

# Strategic Capacity (Roadway Expansion)

## Prioritizing Criteria and Measures

September 15, 2021

**Purpose:** To fund regionally significant highway mobility projects, as prioritized in the Principal Arterial Intersection Conversion Study and the Congestion Management Process (CMP), that reduce delay and crashes and improve multimodal travel options.

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

### Examples of Roadway Expansion Projects:

- New roadways
- Two-lane to four-lane expansions
- Other thru-lane expansions (excludes additions of a continuous center turn lane)
- Four-lane to six-lane expansions
- New interchanges with or without associated frontage roads
- Expanded interchanges with either new ramp movements or added thru lanes
- New bridges, overpasses and underpasses

### Scoring:

| Criteria and Measures  | Points                  | % of Total Points |
|--|-------------------------|-------------------|
| <b>1. Role in the Regional Transportation System and Economy</b>   | <b>210</b>              | <b>19%</b>        |
| Measure A - Congestion within Project Area, Level of Adjacent Congestion, or Principal Arterial Intersection Conversion Study Priorities | 80                      |                   |
| Measure B - Connection to Total Jobs, Manufacturing/Distribution Jobs, and Students  | 50                      |                   |
| Measure C - Regional Truck Corridor Study Tiers  | 80                      |                   |
| <b>2. Usage</b>  | <b>175</b>              | <b>16%</b>        |
| Measure A - Current daily person throughput  | 110                     |                   |
| Measure B - Forecast 2040 average daily traffic volume   | 65                      |                   |
| <b>3. Equity and <u>Affordable Housing-Performance</u></b>   | <b>100</b>              | <b>9%</b>         |
| Measure A - <del>Benefits and outreach to disadvantaged populations</del> <u>Engagement</u>  | <del>35</del> <u>50</u> |                   |
| Measure B - <u>Equity population benefits and impacts</u>  | <u>40</u>               |                   |
| Measure <u>CB</u> - <del>Housing Performance Score/ a</del> <u>Affordable housing connection/access</u>                                  | <del>35</del> <u>50</u> |                   |
| <b>4. Infrastructure Age</b>   | <b>40</b>               | <b>4%</b>         |
| Measure A - Date of construction   | 40                      |                   |

| Criteria and Measures  | Points       | % of Total Points |
|--|--------------|-------------------|
| <b>5. Congestion Reduction/Air Quality</b>                                   | <b>150</b>   | <b>14%</b>        |
| Measure A - Vehicle delay reduced  | 100          |                   |
| Measure B - Kg of emissions reduced  | 50           |                   |
| <b>6. Safety</b>   | <b>150</b>   | <b>14%</b>        |
| Measure A - Crashes reduced  | 120          |                   |
| Measure B - Pedestrian Crash Reduction (Proactive)                           | 30           |                   |
| <b>7. Multimodal Elements and Existing Connections</b>                       | <b>100</b>   | <b>9%</b>         |
| Measure A - Transit, bicycle, or pedestrian project elements and connections | 100          |                   |
| <b>8. Risk Assessment</b>  | <b>75</b>    | <b>7%</b>         |
| Measure A – Risk Assessment Form   | 75           |                   |
| <b>9. Cost Effectiveness</b>   | <b>100</b>   | <b>9%</b>         |
| Measure A – Cost effectiveness (total points awarded/total project cost)     | 100          |                   |
| <b>Total</b>   | <b>1,100</b> |                   |

**1. Role in the Regional Transportation System and Economy (210 Points)**

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

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

**Congestion within Project Area:**

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

**RESPONSE:**

- Free-Flow Travel Speed: \_\_\_\_\_
- Peak Hour Travel Speed: \_\_\_\_\_
- Percentage Decrease in Travel Speed in Peak Hour compared to Free-Flow (calculation):  
\_\_\_\_\_

Upload the “Level of Congestion” map used for this measure.

**Congestion on adjacent Parallel Routes:**

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

**RESPONSE:**

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

Upload the “Level of Congestion” map used for this measure.

**Principal Arterial Intersection Conversion Study:**

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

Use the final study report for this measure: [metro council.org/PAICS](http://metro council.org/PAICS)

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

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

**SCORING GUIDANCE** (80 Points)

Due to the three scoring methods, more than one project can score the maximum points. In order to be awarded points for this measure the proposed project itself must show some delay reduction in

measure 5A. If the project does not reduce delay, then it will score 0 points for this measure.

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

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

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

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

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

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

**RESPONSE** (Data from the “Regional Economy” map):

- Existing Employment within 1 Mile: \_\_\_\_\_ (Maximum of 50 points)
- Existing Manufacturing/Distribution-Related Employment within 1 Mile: \_\_\_\_\_ (Maximum of 50 points)
- Existing Post-Secondary Students within 1 Mile: \_\_\_\_\_ (Maximum of 30 points)
- Upload the “Regional Economy” map used for this measure.

**SCORING GUIDANCE** (50 Points)

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

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

$(1,000/1,500)*50$  points or 33 points.

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

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

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

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

- C. **MEASURE:** This criterion relies on the results on the Truck Highway Corridor Study, which prioritized all principal and minor arterials based on truck volume, truck percentage of total traffic, proximity to freight industry clusters, and proximity to regional freight terminals. [The truck corridors were grouped into tiers 1, 2, and 3, in order of priority. Use the 2021 Updated Regional Truck Corridors tiers to respond to this measure: 2021 Updated Regional Truck Corridors.](#) (80 points)

~~Use the final study report for this measure:~~

**RESPONSE:** (Select one for your project, based on the [2021 updated Regional Truck Corridors Study](#)):

- Along Tier 1:  Miles (to the nearest 0.1 miles) : \_\_\_\_\_
- Along Tier 2:  Miles (to the nearest 0.1 miles) : \_\_\_\_\_
- Along Tier 3:  Miles (to the nearest 0.1 miles) : \_\_\_\_\_
- The project provides a direct and immediate connection (i.e., intersects) with either a Tier 1, Tier 2, or Tier 3 corridor:
- None of the tiers:

**SCORING GUIDANCE** (80 Points)

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

- Projects along Tier 1: 80 points
- Projects along Tier 2: 60 points
- Projects along Tier 3: 40 points
- Projects that that provide a direct and immediate connection to a corridor: 10 points.

- None of the tiers: 0 points

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

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

## 2. Usage (175 Points)

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

- A. **MEASURE:** The applicant must identify the location along the project length and provide the current AADT volume from the MnDOT Traffic Mapping Application MnDOT 50 series maps (select Twin Cities Metro Area Street Series under Traffic Volume (AADT)) and existing transit routes that travel on the road (reference “Transit Connections” map). Due to the potential timing issues with when a traffic count was taken relative to the COVID-19 pandemic (and resulting drop in traffic volumes), applicants may also use a historic AADT volume from the MnDOT Traffic Mapping Application (instructions under the Help Document). Ridership data will be provided by the Metropolitan Council staff, if public transit is currently provided on the project length. Metropolitan Council staff will calculate the current daily person throughput at one location along the A-minor arterial or non-freeway principal arterial project length using the current average annual daily traffic (AADT) volume and average annual ridership.

- Current Daily Person Throughput = (current average annual daily traffic volume x 1.30 vehicle occupancy) + average annual daily transit ridership (2019)
- For new roadways, identify the estimated existing daily traffic volume based on traffic modeling.

### RESPONSE:

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

Transit routes that will likely be diverted to the new proposed roadway (if applicable): \_\_\_\_\_ Upload “Transit Connections” map.

### SCORING GUIDANCE (110 Points)

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

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

and project location. Respond as appropriate to the use of one type of forecast model. (65 Points)

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

**RESPONSE:**

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

OR

**RESPONSE:**

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

**SCORING GUIDANCE** (65 Points)

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

**3. Equity and Affordable Housing Performance (100 Points)**

This criterion addresses the Council's role in advancing equity by examining how a project directly ~~provides~~ benefits ~~to,~~ or impacts (positively and negatively) Black, Indigenous, and People of Color (BIPOC) populations, ~~negative~~ low-income populations, ~~people of color,~~ people with disabilities, youth, ~~and~~ older adults, and residents of affordable housing. The criterion evaluates whether the applicant engaged these populations to identify transportation needs and potential solutions and how the project will address these identified needs. The criterion also evaluates a community's overall efforts to implement affordable housing and how the project improves multimodal access to affordable housing ~~residents~~.

~~A. MEASURE: Socio-Economic Equity~~

~~A. Sub-measure: Equity Population Engagement (0 to 3020 points). This measure is a qualitative scoring measure.~~

~~i. A successful project is ~~one that is~~ the result of active engagement of Black, Indigenous, and People of Color populations, low-income populations, ~~people of color,~~ persons with disabilities, youth, ~~and~~ older adults, and residents in affordable housing. Engagement should occur prior to and during ~~project's~~ development, with the intent to provide direct benefits ~~to,~~ or solve, an expressed transportation issue, while also limiting and mitigating any negative impacts.~~

~~i. Describe ~~and map the location of~~ any Black, Indigenous, and People of Color populations, low-income populations, ~~people of color,~~ disabled populations, youth, or older adults within a ½ mile of the proposed project. Describe how these populations relate to regional context. Location of affordable housing will be addressed in Measure C.~~

- ii. Describe how Black, Indigenous, and People of Color populations, low-income populations, persons with disabilities, youth, older adults, and residents in affordable housing specific populations were engaged, whether through community planning efforts, project needs identification, or during the project development process.
- iii. Describe the progression of engagement activities in this project. A full response should answer these questions:
  1. What-Describe what engagement methods and tools were used?
  2. How did you engage and how the input from these groups is reflected in the project's purpose and need and design. Elements of quality engagement include: outreach and engagement to specific communities and populations that are likely to be directly impacted by the project?
  3. What; techniques did you use to reach out to populations traditionally not involved in community engagement related to transportation projects?
  4. How were the project's purpose; feedback from these populations identifying potential positive and need identified?
  5. How was negative elements of the community engaged as the proposed project was developed and designed?
  6. How did you provide multiple opportunities for of Black, Indigenous, and People of Color populations, low-income populations, persons with disabilities, youth, older adults, and residents in affordable housing to engage at different points of project development?
  7. How did through engagement influence the project plans or, study recommendations? How did you share back findings with community and re-engage to assess responsiveness of these changes?
  - 1-8. \_\_\_\_\_ , or plans that provide feedback from populations that may be impacted by the proposed project. If applicable, relevant, describe how will NEPA or Title VI regulations will guide engagement activities?;

(Limit 2,800~~1,400~~ characters; approximately 400~~200~~ words):

**SCORING GUIDANCE (0 to 30 Points)**  
Each application will be qualitatively scored based on the available points and will receive the number of points awarded.

**B. MEASURE**Sub-measure: Equity Population Benefits and Impacts (0 to 40~~30~~ points). This measure): A successful project is a qualitative scoring measure.

Successful projects are one that has been designed to provide direct benefits to Black, Indigenous, and People of Color populations, low-income populations, people of color, persons with disabilities, youth, and older adults. -All projects must mitigate potential negative benefits as required under federal law. - Projects that are designed to provide benefits go beyond the mitigation requirement to proactively provide transportation benefits and solve transportation issues experienced by Equity populations. Benefits to residents of affordable housing are addressed in Measure C.



~~(0 to 30 points)~~ Describe the project's benefits to Black, Indigenous, and People of Color populations, low-income populations, ~~people of color~~, children, people with disabilities, youth, and older adults. Benefits could relate to:

- ~~•~~ pedestrian and bicycle safety improvements;
- ~~•~~ public health benefits;
- ~~•~~ direct access improvements for residents or improved access to destinations such as jobs, school, health care, or other; or other; travel time improvements; gap closures; new transportation services or modal options, leveraging of other beneficial projects and investments; and/or community connection and cohesion improvements. Note that this is not an exhaustive list.

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

- travel time improvements;
- gap closures;
- new transportation services or modal options;
- leveraging of other beneficial projects and investments;
- and/or community connection and cohesion improvements.

This is not an exhaustive list. A full response will support the benefits claimed, identify benefits specific to Equity populations residing or engaged in activities near the project area, identify benefits addressing a transportation issue affecting Equity populations specifically identified through engagement, and substantiate benefits with data.

Acknowledge and describe (0 points) Describe any negative project impacts to Black, Indigenous, and People of Color populations, low-income populations, people of color, children, people with disabilities, youth, and older adults. Describe created by the project, along with measures that will be taken to mitigate these them. Negative impacts. Unidentified or unmitigated negative impacts may that are not adequately mitigated can result in a reduction in points.

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

Below is a list of potential negative impacts. This Note that this is not an exhaustive list.

- ~~• Increased difficulty in street crossing caused by increased roadway width, increased traffic speed, wider turning radii, or other elements that negatively impact pedestrian access.~~
- ~~• Increased noise.~~
- Decreased pedestrian access through sidewalk removal / narrowing, placement of barriers along the walking path, increase in auto-oriented curb cuts, etc.
- ~~• Project elements that are detrimental to location-based air quality by increasing stop/start activity at intersections, creating vehicle idling areas, directing an increased number of vehicles to a particular point, etc.~~

- Increased speed and/or “cut-through” traffic.
- Removed or diminished safe bicycle access.
- Inclusion of some other barrier to access to jobs and other destinations.

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

**SCORING GUIDANCE (0 to 40 Points)**

Each application will be qualitatively scored based on the available points and will receive the number of points awarded.

- ~~B. **MEASURE:** Affordable Housing Access (0 to 30 points). Displacement of residents and businesses.~~
- ~~C. Mitigation of temporary construction/implementation impacts such as dust; noise; reduced access for travelers and to businesses; disruption of utilities; and eliminated street crossings.~~
- ~~D. Other~~

**C. Sub-measure: Bonus Points (0 to 10)** ~~This measure is a qualitative scoring measure.~~

Describe any affordable housing developments—existing, under construction, or planned—within ½ mile of the proposed project. The applicant should note the number of existing subsidized units, which will be provided on the Socio-Economic Conditions map. Applicants can also describe other types of affordable housing (e.g., naturally-occurring affordable housing, manufactured housing) and under construction or planned affordable housing that is within a half mile of the project. If applicable, the applicant can provide self-generated PDF maps to support these additions. Applicants are encouraged to provide a self-generated PDF map describing how a project connects affordable housing residents to destinations (e.g., childcare, grocery stores, schools, places of worship).

Describe the project’s benefits to current and future affordable housing residents within ½ mile of the project. Benefits must relate to affordable housing residents. Examples may include:

- specific direct access improvements for residents
- improved access to destinations such as jobs, school, health care or other;
- new transportation services or modal options;
- and/or community connection and cohesion improvements.

This is not an exhaustive list. Since residents of affordable housing are more likely not to own a private vehicle, higher points will be provided to roadway projects that include other multimodal access improvements. A full response will support the benefits claimed, identify benefits specific to residents of affordable housing, identify benefits addressing a transportation issue affecting residents of affordable housing specifically identified through engagement, and substantiate benefits with data.

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

**SCORING GUIDANCE (0 to 30 Points)**

The project that best provides meaningful improvements to access to affordable housing units will receive the full 30 points. Multiple projects may receive the highest possible score of 30 points based on this assessment. Remaining projects will receive a share of the full points at the scorer’s discretion.

**E.D. BONUS POINTS (0 TO 25 POINTS ABOVE THE TOTAL CRITERION**

**POINTS):points)** Those projects that score at least 80% of the maximum total points available through Measures A, B, sub-measures 1 and C2 will be awarded bonus points based on the geographic location of the project. These points will be assigned as follows, based on the highest-scoring geography the project contacts:

- 25 points to projects within an Area of Concentrated Poverty
- 1520 points to projects within census tracts with the percent of population in poverty or population of color above the regional average percent
- 10 points for all other areas

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

**RESPONSE** (Select one, based on the “Socio-Economic Conditions” map):

- Project is located in an Area of Concentrated Poverty:
- Project’s census tracts are above the regional average for population in poverty or population of color:
- Project located in a census tract that is below the regional average for population in poverty or populations of color:

**SCORING GUIDANCE (0 to 2550 Points)**

~~Each application will be qualitatively scored based on the available points for each measure and will receive the number of points awarded.~~ If the applicant receives at least 80% of the available points in Measures A, B, and C (,i.e., 80, 40 points for the Roadway applications), the project will receive Bonus points as described ~~under sub-measure 3~~. If an applicant qualifies for Bonus points it may will result in an a Socio-Economic Equity and Affordable Housing score of more than the total points available.

~~F. MEASURE: Projects will be scored based on two housing measures: 1. the 2019 Housing Performance Score for the city or township in which the project is located (40 points) and 2. the project’s connection to affordable housing (10 points) as described below.~~

**Part 1 (40 points): Housing Performance Score**

~~A city or township’s housing performance score is calculated annually by the Metropolitan Council using data from four categories: new affordable or mixed income housing completed in~~

the last ten years; preservation projects completed in the last seven years and/or substantial rehabilitation projects completed in the last three years; housing program participation and production, and housing policies and ordinances; and characteristics of the existing housing stock. Data for the housing performance scores are updated each year by the Council, and the city or township is provided with an opportunity to review and revise the information.

Council staff will use the most current housing score for each city or township. If the project is located in more than one jurisdiction, the points will be awarded based on a weighted average using length or population of the project in each jurisdiction. For stand-alone intersection, bridge, underpass, and interchange projects, a one-mile radius buffer will be drawn around the project. If the radius buffer enters more than one jurisdiction, the points will be awarded based on the proportionate population of the Census blocks in each jurisdiction that are all or partially located in the area within the one-mile radius buffer. If a project is located in a city or township with no allocation of affordable housing need (either there is no forecasted household growth or the area does not have land to support sewered development), the project will not be disadvantaged by this measure and the project's total score will be adjusted during scoring to remove this scoring measure.

**RESPONSE:** (NOTE: The below bullets vary slightly by funding category)

- City/Township: \_\_\_\_\_
- Total project cost: \_\_\_\_\_
- Length of Segment (For stand-alone projects, enter population from Regional Economy map) within each City/Township: \_\_\_\_\_
- Percent of total funds to be spent within City/Township: \_\_\_\_\_

**Part 2 (10 points): Affordable Housing Access**

This measure is a qualitative scoring measure. Describe and map any affordable housing developments — planned, under construction or existing, within ½ mile of the proposed project. The applicant should note the development stage, number of units, number of bedrooms per unit, and level of affordability using 2019 affordability limits. Also note whether the affordability is guaranteed through funding restrictions (i.e. LIHTC, 4d) or is unsubsidized, if housing choice vouchers are/will be accepted, and if there is a fair housing marketing plan required or in place.

Describe how the proposed project will improve or impact access for residents of the affordable housing locations within ½ mile of the project. This should include a description of improved access by all modes, automobiles, transit, bicycle and pedestrian access. Since residents of affordable housing are more likely not to own a private vehicle, higher points will be provided to roadway projects that include other multimodal access improvements.

**RESPONSE:**

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

#### 4. Infrastructure Age (40 Points)

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

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

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

#### RESPONSE:

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

#### SCORING GUIDANCE (40 Points)

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

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

If this is the case, then the total points possible in the application will be 960 instead of 1,000. The total points awarded through the rest of the application (900 as a hypothetical example) will be divided by 960, then multiplied by 1,000. Therefore, a project scoring 900 out of 960, will equate to 938 points on a 1,000-point scale.

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

#### 5. Congestion Reduction/Air Quality (150 Points)

This criterion measures the project's ability to reduce intersection delay and emissions during peak hour conditions. In addition, it will address its ability to improve congested intersections operating at unacceptable levels of service during peak hour conditions.

- A. **MEASURE:** Conduct a capacity analysis at one or more of the intersections (or rail crossings) being improved by the roadway project using existing turning movement counts (collected within the last three years) in the weekday a.m. or p.m. peak hour and Synchro or HCM software. The analysis must include build and no build conditions (with and without the project improvements). The applicant must show the current total peak hour delay at one or more intersections (or rail

crossings) and the reduction in total peak hour intersection delay at these intersections (or rail crossings) in seconds, due to the project. If more than one intersection is examined, then the delay reduced by each intersection (or rail crossing) can be added together to determine the total delay reduced by the project.

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

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

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

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

**RESPONSE:**

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

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

Upload Synchro or HCM Report

**SCORING GUIDANCE** (100 Points)

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

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

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

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

**RESPONSE** (Calculation):

- Total (CO, NOX, and VOC) Peak Hour Emissions without the Project (Kilograms): \_\_\_\_\_
- Total (CO, NOX, and VOC) Peak Hour Emissions with the Project (Kilograms): \_\_\_\_\_
- Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms): \_\_\_\_\_

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

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

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

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

Enter data for Parallel Roadways and New Roadways.

*Parallel Roadways*

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

**RESPONSE:**

- Total (CO, NOX, and VOC) Peak Hour Emissions without the Project (Kilograms): \_\_\_\_\_ (Applicant inputs number)
- Total (CO, NOX, and VOC) Peak Hour Emissions with the Project (Kilograms): \_\_\_\_\_ (Applicant inputs number)
- Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms): \_\_\_\_\_ (Online Calculation)

*New Roadway Portion*

Enter data for New Roadway.

- Cruise speed in miles per hour with the project: \_\_\_\_\_ (Applicant inputs number)
- Vehicle miles traveled with the project: \_\_\_\_\_ (Applicant inputs number)
- Total delay in hours with the project: \_\_\_\_\_ (Applicant inputs number)
- Total stops in vehicles per hour with the project: \_\_\_\_\_ (Applicant inputs number)
- Fuel consumption in gallons: \_\_\_\_\_ (Applicant inputs number)
- Total (CO, NOX, and VOC) Peak Hour Emissions Reduced or Produced on New Roadway (Kilograms): \_\_\_\_\_

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

Speed = cruise speed in miles per hour

Total Travel = vehicle miles traveled

Total Delay = total delay in hours

Stops = total stops in vehicles per hour

$K4 = 0.075283 - 0.0015892 * Speed + 0.000015066 * Speed^2$

$K2 = 0.7329$

$K5 = 0.0000061411 * Speed^2$

F2 = Fuel consumption in gallons

$CO = F2 * 0.0699 \text{ kg/gallon}$

$NOX = F2 * 0.0136 \text{ kg/gallon}$

$VOC = F2 * 0.0162 \text{ kg/gallon}$

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

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



**Roadway projects that include railroad grade-separation elements:**

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

**RESPONSE:**

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

Speed = cruise speed in miles per hour

Total Travel = vehicle miles traveled

Total Delay = total delay in hours

Stops = total stops in vehicles per hour

$K1 = 0.075283 - 0.0015892 * \text{Speed} + 0.000015066 * \text{Speed}^2$

$K2 = 0.7329$

$K3 = 0.0000061411 * \text{Speed}^2$

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

$F1 = \text{Total Travel} * k1 + \text{Total Delay} * k2 + \text{Stops} * k3$

$F2 = \text{Total Travel} * k1 + \text{Total Delay} * k2 + \text{Stops} * k3$

$F3 = F1 - F2$

$CO = F3 * 0.0699 \text{ kg/gallon}$

$NOX = F3 * 0.0136 \text{ kg/gallon}$

$VOC = F3 * 0.0162 \text{ kg/gallon}$

Equation Automatically Provides Emissions Reduced:

- Total (CO, NOX, and VOC) Peak Hour Emissions Reduced by the Project (Kilograms):  
\_\_\_\_\_ (Online Calculation)

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

#### SCORING GUIDANCE (50 Points)

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

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

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

Crash data must be obtained for the project length ~~using the MnDOT TIS system average~~ for calendar years ~~2016-2018~~ through ~~2018-2020~~. Crash data should include all crash types and severities, including pedestrian and bicycle crashes.

Only crashes contained within the Minnesota Department of Public Safety's database can be used. If the agency submitting the application has access to MnCMAT, crash data from that system can be used as part of the submittal. MnCMAT data will be reviewed by MnDOT to ensure accuracy. Crash data can also be obtained from MnDOT if an agency does not have access to MnCMAT. MnDOT Metro District Traffic Office will provide a crash listing, upon request. Applicants should request crash data from MnDOT as early as possible. The applicant must then attach a listing of the crashes reduced and the HSIP Benefit/Cost (B/C) worksheet ([www.dot.state.mn.us/stateaid/trafficsafety.html](http://www.dot.state.mn.us/stateaid/trafficsafety.html)) that identifies the resulting benefit associated with the project. As part of the response, please detail and attach the crash modification factor(s) used from FHWA's Crash Modification Factors Clearinghouse: <http://www.cmfclearinghouse.org/>. As part of the Regional Solicitation Before & After Study, Phase 2 (2021), a list of commonly used crash modification factors was created. Applicants have the option to use these crash modification factors (posted on the Metropolitan Council's Regional Solicitation website, under Application Resources) or find a more appropriate one on FHWA's Clearinghouse.

This measure requests the monetized safety benefit of the project. The cost of the project is scored in the Cost Effectiveness criterion.

### New Roadways:

1. For new roadways, identify the parallel roadway(s) from which traffic will be diverted to the new roadway.

2. Using the crash data for ~~2016~~~~2018~~~~2018~~~~2020~~, calculate the existing crash rate for the parallel roadway(s) identified in Step 1.
3. Identify the daily traffic volume that will be relocated from the parallel roadway(s) to the new roadway.
4. Calculate the number of crashes on the parallel roadway(s) using the existing crash rate from Step 2 and the relocated traffic volume to determine the change in number of crashes due to the relocated traffic volume. For instance, if 5,000 vehicles are expected to relocate from the existing parallel roadway to the new roadway, calculate the number of crashes related to the 5,000 vehicles.
5. Identify the average crash rate for the new roadway using MnDOT's average crash rates by roadway type. Using the average crash rate for the new roadway, calculate the number of crashes related to the relocated traffic (i.e., the 5,000 vehicles).
6. Calculate the crash reduction factor using the existing number of crashes on the existing parallel roadway (Step 4) compared to the estimated crashes calculated for the new roadway (Step 5), due to the relocated traffic volume (i.e., the 5,000 vehicles).
7. The calculated crash reduction factor should be used in the HSIP B/C worksheet.
8. Upload additional documentation materials into the "Other Attachments" Form in the online application.

**RESPONSE:**

- Crash Modification Factor Used (Limit 700 characters; approximately 100 words): \_\_\_\_\_
- Rationale for Crash Modifications Selected (Limit 1,400 characters; approximately 200 words): \_\_\_\_\_
- Project Benefit (\$) from B/C ratio: \_\_\_\_\_
- Total Fatal (K) Crashes: \_\_\_\_\_
- Total Serious Injury (A) Crashes: \_\_\_\_\_
- Total Non-Motorized Fatal and Serious Injury Crashes: \_\_\_\_\_
- Total Crashes: \_\_\_\_\_
- Total Fatal (K) Crashes Reduced by Project: \_\_\_\_\_
- Total Serious Injury (A) Crashes Reduced by Project: \_\_\_\_\_
- Total Non-Motorized Fatal and Serious Injury Crashes Reduced by Project: \_\_\_\_\_
- Total Crashes Reduced by Project: \_\_\_\_\_

Upload Crash Modification Factors and B/C Worksheet.

**Roadway projects that include railroad grade-separation elements:**

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

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

**RESPONSE** (Calculation):

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

SCORING GUIDANCE (1~~250~~ 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  $(11,000,000/16,000,000)*1520$  points or 82.5403 points.

For railroad grade-separation projects, the applicant with the highest crash risk exposure eliminated due to the project will receive the full points for the measure. Remaining projects will receive a proportionate share of the full points. For example, if the application being scored reduced 11,000 exposures and the top project reduced 16,000 exposures this applicant would receive  $(11,000/16,000)*1520$  points or 82.5403 points.

**B. MEASURE:** Pedestrian Safety Measure in Roadway Applications

**Determine if these measures do not apply to your project.**

Does the project match either of the following descriptions?

- Project is primarily a freeway (or transitioning to a freeway) and does not provide safe and comfortable pedestrian facilities and crossings.
- Existing location lacks any pedestrian facilities (e.g., sidewalks, marked crossings, wide shoulders in rural contexts) and project does not add pedestrian elements (e.g., reconstruction of a roadway without sidewalks, that doesn't also add pedestrian crossings and sidewalk or sidepath on one or both sides).

If either of the items above are checked, then score for entire pedestrian safety measure is zero. Applicant does not need to respond to the sub-measures and can proceed to the next section.

**SUB-MEASURE 1: Project-Based Pedestrian Safety Enhancements and Risk Elements**

To receive maximum points in this category, pedestrian safety countermeasures selected for implementation in projects should be, to the greatest extent feasible, consistent with the countermeasure recommendations in the Regional Pedestrian Safety Action Plan and state and national best practices. Links to resources are provided on the Regional Solicitation Resources web page.

Please answer the following two questions with as much detail as possible based on the known attributes of the proposed design. If any aspect referenced in this section is not yet determined, describe the range of options being considered, to the greatest extent available. If there are project elements that may increase pedestrian risk, describe how these risks are being mitigated.

- Describe how this project will address the safety needs of people crossing the street at signalized intersections, unsignalized intersections, midblock locations, and roundabouts.  
Treatments and countermeasures should be well-matched to the roadway's context (e.g., appropriate for the speed, volume, crossing distance, and other location attributes). Refer to the

Regional Solicitation Resources web page for guidance links. (Limit 2,800 characters; approximately 400 words)

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Considerations

Is the distance in between signalized intersections increasing (e.g., removing a signal)?

- No
  - Yes. If yes, describe what measures are being used to fill the gap between protected crossing opportunities for pedestrians (e.g., adding High-Intensity Activated Crosswalk beacons to help motorists yield and help pedestrians find a suitable gap for crossing, turning signal into a roundabout to slow motorist speed, etc.). (Limit 1,400 characters; approximately 200 words)
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- 

o Will your design increase the crossing distance or crossing time across any leg of an intersection? (e.g., by adding turn or through lanes, widening lanes, using a multi-phase crossing, prohibiting crossing on any leg of an intersection, pedestrian bridge requiring length detour, etc.). This does not include any increases to crossing distances solely due to the addition of bike lanes (i.e., no other through or turn lanes being added or widened).

- No
  - Yes. If yes:
    - How many intersections will likely be affected?
    - Describe what measures are being used to reduce exposure and delay for pedestrians (e.g., median crossing islands, curb bulb-outs, etc.). (Limit 1,400 characters; approximately 200 words)
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- If grade separated pedestrian crossings are being added and increasing crossing time, describe any features that are included that will reduce the detour required of pedestrians and make the separated crossing a more appealing option (e.g., shallow tunnel that doesn't require much elevation change instead of pedestrian bridge with numerous switchbacks). (Limit 1,400 characters; approximately 200 words):
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o If mid-block crossings are restricted or blocked, explain why this is necessary and how pedestrian crossing needs and safety are supported in other ways (e.g., nearest protected or enhanced crossing opportunity). (Limit 1,400 characters; approximately 200 words)

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- **Describe how motorist speed will be managed in the project design, both for through traffic and turning movements.** Describe any project-related factors that may affect speed directly or indirectly, even if speed is not the intended outcome (e.g., wider lanes and turning radii to facilitate freight movements, adding turn lanes to alleviate peak hour congestion, etc.). Note any strategies or treatments being considered that are intended to help motorists drive

slower (e.g., visual narrowing, narrow lanes, truck aprons to mitigate wide turning radii, etc.) or protect pedestrians if increasing motorist speed (e.g., buffers or other separation from moving vehicles, crossing treatments appropriate for higher speed roadways, etc.). (Limit 2,800 characters; approximately 400 words)

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- If known, what are the existing and proposed design, operation, and posted speeds? Is this an increase or decrease from existing conditions? (Limit 1,400 characters; approximately 200 words)
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**SCORING GUIDANCE (10 Points)**

Projects that will provide the most improvement to pedestrian safety across the two questions will receive full points. Other projects will receive a share of the full points, based on scorer’s discretion, considering the following scoring guidance. Weight the responses to each of these questions equally and consider them cumulatively when scoring. If mid-block crossings are not applicable for the project, and the applicant’s explanation adequately shows that pedestrian needs are still being safely met, do not penalize the applicant.

See the *FHWA STEP Studio* resource, *FHWA STEP Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations*, *NCHRP Report 926: Guidance to Improving Pedestrian and Bicyclist Safety at Intersections*, and related resources referenced in the application prompt for state-of-practice guidance on pedestrian-oriented safety design and treatments.

Assume that pedestrians may need to travel along and across the entire extent of the project, and evaluate how well the pedestrian safety countermeasures described serve those needs. Projects that serve those needs with the greatest safety and least pedestrian delay, detour, or discomfort should score highest. For example, projects that provide safe at-grade crossings or comfortable tunnels with minimal detour and elevation change should score higher than projects that include pedestrian bridges requiring lengthy detours and elevation change. Projects that provide frequent crossing opportunities or crossing opportunities well-aligned with transit or other likely places with pedestrian crossing needs should score higher than projects that have infrequent or non-existent protected crossings.

Consider how safely, easily, and comfortably children, older adults, and people with disabilities will be able to navigate crossing the street. Score projects more highly if the safety countermeasures selected are designed to be comfortably used by people of all ages and abilities.

Consider pedestrian-oriented safety treatments in context with motor vehicle design elements. If there are motor vehicle design elements that raise concerns about pedestrian safety (e.g., increased speed, increased crossing distance) that are not fully mitigated by the pedestrian safety countermeasures described, consider a lower score. For roadway expansion projects, where all projects *by definition* will be increasing crossing distance, consider how much additional distance is added as well as the types of countermeasures being considered. If the only element causing an increase in crossing distance is the addition of bike lanes or other bike facilities, especially if the project has reduced other elements to help mitigate this impact (e.g., reducing through lane widths), do not penalize the score for the crossing distance attributable to bike lanes.

Regardless of the speed limit, score projects more highly if they include design elements to help motorists drive slowly. For example, narrow lanes, visual narrowing, and elements to help motorists turn slowly, such as tight turning/corner radius or truck aprons, curb extensions, medians/crossing islands, and hardened centerlines.

**SUB-MEASURE 2: Existing Location-Based Pedestrian Safety Risk Factors**

These factors are based on based on trends and patterns observed in pedestrian crash analysis done for the Regional Pedestrian Safety Action Plan. Check off how many of the following factors are present. Applicants receive more points if more risk factors are present.

- Existing road configuration is either:
  - One-way, 3+ through lanes
  - Two-way, 4+ through lanes
- Existing road has a design speed, posted speed limit, or speed study/data showing 85<sup>th</sup> percentile travel speeds in excess of:
  - 30 MPH or more
- Existing road has AADT of greater than 15,000 vehicles per day (List the AADT \_\_\_\_\_)

**SCORING GUIDANCE (10 Points)**

Multiply the score from Sub-Measure 1 by the proportion of risk factors indicated to calculate the number of points earned for Sub-Measure 2. Applications where all three factors are present score additional points equal to 100% of their Sub-Measure 1 score. Applications where two of the three factors are present score additional points equal to 2/3 (or 67%) of their Sub-Measure 1 score. And so on. To earn the maximum possible score on Sub-Measure 2, a project would need to earn maximum points on Sub-Measure 1 and also have all 3 risk factors present.

**SUB-MEASURE 3: Existing Location-Based Pedestrian Safety Exposure Factors**

These factors are based on based on trends and patterns observed in pedestrian crash analysis done for the Regional Pedestrian Safety Action Plan. Check off how many of the following existing location exposure factors are present. Applicants receive more points if more risk factors are present.

- Existing road has transit running on or across it with 1+ transit stops in the project area (If flag-stop route with no fixed stops, then 1+ locations in the project area where roadside stops are allowed. Do not count portions of transit routes with no stops, such as non-stop freeway sections of express or limited-stop routes. If service was temporarily reduced for the pandemic but is expected to return to 2019 levels, consider 2019 service for this item.)
- Existing road has high-frequency transit running on or across it and 1+ high-frequency stops in the project area (high-frequency defined as service at least every 15 minutes from 6am to 7pm weekdays and 9am to 6pm Saturdays. If service frequency was temporarily reduced for the pandemic but is expected to return to 2019 levels, consider 2019 frequency for this item.)
- Existing road is within 500' of 1+ shopping, dining, or entertainment destinations (e.g., grocery store, restaurant)

If yes, please describe (Limit 1,400 characters; approximately 200 words):

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- Existing road is within 500' of other known pedestrian generators (e.g., school, civic/community center, senior housing, multifamily housing, regulatorily-designated affordable housing)

If yes, please describe (Limit 1,400 characters; approximately 200 words):

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**SCORING GUIDANCE (10 Points)**

Multiply the score from Sub-Measure 1 by the proportion of exposure factors indicated to calculate the number of points earned for Sub-Measure 3. Applications where all four factors are present score additional points equal to 100% of their Sub-Measure 1 score. Applications where two of the four factors are present score additional points equal to 2/4 (or 50%) of their Sub-Measure 1 score. And so on. To earn the maximum possible score on Sub-Measure 3 a project would need to earn maximum points on Sub-Measure 1 and also have all 4 exposure factors present.

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

**SCORING GUIDANCE (30 Points)**

~~The project that will provide the most improvement to pedestrian safety will receive full points. Remaining projects will receive a share of the full points at the scorer's discretion.~~

**7. Multimodal Elements and Existing Connections (100 Points)**

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

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



- Discuss the existing bicycle, pedestrian, and transit connections and how the project enhances these connections.
- Discuss whether the project implements specific locations identified as being deficient in a completed ADA Transition Plan.

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

**SCORING GUIDANCE** (100 Points)

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

**8. Risk Assessment (75 Points)**

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

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

**RESPONSE** (Complete Risk Assessment):

Please check those that apply and fill in anticipated completion dates for all projects, ~~except for~~ New/expanded transit service projects will receive full credit for items 2-5 but must fill out item 1. ~~or~~ Transit vehicle purchases will receive full credit.

**1. Public Involvement (20 Percent of Points)**

Projects that have been through a public process with residents and other interested public entities are more likely than others to be successful. The project applicant must indicate that events and/or targeted outreach (e.g., surveys and other web-based input) were held to help identify the transportation problem, how the potential solution was selected instead of other options, and the public involvement completed to date on the project. The focus of this section is on the opportunity for public input as opposed to the quality of input. NOTE: A written response is required and failure to respond will result in zero points.

~~List Dates of most recent meetings and outreach specific to this project:~~

- ~~Meeting with general public: \_\_\_\_\_~~
- ~~Meeting with partner agencies: \_\_\_\_\_~~
- ~~Targeted online/mail outreach: \_\_\_\_\_~~

○ Number of respondents: \_\_\_\_\_

100%  Multiple types of targeted outreach efforts (such as meetings or online/mail outreach) Meetings specific to this project with the general public and partner agencies have been used to help identify the project need.

~~75%  Targeted outreach specific to this project with the general public and partner agencies have been used to help identify the project need.~~

50%  At least one meeting specific to this project with the general public has been used to help identify the project need.

50%  At least one meeting online/mail outreach effort specific to this project with the general public ~~key partner agencies~~ has been used to help identify the project need.

25%  No meeting or outreach specific to the project was conducted, but the project was identified through meetings and/or outreach related to a larger planning effort.

0%  No outreach has led to the selection of this project.

**RESPONSE** (Limit 2,800 characters; approximately 400 words). Describe the type(s) of outreach selected for this project (i.e., online or in-person meetings, surveys, demonstration projects), the method(s) used to announce outreach opportunities, and how many people participated. Include any public website links to outreach opportunities.:

## 2. Layout (25 Percent of Points)

Layout ~~should~~ includes proposed geometrics and existing and proposed right-of-way boundaries. A basic layout should include a base map (north arrow; scale; legend;\* city and/or county limits; existing ROW, labeled; existing signals;\* and bridge numbers\*) and design data (proposed alignments; bike and/or roadway lane widths; shoulder width;\* proposed signals;\* and proposed ROW). An aerial photograph with a line showing the project's termini does not suffice and will be awarded zero points.

\*If applicable

100%  Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties/~~MnDOT that the project goes through or agencies that maintain the roadway(s)~~). If a MnDOT trunk highway is impacted, approval by MnDOT must have occurred to receive full points. **A PDF of the layout must be attached along with letters from each jurisdiction to receive points.**

100%  A layout does not apply (signal replacement/signal timing, stand-alone streetscaping, minor intersection improvements). Applicants that are not certain whether a layout is required should contact Colleen Brown at MnDOT Metro State Aid – [colleen.brown@state.mn.us](mailto:colleen.brown@state.mn.us).

75%  For projects where MnDOT trunk highways are impacted and a MnDOT Staff Approved layout is required. Layout approved by the applicant and all impacted local jurisdictions (i.e., cities/counties), and layout review and approval by MnDOT is pending. A

PDF of the layout must be attached along with letters from each jurisdiction to receive points.

50%  Layout completed but not approved by all jurisdictions. **A PDF of the layout must be attached to receive points.**

25%  Layout has been started but is not complete. A PDF of the layout must be attached to receive points.

0%  Layout has not been started

~~3. Anticipated date or date of completion: \_\_\_\_\_~~

**4.3. Review of Section 106 Historic Resources (15 Percent of Points)**

100%  No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and project is not located on an identified historic bridge

100%  There are historical/archeological properties present but determination of “no historic properties affected” is anticipated.

80%  Historic/archeological property impacted; determination of “no adverse effect” anticipated

40%  Historic/archeological property impacted; determination of “adverse effect” anticipated

0%  Unsure if there are any historic/archaeological properties in the project area.

Project is located on an identified historic bridge:

**5.4. Right-of-Way (25 Percent of Points)**

100%  Right-of-way, permanent or temporary easements, and MnDOT agreement/limited-use permit either not required or all have been acquired

50%  Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required, - plat, legal descriptions, or official map complete

25%  Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required, - parcels identified

0%  Right-of-way, permanent or temporary easements, and/or MnDOT agreement/limited-use permit required, - parcels not all identified

~~Anticipated date or date of acquisition \_\_\_\_\_~~

**6.5. Railroad Involvement (15 Percent of Points)**

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

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

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

Anticipated date or date of executed Agreement \_\_\_\_\_

**SCORING GUIDANCE** (75 Points)

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

**9. Cost Effectiveness (100 Points)**

This criterion will assess the project’s cost effectiveness based on the total TAB-eligible project cost (not including noise walls) and total points awarded in the previous 8 criteria.

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

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

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

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

**SCORING GUIDANCE** (100 Points)

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

The scorer for this measure will also complete a reasonableness check of the total project cost that is used for this measure. The scorer may follow up with the applicant to clarify any questions. Up to 50

percent of points awarded for this measure can be deducted if the scorer does not believe that the cost estimate is reasonable.

**TOTAL: 1,100 POINTS**