DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

[FHWA Docket No. FHWA-2013-0021]

National Bridge Inspection Standards Review Process; Notice and Request for Comment

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice; request for comment.

SUMMARY: The National Bridge Inspection Standards (NBIS), codified in 23 CFR 650 Subpart C, establishes the minimum standards for inspection of all structures defined as highway bridges on public roads. The FHWA annually reviews each State’s bridge inspection program to evaluate compliance with the NBIS. In 2011, FHWA implemented a new systematic, data-driven, risk-based oversight process which is used by FHWA Divisions to review State compliance with the NBIS. The new process was developed prior to the establishment of the review requirements identified in the Moving Ahead for Progress in the 21st Century Act (MAP–21), Section 1111. Development of the internal FHWA review process included consultation with stakeholders through a pilot project, a joint FHWA/AASHTO task force, as well as with individual States and Federal agencies during the initial implementation of the process in 2011. The FHWA intends to continue this data-driven, risk-based review process to evaluate State compliance with the NBIS, including incorporation of any modifications based upon the comments received through this Notice.
DATE: Comments must be received on or before [Insert date 30 days after date of publication in the FEDERAL REGISTER]. Late comments will be considered to the extent practicable.

ADDRESSES: Mail or hand deliver comments to the U.S. Department of Transportation, Dockets Management Facility, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC 20590, or fax comments to (202) 493–2251. Alternatively, comments may be submitted to the Federal eRulemaking portal at http://www.regulations.gov. All comments must include the docket number that appears in the heading of this document. All comments received will be available for examination and copying at the above address from 9 a.m. to 5 p.m., e.t., Monday through Friday, except Federal holidays. Those desiring notification of receipt of comments must include a self-addressed, stamped postcard or you may print the acknowledgment page that appears after submitting comments electronically. Anyone is able to search the electronic form of all comments in any one of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, or labor union). Anyone may review DOT’s complete Privacy Act Statement in the Federal Register published on April 11, 2000 (Volume 65, Number 70, Pages 19477–78).

FOR FURTHER INFORMATION CONTACT: For questions about the program discussed herein, contact, Thomas D. Everett, Principal Bridge Engineer, FHWA Office of Bridge Technology, (202) 366-4675 or via e-mail at Thomas.everett@dot.gov.
For legal questions, please contact Robert Black, Office of the Chief Counsel, (202) 366–1359, or via e-mail at Robert.Black@dot.gov. Office hours are from 8:00 a.m. to 4:30 p.m., e.t., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

Electronic Access and Filing

You may submit or retrieve comments online through the Federal eRulemaking portal at: http://www.regulations.gov. The Web site is available 24 hours each day, 365 days each year. Please follow the instructions. Electronic submission and retrieval help and guidelines are available under the help section of the Web site.


PURPOSE OF THIS NOTICE

The FHWA is requesting comment on the process FHWA uses to conduct reviews of State compliance with the NBIS and the associated penalty process for findings of noncompliance. Comments received through this Notice will be considered by FHWA for improving the review process.

BACKGROUND

For more than 30 years, the FHWA has annually assessed each State’s bridge inspection program to evaluate compliance with the NBIS as codified at 23 CFR 650 Subpart C. Historically, the depth and scope of the reviews varied based upon the
FHWA’s knowledge of the State’s inspection program and experience of the FHWA staff. In 2009, the Office of Inspector General (OIG) issued an audit report National Bridge Inspection Program: Assessment of FHWA’s Implementation of Data-Driven, Risk-Based Oversight\(^1\) that summarized their review of FHWA oversight of the National Bridge Inspection Program. One of the five OIG recommendations from this audit was for FHWA to develop and implement minimum requirements for data-driven, risk-based bridge oversight during bridge engineer’s annual NBIS compliance reviews. In Senate Report 110-418\(^2\), strong support was given to the OIG recommendations and the need for prompt action by the FHWA. In addition, the House of Representatives Conference Report 111-366\(^3\), directed FHWA to improve its oversight of bridge safety and conditions. In response to the OIG recommendations and congressional direction, FHWA developed a new systematic, data-driven, risk-based oversight process for monitoring State compliance with the NBIS. In 2010, a pilot program was initiated using the new process in nine States. Adjustments were made following the pilot in preparation for nationwide implementation in February 2011. After the nationwide implementation, a joint FHWA/AASHTO task force was established in the fall of 2011 to further identify possible modifications or opportunities for improvement to the assessment process. One

of the first steps the task-force completed was the gathering of information from all States and interested Federal agencies requesting their input and feedback on the assessment process. The FHWA collected information from internal staff. The AASHTO gathered information from the States. The information collected was used to help identify and prioritize improvements to the process. The joint task force efforts resulted in FHWA implementing several improvements in April 2012.

Section 1111 of the MAP-21 (Pub. L. 114-141, 126 Stat. 405) modified 23 U.S.C. 144(h)(3)(A)(i) to include provisions for the Secretary to establish, in consultation with the States, Federal agencies, and interested and knowledgeable private organizations and individuals, procedures to conduct reviews of State compliance with the NBIS. The MAP-21 also establishes a penalty for States determined to be in noncompliance with the NBIS in 23 U.S.C. 144(h)(5).

The FHWA developed and implemented the current review process to evaluate a State’s bridge inspection program for compliance with the NBIS prior to the requirements of MAP-21, Section 1111. The development of the review process included consultation with stakeholders through the pilot project, the joint FHWA/AASHTO taskforce, as well as with individual States and Federal agencies during the initial implementation of the process in 2011. The FHWA intends to continue using the data-driven, risk-based review process that was implemented in 2011 to evaluate State compliance with the NBIS as required by 23 U.S.C. 144(h)(4)(A). The FHWA also proposes to implement the penalty provisions in 23 U.S.C. 144(h)(5) using
the process described below. Comments are hereby requested on FHWA’s plan to review compliance and address noncompliance as outlined below.

**Review Process Overview**

Each FHWA Division office annually assesses the State’s compliance with 23 individual metrics which are directly aligned with the existing NBIS regulation. The risk-based assessment process followed during this annual assessment utilizes objective data, employs statistical sampling of data and inspection records, and includes defined criteria for compliance for each metric. States are notified by FHWA of any findings of noncompliance no later than December 31. In accordance with the requirements of 23 U.S.C. 144 as established by MAP-21, within 45 days of the FHWA notification of noncompliance, the State will correct the issue of noncompliance or submit to FHWA a Plan of Corrective Action (PCA) which outlines how noncompliant findings will be addressed. The FHWA will have 45 days for review, comment, and if appropriate accept the PCA. Final compliance determinations by FHWA are to be made no later than March 31. This annual process allows the FHWA to assess NBIS compliance by each State’s bridge inspection program and implements any required penalties in a nationally consistent manner.

**Metrics**

The metrics, or measures, are designed to assess the quality and performance of each State’s bridge inspection program and, collectively, the national program that has been established to assure highway bridges are safe. The following 23 metrics are
directly aligned with the existing requirements of the NBIS and have been established to provide a comprehensive assessment of compliance with the NBIS.

Metric #1: Bridge inspection organization
Metric #2: Qualifications of personnel – Program manager
Metric #3: Qualifications of personnel – Team leader(s)
Metric #4: Qualifications of personnel – Load rating engineer
Metric #5: Qualifications of personnel – Underwater bridge inspection diver
Metric #6: Routine inspection frequency – Lower risk bridges
Metric #7: Routine inspection frequency – Higher risk bridges
Metric #8: Underwater inspection frequency – Lower risk bridges
Metric #9: Underwater inspection frequency – Higher risk bridges
Metric #10: Inspection frequency – Fracture critical member
Metric #11: Inspection frequency – Frequency criteria
Metric #12: Inspection procedures – Quality inspections
Metric #13: Inspection procedures – Load rating
Metric #14: Inspection procedures – Post or restrict
Metric #15: Inspection procedures – Bridge files
Metric #16: Inspection procedures – Fracture critical members
Metric #17: Inspection procedures – Underwater
Metric #18: Inspection procedures – Scour critical bridges
Metric #19: Inspection procedures – Complex bridges
Metric #20: Inspection procedures – Quality Control/Quality Assessment

Metric #21: Inspection procedures – Critical findings

Metric #22: Inventory – Prepare and maintain

Metric #23: Inventory – Timely updating of data

Each metric consists of four parts; 1) NBIS component to be reviewed, 2) compliance levels, 3) evaluation criteria, and 4) assessment levels.

1) NBIS component to be reviewed

Each metric identifies the relevant provisions of the NBIS and focuses on a key inspection area for which compliance will be assessed.

2) Compliance levels

Each of the 23 metrics is annually assessed and assigned one of four compliance levels -- compliant, substantially compliant, noncompliant, or conditionally compliant -- based upon specific thresholds or measures for each compliance level for each metric.

The degrees of compliance are described as follows:

*Compliant*- Adhering to the NBIS regulation.

*Substantially Compliant*- Adhering to the NBIS regulation with minor deficiencies. These deficiencies do not adversely affect the overall effectiveness of the program and are isolated in nature. Documented deficiencies are provided to the State with the expectation that they will be corrected within 12 months or less, unless the deficiencies are related to issues that would most efficiently be
corrected during the next inspection. A written response to the FHWA describing the expected corrective action is required.

Noncompliant - Not adhering to the NBIS regulation. Identified deficiencies may adversely affect the overall effectiveness of the program. Failure to adhere to an approved PCA is also considered noncompliance.

Conditionally Compliant - Taking corrective action in conformance with an FHWA approved PCA to achieve compliance with the NBIS. Deficiencies, if not corrected, may adversely affect the overall effectiveness of the program.

The four compliance levels are grouped into bridge inspection program performance levels for clarity in communicating the results:

Satisfactory – Adhering to the intent of the NBIS regulation. There may be minor deficiencies, but these deficiencies do not adversely affect the overall effectiveness of the program and are isolated in nature.

Actively Improving – A PCA is in place to improve the areas identified as not meeting the requirements of the NBIS.

Unsatisfactory – Not adhering to the NBIS. Deficiencies exist that may adversely affect the overall effectiveness of the inspection program.

Compliant and substantially compliant metrics are grouped to represent program performance at the satisfactory level. Conditionally compliant metrics represent a program area that is categorized as actively improving, and noncompliant represents a program performance at the unsatisfactory level.
Improvement plans and plans of corrective action are defined as follows:

*Improvement Plan (IP)* – A written response by the State which documents the agreement for corrective actions to address deficiencies identified in a substantial compliance determination. The completion timeframe for such agreements is limited to 12 months or less, unless the deficiencies are related to issues that would most efficiently be corrected during the next inspection cycle.

*Plan of Corrective Action (PCA)* – A documented actions agreement prepared and submitted by the State and approved by FHWA describing the process and timelines to correct noncompliant NBIS requirements. The term of “corrective action plan” in MAP-21 is interchangeable with PCA.

3) Evaluation criteria

The evaluation criteria identify the specific measures for each metric for which compliance will be evaluated.

4) Assessment levels

Assessment levels define the review requirements necessary to make a compliance determination for a specific metric. Three assessment levels have been identified as follows:

*Minimum Assessment Level* - A review based on information from past assessments and the FHWA Division Bridge Engineer’s knowledge of the current practice as it
relates to the metric. For some metrics, a minimum level assessment is enhanced with interviews and/or data review. The minimum assessment can range from a very brief consideration of the metric with respect to any changes in the program since the last assessment to a more detailed look at summary data from bridge inventories, pertinent lists, and a review of historical trends.

**Intermediate Assessment Level** - Verifying the minimum level assessment through random sampling of inspection records, analysis of bridge inventories, site visits, interviews, and documentation. The intermediate level assessment involves Tier 1 random sampling using a margin of error (MOE) of 15 percent and a level of confidence (LOC) of 80 percent to review bridge records or as directed in the individual metrics. A Tier 2 random sampling, utilizing a MOE of 10 percent and LOC of 80 percent, is used when the results of the Tier 1 sample are inconclusive.

**In-depth Assessment Level** - Supplementing the intermediate assessment with larger random sample sizes, more interviews, and research of records and documentation, and/or history. The in-depth assessment involves a Tier 1 random sampling using an MOE of 15 percent and LOC of 90 percent or as directed in the individual metrics. A Tier 2 random sampling, utilizing an MOE of 10 percent and LOC of 90 percent, is used when the results of the Tier 1 sample are inconclusive.

Random samples are selected from the population identified for the specific metric. A copy of the metrics is available on the docket (docket number FHWA-2013-0021) through the Federal eRulemaking portal at: [http://www.regulations.gov](http://www.regulations.gov).
Review cycle and schedule

In accordance with 23 U.S.C. 144(h)(4), FHWA will annually review State compliance with the NBIS. In calendar year 2011, FHWA performed a baseline assessment in which all 23 metrics were reviewed at the intermediate assessment level. Subsequent reviews will utilize the following process.

Review cycle

A 5-year review cycle shall consist of:

a) Each of the 23 metrics being assessed annually at the minimum level if an intermediate or in-depth level is not to be performed that year.

b) Each of the 23 metrics being assessed at the intermediate or in-depth level at least once within the 5-year cycle.

c) A 5-year plan which identifies the review strategy and schedule based upon the consideration of risk. The assessment level of effort for metrics with higher risk will vary at the discretion of the FHWA Division office from minimum, intermediate, or in-depth, or as directed at the national level. The 5-year plan is intended to be updated as necessary based on the risks identified during the annual metric assessments.

d) In year five, FHWA will examine the 5-year review history to identify trends in each metric area, to identify any gaps in the program or review process, and to develop a review strategy for the next 5 years.
e) At the completion of a PCA the metric will be assessed at the intermediate level or in-depth level. The determination of either an intermediate or in-depth level review after completion of a PCA is at the discretion of the FHWA Division.

Annual review schedule

Each FHWA Division will conduct an annual assessment of the State’s compliance with the NBIS. Key dates are as follows:

a) April 1 – FHWA begins annual NBIS assessment.

b) By December 31 – FHWA makes compliance assessment for each metric and issues a report to each State detailing issues of noncompliance or substantial compliance.

c) March 31 – Final compliance determination completed for all metrics. The final determination is based on the resolution of compliance issues or development of an acceptable PCA following the December 31 notification.

The proposed schedule may need to be modified on a case-by-case basis when unique and unexpected extenuating circumstances arise. The FHWA will address this issue on a case-by-case basis when it arises.

Where an issue of noncompliance with the NBIS is identified outside the review procedures above, the FHWA will notify the State of the noncompliance and will work with the State to establish a timeframe in which the issue of noncompliance must be addressed or an acceptable PCA submitted.
Findings of Noncompliance

The FHWA Division offices will issue a report to the State detailing the issues of noncompliance for a metric determined to be noncompliant by December 31 of the review period. The report will list the regulatory code and title for each noncompliance deficiency, identify the deficiency, and specify that the deficiency has to be corrected, or a PCA submitted, within 45 calendar days of notification. The State will have 45 days to either correct the issue of noncompliance or submit a PCA to FHWA. The PCA should, at a minimum, include the following information:

a) Identify area of noncompliance;

b) Identify the date FHWA notified State of noncompliance;

c) Identify actions to be taken to address areas of noncompliance;

d) Estimate duration and completion date for each action;

e) Define frequency and reporting format which will be used to monitor; progress towards successful completion of the PCA; and

f) Identify what the State considers to be successful completion of PCA.

After the State submits a PCA, FHWA will have 45 days to review and if appropriate, accept the submitted PCA. Upon FHWA acceptance of the PCA, the final compliance determination for the associated metric will be conditionally compliant. If the PCA is not submitted to FHWA in 45 days after notification of noncompliance or the PCA does not address the issues of noncompliance, the final compliance determination for the associated metric will be noncompliant.
Penalty for Noncompliance

The FHWA will continue to encourage the State to address the noncompliance issues following the final noncompliance determination and expiration of the period allowed to develop a PCA. If a State remains in noncompliance on August 1 following a final compliance determination of noncompliance, FHWA will require the State to dedicate funds to correct the noncompliance, in accordance with 23 U.S.C. 144(h)(5). The State must submit an analysis of actions needed to correct the finding of noncompliance to FHWA no later than August 1. The analysis must identify the actions to be taken, estimated duration and completion date for each action, and an itemized amount of funds to be directed for each action to address the noncompliance. The analysis plan will require the approval of the FHWA. The FHWA will require on October 1 of that year, and each year thereafter as may be necessary, the State to dedicate funds apportioned to the State under sections 23 U.S.C. 119 and 23 U.S.C. 133 to correct the issue of noncompliance.


Issued on: May 24, 2013

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Victor M. Mendez, Administrator
Federal Highway Administration