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DEPARTMENT OF TRANSPORTATION

December 6, 2024

Bulletin 24.06

SUBJECT Bridge Inspection Intervals

Introduction

The intent of this bulletin is to clarify and consolidate NDOT's criteria for assigning bridge inspection intervals based on risk factors, in alignment with federal regulations. By summarizing Nebraska's approach to bridge inspection intervals, it ensures consistent and accurate application of inspection frequencies across the state. This bulletin addresses reduced and extended inspection intervals for Routine, Underwater, and NSTM inspections, providing specific criteria for interval assignment, monitoring, and transitions. These measures aim to maintain compliance and operational efficiency within NDOT's bridge inspection program while meeting FHWA requirements. The intervals align with the forthcoming policy in the updated BIP manual, which will incorporate SNBI standards.

As part of this effort, NDOT has compiled and clarified the criteria in alignment with FHWA guidance under 23 CFR 650.311(a)(1)(ii), (b)(1)(ii), and (c)(1)(ii) for reduced intervals and (a)(1)(iii), (b)(1)(iii), and (c)(1)(iii) for extended intervals. This approach consolidates the information necessary to ensure consistent application of inspection intervals across the state.

Implementation

Information within this bulletin supersedes, supplements, and clarifies interval guidance within the BIP manual sections 4.7.3, 4.8.3, and 4.9.3, effective immediately in accordance with the date of this Bulletin. Part (a) provides an update to the previously published policy for Routine inspections. Part (b) provides inspection interval guidance for Underwater Inspections. Part (c) provides interval guidance for NSTM inspection.

The following criteria provide risk-based inspection interval guidance from 23 CFR Part § 650.311 and Method 1 therein.

- (a) Routine Inspections
 - (1.) Method 1 per 23 CFR Part § 650.311(a)(1) is utilized.
 - (i.) Each bridge must be inspected at regular intervals not to exceed 24 months, except as noted below.

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- (ii.) A reduced inspection interval, not to exceed 12 months is required when the following conditions are met:
 - One or more of the following has a condition rating of 3 or less:
 - Item B.C.01 Deck
 - Item B.C.02 Superstructure
 - Item B.C.03 Substructure
 - Item B.C.04 Culvert
 - Item B.C.11 Scour Condition Rating
 - One or more of the following has a condition rating of 4 or less and the structure is restricted for legal loads (posted):
 - Item B.C.01 Deck
 - Item B.C.02 Superstructure
 - Item B.C.03 Substructure
 - Item B.C.04 Culvert
 - Where these condition ratings are due to localized deficiencies, a special inspection limited to those deficiencies can be used to meet this requirement in lieu of a routine inspection.
- (iii.) Bridges meeting all of the following criteria may be inspected at intervals not to exceed 48 months. These criteria apply to both main spans and approach spans, if present.
 - The condition ratings are coded 6 or greater for the following:
 - Item B.C.01 Deck
 - Item B.C.02 Superstructure
 - Item B.C.03 Substructure
 - Item B.C.04 Culvert
 - Item B.C.09 Channel Condition
 - Item B.C.10 Channel Protection Condition
 - Item B.LR.05 Inventory Load Rating Factor ≥ 1.0
 - Item B.LR.08 Routine Permit Loads is A or N
 - Item B.IR.02 Fatigue Details is coded N
 - Item B.H.13 Highway Minimum Vertical Clearance is greater than or equal to 14.0'.
 - Item B.SP.04 Span Material is coded one of the following:
 - C01-C05
 - S01-S05
 - Item B.SP.06 Span Type is one of the following:

- A01
- B02-B03
- F01-F02
- G01-G08
- S01-S02
- P01-P02
- Item B.AP.03 Scour Vulnerability is coded A or B
- Item B.C.11 Scour Condition Rating is coded 6 or greater.
- (b) Underwater Inspections. This section applies to bridges over waterways with underwater portions of the bridge substructure that cannot be inspected visually at low water or by wading or probing and generally require diving or other appropriate techniques.
 - (1.) Method 1 per 23 CFR Part § 650.311(b)(1) is utilized.
 - (i.) Each bridge that requires an Underwater Inspection must receive an underwater inspection at regular intervals not to exceed 60 months, except as noted below.
 - (ii.) A reduced Underwater Inspection interval, not to exceed 24 months is required when any of the following conditions are met:
 - The following items are coded 3 or less:
 - Item B.C.15 Underwater Inspection Condition
 - Item B.C.09 Channel Condition
 - Item B.C.10 Channel Protection Condition
 - Item B.C.11 Scour Condition Rating
 - Where these condition ratings are due to localized deficiencies, a special inspection limited to those deficiencies can be used to meet this requirement in lieu of a complete underwater inspection.
 - (iii.) No extended inspection intervals are permitted for Underwater Inspections.
- (c) NSTM Inspections

(1.) Method 1 per 23 CFR Part § 650.311(c)(1) is utilized.

- (i.) Each inspection must be completed at regular intervals not to exceed 24 months, except as noted below.
 - A reduced inspection interval, not to exceed 12 months is required, when Item B.C.14 NSTM Inspection Condition is coded 4 or less

(ii.) No extended inspection intervals are permitted for NSTM inspections.

Inspection Interval Assignment

NDOT will conduct reviews of NBIS data and notify bridge owners of the required maximum inspection interval on a quarterly basis or more frequently if the matter is urgent. Bridges that no longer meet extended interval requirements will be transitioned to routine intervals by NDOT on a quarterly basis and as described below.

Bridge inspection intervals will be provided both on the upcoming bridge inspection reports and on the NDOT website in the Upcoming Bridge Inspection Map.

Inspection Interval Transitions

If a bridge no longer qualifies for an extended interval due to circumstances that are not part of a scheduled inspection, and it has been more than 20 months since the previous scheduled inspection the NBIS Program Manager should be notified. In these cases, the inspection interval and the next inspection date will be updated by the Program Manager in coordination with the bridge owner.

These interval transition policies are in place to avoid past-due inspections due to changes in the inspection interval.

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Attachments: None Cc: FHWA, Josh Martin, *Nebraska Division Bridge Engineer*