

Summary of NBIS Compliance Metric Revisions for PY 14

- Over the past two years, the NBIS compliance metrics have been revised to address comments from FHWA staff and the States, add commentary, incorporate prior FHWA guidance from the NBIS web site Q&As, and other necessary edits for improved consistency and clarity. Below is a summary of the revisions made for the PY 14 assessment cycle.

Metric 1 – Bridge Inspection Organization

- Clarified relationship to other metrics.
- Added the assessment of States' established authority over delegated agencies.
 - For compliance, added the following requirement:
Functions delegated to other agencies are clearly defined and the necessary authority is established to take needed action to ensure NBIS compliance; and
 - For substantial compliance, added:
Delegated functions are defined with authority established to resolve safety issues.
- Commentary adds guidance on how to consider relationship with compliance determinations of other metrics, and on interviews of individuals with delegated functions.

Metric 2 – Qualifications of Personnel – Program Manager

- Revised the criteria for a newly designated program manager who has not completed comprehensive bridge inspection training.
 - For substantial compliance, added:
A newly designated PM has not completed comprehensive bridge inspection training, but is scheduled to do so within 6 months (was 12 months) after selection to the PM position.
- Added the assessment of refresher training to this metric; formerly under Metric 20 – QC/QA.
- Commentary adds clarification of PM responsibility, and how to assess PM effectiveness in relation to Metric 1.

Metric 3 – Qualifications of Personnel – Team Leader(s)

- Developed a uniform process for reviewing qualifications of team leaders if a list cannot be provided by the State.
- Added the assessment of refresher training to this metric; formerly under Metric 20 – QC/QA.
- Commentary adds clarification of which team leaders to assess, and specification of the process to be used for reviewing qualifications.

Metric 5 – Qualifications of Personnel – UW Bridge Inspection Diver

- Developed a uniform process for reviewing qualifications of divers (similar to Metric 3 process).

- Commentary adds clarification of which divers to assess, and specification of the process to be used for reviewing qualifications.

Metric 7 – Inspection Frequency – Routine – Higher Risk Bridges

- Revised to include scour critical bridges as high risk.

Metric 13 – Inspection Procedures – Load Rating

- Higher risk bridges redefined to:
 - Remove: Bridges with decks in poor or worse condition; temporary bridges in place while original bridge is closed for replacement/rehabilitation (NBI Item 41 coded as E).
 - Add: Bridges needing load restriction with NBI Item 41 coded as B or D (was just P or R before).
- Substantial compliance redefined to allow for minor or isolated deficiencies, with examples given in commentary.
- A new report developed to evaluate NBI data for bridges with respect to load rating. Compliance data items reviewed at each assessment level; data inconsistencies and possible errors reviewed at in-depth assessment level. Compliance items:
 - Item 63, Operating Rating Method, is coded 5
 - Operating rating less than or equal to inventory rating
- Commentary adds an explanation of the calculation of compliance when evaluating higher and lower risk subsets, provides guidance on intermediate and in-depth assessment levels, and discusses evaluation of NBI data items relating to load rating during field reviews, FHWA policies relating to load rating, and the evaluation of timeliness of rating or re-rating.

Metric 14 – Inspection Procedures – Post or Restrict

- Sample population expanded to include bridges with additional design loads (H10 and H15).
- A new report developed to evaluate NBI data for bridges with respect to posting, restricting or closing bridges for load. Compliance data items reviewed at each assessment level; data inconsistencies and possible errors reviewed at intermediate and in-depth assessment levels.
- Compliance definition further spelled out to include resolution of any compliance deficiencies identified by the NBI data in the new report. Compliance items:
 - Low operating ratings, but not posted (Item 64<20mT, Item 41=A)
 - When legal loads exceed operating ratings for those loads (Item 70<5, Item 41=A)
 - Posting recommended, but not legally implemented (Item 41=B)
 - Superstructures in critical condition or worse, yet unrestricted (Item 59≤2, Item 41=AB, Item 103≠T)
 - Critically low operating ratings, but not closed (Item 64<2.7, Item 41=ABPR, Item 103≠T)
- Substantial compliance redefined to allow for minor or isolated deficiencies, with some additional examples given.

- Commentary adds guidance on evaluating compliance when there is no established timeframe to install posting signs once recommended and dealing with substandard signage.

Metric 15 – Inspection Procedures – Bridge Files

- Revised substantial compliance threshold from 90% to 85%.
- Listing of significant file components is revised to conform to recent changes proposed in AASHTO revisions to Section 2 of the Manual for Bridge Evaluation.
- Commentary adds guidance on how to calculate compliance determination percentages.

Metric 16 – Inspection Procedures – Fracture Critical Members

- Compliance criteria for inspection procedures revised in keeping with the general format agreed upon last year for Metric 17, Underwater Inspection Procedures.
- Substantial compliance redefined to allow for minor or isolated deficiencies, but 95% was changed to 100% (which is practically no change, given the size of the samples).
- Assessment language is changed slightly to give more direction on what to evaluate when conducting field reviews.
- Added in-depth assessment check to see if all bridges with fracture critical members (FCMS) are being identified.
- Commentary adds guidance on risk factors, minor or isolated deficiencies in procedures, and written inspection procedures for FCMS.

Metric 18 – Inspection Procedures – Scour Critical Bridges

- Revised compliance and substantial compliance definitions and assessment language to clarify the expectation that all bridges over water are evaluated for scour vulnerability.
- Substantial compliance definition added (last year was N/A) in accordance with overall metrics schema to define minor or isolated deficiencies for this metric.
- Developed a new report to evaluate NBI data for bridges with respect to scour vulnerability. Compliance data items reviewed at each assessment level. Compliance items are:
 - Bridges over water whose scour vulnerability has not been assessed (Item 113=6,T,null)
- Commentary adds guidance on POA deficiencies that could lead to a substantial compliance determination and in-depth assessment interviews

Metric 19 – Inspection Procedures – Complex Bridges

- Compliance criteria for specialized inspection procedures revised in keeping with the general format used in Metric 17, Underwater Inspection Procedures.
- Substantial compliance revised from 95% to 90%.
- Provided direction on what to evaluate when conducting field reviews.
- Commentary adds guidance on complex features, risk factors, and specialized inspection procedures for complex bridges

Metric 20 – Inspection Procedures – QC/QA

- Moved assessment of attending periodic refresher training for Program Manager and Team Leader to Metrics 2 and 3, respectively.
- Revised so that compliance is based upon State performing QC/QA reviews as identified in their procedures. The use of random sampling was eliminated because of the high degree of variance in the way QC/QA programs are administered.
- Clarified intermediate level assessment expectations - verify QC/QA procedures meet the intent of the NBIS.
- Commentary adds guidance on how to assess at the intermediate level, clarification on key components of a bridge file, and how to consider assessment of other metrics.

Metric 21 – Inspection Procedures – Critical Findings

- Clarified the population for this metric to be bridges which had a critical finding since the last Performance Year review.
- For substantial compliance, changed the requirement for addressing critical findings from 95% to 100% for non-NHS bridges.
- Commentary adds guidance on how to assess when definitions of critical findings are conservative.

Metric 23 – Inventory - Update Data

- Developed uniform method to assess timeliness of updating NBI data.
- Added the timely and accurate submittal of NBI data (April submission) to the evaluation criteria.
- Commentary adds specification of the process to be used for assessment at the intermediate level.