## Wisconsin Department of Transportation

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TO: Wisconsin Bridge Inspection Team Leaders and Program Managers

FROM: Richard Marz, P.E.

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**Bureau of Structures** 

SUBJECT: Technical Memorandum

Complex Bridge Definition

GUIDELINES: This memorandum describes the Wisconsin Department of Transportation's (WisDOT) revised complex bridge definition. Effective for 2018 and forward.

## **Complex Bridges**

The National Bridge Inspection Standards (NBIS) define complex bridges as movable, suspension, cable stayed, and other bridges with unusual characteristics. Examples of such unusual characteristics (or complex features) include:

- Stay cables
- Anchorages of cables and post-tensioning
- Electrical systems
- Mechanical systems
- Operational systems and controls

Complex bridges are usually subject to specialized inspection procedures, and additional inspector training and experience is required to inspect these structures. These inspections require greater engineering knowledge and/or expertise to accurately and fully determine the condition of the various bridge elements. They also may require specialized equipment or climbing to access all parts of the bridge.

<u>WisDOT defines both movable and cable stayed structures as complex bridges.</u> Other structures may have complex features (noted above), which are noted and inspected accordingly, but do not qualify as complex bridges per the WisDOT definition.

## QUESTIONS:

For information on the technical contents of this memorandum, please contact Richard Marz at (608)-266-8195