BRIDGE CONNECTIONS

Prioritizing Criteria and Measures

2050 TPP Goal: Our Region is Dynamic and Resilient

2050 TPP Policies or Objectives:

- People and businesses trust that transportation infrastructure and services will withstand and recover quickly from natural and human-caused disruptions.
- People have better travel options beyond driving alone to meet their daily needs, with a focus on improving travel times, reliability, directness, and affordability.
- People do not die or face life-changing injuries when using any form of transportation.
- People and businesses can rely on predictable and cost-effective movement of freight and goods.
- The region's transportation system protects, restores, and enhances natural systems (air, water, vegetation, and habitat quality).

Category Definition: The Bridge Connections application category is intended to fund bridge projects that increase system resilience by maintaining connections, implement a complete streets approach, encourage natural resource protection, and incorporate safety features. The bridge must be 20 feet or longer and must have a Local Planning Index (LPI) of less than 60 OR a National Bridge Inventory (NBI) Rating of 3 or less for either Deck Geometry, Approach Roadway, or Waterway Adequacy as reported in the most recent *Minnesota Structure Inventory Report*.

Scoring

Criteria and Measures	%
1. System Resilience	**45**
Measure A – Detour length	15
Measure B – Detour impact	15
Measure C – Bridge posting for load restrictions	15
2. Multimodal/Complete Streets Connections	**15**
Measure A – New or improved multimodal connections (transit, bicycle, pedestrian, TDM elements)	15
3. Safety	**10**
Measure A – Safety improvements for people outside of vehicles	10
4. Freight	**5**
Measure A – Regional Truck Corridor Study Tiers	5
5. Natural Systems Protection and Restoration	**5**
Measure A – Flood mitigation, stormwater treatment, or other environmental benefits, etc.	5
6. Community Considerations	**20**
Measure A – Community data and context	6.7
Measure B – Community need and future engagement	6.7
Measure C – Community benefits	6.7
Total	**100**

Examples of Eligible Projects

- Existing bridge rehabilitation
- Existing bridge replacement
- Rail, transit-only, and pedestrian/bike-only bridges are not eligible in this category

Application Criteria and Measures

1. System Resilience

This criterion measures how the project contributes to the resilience of the transportation system by mitigating the consequences of bridge failure.

A. Detour Length (from LPI)

List the detour length found in the National Bridge Inventory (NBI) report as part of the region's current methodology for the Local Planning Index (LPI) calculation. Please include the National Bridge Inventory report: _

Scoring Guidance
The project will be scored using the following guidance:

The applicant with the furthest detour length will receive the full points. Remaining projects will receive a proportionate share of the full points.

B. Detour Impact

Describe the anticipated likely impacts to the regional transportation system if the bridge were to close or be restricted in some way (600 words or less). Consider the following when developing your response and provide data or evidence where possible. Note that not all considerations may be applicable to all projects, but please respond to those that are applicable.

- Impacts to people in vehicles or to users who walk or bike across the bridge.
- Impacts to freight movements.
- Impacts to congestion and increased travel times due to detour length and traffic volumes.
- Impacts to emergency vehicle response times.
- Connections to local businesses, schools, healthcare, and other key community destinations.
- Number of people or jobs immediately impacted by the change in travel patterns.

Scoring Guidance
Consider the information and narrative provided by the applicant and rate projects based on the benchmarks provided below. Projects may be rated at any point along the scale based on their performance against the stated criteria. The project rating will be based on the anticipated scale of impact to the regional transportation system, rather than the number of impacts addressed.

- **High:** The highest rated projects in this measure will provide information that strongly supports a high level of disruption to the regional transportation system in the event of a bridge closure. The response will include quantitative or qualitative evidence to support the response, and likely includes significant impacts in more than one category (including people that walk or bike, freight disruptions, lost connections to local destinations, or emergency vehicle response times).
- **Medium-High**
- **Medium:** Mid-range projects in this measure will provide evidence of moderate disruption to the regional transportation system in the event of a bridge closure. The quantitative or qualitative

evidence to support the response may be lower quality or lacking in detail, but the response likely indicates that disruptions will impact more than one category detailed above.
- **Medium-Low**
- **Low:** Low rated projects in this measure will likely not include quantitative data and may not provide clear information to indicate that a bridge closure would cause concerning disruptions to the regional transportation system.
- **Non-responsive/Not relevant:** Projects that do not address this measure or do not provide evidence of any disruption will receive zero points.

C. Bridge Posting for Load Restrictions

Is the bridge load posted (yes/no)? _

Scoring Guidance
The project will be scored using the following guidance:

- **15 points:** Yes, bridge is load posted in any way
- **0 points:** No, bridge is not load posted

2. Multimodal/Complete Streets Connections

This criterion measures how the project improves travel experience, safety, and security for all modes of transportation and addresses the safe integration of these modes. The 2050 Transportation Policy Plan requires that explicit consideration of all users of the transportation system be considered in the planning and scoping phase of projects.

A. New or Improved Multimodal Connections (Transit, Bicycle, Pedestrian, TDM Elements)

Describe the new or improved multimodal connections (transit, bicycle, pedestrian, etc.) along, across or underneath the project and/or TDM elements (400 words or less). Consider the following when developing your response. Note that not all considerations are applicable to all projects, but please respond to those that are applicable.

- How does the project reduce the level of traffic stress (reference the Oregon Department of Transportation level of traffic stress *analysis procedure* or another similar methodology) for all users of multimodal facilities?
- How will the project improve the comfort and quality of the travel experience for bicyclists, pedestrians, and transit users of all ages and abilities?
- How will the project reduce delays for these users?
- How will the project improve access or expand connections for these users?
- How will the project use TDM to encourage the use of other modes?
- Does the project provide a high-quality connection based on the surrounding land use and/or community context?

Scoring Guidance
Consider the information and narrative provided by the applicant and rate projects based on the benchmarks provided below. Projects may be rated at any point along the scale based on their performance against the stated criteria. The project rating will be based on the quality of the improvements, as opposed to being based solely on the number of modes addressed.

- **High:** The highest rated projects in this measure will significantly improve the travel experience, safety, and security for modes of transportation beyond vehicles and the safe integration of

these modes in the project. The response will include quantitative or qualitative metrics showing a high level of improvement using an established methodology. Projects that are on the Regional Bicycle Transportation Network (RBTN) or cross or address a barrier as identified in the Regional Bicycle Barriers Study AND provide new or improved bicycle facilities designed to cater to uses of all ages and abilities will receive a high score..

- **Medium-High**
- **Medium:** Mid-range projects in this measure may significantly improve the travel experience, safety, and security for modes of transportation beyond vehicles and the safe integration of these modes in the project but without quantitative or qualitative data or using a less established methodology. Similarly, mid-range projects may have quantitative data and a solid methodology but only offer a small improvement to the multimodal experience.
- **Medium-Low**
- **Low:** Low rated projects in this measure will not include quantitative or qualitative data and may not provide clear information to create confidence that the project will provide benefits.
- **Non-responsive/Not relevant:** Projects that do not improve the multimodal travel experience, safety and security should receive zero points in this measure.

3. Safety

This criterion measures the project's ability to promote safety for all users, including how the project responds to existing risks and maximizes use of proven safety countermeasures.

A. Safety Improvements for People Outside of Vehicles

Please provide a written response that explains how the project will mitigate existing risk factors noted above and any other steps taken to ensure the project promotes safety for all users. Please cite any specific proven safety countermeasures that will be part of the project's design or methods the project will use to promote safety for people outside of vehicles (600 words or less).

Consider the following when developing your response. Note that not all considerations are applicable to all projects, but please respond to those that are applicable.

- Will crossing distances or times between protected crossings for people outside of vehicles be increasing or decreasing? If so, how many locations will be affected? If increasing, what measures will be considered to recognize the increase in distance between crossing opportunities?
- Describe what measures are being used to reduce exposure and delay for people outside of vehicles.
- If grade separated pedestrian crossings are being added and increasing crossing times, describe any features that are included that will reduce the detour required of pedestrians and make the separated crossing a more appealing option.
- 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.
- Describe how motorist speed will be managed in the project design, in both through-traffic and turning movements. Note any strategies or treatments being considered that are intended to help motorists drive slower or protect pedestrians and bicyclists if motorist speeds will increase.
- Consider these resources for safety improvements: *Regional Safety Action Plan's Programmatic Recommendations*, *FHWA's Safe System Roadway Design Hierarchy*, and *MnDOT's Traffic Engineering Countermeasures*

Scoring Guidance
Consider the information and narrative provided by the applicant and rate projects based on the benchmarks provided below. Projects may be rated at any point along the scale based on their performance against the stated criteria.

- **High:** The highest rated projects in this criterion will serve the needs of pedestrians and bicyclists with the greatest safety and least pedestrian and bicyclist delay, detour, or discomfort. Score projects higher if selected countermeasures are designed to be comfortably used by people of all ages and abilities. The highest scoring projects will provide frequent, safe, at-grade crossing opportunities to prioritize directness and convenience with safety. Score projects higher if design elements are included to help motorists drive slower. The response will include quantitative or qualitative metrics showing a high level of improvement using an established methodology.
- **Medium-High**
- **Medium:** Mid-range projects in this measure may make a strong case as to how the project improves the travel experience, safety, and security for people outside of vehicles but without quantitative data or using a less established methodology. These projects may require lengthy detours or elevation changes or have less frequent at-grade crossings that do not align well with destinations. Similarly, mid-range projects may have quantitative or qualitative data and an established methodology but only offer a small improvement to the multimodal experience.
- **Medium-Low**
- **Low:** Projects that make minimal improvement to the travel experience, safety and security for people outside of vehicles should receive low points in this measure. These projects may include motor vehicle design elements that raise concerns for pedestrian and bicyclist safety, such as increased vehicle speeds or increased crossing distances that would not be fully mitigated by any safety countermeasures for pedestrians and bicyclists.
- **Non-responsive/Not relevant:** Projects that do not improve the travel experience and safety for people outside of vehicles should receive zero points for this measure.

4. Freight

Tying regional policy in the 2050 Transportation Policy Plan 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 it aligns with the Regional Truck Corridor Study.

A. Regional Truck Corridor Study Tiers

This measure 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.*

Select the highest one for your project, based on the 2021 updated Regional Truck Corridors:

☐ Along Tier 1

☐ Along Tier 2

☐ Along Tier 3

☐ The project provides a direct and immediate connection (i.e., intersects) with a Tier 1, Tier 2 or Tier 3 corridor.

☐ Not applicable

Scoring Guidance
Applicants will be awarded points as assigned in the above tiers, for the highest tier touched (for new alignments, use the tier of the existing alignment or parallel alignment that the new connection is replacing):

- **5 points:** Projects along Tier 1
- **4 points:** Projects along Tier 2
- **3 points:** Projects along Tier 3
- **2 points:** Projects that provide a direct and immediate connection to a corridor
- **0 points:** None of the tiers

5. Natural Systems Protection and Restoration

This criterion measures the project's ability to protect and preserve the region's natural systems and build more resilient infrastructure.

A. Flood Mitigation, Stormwater Treatment, Other Environmental Benefits

Describe how the project protects and restores natural systems through flood mitigation, stormwater treatment, etc. (600 words or less):

Consider the following when developing your response. Note that not all considerations will be applicable to all projects, but please respond to those that are applicable.

- Does the project increase or decrease impervious surface area?
- Does the project use alternative construction methods (e.g., recycling pavement materials or using surfaces more friendly to freeze/thaw cycles)?
- Does the project use landscaping or streetscaping appropriate for the area/climate?
- Does the project preserve existing mature trees or plan new trees with associated establishment period?
- Does the project use soil amendments to improve environmental performance (e.g., biochar food-derived compost)?
- Is the project designed to industry standard flood events (e.g., 100-year flood events)?
- Does the project manage stormwater more efficiently or mitigate an existing stormwater runoff concern?
- Does the project add new infrastructure that is more resilient to wetter and warmer conditions?
- Does the project improve habitat connectivity?

Scoring Guidance
Consider the information and narrative provided by the applicant and rate projects based on the benchmarks provided below. Projects may be rated at any point along the scale based on their performance against the stated criteria.

- **High:** Projects in this range will significantly improve, protect, and restore natural systems over the existing condition. The response will include quantitative or qualitative metrics showing a high level of improvement using an established methodology.

- **Medium-High**
- **Medium:** Projects in this range will somewhat improve, protect, and restore natural systems over the existing condition. The response will include qualitative or quantitative metrics showing a smaller level of improvement using an established methodology.
- **Medium-Low**
- **Low:** These projects make a case as to how the project somewhat improves, protects, and restores natural systems without qualitative or quantitative data or using a less solid methodology. Projects in this range have smaller improvements to natural systems.
- **Non-responsive/Not relevant:** Projects that do not improve, protect or restore natural systems or do not provide adequate information should receive zero points for this measure.

6. Community Considerations

See separate Community Considerations criteria document.