Voted Rating Point Guidance

(Dated: 5-15-2017)

Items which the Regional Bridge Council members will vote on are listed below. A brief explanation of the items is provided with guidance.

Physical Condition

1. Structural Adequacy (by council)

The council should consider the overall structural condition of the bridge. Is the bridge structurally adequate for the traffic using it? From a structural viewpoint, should the bridge be replaced or rehabilitated? Even if the structure is closed, is it critical to replace? Just because a bridge is posted does not mean this category should get a higher rating. Some latitude in reasoning is expected.

A couple of examples:

- a. A narrow camel back bridge posted at 40 tons with a low average daily traffic and negligible commercial traffic may be rated a zero.
- b. Conversely, a functionally adequate structure posted at 60 tons in a heavily industrial area with significant commercial traffic may be rated with maximum points.

Vote 0, 1, or 2 points for each of 4 members (8 points maximum)

2. Bridge and Approach Features (by council)

Consideration to physical aspects including the roadway width, vertical and horizontal alignment, and overall acceptability of the bridge to the traffic corridor it serves. Are these features a safety concern? A bridge could be substandard but still be acceptable if it meets minimal design criteria and needs of the traffic that uses it.

Vote 0 or 1 point for each of 4 members (4 points maximum)

Importance of Structure

1. Detour Evaluation (2 Points Maximum by Calculation, 2 Points Maximum by RBC Vote)

The detour length is defined as the distance around the bridge from reference line A to reference line B, over a comparable route. Dead end roads are considered as infinite. The distance, traffic volume and impact, driver delay, should be considered. The sum of a, b, & c below are divided by 2.

- a. Distance of Detour recommendation:
 - 1. 3 miles or less.....0.0 points
 - 2. Greater than 3 to less than 10 miles.....0.5 points
 - 3. 10 miles or more.....1.0 points
- b. Average Daily Traffic recommendation
 - 1. less than 100 vehicles per day.....0.0 points
 - 2. 100 to less than 1,000 vehicles per day....1.0 points
 - 3. 1,000 or more vehicles per day.....1.5 points

c. Driver Delay Guidelines

Driver Delay = (miles of detour / posted speed) X (average daily traffic) in hours

- 1. 0 to 50 hours of delay.....0.0 points
- 2. Greater than 50 to 100 hour delay.....0.5 points
- 3. Greater than 100 to 250 hour delay.....1.0 points
- 4. Greater than 250 hours delay.....1.5 points

(Sum of part a + part b + part c) / 2 = calculated score (2 points maximum)

d. RBC Voting Points: The RBC will determine if, in their opinion, the detour has a significant impact to the area served.

Vote 0 or ¹/₂ point for each of 4 members (2 points maximum)

2. Functional Adequacy (by council)

An overall evaluation of the importance of the traffic corridor and the effect the bridge condition may be having on the vehicles and the area served. Some structurally sound bridges should be replaced if they are functionally obsolete.

Vote 0, 1, or 2 points for each of 4 members (8 points maximum)

3. Economic Importance (by council)

Consider the economic importance of the structure to the area served. Does it provide primary access to a major employer? Is it critical to serve essential services such as a public works yard, a fire station, or a hospital? Is it a regionally significant transportation link?

Vote 0, 1, or 2 point for each of 4 members (8 points maximum)

4. Discretionary Project Value (by council)

This category of discretionary rating points is for the council to account for other factors not included directly in the other categories. Examples of these factors are:

- a. If an agency is willing to match their project with more than the standard five percent (5%), the council may wish to score this item higher.
- b. The council may feel that a bridge application represents a very good return on investment that will keep the bridge operating adequately for many years to come.
- c. Any other criteria the council feels is relevant.

Vote 0, 1, or 2 point for each of 4 members (8 points maximum)

Preventative Maintenance (PM) Projects (by council)

The council members should review PM applications and create a priority list of the PM projects prior to the rating review meeting. The members, as a group, will discuss their individual rankings, their reasoning, and then may consider the computer-generated points to determine their final list of priorities.