



U.S. Department
of Transportation

Federal Highway
Administration

Memorandum

Subject: **INFORMATION**: Collection of Element
Level Bridge Inspection Data
/s/ Original Signed by

Date: April 16, 2012

From: M. Myint Lwin, P.E., S.E.
Director, Office of Bridge Technology

In Reply Refer To:
HIBT-30

To: Federal Lands Highway Division Engineers
Director of Technical Services
Division Administrators

This memorandum provides an update on a few FHWA initiatives related to bridge inspection data. In recent National Bridge Inspection Program (NBIP) audits, the Office of Inspector General recommended greater use of Bridge Management Systems (BMS), updating of the American Association of State Highway and Transportation Officials (AASHTO) commonly recognized (CoRe) elements, and element data collection by the FHWA. Similarly, the Government Accountability Office recommended that the FHWA identify best tools and practices for BMS and review and evaluate Highway Bridge Program (HBP) funding mechanisms to align with performance. Lastly, draft highway legislation reauthorization language includes provisions that would require the collection of element level bridge inspection data. Clearly, there is agreement by many that element level bridge inspection data is needed to support our oversight activities, increase BMS use, and facilitate the move toward a data driven, performance based program.

As an initial step, the FHWA worked with the AASHTO to update their manual for element level bridge inspection data. In February 2011, the AASHTO Guide Manual for Bridge Element Inspections superseded the AASHTO Guide for CoRe structural elements. More recently, we restarted the process of updating the December 1995 Recording and Coding Guide for the Structure Inventory Appraisal of the Nation's Bridges, often referred to as the National Bridge Inventory (NBI) coding guide. Our vision for these efforts is to ensure that we have a NBI that accurately reflects the condition and performance of our nation's highway bridges.

The incorporation of element level bridge inspection data into the NBI is an integral part of the coding guide update initiative. The element level data to be reported to the NBI will align with the AASHTO Guide Manual for Bridge Element Inspections. The data collection plan will be phased in over time. Although we initially intend to collect element level bridge inspection data for highway bridges on the National Highway System, the NBI will be designed to accept element level data for all highway bridges.

The NBI coding guide update initiative will address a number of goals, including:

1. quality data that reflects current conditions at a more detailed or granular level;
2. incorporation of data that provides for support of the data driven, risk-based NBIP oversight process, development and use of effective bridge performance measures, and support of national level analysis, forecasting, and reporting of bridge conditions and needs (preservation, improvement, rehabilitation, and replacement); and,
3. improved timeliness of data while considering impacts on stakeholders.

There are a number of complementary efforts either underway or completed that support the move to collection of element level bridge inspection data. This includes incorporation of element level bridge inspection information into the Bridge Inspector's Reference Manual, the Safety Inspection of In-Service Bridges training course (FHWA-NHI-130055), and the Bridge Inspector Refresher training course (FHWA-NHI-130053/53A). Additionally, the FHWA Resource Center has developed a 2-day Element Level Bridge Inspection training course.

The update of the NBI Coding Guide and the move to collect element level bridge inspection data is a multi-year effort. We will keep your staff updated as we move forward so that they can respond to inquiries from your partners and stakeholders. Please feel free to share this update with your State DOT. Mr. Wade F. Casey, P.E., may be contacted at 202-366-4606 or wade.casey@dot.gov for further information on these initiatives

Thank you for your support of this important national bridge safety initiative.

cc:
Directors of Field Services