

Screening “Many to Some”

Screening Criteria Category: Engineering-Fundamentals

Screening Criteria Name: Maintenance

Brief Description of Importance:

Bridge alternatives considered have different needs for maintenance and subsequently their lifecycle cost will vary. For example, all bridges require federally stipulated periodic inspections and maintenance but steel bridges also require periodic painting where concrete bridges do not. Another example would be steel girder and steel box bridges require bearings at the piers which need to be replaced periodically where concrete segmental bridge and extradosed do not need bearings.

If all other factors were considered equal, the bridge with the least maintenance would have the lowest lifecycle cost and would be considered the best.

Metrics:

Maintenance

Evaluation Methodology:

Best Score = Least maintenance required

Scoring:

Blended numeric score from 1-15. 15 = best, 1 = worst