Bridge Inspection Memorandum No. 17-06

December 22, 2017

TO:	All Inspection Personnel and Consultants
FROM:	<u>/s/Andrew Fitzgerald</u> Andrew Fitzgerald Bridge Inspection Manager Bridges Division
SUBJECT:	Revisions to Part 3 of the Bridge Inspection Manual
EFFECTIVE:	Immediately

Indiana Bridge Inspection Manual Part 3, Load Rating, has been revised to ensure full compliance with Federal Highway Administration (FHWA) load rating guidelines and both state and federal laws. The intent of Part 3 is to supplement the *Manual for Bridge Evaluation* (MBE) and provide Indiana specific guidance in terms of analysis and documentation. Primary revisions include:

- 1. Revised language to defer to MBE Section 6 for general load rating procedures.
- 2. Redefined rating classification to be consistent with the Load and Resistance Factor Rating (LRFR) terminology as defined in the MBE.

Previously, the two classifications were referred to as Inventory and Operating. This has been replaced with Design, Legal, and Permit.

- Design Used for evaluating bridge rating over the design life of a structure.
- Legal Used for determining the current safe load carrying capacity and load posting of a bridge.
- Permit Used for evaluating loads in exceedance of legal requirements. Permit loads that are considered "Routine" are also used for determining the current safe load carrying capacity and load posting of a bridge.
- 3. Redefined documentation and submittal expectations to maintain a complete bridge file.

Load rating data is to be stored in the Bridge Inspection Application System (BIAS) with any supporting documentation attached. Additionally, any program files and the load rating summary report must be uploaded to the Electronic Records Management System (ERMS) Bridge File. Refer to the <u>bridge</u> inspection website for detailed instructions regarding how to attach and upload documentation.

4. Added emergency vehicles EV2 and EV3 as introduced by the FAST Act.

The passage of the FAST Act introduced new weight limits in regard to emergency vehicles. The FHWA has introduced two new vehicles, EV2 and EV3, that envelop the effects of typical emergency vehicles covered by the FAST Act.

- 5. Revised load rating guidelines and engineering judgement language.
- 6. Guidelines established for specific structure types have been removed.

7. Removed language that identified specific load rating software.

With the exception of AASHTOWare Bridge Rating (BrR), INDOT does not endorse any other load rating software. Other rating programs may be used at the discretion of the load rater when BrR is insufficient. It is the responsibility of the Load Rating Engineer of Record to determine the suitability of software for their particular application.

Questions regarding bridge load rating should be directed to Jeremy Hunter, INDOT Bridge Design and Load Rating Manager, at <u>jhunter@indot.in.gov</u>.