

## Memorandum

Date: February 22, 2007

Subject: <u>ACTION</u>: Oversight of Bridge Load

Ratings and Postings

From: King W. Gee/s/ Original Signed by Dwight A. Horne

Associate Administrator for Infrastructure In Reply Refer To:HIBT-30

To: Directors of Field Services

Federal Lands Highway Division Engineers

**Division Administrators** 

The Office of the Inspector General's (OIG) March 21, 2006, final report, *Audit of Oversight of Load Ratings and Postings on Structurally Deficient Bridges on the National Highway System*, was distributed to all division offices and Federal Lands Highway on March 22, 2006. The FHWA's May 22, 2006, response memorandum concurred with the audit's two recommendations as well as the additional comment to include agency oversight of bridge load ratings and postings on structurally deficient NHS bridges as an element of FHWA's next unit risk assessment.

The FHWA convened a working group to develop an action plan to address the audit recommendations. Because the OIG review identified significant problems in load ratings and postings, your assistance is now requested in implementing the action items.

First, as part of the 2007 risk assessment cycle, field offices are to address bridge load rating and posting practices in their next individual program risk assessment. The second action item depends on the outcome of the risk assessment. If the risk is evaluated high, field offices should conduct a focused in-depth review of bridge load rating and posting practices within 1 year as a response strategy. If the risk associated with bridge load ratings and postings is not evaluated high, a focused in-depth review does not have to be completed within 1 year; however a focused in-depth review should be accomplished within the next 3 years as a supplement to the annual review of the National Bridge Inspection Standards (NBIS) compliance. Upon completion of the initial in-depth review, field offices should continue to monitor the bridge load rating and posting program areas during annual reviews of the NBIS compliance, annually reassess the risk, and implement response strategies if warranted by the risk assessment.



Several tools have been developed to assist field offices in conducting bridge load rating and posting risk assessments and NBIS annual compliance reviews, as well as identifying inaccuracies and inconsistencies in the bridge inspection program and associated data. These tools are summarized as follows:

- Optional forms to assist in evaluation of risk associated with bridge load ratings and postings based on suggested likelihood and impact criteria, a menu of risk statements, and potential risk response strategies. The intent of this information is to provide assistance to field staff on how to approach the risk assessment task for this specific element and to establish some uniformity in the process. A field office may be aware of other criteria that should be considered in assessing risk and may find or develop other risk statements or responses as necessary (see Attachment A).
- A questionnaire that can be used as part of annual or in-depth reviews of bridge load rating and posting practices. The questions have been developed to facilitate collection of information necessary to complete a risk assessment. The example questionnaire is available on the FHWA StaffNet at: http://intra.fhwa.dot.gov/bridge/ipdex.htm.
- New standard National Bridge Inventory (NBI) data-based reports titled *Load Rating and Posting Reports* are available through UPACS (<a href="https://apps.fhwa.dot.gov">https://apps.fhwa.dot.gov</a>) to assist field staff in evaluating the State's NBI load rating and posting data (See Attachment B for a description of the reports). Problem areas identified through these reports should be addressed during the NBIS annual program review.
- The FHWA Bridge Program Manual will be updated to contain sections that specifically define the expectations of the FHWA oversight of bridge load ratings and postings, the minimum level of review, and the process of an annual NBIS review. The updated manual will be available in 2007.
- The NBIS annual program review summary report and spreadsheet have been revised to include additional questions regarding bridge load ratings and postings. Indicate in the summary report and spreadsheet the completion of the focused in-depth review of the load ratings and posting program area under the question; *Did the division office emphasize any particular aspect of the Bridge Inspection program during its annual review, and if so what was it?* An announcement of the availability of the revised summary report and spreadsheet will follow.
- A recommended frame-work for bridge inspection Quality Control (QC) and Quality
  Assurance (QA) procedures is available at:
   <a href="http://www.fhwa.dot.gov/bridge/nbis/nbisframework.cfm">http://www.fhwa.dot.gov/bridge/nbis/nbisframework.cfm</a>. The frame-work addresses
  load rating and posting aspects that should be part of overall QC/QA procedures in order to comply with 23 CFR 650.313(g) of the NBIS.
- An update to FHWA's *Questions and Answers on the National Bridge Inspection Standards 23 CFR 650 subpart C* Web site (<a href="http://www.fhwa.dot.gov/bridge/nbis/index.htm">http://www.fhwa.dot.gov/bridge/nbis/index.htm</a>) will include FHWA positions/policies associated with bridge load ratings and policies. The update will be completed in 2007.

In addition, a new NHI training course on load and resistance factor rating (LRFR) of bridges is under development.

Non-compliance with load rating and posting provisions of the NBIS (23 CFR 650) may directly jeopardize public safety and therefore is of the utmost concern of the FHWA. The FHWA memorandum issued on May 14, 1985,

(<a href="http://www.fhwa.dot.gov/bridge/nbis/051485.cfm">http://www.fhwa.dot.gov/bridge/nbis/051485.cfm</a>) established a policy to suspend Federal-aid for States or local jurisdictions with confirmed substantial NBIS deficiencies. The policy remains in effect today. States or local jurisdictions may avoid suspension of Federal-aid if proactive steps to rectify deficiencies are made.

The Office of Bridge Technology and the Resource Center are available to provide assistance associated with bridge load ratings and postings in the areas of policy, risk assessments, NBIS reviews, LRFR, and program reviews.

Please feel free to contact Tom Everett (202) 366-4675 (<a href="mailto:thomas.everett@dot.gov">thomas.everett@dot.gov</a>), Gary Moss (202) 366-4654 (<a href="mailto:gary.moss@dot.gov">gary.moss@dot.gov</a>), or Everett Matias (202) 366-6712 (<a href="mailto:everett.matias@dot.gov">everett.matias@dot.gov</a>) if any further questions arise.

## 2 Attachments



Federal Highway Administration HIBT-30:EMatias:ch:66712:ch:1/18/2007

cc:

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FILE NAME:H/MEMO-Oversight of Bridge Load Ratings & Postings#1



