Transportation Advisory Board
of the Metropolitan Council of the Twin Cities

INFORMATION ITEM

DATE:	July 11 2019
TO:	TAC Funding and Programming Committee
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SUBJECT:	2020 Regional Solicitation: Roadway Applications

Attached is Regional Solicitation language for the roadway application categories.

General

- The Safety criterion includes an added Pedestrian Crash Reduction measure in Strategic Capacity (roadway expansion), Spot Mobility and Safety, and Reconstruction and Modernization (example, page 25).
- Multimodal Elements and Existing Connections refers to improving locations identified as deficient in a completed ADA Transition Plan and to describing how the project crossings a major river bicycle barrier crossing or regional bicycle barrier (example, page 11).
- Included in the Risk Assessment category is 20% for public involvement, related to how project location and need was determined (Example, page 13).
- Included a new provision in the Cost Effectiveness measure that allows projects that have been awarded other outside, competitive funding (e.g., state bonding, Transportation Economic Development Program, Minnesota Highway Freight Program), to reduce the total project cost for the purposes of the scoring measure by the amount of the outside funding award (example, page 14). This is reflected in other categories, as well.

Transit Management Technologies (Pages 1-14)

No key changes specific to this category.

Spot Mobility and Safety (Pages 15-29)

This is a proposed new category aimed at low-cost, high-benefit safety and mobility projects. The attached application language is generally reflective of measures elsewhere, but with greater weight provided to Congestion Reduction and Air Quality and Safety.

Strategic Capacity (Roadway Expansion) (Pages 30-50)

- Addition of a "Congestion within project area component to measure 1A, which includes scoring related to adjacent congestion and Principal Arterial Conversion Study priorities (page 31).
- Elimination of the Infrastructure Age measure for new roadways. The rest of the score would be adjusted to accommodate this (page 40).

Roadway Reconstruction and Modernization (Pages 51-72)

- Elimination of measure: "Level of Congestion, Principal Arterial Intersection Conversion Study Priorities, and Congestion Management and Safety Plan Opportunity Areas" (page 52), which leads to re-distribution of points to several measures. Mobility projects have been shifted to the new Spot Mobility and Safety application category

Bridge Rehabilitation and Replacement (Pages 73-85)

No key changes specific to this category.

Traffic Management Technologies (Roadway System Management) – Prioritizing Criteria and Measures

June 136, 2019

Definition: An Intelligent Transportation System (ITS) or similar project that primarily benefits roadway users. Traffic Management Technology projects can include project elements along a single corridor, multiple corridors, or within a specific geographic area such as a downtown area. To be eligible, projects must make improvements to at least one A-minor arterial or non-freeway principal arterial. Projects that are more transit-focused must apply in the Transit Modernization application category.

Examples of Traffic Management Technology Projects:

- Flashing yellow arrow traffic signals
- Traffic signal retiming projects
- Integrated corridor signal coordination
- Traffic signal control system upgrades
- New/replacement detectors
- Passive detectors for bicyclists and pedestrians
- Other emerging ITS technologies
- New/replacement traffic mgmt. centers
- New/replacement traffic communication
- New/replacement CCTV cameras
- New/replacement variable message signs & other info improvements
- Incident management coordination
- Vehicle to Infrastructure Technology

Scoring:

Criteria and Measures	Points	% of Total Points
1. Role in the Regional Transportation System and Economy	**175**	**16%**
Measure A - Functional classification of project	50	
Measure B - Regional Truck Corridor Study Tiers	50	
Measure C - Integration within existing traffic management systems	50	
Measure D - Coordination with other agencies	25	
2. Usage	**125**	**11%**
Measure A - Current daily person throughput	85	
Measure B - Forecast 2040 average daily traffic volume	40	
3. Equity and Housing Performance	**100**	**9%**
Measure A - Connection to disadvantaged populations and project's benefits	30	
Measure B - Housing Performance Score	70	
4. Infrastructure Age	**75**	**7%**
Measure A - Upgrades to obsolete equipment	75	
5. Congestion Reduction/Air Quality	**200**	**18%**
Measure A - Congested roadway	150	
Measure B - Emissions and congestion benefits of project	50	
6. Safety	**200**	**18%**
Measure A - Crashes reduced	50	
Measure B - Safety issues in project area	150	
7. Multimodal Elements and Existing Connections	**50**	**5%**
Measure A - Transit, bicycle, or pedestrian project elements and connections	50	
8. Risk Assessment	**75**	**7%**
Measure A- Risk Assessment Form	75	
9. Cost Effectiveness	**100**	**9%**
Measure A – Cost effectiveness (total points awarded/ total project cost)	100	

Criteria and Measures	Points	% of Total Points
Total	**1,100**	

1. Role in the Regional Transportation System and Economy (175 Points) – Tying regional policy (Thrive MSP2040) to the Regional Solicitation, this criterion measures the project's ability to serve a transportation purpose within the regional transportation system and economy based on how well it fulfills its functional classification role, aligns with the Regional Truck Corridor Study, and integrates with existing traffic management systems, and provides coordination across agencies. The project must be located on at least one non-freeway principal arterial or A-minor arterial.

A. *MEASURE:* Reference the functional classification(s) that the project would serve. Investment in a higher functionally-classified roadway (i.e., the principal arterial system) serves a more regional purpose and will result in more points.

RESPONSE (Select one):
- The majority of the project funds will be invested on the principal arterial system: ☐ (50 points)
- The majority of the project funds will be invested on the A-minor arterial system: ☐ (25 points)
- The majority of the project funds will be invested on the collector or local system with some investment either on the principal arterial or A-minor arterial system: ☐ (0 points)

SCORING GUIDANCE (50 Points)
The scorer will assign points based on which of the above scores applies. Note that multiple applicants are able to score the maximum point allotment. If no applicant scores 50 points, the 25-point projects will be adjusted to 50 points, while the zero-point projects will remain at zero.

B. *MEASURE:* This criterion relies on the results of the Regional Truck Corridor Study, which prioritized all principal and minor arterials based on truck volume, truck percentage of total traffic, proximity to freight industry clusters, and proximity to regional freight terminals. (50 points)

Use the final study report for this measure:

https://metrocouncil.org/Transportation/Planning-2/Transit-Plans,-Studies-Reports/Highways-Roads/Truck-Freight-Corridor-Study.aspx

RESPONSE (Select one for your project, based on the Regional Truck Corridor Study):
- The majority of the project funds will be invested on either a Tier 1, Tier 2, or Tier 3 corridor: ☐ (50 Points)
- A majority of the project funds will NOT be invested on a Tier 1, Tier 2, or Tier 3 corridor, but at least 10 percent of the funds will be invested on these corridors: ☐ (25 Points)
- No project funds will be invested on a Tier 1, Tier 2, or Tier 3 corridor: ☐ (0 Points)

SCORING GUIDANCE (50 Points)

The scorer will assign points based on which of the scores applies. Note that multiple applicants can score the maximum point allotment. If no applicant scores 50 points, the 25-point projects will be adjusted to 50 points, while the zero-point projects will remain at zero.

C. <u>*MEASURE*</u>*:* Discuss how the proposed project integrates and/or builds on existing traffic management infrastructure (examples of systems include traffic signal systems, freeway management systems, and incident management systems). (50 Points)

<u>*RESPONSE (Limit 2,800 characters; approximately 400 words)*</u>*:*

<u>SCORING GUIDANCE (50 Points)</u>
The applicant will describe how the project would build on other infrastructure and management systems. Prioritizing projects that complement existing infrastructure and management methods, the scorer will award the full share of points to the project that best builds on other infrastructure and management systems. Remaining projects will receive a share of the full points at the scorer's discretion. This response is intended to be qualitative.

D. <u>*MEASURE*</u>*:* Demonstrate how the project provides or enhances coordination among operational and management systems and/or jurisdictions. (25 points)

<u>*RESPONSE (Limit 2,800 characters; approximately 400 words)*</u>*:*

<u>SCORING GUIDANCE (25 Points)</u>
The project that best provides or enhances coordination among operational and management systems and/or jurisdictions will receive the full points. Remaining projects will receive a share of the full points at the scorer's discretion.

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2. Usage (125 Points) – This criterion quantifies the project's potential impact by measuring the current daily person throughput and future vehicular traffic that will be served by the project. These roadway users directly benefit from the project improvements.

A. *MEASURE:* Metropolitan Council staff will calculate the current daily person throughput at one location along the A-minor arterial or non-freeway principal arterial project length using the current average annual daily traffic (AADT) volume and average daily transit ridership. If more than one corridor or location is included in the project, then the applicant should select the corridor where the most investment is being made with the project. The applicant must identify the location along the project length and provide the current AADT volume from the MnDOT 50-series maps. Reference the "Transit Connections" map for transit routes along the project. Ridership data will be provided by the Metropolitan Council staff, if public transit is currently provided on the project length. (85 points)

- Current Daily Person Throughput = (current average annual daily traffic volume x 1.30 vehicle occupancy) + average annual daily transit ridership (2019~~7~~)

RESPONSE:
- Location:_____
- Current AADT volume:_____
- Existing transit routes at the location noted above:_____

Upload the "Transit Connections" map.

SCORING GUIDANCE (85 Points)
The project with highest current daily person throughput will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had a daily person throughput of 1,000 ~~vehicles~~ people and the top project had a daily person throughput of 1,500 people~~vehicles~~, this applicant would receive (1,000/1,500)*85 points or 56 points.

B. _MEASURE:_ Provide the forecast (2040) average daily traffic volume at the same location along the A-minor arterial or non-freeway principal arterial project length, as identified in the previous measure. The applicant may choose to use a county or city travel demand model based on the Metropolitan Council model to identify the forecast (2040) average daily traffic volume or have Metropolitan Council staff determine the forecast volume using the Metropolitan Council model and project location. Respond as appropriate to the use of one type of forecast model. (40 points)

RESPONSE:
- Use Metropolitan Council model to determine forecast (2040) ADT volume☐
- If checked, METC Staff will provide Forecast (2040) ADT volume ☐

  _OR_

RESPONSE:

- Identify the approved county or city travel demand model to determine forecast (2040) ADT volume☐
- Forecast (2040) ADT volume: _____

SCORING GUIDANCE (40 Points)
The applicant with the highest forecast (2040) ADT volume will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had a daily forecast of 28,000 vehicles and the top project had a daily forecast of 32,000 vehicles, this applicant would receive (28,000/32,000)*40 points or 35 points.

3. Equity and Housing Performance (100 Points) – This criterion addresses the Council's role in advancing equity by examining the project's positive and negative impacts to low-income populations, people of color, children, people with disabilities, and the elderly along with outreach to those groups. The criterion also evaluates a community's efforts to promote affordable housing.

A. _MEASURE:_ Reference the "Socio-Economic Conditions" map generated at the beginning of the application process. Identify the project's location from the list below, as depicted on the map. Geographic proximity alone is not sufficient to receive the full points. In order to receive the maximum points, the response should address equitable distribution of benefits, mitigation of negative impacts, and community engagement for the populations selected. (30 Points)

Upload the "Socio-Economic Conditions" map used for this measure.

RESPONSE (Select one, based on the "Socio-Economic Conditions" map):

- Project located in Area of Concentrated Poverty with 50% or more of residents are people of color (ACP50): ☐ (up to 100% of maximum score)
- Project located in Area of Concentrated Poverty: ☐ (up to 80% of maximum score)
- Project's census tracts are above the regional average for population in poverty or population of color: ☐ (up to 60% of maximum score)
- Project located in a census tract that is below the regional average for population in poverty or populations of color, or includes children, people with disabilities, or the elderly: ☐ (up to 40% of maximum score)

1. (0 to 3 points) A successful project is one that has actively engaged in low-income populations, people of color, children, persons with disabilities, and the elderly during the project's development with the intent to limit negative impacts on them and, at the same time, provide

the most benefits. Describe how the project has encouraged or will engage the full cross-section of community in decision-making. Identify the communities to be engaged and where in the project development process engagement has occurred or will occur. Elements of quality engagement include: outreach to specific communities and populations that are likely to be directly impacted by the project; techniques to reach out to populations traditionally not involved in the community engagement related to transportation projects; residents or users identifying potential positive and negative elements of the project; and surveys, study recommendations, or plans that provide feedback from populations that may be impacted by the proposed project. If relevant, describe how NEPA or Title VI regulations will guide engagement activities.

(Limit 1,400 characters; approximately 200 words):

2. (0 to 7 points) Describe the project's benefits to low-income populations, people of color, children, people with disabilities, and the elderly. Benefits could relate to safety; public health; access to destinations; travel time; gap closure; leveraging of other beneficial projects and investments; and/or community cohesion. Note that this is not an exhaustive list.

(Limit 2,800 characters; approximately 400 words):

3. (-3 to 0 points) Describe any negative externalities created by the project along with measures that will be taken to mitigate them. Negative externalities can result in a reduction in points, but mitigation of externalities can offset reductions.

(Limit 2,800 characters; approximately 400 words):

Below is a list of negative impacts. Note that this is not an exhaustive list.
- Increased difficulty in street crossing caused by increased roadway width, increased traffic speed, wider turning radii, or other elements that negatively impact pedestrian access.
- Increased noise.
- Decreased pedestrian access through sidewalk removal / narrowing, placement of barriers along the walking path, increase in auto-oriented curb cuts, etc.
- Project elements that are detrimental to location-based air quality by increasing stop/start activity at intersections, creating vehicle idling areas, directing an increased number of vehicles to a particular point, etc.
- Increased speed and/or "cut-through" traffic.
- Removed or diminished safe bicycle access.
- Inclusion of some other barrier to access to jobs and other destinations.
- Displacement of residents and businesses.

- Construction/implementation impacts such as dust; noise; reduced access for travelers and to businesses; disruption of utilities; and eliminated street crossings. These tend to be temporary.
- Other

SCORING GUIDANCE (30 Points)

Each application will be scored on a 10-point scale as described below.

1. (3 points): The project(s) with the most impactful and meaningful community engagement will receive the full three points. Remaining projects will receive a share of the full points at the scorer's discretion.
2. (7 points) The project(s) with the most positive benefits will receive the full seven points. Remaining projects will receive a share of the full points at the scorer's discretion.
3. (-3 to 0 points) The scorer will reduce the score by one point (up to three total) for each negative externality. Note that the scorer can deduct points for negatives not acknowledged in the application; the scorer will document any negatives not acknowledged in the application and the reasons for any associated point reductions. The scorer can add one to three points for successful mitigation of negative project elements based on the degree to which they are mitigated. Note that this score cannot provide more points than are deducted.

Each score from the above 10-point scale will then be adjusted to the appropriate geography.
Note: Due to the geographic adjustment to scores, it is possible that the above process will result in no project receiving the maximum allotment of points. In this case, the highest-scoring application for this measure will be adjusted to receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 10 points and the top project had 20 points, this applicant would receive (10/20)*30 points or 15 points. Note also that it is possible to score negative points on this measure.

B. *MEASURE:* Metropolitan Council staff will award points to the project based on the ~~2017~~ 2019 Housing Performance Score for the city or township in which the project is located. ~~The score includes consideration of affordability and diversification, local initiatives to facilitate affordable workforce housing development or preservation, and density of residential development.~~ If the project is in more than one jurisdiction, the points will be awarded based on a weighted average using the percent of total funds to be spent in each jurisdiction.

The housing performance score is calculated from data in these four categories:
- New affordable or mixed-income housing completed in the last ten years;
- Preservation projects completed in the last seven years and/or Substantial rehabilitation projects completed in the last three years;
- Housing program participation and production, and housing policies and ordinances
- Characteristics of the existing housing stock.

If a project is located in a city or township with no allocation of affordable housing need (either there is no forecasted household growth or the area does not have land to support sewered development), then the project will not be disadvantaged by this measure and the project's total score will be adjusted during scoring as a result.

RESPONSE:

- City/Township: _____
- Funds to be spent within each City/Township:_____

- Percent of total funds to be spent within City/Township: _____*(online calculation)*

SCORING GUIDANCE (70 Points)

The applicant with the highest ~~2017~~ 2019 Housing Performance Score will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had a Housing Performance Score of 55 and the top project had a Housing Performance Score of 90, this applicant would receive (55/90)*70 points or 43 points.

Note: Metropolitan Council staff will score this measure.

Projects will use the city Housing Performance Score based on the project location. If a project is located in more than one jurisdiction, the points will be awarded based on a weighted average of the city or township scores for the project location based on the length of the project in each jurisdiction. For stand-alone roadway (intersection, bridge, underpass, and interchange) projects, a one-mile radius-buffer will be drawn around the project. If the radius-buffer enters more than one jurisdiction, the points will be awarded based on the proportionate population of the Census blocks in each jurisdiction that are all or partially located in the area within the one-mile radius-buffer.

If a project is located in a city or township with no allocation of affordable housing need (either there is no forecasted household growth or the area does not have land to support sewered development), then the project will not be disadvantaged by this measure and the project's total score will be adjusted as a result.

If this is the case, then the total points possible in the application will be 930 instead of 1,000. The total points awarded through the rest of the application (900 as a hypothetical example) will be divided by 930, then multiplied by 1,000. Therefore, a project scoring 900 out of 930, will equate to 968 points on a 1,000-point scale.

If a portion of the project is located in a city with an affordable housing allocation and the other portion is located in a township with no affordable housing allocation, then a combination of the weighted average and no affordable housing methodologies should be used. This will result in a total score that will be somewhere between 930 and 1,000; then the score will need to be adjusted to fit a 1,000-point scale.

4. Infrastructure Age (75 Points) – This criterion will assess the degree to which functionally obsolete infrastructure elements are being replaced and improved.

A. *MEASURE:* Describe how various equipment will be improved or replaced as part of this project relative to its age and whether it is functionally obsolete.

   RESPONSE (Limit 2,800 characters; approximately 400 words):

SCORING GUIDANCE (75 Points)

   The project that best provides for stewardship of public funds and resource by replacing functionally obsolete equipment and finding cost-effective solutions to upgrade viable equipment will receive the full points. Remaining projects will receive a share of the full points at the scorer's discretion.

5. Congestion Reduction/Air Quality (200 Points) – This criterion measures the project's ability to make improvements in congested corridors using speed data from the Congestion Management Process Plan. The project will also be measured based on its ability to reduce emissions.

A. *MEASURE:* Council staff will provide travel speed data to compare the peak hour travel speed in the project area to free flow conditions on the "Level of Congestion" map. If more than one corridor or location is included in the project, then the applicant should select the corridor on which the most investment is being made with the project. The applicant must identify the corridor as part of the response. It is anticipated that the Congestion Management Process Plan will be further incorporated into the Regional Solicitation as part of the 2022 Regional Solicitation funding cycle. (150 Points)

   RESPONSE:

   - Corridor:_____
   - Corridor Start and End Points:_____
   - Free-Flow Travel Speed:_____
   - Peak Hour Travel Speed:_____
   - Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow (online calculation):_____

   Upload the "Level of Congestion" map used for this measure.

   > SCORING GUIDANCE (150 Points)
   > The applicant with the most congestion (measured by the largest percentage decrease in peak hour travel speeds relative to free flow conditions) will receive the full points for the measure. Remaining projects will receive a proportionate share of the points. For example, if the application being scored showed a 5% decrease of travel speeds in the peak hour relative to free flow conditions and the top project had a 10% reduction, this applicant would receive (5/10)*150 points, or 75 points.

B. *MEASURE:* Discuss how the project will reduce emissions and congestion. The applicant should focus on any reduction in CO, NO_X, and VOC. Projects on roadways that provide relief to congested, parallel principal arterial roadways should reference the current MnDOT Metro Freeway Congestion Report and discuss the systemwide emissions and congestion impact of the proposed improvements.

   RESPONSE: (Limit 2,800 characters; approximately 400 words):

   > SCORING GUIDANCE (50 Points)
   > The project that is most likely to reduce emissions and congestion will receive the full points. Remaining projects will receive a share of the full points at the scorer's discretion.

6. Safety (200 Points) – This criterion addresses the project's ability to correct deficiencies and improve the overall safety of an existing or future roadway facility. It will assess the project's monetized safety benefits.

A. *MEASURE:* Calculate the reduction in the total number of crashes due to improvements on the A-minor arterial or non-freeway principal arterial made by the project. The applicant must base the estimate of crash reduction on the methodology consistent with the latest MnDOT Metro District Highway Safety Improvement Program (HSIP) application (www.dot.state.mn.us/stateaid/trafficsafety.html). Applicants should focus on the crash analysis for reactive projects.

Crash data must be obtained for the project length using the MnDOT TIS system average for calendar years ~~2013~~ 2017 through ~~2015~~2019. Crash data should include all crash types and severities, including pedestrian and bicycle crashes.

Applicants should request crash data from MnDOT as early as possible. The applicant must then attach a listing of the crashes reduced and the HSIP Benefit/Cost (B/C) worksheet (www.dot.state.mn.us/stateaid/trafficsafety.html) that identifies the resulting benefit associated with the project. As part of the response, please detail and attach the crash modification factor(s) used from FHWA's Crash Modification Factors Clearinghouse: http://www.cmfclearinghouse.org/. This measure requests the monetized safety benefit of the project. The cost of the project is scored in the Cost Effectiveness criterion.

RESPONSE:

- Crash Modification Factors Used _____
- Rationale for Crash Modifications Selected (*Limit 1,400 characters; approximately 200 words)*: _____
- Project Benefit ($) from B/C ratio: _____

Upload Crash Modification Factors and B/C Worksheet.

SCORING GUIDANCE (50 Points)
The applicant with the highest dollar value of benefits will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had safety benefits of $11,000,000 and the top project had safety benefits of $16,000,000, this applicant would receive (11,000,000/16,000,000)*50 points or 34 points.

B. *MEASURE:* Discuss how the project will improve safety issues in the project area. As part of the response, the applicant may want to reference the project relative to County Highway Safety Plan or similar planning documents and what the project will specifically do to improve the safety issue.

RESPONSE (Limit 2,800 characters; approximately 400 words):

SCORING GUIDANCE (150 Points)
The project that will provide the most safety benefits and alleviate identified safety concerns will receive the full points. Remaining projects will receive a share of the full points at the scorer's discretion.

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7. Multimodal Elements and Existing Connections (50 Points) – This criterion measures how the project improves the travel experience, safety, and security for other modes of transportation, and addresses the safe integration of these modes. The *Transportation Policy Plan* requires that explicit consideration of all users of the transportation system be considered in the planning and scoping phase of roadway projects.

A. *MEASURE:* Describe how the project positively affects the multimodal system.
- Discuss any bicycle, pedestrian, or transit elements that are included as part of the project and how they improve the travel experience, safety, and security for users of these modes. Applicants should make sure that new multimodal elements described in the response are accounted for as part of the cost estimate form earlier in the application. Applicants should note if there is no transit service in the project area and identify supporting studies or plans that address why a mode may not be incorporated in the project (e.g., a bicycle system plan that locates bikeway facilities on a lower-volume parallel route).
- Describe how the proposed multimodal improvements positively affect identified alignments in the Regional Bicycle Transportation Network (RBTN) or along a regional trail, if applicable.
- Describe how the proposed multimodal improvements either provide a new, or improve an existing a Major River Bicycle Barrier Crossing (MRBBC) as defined in the 2040 Transportation Policy Plan (TPP) or an identified Regional Bicycle Barrier Improvement Area as defined in the TPP and Technical Addendum to the Regional Bicycle Barriers Study (May 2019), if applicable.
- Discuss the existing bicycle, pedestrian, and transit connections and how the project enhances these connections.
- Discuss whether the project implements specific locations identified as being deficient in a completed ADA Transition Plan.

RESPONSE (Limit 2, 800 characters; approximately 400 words) :

SCORING GUIDANCE (50 Points)

The project that most positively affects the multimodal system will receive the full points. Remaining projects will receive a share of the full points at the scorer's discretion. The project score will be based on the quality of the improvements, as opposed to being based solely on the number of modes addressed. Points can be earned for incorporating multimodal project elements, positively affecting identified alignments in the Regional Bicycle Transportation Network (RBTN) or regional trail, Major River Bicycle Barrier Crossing, or Regional Bicycle Barrier, or for making connections with existing multimodal systems, or helping to implement an ADA Transition Plan. Projects do not need all of these elements to be awarded all of the points.

Scorers should make sure that new multimodal elements described in the response are accounted for on the cost estimate form earlier in the application.

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8. Risk Assessment (75 Points) – This criterion measures the number of risks associated with successfully building the project. High-risk applications increase the likelihood that projects will withdraw at a later date. If this happens, the region is forced to reallocate the federal funds in a short amount of time or return them to the US Department of Transportation. These risks are outlined in the checklist in the required Risk Assessment.

A. *MEASURE:* Applications involving construction must complete the Risk Assessment. This checklist includes activities completed to-date, as well as an assessment of risks (e.g., right-of-way acquisition, proximity to historic properties, etc.).

RESPONSE (Complete Risk Assessment):

Please check those that apply and fill in anticipated completion dates for all projects, except for new/expanded transit service projects or transit vehicle purchases.

1) **Layout (30 Percent of Points)**
    Layout should include proposed geometrics and existing and proposed right-of-way boundaries
    100% ☐ Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties that the project goes through or agencies that maintain the roadway(s)). **A PDF of the layout must be attached along with letters from each jurisdiction to receive points.**
    50% ☐ Layout completed but not approved by all jurisdictions. **A PDF of the layout must be attached to receive points.**
    0% ☐ Layout has not been started

    Anticipated date or date of completion: _____

2) **Review of Section 106 Historic Resources (20 Percent of Points)**
    100% ☐ No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and project is not located on an identified historic bridge
    100% ☐ There are historical/archeological properties present but determination of "no historic properties affected" is anticipated.
    80% ☐ Historic/archeological property impacted; determination of "no adverse effect" anticipated
    40% ☐ Historic/archeological property impacted; determination of "adverse effect" anticipated
    0% ☐ Unsure if there are any historic/archaeological properties in the project area.

    Project is located on an identified historic bridge: ☐

3) **Right-of-Way (30 Percent of Points)**
    100% ☐ Right-of-way, permanent or temporary easements either not required or all have been acquired
    50% ☐ Right-of-way, permanent or temporary easements required, plat, legal descriptions, or official map complete
    25% ☐ Right-of-way, permanent or temporary easements required, parcels identified
    0% ☐ Right-of-way, permanent or temporary easements required, parcels not all identified

    Anticipated date or date of acquisition _____

4) **Railroad Involvement (20 Percent of Points)**
100% ☐ No railroad involvement on project or railroad Right-of-Way agreement is executed (**include signature page, if applicable**)
50% ☐ Railroad Right-of-Way Agreement required; negotiations have begun
0% ☐ Railroad Right-of-Way Agreement required; negotiations have not begun.

Anticipated date or date of executed Agreement _____

5) **Public Involvement (20 Percent of Points)**

The project applicant must describe how the transportation problem was identified at the proposed project location, how the potential solution was identified instead of other options, and the public involvement completed to date on the project. Upfront work completed on a project will likely reduce risks to project implementation

RESPONSE (Limit 2,800 characters; approximately 400 words):

SCORING GUIDANCE (75 Points)
The applicant with the most points on the Risk Assessment (more points equate to less project risk) will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 40 points and the top project had 70 points, this applicant would receive (40/70)*75 points or 43 points.

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9. Cost Effectiveness (100 Points) – This criterion will assess the project's cost effectiveness based on the total TAB-eligible project cost (not including noise walls) and total points awarded in the previous 8 criteria.

A. *MEASURE:*

Calculate the cost effectiveness of the project. Metropolitan Council staff will divide the number of points awarded in the previous criteria by the TAB-eligible project cost (not including noise walls). If a project has been awarded other outside, competitive funding (e.g., state bonding, Transportation Economic Development Program, Minnesota Highway Freight Program), project sponsors may reduce the total project cost for the purposes of this scoring measure by the amount of the outside funding award.

- Cost effectiveness = total number of points awarded in previous criteria/total TAB-eligible project cost (not including noise walls)

RESPONSE (This measure will be calculated after the scores for the other measures are tabulated by the Scoring Committee):

- Total Project Cost (entered in Project Cost Form):_____ *(automatically calculated)*
- Enter amount of Noise Walls: _____
- Enter amount of any outside, competitive funding (attach documentation of award): _____
- Points Awarded in Previous Criteria: _____ (entered by Metropolitan Council staff)

SCORING GUIDANCE (100 Points)

The applicant with the most points (i.e., the benefits) per dollar will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the top project received .0005 points per dollar and the application being scored received .00025 points per dollar, this applicant would receive (.00025/.0005)*100 points or 50 points.

The scorer for this measure will also complete a reasonableness check of the total project cost that is used for this measure. The scorer may follow up with the applicant to clarify any questions. Up to 50 percent of points awarded for this measure can be deducted if the scorer does not believe that the cost estimate is reasonable.

TOTAL: 1,100 POINTS

Spot Mobility and Safety– Prioritizing Criteria and Measures

July 10, 2019

<u>Definition</u>: An at-grade intersection or corridor-level intersection improvement project that focuses on mobility and safety (described as a Regional Mobility project under Spot Mobility in the TPP). New interchanges or projects that add new thru lane capacity (e.g., two-lane to four-lane expansions) should apply in the Strategic Capacity application category. Projects that address mobility and safety at multiple intersections on a corridor are encouraged. However, projects that propose to reconstruct the roadway for the length of the corridor should apply in the Roadway Reconstruction/Modernization application category.

<u>Examples of Spot Mobility and Safety Projects</u>:

- New or extended turn lanes at one or more intersections
- New intersection controls such as roundabouts or traffic signals
- Unsignalized or signalized reduced conflict intersections
- Other innovative/alternative intersection designs such as green t-intersections

Scoring:

Criteria and Measures	Points	% of Total Points
1. Role in the Regional Transportation System and Economy	**175**	**16%**
Measure A - Congestion within the Project Area, Level of Adjacent Congestion, Principal Arterial Intersection Conversion Study Priorities, or Congestion Management Safety Plan Opportunity Areas	100	
Measure B - Regional Truck Corridor Study Tiers	75	
2. Equity and Housing Performance	**100**	**9%**
Measure A - Connection to disadvantaged populations and project's benefits, impacts, and mitigation	30	
Measure B - Housing Performance Score	70	
3. Congestion Reduction/Air Quality	**275**	**25%**
Measure A - Vehicle delay reduced	200	
Measure B - Kg of emissions reduced	75	
4. Safety	**275**	**25%**
Measure A - Crashes reduced	225	
Measure B - Pedestrian Crash Reduction (Proactive)	50	
5 Multimodal Elements and Existing Connections	**100**	**9%**
Measure A - Transit, bicycle, or pedestrian project elements & connections	100	
6. Risk Assessment	**75**	**7%**
Measure A - Risk Assessment Form	75	
7 Cost Effectiveness	**100**	**9%**
Measure A - Cost effectiveness (total points awarded/total project cost)	100	
Total	**1,100**	

1. Role in the Regional Transportation System and Economy (175 Points) – Tying regional policy (Thrive MSP2040) to the Regional Solicitation, this criterion measures the project's ability to serve a transportation purpose within the regional transportation system and economy based on the congestion in the project area, congestion levels along the regional transportation system near the project, how it aligns with the Principal Arterial Intersection Conversion Study, Congestion Management Safety Plan IV, , and the Regional Truck Corridor Study.

A. *MEASURE:* Identify the level of congestion within the project area. This measure uses speed data as was used as part of the Congestion Management Process (CMP) Plan. It is anticipated that the CMP Plan will be further incorporated into the Regional Solicitation as part of the 2022 Regional Solicitation funding cycle. Also, identify the level of congestion on a parallel route and how the project area is prioritized in the Principal Arterial Intersection Conversion Study and Congestion Management Safety Plan IV. Respond to each of the four sub-sections below. Projects will get the highest score of the four sub-sections.

Congestion within Project Area:
The measure will analyze the level of congestion within the project area. Council staff will provide travel speed data on the "Level of Congestion" map. The analysis will compare the peak hour travel speed within the project area to free-flow conditions.

RESPONSE:
- Free-Flow Travel Speed: _____
- Peak Hour Travel Speed: _____
- Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow (calculation): _____

Upload the "Level of Congestion" map used for this measure.

Congestion on adjacent Parallel Routes:
The measure will analyze the level of congestion on an adjacent parallel A-minor arterial or principal arterial to determine the importance of the roadway in managing congestion on the Regional Highway System. Council staff will provide travel speed data on an applicant-selected adjacent parallel route that is adjacent to the proposed project on the "Level of Congestion" map. The analysis will compare the peak hour travel speed on an adjacent parallel route to free-flow conditions on this same route to understand congestion levels in the area of the project, which correlates to the role that the project plays in the regional transportation system and economy. The applicant must identify the adjacent parallel corridor as part of the response. The end points of this adjacent parallel corridor must align as closely as possible to the project end points.

RESPONSE:
- Adjacent Parallel Corridor: _____
- Adjacent Parallel Corridor Start and End Points: _____
- Free-Flow Travel Speed): _____
- Peak Hour Travel Speed: _____
- Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow (calculation): _____

Upload the "Level of Congestion" map used for this measure.

Principal Arterial Intersection Conversion Study:

The measure relies on the results of the Principal Arterial Intersection Conversion Study, which prioritized non-freeway principal arterial intersections. In addition to interchange projects, other lane expansion projects that make improvements to a low-, medium-, or high-priority intersection can also earn points in this measure.

Use the final study report for this measure: metrocouncil.org/PAICS

RESPONSE (Select one for your project, based on the Principal Arterial Intersection Conversion Study):

- Proposed at-grade project that reduces delay at a High Priority Intersection: ☐ (100 Points)
- Proposed at-grade project that reduces delay at a Medium Priority Intersection: ☐ (90 Points)
- Proposed at-grade project that reduces delay at a Low Priority Intersection: ☐ (80 Points)
- Not listed as a priority in the study: ☐ (0 Points)

Congestion Management Safety Plan IV:

The measure relies on the results on MnDOT's Congestion Management Safety Plan IV (CMSP IV), which prioritized lower cost/high benefit, spot mobility projects on MnDOT-owned roadways. For the Regional Solicitation, only the CMSP opportunity areas on the A-minor arterial or non-freeway principal arterial systems are eligible. Principal arterial projects on the freeway system are not eligible for funding per TAB-adopted rules.

Use the final list of CMSP IV opportunity area locations as depicted in the 2040 Transportation Policy Plan (2018).

RESPONSE (Select one for your project):

- Proposed at-grade project that reduces delay at a CMSP opportunity area: ☐ (100 Points)
- Not listed as a CMSP priority location: ☐ (0 Points)

SCORING GUIDANCE (100 Points)

Due to the four scoring methods, more than one project can score the maximum points. In order to be awarded points for this measure the proposed project itself must show some delay reduction in measure 3A. If the project does not reduce delay, then it will score 0 points for this measure.

Congestion within Project Area: The applicant with the most congestion within the project area (measured by the largest percentage decrease in peak hour travel speeds relative to free-flow conditions) will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored showed a 5% decrease of travel speeds in the peak hour relative to free flow conditions and the top project had a 10% reduction, this applicant would receive (5/10)*100 points, or 50 points. If the project covers more than one segment of speed data, the applicants can use the one that is most beneficial to their score.

Congestion on adjacent Parallel Routes: The applicant with the most congestion on an adjacent parallel route (measured by the largest percentage decrease in peak hour travel speeds relative to free-flow conditions) will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored showed a 5% decrease of travel speeds in the peak hour on the adjacent parallel route relative to free flow conditions and the top project had a 10% reduction, this applicant would receive (5/10)*100 points, or 50 points. Applicants can use the adjacent parallel route that is most beneficial to their score.

Principal Arterial Intersection Conversion Study: Projects will be scored based on their Principal Arterial Intersection Conversion Study priorities.

Congestion Management and Safety Plan IV: Projects will be scored based on whether their project location is in a Congestion Management and Safety Plan opportunity area.

The scorer will assess if the applicant would score highest with congestion on adjacent parallel routes part of the measure, the Principal Arterial Intersection Conversion Study part of the measure, or the CMSP IV part of the measure and give the applicant the highest of the four scores out of a maximum of 1000 points.

Note: Due to the use of multiple sub-sections, multiple applicants may receive the full 100 points.

B. *MEASURE:* This criterion relies on the results on the Truck Highway Corridor Study, which prioritized all principal and minor arterials based on truck volume, truck percentage of total traffic, proximity to freight industry clusters, and proximity to regional freight terminals. (75 points)

Use the final study report for this measure: https://metrocouncil.org/Transportation/Planning-2/Transit-Plans,-Studies-Reports/Highways-Roads/Truck-Freight-Corridor-Study.aspx

RESPONSE: (Select one for your project, based on the Regional Truck Corridor Study):
- Along Tier 1: ☐
- Along Tier 2: ☐
- Along Tier 3: ☐
- The project provides a direct and immediate connection (i.e., intersects) with either a Tier 1, Tier 2, or Tier 3 corridor: ☐
- None of the tiers: ☐

SCORING GUIDANCE (75 Points)
Applicants will be awarded points as assigned in the above tiers:
- Projects along Tier 1: 75 points
- Projects along Tier 2: 65 points
- Projects along Tier 3: 55 points
- Projects that that provide a direct and immediate connection to a corridor: 10 points.
- None of the tiers: 0 points

If no applicant is along Tier 1, the top-scoring application(s) will be adjusted to 75 points, with the others adjusted proportionately.

Note: Due to the use of tiered scoring, multiple applications can receive the full points.

2. Equity and Housing Performance (100 Points) – This criterion addresses the Council's role in advancing equity by examining the project's positive and negative impacts to low-income populations, people of color, children, people with disabilities, and the elderly along with outreach to those groups. The criterion also evaluates a community's efforts to promote affordable housing.

A. *MEASURE:* Reference the "Socio-Economic Conditions" map generated at the beginning of the application process. Identify the project's location from the list below, as depicted on the map. Geographic proximity alone is not sufficient to receive the full points. In order to receive the maximum points, the response should address equitable distribution of benefits, mitigation of negative impacts, and community engagement for the populations selected. (30 Points)

Upload the "Socio-Economic Conditions" map used for this measure.

RESPONSE (Select one, based on the "Socio-Economic Conditions" map):

- Project located in Area of Concentrated Poverty with 50% or more of residents are people of color (ACP50): ☐ (up to 100% of maximum score)
- Project located in Area of Concentrated Poverty: ☐ (up to 80% of maximum score)
- Project's census tracts are above the regional average for population in poverty or population of color: ☐ (up to 60% of maximum score)
- Project located in a census tract that is below the regional average for population in poverty or populations of color, or includes children, people with disabilities, or the elderly: ☐ (up to 40% of maximum score)

1. (0 to 3 points) A successful project is one that has actively engaged in low-income populations, people of color, children, persons with disabilities, and the elderly during the project's development with the intent to limit negative impacts on them and, at the same time, provide the most benefits. Describe how the project has encouraged or will engage the full cross-section of community in decision-making. Identify the communities to be engaged and where in the project development process engagement has occurred or will occur. Elements of quality engagement include: outreach to specific communities and populations that are likely to be directly impacted by the project; techniques to reach out to populations traditionally not involved in the community engagement related to transportation projects; residents or users identifying potential positive and negative elements of the project; and surveys, study recommendations, or plans that provide feedback from populations that may be impacted by the proposed project. If relevant, describe how NEPA or Title VI regulations will guide engagement activities.

   (Limit 1,400 characters; approximately 200 words):

2. (0 to 7 points) Describe the project's benefits to low-income populations, people of color, children, people with disabilities, and the elderly. Benefits could relate to safety; public health; access to destinations; travel time; gap closure; leveraging of other beneficial projects and investments; and/or community cohesion. Note that this is not an exhaustive list.

   (Limit 2,800 characters; approximately 400 words):

3. (-3 to 0 points) Describe any negative externalities created by the project along with measures that will be taken to mitigate them. Negative externalities can result in a reduction in points, but mitigation of externalities can offset reductions.

> *(Limit 2,800 characters; approximately 400 words):*

Below is a list of negative impacts. Note that this is not an exhaustive list.
- Increased difficulty in street crossing caused by increased roadway width, increased traffic speed, wider turning radii, or other elements that negatively impact pedestrian access.
- Increased noise.
- Decreased pedestrian access through sidewalk removal / narrowing, placement of barriers along the walking path, increase in auto-oriented curb cuts, etc.
- Project elements that are detrimental to location-based air quality by increasing stop/start activity at intersections, creating vehicle idling areas, directing an increased number of vehicles to a particular point, etc.
- Increased speed and/or "cut-through" traffic.
- Removed or diminished safe bicycle access.
- Inclusion of some other barrier to access to jobs and other destinations.
- Displacement of residents and businesses.
- Construction/implementation impacts such as dust; noise; reduced access for travelers and to businesses; disruption of utilities; and eliminated street crossings. These tend to be temporary.
- Other

SCORING GUIDANCE (30 Points)

Each application will be scored on a 10-point scale as described below.

1. (3 points): The project(s) with the most impactful and meaningful community engagement will receive the full three points. Remaining projects will receive a share of the full points at the scorer's discretion.
2. (7 points) The project(s) with the most positive benefits will receive the full seven points. Remaining projects will receive a share of the full points at the scorer's discretion.
3. (-3 to 0 points) The scorer will reduce the score by one point (up to three total) for each negative externality. Note that the scorer can deduct points for negatives not acknowledged in the application; the scorer will document any negatives not acknowledged in the application and the reasons for any associated point reductions. The scorer can add one to three points for successful mitigation of negative project elements based on the degree to which they are mitigated. Note that this score cannot provide more points than are deducted.

Each score from the above 10-point scale will then be adjusted to the appropriate geography.

Note: Due to the geographic adjustment to scores, it is possible that the above process will result in no project receiving the maximum allotment of points. In this case, the highest-scoring application for this measure will be adjusted to receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 10 points and the top project had 20 points, this applicant would receive (10/20)*30 points or 15 points. Note also that it is possible to score negative points on this measure.

B. _MEASURE_: Metropolitan Council staff will award points to the project based on the 2019 Housing Performance Score for the city or township in which the project is located. If the project is in more than one jurisdiction, the points will be awarded based on a weighted average using the length or population of the project in each jurisdiction.

The housing performance score is calculated from data in these four categories:
- New affordable or mixed-income housing completed in the last ten years;
- Preservation projects completed in the last seven years and/or Substantial rehabilitation projects completed in the last three years;
- Housing program participation and production, and housing policies and ordinances
- Characteristics of the existing housing stock.

For stand-alone intersection, bridge, underpass, and interchange projects, a one-mile radius-buffer will be drawn around the project. If the radius-buffer enters more than one jurisdiction, the points will be awarded based on the proportionate population of the Census blocks in each jurisdiction that are all or partially located in the area within the one-mile radius-buffer.

If a project is located in a city or township with no allocation of affordable housing need (either there is no forecasted household growth or the area does not have land to support sewered development), then the project will not be disadvantaged by this measure and the project's total score will be adjusted as a result.

RESPONSE:
- City/Township: _____
- Length of Segment (For stand-alone projects, enter population from Regional Economy map) within each City/Township: _____
- Housing Score: _____ _(online calculation)_

SCORING GUIDANCE (70 Points)

The applicant with the highest 2019 Housing Performance Score will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had a Housing Performance Score of 55 and the top project had a Housing Performance Score of 90, this applicant would receive (55/90)*70 points or 43 points.

Note: Metropolitan Council staff will score this measure.

Projects will use the city Housing Performance Score based on the project location. If a project is located in more than one jurisdiction, the points will be awarded based on a weighted average of the city or township scores for the project location based on the length of the project in each jurisdiction. For stand-alone intersection, bridge, underpass, and interchange projects, a one-mile radius-buffer will be drawn around the project. If the radius-buffer enters more than one jurisdiction, the points will be awarded based on the proportionate population of the Census blocks in each jurisdiction that are all or partially located in the area within the one-mile radius-buffer.

If a project is located in a city or township with no allocation of affordable housing need (either there is no forecasted household growth or the area does not have land to support sewered development), then the project will not be disadvantaged by this measure and the project's total score will be adjusted as a result.

If this is the case, then the total points possible in the application will be 930 instead of 1,000. The total points awarded through the rest of the application (900 as a hypothetical example) will be divided by 930, then multiplied by 1,000. Therefore, a project scoring 900 out of 930, will equate to 968 points on a 1,000-point scale.

If a portion of the project is located in a city with an affordable housing allocation and the other portion is located in a township with no affordable housing allocation, then a combination of the weighted average and no affordable housing methodologies should be used. This will result in a total score that will be somewhere between 930 and 1,000; then the score will need to be adjusted to fit a 1,000-point scale.

3. Congestion Reduction/Air Quality (275 Points) – This criterion measures the project's ability to reduce intersection delay and emissions during peak hour conditions. In addition, it will address its ability to improve congested intersections operating at unacceptable levels of service during peak hour conditions.

A. *MEASURE:* Conduct a capacity analysis at one or more of the intersections being improved by the roadway project using existing turning movement counts (collected within the last three years) in the weekday a.m. or p.m. peak hour and Synchro or HCM software. The analysis must include build and no build conditions (with and without the project improvements). The applicant must show the current total peak hour delay at one or more intersections and the reduction in total peak hour intersection delay at these intersections in seconds, due to the project. If more than one intersection is examined, then the delay reduced by each intersection can be can added together to determine the total delay reduced by the project.

The applicant should include the appropriate Synchro or HCM full reports (including the Timing Page Report) that support the improvement in total peak hour delay and should conduct the analysis using the following:
- Under the network settings, all defaults should be used for lanes, saturation flow rates, volumes, and simulation
- Use Synchro's automatic optimization to determine cycle, offset and splits (for traffic signals). Use the setting when assessing delay both with and without the project. This methodology will ensure that all applicants start with their signal systems optimized when determining existing delay.
- Project improvements assumed in the build condition should be reflected in the total project cost, such as additional through or turn lanes and protective left-turn phasing
- Roadway lengths for intersection approaches must be the same length for before and after scenarios
- An average weekday should be used for the existing conditions instead of a weekend, peak holiday, or special event time period that is not representative of the corridor for most of the year
- For most projects, the volumes with and without the project should be the same; however, some project types such as new roadways, new ramps, or new interchanges may have different volumes.

Total Peak Hour Delay Reduced (Seconds) = Total Peak Hour Delay Per Vehicle x Vehicles Per Hour

RESPONSE:
- Total Peak Hour Delay/Vehicle without the Project (Seconds/Vehicle):_____
- Total Peak Hour Delay/Vehicle with the Project (Seconds/Vehicle):_____
- Total Peak Hour Delay/Vehicle Reduced by the Project (Seconds/Vehicle):_____ *(automatically calculated)*
- Volume without the Project (Vehicles Per Hour): _____
- Volume with the Project (Vehicles Per Hour): _____
- Total Peak Hour Delay Reduced by the Project (Seconds): _____ *(automatically calculated)*

EXPLANATION of date of last signal retiming for signalized corridors (Limit 1,400 characters; approximately 200 words):

Upload Synchro or HCM Report

SCORING GUIDANCE (200 Points)

The applicant with the most peak hour vehicle delay reduced by the project improvement will receive the full points for the measure. Remaining projects will receive a proportionate share of the points. For example, if the application being scored reduced delay by 5,000 seconds and the top project reduced delay by 25,000 seconds, this applicant would receive (5,000/25,000)*200 points, or 40 points.

B. *MEASURE:* Using the Synchro or HCM analysis completed in the previous measure, identify the total peak hour emissions reduction in kilograms (CO, NO$_X$, VOC) due to the project. The applicant should include the appropriate Synchro or HCM reports (including the Timing Page Report) that support the improvement in total peak hour emissions. If more than one intersection is examined, then the emissions reduced by each intersection can be can added together to determine the total emissions reduced by the project.

- Total Peak Hour Emissions Reduced (Kilograms) = Total Peak Hour Emissions without the project – Total Peak Hour Emissions with the Project

RESPONSE (Calculation):

- Total (CO, NO$_X$, and VOC) Peak Hour Emissions without the Project (Kilograms):_____
- Total (CO, NO$_X$, and VOC) Peak Hour Emissions with the Project (Kilograms):_____
- Total (CO, NO$_X$, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):_____

EXPLANATION of methodology and assumptions used (Limit 1,400 characters; approximately 200 words):

SCORING GUIDANCE (75 Points)
The applicant with the most kilograms reduced by the project improvement will receive the full points for the measure. Remaining projects will receive a proportionate share of the full. For example, if the application being scored reduced emissions by 3 kilograms and the top project reduced emissions by 5 kilograms, this applicant would receive (3/5)*75 points or 45 points.

4. Safety (275 Points) – This criterion addresses the project's ability to correct deficiencies and improve the overall safety of an existing roadway facility. It will assess the project's monetized safety benefits.

A. *MEASURE:* Calculate the reduction in the total number of crashes due to improvements on the A-minor arterial or non-freeway principal arterial made by the project. The applicant must base the estimate of crash reduction on the methodology consistent with the latest Highway Safety Improvement Program (HSIP) application (www.dot.state.mn.us/stateaid/trafficsafety.html). Applicants should focus on the crash analysis for reactive projects.

Crash data must be obtained for the project length using the MnDOT TIS system average for calendar years 2016 through 2018. Crash data should include all crash types and severities, including pedestrian and bicycle crashes.

Applicants should request crash data from MnDOT as early as possible. The applicant must then attach a listing of the crashes reduced and the HSIP Benefit/Cost (B/C) worksheet (www.dot.state.mn.us/stateaid/trafficsafety.html) that identifies the resulting benefit associated with the project. As part of the response, please detail and attach the crash modification factor(s) used from FHWA's Crash Modification Factors Clearinghouse: http://www.cmfclearinghouse.org/. This measure requests the monetized safety benefit of the project. The cost of the project is scored in the Cost Effectiveness criterion.

SCORING GUIDANCE (225 Points)
The applicant with the highest dollar value of benefits will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had safety benefits of $11,000,000 and the top project had safety benefits of $16,000,000, this applicant would receive (11,000,000/16,000,000)*225 points or 155 points.

A. *MEASURE:* Discuss how the project will improve safety for pedestrians. Safety countermeasures for pedestrians can include those identified by the FHWA as part of its Safe Transportation for Every Pedestrian program or others in its Proven Safety Countermeasures (e.g., pedestrian refuge islands, raised crosswalks, pedestrian hybrid beacons, leading pedestrian intervals). More information about pedestrian safety best practices is also available in MnDOT's *Best Practices for Pedestrian/Bicycle Safety.*

SCORING GUIDANCE (50 Points)
The project that will provide the most improvement to pedestrian safety will receive full points. Remaining projects will receive a share of the full points at the scorer's discretion.

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5. Multimodal Elements and Existing Connections (100 Points) – This criterion measures how the project improves the travel experience, safety, and security for other modes of transportation and addresses the safe integration of these modes. The *Transportation Policy Plan* requires that explicit consideration of all users of the transportation system be considered in the planning and scoping phase of roadway projects.

A. <u>MEASURE:</u> Describe how the project positively affects the multimodal system.
- Discuss any bicycle, pedestrian, or transit elements that are included as part of the project and how they improve the travel experience, safety, and security for users of these modes. Applicants should make sure that new multimodal elements described in the response are accounted for as part of the cost estimate form earlier in the application. Applicants should note if there is no transit service in the project area and identify supporting studies or plans that address why a mode may not be incorporated in the project (e.g., a bicycle system plan that locates bikeway facilities on a lower-volume parallel route).
- Describe how the proposed multimodal improvements positively affect identified alignments in the Regional Bicycle Transportation Network (RBTN) or along a regional trail, if applicable.
- Describe how the proposed multimodal improvements either provide a new, or improve an existing a Major River Bicycle Barrier Crossing (MRBBC) as defined in the 2040 Transportation Policy Plan (TPP) or an identified Regional Bicycle Barrier Improvement Area as defined in the TPP and Technical Addendum to the Regional Bicycle Barriers Study (May 2019), if applicable.
- Discuss the existing bicycle, pedestrian, and transit connections and how the project enhances these connections.
- <u>Discuss whether the project implements specific locations identified as being deficient in a completed ADA Transition Plan.</u>

<u>RESPONSE (Limit 2, 800 characters; approximately 400 words):</u>

SCORING GUIDANCE (100 Points)

The project that most positively affects the multimodal system will receive the full points. Remaining projects will receive a share of the full points at the scorer's discretion. The project score will be based on the quality of the improvements, as opposed to being based solely on the number of modes addressed. Points can be earned for incorporating multimodal project elements, positively affecting identified alignments in the Regional Bicycle Transportation Network (RBTN), regional trail, Major River Bicycle Barrier Crossing, or Regional Bicycle Barrier, for making connections with existing multimodal systems, or helping to implement an ADA Transition Plan. Projects do not need all of these elements to be awarded all of the points. Multimodal elements for rural roadway projects may include wider shoulders that will be used by bicyclists and pedestrians. Multimodal elements for rural roadway projects may include wider shoulders that will be used by bicyclists and pedestrians.

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6. Risk Assessment (75 Points) – This criterion measures the number of risks associated with successfully building the project. High-risk applications increase the likelihood that projects will withdraw at a later date. If this happens, the region is forced to reallocate the federal funds in a short amount of time or return them to the US Department of Transportation. These risks are outlined in the checklist in the required Risk Assessment.

A. *MEASURE:* Applications involving construction must complete the Risk Assessment. This checklist includes activities completed to-date, as well as an assessment of risks (e.g., right-of-way acquisition, proximity to historic properties, etc.).

RESPONSE (Complete Risk Assessment):

Please check those that apply and fill in anticipated completion dates for all projects, except for new/expanded transit service projects or transit vehicle purchases.

1) **Layout (25 Percent of Points)**
   Layout should include proposed geometrics and existing and proposed right-of-way boundaries
   100% ☐ Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties that the project goes through or agencies that maintain the roadway(s)). **A PDF of the layout must be attached along with letters from each jurisdiction to receive points.**
   50% ☐ Layout completed but not approved by all jurisdictions. **A PDF of the layout must be attached to receive points.**
   0% ☐ Layout has not been started

   Anticipated date or date of completion: _____

2) **Review of Section 106 Historic Resources (15 Percent of Points)**
   100% ☐ No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and project is not located on an identified historic bridge
   100% ☐ There are historical/archeological properties present but determination of "no historic properties affected" is anticipated.
   80% ☐ Historic/archeological property impacted; determination of "no adverse effect" anticipated
   40% ☐ Historic/archeological property impacted; determination of "adverse effect" anticipated
   0% ☐ Unsure if there are any historic/archaeological properties in the project area.

   Project is located on an identified historic bridge: ☐

3) **Right-of-Way (25 Percent of Points)**
   100% ☐ Right-of-way, permanent or temporary easements either not required or all have been acquired
   50% ☐ Right-of-way, permanent or temporary easements required, plat, legal descriptions, or official map complete
   25% ☐ Right-of-way, permanent or temporary easements required, parcels identified
   0% ☐ Right-of-way, permanent or temporary easements required, parcels not all identified

   Anticipated date or date of acquisition _____

4) **Railroad Involvement (15 Percent of Points)**
100% ☐   No railroad involvement on project or railroad Right-of-Way agreement is executed (**include signature page, if applicable**)
50% ☐   Railroad Right-of-Way Agreement required; negotiations have begun
0% ☐   Railroad Right-of-Way Agreement required; negotiations have not begun.

Anticipated date or date of executed Agreement _____

5) **Public Involvement (20 Percent of Points)**

The project applicant must describe how the transportation problem was identified at the proposed project location, how the potential solution was identified instead of other options, and the public involvement completed to date on the project. Upfront work completed on a project will likely reduce risks with regard to project implementation

RESPONSE (Limit 2,800 characters; approximately 400 words):

SCORING GUIDANCE (75 Points)
The applicant with the most points on the Risk Assessment (more points equate to less project risk) will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 40 points and the top project had 70 points, this applicant would receive (40/70)*75 points or 43 points.

7. Cost Effectiveness (100 Points) – This criterion will assess the project's cost effectiveness based on the total TAB-eligible project cost (not including noise walls) and total points awarded in the previous 8 criteria. If a project has been awarded other outside, competitive funding (e.g., state bonding, Transportation Economic Development Program, Minnesota Highway Freight Program), project sponsors may reduce the total project cost for the purposes of this scoring measure by the amount of the outside funding award.

A. *MEASURE:*

This measure will calculate the cost effectiveness of the project. Metropolitan Council staff will divide the number of points awarded in the previous criteria by the TAB-eligible project cost (not including noise walls).

- Cost effectiveness = total number of points awarded in previous criteria/total TAB-eligible project cost (not including noise walls)

RESPONSE (This measure will be calculated after the scores for the other measures are tabulated by the Scoring Committee):

- Total Project Cost (entered in Project Cost Form):_____ *(automatically calculated)*
- Enter amount of Noise Walls: _____
- Enter amount of any outside, competitive funding (attach documentation of award): _____
- Points Awarded in Previous Criteria: _____ (entered by Metropolitan Council staff)

SCORING GUIDANCE (100 Points)

The applicant with the most points (i.e., the benefits) per dollar will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the top project received .0005 points per dollar and the application being scored received .00025 points per dollar, this applicant would receive (.00025/.0005)*100 points or 50 points.

The scorer for this measure will also complete a reasonableness check of the total project cost that is used for this measure. The scorer may follow up with the applicant to clarify any questions. Up to 50 percent of points awarded for this measure can be deducted if the scorer does not believe that the cost estimate is reasonable.

TOTAL: 1,100 POINTS

Strategic Capacity (Roadway Expansion)– Prioritizing Criteria and Measures

July 10, 2019

Definition: A roadway project that adds thru-lane capacity (–described as a Regional Mobility project under Strategic Capacity Enhancements in the TPP). Projects must be located on a non-freeway principal arterial or A-minor arterial functionally-classified roadway, consistent with the latest TAB approved functional classification map. However, A-minor connectors cannot be expanded with new thru-lane capacity with these federal funds per regional policy and must apply in the Reconstruction/Modernization and Spot Mobility application category.

Examples of Roadway Expansion Projects:

- New roadways
- Two-lane to four-lane expansions
- Other thru-lane expansions (excludes additions of a continuous center turn lane)
- Four-lane to six-lane expansions

- New interchanges with or without associated frontage roads
- Expanded interchanges with either new ramp movements or added thru lanes
- New bridges, overpasses and underpasses

Scoring:

Criteria and Measures	Points	% of Total Points
1. Role in the Regional Transportation System and Economy	**210**	**19%**
Measure A – Congestion within Project Area, Level of Adjacent Congestion, and or Principal Arterial Intersection Conversion Study Priorities	80	
Measure B - Project Location Relative to Jobs, Manufacturing, and Education	50	
Measure C - Regional Truck Corridor Study Tiers	80	
2. Usage	**175**	**16%**
Measure A - Current daily person throughput	110	
Measure B - Forecast 2040 average daily traffic volume	65	
3. Equity and Housing Performance	**100**	**9%**
Measure A - Connection to disadvantaged populations and project's benefits, impacts, and mitigation	30	
Measure B - Housing Performance Score	70	
4. Infrastructure Age	**40**	**4%**
Measure A - Date of construction	40	
5. Congestion Reduction/Air Quality	**150**	**14%**
Measure A - Vehicle delay reduced	100	
Measure B - Kg of emissions reduced	50	
6. Safety	**150**	**14%**
Measure A - Crashes reduced	150120	
Measure B - Crashes reducedPedestrian Crash Reduction (Proactive)	30	
7. Multimodal Elements and Existing Connections	**100**	**9%**
Measure A - Transit, bicycle, or pedestrian project elements & connections	100	
8. Risk Assessment	**75**	**7%**
Measure A - Risk Assessment Form	75	
9. Cost Effectiveness	**100**	**9%**
Measure A - Cost effectiveness (total points awarded/total project cost)	100	

Total	**1,100**

1. Role in the Regional Transportation System and Economy (210 Points) – Tying regional policy (Thrive MSP2040) to the Regional Solicitation, this criterion measures the project's ability to serve a transportation purpose within the regional transportation system and economy based on <u>congestion in the project area,</u> congestion levels along the regional transportation system near the project, how it aligns with the Principal Arterial Intersection Conversion Study, how it connects to employment, manufacturing/distribution-related employment, and students, and how it aligns with the Regional Truck Corridor Study.

A. *MEASURE:* <u>Identify the level of congestion within the project area. This measure uses speed data as was used as part of the Congestion Management Process (CMP) Plan. It is anticipated that the CMP Plan will be further incorporated into the Regional Solicitation as part of the 2022 Regional Solicitation funding cycle. Also, I</u>identify the level of congestion on a parallel route and how the project area is prioritized in the Principal Arterial Intersection Conversion Study. Respond to each of the ~~two~~ <u>three</u> sub-sections below. Projects will get the highest score of the ~~two~~ <u>three</u> sub-section~~s sections~~.

Congestion within Project Area:
<u>The measure will analyze the level of congestion within the project area. Council staff will provide travel speed data on the "Level of Congestion" map. The analysis will compare the peak hour travel speed within the project area to free-flow conditions.</u>

RESPONSE:
- <u>Free-Flow Travel Speed:_____</u>
- <u>Peak Hour Travel Speed: _____</u>
- <u>Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow (calculation): _____</u>

<u>Upload the "Level of Congestion" map used for this measure.</u>

Congestion on adjacent Parallel Routes:
The measure will analyze the level of congestion on an adjacent parallel A-minor arterial or principal arterial to determine the importance of the roadway in managing congestion on the Regional Highway System. Council staff will provide travel speed data on an applicant-selected adjacent parallel route that is adjacent to the proposed project on the "Level of Congestion" map. The analysis will compare the peak hour travel speed on an adjacent parallel route to free-flow conditions on this same route to understand congestion levels in the area of the project, which correlates to the role that the project plays in the regional transportation system and economy. The applicant must identify the adjacent parallel corridor as part of the response. The end points of this adjacent parallel corridor must align as closely as possible to the project end points.

RESPONSE:
- Adjacent Parallel Corridor: _____
- Adjacent Parallel Corridor Start and End Points: _____
- Free-Flow Travel Speed): _____
- Peak Hour Travel Speed: _____
- Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow (calculation): _____

Upload the "Level of Congestion" map used for this measure.

Principal Arterial Intersection Conversion Study:

The measure relies on the results of the Principal Arterial Intersection Conversion Study, which prioritized non-freeway principal arterial intersections. In addition to interchange projects, other lane expansion projects that make improvements to a low-, medium-, or high-priority intersection can also earn points in this measure.

Use the final study report for this measure: metrocouncil.org/PAICS

RESPONSE (Select one for your project, based on the Principal Arterial Intersection Conversion Study):

- Proposed interchange or at-grade project that reduces delay at a High Priority Intersection: ☐ (80 Points)
- Proposed at-grade project that reduces delay at a Medium Priority Intersection: ☐ (60 Points)
- Proposed at-grade project that reduces delay at a Low Priority Intersection: ☐ (50 Points)
- Proposed interchange project that reduces delay at a Medium Priority Intersection: ☐ (40 Points)
- Proposed interchange project that reduces delay at a Low Priority Intersection: ☐ (0 Points)
- Not listed as a priority in the study: ☐ (0 Points)

SCORING GUIDANCE (80 Points)

Due to the ~~two~~ three scoring methods, more than one project can score the maximum points. In order to be awarded points for this measure the proposed project itself must show some delay reduction in measure 5A. If the project does not reduce delay, then it will score 0 points for this measure.

Congestion within Project Area: The applicant with the most congestion within the project area (measured by the largest percentage decrease in peak hour travel speeds relative to free-flow conditions) will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored showed a 5% decrease of travel speeds in the peak hour relative to free flow conditions and the top project had a 10% reduction, this applicant would receive (5/10)*80 points, or 40 points. If the project covers more than one segment of speed data, the applicants can use the one that is most beneficial to their score.

Congestion on adjacent Parallel Routes: The applicant with the most congestion on an adjacent parallel route (measured by the largest percentage decrease in peak hour travel speeds relative to free-flow conditions) will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored showed a 5% decrease of travel speeds in the peak hour on the adjacent parallel route relative to free flow conditions and the top project had a 10% reduction, this applicant would receive (5/10)*80 points, or 40 points. Applicants can use the adjacent parallel route that is most beneficial to their score.

Principal Arterial Intersection Conversion Study: Projects will be scored based on their Principal Arterial Intersection Conversion Study priorities.

The scorer will assess if the applicant would score highest with congestion on the adjacent parallel routes part of the measure or the Principal Arterial Intersection Conversion Study part of the measure and give the applicant the highest of the two scores out of a maximum of 80 points. However, all interchange projects must only use the scoring output from the Principal Arterial Intersection Conversion Study.

Note: Due to the use of multiple sub-sections, ~~two~~ multiple applicants may receive the full 80 points.

B. Reference the "Regional Economy" map generated at the beginning of the application process. Report the existing employment, manufacturing/distribution-related employment, and post-secondary students enrolled within one mile, as depicted on the "Regional Economy" map.

RESPONSE (Data from the "Regional Economy" map):
- Existing Employment within 1 Mile:_____(Maximum of 50 points)
- Existing Manufacturing/Distribution-Related Employment within 1 Mile:_____ (Maximum of 50 points)
- Existing Post-Secondary Students within 1 Mile: _____(Maximum of 30 points)

Upload the "Regional Economy" map used for this measure.

SCORING GUIDANCE (50 Points)

All Census block groups that are included within or intersect the buffer area around the project will be included.

The applicant with the highest existing total employment will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 1,000 workers within one mile and the top project had 1,500 workers, this applicant would receive (1,000/1,500)*50 points or 33 points.

The applicant with the highest existing manufacturing/distribution-related employment will receive the full points. Remaining projects will receive a proportionate share of the full points equal to the existing manufacturing/distribution-related employment within one mile of the project being scored divided by the project with the highest manufacturing/distribution-related employment within one mile multiplied by the maximum points available for the measure. For example, if the application being scored had 1,000 manufacturing/distribution-related workers within one mile and the top project had 1,500 manufacturing/distribution-related workers, this applicant would receive (1,000/1,500)*50 points or 33 points.

The applicant with the highest number of post-secondary students will receive 30 points. Remaining projects will receive a proportionate share of the 30 points. For example, if the application being scored had 1,000 students within one mile and the top project had 1,500 students, this applicant would receive (1,000/1,500)*30 points or 20 points.

The scorer will assess if the applicant would score highest with the total employment part of the measure, the manufacturing/distribution employment part of the measure, or the education part of the measure and give the applicant the highest of the three scores out of a maximum of 50 points.

Note: Due to the use of multiple sub-measures, two applicants can receive the full 50 points.

C. *MEASURE:* This criterion relies on the results on the Truck Highway Corridor Study, which prioritized all principal and minor arterials based on truck volume, truck percentage of total traffic, proximity to freight industry clusters, and proximity to regional freight terminals. (80 points)

Use the final study report for this measure:
https://metrocouncil.org/Transportation/Planning-2/Transit-Plans,-Studies-Reports/Highways-Roads/Truck-Freight-Corridor-Study.aspx

RESPONSE: (Select one for your project, based on the Regional Truck Corridor Study):
- Along Tier 1: ☐
- Along Tier 2: ☐

- Along Tier 3: ☐
- The project provides a direct and immediate connection (i.e., intersects) with either a Tier 1, Tier 2, or Tier 3 corridor: ☐
- None of the tiers: ☐

SCORING GUIDANCE (80 Points)

Applicants will be awarded points as assigned in the above tiers:
- Projects along Tier 1: 80 points
- Projects along Tier 2: 60 points
- Projects along Tier 3: 40 points
- Projects that that provide a direct and immediate connection to a corridor: 10 points.
- None of the tiers: 0 points

If no applicant is along Tier 1, the top-scoring application(s) will be adjusted to 80 points, with the others adjusted proportionately.

Note: Due to the use of tiered scoring, multiple applications can receive the full points.

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2. Usage (175 Points) – This criterion quantifies the project's potential impact by measuring the current daily person throughput and future vehicular traffic that will be served by the project. These roadway users directly benefit from the project improvements on the A-minor arterial or non-freeway principal arterial.

A. *MEASURE:* The applicant must identify the location along the project length and provide the current AADT volume from the MnDOT 50-series maps (select *Twin Cities Metro Area Street Series* under *Traffic Volume (AADT)*) and existing transit routes that travel on the road (reference "Transit Connections" map). Ridership data will be provided by the Metropolitan Council staff, if public transit is currently provided on the project length. Metropolitan Council staff will calculate the current daily person throughput at one location along the A-minor arterial or non-freeway principal arterial project length using the current average annual daily traffic (AADT) volume and average annual ridership.

- Current Daily Person Throughput = (current average annual daily traffic volume x 1.30 vehicle occupancy) + average annual daily transit ridership (~~2017~~2019)

- For new roadways, identify the estimated existing daily traffic volume based on traffic modeling.

RESPONSE:
- Location:_____
- Current AADT volume:_____
- Existing Transit Routes on the Project:_____
Transit routes that will likely be diverted to the new proposed roadway (if applicable):_____Upload "Transit Connections" map.

SCORING GUIDANCE (110 Points)

The applicant with highest current daily person throughput will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had a daily person throughput of 1,000 ~~vehicles~~ people and the top project ~~within the same functional classification~~ had a daily person throughput of 1,500 ~~vehicles~~people, this applicant would receive (1,000/1,500)*110 points or 73 points.

B. *MEASURE:* Provide the forecast (2040) average daily traffic volume at the same location along the A-minor arterial or non-freeway principal arterial project length, as identified in the previous measure. The applicant may choose to use a county or city travel demand model based on the Metropolitan Council model to identify the forecast (2040) average daily traffic volume or have Metropolitan Council staff determine the forecast volume using the Metropolitan Council model and project location. Respond as appropriate to the use of one type of forecast model. (65 Points)

- For new roadways, identify the modeled forecast daily traffic volume

RESPONSE:
- Use Metropolitan Council model to determine forecast (2040) ADT volume☐
- If checked, METC Staff will provide Forecast (2040) ADT volume _____

   OR

RESPONSE:

- Identify the approved county or city travel demand model to determine forecast (2040) ADT volume: _____
- Forecast (2040) ADT volume : _____

SCORING GUIDANCE (65 Points)

The applicant with the highest forecast (2040) ADT volume will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had a daily forecast of 28,000 vehicles and the top project had a daily forecast of 32,000 vehicles, this applicant would receive (28,000/32,000)*65 points or 57 points.

3. Equity and Housing Performance (100 Points) – This criterion addresses the [Council's role in advancing equity](#) by examining the project's positive and negative impacts to low-income populations, people of color, children, people with disabilities, and the elderly along with outreach to those groups. The criterion also evaluates a community's efforts to promote affordable housing.

A. *MEASURE:* Reference the "Socio-Economic Conditions" map generated at the beginning of the application process. Identify the project's location from the list below, as depicted on the map. Geographic proximity alone is not sufficient to receive the full points. In order to receive the maximum points, the response should address equitable distribution of benefits, mitigation of negative impacts, and community engagement for the populations selected. (30 Points)

Upload the "Socio-Economic Conditions" map used for this measure.

RESPONSE (Select one, based on the "Socio-Economic Conditions" map):

- Project located in Area of Concentrated Poverty with 50% or more of residents are people of color (ACP50): ☐ (up to 100% of maximum score)
- Project located in Area of Concentrated Poverty: ☐ (up to 80% of maximum score)
- Project's census tracts are above the regional average for population in poverty or population of color: ☐ (up to 60% of maximum score)
- Project located in a census tract that is below the regional average for population in poverty or populations of color, or includes children, people with disabilities, or the elderly: ☐ (up to 40% of maximum score)

1. (0 to 3 points) A successful project is one that has actively engaged in low-income populations, people of color, children, persons with disabilities, and the elderly during the project's development with the intent to limit negative impacts on them and, at the same time, provide the most benefits. Describe how the project has encouraged or will engage the full cross-section of community in decision-making. Identify the communities to be engaged and where in the project development process engagement has occurred or will occur. Elements of quality engagement include: outreach to specific communities and populations that are likely to be directly impacted by the project; techniques to reach out to populations traditionally not involved in the community engagement related to transportation projects; residents or users identifying potential positive and negative elements of the project; and surveys, study recommendations, or plans that provide feedback from populations that may be impacted by the proposed project. If relevant, describe how NEPA or Title VI regulations will guide engagement activities.

> *(Limit 1,400 characters; approximately 200 words)*:

2. (0 to 7 points) Describe the project's benefits to low-income populations, people of color, children, people with disabilities, and the elderly. Benefits could relate to safety; public health; access to destinations; travel time; gap closure; leveraging of other beneficial projects and investments; and/or community cohesion. Note that this is not an exhaustive list.

> *(Limit 2,800 characters; approximately 400 words)*:

3. (-3 to 0 points) Describe any negative externalities created by the project along with measures that will be taken to mitigate them. Negative externalities can result in a reduction in points, but mitigation of externalities can offset reductions.

> *(Limit 2,800 characters; approximately 400 words):*

Below is a list of negative impacts. Note that this is not an exhaustive list.
- Increased difficulty in street crossing caused by increased roadway width, increased traffic speed, wider turning radii, or other elements that negatively impact pedestrian access.
- Increased noise.
- Decreased pedestrian access through sidewalk removal / narrowing, placement of barriers along the walking path, increase in auto-oriented curb cuts, etc.
- Project elements that are detrimental to location-based air quality by increasing stop/start activity at intersections, creating vehicle idling areas, directing an increased number of vehicles to a particular point, etc.
- Increased speed and/or "cut-through" traffic.
- Removed or diminished safe bicycle access.
- Inclusion of some other barrier to access to jobs and other destinations.
- Displacement of residents and businesses.
- Construction/implementation impacts such as dust; noise; reduced access for travelers and to businesses; disruption of utilities; and eliminated street crossings. These tend to be temporary.
- Other

SCORING GUIDANCE (30 Points)

Each application will be scored on a 10-point scale as described below.
1. (3 points): The project(s) with the most impactful and meaningful community engagement will receive the full three points. Remaining projects will receive a share of the full points at the scorer's discretion.
2. (7 points) The project(s) with the most positive benefits will receive the full seven points. Remaining projects will receive a share of the full points at the scorer's discretion.
3. (-3 to 0 points) The scorer will reduce the score by one point (up to three total) for each negative externality. Note that the scorer can deduct points for negatives not acknowledged in the application; the scorer will document any negatives not acknowledged in the application and the reasons for any associated point reductions. The scorer can add one to three points for successful mitigation of negative project elements based on the degree to which they are mitigated. Note that this score cannot provide more points than are deducted.

Each score from the above 10-point scale will then be adjusted to the appropriate geography.

Note: Due to the geographic adjustment to scores, it is possible that the above process will result in no project receiving the maximum allotment of points. In this case, the highest-scoring application for this measure will be adjusted to receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 10 points and the top project had 20 points, this applicant would receive (10/20)*30 points or 15 points. Note also that it is possible to score negative points on this measure.

B. *MEASURE:* Metropolitan Council staff will award points to the project based on the ~~2017~~ 20189 Housing Performance Score for the city or township in which the project is located. ~~The score includes consideration of affordability and diversification, local initiatives to facilitate affordable workforce housing development or preservation, and density of residential development.~~ If the project is in more than one jurisdiction, the points will be awarded based on a weighted average using the length or population of the project in each jurisdiction.

The housing performance score is calculated from data in these four categories:
- New affordable or mixed-income housing completed in the last ten years;
- Preservation projects completed in the last seven years and/or Substantial rehabilitation projects completed in the last three years;
- Housing program participation and production, and housing policies and ordinances
- Characteristics of the existing housing stock.

For stand-alone intersection, bridge, underpass, and interchange projects, a one-mile radius-buffer will be drawn around the project. If the radius-buffer enters more than one jurisdiction, the points will be awarded based on the proportionate population of the Census blocks in each jurisdiction that are all or partially located in the area within the one-mile radius-buffer.

If a project is located in a city or township with no allocation of affordable housing need (either there is no forecasted household growth or the area does not have land to support sewered development), then the project will not be disadvantaged by this measure and the project's total score will be adjusted as a result.

RESPONSE:
- City/Township: _____
- Length of Segment (For stand-alone projects, enter population from Regional Economy map) within each City/Township: _____
- Housing Score: _____ *(online calculation)*

SCORING GUIDANCE (70 Points)

The applicant with the highest ~~2017~~ 2019 Housing Performance Score will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had a Housing Performance Score of 55 and the top project had a Housing Performance Score of 90, this applicant would receive (55/90)*70 points or 43 points.

Note: Metropolitan Council staff will score this measure.

Projects will use the city Housing Performance Score based on the project location. If a project is located in more than one jurisdiction, the points will be awarded based on a weighted average of the city or township scores for the project location based on the length of the project in each jurisdiction. For stand-alone intersection, bridge, underpass, and interchange projects, a one-mile radius-buffer will be drawn around the project. If the radius-buffer enters more than one jurisdiction, the points will be awarded based on the proportionate population of the Census blocks in each jurisdiction that are all or partially located in the area within the one-mile radius-buffer.

If a project is located in a city or township with no allocation of affordable housing need (either there is no forecasted household growth or the area does not have land to support sewered development), then the project will not be disadvantaged by this measure and the project's total score will be adjusted as a result.

If this is the case, then the total points possible in the application will be 930 instead of 1,000. The total points awarded through the rest of the application (900 as a hypothetical example) will be divided by 930,

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then multiplied by 1,000. Therefore, a project scoring 900 out of 930, will equate to 968 points on a 1,000-point scale.

If a portion of the project is located in a city with an affordable housing allocation and the other portion is located in a township with no affordable housing allocation, then a combination of the weighted average and no affordable housing methodologies should be used. This will result in a total score that will be somewhere between 930 and 1,000; then the score will need to be adjusted to fit a 1,000-point scale.

4. Infrastructure Age (40 Points) – This criterion will assess the age of the roadway facility being improved. Roadway improvement investments should focus on the higher needs of an aging facility, whereas improvements to a recently reconstructed roadway does not display ~~an~~ as efficient use of funds.

A. *MEASURE:* Identify the year of the roadway's original construction or most recent reconstruction. If the reconstruction date is used for the roadway, a full reconstruction must have been completed during the indicated year. Routine maintenance, such as an overlay or sealcoating project does not constitute a reconstruction and should not be used to determine the infrastructure age.

If construction was completed over several years, enter the segment lengths for each year. The average age will be calculated.

In order to enter information, click "Add" (in the upper right-hand corner of the page) and then click "Save". If the project length has more than one construction year, repeat the "Add" and "Save" process for each segment.

- ~~For new roadways, identify the average age of the parallel roadways from which traffic will be diverted to the new roadway.~~

RESPONSE:

- Year of original roadway construction or most recent reconstruction: _____
- Segment length: _____
- Average Age: _____ *(online calculation)*

SCORING GUIDANCE (40 Points)

The applicant with the oldest roadway will receive full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored was constructed 41 years ago and the oldest project was constructed 48 years ago, this applicant would receive (41/48)*40 points or 34 points.

This measure is not applicable to new roadway projects, so the project's total score for new roadways will be adjusted as a result.

If this is the case, then the total points possible in the application will be 960 instead of 1,000. The total points awarded through the rest of the application (900 as a hypothetical example) will be divided by 960, then multiplied by 1,000. Therefore, a project scoring 900 out of 940, will equate to 957 points on a 1,000-point scale.

Note: Because of the reporting of year of construction, it is possible for multiple projects to receive the full allotment of 40 points.

5. Congestion Reduction/Air Quality (150 Points) – This criterion measures the project's ability to reduce intersection delay and emissions during peak hour conditions. In addition, it will address its ability to improve congested intersections operating at unacceptable levels of service during peak hour conditions.

A. _MEASURE:_ Conduct a capacity analysis at one or more of the intersections (or rail crossings) being improved by the roadway project using existing turning movement counts (collected within the last three years) in the weekday a.m. or p.m. peak hour and Synchro or HCM software. The analysis must include build and no build conditions (with and without the project improvements). The applicant must show the current total peak hour delay at one or more intersections (or rail crossings) and the reduction in total peak hour intersection delay at these intersections (or rail crossings) in seconds, due to the project. If more than one intersection is examined, then the delay reduced by each intersection (or rail crossing) can be can added together to determine the total delay reduced by the project.

- For new roadways, identify the key intersection(s) on any parallel roadway(s) that will experience reduced delay as a result of traffic diverting to the new roadway. If more than one intersection is examined, then the delay reduced by each intersection can be can added together.
- For roadway projects that include a railroad crossing, the applicant should conduct fieldwork during either the weekday a.m. or p.m. peak hour to determine the total peak hour delay reduced by the project. Applicants can also add together intersection delay reduced and railroad delay reduced, if they both will be improved by the project.

The applicant should include the appropriate Synchro or HCM full reports (including the Timing Page Report) that support the improvement in total peak hour delay and should conduct the analysis using the following:

- Under the network settings, all defaults should be used for lanes, saturation flow rates, volumes, and simulation
- Use Synchro's automatic optimization to determine cycle, offset and splits (for traffic signals). Use the setting when assessing delay both with and without the project. This methodology will ensure that all applicants start with their signal systems optimized when determining existing delay.
- Project improvements assumed in the build condition should be reflected in the total project cost, such as additional through or turn lanes and protective left-turn phasing
- Roadway lengths for intersection approaches must be the same length for before and after scenarios
- An average weekday should be used for the existing conditions instead of a weekend, peak holiday, or special event time period that is not representative of the corridor for most of the year
- For most projects, the volumes with and without the project should be the same; however, some project types such as new roadways, new ramps, or new interchanges may have different volumes.

Total Peak Hour Delay Reduced (Seconds) = Total Peak Hour Delay Per Vehicle x Vehicles Per Hour

RESPONSE:
- Total Peak Hour Delay/Vehicle without the Project (Seconds/Vehicle):_____
- Total Peak Hour Delay/Vehicle with the Project (Seconds/Vehicle):_____
- Total Peak Hour Delay/Vehicle Reduced by the Project (Seconds/Vehicle):_____ _(automatically calculated)_
- Volume without the Project (Vehicles Per Hour): _____
- Volume with the Project (Vehicles Per Hour): _____

- Total Peak Hour Delay Reduced by the Project (Seconds): _____ *(automatically calculated)*

EXPLANATION of methodology used to calculate railroad crossing delay, if applicable, or date of last signal retiming for signalized corridors (Limit 1,400 characters; approximately 200 words):

Upload Synchro or HCM Report

SCORING GUIDANCE (100 Points)

The applicant with the most peak hour vehicle delay reduced by the project improvement will receive the full points for the measure. Remaining projects will receive a proportionate share of the points. For example, if the application being scored reduced delay by 5,000 seconds and the top project reduced delay by 25,000 seconds, this applicant would receive (5,000/25,000)*100 points, or 20 points.

B. *MEASURE:* Using the Synchro or HCM analysis completed in the previous measure, identify the total peak hour emissions reduction in kilograms (CO, NO_X, VOC) due to the project. The applicant should include the appropriate Synchro or HCM reports (including the Timing Page Report) that support the improvement in total peak hour emissions. If more than one intersection is examined, then the emissions reduced by each intersection can be can added together to determine the total emissions reduced by the project.

Roadway projects that do not include new roadway segments or railroad grade-separation elements:

- Total Peak Hour Emissions Reduced (Kilograms) = Total Peak Hour Emissions without the project – Total Peak Hour Emissions with the Project

RESPONSE (Calculation):

- Total (CO, NO_X, and VOC) Peak Hour Emissions without the Project (Kilograms):_____
- Total (CO, NO_X, and VOC) Peak Hour Emissions with the Project (Kilograms):_____
- Total (CO, NO_X, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):_____

Roadway projects that are constructing new roadway segments, but do not include railroad grade-separation elements:

For new roadways, identify the key intersection(s) on any parallel roadway(s) that will experience reduced emissions as a result of traffic diverting to the new roadway (using Synchro). If more than one intersection is examined, then the emissions reduced by each intersection can be can added together.

However, new roadways will also generate new emissions compared to existing conditions as traffic diverts from the parallel roadways. The applicant needs to estimate four variables to determine the new emissions generated once the project is completed on any major intersections. Those variables include: speed, vehicle mile traveled, delay, and total vehicle stops. The applicant needs to detail any assumptions used for conditions after the project is built. The variables will be used in the exact same equation used Synchro required of the other project types.

The equation below should only be used to estimate the new emissions generated by new roadways.

Enter data for Parallel Roadways and New Roadways.

Parallel Roadways

- Total Peak Hour Emissions Reduced (Kilograms) = Total Peak Hour Emissions without the project – Total Peak Hour Emissions with the Project

RESPONSE:

- Total (CO, NO$_X$, and VOC) Peak Hour Emissions without the Project (Kilograms):_____ (Applicant inputs number)
- Total (CO, NO$_X$, and VOC) Peak Hour Emissions with the Project (Kilograms):_____ (Applicant inputs number)
- Total (CO, NO$_X$, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):_____ (Online Calculation)

New Roadway Portion

Enter data for New Roadway.

- Cruise speed in miles per hour with the project:_____ (Applicant inputs number)
- Vehicle miles traveled with the project:_____ (Applicant inputs number)
- Total delay in hours with the project:_____ (Applicant inputs number)
- Total stops in vehicles per hour with the project:_____ (Applicant inputs number)
- Fuel consumption in gallons: _____ (Applicant inputs number)
- Total (CO, NOX, and VOC) Peak Hour Emissions Reduced or Produced on New Roadway (Kilograms):_____
- EXPLANATION of methodology and assumptions used: (Limit 1,400 characters; approximately 200 words)

  Speed = cruise speed in miles per hour
  Total Travel = vehicle miles traveled
  Total Delay = total delay in hours
  Stops = total stops in vehicles per hour
  *K4 = 0.075283-0.0015892 * Speed + 0.000015066 * Speed^2*
  K2 = 0.7329
  *K5 = 0.0000061411 * Speed^2*

  F2 = Fuel consumption in gallons

  *CO = F2 * 0.0699 kg/gallon*
  *NO$_X$ = F2 * 0.0136 kg/gallon*
  *VOC = F2 * 0.0162 kg/gallon*

  Total = Total Peak Hour Emissions reduced on Parallel Roadways – (CO + NOx + VOC)

- Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms): _____ (calculated online)

Roadway projects that include railroad grade-separation elements:

For roadway projects that include a railroad crossing, the applicant needs to input four variables before and after the project to determine the change in emissions. Those variables include: speed, vehicle mile traveled, delay, and total vehicle stops. The applicant needs to conduct fieldwork during

either the a.m. or p.m. peak hour to determine the existing conditions and then detail any assumptions used for conditions after the project is built. The variables will be used in the exact same equation used within the software program (i.e., Synchro) required of the other project types. Therefore, the approach to calculate the kilograms emissions reduced for railroad grade-separation projects will be comparable to intersection improvement projects.

RESPONSE:

- Cruise speed in miles per hour without the project:_____ (Applicant inputs number)
- Vehicle miles traveled without the project:_____ (Applicant inputs number)
- Total delay in hours without the project:_____ (Applicant inputs number)
- Total stops in vehicles per hour without the project:_____ (Applicant inputs number)
- Cruise speed in miles per hour with the project:_____ (Applicant inputs number)
- Vehicle miles traveled with the project:_____ (Applicant inputs number)
- Total delay in hours with the project:_____ (Applicant inputs number)
- Total stops in vehicles per hour with the project:_____ (Applicant inputs number)
- Fuel consumption in gallons (F1)
- Fuel consumption in gallons (F2)
- Fuel consumption in gallons (F3)

> *Speed = cruise speed in miles per hour*
> *Total Travel = vehicle miles traveled*
> *Total Delay = total delay in hours*
> *Stops = total stops in vehicles per hour*
>
> *$K1 = 0.075283 - 0.0015892 * Speed + 0.000015066 * Speed^2$*
> *$K2 = 0.7329$*
> *$K3 = 0.0000061411 * Speed^2$*
>
> *F1 (or F2 – without the project) = Fuel consumption in gallons*
>
> *F1 = Total Travel * k1 + Total Delay * k2 + Stops * k3*
> *F2 = Total Travel * k1 + Total Delay * k2 + Stops * k3*
>
> *F3 = F1 – F2*
>
> *CO = F3 * 0.0699 kg/gallon*
> *NO_X = F3 * 0.0136 kg/gallon*
> *VOC = F3 * 0.0162 kg/gallon*

Equation Automatically Provides Emissions Reduced:
- Total (CO, NO_X, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms): _____ (Online Calculation)

EXPLANATION of methodology and assumptions used (Limit 1,400 characters; approximately 200 words):

SCORING GUIDANCE (50 Points)
The applicant with the most kilograms reduced by the project improvement will receive the full points for the measure. Remaining projects will receive a proportionate share of the full. For example, if the application being scored reduced emissions by 3 kilograms and the top project reduced emissions by 5 kilograms, this applicant would receive (3/5)*50 points or 30 points.

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6. Safety (150 Points) – This criterion addresses the project's ability to correct deficiencies and improve the overall safety of an existing or future roadway facility. It will assess the project's monetized safety benefits.

A. *MEASURE:* Respond as appropriate to one of the two project types below.

Roadway projects that do not include railroad grade-separation elements:

Calculate the reduction in the total number of crashes due to improvements on the A-minor arterial or non-freeway principal arterial made by the project. The applicant must base the estimate of crash reduction on the methodology consistent with the latest Highway Safety Improvement Program (HSIP) application (www.dot.state.mn.us/stateaid/trafficsafety.html). Applicants should focus on the crash analysis for reactive projects.

Crash data must be obtained for the project length using the MnDOT TIS system average for calendar years ~~2013~~ 2016 through ~~2015~~2018. Crash data should include all crash types and severities, including pedestrian and bicycle crashes.

Applicants should request crash data from MnDOT as early as possible. The applicant must then attach a listing of the crashes reduced and the HSIP Benefit/Cost (B/C) worksheet (www.dot.state.mn.us/stateaid/trafficsafety.html) that identifies the resulting benefit associated with the project. As part of the response, please detail and attach the crash modification factor(s) used from FHWA's Crash Modification Factors Clearinghouse: http://www.cmfclearinghouse.org/. This measure requests the monetized safety benefit of the project. The cost of the project is scored in the Cost Effectiveness criterion.

New Roadways:

1. For new roadways, identify the parallel roadway(s) from which traffic will be diverted to the new roadway.
2. Using the crash data for 2016-2018, calculate the existing crash rate for the parallel roadway(s) identified in Step 1.
3. Identify the daily traffic volume that will be relocated from the parallel roadway(s) to the new roadway.
4. Calculate the number of crashes on the parallel roadway(s) using the existing crash rate from Step 2 and the relocated traffic volume to determine the change in number of crashes due to the relocated traffic volume. For instance, if 5,000 vehicles are expected to relocate from the existing parallel roadway to the new roadway, calculate the number of crashes related to the 5,000 vehicles.
5. Identify the average crash rate for the new roadway using MnDOT's average crash rates by roadway type. Using the average crash rate for the new roadway, calculate the number of crashes related to the relocated traffic (i.e., the 5,000 vehicles).
6. Calculate the crash reduction factor using the existing number of crashes on the existing parallel roadway (Step 4) compared to the estimated crashes calculated for the new roadway (Step 5), due to the relocated traffic volume (i.e., the 5,000 vehicles).
7. The calculated crash reduction factor should be used in the HSIP B/C worksheet.
8. Upload additional documentation materials into the "Other Attachments" Form in the online application.

RESPONSE :

- Crash Modification Factor Used (*Limit 700 characters; approximately 100 words)*: _____
- Rationale for Crash Modifications Selected (*Limit 1,400 characters; approximately 200 words)*: _____
- Project Benefit ($) from B/C ratio: _____

Roadway projects that include railroad grade-separation elements:

Since the number of observed crashes at an existing at-grade railroad crossing is minor compared to an intersection, this measure will assess crash risk exposure that exists in order to compare projects. As a proactive safety measure, railroad grade-separation projects eliminate the crash risk exposure.

- Crash Risk Exposure Eliminated = current average annual daily traffic volume x average number of daily trains at the at-grade crossing

RESPONSE (Calculation):

- Current AADT volume:_____
- Average daily trains:_____
- Crash Risk Exposure eliminated: (automatically calculated) _____

SCORING GUIDANCE (150 Points)

This measure will be considered separately for projects that do and do not include a railroad grade-separation project. As a result, two projects (one project without a railroad grade-separation project and one with a railroad grade-separation project) may receive the full points.

For projects that do not include a grade-separation project, the applicant with the highest dollar value of benefits will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had safety benefits of $11,000,000 and the top project had safety benefits of $16,000,000, this applicant would receive (11,000,000/16,000,000)*150 points or 103 points.

For railroad grade-separation projects, the applicant with the highest crash risk exposure eliminated due to the project will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored reduced 11,000 exposures and the top project reduced 16,000 exposures this applicant would receive (11,000 /16,000)*150 points or 103 points.

B. *MEASURE:* Discuss how the project will improve safety for pedestrians. Safety countermeasures for pedestrians can include those identified by the FHWA as part of its Safe Transportation for Every Pedestrian program or others in its Proven Safety Countermeasures (e.g., pedestrian refuge islands, raised crosswalks, pedestrian hybrid beacons, leading pedestrian intervals). More information about pedestrian safety best practices is also available in MnDOT's *Best Practices for Pedestrian/Bicycle Safety.*

SCORING GUIDANCE (30 Points)
The project that will provide the most improvement to pedestrian safety will receive full points. Remaining projects will receive a share of the full points at the scorer's discretion.

7. Multimodal Elements and Existing Connections (100 Points) – This criterion measures how the project improves the travel experience, safety, and security for other modes of transportation and addresses the safe integration of these modes. The *Transportation Policy Plan* requires that explicit consideration of all users of the transportation system be considered in the planning and scoping phase of roadway projects.

A. *MEASURE:* Describe how the project positively affects the multimodal system.
- Discuss any bicycle, pedestrian, or transit elements that are included as part of the project and how they improve the travel experience, safety, and security for users of these modes. Applicants should make sure that new multimodal elements described in the response are accounted for as part of the cost estimate form earlier in the application. Applicants should note if there is no transit service in the project area and identify supporting studies or plans that address why a mode may not be incorporated in the project (e.g., a bicycle system plan that locates bikeway facilities on a lower-volume parallel route).
- Describe how the proposed multimodal improvements positively affect identified alignments in the Regional Bicycle Transportation Network (RBTN) or along a regional trail, if applicable.
- Describe how the proposed multimodal improvements either provide a new, or improve an existing a Major River Bicycle Barrier Crossing (MRBBC) as defined in the 2040 Transportation Policy Plan (TPP) or an identified Regional Bicycle Barrier Improvement Area as defined in the TPP and Technical Addendum to the Regional Bicycle Barriers Study (May 2019), if applicable.
- Discuss the existing bicycle, pedestrian, and transit connections and how the project enhances these connections.
- Discuss whether the project implements specific locations identified as being deficient in a completed ADA Transition Plan.

RESPONSE (Limit 2,800 characters; approximately 400 words):

SCORING GUIDANCE (100 Points)

The project that most positively affects the multimodal system will receive the full points. Remaining projects will receive a share of the full points at the scorer's discretion. The project score will be based on the quality of the improvements, as opposed to being based solely on the number of modes addressed. Points can be earned for incorporating multimodal project elements, positively affecting identified alignments in the Regional Bicycle Transportation Network (RBTN), ~~or~~ regional trail, Major River Bicycle Barrier Crossing, or Regional Bicycle Barrier, for making connections with existing multimodal systems, or helping to implement an ADA Transition Plan. Projects do not need all of these elements to be awarded all of the points. Multimodal elements for rural roadway projects may include wider shoulders that will be used by bicyclists and pedestrians.
~~Scorers should make sure that new multimodal elements described in the response are accounted for on the cost estimate form earlier in the application.~~

8. Risk Assessment (75 Points) – This criterion measures the number of risks associated with successfully building the project. High-risk applications increase the likelihood that projects will withdraw at a later date. If this happens, the region is forced to reallocate the federal funds in a short amount of time or return them to the US Department of Transportation. These risks are outlined in the checklist in the required Risk Assessment.

A. *MEASURE:* Applications involving construction must complete the Risk Assessment. This checklist includes activities completed to-date, as well as an assessment of risks (e.g., right-of-way acquisition, proximity to historic properties, etc.).

RESPONSE (Complete Risk Assessment):

Please check those that apply and fill in anticipated completion dates for all projects, except for new/expanded transit service projects or transit vehicle purchases.

1) **Layout (~~30~~ 25 Percent of Points)**
   Layout should include proposed geometrics and existing and proposed right-of-way boundaries
   100% ☐ Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties that the project goes through or agencies that maintain the roadway(s)). **A PDF of the layout must be attached along with letters from each jurisdiction to receive points.**
   50% ☐ Layout completed but not approved by all jurisdictions. **A PDF of the layout must be attached to receive points.**
   0% ☐ Layout has not been started

   Anticipated date or date of completion: _____

2) **Review of Section 106 Historic Resources (~~20~~ 15 Percent of Points)**
   100% ☐ No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and project is not located on an identified historic bridge
   100% ☐ There are historical/archeological properties present but determination of "no historic properties affected" is anticipated.
   80% ☐ Historic/archeological property impacted; determination of "no adverse effect" anticipated
   40% ☐ Historic/archeological property impacted; determination of "adverse effect" anticipated
   0% ☐ Unsure if there are any historic/archaeological properties in the project area.

   Project is located on an identified historic bridge: ☐

3) **Right-of-Way (~~30~~ 25 Percent of Points)**
   100% ☐ Right-of-way, permanent or temporary easements either not required or all have been acquired
   50% ☐ Right-of-way, permanent or temporary easements required, plat, legal descriptions, or official map complete
   25% ☐ Right-of-way, permanent or temporary easements required, parcels identified
   0% ☐ Right-of-way, permanent or temporary easements required, parcels not all identified

   Anticipated date or date of acquisition _____

4) **Railroad Involvement (~~20~~ 15 Percent of Points)**

100% ☐ No railroad involvement on project or railroad Right-of-Way agreement is executed (**include signature page, if applicable**)

50% ☐ Railroad Right-of-Way Agreement required; negotiations have begun

0% ☐ Railroad Right-of-Way Agreement required; negotiations have not begun.

Anticipated date or date of executed Agreement _____

5) Public Involvement (20 Percent of Points)

The project applicant must describe how the transportation problem was identified at the proposed project location, how the potential solution was identified instead of other options, and the public involvement completed to date on the project. Upfront work completed on a project will likely reduce risks to project implementation

RESPONSE (Limit 2,800 characters; approximately 400 words):

SCORING GUIDANCE (75 Points)

The applicant with the most points on the Risk Assessment (more points equate to less project risk) will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 40 points and the top project had 70 points, this applicant would receive (40/70)*75 points or 43 points.

9. Cost Effectiveness (100 Points) – This criterion will assess the project's cost effectiveness based on the total TAB-eligible project cost (not including noise walls) and total points awarded in the previous 8 criteria.

A. *MEASURE:*

This measure will calculate the cost effectiveness of the project. Metropolitan Council staff will divide the number of points awarded in the previous criteria by the TAB-eligible project cost (not including noise walls). If a project has been awarded other outside, competitive funding (e.g., state bonding, Transportation Economic Development Program, Minnesota Highway Freight Program), project sponsors may reduce the total project cost for the purposes of this scoring measure by the amount of the outside funding award.

- Cost effectiveness = total number of points awarded in previous criteria/total TAB-eligible project cost (not including noise walls)

RESPONSE (This measure will be calculated after the scores for the other measures are tabulated by the Scoring Committee):

- Total Project Cost (entered in Project Cost Form):_____ *(automatically calculated)*
- Enter amount of Noise Walls: _____
- Enter amount of any outside, competitive funding (attach documentation of award): _____
- Points Awarded in Previous Criteria: _____ (entered by Metropolitan Council staff)

SCORING GUIDANCE (100 Points)

The applicant with the most points (i.e., the benefits) per dollar will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the top project received .0005 points per dollar and the application being scored received .00025 points per dollar, this applicant would receive (.00025/.0005)*100 points or 50 points.

The scorer for this measure will also complete a reasonableness check of the total project cost that is used for this measure. The scorer may follow up with the applicant to clarify any questions. Up to 50 percent of points awarded for this measure can be deducted if the scorer does not believe that the cost estimate is reasonable.

TOTAL: 1,100 POINTS

Roadway Reconstruction/Modernization ~~and Spot Mobility~~ – Prioritizing Criteria and Measures

July 10, 2019

Definition: A roadway project that does not add thru-lane capacity, but reconstructs, reclaims, and/or modernizes a corridor with improved safety, multimodal, or~~, or adds new spot~~ mobility elements (e.g., new turn lanes, traffic signal, or roundabout). Routine maintenance including mill and overlay projects are not eligible. Projects must be located on a non-freeway principal arterial or A-minor arterial functionally-classified roadway, consistent with the latest TAB approved functional classification map.

Examples of Roadway Reconstruction/Modernization ~~and Spot Mobility~~ Projects:

- Intersection improvements, including innovative intersection designs
- Interchange reconstructions that do not involve new ramp movements or added thru lanes
- Turn lanes
- Two-lane to three-lane conversions (with a continuous center turn lane)
- Four-lane to three-lane conversions
- Roundabouts
- Addition or replacement of traffic signals
- Shoulder improvements
- Strengthening a non-10-ton roadway
- Raised medians, frontage roads, access modifications, or other access management
- Roadway improvements that add multimodal elements
- Roadway improvements that add safety elements
- New alignments that replace an existing alignment and do not expand the number of lanes

Scoring:

Criteria and Measures	Points	% of Total Points
1. Role in the Regional Transportation System and Economy	~~170~~105	~~15~~10%
~~Measure A - Level of Congestion, Principal Arterial Intersection Conversion Study Priorities, and Congestion Management and Safety Plan Opportunity Areas~~	~~65~~	
Measure B - Project Location Relative to Jobs, Manufacturing, and Education	~~40~~65	
Measure C - Regional Truck Corridor Study Tiers	~~65~~40	
2. Usage	175	16%
Measure A - Current daily person throughput	110	
Measure B - Forecast 2040 average daily traffic volume	65	
3. Equity and Housing Performance	100	9%
Measure A - Connection to disadvantaged populations and project's benefits	30	
Measure B - Housing Performance Score	70	
4. Infrastructure Age/Condition	~~150~~175	~~14~~16%
Measure A - Date of construction	50	
Measure B - Geometric, structural, or infrastructure improvements	~~100~~125	
5. Congestion Reduction/Air Quality	80	7%
Measure A - Vehicle delay reduced	50	
Measure B - Kg of emissions reduced	30	
6. Safety	~~150~~180	~~14~~16%
Measure A - Crashes reduced	150	
Measure B - Pedestrian Crash Reduction (Proactive)	30	
7. Multimodal Elements and Existing Connections	~~100~~110	~~9~~10%
Measure A - Transit, bicycle, or pedestrian project elements and connections	~~100~~110	
8. Risk Assessment	75	7%
Measure A - Risk Assessment Form	75	
9. Cost Effectiveness	100	9%
Measure A – Cost effectiveness (total points awarded/total project cost)	100	
Total	**1,100**	

1. Role in the Regional Transportation System and Economy (170 Points) – Tying regional policy (Thrive MSP2040) to the Regional Solicitation, this criterion measures the project's ability to serve a transportation purpose within the regional transportation system and economy based on ~~congestion levels along the regional transportation system near the project; how it aligns with the Principal Arterial Intersection Conversion Study and Congestion Management and Safety Plan IV;~~ how it connects to employment, manufacturing/distribution-related employment, and post-secondary students; and how it aligns with the Regional Truck Corridor Study.

A. ~~*MEASURE:* Identify the level of congestion within the project area. This measure uses speed data as was used as part of the Congestion Management Process (CMP) Plan. It is anticipated that the CMP Plan will be further incorporated into the Regional Solicitation as part of the 2022 Regional Solicitation funding cycle. Also, iIdentify the level of congestion on a parallel route and how the project area is prioritized in the Principal Arterial Intersection Conversion Study and the latest Congestion Management and Safety Plan. Respond to each of the three four sub-sections below. Projects will get the highest score of the four three sub-sections sections.~~

~~**Congestion on Adjacent Parallel Routes:**~~

~~The measure will analyze the level of congestion on an adjacent parallel A-minor arterial or principal arterial to determine the importance of the roadway in managing congestion on the Regional Highway System. Council staff will provide travel speed data on an applicant-selected parallel route that is adjacent to the proposed project on the "Level of Congestion" map. The analysis will compare the peak hour travel speed on an adjacent parallel route to free-flow conditions on this same route to understand congestion levels in the area of the project, which correlates to the role that the project plays in the regional transportation system and economy. The applicant must identify the adjacent parallel corridor as part of the response. The end points of this adjacent parallel corridor must align as closely as possible to the project end points.~~

~~*RESPONSE :*~~
- ~~Adjacent Parallel Corridor: _____~~
- ~~Adjacent Parallel Corridor Start and End Points: _____~~
- ~~Free-Flow Travel Speed:_____~~
- ~~Peak Hour Travel Speed:_____~~
- ~~Percentage Decrease in Travel Speed in Peak Hour Compared to Free-Flow (calculation):_____~~

~~Upload the "Level of Congestion" map used for this measure.~~

~~**Principal Arterial Intersection Conversion Study:**~~

~~The measure relies on the results of the Principal Arterial Intersection Conversion Study, which prioritized non-freeway principal arterial intersections.~~

~~Use the final study report for this measure: metrocouncil.org/PAICS~~

~~*RESPONSE (Select one for your project):*~~

- ~~Proposed at-grade project that reduces delay at a High Priority Intersection: ☐ (65 Points)~~
- ~~Proposed at-grade project that reduces delay at a Medium Priority Intersection: ☐ (55 Points)~~
- ~~Proposed at-grade project that reduces delay at a Low Priority Intersection: ☐ (45 Points)~~
- ~~Not listed as a priority in the study: ☐ (0 Points)~~

~~**Congestion Management and Safety Plan IV:**~~

~~The measure relies on the results on MnDOT's Congestion Management and Safety Plan IV (CMSP IV), which prioritized lower cost/high benefit, spot mobility projects on MnDOT-owned roadways. For the Regional Solicitation, only the CMSP opportunity areas on the A-minor arterial or non-freeway principal arterial systems are eligible. Principal arterial projects on the freeway system are not eligible for funding per TAB-adopted rules.~~

~~Use the final list of CMSP IV opportunity area locations as depicted in the draft 2040 Transportation Policy Plan (2018).~~

~~*RESPONSE (Select one for your project):*~~

- ~~Proposed at-grade project that reduces delay at a CMSP opportunity area: ☐ (65 Points)~~
- ~~Not listed as a CMSP priority location: ☐ (0 Points)~~

~~SCORING GUIDANCE (65 Points)~~

~~Due to scoring methods, more than one project can score the maximum points. In order to be awarded points for this measure the proposed project itself must show some delay reduction in measure 5A. If the project does not reduce delay, then it will score 0 points for this measure.~~

~~Congestion within Project Area: The applicant with the most congestion within the project area (measured by the largest percentage decrease in peak hour travel speeds relative to free-flow conditions) will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored showed a 5% decrease of travel speeds in the peak hour relative to free flow conditions and the top project had a 10% reduction, this applicant would receive (5/10)*65 points, or 33 points. If the project covers more than one segment of speed data, the applicants can use the one that is most beneficial to their score.~~

~~Congestion on Adjacent Parallel Routes: The applicant with the with the most congestion on an adjacent parallel route (measured by the largest percentage decrease in peak hour travel speeds relative to free-flow conditions) will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored showed a 5% decrease of travel speeds in the peak hour on the adjacent parallel route relative to free flow conditions and the top project had a 10% reduction, this applicant would receive (5/10)*65 points, or 33 points. Applicants can use the adjacent parallel route that is most beneficial to their score.~~

~~Principal Arterial Intersection Conversion Study: Projects will be scored based on their Principal Arterial Intersection Conversion Study priorities.~~

~~Congestion Management and Safety Plan IV: Projects will be scored based on whether their project location is in a Congestion Management and Safety Plan opportunity area.~~

~~The scorer will assess if the applicant would score highest with congestion on adjacent parallel routes part of the measure, the Principal Arterial Intersection Conversion Study part of the measure, or the CMSP IV part of the measure and give the applicant the highest of the three scores out of a maximum of 65 points.~~

~~Note: Due to the use of multiple sub-sections, three multiple applicants may receive the full 65 points.~~

~~B.~~A.MEASURE*:* Reference the "Regional Economy" map generated at the beginning of the application process. Report the existing employment and manufacturing/distribution-related employment, and post-secondary students enrolled within one mile, as depicted on the "Regional Economy" map.

RESPONSE (Data from the "Regional Economy" map):

- Existing Employment within 1 Mile:_____(Maximum of ~~40~~65 points)
- Existing Manufacturing/Distribution-Related Employment within 1 Mile:_____ (Maximum of ~~40~~ 65 points)
- Existing Post-Secondary Students within 1 Mile: _____(Maximum of ~~24~~40 points)

Upload the "Regional Economy" map used for this measure.

SCORING GUIDANCE (~~40~~65 Points)

All Census block groups that are included within or intersect the buffer area around the project will be included.

The applicant with the highest existing total employment will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 1,000 workers within one mile and the top project had 1,500 workers, this applicant would receive (1,000/1,500)*~~40~~65 points or ~~27~~43 points.

The applicant with the highest existing manufacturing/distribution-related employment will receive the full points. Remaining projects will receive a proportionate share of the full points equal to the existing manufacturing/distribution-related employment within one mile of the project being scored divided by the project with the highest manufacturing/distribution-related employment within one mile multiplied by the maximum points available for the measure (30). For example, if the application being scored had 1,000 manufacturing/distribution-related workers within one mile and the top project had 1,500 manufacturing/distribution-related workers, this applicant would receive (1,000/1,500)*~~40~~65 points or ~~27~~43 points.

The applicant with the highest number of post-secondary students will receive 30 points. Remaining projects will receive a proportionate share of the 30 points. For example, if the application being scored had 1,000 students within one mile and the top project had 1,500 students, this applicant would receive (1,000/1,500)*~~24~~40 points or ~~16~~27 points.

The scorer will assess if the applicant would score highest with the total employment part of the measure, the manufacturing/distribution employment part of the measure, or the education part of the measure and give the applicant the highest of the three scores out of a maximum of ~~40~~65 points.

Note: Due to the use of multiple sub-measures, two applicants can receive the full ~~40~~65 points.

~~C.~~B.*MEASURE:* This criterion relies on the results on the Regional Truck Corridor Study, which prioritized all principal and minor arterials based on truck volume, truck percentage of total traffic, proximity to freight industry clusters, and proximity to regional freight terminals. (~~65~~ 40 points)

Use the final study report for this measure:

https://metrocouncil.org/Transportation/Planning-2/Transit-Plans,-Studies-Reports/Highways-Roads/Truck-Freight-Corridor-Study.aspx

RESPONSE: (Select one for your project, based on the Regional Truck Corridor Study):

- Along Tier 1: ☐
- Along Tier 2: ☐
- Along Tier 3: ☐
- The project provides a direct and immediate connection (i.e., intersects) with either a Tier 1, Tier 2, or Tier 3 corridor: ☐
- None of the tiers: ☐

SCORING GUIDANCE (~~65~~ 40 Points)

Applicants will be awarded points as assigned in the above tiers:

- Projects along Tier 1: ~~65~~ 40 points
- Projects along Tier 2: ~~45~~ 30 points
- Projects along Tier 3: ~~25~~ 20 points
- Projects that that provide a direct and immediate connection to a corridor: 10 points.
- None of the tiers: 0 points

If no applicant is along Tier 1, the top-scoring application(s) will be adjusted to ~~65~~ 40 points, with the others adjusted proportionately.

Note: Due to the use of tiered scoring, multiple applications can receive the full points.

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2. Usage (175 Points) – This criterion quantifies the project's potential impact by measuring the current daily person throughput and future vehicular traffic that will be served by the project. These roadway users directly benefit from the project improvements on the A-minor arterial or non-freeway principal arterial. For interchange reconstruction projects, the cross-street traffic volumes should be used instead of the mainline volumes.

A. *MEASURE:* The applicant must identify the location along the project length and provide the current AADT volume from the MnDOT 50-series maps (select *Twin Cities Metro Area Street Series* under *Traffic Volume (AADT)*) and existing transit routes that travel on the road (reference "Transit Connections" map). Ridership data will be provided by the Metropolitan Council staff, if public transit is currently provided on the project length. Metropolitan Council staff will calculate the current daily person throughput at one location along the A-minor arterial or non-freeway principal arterial project length using the current average annual daily traffic (AADT) volume and average annual ridership.

- Current Daily Person Throughput = (current average annual daily traffic volume x 1.30 vehicle occupancy) + average annual daily transit ridership (~~2017~~2019)

RESPONSE:
- Location:_____
- Current AADT volume:_____
- Existing Transit Routes on the Project:_____
Upload "Transit Connections" map.

SCORING GUIDANCE (110 Points)
The applicant with highest current daily person throughput will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had a daily person throughput of 1,000 ~~vehicles~~ people and the top project ~~within the same functional classification~~ had a daily person throughput of 1,500 ~~vehicles~~people, this applicant would receive (1,000/1,500)*110 points or 73 points.

B. *MEASURE:* Provide the forecast (2040) average daily traffic volume at the same location along the A-minor arterial or non-freeway principal arterial project length, as identified in the previous measure. The applicant may choose to use a county or city travel demand model based on the Metropolitan Council model to identify the forecast (2040) average daily traffic volume or have Metropolitan Council staff determine the forecast volume using the Metropolitan Council model and project location. Respond as appropriate to the use of one type of forecast model.

RESPONSE:
- Use Metropolitan Council model to determine forecast (2040) ADT volume☐
- If checked, METC Staff will provide Forecast (2040) ADT volume ☐

    OR

RESPONSE:
- Identify the approved county or city travel demand model to determine forecast (2040) ADT volume: _____
- Forecast (2040) ADT volume : _____

SCORING GUIDANCE (65 Points)
The applicant with the highest forecast (2040) ADT volume will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application

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being scored had a daily forecast of 28,000 vehicles and the top project had a daily forecast of 32,000 vehicles, this applicant would receive (28,000/32,000)*65 points or 57 points.

3. Equity and Housing Performance (100 Points) – This criterion addresses the Council's role in advancing equity by examining the project's positive and negative impacts to low-income populations, people of color, children, people with disabilities, and the elderly along with outreach to those groups. The criterion also evaluates a community's efforts to promote affordable housing.

A. _MEASURE:_ Reference the "Socio-Economic Conditions" map generated at the beginning of the application process. Identify the project's location from the list below, as depicted on the map. Geographic proximity alone is not sufficient to receive the full points. In order to receive the maximum points, the response should address equitable distribution of benefits, mitigation of negative impacts, and community engagement for the populations selected. (30 Points)

Upload the "Socio-Economic Conditions" map used for this measure.

RESPONSE (Select one, based on the "Socio-Economic Conditions" map):

- Project located in Area of Concentrated Poverty with 50% or more of residents are people of color (ACP50): ☐ (up to 100% of maximum score)
- Project located in Area of Concentrated Poverty: ☐ (up to 80% of maximum score)
- Project's census tracts are above the regional average for population in poverty or population of color: ☐ (up to 60% of maximum score)
- Project located in a census tract that is below the regional average for population in poverty or populations of color, or includes children, people with disabilities, or the elderly: ☐ (up to 40% of maximum score)

1. (0 to 3 points) A successful project is one that has actively engaged in low-income populations, people of color, children, persons with disabilities, and the elderly during the project's development with the intent to limit negative impacts on them and, at the same time, provide the most benefits. Describe how the project has encouraged or will engage the full cross-section of community in decision-making. Identify the communities to be engaged and where in the project development process engagement has occurred or will occur. Elements of quality engagement include: outreach to specific communities and populations that are likely to be directly impacted by the project; techniques to reach out to populations traditionally not involved in the community engagement related to transportation projects; residents or users identifying potential positive and negative elements of the project; and surveys, study recommendations, or plans that provide feedback from populations that may be impacted by the proposed project. If relevant, describe how NEPA or Title VI regulations will guide engagement activities.

   (Limit 1,400 characters; approximately 200 words):

2. (0 to 7 points) Describe the project's benefits to low-income populations, people of color, children, people with disabilities, and the elderly. Benefits could relate to safety; public health; access to destinations; travel time; gap closure; leveraging of other beneficial projects and investments; and/or community cohesion. Note that this is not an exhaustive list.

   (Limit 2,800 characters; approximately 400 words):

3. (-3 to 0 points) Describe any negative externalities created by the project along with measures that will be taken to mitigate them. Negative externalities can result in a reduction in points, but mitigation of externalities can offset reductions.

> *(Limit 2,800 characters; approximately 400 words):*

Below is a list of negative impacts. Note that this is not an exhaustive list.
*   Increased difficulty in street crossing caused by increased roadway width, increased traffic speed, wider turning radii, or other elements that negatively impact pedestrian access.
*   Increased noise.
*   Decreased pedestrian access through sidewalk removal / narrowing, placement of barriers along the walking path, increase in auto-oriented curb cuts, etc.
*   Project elements that are detrimental to location-based air quality by increasing stop/start activity at intersections, creating vehicle idling areas, directing an increased number of vehicles to a particular point, etc.
*   Increased speed and/or "cut-through" traffic.
*   Removed or diminished safe bicycle access.
*   Inclusion of some other barrier to access to jobs and other destinations.
*   Displacement of residents and businesses.
*   Construction/implementation impacts such as dust; noise; reduced access for travelers and to businesses; disruption of utilities; and eliminated street crossings. These tend to be temporary.
*   Other

SCORING GUIDANCE (30 Points)

Each application will be scored on a 10-point scale as described below.
1. (3 points): The project(s) with the most impactful and meaningful community engagement will receive the full three points. Remaining projects will receive a share of the full points at the scorer's discretion.
2. (7 points) The project(s) with the most positive benefits will receive the full seven points. Remaining projects will receive a share of the full points at the scorer's discretion.
3. (-3 to 0 points) The scorer will reduce the score by one point (up to three total) for each negative externality. Note that the scorer can deduct points for negatives not acknowledged in the application; the scorer will document any negatives not acknowledged in the application and the reasons for any associated point reductions. The scorer can add one to three points for successful mitigation of negative project elements based on the degree to which they are mitigated. Note that this score cannot provide more points than are deducted.

Each score from the above 10-point scale will then be adjusted to the appropriate geography.

Note: Due to the geographic adjustment to scores, it is possible that the above process will result in no project receiving the maximum allotment of points. In this case, the highest-scoring application for this measure will be adjusted to receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 10 points and the top project had 20 points, this applicant would receive (10/20)*30 points or 15 points. Note also that it is possible to score negative points on this measure.

B. *MEASURE:* Metropolitan Council staff will award points to the project based on the ~~2017~~ 2019 Housing Performance Score for the city or township in which the project is located. ~~The score includes consideration of affordability and diversification, local initiatives to facilitate affordable workforce housing development or preservation, and density of residential development~~. If the project is in more than one jurisdiction, the points will be awarded based on a weighted average using the length or population of the project in each jurisdiction.

The housing performance score is calculated from data in these four categories:
- New affordable or mixed-income housing completed in the last ten years;
- Preservation projects completed in the last seven years and/or Substantial rehabilitation projects completed in the last three years;
- Housing program participation and production, and housing policies and ordinances
- Characteristics of the existing housing stock.

For stand-alone intersection, bridge, underpass, and interchange projects, a one-mile radius-buffer will be drawn around the project. If the radius-buffer enters more than one jurisdiction, the points will be awarded based on the proportionate population of the Census blocks in each jurisdiction that are all or partially located in the area within the one-mile radius-buffer.

If a project is located in a city or township with no allocation of affordable housing need (either there is no forecasted household growth or the area does not have land to support sewered development), then the project will not be disadvantaged by this measure and the project's total score will be adjusted as a result.

RESPONSE:
- City/Township: _____
- Length of Segment (For stand-alone projects, enter population from Regional Economy map) within each City/Township: _____
- Housing Score: _____ *(online calculation)*

SCORING GUIDANCE (70 Points)

The applicant with the highest ~~2017~~ 2019 Housing Performance Score will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had a Housing Performance Score of 55 and the top project had a Housing Performance Score of 90, this applicant would receive (55/90)*70 points or 43 points.

Note: Metropolitan Council staff will score this measure.

Projects will use the city Housing Performance Score based on the project location. If a project is located in more than one jurisdiction, the points will be awarded based on a weighted average of the city or township scores for the project location based on the length of the project in each jurisdiction. For stand-alone intersection, bridge, underpass, and interchange projects, a one-mile radius-buffer will be drawn around the project. If the radius-buffer enters more than one jurisdiction, the points will be awarded based on the proportionate population of the Census blocks in each jurisdiction that are all or partially located in the area within the one-mile radius-buffer.

If a project is located in a city or township with no allocation of affordable housing need (either there is no forecasted household growth or the area does not have land to support sewered development), then the project will not be disadvantaged by this measure and the project's total score will be adjusted as a result.

If this is the case, then the total points possible in the application will be 930 instead of 1,000. The total points awarded through the rest of the application (900 as a hypothetical example) will be divided by 930,

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then multiplied by 1,000. Therefore, a project scoring 900 out of 930, will equate to 968 points on a 1,000-point scale.

If a portion of the project is located in a city with an affordable housing allocation and the other portion is located in a township with no affordable housing allocation, then a combination of the weighted average and no affordable housing methodologies should be used. This will result in a total score that will be somewhere between 930 and 1,000; then the score will need to be adjusted to fit a 1,000-point scale.

4. Infrastructure Age/Condition (~~150~~ 175 Points) – This criterion will assess the age of the roadway facility being improved. Roadway improvement investments should focus on the higher needs of an aging facility, whereas, improvements to a recently reconstructed roadway does not display an efficient use of funds.

A. *MEASURE:* Identify the year of the roadway's original construction or most recent reconstruction. If the reconstruction date is used for the roadway, a full reconstruction must have been completed during the indicated year. Routine maintenance, such as an overlay or sealcoating project does not constitute a reconstruction and should not be used to determine the infrastructure age.

If construction was completed over several years, enter the segment lengths for each year. The average age will be calculated.

In order to enter information, click "Add' (in the upper right-hand corner of the page), enter the year and click "Save". If the project length has more than one construction year, repeat the "Add" and "Save" process for each segment.

RESPONSE:

- Year of original roadway construction or most recent reconstruction: _____
- Location(s) used: _____

SCORING GUIDANCE (50 Points)

The applicant with the oldest roadway will receive full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored was constructed 41 years ago and the oldest project was constructed 48 years ago, this applicant would receive (41/48)*50 points or 43 points.

Note: Because of the reporting of year of construction, it is possible for multiple projects to receive the full allotment of 50 points.

B. *MEASURE:* Select the geometric, structural, or infrastructure deficiencies listed below that will be improved as part of this project, as reflected in the project cost estimate. (~~100~~ 125 Points)

RESPONSE (Select all that apply. Please identify the proposed improvement):
- Improved roadway to better accommodate freight movements: ☐ 0-15 pts
  - *RESPONSE (Limit 700 characters; approximately 100 words):*
- Improved clear zones or sight lines: ☐ 0-10 pts
  - *RESPONSE (Limit 700 characters; approximately 100 words)*
- Improved roadway geometrics: ☐ 0-15 pts
  - *RESPONSE (Limit 700 characters; approximately 100 words)*
- Access management enhancements: ☐ 0-20 pts
  - *RESPONSE (Limit 700 characters; approximately 100 words)*
- Vertical/horizontal alignment improvements: ☐ 0-10 pts
  - *RESPONSE (Limit 700 characters; approximately 100 words)*
- Improved stormwater mitigation: ☐ 0-10 pts
  - *RESPONSE (Limit 700 characters; approximately 100 words)*
- Signals/lighting upgrades: ☐ 0-10 pts
  - *RESPONSE (Limit 700 characters; approximately 100 words)*
- Other *Improvements*: ☐ 0-10 pts
  - *RESPONSE (Limit 700 characters; approximately 100 words)*

SCORING GUIDANCE (~~100~~ 125 Points)

Within each improvement sub-measure, the answer most responsive to the need will receive full points (e.g., the top project that improves clear zones or sight lines will receive 10 points), with each remaining project receiving a share of the full points at the scorer's discretion. It is possible for more than one project to receive maximum points for a sub-measure.

The highest-scoring application for this measure will be adjusted to receive the full ~~100~~ 125 points. Remaining projects will receive a proportionate share of the full points equal to the points for the project being scored divided by the points assigned to the highest-scoring project multiplied by the maximum points available for the measure (100). For example, if the application being scored had 25 points and the top project had 50 points, this applicant would receive (25/50)*~~100~~ 125 points or ~~50~~ 63 points.

5. Congestion Reduction/Air Quality (80 Points) – This criterion measures the project's ability to reduce congestion. In addition, it will address its ability to improve congested intersections operating at unacceptable levels of service during peak hour conditions. The project will also be measured based on its ability to reduce emissions.

A. *MEASURE:* Conduct a capacity analysis at one or more of the intersections (or rail crossings) being improved by the roadway project using existing turning movement counts (collected within the last three years) in the weekday a.m. or p.m. peak hour and the Synchro or HCM software. The applicant must show the current total peak hour delay at one or more intersections (or rail crossings) and the reduction in total peak hour intersection delay at these intersections (or rail crossings) in seconds due to the project. If more than one intersection (or rail crossing) is examined, then the delay reduced by each intersection can be can added together to determine the total delay reduced by the project.

- For roadway projects that include a railroad crossing, the applicant should conduct fieldwork during either the weekday a.m. or p.m. peak hour to determine the total peak hour delay reduced by the project. Applicants can also add together intersection delay reduced and railroad delay reduced, if they both will be improved by the project.

The applicant should include the appropriate Synchro or HCM full reports (including the Timing Page Report) that support the improvement in total peak hour delay and should conduct the analysis using the following:
- Under the network settings, all defaults should be used for lanes, saturation flow rates, volumes, and simulation
- Use Synchro's automatic optimization to determine cycle, offset and splits (for traffic signals). Use the setting when assessing delay both with and without the project. This methodology will ensure that all applicants start with their signal systems optimized when determining existing delay.
- Project improvements assumed in the build condition should be reflected in the total project cost, such as additional through or turn lanes and protective left-turn phasing
- Roadway lengths for intersection approaches must be the same length for before and after scenarios
- An average weekday should be used for the existing conditions instead of a weekend, peak holiday, or special event time period that is not representative of the corridor for most of the year

Total Peak Hour Delay Reduced (Seconds) = Total Peak Hour Delay/Vehicle x Vehicles Per Hour

RESPONSE):
- Total Peak Hour Delay/Vehicle without the Project (Seconds/Vehicle):_____
- Total Peak Hour Delay/Vehicle with the Project (Seconds/Vehicle):_____
- Total Peak Hour Delay/Vehicle Reduced by the Project (Seconds/Vehicle):_____ *(automatically calculated)*
- Volume (Vehicles Per Hour): _____
- Total Peak Hour Delay Reduced by the Project (Seconds): _____ *(automatically calculated)*

EXPLANATION of methodology used to calculate railroad crossing delay, if applicable (Limit 1,400 characters; approximately 200 words):

SCORING GUIDANCE (50 Points)

The applicant with the most peak hour vehicle delay reduced by the project improvement will receive the full points for the measure. Remaining projects will receive a proportionate share of the points. For example, if the application being scored reduced delay by 5,000 seconds and the top project reduced delay by 25,000 seconds, this applicant would receive (5,000/25,000)*50 points, or 10 points.

B. *MEASURE:* Using the Synchro or HCM analysis completed in the previous measure, identify the total peak hour emissions reduction in kilograms (CO, NO$_X$, VOC) due to the project. The applicant should include the appropriate Synchro or full HCM reports (including the Timing Page Report) that support the improvement in total peak hour emissions. If more than one intersection is examined, then the emissions reduced by each intersection can be can added together to determine the total emissions reduced by the project.

    Roadway projects that do not include railroad grade-separation elements:

    - Total Peak Hour Emissions Reduced (Kilograms)= Total Peak Hour Emissions without the project – Total Peak Hour Emissions with the Project

    RESPONSE:
    - Total (CO, NO$_X$, and VOC) Peak Hour Emissions without the Project (Kilograms):_____
    - Total (CO, NO$_X$, and VOC) Peak Hour Emissions with the Project (Kilograms):_____
    - Total (CO, NO$_X$, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):_____ *(calculated online)*

    If more than one intersection is examined, the response should include a total of all emissions reduced.

    Roadway projects that include railroad grade-separation elements:

    - For roadway projects that include a railroad crossing, the applicant needs to input four variables before and after the project to determine the change in emissions. Those variables include: speed, vehicle mile traveled, delay, and total vehicle stops. The applicant needs to conduct fieldwork during either the a.m. or p.m. peak hour to determine the existing conditions and then detail any assumptions used for conditions after the project is built. The variables will be used in the exact same equation used within the software program (i.e., Synchro) required of the other project types. Therefore, the approach to calculate the kilograms emissions reduced for railroad grade-separation projects will be comparable to intersection improvement projects.

    RESPONSE:
    - Cruise speed in miles per hour without the project:_____ (Applicant inputs number)
    - Vehicle miles traveled without the project:_____ (Applicant inputs number)
    - Total delay in hours without the project:_____ (Applicant inputs number)
    - Total stops in vehicles per hour without the project:_____ (Applicant inputs number)
    - Cruise speed in miles per hour with the project:_____ (Applicant inputs number)
    - Vehicle miles traveled with the project:_____ (Applicant inputs number)
    - Total delay in hours with the project:_____ (Applicant inputs number)
    - Total stops in vehicles per hour with the project:_____ (Applicant inputs number)
    - Fuel consumption in gallons (F1)
    - Fuel consumption in gallons (F2)
    - Fuel consumption in gallons (F3)

Speed = cruise speed in miles per hour
Total Travel = vehicle miles traveled
Total Delay = total delay in hours
Stops = total stops in vehicles per hour

K1 = 0.075283-0.0015892 * Speed + 0.000015066 * Speed^2
K2 = 0.7329
K3 = 0.0000061411 * Speed^2

F1 (or F2 – without the project) = Fuel consumption in gallons

F1 = Total Travel * k1 + Total Delay * k2 + Stops * k3
F2 = Total Travel * k1 + Total Delay * k2 + Stops * k3

F3 = F1 – F2

CO = F3 * 0.0699 kg/gallon
NO$_X$ = F3 * 0.0136 kg/gallon
VOC = F3 * 0.0162 kg/gallon

Equation Automatically Provides Emissions Reduced:
- Total (CO, NO$_X$, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms): _____ (Online Calculation)

EXPLANATION of methodology and assumptions used (Limit 1,400 characters; approximately 200 words):

SCORING GUIDANCE (30 Points)
The applicant with the most kilograms reduced by the project improvement will receive the full points for the measure. Remaining projects will receive a proportionate share of the full. For example, if the application being scored reduced emissions by 3 kilograms and the top project reduced emissions by 5 kilograms, this applicant would receive (3/5)*30 points or 18 points.

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6. Safety (~~150~~ 180 Points) – This criterion addresses the project's ability to correct deficiencies and improve the overall safety of a roadway facility. It will assess the project's monetized safety benefits.

A. *MEASURE:* Respond as appropriate to one of the two project types below. (~~150~~ 175 Points)

Roadway projects that do not include railroad grade-separation elements:

Calculate the reduction in the total number of crashes due to improvements on the A-minor arterial or non-freeway principal arterial made by the project. The applicant must base the estimate of crash reduction on the methodology consistent with the latest Highway Safety Improvement Program (HSIP) application (www.dot.state.mn.us/stateaid/trafficsafety.html). Applicants should focus on the crash analysis for reactive projects.

Crash data must be obtained for the project length using the MnDOT TIS system average for calendar years ~~2013~~ 2016 through ~~2015~~ 2018. Crash data should include all crash types and severities, including pedestrian and bicycle crashes.

Applicants should request crash data from MnDOT as early as possible. The applicant must then attach a listing of the crashes reduced and the HSIP Benefit/Cost (B/C) worksheet (www.dot.state.mn.us/stateaid/trafficsafety.html) that identifies the resulting benefit associated with the project. As part of the response, please detail and attach the crash modification factor(s) used from FHWA's Crash Modification Factors Clearinghouse: http://www.cmfclearinghouse.org/. This measure requests the monetized safety benefit of the project. The cost of the project is scored in the Cost Effectiveness criterion.

RESPONSE:
- Crash Modification Factors Used (*Limit 700 characters; approximately 100 words)*: _____
- Rationale for Crash Modifications Selected (*Limit 1,400 characters; approximately 200 words)*: _____
- Project Benefit ($) from B/C ratio: _____
- Explanation of Methodology: _____

Roadway projects that include railroad grade-separation elements:

Since the number of observed crashes at an existing at-grade railroad crossing is minor compared to an intersection, this measure will assess crash risk exposure that exists in order to compare projects. As a proactive safety measure, railroad grade-separation projects eliminate the crash risk exposure.
- Crash Risk Exposure Eliminated = current average annual daily traffic volume x average number of daily trains at the at-grade crossing

RESPONSE:
- Current AADT volume:_____
- Average daily trains:_____
- Crash Risk Exposure eliminated:_____

SCORING GUIDANCE (~~150~~ 150 Points)

This measure will be considered separately for projects that do and do not include a railroad grade-separation project. As a result, two projects (one without a railroad grade-separation project and one with a railroad grade-separation) may receive the full points.

For projects that do not include a grade-separation project, the applicant with the highest dollar value of benefits will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had safety benefits of $11,000,000

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and the top project had safety benefits of $16,000,000, this applicant would receive (11,000,000/16,000,000)*~~150~~175 points or ~~103~~120 points.

For railroad grade-separation projects, the applicant with the highest crash risk exposure eliminated due to the project will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored reduced 11,000 exposures and the top project reduced 16,000, this applicant would receive (11,000 /16,000)*~~150~~175 points or ~~103~~120 points.

B. *MEASURE:* Discuss how the project will improve safety for pedestrians. Safety countermeasures for pedestrians can include those identified by the FHWA as part of its Safe Transportation for Every Pedestrian program or others in its Proven Safety Countermeasures (e.g., pedestrian refuge islands, raised crosswalks, pedestrian hybrid beacons, leading pedestrian intervals). More information about pedestrian safety best practices is also available in MnDOT's *Best Practices for Pedestrian/Bicycle Safety.*

SCORING GUIDANCE (30 Points)
The project that will provide the most improvement to pedestrian safety will receive full points. Remaining projects will receive a share of the full points at the scorer's discretion.

7. Multimodal Elements and Existing Connections (~~100~~110 Points) - This criterion measures how the project improves the travel experience, safety, and security for other modes of transportation and addresses the safe integration of these modes. The *Transportation Policy Plan* requires that explicit consideration of all users of the transportation system be considered in the planning and scoping phase of roadway projects.

A. *MEASURE:* Describe how the project positively affects the multimodal system.
- Discuss any bicycle, pedestrian, or transit elements that are included as part of the project and how they improve the travel experience, safety, and security for users of these modes. Applicants should make sure that new multimodal elements described in the response are accounted for as part of the cost estimate form earlier in the application. Applicants should note if there is no transit service in the project area and identify supporting studies or plans that address why a mode may not be incorporated in the project (e.g., a bicycle system plan that locates bikeway facilities on a lower-volume parallel route).
- Describe how the proposed multimodal improvements positively affect identified alignments in the Regional Bicycle Transportation Network (RBTN) or along a regional trail, if applicable.
- Describe how the proposed multimodal improvements either provide a new, or improve an existing a Major River Bicycle Barrier Crossing (MRBBC) as defined in the 2040 Transportation Policy Plan (TPP) or an identified Regional Bicycle Barrier Improvement Area as defined in the TPP and Technical Addendum to the Regional Bicycle Barriers Study (May 2019), if applicable.
- Discuss the existing bicycle, pedestrian, and transit connections and how the project enhances these connections.
- Discuss whether the project implements specific locations identified as being deficient in a completed ADA Transition Plan.

RESPONSE (Limit 2,800 characters; approximately 400 words):

SCORING GUIDANCE (~~100~~110 Points)

The project that most positively affects the multimodal elements system will receive the full points. Remaining projects will receive a share of the full points at the scorer's discretion. The project score will be based on the quality of the improvements, as opposed to being based solely on the number of modes addressed. Points can be earned for incorporating multimodal project elements, positively affecting identified alignments in the Regional Bicycle Transportation Network (RBTN), ~~or~~ regional trail, Major River Bicycle Barrier Crossing, or Regional Bicycle Barrier, or for making connections with existing multimodal systems or helping to implement an ADA Transition Plan. Projects do not need all of these elements to be awarded all of the points. Multimodal elements for rural roadway projects may include wider shoulders that will be used by bicyclists and pedestrians.

~~Scorers should make sure that new multimodal elements described in the response are accounted for on the cost estimate form earlier in the application.~~

8. Risk Assessment (75 Points) – This criterion measures the number of risks associated with successfully building the project. High-risk applications increase the likelihood that projects will withdraw at a later date. If this happens, the region is forced to reallocate the federal funds in a short amount of time or return them to the US Department of Transportation. These risks are outlined in the checklist in the required Risk Assessment.

A. <u>*MEASURE*</u>*:* Applications involving construction must complete the Risk Assessment. This checklist includes activities completed to-date, as well as an assessment of risks (e.g., right-of-way acquisition, proximity to historic properties, etc.).

<u>*RESPONSE (Complete Risk Assessment):*</u>

Please check those that apply and fill in anticipated completion dates for all projects, except for new/expanded transit service projects or transit vehicle purchases.

1) **Layout (~~30~~ 25 Percent of Points)**
   Layout should include proposed geometrics and existing and proposed right-of-way boundaries
   100% ☐ Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties that the project goes through or agencies that maintain the roadway(s)). **A PDF of the layout must be attached along with letters from each jurisdiction to receive points.**
   50% ☐ Layout completed but not approved by all jurisdictions. **A PDF of the layout must be attached to receive points.**
   0% ☐ Layout has not been started

   Anticipated date or date of completion: _____

2) **Review of Section 106 Historic Resources (~~20~~ 15 Percent of Points)**
   100% ☐ No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and project is not located on an identified historic bridge
   100% ☐ There are historical/archeological properties present but determination of "no historic properties affected" is anticipated.
   80% ☐ Historic/archeological property impacted; determination of "no adverse effect" anticipated
   40% ☐ Historic/archeological property impacted; determination of "adverse effect" anticipated
   0% ☐ Unsure if there are any historic/archaeological properties in the project area.

   Project is located on an identified historic bridge: ☐

3) **Right-of-Way (~~30~~ 25 Percent of Points)**
   100% ☐ Right-of-way, permanent or temporary easements either not required or all have been acquired
   50% ☐ Right-of-way, permanent or temporary easements required, plat, legal descriptions, or official map complete
   25% ☐ Right-of-way, permanent or temporary easements required, parcels identified
   0% ☐ Right-of-way, permanent or temporary easements required, parcels not all identified

   Anticipated date or date of acquisition _____

4) Railroad Involvement (~~20~~ 15 Percent of Points)

100% ☐ No railroad involvement on project or railroad Right-of-Way agreement is executed (**include signature page, if applicable**)

50% ☐ Railroad Right-of-Way Agreement required; negotiations have begun

0% ☐ Railroad Right-of-Way Agreement required; negotiations have not begun.

Anticipated date or date of executed Agreement _____

5) Public Involvement (20 Percent of Points)

The project applicant must describe how the transportation problem was identified at the proposed project location, how the potential solution was identified instead of other options, and the public involvement completed to date on the project. Upfront work completed on a project will likely reduce risks to project implementation _____

RESPONSE (Limit 2,800 characters; approximately 400 words):

SCORING GUIDANCE (75 Points)
The applicant with the most points on the Risk Assessment (more points equate to less project risk) will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 40 points and the top project had 70 points, this applicant would receive (40/70)*75 points or 43 points.

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9. Cost Effectiveness (100 Points) – This criterion will assess the project's cost effectiveness based on the total TAB-eligible project cost (not including noise walls) and total points awarded in the previous criteria.

A. *MEASURE:*

This measure will calculate the cost effectiveness *of the project.* Metropolitan Council staff will divide the number of points awarded in the previous criteria by the TAB-eligible project cost (not including noise walls). If a project has been awarded other outside, competitive funding (e.g., state bonding, Transportation Economic Development Program, Minnesota Highway Freight Program), project sponsors may reduce the total project cost for the purposes of this scoring measure by the amount of the outside funding award.

- Cost- effectiveness = total number of points awarded in previous criteria/total TAB-eligible project cost

RESPONSE (This measure will be calculated after the scores for the other measures are tabulated by the Scoring Committee):

- Total Project Cost (entered in Project Cost Form):_____ *(automatically calculated)*
- Enter amount of Noise Walls: _____
- Enter amount of any outside, competitive funding (attach documentation of award): _____
- Points Awarded in Previous Criteria: ____ (entered by Metropolitan Council staff)

SCORING GUIDANCE (100 Points)

The applicant with the most points (i.e., the benefits) per dollar will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the top project received .0005 points per dollar and the application being scored received .00025 points per dollar, this applicant would receive (.0005/.00025) *100 points for 50 points.

The scorer for this measure will also complete a reasonableness check of the total project cost that is used for this measure. The scorer may follow up with the applicant to clarify any questions. Up to 50 percent of points awarded for this measure can be deducted if the scorer does not believe that the cost estimate is reasonable.

TOTAL: 1,100 POINTS

Bridges – Prioritizing Criteria and Measures

July 10, 2019

Definition: A bridge rehabilitation or replacement project located on a non-freeway principal arterial or A-minor arterial functionally-classified roadway, consistent with the latest TAB-approved functional classification map. Bridge structures that have a separate span for each direction of travel can apply for both spans as part of one application.

The bridge must carry vehicular traffic but may also include accommodations for other modes. Bridges that are exclusively for bicycle or pedestrian traffic must apply under one of the Bicycle and Pedestrian Facilities application categories. Rail-only bridges are not eligible for funding. Completely new bridges, interchanges, or overpasses should apply in the Roadway Expansion application category.

Examples of Bridge Rehabilitation/Replacement Projects:
- Bridge rehabilitation of 20 or more feet with a sufficiency rating less than 80 and classified as structurally deficient or functionally obsolete.
- Bridge replacement of 20 or more feet with a sufficiency rating less than 50 and classified as structurally deficient or functionally obsolete.

Scoring:

Criteria and Measures	Points	% of Total Points
1. Role in the Regional Transportation System and Economy	**195**	**18%**
Measure A - Distance to the nearest parallel bridge	100	
Measure B - Project Location Relative to Jobs, Manufacturing, and Education	30	
Measure C - Regional Truck Corridor Tiers	65	
2. Usage	**130**	**12%**
Measure A - Current daily person throughput	100	
Measure B - Forecast 2040 average daily traffic volume	30	
3. Equity and Housing Performance	**100**	**9%**
Measure A - Connection to disadvantaged populations and project's benefits, impacts, and mitigation	30	
Measure B - Housing Performance Score	70	
4. Infrastructure Condition	**400**	**36%**
Measure A – Bridge Sufficiency Rating	300	
Measure B – Load-Posting	100	
5. Multimodal Elements and Existing Connections	**100**	**9%**
Measure A - Transit, bicycle, or pedestrian project elements and connections	100	
6. Risk Assessment	**75**	**7%**
Measure A - Risk Assessment Form	75	
7. Cost Effectiveness	**100**	**9%**
Measure A – Cost effectiveness (total points awarded/total project cost)	100	
Total	**1,100**	

1. Role in the Regional Transportation System and Economy (195 Points) – Tying regional policy (Thrive MSP2040) to the Regional Solicitation, this criterion measures the project's ability to serve a transportation purpose within the regional transportation system and economy based on how well it fulfills its functional classification role, connects to employment, post-secondary students, and manufacturing/distribution-related employment, and aligns with the Regional Truck Corridor Study tiers.

A. *MEASURE:* Address how the project route fulfills its role in the regional transportation system by measuring the diversion to the nearest parallel crossing (must be an A-minor arterial or principal arterial) if the proposed project is closed. The project itself must be located on a non-freeway principal arterial or an A-minor arterial.

   RESPONSE:
   - Location of nearest parallel crossing:_____
   - Explanation (*Limit 2,800 characters; approximately 400 words*): _____
   - Distance from one end of proposed project to nearest parallel crossing (that is an A-minor arterial or principal arterial) and then back to the other side of the proposed project using non-local functionally-classified roadways:_____ *(calculated by Council Staff)*

SCORING GUIDANCE (100 Points)
The applicant with the furthest distance from the closest parallel A-minor arterial or principal arterial bridge ~~on~~ will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the project being scored had a distance of 8 miles and the top project was had a distance of 10 miles, this applicant would receive (8/10)*100 points or 80 points.

B. *MEASURE:* Reference the "Regional Economy" map generated at the beginning of the application process. Report the employment, manufacturing/distribution-related employment, and post-secondary students enrolled within one mile, as depicted on the "Regional Economy" map.

   RESPONSE (Data from the "Regional Economy" map):

   - Existing Employment within 1 Mile:_____(Maximum of 30 points)
   - Existing Manufacturing/Distribution-Related Employment within 1 Mile:_____ (Maximum of 30 points)
   - Existing Post-Secondary Students within 1 Mile: _____(Maximum of 18 points)

   Upload the "Regional Economy" map used for this measure.

SCORING GUIDANCE (30 Points)

All Census block groups that are included within or intersect the buffer area around the project will be included.

The applicant with the highest existing total employment will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 1,000 workers within one mile and the top project had 1,500 workers, this applicant would receive (1,000/1,500)*30 points or 20 points.

The applicant with the highest existing manufacturing/distribution-related employment will receive the full points. Remaining projects will receive a proportionate share of the full points equal to the existing manufacturing/distribution-related employment within one mile of the project being scored divided by the project with the highest manufacturing/distribution-related employment within one mile multiplied by the maximum points available for the measure (20). For example, if the application being scored had 1,000 manufacturing/distribution-related workers within one mile and the top project had 1,500 manufacturing/distribution-related workers, this applicant would receive (1,000/1,500)*30 points or 20 points.

The applicant with the highest number of post-secondary students will receive 30 points. Remaining projects will receive a proportionate share of the 30 points. For example, if the application being scored had 1,000 students within one mile and the top project had 1,500 students, this applicant would receive (1,000/1,500)*18 points or 12 points.

The scorer will assess if the applicant would score highest with the total employment part of the measure, the manufacturing/distribution employment part of the measure, or the education part of the measure and give the applicant the highest of the three scores out of a maximum of 30 points.

Note: Due to the use of multiple sub-measures, two applicants can receive the full 30 points.

C. *MEASURE:* This measure relies on the results in the Regional Truck Corridor Study, which prioritized all principal and minor arterials based on truck volume, truck percentage of total traffic, proximity to freight industry clusters, and proximity to regional freight terminals. (65 points)

Use the final study report for this measure:
https://metrocouncil.org/Transportation/Planning-2/Transit-Plans,-Studies-Reports/Highways-Roads/Truck-Freight-Corridor-Study.aspx

RESPONSE (Select one for your project, based on the Regional Truck Corridor Study:

- The project is located on either a Tier 1, Tier 2, or Tier 3 corridor: ☐ (65 Points)
- The project provides a direct and immediate connection (i.e., intersects) with either a Tier 1, Tier 2, or Tier 3 corridor: ☐ (10 Points)
- The project is not located on a Tier 1, Tier 2, or Tier 3 corridor: ☐ (0 Points)

SCORING GUIDANCE (65 Points)

The scorer will assign points based on which of the scores applies. Note that multiple applicants can score the maximum point allotment.

2. Usage (130 Points) – This criterion quantifies the project's potential impact by measuring the current daily person throughput and future vehicular traffic that will be served by the project. These roadway users directly benefit from the project improvements on the A-minor arterial or non-freeway principal arterial.

A. *MEASURE:* Metropolitan Council staff will calculate the current daily person throughput at one location on the A-minor arterial or non-freeway principal arterial bridge using the current average annual daily traffic (AADT) volume and average annual ridership. The applicant must identify the location along the project length and provide the current AADT volume from the MnDOT 50-series maps (select *Twin Cities Metro Area Street Series* under *Traffic Volume (AADT)*). Reference the "Transit Connections" map for transit routes along the project. Ridership data will be provided by the Metropolitan Council staff, if public transit is currently provided on the project length.

- Current Daily Person Throughput = (current average annual daily traffic volume x 1.30 vehicle occupancy) + average annual daily transit ridership (2019~~2017~~)

RESPONSE:

- Location:_____
- Current AADT volume:_____
- Existing Transit Routes on the Project:_____

Upload the "Transit Connections" map.

SCORING GUIDANCE (100 Points)
The applicant with highest current daily person throughput will receive the full points for the measure. Remaining projects will receive a proportionate share of the full. For example, if the application being scored had a daily person throughput of 1,000 ~~vehicles~~ people and the top project had a daily person throughput of 1,500 ~~vehicles~~people, this applicant would receive (1,000/1,500)*100 points or 67 points.

B. *MEASURE:* Provide the forecast (2040) average daily traffic volume at the same location on the A-minor arterial or non-freeway principal arterial bridge, as identified in the previous measure. The applicant may choose to use a county or city travel demand model based on the Metropolitan Council model to identify the forecast (2040) average daily traffic volume or have Metropolitan Council staff determine the forecast volume using the Metropolitan Council model and project location. Respond as appropriate to the use of one type of forecast model. (30 points)

RESPONSE:
- Use Metropolitan Council model to determine forecast (2040) ADT volume ☐
- METC Staff-Forecast (2040) ADT volume ☐

    OR

RESPONSE:

- Identify the approved county or city travel demand model to determine forecast (2040) ADT volume☐
- Forecast (2040) ADT volume : _____

SCORING GUIDANCE (30 Points)
The applicant with the highest forecast (2040) ADT volume will receive the full points for the measure.

Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had a daily forecast of 28,000 vehicles and the top project had a daily forecast of 32,000 vehicles, this applicant would receive (28,000/32,000)*30 points or 26 points.

3. Equity and Housing Performance (100 Points) – This criterion addresses the Council's role in advancing equity by examining the project's positive and negative impacts to low-income populations, people of color, children, people with disabilities, and the elderly along with outreach to those groups. The criterion also evaluates a community's efforts to promote affordable housing.

A. *MEASURE:* Reference the "Socio-Economic Conditions" map generated at the beginning of the application process. Identify the project's location from the list below, as depicted on the map. Geographic proximity alone is not sufficient to receive the full points. In order to receive the maximum points, the response should address equitable distribution of benefits, mitigation of negative impacts, and community engagement for the populations selected. (30 Points)

Upload the "Socio-Economic Conditions" map used for this measure.

RESPONSE (Select one, based on the "Socio-Economic Conditions" map):

- Project located in Area of Concentrated Poverty with 50% or more of residents are people of color (ACP50): ☐ (up to 100% of maximum score)
- Project located in Area of Concentrated Poverty: ☐ (up to 80% of maximum score)
- Project's census tracts are above the regional average for population in poverty or population of color: ☐ (up to 60% of maximum score)
- Project located in a census tract that is below the regional average for population in poverty or populations of color, or includes children, people with disabilities, or the elderly: ☐ (up to 40% of maximum score)

1. (0 to 3 points) A successful project is one that has actively engaged in low-income populations, people of color, children, persons with disabilities, and the elderly during the project's development with the intent to limit negative impacts on them and, at the same time, provide the most benefits. Describe how the project has encouraged or will engage the full cross-section of community in decision-making. Identify the communities to be engaged and where in the project development process engagement has occurred or will occur. Elements of quality engagement include: outreach to specific communities and populations that are likely to be directly impacted by the project; techniques to reach out to populations traditionally not involved in the community engagement related to transportation projects; residents or users identifying potential positive and negative elements of the project; and surveys, study recommendations, or plans that provide feedback from populations that may be impacted by the proposed project. If relevant, describe how NEPA or Title VI regulations will guide engagement activities.

   (Limit 1,400 characters; approximately 200 words):

2. (0 to 7 points) Describe the project's benefits to low-income populations, people of color, children, people with disabilities, and the elderly. Benefits could relate to safety; public health; access to destinations; travel time; gap closure; leveraging of other beneficial projects and investments; and/or community cohesion. Note that this is not an exhaustive list.

> *(Limit 2,800 characters; approximately 400 words):*

3. (-3 to 0 points) Describe any negative externalities created by the project along with measures that will be taken to mitigate them. Negative externalities can result in a reduction in points, but mitigation of externalities can offset reductions.

> *(Limit 2,800 characters; approximately 400 words):*

Below is a list of negative impacts. Note that this is not an exhaustive list.
- Increased difficulty in street crossing caused by increased roadway width, increased traffic speed, wider turning radii, or other elements that negatively impact pedestrian access.
- Increased noise.
- Decreased pedestrian access through sidewalk removal / narrowing, placement of barriers along the walking path, increase in auto-oriented curb cuts, etc.
- Project elements that are detrimental to location-based air quality by increasing stop/start activity at intersections, creating vehicle idling areas, directing an increased number of vehicles to a particular point, etc.
- Increased speed and/or "cut-through" traffic.
- Removed or diminished safe bicycle access.
- Inclusion of some other barrier to access to jobs and other destinations.
- Displacement of residents and businesses.
- Construction/implementation impacts such as dust; noise; reduced access for travelers and to businesses; disruption of utilities; and eliminated street crossings. These tend to be temporary.
- Other

SCORING GUIDANCE (30 Points)
Each application will be scored on a 10-point scale as described below.
1. (3 points): The project(s) with the most impactful and meaningful community engagement will receive the full three points. Remaining projects will receive a share of the full points at the scorer's discretion.
2. (7 points) The project(s) with the most positive benefits will receive the full seven points. Remaining projects will receive a share of the full points at the scorer's discretion.
3. (-3 to 0 points) The scorer will reduce the score by one point (up to three total) for each negative externality. Note that the scorer can deduct points for negatives not acknowledged in the application; the scorer will document any negatives not acknowledged in the application and the reasons for any associated point reductions. The scorer can add one to three points for successful mitigation of negative project elements based on the degree to which they are mitigated. Note that this score cannot provide more points than are deducted.

Each score from the above 10-point scale will then be adjusted to the appropriate geography.

Note: Due to the geographic adjustment to scores, it is possible that the above process will result in no project receiving the maximum allotment of points. In this case, the highest-scoring application for this measure will be adjusted to receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 10 points and the top project had 20 points, this applicant would receive (10/20)*30 points or 15 points. Note also that it is possible to score negative points on this measure.

B.   _MEASURE:_ Metropolitan Council staff will award points to the project based on the ~~2017~~ 2019 Housing Performance Score for the city or township in which the project is located. ~~The score includes consideration of affordability and diversification, local initiatives to facilitate affordable workforce housing development or preservation, and density of residential development.~~ A one-mile radius-buffer will be drawn around the project. If the radius-buffer enters more than one jurisdiction, the points will be awarded based on the proportionate population of the Census blocks in each jurisdiction that are all or partially located in the area within the one-mile radius-buffer. (70 Points)

The housing performance score is calculated from data in these four categories:
- New affordable or mixed-income housing completed in the last ten years;
- Preservation projects completed in the last seven years and/or Substantial rehabilitation projects completed in the last three years;
- Housing program participation and production, and housing policies and ordinances
- Characteristics of the existing housing stock.

RESPONSE:

- City/Township: _____
- Population from the "Regional Economy" map within each City/Township entered: _____
- Housing Score: _____ _(online calculation)_

SCORING GUIDANCE (70 Points)

The applicant with the highest ~~2017~~ 2019 Housing Performance Score will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had a Housing Performance Score of 55 and the top project had a Housing Performance Score of 90, this applicant would receive (55/90)*70 points or 43 points.

Note: Metropolitan Council staff will score this measure.

Projects will use the city Housing Performance Score based on the project location. A one-mile radius-buffer will be drawn around the project. If the radius-buffer enters more than one jurisdiction, the points will be awarded based on the proportionate population of the Census blocks in each jurisdiction that are all or partially located in the area within the one-mile radius-buffer.

If a project is located in a city or township with no allocation of affordable housing need (either there is no forecasted household growth or the area does not have land to support sewered development), then the project will not be disadvantaged by this measure and the project's total score will be adjusted as a result.

If this is the case, then the total points possible in the application will be 930 instead of 1,000. The total points awarded through the rest of the application (900 as a hypothetical example) will be divided by

930, then multiplied by 1,000. Therefore, a project scoring 900 out of 930, will equate to 968 points on a 1,000-point scale.

If a portion of the project is located in a city with an affordable housing allocation and the other portion is located in a township with no affordable housing allocation, then a combination of the weighted average and no affordable housing methodologies should be used. This will result in a total score that will be somewhere between 930 and 1,000; then the score will need to be adjusted to fit a 1,000-point scale.

4. Infrastructure Condition (400 Points) – This criterion will assess the age and condition of the bridge facility being improved. Bridge improvement investments should focus on the higher needs of unsafe facilities. If there are two separate spans, then the applicant should take the average bridge sufficiency rating of the two spans.

A. *MEASURE:* Identify the bridge sufficiency rating, from the most recent market structure inventory report. Attach the report to the application.

   RESPONSE:
   - Bridge Sufficiency Rating: _____

   Upload Structure Inventory Report.

SCORING GUIDANCE (300 Points)

The applicant with the lowest bridge sufficiency rating will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points equal to the rating for the project with the lowest bridge sufficiency rating divided by the project being scored multiplied by the maximum points available for the measure (300). For example, if the top project had a bridge sufficiency rating of 35 and the application being scored had a score of 55, this applicant would receive (35/55)*300 points or 191 points.

B. *MEASURE:* Identify whether the bridge is posted for load restrictions.

   RESPONSE (Check box if the bridge is load-posted):
   - Load-Posted (Check box if the bridge is load-posted): ☐

SCORING GUIDANCE (100 Points)

Applicants will receive the points shown depending on whether the bridge is load-posted. The applicant can only score 0 or 100 points for this measure.

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5. Multimodal Elements and Connections (100 Points) – This criterion measures how the project improves the travel experience, safety, and security for other modes of transportation and addresses the safe integration of these modes. The *Transportation Policy Plan* requires that explicit consideration of all users of the transportation system be considered in the planning and scoping phase of roadway projects.

A. *MEASURE:* Describe how the project positively affects the multimodal system.
- Discuss any bicycle, pedestrian, or transit elements that are included as part of the project and how they improve the travel experience, safety, and security for users of these modes. Applicants should make sure that new multimodal elements described in the response are accounted for as part of the cost estimate form earlier in the application. Applicants should note if there is no transit service in the project area and identify supporting studies or plans that address why a mode may not be incorporated in the project (e.g., a bicycle system plan that locates bikeway facilities on a lower-volume parallel route).
- Describe how the proposed multimodal improvements positively affect identified alignments in the Regional Bicycle Transportation Network (RBTN) or along a regional trail, if applicable.
- Describe how the proposed multimodal improvements either provide a new, or improve an existing a Major River Bicycle Barrier Crossing (MRBBC) as defined in the 2040 Transportation Policy Plan (TPP) or an identified Regional Bicycle Barrier Improvement Area as defined in the TPP and Technical Addendum to the Regional Bicycle Barriers Study (May 2019), if applicable.
- Discuss the existing bicycle, pedestrian, and transit connections and how the project enhances these connections.
- Discuss whether the project implements specific locations identified as being deficient in a completed ADA Transition Plan.

RESPONSE (Limit 2,800 characters; approximately 400 words):

SCORING GUIDANCE (100 Points)

The project that most positively affects the multimodal will receive the full points. Remaining projects will receive a share of the full points at the scorer's discretion. The project score will be based on the quality of the improvements, as opposed to being based solely on the number of modes addressed. Points can be earned for incorporating multimodal project elements, positively affecting identified alignments in the Regional Bicycle Transportation Network (RBTN), or regional trail, Major River Bicycle Barrier Crossing, or Regional Bicycle Barrier, or for making connections with existing multimodal systems, or helping to implement an ADA Transition Plan. Projects do not need all of these elements to be awarded all of the points. Multimodal elements for rural roadway projects may include wider shoulders that will be used by bicyclists and pedestrians. Multimodal elements for rural roadway projects may include wider shoulders that will be used by bicyclists and pedestrians. Scorers should make sure that new multimodal elements described in the response are accounted for on the cost estimate form earlier in the application.

6. Risk Assessment (75 Points) – This criterion measures the number of risks associated with successfully building the project. High-risk applications increase the likelihood that projects will withdraw at a later date. If this happens, the region is forced to reallocate the federal funds in a short amount of time or return them to the US Department of Transportation. These risks are outlined in the checklist in the required Risk Assessment.

A. _MEASURE:_ Applications involving construction must complete the Risk Assessment. This checklist includes activities completed to-date, as well as an assessment of risks (e.g., right-of-way acquisition, proximity to historic properties, etc.).

RESPONSE (Complete Risk Assessment):

Please check those that apply and fill in anticipated completion dates for all projects, except for new/expanded transit service projects or transit vehicle purchases.

1) **Layout (~~30~~ 25 Percent of Points)**

    Layout should include proposed geometrics and existing and proposed right-of-way boundaries
    100% ☐ Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties that the project goes through or agencies that maintain the roadway(s)). **A PDF of the layout must be attached along with letters from each jurisdiction to receive points.**
    50% ☐ Layout completed but not approved by all jurisdictions. **A PDF of the layout must be attached to receive points.**
    0% ☐ Layout has not been started

    Anticipated date or date of completion: _____

2) **Review of Section 106 Historic Resources (~~20~~ 15 Percent of Points)**
    100% ☐ No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and project is not located on an identified historic bridge
    100% ☐ There are historical/archeological properties present but determination of "no historic properties affected" is anticipated.
    100% ☐ Historic/archeological property impacted; determination of "no adverse effect" anticipated
    40% ☐ Historic/archeological property impacted; determination of "adverse effect" anticipated
    0% ☐ Unsure if there are any historic/archaeological properties in the project area.

    Project is located on an identified historic bridge: ☐

3) **Right-of-Way (~~30~~ 25 Percent of Points)**
    100% ☐ Right-of-way, permanent or temporary easements either not required or all have been acquired
    50% ☐ Right-of-way, permanent or temporary easements required, plat, legal descriptions, or official map complete
    25% ☐ Right-of-way, permanent or temporary easements required, parcels identified
    0% ☐ Right-of-way, permanent or temporary easements required, parcels not all identified

    Anticipated date or date of acquisition _____

4) **Railroad Involvement (~~20~~ 15 Percent of Points)**
   100% ☐ No railroad involvement on project or railroad Right-of-Way agreement is executed
   (**include signature page, if applicable**)
   50% ☐ Railroad Right-of-Way Agreement required; negotiations have begun
   0% ☐ Railroad Right-of-Way Agreement required; negotiations have not begun.

   Anticipated date or date of executed Agreement _____

5) **Public Involvement (20 Percent of Points)**

   The project applicant must describe how the transportation problem was identified at the proposed project location, how the potential solution was identified instead of other options, and the public involvement completed to date on the project. Upfront work completed on a project will likely reduce risks to project implementation _____

   RESPONSE (Limit 2,800 characters; approximately 400 words):

SCORING GUIDANCE (75 Points)
The applicant with the most points on the Risk Assessment (more points equate to less project risk) will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 40 points and the top project had 70 points, this applicant would receive (40/70)*75 points or 43 points.

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7. Cost Effectiveness (100 Points) – This criterion will assess the project's cost effectiveness based on the TAB-eligible project cost (not including noise walls) and total points awarded in the previous six criteria. If a project has been awarded other outside, competitive funding (e.g., state bonding, Transportation Economic Development Program, Minnesota Highway Freight Program), project sponsors may reduce the total project cost for the purposes of this scoring measure by the amount of the outside funding award.

A. *MEASURE:*

This measure will calculate the cost effectiveness of the project. Metropolitan Council staff will divide the number of points awarded in the previous criteria by the TAB-eligible project cost (not including noise walls).

- Cost effectiveness = total number of points awarded in previous criteria/total TAB-eligible project cost (not including noise walls)

RESPONSE (This measure will be calculated after the scores for the other measures are tabulated by the Scoring Committee):

- Total Project Cost (entered in Project Cost Form):_____ *(automatically calculated)*
- Enter amount of Noise Walls: _____
- Enter amount of any outside, competitive funding (attach documentation of award): _____
- Points Awarded in Previous Criteria: _____ (entered by Metropolitan Council staff)

SCORING GUIDANCE (100 Points)

The applicant with the most points (i.e., the benefits) per dollar will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the top project received .0005 points per dollar and the application being scored received .00025 points per dollar, this applicant would receive (.00025/.0005)*100 points or 50 points.

The scorer for this measure will also complete a reasonableness check of the total project cost that is used for this measure. The scorer may follow up with the applicant to clarify any questions. Up to 50 percent of points awarded for this measure can be deducted if the scorer does not believe that the cost estimate is reasonable.

TOTAL: 1,100 POINTS