In 2013, the FHWA published a document titled "Metrics for the Oversight of the National Bridge Inspection Program". This data driven program was implemented as a risked based approach to providing oversight and monitoring of compliance with the National Bridge Inspection Standards (NBIS). The process identifies 23 metrics of compliance that are designed to assess the different levels of compliance across all states in a consistent manner.

During a Compliance Review, an agency will be assessed on the following Metrics:

#2: Qualifications of personnel – Program Administrator

#3: Qualifications of personnel - Team Leader(s)

#6: Routine inspection frequency – Lower risk bridges

#7: Routine inspection frequency - Higher risk bridges

#12: Inspection procedures - Quality Inspections

#13: Inspection procedures - Load Rating

#14: Inspection procedures - Post or Restrict

#15: Inspection procedures - Bridge Files

#17: Inspection procedures – Underwater Inspections

#18: Inspection procedures - Scour Critical Bridges

#21: Inspection procedures - Critical Findings

#22: Inventory – Prepare and Maintain

#23: Inventory - Update Data

A large portion of the review is based upon the bridge inspection data submitted to the FHWA from the previous inspection year. This includes data from bridge inspection and inventory changes entered from March of the previous inspection year to February of the next year (example; March 2016 to February 2017).

The review will also include a field review of up to four bridges. Inspection reports, condition assessments and calculations will be evaluated and discussed. The goal here is to standardize reporting and evaluation methods across the state. Team Leader(s) are required to attend the field review, however Program Administrator attendance is optional.

The final portion of the review includes an office meeting to discuss details of the review. The individual compliance to the metrics will be discussed and if improvement is required, options will be explored. Program Administrators are required to attend this portion of the review, Team Leaders are optional.

The general schedule of the review is as follows:

Time	Event	Attendees
8:00 AM	Bridge 1 Review	
9:00 AM	Bridge 2 Review	Team Leader(s) Recommended
10:00 AM	Bridge 3 Review	Program Administrator Optional
11:00 AM	Bridge 4 Review	
12:00 PM	Office Meeting	Team Leader(s) Optional
1:00 PM	Adjourn	Program Administrator Required

Detailed below are the Metrics reviewed and the checks for each Metric. Additional questions about the process can be directed to: Eric.Evens@state.mn.us or at 651-366-4570.

National Bridge Inspection Program Metric Evaluation for Compliance Reviews

Metric 2

Does the Program Administrator meet the requirements?

- Check training requirements (2 trainings in past 4 years)
- Check PE license status from MN Board of AELSLAGID

Metric 3

Does the Team Leader meet the requirements?

- Check agency has at least one team leader
- Check training requirements of team leader(s) (2 trainings in past 4 years)

Metric 6

Routine inspections: Have lower risk bridges been inspected at required intervals?

- Check for late inspections (inspections performed in last cycle that were beyond frequency requirements)
- Check for overdue inspections (inspections that are currently overdue for an inspection based on designated frequency)

Metric 7

Routine inspections: Have higher risk bridges been inspected at required intervals?

- Check for late inspections (inspections performed in last cycle that were beyond frequency requirements)
- Check for overdue inspections (inspections that are currently overdue for an inspection based on designated frequency)

Metric 12

Is each bridge inspected with nationally recognized acceptable inspection procedures, with the necessary quality of assessment, rating and documentation?

- Check to ensure that all elements in condition state 2 or greater has notes
- Check to ensure that all elements in condition state 2 or greater has the last inspection year in the note
- Check to ensure that there is a note justifying any NBI rating of a 5 or less
- Check to ensure that the Approach Alignment coding has been changed from a 9 and is coded correctly

Metric 13

Has each bridge been rated to its safe load carrying capacity in accordance with the AASHTO Manual?

- Check to ensure that each bridge has a load rating on file with the bridge office
- Incorporate bridges from automated load rating emails and check if they have been reviewed or updated in SIMS

Metric 14

Have all bridges been posted or restricted in accordance with the AASHTO Manual or in accordance with State law, when the maximum unrestricted legal loads or State routine permit loads exceed that allowed under the operating rating or equivalent rating factor?

Report any bridges with missing, incorrect or damaged load rating signing

Metric 23

Does the State enter the SI&A data in the inventory within 90 days of the date for State bridges and within 180 days of the date for all other bridges for inspections, bridge modifications and load restriction or closure status?

• Check to ensure that PAs and TLs are approving/entering inspections within required timeframe

ADDITIONAL METRICS TO BE VISITED ON IN-DEPTH REVIEWS

Metric 12 (In Depth) and Metric 22

Is each bridge inspected with nationally recognized acceptable inspection procedures, with the necessary quality of assessment, rating and documentation? Does the agency prepare and maintain an inventory of all bridges? Field review up to 4 bridges:

- · Check quality of ratings
- Check documentation of ratings
 - Dates to show when defect(s) were first noted and what has changed since
 - Quantification of defects
- Check element vs NBI ratings
- Check for inventory for completeness and accuracy

Metric 15

Have bridge files been prepared as described in the AASHTO Manual i.e., maintain reports on the results of bridge inspections together with notations of any action taken to address the findings of such inspections, maintain relevant maintenance and inspection data to allow assessment of current bridge condition, and record the findings and results of bridge inspections on standard forms.

- Select 3 bridges at random and check for following items:
 - o Plans
 - SI&A Sheets
 - o Photos (one roadway view and one profile view at minimum)
 - Inspection history (inspection reports since bridge opening)
 - Bridge load rating, signing recommendations
 - Maintenance & repair history
 - Inspection requirements and procedures, special equipment needed or features to be inspected
 - o Flood data, channel cross sections, underwater inspection reports, POAs

Metric 17

Have underwater inspections results and recommendations been incorporated into inspection data?

 Select 3 bridges and check that the report recommendations have been acknowledged and that the NBI rating for the channel and substructure have been updated

Metric 18

Bridges that are scour critical: Has a plan of action (POA) been prepared to monitor known and potential deficiencies and to address critical findings? Have bridges that are scour critical been monitored in accordance with the plan?

- Select 5 bridges with POAs at random and follow POA <u>check sheet</u>.
- Select 3 bridges with required cross sections on file and check for compliance

Metric 21

Has a statewide procedure been established to assure that critical findings are addressed in a timely manner? Is FHWA periodically notified of the actions taken to resolve or monitor critical findings?

- Check for any outstanding critical findings that need follow up
- Educate agencies about current procedures and issued tech memo