any ties that remain after this will favor (step 1) the lower federal amount of funding requested and (step 2 if step 1 results in a tie) the lower total amount of funding for the proposed project.

Federal Maximum Awards – No Staff Recommendation

Since 2014, category maximum awards have not increased with inflation. At its March 16, 2023, meeting, the Funding & Programming Committee discussed increasing funding maximum amounts along with the fact that increased amounts would lead to funding fewer projects.

Table 3 shows inflation on each funding maximum at 5% per year to 2024 (the year to be used for project cost estimations in the 2024 Regional Solicitation).

Staff explored the likely number of projects that would be funded with the following federal funding maximums:

- Strategic Capacity (\$12M; currently \$10M)
- Roadway Reconstruction/Modernization (\$10M; currently \$7M)
- Multiuse Trails and Bike Facilities (\$7M; currently \$5.5M)
- Pedestrian Facilities (\$3M; currently \$2M)
- Safe Routes to School (\$2M; currently \$1M)

This increase in the maximums would have resulted in eight to 12 fewer projects being funded.

Staff is presenting this for informational purposes with no recommendation and seeks feedback.



Table 3: 5% Inflation

| | 2014 Max | 2024 Value | 2016 Max | 2024 Value | 2018 Max | 2024 Value | 2020 Max | 2024 Value | 2022 Max | 2024 Value |
|--|----------|--------------|----------|-------------|----------|-------------|----------|--------------|----------|--------------|
| Roadways | | | | | | | | | | |
| System Management/TMT | \$7M | \$11,402,262 | \$7M | \$9,849,703 | \$7M | \$9,380,669 | \$3.5M | \$4,254,272 | \$3.5M | \$3,858,750 |
| Spot Mobility/Safety | - | - | - | - | - | - | \$3.5M | \$4,254,272 | \$3.5M | \$3,858,750 |
| Strategic Capacity | \$7M | \$11,402,262 | \$7M | \$9,849,703 | \$7M | \$9,380,669 | \$10M | \$12,155,063 | \$10M | \$11,025,000 |
| Reconstruction/Modernization | \$7M | \$11,402,262 | \$7M | \$9,849,703 | \$7M | \$9,380,669 | \$7M | \$8,508,544 | \$7M | \$7,717,500 |
| Bridge | \$7M | \$11,402,262 | \$7M | \$9,849,703 | \$7M | \$9,380,669 | \$7M | \$8,508,544 | \$7M | \$7,717,500 |
| Transit | | | | | | | | | | |
| Transit Expansion | \$7M | \$11,402,262 | \$7M | \$9,849,703 | \$7M | \$9,380,669 | \$7M | \$8,508,544 | \$7M | \$7,717,500 |
| Transit Modernization | \$7M | \$11,402,262 | \$7M | \$9,849,703 | \$7M | \$9,380,669 | \$7M | \$8,508,544 | \$7M | \$7,717,500 |
| ABRT | - | - | - | - | - | - | \$25M | \$30,387,656 | \$25M | \$27,562,500 |
| TDM | - | - | \$0.3M | \$422,130 | \$0.5M | \$670,048 | \$0.5M | \$607,753 | \$0.5M | \$551,250 |
| Bicycle & Pedestrian Facilities | | | | | | | | | | |
| Bike Trails | \$5.5M | \$8,958,920 | \$5.5M | \$7,739,052 | \$5.5M | \$7,370,526 | \$5.5M | \$6,685,284 | \$5.5M | \$6,063,750 |
| Ped | \$1M | \$1,628,895 | \$1M | \$1,407,100 | \$1M | \$1,340,096 | \$1M | \$1,215,506 | \$2M | \$2,205,000 |
| SRTS | \$1M | \$1,628,895 | \$1M | \$1,407,100 | \$1M | \$1,340,096 | \$1M | \$1,215,506 | \$1M | \$1,102,500 |

