



February 28, 2019

Pete Ricketts. Governor

RE: Bridge Inspection Program

Nebraska Bridge Inspection Program Participants:

The Quality Assurance (QA) Evaluation of the Bridge Inspection Program (BIP) has been completed for data entered into BrM from April 1, 2017 to March 31, 2018. In addition to meeting with bridge owners to review records, the following items were part of the QA Program:

- Qualifications of Personnel
- Inspection Frequency

- Inspection Procedures
- Bridge Posting or Closure

A total of 377 bridge files were reviewed this year at 33 separate Bridge Owners. The results from this year as well as the previous three years are below.

Review Result	Percent			
	2015	2016	2017	2018
Compliant → All required items are included in file	32%	30%	56%	43%
Substantially Compliant → File is missing one required item	28%	36%	21%	28%
Non-Compliant → File is missing two or more required items	40%	34%	23%	29%

This year's owners group saw a significant drop in the number of bridge files that had all required information. This drop was driven by a large decrease in Plan of Action Log retention as well as a smaller decline in owners storing Critical Finding Reports in their files.

A summary of significant findings during this year's QA process follows:

Plan of Action (POA) Logs should be completed at the interval shown on the accompanying POA. The POA for each scour critical bridge has trigger events that initiate a scour inspection. This trigger event could be the Routine Inspection or a rain event of some set intensity. The POA Log should be completed each time the trigger event calls for a scour inspection of the structure. If no trigger event observed for the year, it should be recorded as such in the POA Log. The POA Log records the date of inspection as well as any changes to the scour observed by the inspector. See NDOT Form BR 385E.





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Critical Finding Reports (CFR) should be kept with the bridge folder. Each structure with a critical finding should have the CFR in the bridge file. The reports are an important part of the bridge record as they deal with safety or structural issues that in the inspector's opinion warrant action by the bridge owner. Each open CFR should also be updated yearly by emailing Marvin Taylor at NDOT marvin.taylor@nebraska.gov.

Inspectors are required to add a note and take a photo for any NBI Condition Code of 5 (Fair) or less. This applies to NBI Items 58, 59, 60, and 62. The note should document the cause of the condition rating of 5 or less and include a photo of the defect or distress. The wording of the note should preferably follow the BIPM descriptions in Chapter 3 for the item being evaluated. Inspectors are also encouraged to upload the photo(s) to BrM. Both the note and photos should be updated each inspection cycle. This will be an area of emphasis during the 2019 QA review.

Each file should contain plans for the structure. As in previous years, this continues to be one of the most commonly missing items from owners' files. In all, plans or a note were found in 68% of the files reviewed this year. This was the same percentage as the past two years. Each file should either contain the plans/sketches for the structure or have a note in the file where they are located. For instance, if the plans are part of a larger project and stored in a separate file, a note should be placed in the bridge folder to indicate this location. If there are no known plans or sketches, a note should be placed in the file to indicate this as well.

Only one Load Rating Summary Sheet (LRSS) should be active in each file. Almost all files reviewed had a current LRSS again this year; however, numerous files had several versions of past summary sheets included. When new summary sheets are received from NDOT or consultants, "void" or "superseded" should be written on the previous summary sheet to avoid confusion as to which is the most current.

Fracture Critical, Other Special, and Underwater bridge inspection documentation should be stored in the bridge file with the other bridge documentation. Fracture Critical documentation was found in approximately 70% of files requiring this information, very similar to last year. However, Underwater and Special Inspection reports were found much less often, only 45% and 49% of the time respectively. Underwater inspections are typically done every 60 months. All of these inspections were scheduled for 2018. When received from inspecting consultants, they should be treated like any other inspection document and placed in the bridge file.





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Nebraska Department of Transportation and Federal Highway Administration appreciate your cooperation in meeting the requirements of the National Bridge Inspection Standards.

This memorandum is being sent to all local Bridge Owners and is intended to provide an update on the Nebraska Bridge Inspection Program (BIP). Electronic copies of this and previous BIP memos, as well as other BIP information, can be found on the NDOT Bridge Division website at the following link:

http://dot.nebraska.gov/business-center/bridge/inspection/

Sincerely,

Mark Traynowicz, PE State Bridge Engineer