ACTION TRANSMITTAL 2016-03

DATE:	December 30, 2015
TO:	Technical Advisory Committee
FROM:	TAC Funding and Programming Committee
PREPARED BY:	Joe Barbeau, Senior Planner (651-602-1705) Steve Peterson, Planning Analyst (651-602-1819) Elaine Koutsoukos, TAB Coordinator (651-602-1717)
SUBJECT:	2016 Regional Solicitation Application
REQUESTED ACTION:	Recommend the attached measures and scoring guidance for each application category for the 2016 Regional Solicitation
RECOMMENDED MOTION:	That TAC recommend to TAB the attached measures and scoring guidance, as modified, for each application category for the 2016 Regional Solicitation

BACKGROUND AND PURPOSE OF ACTION: The Regional Solicitation for federal transportation project funding is part of the Metropolitan Council's federally-required continuing, comprehensive, and cooperative transportation planning process for the Twin Cities Metropolitan Area. The Twin Cities Metropolitan Area selects projects for funding from two federal programs: Surface Transportation Block Grant Program (STBG) and the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. The Transportation Alternatives Program (TAP) was folded into STBG by the recently-signed Fixing America's Surface Transportation (FAST) Act.

The attached materials include the 10 application categories, criteria for each category (approved by TAB on December 16, 2015), proposed measures for the criteria, and proposed scoring guidance for the 2016 Regional Solicitation.

Many measures have undergone minor adjustments while some measures have major changes proposed as described below.

MAJOR CHANGES PROPOSED TO MEASURES

<u>Proposed Changes to Overall Measures</u>

- Insertion of the scoring guidance into each of the measure descriptions. In the 2014 Regional Solicitation the scoring guidance was provided as a separate document to assist scorers and was not included in the application packet. For the 2016 Regional Solicitation, it is recommended that the scoring guidance be included in the application packet to give applicants more information regarding how projects will be evaluated.

- Inclusion of a new Cost Effectiveness criterion in each application category, which requires elimination of cost effectiveness from other criteria and measures. Potential ways to determine cost effectiveness include:
  - o total project cost/total points (as previously suggested by staff and shown in the attachment);
  - o federal dollars requested/total points;
  - o percentage of local match provided; or
  - o some combination of the above measures

Recommended modification: Add as the Cost Effectiveness measure, Total federally eligible costs, excluding the cost of noise walls/total points.

The rationale for excluding noise walls in the total cost is that the determination on the need for noise walls is made late in project development following public input. An applicant including a noise wall in the cost estimate and later not needing it would be penalized in the points awarded. An applicant not including a noise wall in the estimate and later adding one in would have benefited with the points awarded.

Proposed Changes to Roadway Measures

- Replacement of the measure "connection to areas of jobs, manufacturing/distribution centers, and educational institutions" with "connection to total jobs, manufacturing/distribution jobs, and educational institutions" (measure 1C pages 16, 32, 48, and 61)

Recommended modification: Retain the connection to educational institutions (using school enrollment) in measure 1C as shown above.

- Consolidation and simplification of the Multimodal Facilities measures and addition of freight as a multimodal component (measure 7A/5A, pages 26, 43, 56, and 67)
- Adjustment of measures to help railroad crossing projects be more competitive within the Roadway Expansion and Roadway Reconstruction/Modernization categories. This includes accounting for delay caused by trains in the congestion reduction measure and calculating a separate safety score (measures 5A and 6A, pages 22, 24, 39, and 41)

There was committee discussion related to the use of Synchro for measuring delay at railroad crossings. Further modification may occur following additional staff research.

- Under the Risk Assessment criterion, the allocation of points among risk factors has changed due to the addition of a factor for interchange projects to provide points if the project has gone through the MnDOT/Metropolitan Council Interchange Request process
- Adjustment to the scoring of the following measures to help all A-minor arterial classifications be more competitive in the Roadway Expansion and Roadway Reconstruction/Modernization application categories:
  - o Measure 1B: Daily heavy commercial traffic (pages 15 and 31)
  - o Measure 2A: Current daily person throughput (pages 17 and 33)
  - o Measure 2B: Forecast average daily traffic (pages 17 and 33)

- Measure 7A: Multimodal facilities(pages 26 and 43)

There was committee discussion and consensus that the scoring remain the same with at least one A-minor connector funded. This is a modified Option 1.

If TAB adopts Options 1 or 3 under Action Item 2015-51 regarding the funding of A-minor classifications, no adjustments to the scoring of measures 1B, 2A, 2B and 7A above would occur. Adjustment to the scoring of these measures will only be required if TAB adopts Option 2 under Action Item 2015-51.

- For the Roadway Expansion application category only, addition of guidance for applying for new roadways under several measures including:
  - Measure 1B: Daily heavy commercial traffic (page 15)
  - Measure 2A: Current daily person throughput (page 17)
  - Measure 2B: Forecast average daily traffic, (page 17)
  - Measure 4A: Year of original construction (page 21)
  - Measure 5A: Vehicle delay reduction (page 22)
  - Measure 5B: Emissions reduction (page 23)
  - Measure 6A: Crash reduction (page 24)
- For the Roadway Reconstruction/Modernization application category only, addition of specific deficiencies for applicants to address under the Deficiencies measure (Measure 4B, page 37)

<u>Proposed Changes to Transit</u>

- Allow transit applicants to provide letters from employers or educational institutions committing to provide last-mile shuttle service, resulting in expanded transit stop geography (Measure 1A, pages 71 and 84)
- Replacement of average daily transit routes with number of weekday transit trips (Measure 1C, pages 72 and 85)
- Focusing the Transit Expansion Usage measure on new riders and the Transit System Modernization Usage measure on existing riders. (Measure 2A, pages 74 and 87)
- Consolidation and simplification of the Multimodal measures (Measure 5A, pages 79 and 91)

Recommended modification: Remove measure 1B from the Transit Expansion and Transit System Modernization applications because the measure includes population, which is also reflected in measure 2A. The change removes the double counting of population and makes the measures under criteria 1 and 2 similar to criteria 1 and 2 in the Roadway applications.

<u>Proposed Changes to Innovative Travel Demand Management Measures</u>

- Elimination of the auto-generated response measures provided by the mapping tool for connection to areas of job concentration, educational institutions, and manufacturing/distribution centers. The entire “Role in the Regional Transportation System” criterion is proposed to use one measure requiring the applicant to better explain how the project provides benefits to specific concentrated areas. (Measure 1A, page 98)
- Adjustment of the socio-economic equity measure to remove focus from the geographic concentrations from the auto-generated responses provided by the

mapping tool and requiring the applicant to better explain how the project provides benefits to specific concentrated areas. (Measure 3A, page 100)
- Combination of the Innovation criteria into one measure; new policy, program, or strategy had been in a separate measure from expanded geography (Measure 5A, page 104)
- Elimination of the requirement to fill out Risk Assessment form (Measure 6A (eliminated), page 105). Rationale: The Risk Assessment Form is used for capital projects. TDM projects typically are not capital projects and receive the full points for the measure.

Proposed Changes to Multiuse Trails and Bicycle Facilities Measures
- Combination of closing a gap and circumventing a barrier into one component (Measure 4A, page 113)
- Consolidation and simplification of the Multimodal measure (Measure 5A, page 116)

Proposed Changes to Pedestrian Facilities Measures
- Replacement of connection to areas of job concentration, educational institutions, and manufacturing/distribution centers with employment and post-secondary enrollment counts (Measure 1A, page 120)
- Elimination of employment from the Usage measure because it is included in Measure 1A (Measure 2A, page 121)
- Combination of closing a gap and circumventing a barrier into one measure (Measure 4A, page 124)
- Consolidation and simplification of the Multimodal measure (Measure 5A, page 126)

Proposed Changes to Safe Routes to School Measures
- Addition of public transit users to the count of students that bike or walk (Measure 2A, page 132), thereby eliminating the need for the separate Multimodal Facilities criteria and measures

RELATIONSHIP TO REGIONAL POLICY: TAB develops and issues a Regional Solicitation for federal funding.

COMMITTEE COMMENTS AND ACTION: Funding & Programming Committee reviewed the recommended changes to the application measures as prepared from previous committee discussions at the October and November Funding & Programming Committee meetings. F&P made recommendations on specific measures as described above and as follows:

- Recommend adding the Cost Effectiveness measure: Total federally eligible costs, not including the cost of noise walls/total points.

- Recommend adding back in connection to educational institutions (via school enrollment) in measure 1C as shown above.

- There was committee discussion and consensus that the scoring remain the same with at least one A-minor connector funded. This is a modified Option 1.

  If TAB approves Options 1, modified 1, or 3 for Action Item 2015-51, no adjustments to the scoring of the roadway expansion and modernization measures 1B, 2A, 2B and 7A will be necessary. If TAB adopts Option 2 under

Action Item 2015-51, to make all A-minor categories more competitive, the adjustment to the scoring of these measures will need to occur.

- Recommend removing measure 1B from the Transit Expansion and Transit System Modernization applications because the measure reflects population, which is also included in measure 2A.

Technical staff work on the railroad crossings measure will continue in order to determine whether there is a better way than using Synchro to measure number of seconds of delay reduced by the project.

A motion was made that TAC recommend to TAB the attached measures and scoring guidance, as modified, for each application category for the 2016 Regional Solicitation. The motion passed.

ROUTING

TO	ACTION REQUESTED	DATE COMPLETED
TAC Funding & Programming	Review & Recommend	December 17, 2015
Technical Advisory Committee	Review & Recommend	
Transportation Advisory Board	Review & Approve	

1. Assigning 16 additional points to the "Transit Connectivity" measure in Transit applications

- **APPLICATIONS:** Transit Expansion and Transit Modernization
- **DISCUSSION:** At its 12/17/2015 meeting, F&P recommended elimination of the population measure (1B) from the "Role in the Regional Transportation System and Economy" criterion. F&PC added 16 points to the Transit Connectivity measure. **These points need to be redistributed to the two bullets shown below under "response" to add up to 50 points.**

MEASURE: Reference the "Transit Connectivity" map generated at the beginning of the application process. List the transit routes directly connected to the project to help determine the average weekday transit trips these connecting routes provide, as depicted on the "Transit Connectivity" map. Metropolitan Council staff will provide the average number of weekday trips for each connecting transit route. Connections to planned transitway stations should be separately cited. Any transitway connection is worth 10 points. (~~34~~ **50 Points**)

Upload the "Transit Connectivity" map used for this measure.

RESPONSE (Data from the "Transit Connectivity" map):

- Existing transit routes directly connected to the project: _____ (**24 Points**). Council staff will use this information to determine the average number of weekday trips.
- Planned transitways directly connect to the project (mode and alignment determined and identified in the 2040 TPP): ☐ (**10 Points**)

2. Addressing the Retention of Educational Institutions in the "Regional Economy"

- **APPLICATIONS:** Roadway Expansion, Roadway Reconstruction/Modernization, Roadway System Management, Bridges
- **ISSUE:** At its 12/17/2015 meeting, F&P recommended retention of "educational institutions" measure in the "Role in the Regional Transportation System and Economy" criterion, shown below. The previous recommendation weighted the responses for employment and manufacturing/distribution, providing two top scores. Retaining educational institutions (i.e., number of students) would create a third top score.
- **DISCUSSION:**
    - **Identify which students to count, i.e., secondary, post-secondary**
    - **In 2014 Solicitation, points were allocated as follows:**
        - **Job Concentration – 20 points**
        - **Manufacturing/distribution – 20 points**
        - **Educational institutions – 12 points.**

      New points allocation for students needs to be determined:
        - **Employment – up to 20 points**
        - **Manufacturing/distribution employment – up to 20 points**
        - **Students – up to ____ points**

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

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

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

- Existing Employment within 1 Mile:_____
- Existing Manufacturing/Distribution-Related Employment within 1 Mile:_____
- Existing Students:_____

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 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 13 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 13 points.

Add in text for Students…

The scorer will assess if the applicant would score higher with the total employment part of the measure or the manufacturing/distribution employment part of the measure, and give the applicant the higher of the two scores out of a maximum of 30 points. Note: Due to the use of two sub-measures, two applicants will receive the full 30 points.

3. Applying equitable scoring for new roadways: Emission Reduction and Safety

- **APPLICATION:** Roadway Expansion
- **DISCUSSION:** Staff has been asked to find ways to make new roadways competitive.

DISCUSSION: (Measure 5B) Emission Reduction. For new roadways, the application instructs applicants to use intersection(s) with reduced emissions on parallel roadways. However, this does not address emissions created on the new roadway. The crash reduction benefit of attracting traffic off existing roads has to be balanced with the accidents that will occur on the new road due to shifting traffic and attracting additional trips.

MEASURE: Using the Synchro or HCM analysis (or fieldwork for railroad grade-separation projects) 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 (only applies to projects that do not include railroad grade-separation elements). 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. (50 Points)

Roadway projects that 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. If more than one intersection is examined, then the emissions reduced by each intersection can be can added together.
- Total Peak Hour Emissions Reduced (Kilograms) = Total Peak Hour Emissions Reduced/Vehicle x Vehicles Per Hour

DISCUSSION: (Measure 6A) Safety. For new roadways, the application instructs applicants to use crash data from parallel roadways but does not acknowledge crashes created on the new roadway.

MEASURE: Respond as appropriate to one of the two project types below. (150 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 Highway Safety Improvement Program (HSIP). Applicants should focus on the crash analysis for reactive projects starting on page 7 through page 11, in addition to Appendix A, E, and F. Crash data must be obtained for the project length using the MnDOT TIS system average for calendar years 2013 through 2015. Crash data should include all crash types and severity, 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 that identifies the resulting

benefit associated with the project. As part of the response, please detail the crash modification factor(s) used from FHWA's Crash Modification Factors Clearinghouse: http://www.cmfclearinghouse.org/

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 2013-2015, 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 online.

RESPONSE (Calculation):

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

4. Measuring railroad crossing emissions.

- **APPLICATIONS:** Roadway Expansion, Roadway Reconstruction/Modernization
- **DISCUSSION:** How to score emissions reduction for railroad crossing projects
- **POSSIBLE SOLUTION:** Below is potential additional language for railroad crossing emissions (Measure 5B, Air Quality)

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.

*CO = F * 0.0699 kg/gallon*
NO_X *= F * 0.0136 kg/gallon*
*VOC = F * 0.0162 kg/gallon*

F = Fuel consumption in gallons

*F = Total Travel * k1 + Total Delay * k2 + Stops * k3*
$K1 = 0.075283-0.0015892 * Speed + 0.000015066 * Speed^2$
K2 = 0.7329
$K3 = 0.0000061411 * Speed^2$
Speed = cruise speed (free-flow speed) in miles per hour
Total Travel = vehicle miles traveled
Total Delay = total delay in hours
Stops = total stops in vehicles per hour

RESPONSE (Calculation):

- Cruise speed in miles per hour without the project:_____
- Vehicle miles traveled without the project:_____
- Total delay in hours without the project:_____
- Total stops in vehicles per hour without the project:_____

- Cruise speed in miles per hour with the project:_____
- Vehicle miles traveled with the project:_____
- Total delay in hours with the project:_____
- Total stops in vehicles per hour with the project:_____

Automatically Provides Emissions Reduced:

- 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):*

5. Measuring railroad crossing delay

- **APPLICATIONS:** Roadway Expansion, Roadway Reconstruction/Modernization, Roadway System Management
- **DISCUSSION:** In response to momentum for helping make railroad crossing projects more competitive, staff suggested using Synchro to measure delay caused by railroad crossings. At the 12/17/2015 F&P meeting, members were split on whether Synchro can be used for this purpose
- **POSSIBLE SOLUTION:** The below measure is shown for 5A, Congestion Reduction. The bullet represents a potential roadway solution.

  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 a.m. or p.m. peak hour and the Synchro or HCM software for roadway intersections and fieldwork for rail crossings. 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 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.

Roadway Expansion – Prioritizing Criteria and Measures

Definition: A roadway project that adds thru-lane capacity. 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 these federal funds per regional policy and must apply in the Reconstruction/Modernization sub-category.

Examples of Roadway Expansion Projects:

- New roadways
- Two-lane to four-lane, two-lane to three-lane, and 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 and overpasses (includes roadway/railroad grade-separations)

Criteria and Measures
1. Role in the Regional Transportation System and Economy
Measure A - Role in Regional Transportation System
Measure B - Current daily heavy commercial traffic
Measure C - Connection to Total Jobs, ~~and~~ Manufacturing/Distribution Jobs, and Educational Institutions ~~and local activity Centers~~
2. Usage
Measure A - Current daily person throughput
Measure B - Forecast 2040 average daily traffic volume
3. Equity and Housing Performance
Measure A - Connection to disadvantaged populations and benefits, impacts, mitigation
Measure B - Housing Performance Score
4. Infrastructure Age
Measure A - Date of construction ~~and remaining useful life~~
5. Congestion Reduction/Air Quality
Measure A - ~~Cost effectiveness (project cost/v~~Vehicle delay reduced~~)~~
Measure B - ~~Cost effectiveness (project cost/~~Kg ~~per day~~of emissions reduced~~)~~
6. Safety
Measure A - ~~Cost effectiveness of~~ Crashes reduced
7. Multimodal ~~Facilities~~ Elements and Connections
~~Measure A – Ridership of transit routes directly/indirectly connected to project~~
~~Measure B – Bicycle and pedestrian connections~~
Measure ~~C~~ A - Transit, bicycle, ~~or~~ pedestrian, or freight elements of the project and existing connections
8. Risk Assessment
Measure A - Risk Assessment Form
9. Cost Effectiveness
Measure A – Cost effectiveness (~~federally~~TAB eligible cost, not including noise walls/total points awarded)

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, serves heavy commercial traffic, and connects to employment and manufacturing/distribution-related employment.

A. *MEASURE:* Address how the project route fulfills its role in the regional transportation system as identified by its current functional classification. Respond as appropriate to one type of functional classification. (90 Points)

For Expander, Augmentor, or Non-Freeway Principal Arterial Projects Only:

Metropolitan Council staff will use the "Roadway Area Definition" map generated at the beginning of the application process. To ensure consistency of methodology between applicants, Metropolitan Council staff will calculate the average distance between the project and the closest parallel A-Minor Arterials or Principal Arterials on both sides of the project given the project description included by the applicant.

RESPONSE (Calculation):

- *Metropolitan Council staff will calculate the response*

For Reliever Projects Only:

For A-Minor Arterial Relievers, the measure will analyze the level of congestion on the parallel Principal Arterial to determine the importance of the Reliever. Identify the hours per day the current volume exceeds the design capacity on the Principal Arterial being relieved by the Reliever.

- If the Reliever is relieving a Principal Arterial that is a freeway facility, the applicant should obtain data from the current MnDOT Metro Freeway Congestion Report.

- If the Reliever is relieving a Principal Arterial that is a non-freeway facility, the applicant should obtain intersection turning movement or hourly volume data (within the last three years) directly from the MnDOT Metro Intersection Warrant Information website. If data is unavailable on the website, the applicant should collect or use their own intersection turning movement or hourly volume data (within the last three years) for the non-freeway facility. The volume used for the Principal Arterial being relieved should be located within the parallel length of the project. To calculate existing conditions, the applicant must obtain the hourly directional traffic volumes on a weekday, and the current lane configurations.

  For the design capacity calculations, the applicant must use Metropolitan Council definition below:

  Design Capacity
  The assumed maximum number of vehicles per lane which pass any given point in an hour on an average day during normal operating conditions. For the purposes of responding to criteria in this solicitation packet, the following capacities shall be used:

- Expressway through lane - 800 vehicles per hour;
- Arterial through lane - 600 vehicles per hour;
- Left-turn lane - 300 vehicles per hour;
- Right-turn lane - 200 vehicles per hour;
- Dedicated bike lane or multi use trail - 60 vehicles per hour.

RESPONSE (Calculation):

SCORING GUIDANCE (~~90~~ 80 Points)
Expanders, Augmentors, and Non-Freeway Principal Arterials: The applicant with the furthest average distance from the closest parallel A-Minor Arterials or Principal Arterials on both sides will receive the full points. The furthest average distance will be considered separately for Expanders, Augmentors, and Non-Freeway Principal Arterials.

Relievers: The applicant with the highest number of hours per day in which current capacity exceeds the design capacity on the Principal Arterial will receive the full points. Remaining Reliever projects will receive a proportionate share of the full points, calculated as described above.

Four projects (one each for Augmentor, Expander, Reliever, and Non-Freeway Principal Arterial) may receive the full points. Remaining projects will receive a proportionate share of the full points (awarded to the top score in the appropriate functional classification). For example, if the Expander being scored had a distance of 8 miles and the top Expander project had an average distance of 10 miles, this applicant would receive (8/10)*80 points or 64 points. Metropolitan Council staff will provide average distance data for all Augmentor, Expander, and Non-Freeway Principal Arterial projects to ensure consistency of methodology between applications.

B. *MEASURE:* Provide the current daily heavy commercial traffic at one location along the A-Minor Arterial or Non-Freeway Principal Arterial's project length. It is required that an actual daily count is collected or available data from within the last three years is used (from the city, county or MnDOT). Heavy commercial traffic is defined as all trucks with at least two axles and six tires. (65 Points)

- For new roadways, using a traffic model, identify the estimated current daily heavy commercial traffic volume.

RESPONSE:

- Location:_____
- Current daily heavy commercial traffic volume:_____

SCORING GUIDANCE (65 Points)
The applicant with the highest daily heavy commercial traffic at a location along the project length will receive the full points. ~~The highest daily heavy commercial traffic will be considered separately for Augmentors, Expanders, Relievers, and Non-Freeway Principal Arterials.~~

~~As a result, four projects (Augmentors, Expanders, Relievers, and Non-Freeway Principal Arterials) may receive the full points. Remaining projects in each of the four functional classifications will receive a proportionate share of the full points (awarded to the top score in its functional classification).~~ Remaining projects will receive a proportionate share of the full points. For example, if the application

being scored had a heavy commercial volume of 750 vehicles and the top project had a heavy commercial volume of 1,000 vehicles, this applicant would receive (750/1,000)*65 points, or 48 points.

C. *MEASURE:* Reference the "Regional Economy" map generated at the beginning of the application process. Report the existing total employment and manufacturing/distribution-related employment within one mile, as depicted on the "Regional Economy" map.

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

~~*RESPONSE (Select all that apply, based on the "Regional Economy" map):*~~

- ~~Direct connection to or within a mile of a Job Concentration: ☐ (20 Points)~~
- ~~Direct connection to or within a mile of a Manufacturing/Distribution Location:☐ (20 Points)~~
- ~~Direct connection to or within a mile of an Educational Institution:☐ (12 Points)~~
- ~~Project provides a direct connection to or within a mile of an existing local activity center identified in an adopted county or city plan:☐ (12 8 Points)~~

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

- Existing Total Employment within 1 Mile: _____
- Existing Manufacturing/Distribution-Related Employment within 1 Mile: _____

SCORING GUIDANCE (~~20~~ 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. 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 scorer will assess if the applicant would score higher with the total employment part of the measure or the manufacturing/distribution employment part of the measure, and give the applicant the higher of the two scores out of a maximum of 30 points.

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

2. Usage (175 Points) – This criterion quantifies the project's potential mobility 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 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. The applicant must identify the location along the project length and provide the current AADT volume from the last published MnDOT 50-series maps and existing transit routes that travel on the road. Ridership data will be provided by the Metropolitan Council staff, if public transit is currently provided on the project length. (110 Points)

- Current Daily Person Throughput = (current average annual daily traffic volume x 1.30 vehicle occupancy) + average annual daily transit ridership (2015)

- 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 a new roadway:_____

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 ~~This measure will be considered separately for Augmentors, Expanders, Relievers, and Non-Freeway Principal Arterials.~~

~~As a result, four projects (Augmentors, Expanders, Relievers, and Non-Freeway Principal Arterials) may receive the full points. Remaining projects will receive a proportionate share of the full points (awarded to the top score in its functional classification).~~ For example, if the application being scored had a daily person throughput of 1,000 vehicles and the top project within the same functional classification had a daily person throughput of 1,500 vehicles, 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 forecast daily traffic volume if this information is available. If not available, then identify the forecast volumes that will be relocated from any parallel roadway(s) to the new roadway.

RESPONSE:

- Use Metropolitan Council model to determine forecast (2040) ADT volume☐

OR

RESPONSE:

- 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~~.~~ ~~This measure will be considered separately for Augmentors, Expanders, Relievers, and Non-Freeway Principal Arterials.~~

~~As a result, four projects (Augmentors, Expanders, Relievers, and Non-Freeway Principal Arterials) may receive the full points. Remaining projects will receive a proportionate share of the full points.~~. 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 project's positive and negative impacts to low-income populations, people of color, children, people with disabilities, and the elderly. The criterion also evaluates a community's efforts to promote affordable housing.

A. *MEASURE:* Reference the "Socio-Econ" map generated at the beginning of the application process. Identify the project's location from the list below, as depicted on the map. Describe the project's positive benefits, and negative impacts, and mitigation for low-income populations; people of color; children, people with disabilities, and the elderly. Geographic proximity alone is not sufficient to receive the full points listed below. In order to receive the maximum points, the response should address the benefits, impacts, and mitigation for the populations listed above. (30 Points)

Upload the "Socio-Econ" map used for this measure.

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

- Project located in Racially Concentrated Area of Poverty: ☐ (0 to 30 Points)
- Project located in Concentrated Area of Poverty: ☐ (0 to 24 Points)
- Project's census tracts are above the regional average for population in poverty or population of color: ☐ (0 to 18 Points)
- 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: ☐ (0 to 12 Points)

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

SCORING GUIDANCE (30 Points)
Based on the "Socio-Econ" map's output, the applicant will select the appropriate option from the above bullets. However, geographic proximity alone is not sufficient to receive full points. The applicant must fully describe the positive benefits and negative impacts (with mitigation to address the issue) for those identified groups. Each project will first be graded on a 10-point scale, not accounting for geography. Each score from the 10-point scale will then be adjusted to the appropriate geography. The project with the most positive benefits and appropriate mitigation for negative impacts will receive the full points relative to its maximum geographic sub-area defined above. Remaining projects will receive a share of the full points at the scorer's discretion. This response is intended to be qualitative. Metropolitan Council staff will score this measure.

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 30 points. In this case, the highest-scoring application for this measure will be adjusted to receive the full 30 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.

B. *MEASURE:* Metropolitan Council staff will award points to the project based on the 2015 Housing Performance Score (add hyperlink) 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 of the project in each jurisdiction. 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. (70 Points)

RESPONSE (Affordable Housing Score completed by Metropolitan Council staff):

- City/Township: _____
- Length of Segment within City/Township: _____

SCORING GUIDANCE (70 Points)

The applicant with the highest 2015 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. 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 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 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 a sealcoating project does not constitute a reconstruction and should not be used to determine the infrastructure age.

- 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 full reconstruction: _____
- Explanation (if needed): _____

SCORING GUIDANCE (75 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)*75 points or 64 points.

Note: Because of the reporting of year of construction, it is possible for multiple projects to receive the full allotment of 75 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.

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 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. (100 Points)

- 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 Synchro analysis should be adapted to account for the delay caused by the railroad tracks being blocked.

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, volumes, phases and simulation
- Use Synchro's automatic optimization to determine cycle, offset and splits (for traffic signals)
- 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.

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

RESPONSE (Calculation):

- 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):_____
- Volume (Vehicles Per Hour): _____
- Total Peak Hour Delay Reduced by the Project (Seconds): _____
- *EXPLANATION of methodology used to calculate railroad crossing delay, if applicable (Limit 1,400 characters; approximately 200 words):*

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. 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 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. (50 Points)

Roadway projects that 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. If more than one intersection is examined, then the emissions reduced by each intersection can be can added together.

- Total Peak Hour Emissions Reduced (Kilograms)= Total Peak Hour Emissions Reduced/Vehicle x Vehicles Per Hour

RESPONSE (Calculation):

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

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.

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. (150 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 Highway Safety Improvement Program (HSIP). Applicants should focus on the crash analysis for reactive projects starting on page 7 through page 11, in addition to Appendix A, E, and F.

Crash data must be obtained for the project length using the MnDOT TIS system average for calendar years 2013 through 2015. Crash data should include all crash types and severity, 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 that identifies the resulting benefit associated with the project. As part of the response, please detail the crash modification factor(s) used from FHWA's Crash Modification Factors Clearinghouse: http://www.cmfclearinghouse.org/

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 2013-2015, 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 (Calculation):

- Crash Modification Factors Used: _____
- 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 small 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:_____

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

7. Multimodal ~~Facilities~~ 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:* Discuss any bicycle, pedestrian, transit, or freight 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. Freight elements could be project elements such as adding paved shoulders, wider shoulders, acceleration lanes, or longer turning lanes added specifically to accommodate freight movements.

Also, describe the existing bicycle, pedestrian, transit, or freight connections. Furthermore, address how the proposed project safely integrates all modes of transportation (i.e., vehicles, trucks, bicyclists, transit, and pedestrians) and, if applicable, supports planned transitway stations. 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).

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

SCORING GUIDANCE (100 Points)

The project with the most comprehensive multimodal elements included as part of the project will receive the full points. ~~This measure will be considered separately for Augmentors, Expanders, Relievers, and Non-Freeway Principal Arterials. As a result, four projects (Augmentors, Expanders, Relievers, and Non-Freeway Principal Arterials) may 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.

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~~ 100 Points) – This criterion measures the number of risks associated with the project and the steps already completed in the project development process. These steps 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):

SCORING GUIDANCE (~~75~~ 100 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~~ 100 points or ~~43~~ 57 points.

9. Cost Effectiveness (~~TBD~~ 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. ~~Calculations must be based on the total project cost of TAB-eligible expenses. Any eligible dollars allocated to noise walls should be excluded from this measure because of the uncertainty of needing them at this stage of the project development cycle.~~

A. *MEASURE: Calculate the cost* effectiveness *of the project.* Metropolitan Council staff will divide the ~~total~~ TAB-eligible project cost (not including noise walls) by the total number of points awarded in the previous criteria (1-8).

- Cost effectiveness = total TAB-eligible project cost (not including noise walls)/total number of points awarded in previous criteria (1-8)

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):_____

SCORING GUIDANCE (100 Points)
The applicant with the lowest dollar value per point earned in the application (i.e., the benefits) 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 had 35,000 and the application being scored had 70,000, this applicant would receive (35,000/70,000) *100 points for 50~~% of the total~~ points.

TOTAL: ~~TBD~~ 1,100 POINTS

Roadway Reconstruction/Modernization – Prioritizing Criteria and Measures

Definition: A roadway project that does not add thru-lane capacity, but reconstructs or modernizes the facility. 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 Projects:

- Intersection improvements (includes roadway/RR grade-separations that do not add thru lanes)
- Alternative intersections such as unsignalized or signalized reduced conflict intersections (one intersection or multiple intersections)
- Interchange reconstructions that do not involve new ramp movements or added thru lanes
- Turn lanes (not continuous), four-lane to three-lane reconstructions, 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 improvements
- Roadway improvements with the addition of multimodal elements
- New roadway alignments that replace an existing alignment and do not expand the number of lanes

Criteria and Measures
1. Role in the Regional Transportation System and Economy
Measure A - Average distance to nearest parallel roadways~~Role in Regional Transportation System~~
Measure B - Current daily heavy commercial traffic
Measure C - Connection to Total Jobs, Manufacturing/Distribution Jobs, and Educational Institutions
2. Usage
Measure A - Current daily person throughput
Measure B - Forecast 2040 average daily traffic volume
3. Equity and Housing Performance
Measure A - Connection to disadvantaged populations and project's benefits
Measure B - Housing Performance Score
4. Infrastructure Age/Condition
Measure A - Date of construction
Measure B – Geometric, structural, or infrastructure deficiencies
5. Congestion Reduction/Air Quality
Measure A - ~~Cost effectiveness (project cost/v~~Vehicle delay reduced~~)~~
Measure B - ~~Cost effectiveness (project cost/kg~~ Kg of emissions ~~-~~reduced~~)~~
6. Safety
Measure A - ~~Cost effectiveness (project cost/~~Crashes reduced~~)~~
7. Multimodal ~~Facilities~~ Elements and Connections
~~Measure A – Ridership of transit routes directly/indirectly connected project~~
~~Measure B – Bicycle and pedestrian connections~~
Measure ~~C~~ A - Transit, bicycle, ~~or~~ pedestrian, or freight elements of project and existing connections
8. Risk Assessment
Measure A - Risk Assessment Form

9. Cost Effectiveness	
	Measure A – Cost effectiveness (~~federally~~TAB-~~-~~eligible cost, not including noise walls/total points awarded)

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, serves heavy commercial traffic, and connects to employment and manufacturing/distribution-related employment.

A. *MEASURE:* Address how the project route fulfills its role in the regional transportation system as identified by its current functional classification. Respond as appropriate to one type of functional classification. (90 Points)

For Expander/Augmentor/Connector/Non-Freeway Principal Arterial Projects Only:

Metropolitan Council staff will use the "Roadway Area Definition" map generated at the beginning of the application process. To ensure consistency of methodology between applicants, Metropolitan Council staff will calculate the average distance between the project and the closest parallel A-Minor Arterials or Principal Arterials on both sides of the project given the project description included by the applicant.

For Reliever Projects Only:

For A-Minor Arterial Relievers, the measure will analyze the level of congestion on the parallel Principal Arterial to determine the importance of the Reliever. Identify the hours per day the current volume exceeds the design capacity on the Principal Arterial being relieved by the Reliever.

- If the Reliever is relieving a Principal Arterial that is a freeway facility, the applicant should obtain data from the current MnDOT Metro Freeway Congestion Report.
- If the Reliever is relieving a Principal Arterial that is a non-freeway facility, the applicant should obtain intersection turning movement or hourly volume data (within the last three years) directly from the MnDOT Metro Intersection Warrant Information website. If data is unavailable on the website, the applicant should collect or use their own intersection turning movement or hourly volume data (within the last three years) for the non-freeway facility. The volume used for the Principal Arterial being relieved should be located within the parallel length of the project. To calculate existing conditions, the applicant must obtain the hourly directional traffic volumes on a weekday, and the current lane configurations.

For the design capacity calculations, the applicant must use Metropolitan Council definition below:

Design Capacity
The assumed maximum number of vehicles per lane which pass any given point in an hour on an average day during normal operating conditions. For the purposes of responding to criteria in this solicitation packet, the following capacities shall be used:

- Expressway through lane - 800 vehicles per hour;
- Arterial through lane - 600 vehicles per hour;
- Left-turn lane - 300 vehicles per hour;

- Right-turn lane - 200 vehicles per hour;
- Dedicated bike lane or joint use trail - 60 vehicles per hour.

RESPONSE (Calculation):

SCORING GUIDANCE (~~90~~ 80 Points)
Expanders, Augmentors, Connectors, and Non-Freeway Principal Arterials: The applicant with the furthest average distance from the closest parallel A-Minor Arterials or Principal Arterials on both sides will receive the full points. The furthest average distance will be considered separately for Expanders, Augmentors, Connectors, and Non-Freeway Principal Arterials.

Relievers: The applicant with the highest number of hours per day in which current capacity exceeds the design capacity on the Principal Arterial will receive the full points. Remaining Reliever projects will receive a proportionate share of the full points, calculated as described above.

Five projects (one each for Augmentor, Connector, Expander, Reliever, and Non-Freeway Principal Arterial) may receive the full points. Remaining projects will receive a proportionate share of the full points (awarded to the top score in its functional classification). For example, if the Expander being scored had a distance of 8 miles and the top Expander project had an average distance of 10 miles, this applicant would receive (8/10)*90 points or 72 points. Metropolitan Council staff will provide average distance data for all Augmentor, Expander, Connector and Non-Freeway Principal Arterial projects to ensure consistency of methodology between applications.

B. *MEASURE:* Provide the current daily heavy commercial traffic at one location along the "A" Minor Arterial or Non-Freeway Principal Arterial project length. It is required that actual counts are collected (from the city, county or MnDOT) within the last three years is used (from the city, county or MnDOT). Heavy commercial traffic is defined as all trucks with at least two axles and six tires. (65 Points)

RESPONSE:

- Location:_____
- Current daily heavy commercial traffic volume:_____

SCORING GUIDANCE (65 Points)
The applicant with the highest daily heavy commercial traffic at a location along the project length will receive the full points. Remaining projects will receive a proportionate share of the full points. ~~The highest daily heavy commercial traffic will be considered separately for each functional classification.~~

~~As a result, five projects may receive the full points. Remaining projects in each of the five functional classifications will receive a proportionate share of the full points (in the same functional classification).~~ Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had a heavy commercial volume of 750 vehicles and the top project had a heavy commercial volume of 1,000 vehicles, this applicant would receive (750/1,000)*65 points, or 48 points.

c. *MEASURE:* Reference the "Regional Economy" map generated at the beginning of the application process. Report the existing population and employment and manufacturing/distribution-related employment within one mile, as depicted on the "Regional Economy" map.

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

~~*RESPONSE (Select all that apply, based on the "Regional Economy" map):*~~

- ~~Direct connection to or within a mile of a Job Concentration: ☐ (20 Points)~~
- ~~Direct connection to or within a mile of a Manufacturing/Distribution Location:☐ (20 Points)~~
- ~~Direct connection to or within a mile of an Educational Institution:☐ (12 Points)~~
- ~~Project provides a direct connection to or within a mile of an existing local activity center identified in an adopted county or city plan:☐ (12 Points)~~

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

- Existing Employment within 1 Mile: _____
- Existing Manufacturing/Distribution-Related Employment within 1 Mile: _____

SCORING GUIDANCE (~~20~~ 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 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 13 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 13 points.

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

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

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:* 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. The applicant must identify the location along the project length and provide the current AADT volume from the MnDOT 50-series maps. Ridership data will be provided by the Metropolitan Council staff, if public transit is currently provided on the project length. (110 Points)

- Current Daily Person Throughput = (current average annual daily traffic volume x 1.30 vehicle occupancy) + average annual daily transit ridership (2013)

RESPONSE:

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

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~~This measure will be considered separately for each functional classification.~~

~~As a result, five projects may receive the full points. Remaining projects will receive a proportionate share of the full points (awarded to the top score in its functional classification)~~. For example, if the application being scored had a daily person throughput of 1,000 vehicles and the top project within the same functional classification had a daily person throughput of 1,500 vehicles, 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)

RESPONSE:

- Use Metropolitan Council model to determine forecast (2040) ADT volume☐

OR

RESPONSE:

- 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~~This measure will be considered separately for each functional classification.~~

~~As a result, five projects may receive the full points. 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 project's positive and negative impacts to low-income populations, people of color, children, people with disabilities, and the elderly. The criterion also evaluates a community's efforts to promote affordable housing.

A. *MEASURE:* Reference the "Socio-Econ" map generated at the beginning of the application process. Identify the project's location from the list below, as depicted on the map. Describe the project's positive benefits, and negative impacts, and mitigation for low-income populations; people of color; children, people with disabilities, and the elderly. Geographic proximity alone is not sufficient to receive the full points listed below. In order to receive the maximum points, the response should address the benefits, impacts, and mitigation for the populations listed above. (30 Points)

Upload the "Socio-Econ" map used for this measure.

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

- Project located in Racially Concentrated Area of Poverty: ☐ (0 to 30 Points)
- Project located in Concentrated Area of Poverty: ☐ (0 to 24 Points)
- Project's census tracts are above the regional average for population in poverty or population of color: ☐ (0 to 18 Points)
- 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: ☐ (0 to 12 Points)

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

SCORING GUIDANCE (30 Points)

Based on the "Socio-Econ" map's output, the applicant will select the appropriate option from the above bullets. However, geographic proximity alone is not sufficient to receive full points. The applicant must fully describe the positive benefits and negative impacts (with mitigation to address the issue) for those identified groups (200 words or less). Each project will first be graded on a 10-point scale, not accounting for geography. Each score from the 10-point scale will then be adjusted to the appropriate geography. The project with the most positive benefits and appropriate mitigation for negative impacts will receive the full points relative to its maximum geographic sub-area define above. Remaining projects will receive a share of the full points at the scorer's discretion. This response is intended to be qualitative. Metropolitan Council staff will score this measure.

Due to the geographic adjustment to scores, it is possible that the above process will result in no project receiving the maximum allotment of 30 points. In this case, the highest-scoring application for this measure will be adjusted to receive the full 30 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.

B. *MEASURE:* Metropolitan Council staff will award points to the project based on the 2014 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 of the project in each jurisdiction. 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. (70 Points)

RESPONSE (Affordable Housing Score completed by Metropolitan Council staff):

- City/Township: _____
- Length of Segment within City/Township:

SCORING GUIDANCE (70 Points)

The applicant with the highest 2015 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. 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 (150 Points) – This criterion will assess the age and remaining useful life for 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, is ineligible for this calculation of remaining useful life.. (50 Points)

RESPONSE:

- Year of original roadway construction or most recent reconstruction: _____
- Explanation (if needed): _____

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 Points)

RESPONSE (Select all that apply. If "other" is selected, please identify the proposed improvement.):

- Improving a non-10-ton roadway to a 10-ton roadway: ☐ 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 alignments improvements: ☐ 0-10 pts
  - *RESPONSE (Limit 700 characters; approximately 100 words)*
- Improved stormwater mitigation: ☐ 0-10 pts
  - *RESPONSE (Limit 700 characters; approximately 100 words)*
- Improved roadway materials: ☐ 0-10 pts
  - *RESPONSE (Limit 700 characters; approximately 100 words)*
- Signals/lighting upgrades: ☐ 0-10 pts
  - *RESPONSE (Limit 700 characters; approximately 100 words)*

SCORING GUIDANCE (100 Points)

Within each above improvement sub-measure, the answer most responsive to the need will receive full (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 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 points or 50 points.

5. Congestion Reduction/Air Quality (75 Points) – This criterion measures the project's ability to reduce delay–along the roadway facility. It will also address its ability to improve congested intersections operating at unacceptable levels of service during peak hour conditions. This criterion will assess the project's cost effectiveness based on the total project cost and reduction in the total intersection delay. The region must allocate transportation funds in such a way that the selected projects provide the most benefit for the amount of funding requested. Cost effectiveness is an essential component of the regional solicitation process.

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 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. (50 Points)
    - For roadway projects that include a railroad crossing, the Synchro analysis should be adapted to account for the delay caused by the railroad tracks being blocked.

   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, volumes, phases and simulation
   - Use Synchro's automatic optimization to determine cycle, offset and splits (for traffic signals)
   - 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.

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

   RESPONSE (Calculation):

   - 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):_____
   - Volume (Vehicles Per Hour): _____
   - Total Peak Hour Delay Reduced by the Project (Seconds): _____

SCORING GUIDANCE (~~50~~ 45 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. 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)*45 points, or 9 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. (25 Points)

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

- Total Peak Hour Emissions Reduced (Kilograms)= Total Peak Hour Emissions Reduced/Vehicle x Vehicles Per Hour

RESPONSE (Calculation):

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

SCORING GUIDANCE (~~25~~ 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.

6. Safety (150 Points) – This criterion addresses the project's ability to correct deficiencies and improve the overall safety of an existing or 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 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 Highway Safety Improvement Program (HSIP). Applicants should focus on the crash analysis for reactive projects starting on page 7 through page 11, in addition to Appendix A, E, and F.

Crash data must be obtained for the project length using the MnDOT TIS system average for calendar years 2013 through 2015. Crash data should include all crash types and severity, 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 that identifies the resulting benefit associated with the project. As part of the response, please detail the crash modification factor(s) used from FHWA's Crash Modification Factors Clearinghouse: http://www.cmfclearinghouse.org/

RESPONSE (Calculation):

- Crash Modification Factors Used: _____
- 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 small 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:_____

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

7. Multimodal ~~Facilities~~ Elements and Connections (~~100~~ 75 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:* Discuss any bicycle, pedestrian, transit, or freight 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. Freight elements could be project elements such as adding paved shoulders, wider shoulders, acceleration lanes, or longer turning lanes added specifically to accommodate freight movements.

Also, describe the existing bicycle, pedestrian, and transit accommodations. Furthermore, address how the proposed project safely integrates all modes of transportation (i.e., vehicles, trucks, bicyclists, transit, and pedestrians) and, if applicable, supports planned transitway stations. 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).

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

SCORING GUIDANCE (75 Points)

The project with the most comprehensive multimodal elements included as part of the project will receive the full points. ~~This measure will be considered separately for all roadway classifications. As a result, five projects may 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.

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~~ 100 Points) – This criterion measures the number of risks associated with the project and the steps already completed in the project development process. These steps 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):

SCORING GUIDANCE (100 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)*100 points or 57 points.

9. Cost Effectiveness (~~TBD~~ 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. ~~Calculations must be based on the total project cost of TAB-eligible expenses. Any eligible dollars allocated to noise walls should be excluded from this measure because of the uncertainty of needing them at this stage of the project development cycle.~~

A. *MEASURE: Calculate the cost* effectiveness *of the project.* Metropolitan Council staff will divide the ~~total~~ TAB-eligible project cost (not including noise walls)by the total number of points awarded in the previous criteria (1-8).

- Cost- effectiveness = total TAB-eligible project cost (not including noise walls)/total number of points awarded in previous criteria (1-8)

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):_____

SCORING GUIDANCE (100 Points)
The applicant with the lowest dollar value per point earned in the application (i.e., the benefits) 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 had 35,000 and the application being scored had 70,000, this applicant would receive (35,000/70,000) *100 points for 50~~% of the total~~ points.

TOTAL: ~~TBD~~ 1,100 POINTS

Roadway System Management – Prioritizing Criteria and Measures

Definition: An Intelligent Transportation System (ITS) or similar project that primarily benefits roadway users. Roadway System Management projects can include project elements along a continuous route (could be more than one roadway) or defined geographic area such as a downtown area. The system management project must make improvements to at least one A-Minor Arterial or non-Freeway Principal Arterial as part of the project. Projects that are more transit-focused must apply in the Transit System Modernization sub-category.

Examples of Roadway System Management Projects:

- Traffic signal retiming, integrated corridor signal coordination, traffic signal control system upgrades
- New or replacement traffic mgmt centers, detectors, fiber optic cables for traffic control, etc., CCTV cameras, variable message signs, and other traveler information improvements
- Incident management coordination

Criteria and Measures
1. Role in the Regional Transportation System and Economy
Measure A - Role in Regional Transportation System
Measure B - Current daily heavy commercial traffic
Measure C - Connection to Total Jobs and ~~-~~ Manufacturing/Distribution Jobs, and Educational Institutions
2. Usage
Measure A - Current daily person throughput
Measure B - Forecast 2030 average daily traffic volume
3. Equity and Housing Performance
Measure A - Connection to disadvantaged populations and project's benefits
Measure B - Housing Performance Score
4. Infrastructure Age/Condition
Measure A - Date of construction and remaining useful life
5. Congestion Reduction/Air Quality
Measure A - ~~Cost effectiveness per v~~Vehicle delay reduced
Measure B - ~~Cost effectiveness (project cost /~~ Kg ~~per day~~ of emissions reduced
6. Safety
Measure A - Crashes reduced
7. Multimodal ~~Facilities~~ Elements and Connections
~~Measure A – Ridership of transit routes directly/indirectly connected project~~
~~Measure B – Bicycle and pedestrian connections~~
Measure C - Transit, bicycle, ~~or~~ pedestrian, or freight elements of the project and existing connections
8. Risk Assessment
Measure A- Risk Assessment Form
9. Cost Effectiveness
Measure A – Cost effectiveness (~~federally~~TAB~~-~~ eligible cost, not including noise walls/total points awarded)

1. Role in the Regional Transportation System and Economy (125 Points) – Tying regional policy (Thrive MSP 2040) 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, serves heavy commercial traffic, and connects to employment and manufacturing/distribution-related employment.

A. *MEASURE:* Address how the project fulfills its role in the regional transportation system as identified by its current functional classification. This system must include a Non-Freeway Principal Arterial or an "A" Minor Arterial. (55 Points)

- Metropolitan Council staff will use the "Roadway Area Definition" map generated at the beginning of the application process. To ensure consistency of methodology between applicants, Metropolitan Council staff will calculate the average distance between the project and the closest parallel A-Minor Arterials or Principal Arterials on both sides of the project given the project description included by the applicant.

RESPONSE (Calculation):

- *Metropolitan Council staff will calculate the response*

SCORING GUIDANCE (~~65~~ 55 Points)

The applicant with the furthest average distance from the closest parallel A-Minor Arterials or Principal Arterials on both sides 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 an average distance of 10 miles, this applicant would receive (8/10)*55 points or 44 points. Metropolitan Council staff will provide average distance data for all projects to ensure consistency of methodology between applications.

B. *MEASURE:* Provide the current daily heavy commercial traffic at one location along the "A" Minor Arterial or Non-Freeway Principal Arterial project length. It is required that an actual daily count is collected or available data from within the last three years is used (from the city, county or MnDOT). Heavy commercial traffic is defined as all trucks with at least two axles and six tires. (40 Points)

RESPONSE:

- Location:_____
- Current daily heavy commercial traffic volume:_____

SCORING GUIDANCE (40 Points)

The applicant with the highest daily heavy commercial traffic at a location along the project length 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 heavy commercial volume of 750 vehicles and the top project had a heavy commercial volume of 1,000 vehicles, this applicant would receive (750/1,000)*40 points, or 30 points.

C. *MEASURE:* Reference the "Regional Economy" map generated at the beginning of the application process. Report the existing total employment and manufacturing/distribution-related employment within one mile, as depicted on the "Regional Economy" map.

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

~~*RESPONSE (Select all that apply, based on the "Regional Economy" map):*~~

- ~~Direct connection to or within a mile of a Job Concentration: ☐ (20 Points)~~
- ~~Direct connection to or within a mile of a Manufacturing/Distribution Location: ☐ (20 Points)~~
- ~~Direct connection to or within a mile of an Educational Institution: ☐ (12 Points)~~
- ~~Project provides a direct connection to or within a mile of an existing local activity center identified in an adopted county or city plan: ☐ (12 Points)~~

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

- Existing Total Employment within 1 Mile: _____
- Existing Manufacturing/Distribution-Related Employment within 1 Mile: _____

SCORING GUIDANCE (~~20~~ 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. 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 scorer will assess if the applicant would score higher with the total employment part of the measure or the manufacturing/distribution employment part of the measure, and give the applicant the higher of the two scores out of a maximum of 30 points.

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

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 annual ridership. The applicant must identify the location along the project length and provide the current AADT volume from the MnDOT 50-series maps. 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 (2013)

RESPONSE:

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

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 and the top project within the same functional classification had a daily person throughput of 1,500 vehicles, this applicant would receive (1,000/1,500)*85 points or 57 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. It is required that an actual daily count is collected or available data from within the last three years is used (from the city, county or MnDOT). Heavy commercial traffic is defined as all trucks with at least two axles and six tires. (40 Points)

RESPONSE:

- Use Metropolitan Council model to determine forecast (2040) ADT volume☐

OR

RESPONSE:

- 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 project's positive and negative impacts to low-income populations, people of color, children, people with disabilities, and the elderly. The criterion also evaluates a community's efforts to promote affordable housing.

A. *MEASURE:* Reference the "Socio-Econ" map generated at the beginning of the application process. Identify the project's location from the list below, as depicted on the map. Describe the project's positive benefits, and negative impacts, and mitigation for low-income populations; people of color; children, people with disabilities, and the elderly. Geographic proximity alone is not sufficient to receive the full points listed below. In order to receive the maximum points, the response should address the benefits, impacts, and mitigation for the populations listed above. (30 Points)

Upload the "Socio-Econ" map used for this measure.

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

- Project located in Racially Concentrated Area of Poverty: ☐ (0 to 30 Points)
- Project located in Concentrated Area of Poverty: ☐ (0 to 24 Points)
- Project's census tracts are above the regional average for population in poverty or population of color: ☐ (0 to 18 Points)
- 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: ☐ (0 to 12 Points)

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

SCORING GUIDANCE (30 Points)
Based on the "Socio-Econ" map's output, the applicant will select the appropriate option from the above bullets. However, geographic proximity alone is not sufficient to receive full points. The applicant must fully describe the positive benefits and negative impacts (with mitigation to address the issue) for those identified groups (200 words or less). Each project will first be graded on a 10-point scale, not accounting for geography. Each score from the 10-point scale will then be adjusted to the appropriate geography. The project with the most positive benefits and appropriate mitigation for negative impacts will receive the full points relative to its maximum geographic sub-area defined above. Remaining projects will receive a share of the full points at the scorer's discretion. This response is intended to be qualitative. Note: Metropolitan Council staff will score this measure.

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 30 points. In this case, the highest-scoring application for this measure will be adjusted to receive the full 30 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.

B. *MEASURE:* Metropolitan Council staff will award points to the project based on the 2015 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 of the project in each jurisdiction. 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. (70 Points)

RESPONSE (Affordable Housing Score completed by Metropolitan Council staff):

- City/Township: _____
- Length of Segment within City/Township:

SCORING GUIDANCE (70 Points)

The applicant with the highest 2015 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. 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 age of the infrastructure elements being improved. Roadway system management investments should focus on improving and replacing existing equipment that is beyond its useful life.

A. *MEASURE:* Identify the type(s) and age(s) of ITS, signal/control, and/or communication equipment that will be improved or replaced as part of this project, as reflected in the project cost estimate.

RESPONSE:

- Equipment to be improved: _____
- Date of equipment installation (year) : _____

SCORING GUIDANCE (75 Points)

All applicants replacing equipment past the total useful life, as listed below, will receive full points. Projects replacing more than one type or age of equipment should be scored based on the average remaining useful life. Remaining projects will receive a proportionate share of the full points equal to the total useful life minus the remaining useful life for the project being scored divided by the total useful life.

If there are no projects at or past the useful life of the equipment, the applicant with shortest remaining useful life will receive full points, and remaining projects will receive a proportionate share. For example, if the oldest project was installed 18 years ago (traffic signal) and the application being scored was installed 14 years ago, this applicant would receive (14/18)*75 points, or 58 points.

Equipment Useful Life Values

- ITS Equipment: 10 years
- Traffic Signals/Control Equipment: 20 years
- Communication Equipment: 10 years

5. Congestion Reduction/Air Quality (200 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 being improved by the roadway project using existing turning movement counts (collected within the last three years) in the 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 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 added together to determine the total delay reduced by the project. (150 Points)

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, volumes, phases and simulation
- Use Synchro's automatic optimization to determine cycle, offset and splits (for traffic signals). For signal retiming projects, use the existing signal timing for the no-build.
- 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.

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

RESPONSE (Calculation):

- 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):_____
- Volume (Vehicles Per Hour): _____
- Total Peak Hour Delay Reduced by the Project (Seconds): _____

SCORING GUIDANCE (150 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. 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)*150 points, or 30 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. (50 Points)

- Total Peak Hour Emissions Reduced (Kilograms)= Total Peak Hour Emissions Reduced/Vehicle x Vehicles Per Hour

RESPONSE (Calculation):

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

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.

6. Safety (200 Points) – This criterion addresses the project's ability to correct deficiencies and improve the overall safety of an existing or 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 Highway Safety Improvement Program (HSIP). Applicants should focus on the crash analysis for reactive projects starting on page 7 through page 11, in addition to Appendix A, E, and F.

Crash data must be obtained for the project length using the MnDOT TIS system average for calendar years 2013 through 2015. Crash data should include all crash types and severity, 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 that identifies the resulting benefit associated with the project. As part of the response, please detail the crash modification factor(s) used from FHWA's Crash Modification Factors Clearinghouse: http://www.cmfclearinghouse.org/

RESPONSE (Calculation):

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

SCORING GUIDANCE (200 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)*200 points or 138 points.

7. Multimodal ~~Facilities~~ Elements and Connections (~~100~~ 75 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:* Discuss any bicycle, pedestrian, transit, or freight 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. Freight elements could be project elements such as adding paved shoulders, wider shoulders, acceleration lanes, or longer turning lanes added specifically to accommodate freight movements.

Also, describe the existing bicycle, pedestrian, and transit accommodations. Furthermore, address how the proposed project safely integrates all modes of transportation (i.e., vehicles, trucks, bicyclists, transit, and pedestrians) and, if applicable, supports planned transitway stations. 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).

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

SCORING GUIDANCE (~~50~~ 75 Points)

The project with the most comprehensive multimodal elements included as part of the project 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.

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~~ 100 Points) – This criterion measures the number of risks associated with the project and the steps already completed in the project development process. These steps 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):

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~~ 100 points or ~~43~~ 57 points.

9. Cost Effectiveness (~~TBD~~ 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. ~~Calculations must be based on the total project cost of TAB-eligible expenses. Any eligible dollars allocated to noise walls should be excluded from this measure because of the uncertainty of needing them at this stage of the project development cycle.~~

A. *MEASURE: Calculate the cost effectiveness of the project.* Metropolitan Council staff will divide the ~~total~~ TAB-eligible project cost (not including noise walls) by the total number of points awarded in the previous criteria (1-8).

- Cost effectiveness = total TAB-eligible project cost (not including noise walls)/total number of points awarded in previous criteria (1-8)

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):_____

SCORING GUIDANCE (100 Points)
The applicant with the lowest dollar value per point earned in the application (i.e., the benefits) 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 had 35,000 and the application being scored had 70,000, this applicant would receive (35,000/70,000) *100 points for 50~~% of the total~~ points.

TOTAL: ~~TBD~~ 1,100 POINTS

Bridge Rehabilitation/Replacement – Prioritizing Criteria and Measures

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 sub-categories. Rail-only bridges are not eligible for funding. Completely new bridges, interchanges, or overpasses should apply in the Roadway Expansion sub-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.

Criteria and Measures
1. Role in the Regional Transportation System and Economy
Measure A - Average distance to nearest parallel bridges~~Role in Regional Transportation System~~
Measure B - Current daily heavy commercial traffic
Measure C - Connection to total jobs ~~Concentrations~~, Manufacturing/Distribution Jobs ~~Locations~~, and Educational Institutions~~, and local activity centers~~
2. Usage
Measure A - Current daily person throughput
Measure B - Forecast 2040 average daily traffic volume
3. Equity and Housing Performance
Measure A - Connection to disadvantaged pop. and benefits, impacts, mitigation
Measure B - Housing Performance Score
4. Infrastructure Condition
Measure A – ~~Date of construction & remaining useful life~~Bridge sufficiency rating
Measure B – ~~Geometric, structural or infrastructure deficiencies~~Load-posting
5. Multimodal ~~Facilities~~ Elements and Connections
Measure A - Transit, bicycle, pedestrian, or freight elements of the project and existing connections~~Ridership of transit routes directly/indirectly connected project~~
~~Measure B – Bicycle and pedestrian connections~~
~~Measure C – Transit, bicycle, or pedestrian elements of the project~~
6. Risk Assessment
Measure A - Risk Assessment Form
~~**7. Total Project Cost Effectiveness**~~
~~Measure A – Cost effectiveness (total project cost/total points awarded)~~
7. Cost Effectiveness
Measure A – Cost effectiveness (~~federally~~TAB-eligible cost, not including noise walls/total points awarded)

1. Role in the Regional Transportation System and Economy (~~125~~ 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, serves heavy commercial traffic, and connects to employment and manufacturing/distribution-related employment.

A. *MEASURE:* Address how the project route fulfills its role in the regional transportation system as identified by its current functional classification. The project must be located on a Non-Freeway Principal Arterial or an "A" Minor Arterial. (115 Points)

- Metropolitan Council staff will use the "Roadway Area Definition" map generated at the beginning of the application process. To ensure consistency of methodology between applicants, Metropolitan Council staff will calculate the average distance between the project and the closest parallel A-Minor Arterials or Principal Arterials bridge on both sides of the project given the project description included by the applicant.

RESPONSE (Calculation):

- *Metropolitan Council staff will calculate the response*

SCORING GUIDANCE (~~65~~ 115 Points)
The applicant with the furthest average distance from the closest parallel A-Minor Arterial or Principal Arterial bridge on both sides 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 an average distance of 10 miles, this applicant would receive (8/10)*115 points or 92 points. Metropolitan Council staff will provide average distance data for all projects to ensure consistency of methodology between applications.

B. *MEASURE:* Provide the current daily heavy commercial traffic at one location along the "A" Minor Arterial or Non-Freeway Principal Arterial project length. It is required that an actual daily count is collected or available data from within the last three years is used (from the city, county or MnDOT). Heavy commercial traffic is defined as all trucks with at least two axles and six tires. (50 Points)

RESPONSE:

- Location:_____
- Current daily heavy commercial traffic volume:_____

SCORING GUIDANCE (~~40~~ 50 Points)
The applicant with the highest daily heavy commercial traffic at a location along the bridge 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 heavy commercial volume of 750 vehicles and the top project had a heavy commercial volume of 1,000 vehicles, this applicant would receive (750/1,000)*50 points, or 38

points.

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

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

~~*RESPONSE (Select all that apply, based on the "Regional Economy" map):*~~

- ~~Direct connection to or within a mile of a Job Concentration: ☐ (20 Points)~~
- ~~Direct connection to or within a mile of a Manufacturing/Distribution Location:☐ (20 Points)~~
- ~~Direct connection to or within a mile of an Educational Institution:☐ (12 Points)~~
- ~~Project provides a direct connection to or within a mile of an existing local activity center identified in an adopted county or city plan:☐ (12~~ 8 ~~Points)~~

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

- Existing Total Employment within 1 Mile: _____
- Existing Manufacturing/Distribution-Related Employment within 1 Mile: _____

SCORING GUIDANCE (~~20~~ 30Points)

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

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

2. Usage (~~125~~ 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 or nearest count location and provide the current AADT volume from the MnDOT 50-series maps. Ridership data will be provided by the Metropolitan Council staff, if public transit is currently provided on the project length. (100 Points)

- Current Daily Person Throughput = (current average annual daily traffic volume x 1.30 vehicle occupancy) + average annual daily transit ridership (2015)

RESPONSE:

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

SCORING GUIDANCE (~~95~~ 100Points)
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 and the top project within the same functional classification had a daily person throughput of 1,500 vehicles, 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☐

OR

RESPONSE:

- 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 project's positive and negative impacts to low-income populations, people of color, children, people with disabilities, and the elderly. The criterion also evaluates a community's efforts to promote affordable housing.

A. *MEASURE:* Reference the "Socio-Econ" map generated at the beginning of the application process. Identify the project's location from the list below, as depicted on the map. Describe the project's positive benefits, and negative impacts, and mitigation for low-income populations; people of color; children, people with disabilities, and the elderly. Geographic proximity alone is not sufficient to receive the full points listed below. In order to receive the maximum points, the response should address the benefits, impacts, and mitigation for the populations listed above. (30 Points)

Upload the "Socio-Econ" map used for this measure.

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

- Project located in Racially Concentrated Area of Poverty: ☐ (0 to 30 Points)
- Project located in Concentrated Area of Poverty: ☐ (0 to 24 Points)
- Project's census tracts are above the regional average for population in poverty or population of color: ☐ (0 to 18 Points)
- 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: ☐ (0 to 12 Points)

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

SCORING GUIDANCE (30 Points)
Based on the "Socio-Econ" map's output, the applicant will select the appropriate option from the above bullets. However, geographic proximity alone is not sufficient to receive full points. The applicant must fully describe the positive benefits and negative impacts (with mitigation to address the issue) for those identified groups (200 words or less). Each project will first be graded on a 10-point scale, not accounting for geography. Each score from the 10-point scale will then be adjusted to the appropriate geography. The project with the most positive benefits and appropriate mitigation for negative impacts will receive the full points relative to its maximum geographic sub-area defined above. Remaining projects will receive a share of the full points at the scorer's discretion. This response is intended to be qualitative. Metropolitan Council staff will score this measure.

The highest-scoring application for this measure will be adjusted to receive the full 30 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.

B. *MEASURE:* Metropolitan Council staff will award points to the project based on the 2015 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 of the project in each jurisdiction. 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. (70 Points)

RESPONSE (Affordable Housing Score completed by Metropolitan Council staff):

- City/Township: _____
- Length of Segment within City/Township:

SCORING GUIDANCE (70 Points)

The applicant with the highest 2015 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. 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 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. (300 Points)

RESPONSE:

- Bridge Sufficiency Rating: ____ (0 to 100)

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. (100 Points)

RESPONSE (Select if the bridge is load-posted):

- Load-Posted: ☐ (100 points)

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.

5. Multimodal ~~Facilities~~ Elements and Connections (~~100~~ 75 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:* Discuss any bicycle, pedestrian, transit, or freight 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. Freight elements could be project elements such as adding paved shoulders, wider shoulders, acceleration lanes, or longer turning lanes added specifically to accommodate freight movements.

Also, describe the existing bicycle, pedestrian and transit, and freight accommodations. Furthermore, address how the proposed project safely integrates all modes of transportation (i.e., vehicles, trucks, bicyclists, transit, and pedestrians) and, if applicable, supports planned transitway stations. 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).

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

SCORING GUIDANCE (~~50~~ 75 Points)

The project with the most comprehensive multimodal elements included as part of the project 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.

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~~ 100 Points) – This criterion measures the number of risks associated with the project and the steps already completed in the project development process. These steps 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):

SCORING GUIDANCE (~~75~~ 100 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~~ 100 points or ~~43~~57 points.

7. Cost Effectiveness (~~TBD~~ 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 six criteria.

A. *MEASURE: Calculate the cost* effectiveness *of the project.* Metropolitan Council staff will divide the ~~total~~ TAB-eligible project cost (not including noise walls)by the total number of points awarded in the previous criteria (1 through 6).

- Cost Effectiveness = total TAB-eligible project cost (not including noise walls)/total number of points awarded in previous criteria (1 through 6)

RESPONSE (Points Awarded and Cost Effectiveness will be Automatically Calculated):

- Total Project Cost (entered in Project Cost Form):_____

SCORING GUIDANCE (100 Points)
The applicant with the lowest dollar value per point earned in the application (i.e., the benefits) 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 had 35,000 and the application being scored had 70,000, this applicant would receive (35,000/70,000) *100 points for 50~~% of the total~~ points.

TOTAL: ~~TBD~~ 1,100 POINTS

Transit Expansion – Prioritizing Criteria and Measures

Definition: A transit project that provides new or expanded transit service/facilities. Routine facility maintenance and upkeep is not eligible. If a project has both transit expansion and transit system modernization elements, it should apply in the application category that requires the majority of the project costs.

Examples of Transit Expansion Projects:

- Operating funds for new or expanded transit service
- Transit vehicles for new or expanded service
- Transit shelters, centers, stations, and platforms for new or expanded service along a route
- Park-and-ride facilities

Criteria and Measures
1. Role in the Regional Transportation System and Economy
Measure A - Connection to Jobs, Manufacturing/Distribution Locations, and Educational Institutions and local activity centers
~~Measure B - Existing population within 0.25 mile (bus stop) or 0.5 mile (transitway)~~
Measure C - Average~~Ridership of transit routes~~ number of weekday transit trips directly connected to the project
2. Usage
Measure A - ~~Cost effectiveness of project per rider~~New annual riders
~~Measure B - Cost effectiveness of project per new rider~~
~~Measure C - Service (operating) cost effectiveness of project per new rider~~
3. Equity and Housing Performance
Measure A - Connection to disadvantaged populations and project's benefits, impacts, and mitigation
Measure B - Housing Performance Score
4. Emissions Reduction
Measure A - Total emissions reduced
~~Measure B - Cost effectiveness (project cost/kg of emissions reduced)~~
5. Multimodal ~~Facilities~~ Elements and Connections
Measure A - Bicycle and pedestrian elements and existing connections
~~Measure B - Multimodal elements of the project~~
6. Risk Assessment
Measure A - Risk Assessment Form
Sub-Total
7. Cost Effectiveness
Measure A – Cost effectiveness (~~federally~~TAB–eligible cost ~~, not including noise walls~~/total points awarded)

1. Role in the Regional Transportation System and Economy (100 Points) - Tying regional policy (Thrive MSP2040) to the Regional Solicitation, this criterion measures the regional significance of the project, including the project's connections to jobs, Educational Institutions (as defined in Thrive MSP 2040), population centers, and the project's ability to provide regional transit system connections (measured through the number of connecting, weekday transit trips).

A. *MEASURE:* Reference the "Regional Economy" map generated at the beginning of the application process. Report the existing employment and educational institution enrollment within 1/4 mile of the project's bus stops or within 1/2 mile of the project's transitway stations. Existing employment will be measured by summing the employment located in the census blocks that intersect the 1/4-mile or 1/2-mile buffers. Enrollment at public and private post-secondary institutions will also be measured. Applications for projects that include "last mile" service provided by employers or educational institutions can get credit for the employment and enrollment, respectively, if a commitment letter is provided guaranteeing service for three years. (33 Points)

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

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

- Existing Employment:_____
- Existing Post-Secondary Enrollment:_____
- Existing Employment outside of the ¼- or ½ mile buffer to be served by shuttle service (Letter of commitment required):_____
- Existing Post-Secondary Enrollment outside of the ¼- or ½ mile buffer to be served by shuttle service (Letter of commitment required):_____

EXPLANATION of last-mile service (Limit 1,400 characters; approximately 200 words):

Note: Transitways offer travel time advantages for transit vehicles, improve transit service reliability, and increase the convenience and attractiveness of transit service. Transitways are defined in the 2040 Transportation Policy Plan to include commuter rail, light rail, highway and arterial bus rapid transit. Eligible transitway projects are those that have a mode and alignment identified in the 2040 Transportation Policy Plan.

If the project includes construction of a park-and-ride facility, employment and eligible educational institutions only include those directly connected by the transit routes exiting the facility.

SCORING GUIDANCE (~~33~~ 50 Points)
The applicant with the highest combined total employment and post-secondary education enrollment will receive the full points for this measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 1,000 workers/students within 1/4 mile and the top project had 1,500 workers/students, this applicant would receive (1,000/1,500)*~~33~~ 50 points or 33~~22~~ points. Using the Metropolitan Council model, all census blocks that are included within or intersect the buffer area around the project.

Using the Metropolitan Council model, all Census block groups that are included within or intersect the buffer area around the project will be included in the analysis.

~~B. *MEASURE:* Reference the "Population Summary" map generated at the beginning of the application process. Report the existing population within 1/4 mile of the project's bus stops, within 1/2 mile of the project's transitway stations. Existing population will be measured by summing the population located in the Census block group that intersect these buffers. (33 Points)~~

~~Upload the "Population Summary" map used for this measure.~~

~~*RESPONSE (Data from the "Population Summary" map):*~~

- ~~Existing Population:_____~~

~~SCORING GUIDANCE (33 Points)~~
~~The applicant with the highest population 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 people within 1/4 mile and the top project had 1,500 people, this applicant would receive (1,000/1,500)*33 points or 22 points.~~

~~Using the Metropolitan Council model, all Census block groups that are included within or intersect the buffer area around the project will be included in the analysis.~~

~~C.~~B. *MEASURE:* Reference the "Transit Connectivity" map generated at the beginning of the application process. List the transit routes directly connected to the project to help determine the average weekday transit trips these connecting routes provide, as depicted on the "Transit Connectivity" map. Metropolitan Council staff will provide the average number of weekday trips for each connecting transit route. Connections to planned transitway stations should be separately cited. Any transitway connection is worth 10 points. (~~34~~ 50 Points)

Upload the "Transit Connectivity" map used for this measure.

RESPONSE (Data from the "Transit Connectivity" map):

- Existing transit routes directly connected to the project: _____ (24 Points) Council staff will use this information to determine the average number of weekday trips.
- Planned transitways directly connect to the project (mode and alignment determined and identified in the 2040 TPP): ☐ (10 Points)

SCORING GUIDANCE (34 Points)
The applicant with route connections having the highest number of weekday trips will receive the full points (as shown above). Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had connecting ridership of 100 trips and the top project had 150 trips, this applicant would receive (100/150)*34 points or 16 points.

Any project with a connection to a planned transitway station should be awarded 10 points.

After each of the above scores are tabulated the top total score will be adjusted to 34 with all other projects adjusted proportionately. For example, if the top application scored 28 points, it would be adjusted to 34. A project that scored 19 points would be awarded (19/28)*34, or 23 points.

2. Usage (350 Points) – This criterion quantifies the project's impact by estimating the new annual transit ridership of the project.

A. *MEASURE:* This measure will calculate the project's new riders. Based on the service type, estimate and provide the new annual transit ridership that is produced by the new project in the third year of service.

Select the service type and provide the annual transit ridership, based on the methodology listed below

For Express Route Projects to Minneapolis and St. Paul Only:

- Use the 2020 forecast from the park-and-ride demand estimation model in the 2030 Regional Park-and-Ride Plan (Appendix B) to develop a ridership estimate. The market will be defined using the prescribed site location criteria in the plan and demand estimates determined by the census block groups in the express bus route market area. If possible, the applicant will use the ridership figures provided for an existing or planned facility.

  The 2030 Regional Park-and-Ride Plan forecasts 2020 demand to downtown Minneapolis and downtown St. Paul based off 2008 data. If the applicant wants to use more up-to-date data than 2008, then they must follow the methodology and equations from the Park-and-Ride Plan and clearly describe the methodology and assumptions used to estimate annual ridership.

  Note: Any Express routes not going to these downtown areas should follow the peer route methodology described in the "For Urban and Suburban Local Routes and Suburb-to-Suburb Express Routes Only" section.

For Transitways Projects Only:

- Use most recent forecast data to estimate ridership for the third year of service. Forecast data for the transitway must be derived from a study or plan that uses data approved by Metropolitan Council staff. This includes the most up-to-date estimates from plans that have been already adopted. Describe the methodology and assumptions used to estimate annual ridership.

Note: Transitways offer travel time advantages for transit vehicles, improve transit service reliability, and increase the convenience and attractiveness of transit service. Transitways are defined in the 2040 Transportation Policy Plan to include commuter rail, light rail, highway and arterial bus rapid transit. Eligible transitway projects are those that have a mode and alignment identified in the 2040 Transportation Policy Plan.

For Urban and Suburban Local Routes and Suburb-to-Suburb Express Routes Only:

- Use peer routes that are currently in service to develop a ridership estimate for the third year of service. Applicants must use the most recent annual ridership figures that are available. To select the peer routes, the applicant should identify routes in the same transit market area (as defined in the 2040 Transportation Policy Plan), or routes that serve locations with similar development patterns. Applicants must use the average passengers per service hour of at least three peer routes to apply a rate of ridership for

the proposed service project. Additionally, describe how a peer route was selected in the response and any assumptions used.

RESPONSE:

- Service Type:____
- New Annual Ridership:_____
- Assumptions Used (Limit 2,800 characters; approximately 400 words):_____
- Describe how Urban and Suburban Local Route(s) was selected (Limit 2,800 characters; approximately 400 words):_____

SCORING GUIDANCE (350 Points)

The applicant with the highest new annual ridership will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had ridership of 1,000,000 riders and the top project had a ridership of 1,500,000 riders, this applicant would receive (1,000,000/1,500,000)*350 points or 233 points.

For urban and suburban local bus service and suburb-to-suburb express service, applicants should use peer routes from the same Transportation Policy Plan market area or peer routes that serve locations with similar development patterns. Points are scored based on sound methodology and clear relationship to the peer routes.

For all service types, 50 percent of points can be deducted if the applicant provides no methodology. If a methodology is provided, then points should only be deducted if the estimation methodology is not sound.

3. Equity and Housing Performance (200 Points) -- This criterion addresses the project's positive and negative impacts to low-income populations, people of color, children, people with disabilities, and the elderly. The criterion also evaluates a community's efforts to promote affordable housing.

A. *MEASURE:* Reference the "Socio-Econ" map generated at the beginning of the application process. Identify the project's location from the list below, as depicted on the map. Describe the project's positive benefits, and negative impacts, and mitigation of impacts for low-income populations; people of color; children, people with disabilities, and the elderly. A project's service must stop in one of the eligible areas to qualify as a direct connection. In addition, a direct connection is one that does not require a transfer. Geographic proximity alone is not sufficient to receive the full points listed below. In order to receive the maximum points, the response should address the benefits, impacts, and mitigation for the populations listed above. (130 Points)

Upload the "Socio-Econ" map used for this measure.

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

- Project's service directly connects to Racially Concentrated Area of Poverty: ☐ (0 to 130 Points)
- Project's service directly connects to Concentrated Area of Poverty: ☐ (0 to 104 Points)
- Project's service directly connects to census tracts that are above the regional average for population in poverty or population of color: ☐ (0 to 52 Points)
- Project's service directly connects to 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: ☐ (0 to 37 Points)

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

SCORING GUIDANCE (130 Points)

Based on the "Socio-Econ" map's output, the applicant will select the appropriate option from the above bullets. However, geographic proximity alone is not sufficient to receive full points. The applicant must fully describe the positive benefits and negative impacts (with mitigation to address the issue) for those identified groups (200 words or less). Each project will first be graded on a 10-point scale, not accounting for geography. Each score from the 10-point scale will then be adjusted to the appropriate geography. The project with the most positive benefits and appropriate mitigation for negative impacts will receive the full points relative to its maximum geographic sub-area defined above. Remaining projects will receive a share of the full points at the scorer's discretion. This response is intended to be qualitative. Metropolitan Council staff will score this measure.

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 130 points. In this case, the highest-scoring application for this measure will be adjusted to receive the full 130 points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 50 points and the top project had 100 points, this applicant would receive (50/100)*130 points or 65 points.

B. *MEASURE:* Metropolitan Council staff will award points to the project based on the 2015 Housing Performance Score for the city or township in which the project's stops are 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 includes express service with no reverse commute trips, the applicant should only report the number of stops and corresponding jurisdictions in which the inbound service originates. If the project has stops in more than one jurisdiction, the points will be awarded based on a weighted average using the length of the project in each jurisdiction. If a project's stops are 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. (70 Points)

RESPONSE (Affordable Housing Score completed by Metropolitan Council staff):

- City/Township: _____
- Number of Stops within City/Township:

SCORING GUIDANCE (70 Points)

The applicant with the highest 2015 Housing Performance Score will receive the full points. Remaining projects will receive a proportionate share of the full 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. 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. Emissions Reduction (200 Points) – This criterion measures the impact that the project's implementation will have on air quality as measured by reductions in CO, NO_x, CO_{2e}, $PM_{2.5}$, and VOC emissions. Applications for transit operating, vehicle or capital funds must calculate the benefit for the third year of service.

A. *MEASURE:* The applicant must show that the project will reduce CO, NOx, CO2e, PM2.5, and/or VOC due to the reduction in VMT. Calculate and provide the number of new daily transit riders and the distance from terminal to terminal in miles to calculate VMT reduction. The emissions factors will be automatically applied to the VMT reduction to calculate the total reduced emissions. (133 Points)

Daily VMT Reduction = New Daily Transit Riders multiplied by Distance from Terminal to Terminal

Emissions Factors

- CO reduced = VMT reduced * 2.39
- NO_X reduced = VMT reduced * 0.16
- CO_{2e} reduced = VMT reduced * 366.60
- $PM_{2.5}$ reduced = VMT reduced * 0.005
- VOCs reduced = VMT reduced * 0.03

RESPONSE (Total reduced emissions will automatically calculate):

- New Daily Transit Riders: _____
- Distance from Terminal to Terminal (Miles)_____

SCORING GUIDANCE (200 Points)

The applicant with the greatest daily reduction in emissions due to VMT reduction will receive the full points. Remaining projects will receive a proportionate share of the full points. 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)*200 points or 120 points.

5. Multimodal ~~Facilities~~ Elements and Connections (100 Points) – This criterion measures how the project improves the travel experience, safety, and security for other modes of transportation, provides strong connections, and addresses the safe integration of these modes.

A. *MEASURE:* Discuss any bicycle or pedestrian elements that are included as part of the total project and how they improve the travel experience, safety, and security for users of these modes. Also, describe the existing bicycle and pedestrian facilities and accommodations or bicycle, and pedestrian connections. Furthermore, address how the proposed project safely integrates all modes of transportation (i.e., transit, vehicles, bicyclists, and pedestrians). Applicants should also identify supporting studies or plans that address why a mode may not be incorporated into the project.

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

SCORING GUIDANCE (100 Points)

The project that results in the most comprehensive connectivity to non-motorized modes (via existing or added elements), as addressed in the required response will receive the full points. Remaining projects will receive a share of the full points at the scorer's discretion. Example improvements are listed below:

- Improves the safety and security of the pedestrian or bicyclist (e.g., pedestrian-scale lighting, removing obstructions to create safe gathering spaces, leading pedestrian signal phasing, traffic calming, bike facilities separated from pedestrians)
- Improves the quality of the travel experience (e.g., pavement improvements, public art, benches, wayfinding)
- Improves the pedestrian network near the transit stop/station
- Improves the bicycle network near the transit stop/station
- Uses roadway shoulders or MnPASS lanes for faster service
- Connects to transit stops accessible via bike
- Connects to transit tops with safe / comfortable areas for pedestrians to walk or wait

6. Risk Assessment (50 Points) - This criterion measures the number of risks associated with the project and the steps already completed in the project development process. These steps are outlined in the checklist in the required Risk Assessment. The Risk Assessment only needs to be completed for construction projects. All other projects do not need to complete this form. Projects that only involve transit operating assistance will receive all possible points under this criterion if the project meets funding requirements.

Facility Projects:

A. *MEASURE:* Applications involving construction must complete the Risk Assessment. The Risk Assessment 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):

SCORING GUIDANCE (50 Points)

The applicant will receive up to the full points based on the eight Risk Assessment elements. A project that is not required to complete the checklist will be given credit for 70 points (i.e., it will receive full points). Any project that receives all 70 points awarded on the checklist will receive full points as well. If the top-scoring project receives fewer than 70 points on the checklist, it will receive full points only if no projects are except from completing the checklist. All 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)*50 points or 29 points.

7. Cost Effectiveness (~~TBD~~ 100 Points) – This criterion will assess the project's cost effectiveness based on the total annual TAB-eligible project cost ~~(not including noise walls)~~ and total points awarded.

A. *MEASURE: Calculate the cost effectiveness of the project.* Metropolitan Council staff will divide the total annual TAB-eligible project cost ~~(not including noise walls)~~ by the total number of points awarded in the previous criteria.

Estimate and provide the annualized capital cost of the project and the annual operating cost of the project; the sum of these cost components equals the total annual project cost. The annualized project cost is derived from the Federal Transit Administration (FTA) guidelines on useful life.

Total annual project cost is the lump sum total project cost divided by the FTA "years of useful life" as listed here. As noted in the useful life table, operating costs should also be annualized. If the project has two or more components with differing years of useful life, annualize each component. If the project type is not listed in the document, use most similar project type or provide supporting documentation on useful life value used.

Applicants should include all operating and capital costs associated with implementing the entire project, even though the applicant may only be applying for part of these costs as part of the solicitation.

Project Type	Years of Useful Life
Operating funds	3
Passenger Automobile/Sedan/Minivan	4
Medium Duty Transit Buses	5
Heavy Duty Transit Buses	12
Over-the-Road Coach Buses	14
Park & Ride – Surface Lot	20
Park & Ride – Structured	50
Transit Center/Station/Platform	70
Transit Shelter	20
Light Rail Vehicles	25
Commuter Rail Vehicles	25
Land Purchase	100

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

- Total Annual Operating Cost: _____
- Total Annual Capital Cost of Project:_____

- Total Annual Project Cost:_____
- Assumptions Used (Limit 1,400 characters; approximately 200 words):_____

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

SCORING GUIDANCE (100 Points)
The applicant with the lowest dollar value per point earned in the application (i.e., the benefits) 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 had 35,000 and the application being scored had 70,000, this applicant would receive (35,000/70,000) *100 points or 50~~% of the total~~ points.

TOTAL: ~~TBD~~ 1,100 POINTS

Transit System Modernization – Prioritizing Criteria and Measures

Definition: A transit project that makes existing transit more attractive to existing and future riders by offering faster travel times between destinations, improving the customer experience, or reducing operating costs for the transit provider. The project must be able to reduce emissions through a reduction in single-occupant vehicle trips, vehicle-miles traveled, emissions from capital improvements, idling time, an increase in speeds, or other means. Routine facility maintenance and upkeep is not eligible. Projects associated with new or expanded service/facilities such as the purchase of new buses should apply in the Transit Expansion sub-category. If a project has both transit expansion and transit system modernization elements, then the project should apply in the application category that requires the majority of the project costs.

Examples of Transit System Modernization Projects:

- Improved boarding areas, lighting, and passenger waiting facilities, real-time signage
- Heated facilities or weather protection; safety and security equipment
- New transit maintenance and support facilities/garages or upgrades to existing facilities
- ITS measures that improve reliability and the customer experience
- Improved fare collection systems
- Multiple eligible improvements along a route

Criteria and Measures
1. Role in the Regional Transportation System and Economy
Measure A - Connection to Jobs and~~, Manufacturing/Distribution,~~ Educational Institutions
~~Measure B – Existing population within 0.25 mile (bus stop) 0.5 mile (transitway)~~
Measure C - ~~Ridership of transit routes~~Weekday transit trips directly connected to project
2. Usage
Measure A - ~~Cost effectiveness of project per total rider~~Total existing annual riders
~~Measure B – Service (operating) cost effectiveness of project per new rider~~
3. Equity and Housing Performance
Measure A - Connection to disadvantaged populations and project's benefits
Measure B - Housing Performance Score
4. Emissions Reduction
Measure A – Description of emissions reduced
5. Service and Customer Improvements
Measure A - Percent reduction in passenger travel time
Measure B - Percent reduction in operating & maintenance costs
Measure C - Project improvements for transit users
6. Multimodal ~~Facilities~~ Elements and Connections
Measure A - Bicycle and pedestrian facilities and existing connections
~~Measure B – Multimodal elements of the project~~
7. Risk Assessment
Measure A - Risk Assessment Form
8. Cost Effectiveness
Measure A – Cost effectiveness (~~federally~~TAB-eligible cost ~~, not including noise walls~~/total points awarded)

November 4, 2015

1. Role in the Regional Transportation System and Economy (100 Points) - This criterion measures the regional significance of the project, including the project's connections to jobs, Educational Institutions (as defined in Thrive MSP 2040), population centers, and the project's ability to provide regional transit system connections (measured through the annual transit ridership of connecting transit routes).

A. *MEASURE:* Reference the "Regional Economy" map generated at the beginning of the application process. Report the existing employment and educational institution enrollment within 1/4 mile of the project's bus stops or within 1/2 mile of the project's transitway stations. Existing employment will be measured by summing the employment located in the census block groups that intersect the 1/4-mile or 1/2-mile buffers. Enrollment at public and private post-secondary institutions will also be measured. Applications for projects that include "last mile" service provided by employers or educational institutions can get credit for the employment and enrollment, respectively, if a commitment letter is provided guaranteeing service for three years. (33 Points)

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

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

- Existing Employment:_____
- Existing Post-Secondary Enrollment:_____
- Existing Employment outside of the ¼- or ½ mile buffer to be served by shuttle service (Letter of commitment required):_____
- Existing Post-Secondary Enrollment outside of the ¼- or ½ mile buffer to be served by shuttle service (Letter of commitment required):_____

- *EXPLANATION of last-mile service (Limit 1,400 characters; approximately 200 words):*

Note: Transitways offer travel time advantages for transit vehicles, improve transit service reliability, and increase the convenience and attractiveness of transit service. Transitways are defined in the 2040 Transportation Policy Plan to include commuter rail, light rail, highway and arterial bus rapid transit. Eligible transitway projects are those that have a mode and alignment identified in the 2040 Transportation Policy Plan.

RESPONSE (Limit 700 characters; approximately 100 words):

SCORING GUIDANCE (33 Points)

The applicant with the highest combined total employment and post-secondary education enrollment will receive the full 33 points for this measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 1,000 workers/students within 1/4 mile and the top project had 1,500 workers/students, this applicant would receive (1,000/1,500)*33 points or 22 points. Using the Metropolitan Council model, all census block groups that are included within or intersect the buffer area around the project.

Using the Metropolitan Council model, all Census block groups that are included within or intersect the buffer area around the project will be included in the analysis.

~~B.~~ *MEASURE:* ~~Reference the "Population Summary" map generated at the beginning of the application process. Report the existing population within 1/4 mile of the project's bus stops, within 1/2 mile of the project's transitway stations Existing population will be measured by summing the population located in the census block groups that intersect these buffers. (33 Points)~~

~~Upload the "Population Summary" map used for this measure.~~

~~*RESPONSE (Data from the "Population Summary" map):*~~

- ~~Existing Population :_____~~

~~SCORING GUIDANCE (33 Points)~~
~~The applicant with the highest population 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 people within 1/4 mile and the top project had 1,500 people, this applicant would receive (1,000/1,500)*33 points or 22 points.~~

~~Using the Metropolitan Council model, all Census block groups that are included within or intersect the buffer area around the project will be included in the analysis.~~

~~C.~~*B. MEASURE:* Reference the "Transit Connectivity" map generated at the beginning of the application process. List the transit routes directly connected to the project to help determine the average weekday transit trips these connecting routes provide, as depicted on the "Transit Connectivity" map. Metropolitan Council staff will provide the average number of weekday trips for each connecting transit route. Connections to planned transitway stations should be separately cited. Any transitway connection is worth 10 points. (~~34~~ 50 Points)

Upload the "Transit Connectivity" map used for this measure.

RESPONSE (Data from the "Transit Connectivity" map):

- Existing transit routes directly connected to the project: _____ (24 Points). Council staff will use this information to determine the average number of weekday trips.
- Planned transitways directly connect to the project (mode and alignment determined and identified in the 2040 TPP): : ☐ (10 Points)

SCORING GUIDANCE (34 Points)
The applicant with route connections having the highest number of weekday trips will receive the full points (as shown above). Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had connecting ridership of 100 trips and the top project had 150 trips, this applicant would receive (100/150)*24 points or 16 points.

Any project with a connection to a planned transitway station should be awarded 10 points.

After each of the above scores are tabulated the top total score will be adjusted to 34 with all other projects adjusted proportionately. For example, if the top application scored 28 points, it would be adjusted to 34. A project that scored 19 points would be awarded (19/28)*34, or 23 points.

2. Usage (300 points) - This criterion quantifies the project's impact based on how many riders the improvement(s) will impact, i.e., ~~total (existing + new)~~ existing riders.

MEASURE: This measure will display the ~~total (existing + new)~~ existing riders that will benefit from the project. This would entail, for example, riders on a bus route with buses fitted for Wi-Fi or users boarding or alighting at a park-and-ride being improved. Ridership data will be provided by the Metropolitan Council staff.

RESPONSE:

- Existing Transit Routes on the Project:_____

SCORING GUIDANCE (300 Points)

The applicant with the highest existing annual ridership will receive the full points. Remaining projects will receive a proportionate share of the full points equal to the existing ridership of the project being scored divided by the project with the highest existing ridership multiplied by the maximum points available for the measure (300). For example, if the application being scored had ridership of 1,000 riders and the top project had a ridership of 1,500 riders, this applicant would receive (1,000/1,500)*300 points or 200 points.

3. Equity and Housing Performance (150 Points) -- This criterion addresses the project's positive and negative impacts to low-income populations, people of color, children, people with disabilities, and the elderly. The criterion also evaluates a community's efforts to promote affordable housing.

A. *MEASURE:* Reference the "Socio-Econ" map generated at the beginning of the application process. Identify the project's location from the list below, as depicted on the map. Describe the project's positive benefits, and negative impacts, and mitigation for low-income populations; people of color; children, people with disabilities, and the elderly. A project's service must stop in one of the eligible areas to qualify as a direct connection. In addition, a direct connection is one that does not require a transfer. Geographic proximity alone is not sufficient to receive the full points listed below. In order to receive the maximum points, the response should address the benefits, impacts, and mitigation for the populations listed above. (80 Points)

Upload the "Socio-Econ" map used for this measure.

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

- Project's service directly connects to Racially Concentrated Area of Poverty: ☐ (0 to 80 Points)
- Project's service directly connects to Concentrated Area of Poverty: ☐ (0 to 64 Points)
- Project's service directly connects to census tracts that are above the regional average for population in poverty or population of color: ☐ (0 to 48 Points)
- Project's service does not directly connect to one of these identified geographic areas listed in 1-3; however, people of color or low-income populations are included in the project service area in lower concentrations, or children, people with disabilities, or the elderly are included in the project service area: ☐ (0 to 32 Points)

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

SCORING GUIDANCE (80 Points)

Based on the "Socio-Econ" map's output, the applicant will select the appropriate option from the above bullets. However, geographic proximity alone is not sufficient to receive full points. The applicant must fully describe the positive benefits and negative impacts (with mitigation to address the issue) for those identified groups (200 words or less). Each project will first be graded on a 10-point scale, not accounting for geography. Each score from the 10-point scale will then be adjusted to the appropriate geography. The project with the most positive benefits and appropriate mitigation for negative impacts will receive the full points relative to its maximum geographic sub-area defined above. Remaining projects will receive a share of the full points at the scorer's discretion. This response is intended to be qualitative. Metropolitan Council staff will score this measure.

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 130 points. In this case, the highest-scoring application for this measure will be adjusted to receive the full 130 points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 50 points and the top project had 100 points, this applicant would receive (50/100)*80 points or 40 points.

B. *MEASURE:* Metropolitan Council staff will award points to the project based on the 2015 Housing Performance Score for the city or township in which the project's stops are 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 includes express service with no reverse commute trips, the applicant should only report the number of stops and corresponding jurisdictions in which the inbound service originates. If the project has stops in more than one jurisdiction, the points will be awarded based on a weighted average using the length of the project in each jurisdiction. If a project's stops are 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. (70 Points)

RESPONSE (Affordable Housing Score completed by Metropolitan Council staff):

- City/Township: _____
- Number of Stops within City/Township:

SCORING GUIDANCE (70 Points)

The applicant with the highest 2015 Housing Performance Score will receive the full points. Remaining projects will receive a proportionate share of the full 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. 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. Emissions Reduction (100 Points) - This criterion measures the impact that the project's implementation will have on air quality as measured by reductions in CO, NO_x, CO_{2e}, $PM_{2.5}$, and VOC emissions. Projects can include improvements to rolling stock, increases in travel speed, facility modernization, and systemwide upgrades that reduce congestion and improve energy efficiency.

A. *MEASURE:* Describe how the project will reduce CO, NOx, CO_{2e}, $PM_{2.5}$, and/or VOC due to the reduction in VMT, reduction in idling time, and/or an increase of speeds. The applicant should also describe capital improvements that will reduce emissions and energy consumption.

Most projects will reduce CO, NOx, CO2e, PM2.5, and/or VOC due to the reduction in VMT that comes about from adding new daily transit riders (computed in the third year of service). As part of the response, applicants may want to indicate the daily emissions reductions by using the formula and emissions factors below.

Daily VMT Reduction = New Daily Transit Riders multiplied by Distance from Terminal to Terminal

Emissions Factors

- CO reduced = VMT reduced * 2.39
- NO_X reduced = VMT reduced * 0.16
- CO_{2e} reduced = VMT reduced * 366.60
- $PM_{2.5}$ reduced = VMT reduced * 0.005
- VOCs reduced = VMT reduced * 0.03

RESPONSE: (Limit 2,100 characters; approximately 300 words):

SCORING GUIDANCE (100 Points)

The applicant should describe improvements to rolling stock, increases in travel speed, facility improvements, and systemwide upgrades that will reduce congestion and/or improve energy efficiency. The application will be scored based on the improvements that are being made. Projects will receive a share of the full points at the scorer's discretion. (200 words or less).

5. Service and Customer Improvements (150 Points) - Measures under this criterion assess how the overall quality of transit service is improved, and how the regional transit system will operate more efficiently as a result of this project. An improvement that makes transit more attractive to future and existing riders is offering faster travel times between destinations. Additionally, the modernization of a transit facility should present a savings in operating costs for the transit provider. Projects can also offer improvements to facilities that offer a better customer experience, and attract riders to transit facilities.

A. *MEASURE:* Provide the existing and proposed travel times to calculate the percent reduction in transit passenger travel time due to the project. The applicant should provide the existing passenger travel time from the project site to the transit route's terminal. The applicant should also provide its methodology for determining travel time change. If the project benefits multiple routes, the applicant can take an average of the passenger travel times. Applicants must also provide the proposed travel time from the project site to the terminal. The percent reduction in travel time that will result from the project's implementation will be calculated automatically. (75 Points)

RESPONSE (Percent reduction will be automatically calculated)

- Current Route Travel Time (Minutes):_____
- Proposed Route Travel Time (Minutes):_____

Description of how proposed travel time reduction was determined (Limit 2,800 characters; approximately 400 words):

SCORING GUIDANCE (75 Points)
The applicant with the greatest reduction in travel time will receive the full points. Remaining projects will receive a proportionate share of the full points.

B. *MEASURE:* Identify the current annual transit operating costs and proposed annual transit operating costs that will result from this project. Operating and maintenance costs are external to the project, and do not include costs associated with the construction or procurement of facilities, vehicles, or equipment. The percent reduction in operating and maintenance costs will be calculated automatically. The applicant should also provide its methodology for calculating cost change. (38 Points)

RESPONSE (Percent reduction will be automatically calculated):

- Current Annual Transit Operating Costs:_____
- Proposed Annual Transit Operating Costs:_____

Description of how the proposed cost change was determined (Limit 2,800 characters; approximately 400 words):

SCORING GUIDANCE (38 Points)
The applicant with the greatest reduction in operating and maintenance costs will receive the full points. Remaining projects will receive a proportionate share of the full points.

C. *MEASURE:* Discuss how the project will improve transit service to the users. Proposed improvements and amenities can include, but are not limited to the following (37 Points):

- Improved boarding area
- Improved passenger waiting facilities
- Real-time signage
- Heated facilities or weather protection
- Safety and security equipment
- Improved lighting
- ITS measures that improve reliability and the customer experience
- Transit advantages

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

SCORING GUIDANCE (37 Points)

The applicant should describe improvements included in the project that will make transit service more attractive and improve the user experience. The project will be scored based on the quality of the responses. Projects will receive a share of the full points at the scorer's discretion.

6. Multimodal ~~Facilities~~ Elements and Connections (100 Points) – This criterion measures how the project improves the travel experience, safety, and security for other modes of transportation, provides strong connections, and addresses the safe integration of these modes.

A. *MEASURE:* Discuss any bicycle or pedestrian elements that are included as part of the total project and how they improve the travel experience, safety, and security for users of these modes. Also, describe the existing bicycle and pedestrian facilities and accommodations or bicycle, and pedestrian connections. Furthermore, address how the proposed project safely integrates all modes of transportation (i.e., transit, vehicles, bicyclists, and pedestrians). Applicants should also identify supporting studies or plans that address why a mode may not be incorporated into the project.

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

SCORING GUIDANCE (100 Points)

The project that results in the most comprehensive connectivity to non-motorized modes (via existing or added elements), as addressed in the required response (400 words or less), will receive the full points. Remaining projects will receive a share of the full points at the scorer's discretion. Example improvements are listed below:

- Improves the safety and security of the pedestrian or bicyclist (e.g., pedestrian-scale lighting, removing obstructions to create safe gathering spaces, leading pedestrian signal phasing, traffic calming, bike facilities separated from pedestrians)
- Improves the quality of the travel experience (e.g., pavement improvements, public art, benches, wayfinding)
- Improves the pedestrian network near the transit stop/station
- Improves the bicycle network near the transit stop/station
- Uses roadway shoulders or MnPASS lanes for faster service
- Connects to transit stops accessible via bike

Connects to transit tops with safe / comfortable areas for pedestrians to walk or wait

7. Risk Assessment (100 Points) –This criterion measures the number of risks associated with the project and the steps already completed in the project development process. These steps are outlined in the required Risk Assessment.

A. *MEASURE:* Applications involving construction must complete the Risk Assessment. The Risk Assessment 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):

SCORING GUIDANCE (100 Points)

The applicant will receive up to the full points based on the eight Risk Assessment elements. A project that is not required to complete the checklist will receive full points. The top-scoring project will receive full points. All 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)*100 points or 57 points.

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

A. *MEASURE: Calculate the cost effectiveness of the project.* Metropolitan Council staff will divide the total annual TAB-eligible project cost ~~(not including noise walls)~~ by the total number of points awarded in the previous criteria.

Estimate and provide the annualized capital cost of the project and the annual operating cost of the project; the sum of these cost components equals the total annual project cost. The annualized project cost is derived from the Federal Transit Administration (FTA) guidelines on useful life.

Total annual project cost is the lump sum total project cost divided by the FTA "years of useful life" as listed here. As noted in the useful life table, operating costs should also be annualized. If the project has two or more components with differing years of useful life, annualize each component. If the project type is not listed in the document, use most similar project type or provide supporting documentation on useful life value used.

Applicants should include all operating and capital costs associated with implementing the entire project, even though the applicant may only be applying for part of these costs as part of the solicitation.

Project Type	Years of Useful Life
Operating funds	3
Passenger Automobile/Sedan/Minivan	4
Medium Duty Transit Buses	5
Heavy Duty Transit Buses	12
Over-the-Road Coach Buses	14
Park & Ride – Surface Lot	20
Park & Ride – Structured	50
Transit Center/Station/Platform	70
Transit Shelter	20
Light Rail Vehicles	25
Commuter Rail Vehicles	25
Land Purchase	100

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

- Total Annual Operating Cost: _____
- Total Annual Capital Cost of Project:_____

- Total Annual Project Cost:_____
- Assumptions Used (Limit 1,400 characters; approximately 200 words):_____

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

SCORING GUIDANCE (100 Points)
The applicant with the lowest dollar value per point earned in the application (i.e., the benefits) 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 had 35,000 and the application being scored had 70,000, this applicant would receive (35,000/70,000) *100 points or 50~~% of the total~~ points.

TOTAL: ~~TBD~~ 1,100 POINTS

Innovative Travel Demand Management (TDM) – Prioritizing Criteria and Measures

Definition: An innovative project that reduces the congestion and emissions during the peak period. Similar to past Regional Solicitations, base-level TDM funding for the Transportation Management Organizations (TMOs) and Metro Transit will be not part of the competitive process.

Examples of TDM Projects:

- Bikesharing
- Carsharing
- Telework strategies
- Carpooling
- Parking management
- Managed lane components

Criteria and Measures
1. Role in the Regional Transportation System and Economy
~~Measure A - Connection to Job Concentrations, Manufacturing/Distribution Locations, Educational Institutions, and local activity centers~~
Measure B ~~–~~ – Ability to capitalize on ~~E~~existing regional transportation facilities and resources
2. Usage
Measure A - ~~Cost effectiveness of project per user~~Users
3. Equity and Housing Performance
Measure A - Connection and project's benefits, impacts, and mitigation
Measure B - Housing Performance Score
4. Congestion Reduction/Air Quality
Measure A - Congested roadways in project area
Measure B - Emissions reduced
5. Innovation
Measure A - Project innovations or new geographic area
~~Measure B - New geographic area~~
6. Risk Assessment
Measure A - Technical capacity of applicant's organization
Measure B - Continuation of project after initial federal funds are expended
~~Measure C - Risk Assessment Form~~
7. Cost Effectiveness
Measure A – Cost effectiveness (~~federally~~TAB-~~-~~eligible cost ~~, not including noise walls~~/total points awarded)

1. Role in the Regional Transportation System and Economy (100 Points) - This criterion measures the existing regional transportation resources that can be capitalized on as part this project.

A. *MEASURE*: Identify the existing regional transportation facilities and resources on which the project will capitalize (transit stations, key roadways, bikeways, etc.). (100 Points)

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

SCORING GUIDANCE (100 Points)
The applicant will receive points based on the quality of the response. Projects that effectively use existing regional infrastructure will receive the most points. The applicant with the top score will receive full points. Remaining projects will receive a share of the full points.

2. Usage (100 Points) – This criterion quantifies the project's impact by estimating the number of direct users of the TDM.

A. *MEASURE:* Calculate and provide the average weekday users of the project. A direct project user is someone who will participate in the TDM program or project and not one who receives an indirect benefit from the project. For example, if the project involves teleworking, a user would be the individual that is teleworking, not the roadway users that benefit from reduced congestion. Applicants must describe their methodology for determining the number of project users. (100 Points)

RESPONSE (Cost Effectiveness will be automatically calculated):

- Average Weekday Users:_____

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

SCORING GUIDANCE (100 Points)

The applicant with the most users will receive the full points. Remaining projects will receive a proportional share of the full points. For example, if the top project had 90 users and the application being scored had 50, this applicant would receive (50/90)*100 points or 56 points.

Fifty percent of points can be deducted if the applicant provides no methodology. If a methodology is provided, then points should only be deducted if the estimation methodology is not sound.

3. Equity and Housing Performance (150 Points) -- This criterion addresses the project's positive and negative impacts to low-income populations, people of color, children, people with disabilities, and the elderly. The criterion also evaluates a community's efforts to promote affordable housing.

A. *MEASURE:* ~~Reference the "Socio-Econ" map generated at the beginning of the application process. Identify the project's location from the list below, as depicted on the map.~~ Describe the project's positive benefits, and negative impacts, and mitigation for low-income populations; people of color; children, people with disabilities, and the elderly. ~~Geographic proximity alone is not sufficient to receive the full points listed below.~~ In order to receive the maximum points, the response should address the benefits, impacts, and mitigation for low-income populations; people of color; children, people with disabilities, and the elderly. As part of the response, reference the "Socio-Econ" map generated at the beginning of the application process to identify if the project is located in Racially Concentrated Area of Poverty, Concentrated Area of Poverty, or census tracts above the regional average in poverty or populations of color. (80 Points)

~~Upload the "Socio-Econ" map used for this measure.~~

~~*RESPONSE (Select one, based on the "Socio-Econ" map):*~~

- ~~Project located in Racially Concentrated Area of Poverty: ☐ (0 to 80 Points)~~
- ~~Project located in Concentrated Area of Poverty: ☐ (0 to 64 Points)~~
- ~~Project's census tracts are above the regional average for population in poverty or population of color: ☐ (0 to 48 Points)~~
- ~~Project located in 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: ☐ (0 to 32 Points)~~

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

SCORING GUIDANCE (80 Points)

~~Based on the "Socio-Econ" map's output, the applicant will select the appropriate option from the above bullets. However, geographic proximity alone is not sufficient to receive full points. The applicant must fully describe the positive benefits and negative impacts (with mitigation to address the issue) for those identified groups (200 words or less). Each project will first be graded on a 10-point scale, not accounting for geography. Each score from the 10-point scale will then be adjusted to the appropriate geography.~~ The project with the most positive benefits and appropriate mitigation for negative impacts will receive the full points ~~relative to its maximum geographic sub-area defined above~~. Remaining projects will receive a share of the full points at the scorer's discretion. This response is intended to be qualitative. Metropolitan Council staff will score this measure.

~~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 130 points. In this case, the highest scoring application for this measure will be adjusted to receive the full 130 points. Remaining projects will receive a proportional share of the full points. For example, if the application being scored had 50 points and the top project had 100 points, this applicant would receive (50/100)*130 points or 65 points.~~

B. *MEASURE:* Metropolitan Council staff will award points to the project based on the 2015 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 an average score of the jurisdictions. 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. (105 Points)

RESPONSE (Affordable Housing Score completed by Metropolitan Council staff):

- City/Township: _____ *(Cities and Townships entered by applicant)*
- Housing Score: _____

SCORING GUIDANCE (70 Points)

The applicant with the highest 2015 Housing Performance Score will receive the full points. Remaining projects will receive a proportional share of the full 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. 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. Congestion Reduction/Air Quality (400 Points) – This criterion measures the project's ability to reduce congestion during the peak period in an area or corridor. This criterion also measures the impact that the project's implementation will have on air quality as measured by reductions in CO, NO_x, CO_{2e}, $PM_{2.5}$, and VOC emissions.

A. *MEASURE:* Describe the congested roadways in the geographic area of the project and how this project will address or alleviate those issues by reducing congestion and/or single occupancy vehicle (SOV) trips. (200 Points)

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

SCORING GUIDANCE (200 Points)
The applicant with best response will receive the full points. Remaining projects will receive a share of the full points at the scorer's discretion.
- The project is located in an area of traffic congestion served by one or more principal arterials or A-minors: Up to 60 Points, plus
- The project will reduce congestion and/or SOV trips in the project area: Up to 140 Points

B. *MEASURE:* The applicant must show that the project will reduce CO, NOx, CO2e, PM2.5, and/or VOC due to the reduction in VMT. Calculate and provide the number of one-way commute trips reduced and the average commute trip length to calculate VMT reduction. The emissions factors will be automatically applied to the VMT reduction to calculate the total reduced emissions. Applicants must describe their methodology for determining the number of one-way trips reduced. (200 Points)

- VMT reduced = Number of one-way commute trips reduced * 12.1

(12.1 is the regional average commute trip length in miles as determined by the 2011 Travel Behavior Inventory, conducted by Metropolitan Transportation Services. You may use a number other than 12.1 if you know the commute length of your targeted market area).

Emissions Factors
- CO reduced = VMT reduced * 2.39
- NO_X reduced = VMT reduced * 0.16
- CO_{2e} reduced = VMT reduced * 366.60
- $PM_{2.5}$ reduced = VMT reduced * 0.005
- VOCs reduced = VMT reduced * 0.03

RESPONSE (Emissions reduction will be automatically calculated):
- Number of One-Way Commute Trips Reduced:_____
- Average Commute Trip Length (Default 12.1):_____

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

SCORING GUIDANCE (200 Points)
The applicant with the greatest reduction in emissions will receive the full points. Remaining projects

will receive a proportional share of the full points. For example, if the top project reduced 5 kg and the application being scored reduced 4 kg, this applicant would receive (4/5)*200 points or 160 points.

Fifty percent of points can be deducted if the applicant provides no methodology. If a methodology is provided, then points should only be deducted if the estimation methodology is not sound.

5. Innovation (200 Points) – This prioritizing criterion measures how well the project introduces new concepts to the region or expands to a new geographic region. Innovative TDM projects may involve the deployment of new creative strategies for the region, expand the geographic scope of a project to a new geographic area, serve populations that were previously unserved, or incorporate new, significant enhancements to an existing program.

A. *MEASURE:* Describe how the project is innovative or expands or expands the geographic area of an existing project. (200 Points)

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

SCORING GUIDANCE (100 Points)

The applicant will receive the full points shown for each of innovation categories based on the quality of the response. The applicant with the top score will receive full points. Remaining projects will receive a proportional share of the full points.

- Project introduces a new policy, program, or creative strategy: Up to 200 Points or
- Project expands the geographic scope of an existing project, serves or engages a new group of people, or significantly enhances an existing program: Up to 100 Points

6. Risk Assessment (50 Points) - This criterion measures the technical capacity of the applicant and their long-term strategy to sustain their proposed projects beyond the initial funding period.

A. *MEASURE:* Describe the technical capacity of the applicant's organization and what makes them well suited to deliver the project. (25 Points)

RESPONSE (200 words or less):

SCORING GUIDANCE (~~20~~ 25 Points)
The applicant will receive a maximum of the points listed below, based on the quality of their response (200 words or less). Highest scoring projects will be led by agencies with staff expertise in TDM, experience in the field, and adequate resources to deliver the project in a timely manner. The applicant with the top score will receive full points. Remaining projects will receive a proportional share of the full points. For example, if the top project had 15 points and the application being scored had 10, this applicant would receive (10/15)*25 points or 17 points.

- Organization has experience implementing similar projects: Up to 10 Points, plus
- Organization has adequate resources to implement the project in a timely manner: Up to 15 Points

B. *MEASURE:* Describe if the project will continue after the initial federal funds are expended. Identify potential future sources of funding, if needed, to continue the project. (25 Points)

RESPONSE (Check one):

- Project funding sources are identified and secured to continue the project past the initial funding period, and/or carry on the project to a future phase: ☐ (25 Points)
- Applicant has identified potential funding sources that could support the project beyond the initial funding period: ☐ (15 Points)
- Applicant has not identified funding sources to carry the project beyond the initial funding period: ☐ (0 Points)

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

SCORING GUIDANCE (~~15~~ 25 Points)
The applicant will receive a maximum of the points shown below based on the quality of their response. Applicants that receive the highest scores will have a financial plan in place to continue the project after the initial funding period. The applicant with the top score will receive full points. Remaining projects will receive a proportional share of the full points. For example, if the top project had 15 and the application being scored had 0, this applicant would receive (0/15)*25 points or 0 points.

7. Cost Effectiveness (~~TBD~~ 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 6 criteria.

A. *MEASURE: Calculate the cost* effectiveness *of the project.* Metropolitan Council staff will divide the ~~total~~ TAB-eligible project cost (not including noise walls) by the total number of points awarded in the previous criteria (1-6).

- Cost effectiveness = total TAB-eligible project cost(not including noise walls)/total number of points awarded in previous criteria (1-6)

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):_____

SCORING GUIDANCE (TBD Points)
The applicant with the lowest dollar value per point earned in the application (i.e., the benefits) will receive the full points for the measure. Remaining projects will receive a proportional share of the full points. For example, if the top project had 35,000 and the application being scored had 70,000, this applicant would receive (35,000/70,000)*~~X~~ 100 points or 50 points.

TOTAL: ~~TBD~~ 1,100 POINTS

Multiuse Trails and Bicycle Facilities – Prioritizing Criteria and Measures

Definition: A project that benefits bicyclists (or bicyclists and other non-motorized users). All projects must have a transportation purpose (i.e., connecting people to destinations). A facility may serve both a transportation purpose and a recreational purpose. Multiuse trail bridges or underpasses should apply in this sub-category instead of the Pedestrian Facilities sub-category given the nature of the users and the higher maximum award amount.

Examples of Multiuse Trail and Bicycle Facility Projects:

- Multiuse trails
- Trail bridges/underpasses
- On-street bike lanes
- Filling multiple gaps, improving multiple crossings, or making other similar improvements along a trail corridor

Criteria and Measures
1. Role in the Regional Transportation System and Economy
Measure A - Identify location of project relative to Regional Bicycle Transportation Network
2. Potential Usage
Measure A – ~~Measure A - Cost effectiveness per population and employment~~ Existing population and employment within 1 mile
3. Equity and Housing Performance
Measure A - Connection to disadvantaged populations and project's benefits, impacts, and mitigation
Measure B - Housing Performance Score
4. Deficiencies and Safety
Measure A – Gaps closed/barriers removed, and/or continuity between jurisdictions improved by the project
Measure B - Deficiencies corrected or safety problem addressed
5. Multimodal ~~Facilities~~ Elements and Connections
~~Measure A - Ridership of transit routes directly and indirectly connected to project~~
~~Measure B – Pedestrian Connections~~
Measure ~~C~~ A - Transit or pedestrian elements of the project~~, or~~ and existing connections
6. Risk Assessment/Public Engagement
Measure A - Risk Assessment Form
7. Cost Effectiveness
Measure A – Cost effectiveness (~~federally~~TAB~~-~~eligible cost~~, not including noise walls~~/total points awarded)

1. Role in the Regional Transportation System and Economy (200 Points) - This criterion measures the project's ability to serve a transportation purpose within the regional transportation system and economy through its inclusion within or direct connection to the Regional Bicycle Transportation Network (RBTN), as established in the 2040 Transportation Policy Plan (2015).

A. *MEASURE:* Reference the "RBTN Evaluation" map generated at the beginning of the application process. Draw the proposed trail on the map.

Upload the "RBTN Evaluation" map used for this measure.

RESPONSE (Select one, based on the "RBTN Evaluation and Major Barriers" map):

- Tier 1, Priority RBTN Corridor (200 Points)
- Tier 1 RBTN Alignment (200 points)
- Tier 2, RBTN Corridor (175 Points)
- Tier 2, RBTN Alignment (175 Points)
- Direct connection to an RBTN Tier 1 corridor or alignment: (150 Points)
- Direct connection to an RBTN Tier 2 Corridor or Alignment (125 Points)

OR

- Project is not located on or directly connected to the RBTN, but is part of a local system and identified within an adopted county, city, or regional parks implementing agency plan (50 Points)

SCORING GUIDANCE (200 Points)
The applicant will receive the points shown in the above bullets based on the location of the project relative to the RBTN.

RBTN Projects (Tier 1/Tier 2 corridors and alignments)
To receive the available points associated with Tier 1 and Tier 2 corridors and alignments, a project must accomplish one of the following:

- Improve a segment of an existing Tier 1 or Tier 2 alignment beyond a simple resurfacing of the facility;
- Implement a currently non-existing segment of a Tier 1 or Tier 2 alignment within and along a Tier 1 or Tier 2 corridor; OR
- Connect directly to a specific Tier 1 or Tier 2 corridor or alignment of the RBTN.
  * Note: if connecting to a RBTN ***corridor***, the project must connect to a roadway or to the planned terminus of a trail in a way that makes possible a future connection to a potential RBTN alignment for the corridor.

Projects that include both on-RBTN and off-RBTN improvements
Projects will be scored based on the proportion of the project that is within and along a RBTN corridor or along a designated RBTN alignment as shown on the RBTN map. Specifically:

- Tier 1 projects with 50% or more of the project's length within and along a Tier 1 corridor or alignment will receive 200 points.
- Tier 2 projects with 50% or more of the project's length within and along a Tier 2 corridor or

alignment will receive 175 points.

- A project with less than 50% of its length within and along a Tier 1 corridor or alignment will be considered a Tier 1 direct connection and will receive 150 points for providing the direct connection.
- A project with less than 50% of its length within and along a Tier 2 corridor or alignment will be considered a Tier 2 direct connection and will receive 125 points for providing the direct connection.
- A project with less than 50% of its length within and along a Tier 1 or Tier 2 corridor or along a Tier 1 or Tier 2 alignment, but with 50% or more of its length within and along a combined Tier 1/Tier 2 corridor or alignment will receive the number of points corresponding to the Tier level with the higher proportion of project length.

Note: Due to tiered scoring, it is possible that no, or multiple, projects will receive the maximum allotment of 200 points.

2. Potential Usage (200 Points) - This criterion quantifies the project's potential usage based on the existing population and employment adjacent to the project. Metropolitan Council staff will calculate the potential usage of the project using the Metropolitan Council model.

A. *MEASURE:* Reference the "Population Summary" map generated at the beginning of the application process. Report the existing population and employment within one mile, as depicted on the "Population Summary" map.

Upload the "Population Summary" map used for this measure.

RESPONSE (Data from the "Population Summary" map):

- Existing Population within 1 Mile (100 Points): _____
- Existing Employment within 1 Mile (100 Points):_____

SCORING GUIDANCE (200 Points)

The applicant with highest population will receive the full 100 points, as will the applicant with the highest number of jobs. Remaining projects will receive a proportionate share of the full points for population and jobs, respectively. As an example for population, projects will score equal to the existing population within 1 mile of the project being scored divided by the project with the highest population within 1 mile multiplied by the maximum points available for the measure (100). For example, if the application being scored had 1,000 people within 1 mile and the top project had 1,500 people, this applicant would receive (1,000/1,500)*100 points or 67 points.

- Existing population: 100 Points
- Existing employment: 100 Points

Using the Metropolitan Council model, all Census block groups that are included within or intersect the buffer area around the project will be included in the analysis.

The highest-scoring application for this measure will be adjusted to receive the full 200 points. Remaining projects will receive a proportional share of the full points. For example, if the application being scored had 80 points and the top project had 190 points, this applicant would receive (80/190)*200 points or 84 points.

3. Equity and Housing Performance (120 Points) – This criterion addresses the project's positive and negative impacts to low-income populations, people of color, children, people with disabilities, and the elderly. The criterion also evaluates a community's efforts to promote affordable housing.

A. *MEASURE:* Reference the "Socio-Econ" map generated at the beginning of the application process. Identify the project's location from the list below, as depicted on the map. Describe the project's positive benefits, and negative impacts, and mitigation for low-income populations; people of color; children, people with disabilities, and the elderly. Geographic proximity alone is not sufficient to receive the full points listed below. In order to receive the maximum points, the response should address the benefits, impacts, and mitigation for the populations listed above. (50 Points)

Upload the "Socio-Econ" map used for this measure.

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

- Project located in Racially Concentrated Area of Poverty: ☐ (0 to 50 Points)
- Project located in Concentrated Area of Poverty: ☐ (0 to 40 Points)
- Project's census tracts are above the regional average for population in poverty or population of color: ☐ (0 to 30 Points)
- Project located in 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: ☐ (0 to 20 Points)

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

SCORING GUIDANCE (50 Points)
Based on the "Socio-Econ" map's output, the applicant will select the appropriate option from the above bullets. However, geographic proximity alone is not sufficient to receive full points. The applicant must fully describe the positive benefits and negative impacts (with mitigation to address the issue) for those identified groups (200 words or less). Each project will first be graded on a 10-point scale, not accounting for geography. Each score from the 10-point scale will then be adjusted to the appropriate geography. The project with the most positive benefits and appropriate mitigation for negative impacts will receive the full points relative to its maximum geographic sub-area defined above. Remaining projects will receive a share of the full points at the scorer's discretion. This response is intended to be qualitative. Metropolitan Council staff will score this measure.

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 50 points. In this case, the highest-scoring application for this measure will be adjusted to receive the full 50 points. Remaining projects will receive a proportional share of the full points. For example, if the application being scored had 20 points and the top project had 40 points, this applicant would receive (20/40)*50 points or 25 points.

B. *MEASURE:* Metropolitan Council staff will award points to the project based on the 2015 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 of the project in each jurisdiction. 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. (70 Points)

RESPONSE (Affordable Housing Score completed by Metropolitan Council staff):

- City/Township: _____
- Length of Segment within City/Township:

SCORING GUIDANCE (70 Points)

The applicant with the highest 2015 Housing Performance Score will receive the full points. Remaining projects will receive a proportional share of the full 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. 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. Deficiencies and Safety (250 Points) – This criterion addresses the project's ability to overcome barriers or network gaps through the completion of Critical Bicycle Transportation Links, as defined in the 2040 TPP. **Critical Bicycle Transportation Links** encompass several types of barriers that can disrupt the connectivity of the Regional Bicycle Transportation Network (RBTN) and isolate communities from key destinations. In addition to providing critical links, projects will be scored on their ability to correct deficiencies and improve the overall safety/security of an existing facility, or expand safe biking opportunities with a future multiuse trail or bicycle facility.

Note: Routine maintenance activities on a multiuse trail or bicycle facility are not eligible for funding. As defined by the FHWA, examples of routine maintenance activities include shrub and brush removal or minor drainage improvements. In order to be eligible for funding, reconstruction projects must be replacing a facility at the end of its useful life or include improvements to the facility (e.g., ADA, safety, other deficiencies). Resurfacing of a facility is eligible only if other improvements to the facility are also included in the proposed project.

A. *MEASURE:* Discuss how the project will close a gap, cross or circumvent a physical barrier, and/or improve continuity or connections between jurisdictions. The applicant should include a description of barriers and gap improvements for the project. If the project is crossing or circumventing a barrier (e.g., river, stream, railroad corridor, freeway, or multi-lane highway), the applicant should describe the magnitude of the barrier (number of lanes, average daily traffic, posted speed limit, etc.) and how the proposed project will improve travel across or around that barrier. The description should include the distance to and condition of the nearest parallel crossing of the barrier, including the presence or absence of bicycle facilities, number of lanes, average daily traffic, and posted speed limit. (100 Points)

RESPONSE (Check all that apply):

- **Closes a transportation network gap and/or provides a facility that crosses or circumvents a physical barrier** ☐ (0-90 Points)**:**
  Gap improvements can be on or off the RBTN and may include the following:
  - Providing a missing link between existing or improved segments of a regional (i.e., RBTN) or local transportation network;
  - Improving bikeability to better serve all ability and experience levels by:
    - Providing a safer, more protected on-street facility;
    - Improving crossings at busy intersections (signals, signage, pavement markings); OR
    - Improving a bike route or providing a trail parallel to a highway or arterial roadway along a lower-volume neighborhood collector or local street.

  Barrier crossing improvements (on or off the RBTN) can include crossings (over or under) of rivers or streams, railroad corridors, freeways, or multi-lane highways, or enhanced routes to circumvent the barrier by channeling bicyclists to existing safe crossings or grade separations. (For new barrier crossing projects, data about the nearest parallel crossing (as described above) must be included in the application to be considered for the full allotment of points under this criterion).

- **Improves continuity and/or connections between jurisdictions** (on or off the RBTN) including extending a specific bikeway facility treatment across jurisdictions to improve consistency and inherent bikeability/convenience for all bicyclists: ☐ (0-10 Points)

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

SCORING GUIDANCE (90 Points)

The applicant will receive up to 90 points if the response shows that the project closes a gap and/or crosses or circumvents a physical barrier and up to 10 points if it improves continuity and/or connections between jurisdictions. The project that the most meets the intent of each the criteria will receive the maximum points (e.g., 90 points for the project that best overcomes a gap or barrier). Remaining projects will receive a portion of the maximum points based on the response. Projects that do not check the box or whose description does not fulfill the intent of the criteria, will receive 0 points.

The highest-scoring application for this measure will be adjusted to receive the full 100 points. Remaining projects will receive a proportional share of the full points. For example, if the application being scored had 80 points and the top project had 90 points, this applicant would receive (80/90)*100 points or 89 points.

B. *MEASURE:* Discuss how the project will correct existing deficiencies or address an identified safety or security problem on the facility. The applicant should also include any available project site-related safety data (e.g., crash data, number of conflict points to be eliminated by the project by type of conflict (bicyclist/pedestrian, bicyclist/vehicle, pedestrian/vehicle, and vehicle/vehicle)) to demonstrate the magnitude of the existing safety problem. Where available, use of local crash data for the project length is highly encouraged. Crashes involving bicyclists and pedestrians should be reported for 2011-2015. As part of the response, demonstrate that the project improvements will reduce the crash potential and provide a safer environment (by referencing crash reduction factors or safety studies) and/or correct a deficiency. (150 Points)

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

SCORING GUIDANCE (150 Points)

The applicant will receive the points shown below, based on the magnitude of the deficiencies or safety issues and the quality of the improvements, as addressed in the response. The scorer will first place each project into one of the two categories below based on if crash data is cited as part of the response. The project with the most extensive improvements will receive the full points for each category. Remaining projects will receive a share of the full points as listed below.

- For applicants that provide actual bicycle and pedestrian crash data to demonstrate the magnitude of the existing safety problem only. Project also demonstrates that the project will reduce the crash potential and provide a safer environment and/or correct a deficiency. The project that will reduce the most crashes will receive 150 points. The other projects in this category will receive a proportional share between 101 and 150 points (i.e., a project that reduces one-half of the crashes

of the top project would receive 125 points): 101 to 150 Points

- For applicants that do not provide actual bicycle and pedestrian crash data. However, the applicant demonstrates the project's ability to reduce the risk for bicycle and pedestrian crashes with the reduction of modal conflict points (bike/pedestrian, bike/vehicle, pedestrian/vehicle, and vehicle/vehicle), safety improvements that address these modal conflicts, or the project's ability to correct deficiencies. The top project will receive 100 points while other projects will receive a portion of the 100 points based on the quality of the project and response: 0 to 100 Points

5. Multimodal ~~Facilities~~ Elements and Connections (100 Points) - This criterion measures how the project improves the travel experience, safety, and security for other modes of transportation, provides strong connections, and addresses the safe integration of these modes.

A. *MEASURE:* Discuss any transit or pedestrian 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. Also, describe the existing transit and pedestrian accommodations. Furthermore, address how the proposed bikeway project safely integrates all modes of transportation (i.e., bicyclists, transit, pedestrians, and vehicles). 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.

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

SCORING GUIDANCE (100 Points)

The project with the most comprehensive enhancements to the travel experience and safe integration of other modes, as addressed in the required response, 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. Projects that include the transit or pedestrian elements as part of the project should receive slightly more points than existing or planned multimodal facilities on parallel routes, consistent with the supporting plans and studies.

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 (130 Points) - This criterion measures the number of risks associated with the project and the steps already completed in the project development process. These steps 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):

SCORING GUIDANCE (130 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 proportional 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)*130 points or 74 points.

7. Cost Effectiveness (~~TBD~~ 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 6 criteria.

A. *MEASURE: Calculate the cost effectiveness of the project.* Metropolitan Council staff will divide the ~~total~~ TAB-eligible project cost ~~(not including noise walls)~~ by the total number of points awarded in the previous criteria (1-6).

- Cost Effectiveness = total TAB-eligible project cost ~~(not including noise walls)~~/total number of points awarded in previous criteria (1-6)

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):_____

SCORING GUIDANCE (TBD Points)
The applicant with the lowest dollar value per point earned in the application (i.e., the benefits) will receive the full points for the measure. Remaining projects will receive a proportional share of the full points. For example, if the top project had 35,000 and the application being scored had 70,000, this applicant would receive (35,000/70,000)*~~X~~ 100 points or 50 points.

TOTAL: ~~TBD~~ 1,100 POINTS

Pedestrian Facilities (Sidewalks, Streetscaping, and ADA) – Prioritizing Criteria and Measures

Definition: A project that primarily benefits pedestrians as opposed to multiple types of non-motorized users. Most non-motorized projects should apply in the Multiuse Trail and Bicycle Facilities sub-category. All projects must relate to surface transportation. A facility may serve both a transportation purpose and a recreational purpose; a facility that connects people to recreational destinations may be considered to have a transportation purpose. Multiuse trail bridges or underpasses should apply in the Multiuse Trail and Bicycle Facilities sub-category instead of this sub-category given the nature of the users and the higher maximum awards.

Examples of Pedestrian Facility Projects:

- Sidewalks
- Streetscaping
- Americans with Disabilities Act (ADA) improvements
- Making similar improvements in a concentrated geographic area, such as sidewalk gap closure throughout a defined neighborhood or downtown area

Criteria and Measures
1. Role in the Regional Transportation System and Economy
Measure A - ~~Measure A - Connection to Job Concentrations, Manufacturing/Distribution Locations, Educational Institutions, and local activity centers~~ Connection to Jobs and Educational Institutions
2. Potential Usage
Measure A - ~~Cost effectiveness per population and employment~~Population
3. Equity and Housing Performance
Measure A - Connection to disadvantaged populations and project's benefits, impacts, and mitigation
Measure B - Housing Performance Score
4. Deficiencies and Safety
Measure A - Barriers overcome or gaps filled
Measure B - Deficiencies correct or safety problems addressed
5. Multimodal ~~Facilities~~ Elements and Connections
~~Measure A - Ridership of transit routes directly / indirectly connected to project~~
~~Measure B - Bikeway connections~~
Measure ~~C~~ A - Transit or bicycle elements of the project and existing connections
6. Risk Assessment
Measure A - Risk Assessment Form
7. Cost-Effectiveness
Measure A – Cost effectiveness (federally eligible cost, not including noise walls/total points awarded)

1. Role in the Regional Transportation System and Economy (~~100~~ 150 Points) - Tying regional policy (Thrive MSP 2040) to the Regional Solicitation, this criterion measures the regional significance of the project, including the project's connections to jobs and Educational Institutions, as defined in ThriveMSP 2040.

A. *MEASURE:* Reference the "Regional Economy" map generated at the beginning of the application process. Report the existing employment and educational institution enrollment within 1/2 mile of the project. Existing employment will be measured by summing the employment located in the Census block groups that intersect the 1/2-mile buffer. Enrollment at public and private post-secondary institutions will also be measured. (150 Points)

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

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

- Existing Employment:_____
- Existing Post-Secondary Enrollment:_____

SCORING GUIDANCE (150 Points)

The applicant with the highest combined total employment and post-secondary education enrollment will receive the full points for this measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 1,000 workers/students within 1/2 mile and the top project had 1,500 workers/students, this applicant would receive (1,000/1,500)*150 points or 100 points. Using the Metropolitan Council model, all census block groups that are included within or intersect the buffer area around the project.

Using the Metropolitan Council model, all Census block groups that are included within or intersect the buffer area around the project will be included in the analysis.~~The applicant with the highest employment will receive the full 150 points for the employment portion of this measure. Remaining projects will receive a proportionate share of the full. For example, if the application being scored had 1,000 workers within 1/4 mile and the top project had 1,500 workers, this applicant would receive (1,000/1,500)*150 points or 100 points. Using the Metropolitan Council model, all traffic analysis zone that are included within or intersect the buffer area around the project.~~

~~For the connection to educational institutions portion of this measure, the applicant with the highest post-secondary enrollment will receive the full 150 points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 1,000 students within 1/4 mile and the top project had 1,500 students, this applicant would receive (1,000/1,500)*150 points or 100 points.~~

~~The scorer will assess if the applicant would score higher with the employment part of the measure or the school enrollment part of the measure, and give the applicant the higher of the two scores out of a maximum of 150 points.~~

2. Potential Usage (~~200~~ 150 Points) - This criterion quantifies the project's potential usage based on the existing population adjacent to the project.

A. *MEASURE:* Reference the "Population Summary" map generated at the beginning of the application process. Report the existing population within 1/2-mile, as depicted on the "Population Summary" map.

Upload the "Population Summary" map used for this measure.

RESPONSE (Data from the "Population Summary" map):

- Existing Population within 1/2 Mile: _____

SCORING GUIDANCE (150 Points)

The applicant with the highest population will receive the full 150 points, as will the applicant with the highest number of jobs. Remaining projects will receive a proportional share of the full points. For example, if the application being scored had 1,000 people within 1/2 mile and the top project had 1,500 people, this applicant would receive (1,000/1,500)*150 points or 100 points.

Using the Metropolitan Council model, all Census block groups that are included within or intersect the buffer area around the project will be included in the analysis.

3. Equity and Housing Performance (120 Points) – This criterion addresses the project's positive and negative impacts to low-income populations, people of color, children, people with disabilities, and the elderly. The criterion also evaluates a community's efforts to promote affordable housing.

A. *MEASURE:* Reference the "Socio-Econ" map generated at the beginning of the application process. Identify the project's location from the list below, as depicted on the map. Describe the project's positive benefits, and negative impacts, and mitigation for low-income populations; people of color; children, people with disabilities, and the elderly. Geographic proximity alone is not sufficient to receive the full points listed below. In order to receive the maximum points, the response should address the benefits, impacts, and mitigation for the populations listed above. (50 Points)

Upload the "Socio-Econ" map used for this measure.

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

- Project located in Racially Concentrated Area of Poverty: ☐ (0 to 50 Points)
- Project located in Area of Concentrated Poverty: ☐ (0 to 40 Points)
- Project's census tracts are above the regional average for population in poverty or population of color: ☐ (0 to 30 Points)
- Project located in 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: ☐ (0 to 20 Points)

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

SCORING GUIDANCE (50 Points)

Based on the "Socio-Econ" map's output, the applicant will select the appropriate option from the above bullets. However, geographic proximity alone is not sufficient to receive full points. The applicant must fully describe the positive benefits and negative impacts (with mitigation to address the issue) for those identified groups (200 words or less). Each project will first be graded on a 10-point scale, not accounting for geography. Each score from the 10-point scale will then be adjusted to the appropriate geography. The project with the most positive benefits and appropriate mitigation for negative impacts will receive the full points relative to its maximum geographic sub-area defined above. Remaining projects will receive a share of the full points at the scorer's discretion. This response is intended to be qualitative. Metropolitan Council staff will score this measure.

The highest-scoring application for this measure will be adjusted to receive the full 50 points. Remaining projects will receive a proportional share of the full points. For example, if the application being scored had 20 points and the top project had 40 points, this applicant would receive (20/40)*50 points or 25 points.

B. *MEASURE:* Metropolitan Council staff will award points to the project based on the 2015 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 of the project in each jurisdiction. 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. (70 Points)

RESPONSE (Affordable Housing Score completed by Metropolitan Council staff):

- City/Township: _____
- Length of Segment within City/Township:

SCORING GUIDANCE (70 Points)

The applicant with the highest 2015 Housing Performance Score will receive the full points. Remaining projects will receive a proportional share of the full 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. 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. Deficiencies and Safety (300 Points) – This criterion addresses the project's ability to improve the overall safety of an existing or future pedestrian facility. This includes how the project will overcome physical barriers or system gaps, correct deficiencies, and/or fix a safety problem.

Note: Routine maintenance activities on a pedestrian facility are not eligible for funding. As defined by the FHWA, examples of routine maintenance activities include shrub and brush removal or minor drainage improvements. In order to be eligible for funding, reconstruction projects must be replacing a facility at the end of its useful life or include improvements to the facility (e.g., ADA, safety, other deficiencies). Resurfacing of a facility is eligible only if other improvements to the facility are also included in the proposed project.

A. *MEASURE:* Reference the "RBTN Evaluation and Major Barriers" map generated at the beginning of the application process. Discuss how the project will overcome barriers (i.e., bridge or tunnel), fill gaps, or connect system segments in the pedestrian network. The applicant should include a description of barriers and gap improvements for the project. If the project is crossing or circumventing a barrier (e.g., river, stream, railroad corridor, freeway, or multi-lane highway), the applicant should describe the magnitude of the barrier (number of lanes, average daily traffic, posted speed, etc.) and how the proposed project will improve travel across or around that barrier. The description should include distance to and condition of the nearest parallel crossing of the barrier, including the presence or absence of pedestrian facilities, number of lanes, average daily traffic, and posted speed limit. (120 Points)

RESPONSE (Check all that apply):

- **Overcomes a physical barrier or system gap** ☐ (0-120 Points)

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

SCORING GUIDANCE (120 Points)
The applicant will receive up to 120 points if the response shows that the project overcomes a physical barrier or system gap. The project that most meets the intent will receive the maximum points. Remaining projects will receive a portion of the maximum points based on the response. Projects that do not check the box or whose descriptions do not fulfill the intent of the criteria, will receive 0 points.

B. *MEASURE:* Discuss how the project will correct existing deficiencies or address an identified safety or security problem on the facility. The applicant should also include any available project site-related safety data (e.g., crash data, number of conflict points to be eliminated by the project by type of conflict (bicyclist/pedestrian, bicyclist/vehicle, pedestrian/vehicle, and vehicle/vehicle)) to demonstrate the magnitude of the existing safety problem. Where available, use of local crash data for the project length is highly encouraged. Crashes involving bicyclists and pedestrians should be reported for 2011-2015. As part of the response, demonstrate that the project improvements will reduce the crash potential and provide a safer environment (by referencing crash reduction factors or safety studies) and/or correct a deficiency. (180 Points)

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

SCORING GUIDANCE (180 Points)

The applicant will receive the points shown below, based on the magnitude of the deficiencies or safety issues and the quality of the improvements, as addressed in the response. The scorer will first place each project into one of the two categories below based on if crash data is cited as part of the response. The project with the most extensive improvements will receive the full points for each category. Remaining projects will receive a share of the full points as listed below.

- For applicants that provide actual bicycle and pedestrian crash data to demonstrate the magnitude of the existing safety problem only. Project also demonstrates that the project will reduce the crash potential and provide a safer environment and/or correct a deficiency. The project that will reduce the most crashes will receive 180 points. The other projects in this category will receive a proportional share between 121 and 180 points (i.e., a project that reduces one-half of the crashes of the top project would receive 150 points): 121 to 180 Points
- For applicants that do not provide actual bicycle and pedestrian crash data. However, the applicant demonstrates the project's ability to reduce the risk for bicycle and pedestrian crashes with the reduction of modal conflict points (bike/pedestrian, bike/vehicle, pedestrian/vehicle, and vehicle/vehicle), safety improvements that address these modal conflicts, or the project's ability to correct deficiencies. The top project will receive a portion of the 120 points based on the quality of the project and response: 0 to 120 Points

The highest-scoring application for this measure will be adjusted to receive the full 180 points. Remaining projects will receive a proportional share of the full points. For example, if the application being scored had 80 points and the top project had 160 points, this applicant would receive (80/160)*180 points or 90 points.

5. Multimodal ~~Facilities~~ Elements and Connections (150 Points) - This criterion measures how the project improves the travel experience, safety, and security for other modes of transportation, provides strong connections, and addresses the safe integration of these modes.

A. *MEASURE:* Discuss any transit or bicycle 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. Also, describe the existing transit and bicycle accommodations. Furthermore, address how the proposed pedestrian facility project safely integrates all modes of transportation (i.e., pedestrians, transit, bicyclists, and vehicles). Applicants should note if there is no transit service in the project area and identify supporting studies or plans that address why mode may not be incorporated into the project.

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

SCORING GUIDANCE (150 Points)

The project with the most comprehensive enhancements to the travel experience and safe integration of other modes, as addressed in the required response, 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. Projects that include the transit or bicycle elements as part of the project should receive slightly more points than existing or planned multimodal facilities on parallel routes, consistent with the supporting plans and studies.

6. Risk Assessment (130 Points) - This criterion measures the number of risks associated with the project and the steps already completed in the project development process. These steps 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):

SCORING GUIDANCE (130 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 proportional 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)*130 points or 74 points.

7. Cost Effectiveness Ratio (~~X~~ 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 6 criteria.

A. *MEASURE: Calculate the cost effectiveness of the project.* Metropolitan Council staff will divide the TAB-eligible~~total~~ project cost (not including noise walls) by the total number of points awarded in the previous criteria (1-6).

- Cost effectiveness= total TAB-eligible project cost (not including noise walls)/total number of points awarded in previous criteria (1-6)

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):_____

SCORING GUIDANCE (100 Points)
The applicant with the lowest dollar value per point earned in the application (i.e., the benefits) will receive the full points for the measure. Remaining projects will receive a proportional share of the full points. For example, if the top project had 35,000 and the application being scored had 70,000, this applicant would receive (35,000/70,000)*100 points or 50 points.

TOTAL: ~~TBD~~ 1,100 POINTS

Safe Routes to School Infrastructure – Prioritizing Criteria and Measures

Definition: An infrastructure project that is within a two-mile radius and directly benefiting a primary, middle, or high school site. A Safe Routes to School Plan (SRTS) must be established prior to applying for this infrastructure funding.

Examples of Safe Routes to School Infrastructure Projects:

- Sidewalks benefiting people going to the school
- Multiuse trails benefiting people going to the school
- Improved crossings benefiting people going to the school
- Multiple improvements

Criteria and Measures
1. Relationship between Safe Routes to School Program Elements
Measure A - Describe how project addresses 5 Es* of SRTS program
2. Potential Usage
Measure A - Average share of student population that bikes, walks, or uses public transit
Measure B - Student population within school's walkshed
3. Equity and Housing Performance
Measure A - Connection to disadvantaged populations and project's benefits, impacts, and mitigation
Measure B - Housing Performance Score
4. Safety
Measure A - Barriers overcome, gaps filled, or system connections
Measure B - Deficiencies corrected or safety or security addressed
~~**5. Multimodal Facilities (Transit) and Connections**~~
~~Measure A - Ridership of transit routes directly connected to the project~~
~~6~~**5. Public Engagement/Risk Assessment**
Measure A - Public engagement process
Measure B - Risk Assessment Form
6. Cost Effectiveness
Measure A – Cost effectiveness (~~federally~~TAB-~~-~~eligible cost ~~, not including noise walls~~/total points awarded)

** The 5 E's of Safe Routes to School include Evaluation, Engineering, Education, Encouragement, and Enforcement.*

November 23, 2015

1. Relationship between Safe Routes to School Program Elements (250 Points) - This criterion assesses the program's ability to integrate the Safe Routes to School Program elements: Engineering, Education, Enforcement, Encouragement, and Evaluation (the 5 E's).

A. *MEASURE:* Describe how the SRTS program associated with the project addresses or integrates the 5 E's. The response should include examples, collaborations or partnerships, and planned activities in the near-term (within five years) to further illustrate the incorporation of the 5 E's into the SRTS program associated with the project.

MnDOT Safe Routes to School guidance defines these elements as follows:

- **Engineering** - Creating operational and physical improvements to the infrastructure surrounding schools that reduce speeds and potential conflicts with motor vehicle traffic, and establish safer and fully accessible crossings, walkways, trails, and bikeways. (0-50 points)
- **Education** - Teaching children about the broad range of transportation choices, instructing them in important lifelong bicycling and walking safety skills, and launching driver safety campaigns in the vicinity of schools. (0-50 points)
- **Enforcement** - Partnering with local law enforcement to ensure traffic laws are obeyed in the vicinity of the schools (this includes enforcement of speeds, yielding to pedestrians, and proper walking and bicycling behaviors) and initiating community enforcements such as a crossing guard program. (0-50 points)
- **Encouragement** - Using events and activities to promote walking and bicycling. (0-50 points)
- **Evaluation** - Monitoring and documenting outcomes and trends through the collection of data before and after the project(s). (0-50 points)

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

SCORING GUIDANCE (250 Points)

The applicant will receive up to 50 points for each of the five sub-measures based on the program's ability to demonstrate the incorporation of each of the 5 E's through activities completed or to be implemented in the near-term (within five years). Applicants will receive up to the full points for each element at the scorer's discretion. The project that most meets the intent of each of the sub-measure will receive the maximum points (e.g., 50 points for the project that best meets the engineering element). Remaining projects will receive a portion of the maximum points based on the response. Projects that do not check the box or whose description does not fulfill the intent of the criteria, will receive 0 points.

- Engineering: 0-50 Points
- Education: 0-50 Points
- Enforcement: 0-50 Points
- Encouragement: 0-50 Points

- Evaluation: 0-50 Points

The highest-scoring application for this measure will be adjusted to receive the full 250 points. Remaining projects will receive a proportionate share of the full points relative to the proportion of the full points assigned to the highest-scoring project. For example, if the application being scored had 100 points and the top project had 200 points, this applicant would receive (100/200)*250 points or 125 points.

2. Potential Usage (~~200~~ 250 Points) - This criterion quantifies the project's potential impact to existing population.

A. *MEASURE:* Average percent of student population that currently bikes, walks, or takes public transit to school, as identified on the Safe Routes to School student travel tally worksheet. Public transit usage does not refer to school buses. Public transit usage should only be considered when the bus route does not have a stop at the school (since these students must walk or bike to get to the school grounds). As part of the required attachments, applicants should attach copies of all original travel tally documentation. (~~150~~ 170 Points)

RESPONSE:

- Average percent of student population:_____

SCORING GUIDANCE (~~120~~ 170 Points)
The applicant with the highest average share of student population that currently bikes, walks, or takes public transportation to school will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 15 percent of the students and the top project had 30 points, this applicant would receive (0.15/0.30)*150 points or 75 points.

B. *MEASURE:* Student population within one mile of the elementary school, middle school, or high school served by the project. (~~100~~ 80 Points)

RESPONSE:

- Student population within one mile of the school:_____

SCORING GUIDANCE (80 Points)
The applicant with the highest student population within one mile of the school will receive the full points. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored had 150 students and the top project had 300 points, this applicant would receive (150/300)*~~100~~ 80 points or ~~50~~ 40 points.

3. Equity and Housing Performance (120 Points) – This criterion addresses the project's positive and negative impacts to low-income populations, people of color, children, and people with disabilities. The criterion also evaluates a community's efforts to promote affordable housing.

A. *MEASURE:* Reference the "Socio-Econ" map generated at the beginning of the application process. Identify the project's location from the list below, as depicted on the map. Describe the project's positive benefits, and negative impacts, and mitigation for low-income populations; people of color; students, people with disabilities, and the elderly. Geographic proximity alone is not sufficient to receive the full points listed below. In order to receive the maximum points, the response should address the benefits, impacts, and mitigation for the populations listed above. (50 Points)

Upload the "Socio-Econ" map used for this measure.

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

- Project located in Racially Concentrated Area of Poverty: ☐ (0 to 50 Points)
- Project located in Concentrated Area of Poverty: ☐ (0 to 40 Points)
- Project's census tracts are above the regional average for population in poverty or population of color: ☐ (0 to 30 Points)
- Project located in census tract that is below the regional average for population in poverty or populations of color, or includes students, people with disabilities, or the elderly: ☐ (0 to 20 Points)

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

SCORING GUIDANCE (50 Points)

Based on the "Socio-Econ" map's output, the applicant will select the appropriate option from the above bullets. However, geographic proximity alone is not sufficient to receive full points. The applicant must fully describe the positive benefits and negative impacts (with mitigation to address the issue) for those identified groups (200 words or less). Each project will first be graded on a 10-point scale, not accounting for geography. Each score from the 10-point scale will then be adjusted to the appropriate geography. The project with the most positive benefits and appropriate mitigation for negative impacts will receive the full points relative to its maximum geographic sub-area defined above. Remaining projects will receive a share of the full points at the scorer's discretion. This response is intended to be qualitative. Metropolitan Council staff will score this measure.

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 50 points. In this case, the highest-scoring application for this measure will be adjusted to receive the full 50 points. Remaining projects will receive a proportionate share of the full points equal to the points. For example, if the application being scored had 20 points and the top project had 40 points, this applicant would receive (20/40)*50 points or 25 points.

B. *MEASURE:* Metropolitan Council staff will award points to the project based on the 2015 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 of the project in each jurisdiction. 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. (70 Points)

RESPONSE (Affordable Housing Score completed by Metropolitan Council staff):

- City/Township: _____
- Length of Segment within City/Township:

SCORING GUIDANCE (70 Points)

The applicant with the highest 2015 Housing Performance Score will receive the full points. Remaining projects will receive a proportionate share of the full 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. 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. Deficiencies and Safety (250 Points) - This criterion addresses the project's ability to improve the overall safety of the proposed project area. This includes how the project will overcome physical barriers or system gaps and/or fix a safety problem.

A. *MEASURE:* Reference the "RBTN Evaluation and Major Barriers" map generated at the beginning of the application process. Discuss how the project will overcome barriers (i.e., bridge or tunnel), fill gaps, or connect system segments in the pedestrian/bicycle network serving a K-12 school. The applicant should include a description of barriers and gap improvements for the project in context with the existing bicycle or pedestrian network serving the school(s). If the project is crossing or circumventing a barrier (e.g., river, stream, railroad corridor, freeway, or multi-lane highway), the applicant should describe the magnitude of the barrier (number of lanes, average daily traffic, posted speed, etc.) and how the proposed project will improve travel across or around that barrier. The description should include distance to and condition of the nearest parallel crossing of the barrier, including the presence or absence of bicycle and pedestrian facilities, number of lanes, average daily traffic, and posted speed limit. (100 Points)

RESPONSE (Check all that apply):

- Overcomes a physical barrier or system gap ☐ (0-100 Points)

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

SCORING GUIDANCE (100 Points)
The applicant will receive up to 100 points if the response shows that the project overcomes a physical barrier or system gap. The project that the most meets the intent will receive the maximum points. Remaining projects will receive a portion of the maximum points based on the response. Projects that do not check the box or whose descriptions do not fulfill the intent of the criteria, will receive 0 points.

B. *MEASURE:* Discuss how the project will correct existing deficiencies or address an identified safety or security problem on the facility or within the project site. Address how these improvements will make bicycling and walking to the school a safer and appealing transportation alternative. Include any available project site-related safety data (e.g. crash data, number of conflict points to be eliminated by the project by type of conflict (bicyclist/pedestrian, bicyclist/vehicle, pedestrian/vehicle, and vehicle/vehicle)) to demonstrate the magnitude of the existing safety problem. Where available, use of local crash data for the project length is highly encouraged. Crashes involving bicyclists and pedestrians should be reported for 2011-2015. As part of the response, demonstrate that the project improvements will reduce the crash potential and provide a safer environment (by referencing crash reduction factors or safety studies) and/or correct a deficiency. Qualitative data from parent surveys, other internal survey data, or stakeholder engagement supporting the safety/security improvements or deficiencies should also be addressed. (150 Points)

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

SCORING GUIDANCE (150 Points)

The applicant will receive the points shown below, based on the magnitude of the deficiencies or safety issues and the quality of the improvements, as addressed in the response. The scorer will first place each project into one of the two categories below based on if crash data or other qualitative data is cited as part of the response. Improvements that are supported by crash reduction factors, safety studies, survey data, and/or stakeholder engagement should be scored highest. The project with the most extensive improvements will receive the full points for each category below. Remaining projects will receive a share of the full points at the scorer's discretion.

- For applicants that provide actual bicycle and pedestrian crash data to demonstrate the magnitude of the existing safety problem only. Applicant also demonstrates that the project will reduce the crash potential and provide a safer environment and/or correct a deficiency, supported by crash reduction factors, safety studies, survey data, and/or stakeholder engagement. The project that will reduce the most crashes will receive 150 points. The other projects in this category will receive a proportionate share between 101 and 150 points (i.e., a project that reduces one-half of the crashes of the top project would receive 125 points): 101 to 150 Points
- For applicants that do not provide actual bicycle and pedestrian crash data. However, the applicant demonstrates the project's ability to reduce the risk for bicycle and pedestrian crashes with the reduction of modal conflict points (bike/pedestrian, bike/car, pedestrian/car, and vehicle/vehicle), safety improvements that address these modal conflicts, or the project's ability to correct deficiencies. The top project will receive 100 points while other projects will receive a portion of the 100 points based on the quality of the project and response: 0 to 100 Points

5. Public Engagement/Risk Assessment (130 Points) - This criterion measures the planned public engagement, the number of risks associated with the project, and the steps already completed in the project development process. These steps are outlined in the checklist in the required Risk Assessment.

A. *MEASURE:* Describe the public engagement process that will be used to include partners and stakeholders (e.g., schools parents, law enforcement, road authorities, and other impacted community members) and build consensus during the development of the proposed project. The number and types of meetings to be held, notices or other notification distributed, stakeholder contacts, adoption of the SRTS plan by the community and school district, and any additional descriptive information should be included in the discussion of the engagement process. As part of the required attachments, copies of all parent survey results must also be attached to the application. The applicant should note if parent surveys were not collected as part of the SRTS planning process. (45 Points)

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

SCORING GUIDANCE (45 Points)

The applicant will be scored on the comprehensiveness and quality of the planned public engagement activities. Additionally, applicants with a project selected through a public engagement process should score higher than projects without this engagement step. Community support, as displayed through parent surveys, stakeholder contacts, and/or adoption of the SRTS plan by the community and school district, should also be considered in the scoring. Note: parent surveys are attached for MnDOT informational purposes only.

The project with the most extensive near-term engagement process (current year through project construction year), including any completed engagement activities for the proposed project, will receive the full points. Remaining projects will receive a share of the full points at the scorer's discretion.

B. *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.). (85 Points)

RESPONSE (Complete Risk Assessment):

SCORING GUIDANCE (85 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)*85 points or 49 points.

6. Cost Effectiveness (~~TBD~~ 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 five criteria.

A. *MEASURE: Calculate the cost* effectiveness *of the project.* Metropolitan Council staff will divide the ~~total~~ TAB-eligible project cost ~~(not including noise walls)~~ by the total number of points awarded in the previous criteria (1-6).

- Cost effectiveness = total TAB-eligible project cost ~~(not including noise walls)~~/total number of points awarded in previous criteria (1-6)

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):_____

SCORING GUIDANCE (~~TBD~~ 100 Points)
The applicant with the lowest dollar value per point earned in the application (i.e., the benefits) will receive the full points for the measure. For example, if the top project had 35,000 and the application being scored had 70,000, this applicant would receive (35,000/70,000)*X 100 points or 50 points.

TOTAL: 1,100~~TBD~~ POINTS

Ongoing Work to Highlight at TAC, 1/6/2016

1. Assigning 16 additional points to the "Transit Connectivity" measure in Transit applications

- **APPLICATIONS:** Transit Expansion and Transit Modernization
- **DISCUSSION:** At its 12/17/2015 meeting, F&P recommended elimination of the population measure (1B) from the "Role in the Regional Transportation System and Economy" criterion. F&PC added 16 points to the Transit Connectivity measure. **These points need to be redistributed to the two bullets shown below under "response" to add up to 50 points.**

MEASURE: Reference the "Transit Connectivity" map generated at the beginning of the application process. List the transit routes directly connected to the project to help determine the average weekday transit trips these connecting routes provide, as depicted on the "Transit Connectivity" map. Metropolitan Council staff will provide the average number of weekday trips for each connecting transit route. Connections to planned transitway stations should be separately cited. Any transitway connection is worth 10 points. (~~34~~ **50 Points**)

Upload the "Transit Connectivity" map used for this measure.

RESPONSE (Data from the "Transit Connectivity" map):

- Existing transit routes directly connected to the project: _____ (**24 Points**). Council staff will use this information to determine the average number of weekday trips.
- Planned transitways directly connect to the project (mode and alignment determined and identified in the 2040 TPP): ☐ (**10 Points**)

2. Addressing the Retention of Educational Institutions in the "Regional Economy"

- **APPLICATIONS:** Roadway Expansion, Roadway Reconstruction/Modernization, Roadway System Management, Bridges
- **ISSUE:** At its 12/17/2015 meeting, F&P recommended retention of "educational institutions" measure in the "Role in the Regional Transportation System and Economy" criterion, shown below. The previous recommendation weighted the responses for employment and manufacturing/distribution, providing two top scores. Retaining educational institutions (i.e., number of students) would create a third top score.
- **DISCUSSION:**
    - **Identify which students to count, i.e., secondary, post-secondary**
    - **In 2014 Solicitation, points were allocated as follows:**
        - **Job Concentration – 20 points**
        - **Manufacturing/distribution – 20 points**
        - **Educational institutions – 12 points.**

      New points allocation for students needs to be determined:
        - **Employment – up to 20 points**
        - **Manufacturing/distribution employment – up to 20 points**
        - **Students – up to ____ points**

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

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

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

- Existing Employment within 1 Mile:_____
- Existing Manufacturing/Distribution-Related Employment within 1 Mile:_____
- Existing Students:_____

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 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 13 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 13 points.

Add in text for Students…

The scorer will assess if the applicant would score higher with the total employment part of the measure or the manufacturing/distribution employment part of the measure, and give the applicant the higher of the two scores out of a maximum of 30 points. Note: Due to the use of two sub-measures, two applicants will receive the full 30 points.

3. Applying equitable scoring for new roadways: Emission Reduction and Safety

- **APPLICATION:** Roadway Expansion
- **DISCUSSION:** Staff has been asked to find ways to make new roadways competitive.

DISCUSSION: (Measure 5B) Emission Reduction. For new roadways, the application instructs applicants to use intersection(s) with reduced emissions on parallel roadways. However, this does not address emissions created on the new roadway. The crash reduction benefit of attracting traffic off existing roads has to be balanced with the accidents that will occur on the new road due to shifting traffic and attracting additional trips.

MEASURE: Using the Synchro or HCM analysis (or fieldwork for railroad grade-separation projects) 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 (only applies to projects that do not include railroad grade-separation elements). 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. (50 Points)

Roadway projects that 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. If more than one intersection is examined, then the emissions reduced by each intersection can be can added together.
- Total Peak Hour Emissions Reduced (Kilograms) = Total Peak Hour Emissions Reduced/Vehicle x Vehicles Per Hour

DISCUSSION: (Measure 6A) Safety. For new roadways, the application instructs applicants to use crash data from parallel roadways but does not acknowledge crashes created on the new roadway.

MEASURE: Respond as appropriate to one of the two project types below. (150 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 Highway Safety Improvement Program (HSIP). Applicants should focus on the crash analysis for reactive projects starting on page 7 through page 11, in addition to Appendix A, E, and F. Crash data must be obtained for the project length using the MnDOT TIS system average for calendar years 2013 through 2015. Crash data should include all crash types and severity, 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 that identifies the resulting

benefit associated with the project. As part of the response, please detail the crash modification factor(s) used from FHWA's Crash Modification Factors Clearinghouse: http://www.cmfclearinghouse.org/

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 2013-2015, 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 online.

RESPONSE (Calculation):

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

4. Measuring railroad crossing emissions.

- **APPLICATIONS:** Roadway Expansion, Roadway Reconstruction/Modernization
- **DISCUSSION:** How to score emissions reduction for railroad crossing projects
- **POSSIBLE SOLUTION:** Below is potential additional language for railroad crossing emissions (Measure 5B, Air Quality)

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.

*CO = F * 0.0699 kg/gallon*
NO_X *= F * 0.0136 kg/gallon*
*VOC = F * 0.0162 kg/gallon*

F = Fuel consumption in gallons

*F = Total Travel * k1 + Total Delay * k2 + Stops * k3*
*K1 = 0.075283-0.0015892 * Speed + 0.000015066 * Speed*^{2}
K2 = 0.7329
*K3 = 0.0000061411 * Speed*^{2}
Speed = cruise speed (free-flow speed) in miles per hour
Total Travel = vehicle miles traveled
Total Delay = total delay in hours
Stops = total stops in vehicles per hour

RESPONSE (Calculation):

- Cruise speed in miles per hour without the project:_____
- Vehicle miles traveled without the project:_____
- Total delay in hours without the project:_____
- Total stops in vehicles per hour without the project:_____

- Cruise speed in miles per hour with the project:_____
- Vehicle miles traveled with the project:_____
- Total delay in hours with the project:_____
- Total stops in vehicles per hour with the project:_____

Automatically Provides Emissions Reduced:

- 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):*

5. Measuring railroad crossing delay

- **APPLICATIONS:** Roadway Expansion, Roadway Reconstruction/Modernization, Roadway System Management
- **DISCUSSION:** In response to momentum for helping make railroad crossing projects more competitive, staff suggested using Synchro to measure delay caused by railroad crossings. At the 12/17/2015 F&P meeting, members were split on whether Synchro can be used for this purpose
- **POSSIBLE SOLUTION:** The below measure is shown for 5A, Congestion Reduction. The bullet represents a potential roadway solution.

  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 a.m. or p.m. peak hour and the Synchro or HCM software for roadway intersections and fieldwork for rail crossings. 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 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.