Bridge Inspection Memorandum No. 25-06
SNBI Bridge Inspections

February 28, 2025

TO: **All Inspection Personnel and Consultants**

FROM: ***/s/ Anthony Marino SPM***
Anthony Marino, P.E.
Bridge Inspection State Program Manager
Bridge Management Division

SUBJECT: **SNBI Bridge Inspections**

EFFECTIVE: **Immediately**

As announced at the 2025 INDOT Bridge Inspection Workshop, all bridge inspections done in Indiana starting on or after January 1, 2025 shall be done according to CFR 23 Part 650 National Bridge Inspection Standards and the FHWA Specifications for the National Bridge Inventory (SNBI). This will be phased in as follows:

- Inspections for LPA owned/maintained bridges carried out prior to September 1, 2025, shall be limited scope SNBI Hybrid Inspections; defined herein as SNBI Lite.

- State bridge inspections carried out beginning January 1, 2025, will be full SNBI.

- All bridge inspections for LPA owned/maintained bridges carried out beginning September 1, 2025, will be full SNBI except those in counties whose compliance month started prior to September 1, 2025.

All SNBI items must be populated, validated, complete, and accurate by the March 2028 Fed Bridge File data submission and will require all bridges to have full SNBI inspections by the end of 2027.

INDOT prepopulated the iTAMS Asset Inventory Data within SNBI Sections 1 through 7 as much as possible using the FHWA Data Crosswalk tools.

Bridges previously on 48-month extended inspection intervals shall be reduced to 24 months, be inspected during the first available inspection cycle, and have the Inspection Interval (B.IE.05) coded on the inspection findings after being evaluated for compliance with the updated extended frequency requirements.

The following SNBI items are the minimum SNBI fields that must be coded for SNBI Lite:

* Denotes SNBI Items that had direct FHWA Data Crosswalk transitions containing data previously collected and reported under the past coding guide. Prepopulated data from SNBI Sections 1 through 4 listed below will not require validation as part of SNBI Lite bridge inspections.

SUBSECTION 1.1: IDENTIFICATION
*B.ID.01 – Bridge Number

B.ID.02 – Bridge Name: this item was prepopulated by INDOT as the previously identified bridge number. FHWA encourages reporting the commonly known names for bridges. INDOT has locked this item for editing; however, inspectors are encouraged to contact the SPM, ASPM, and iTAMS administrator to report common bridge names to be added to this field.

*B.ID.03 – Previous Bridge Number

SUBSECTION 1.2: LOCATION

*B.L.01 – State Code
*B.L.02 – County Code
*B.L.03 – Place Code
*B.L.04 – Highway Agency District
*B.L.05 – Latitude
*B.L.06 – Longitude
*B.L.07 – Border Bridge Number
*B.L.08 – Border Bridge State or Country Code
B.L.09 – Border Bridge Inspection Responsibility
*B.L.10 – Border Bridge Designated Lead State
*B.L.11 – Bridge Location

SUBSECTION 1.3: CLASSIFICATION

*B.CL.01 – Owner
*B.CL.02 – Maintenance Responsibility
*B.CL.05 – Toll

SUBSECTION 2.1: SPAN MATERIAL AND TYPE

Inspectors shall code the following SNBI item values in SNBI Subsection 2.1 as inspections are executed. These SNBI items are required to evaluate extended interval requirements for Routine Bridge Inspections in accordance with INDOT BIM 25-03 and to code SNBI B.IE.05 (Inspection Interval).

B.SP.04 – Span Material
B.SP.06 – Span Type
B.SP.09 – Deck Material and Type

SECTION 3: BRIDGE GEOMETRY

*B.G.02 – Total Bridge Length
*B.G.03 – Maximum Span Length
*B.G.05 – Bridge Width Out-to-Out
*B.G.06 – Bridge Width Curb-to-Curb
*B.G.07 – Left Curb or Sidewalk Width
*B.G.08 – Right Curb or Sidewalk Width
*B.G.09 – Approach Roadway Width
*B.G.10 – Bridge Median
*B.G.11 – Skew
*B.G.16 – Calculated Deck Area: this item is calculated by FHWA and requires no action by the bridge inspector.

SUBSECTION 4.1: FEATURES

*B.F.01 – Feature Type
*B.F.02 – Feature Location
*B.F.03 – Feature Name

SUBSECTION 4.2: ROUTES

*B.RT.01 – Route Designation
*B.RT.02 – Route Number
*B.RT.04 – Route Type
*B.RT.05 – Service Type

SUBSECTION 4.3: HIGHWAYS

*B.H.03 – NHS Designation
*B.H.05 – STRAHNET Designation
*B.H.07 – LRS Mile Point
*B.H.08 – Lanes On Highway
*B.H.09 – Annual Average Daily Traffic
*B.H.10 – Annual Average Daily Truck Traffic
*B.H.11 – Year of Annual Average Daily Traffic
*B.H.12 – Highway Maximum Usable Vertical Clearance
*B.H.13 – Highway Minimum Vertical Clearance
*B.H.14 – Highway Minimum Horizontal Clearance, Left
*B.H.15 – Highway Minimum Horizontal Clearance, Right
*B.H.16 – Highway Maximum Usable Surface Width
*B.H.17 – Bypass Detour Length

SUBSECTION 4.4: RAILROADS

*B.RR.02 – Railroad Minimum Vertical Clearance
*B.RR.03 – Railroad Minimum Horizontal Offset

SUBSECTION 4.5: NAVIGABLE WATERWAYS

B.N.01 – Navigable Waterway: this item will require validation. Unless directed specifically by INDOT, this item should be coded N (Not navigable waters) for all LPA owned/maintained bridges. The SNBI defines navigable waterways as ones where the U.S. Coast Guard may exercise jurisdiction according to 33 CFR, Part 2. LPA bridge files that have this item coded "Y" from the Data Crosswalk shall be brought to the attention of the SPM to discuss the correct disposition of this coding.

*B.N.02 – Navigation Minimum Vertical Clearance
*B.N.03 – Movable Bridge Maximum Navigation Vertical Clearance
*B.N.04 – Navigation Channel Width

SECTION 5: LOADS, LOAD RATING, AND POSTING

Inspectors or approved Load Rating Engineers, based on permissions, shall code all SNBI Item values in SNBI Section 5 through BRADIN as inspections are executed.

SUBSECTION 5.1: LOADS AND LOAD RATING

*B.LR.01 – Design Load
*B.LR.04 – Load Rating Method
*B.LR.05 – Inventory Load Rating Factor
*B.LR.06 – Operating Load Rating Factor

SUBSECTION 5.2: LOAD POSTING STATUS

B.PS.01 – Load Posting Status

SECTION 6: INSPECTIONS

Inspectors shall code the following SNBI Item values in SNBI Section 6 as inspections are executed.

SUBSECTION 6.1: INSPECTION REQUIREMENTS

*B.IR.01 – NSTM Inspection Required: this item is a direct data crosswalk transition from NBI 92A and shall only be coded either N or Y. INDOT is not yet implementing either IRM or SRM protocols.

B.IR.02 – Fatigue Details

*B.IR.03 – Underwater Inspection Required: this item is a direct data crosswalk transition from NBI 92B and shall only be coded either N or Y.

B.IR.04 – Complex Feature: this item will mostly be coded N, as Indiana has only 6 bridges with complex features. Inspectors shall coordinate with the SPM/ASPM if they think they have a bridge with such features.

SUBSECTION 6.2: INSPECTION EVENTS

B.IE.01 – Inspection Type
B.IE.02 – Inspection Begin Date
B.IE.03 – Inspection Completion Date

B.IE.04 – Nationally Certified Bridge Inspector: inspectors shall contact the iTAMS Administrator for their individual identification number.

B.IE.05 – Inspection Interval

B.IE.07 – Risk-Based Inspection Interval Method: INDOT is only using ***Method 1***.

B.IE.11 – Inspection Note: this item should primarily be used for non-Routine Inspection Types when only ***limited portions*** of a bridge is inspected.

SECTION 7: BRIDGE CONDITION

Inspectors shall code all SNBI Item values in SNBI Section 7 as inspections are executed, except as noted herein.

*B.C.01 – Deck Condition Rating: this item is a direct crosswalk of previous condition rating only from NBI 58.
*B.C.02 – Superstructure Condition Rating: this item is a direct crosswalk of previous condition rating only from NBI 59.
*B.C.03 – Substructure Condition Rating: this item is a direct crosswalk of previous condition rating only from NBI 60.
*B.C.04 – Culvert Condition Rating: this item is a direct crosswalk of previous condition rating only from NBI 62.
B.C.05 – Bridge Railings Condition Rating
B.C.06 – Bridge Railing Transitions Condition Rating
B.C.07 – Bridge Bearings Condition Rating
B.C.08 – Bridge Joints Condition Rating
*B.C.09 – Channel Condition Rating: this item is a direct crosswalk of previous condition rating only from NBI 61.
B.C.10 – Channel Protection Condition Rating
B.C.11 – Scour Condition Rating

*B.C.12 – Bridge Condition Classification: this item is calculated by FHWA and requires no action by the bridge inspector.
*B.C.13 – Lowest Condition Rating Code: this item is calculated by FHWA and requires no action by the bridge inspector.

B.C.14 – NSTM Inspection Condition
B.C.15 – Underwater Inspection Condition

SUBSECTION 7.2: ELEMENT IDENTIFICATION

*B.E.01 – Element Number
*B.E.02 – Element Parent Number
*B.E.03 – Element Total Quantity

SUBSECTION 7.3: ELEMENT CONDITIONS

*B.CS.01 – Element Quantity Condition State One
*B.CS.02 – Element Quantity Condition State Two
*B.CS.03 – Element Quantity Condition State Three
*B.CS.04 – Element Quantity Condition State Four

SUBSECTION 7.4: APPRAISAL

*B.AP.01 – Approach Roadway Alignment: this item is a direct crosswalk from NBI 72.

B.AP.02 – Overtopping Likelihood: this item will require validation. This item is a partial crosswalk from NBI 71 and no longer is broken down by the roadway functional classification

B.AP.03 – Scour Vulnerability: this item will require validation. This item is a partial crosswalk from NBI 113 for appraising the scour vulnerability of the bridge. Inspectors shall review previous NBI 113 coding along with any available bridge plans, hydraulic design memos, hydraulics correspondence, scour screening and assessment documents, and similar information for coding this item. The following minimal guidelines are provided.

SNBI Code A – Best corresponds to NBI 113 = 9 or 8
SNBI Code B – Best corresponds to NBI 113 = 8 where designed and functioning scour protection is in place and functioning as intended.
SNBI Code C – Best corresponds to NBI 113 = 7 where temporary, non-designed scour protection has been placed to mitigate scour. The bridge is considered scour critical, and a Scour Plan of Action must be part of the iTAMS Bridge Asset File.
SNBI Code D – Best corresponds to SNBI 113 = 3 or less. The bridge is considered scour critical, and a Scour Plan of Action must be part of the iTAMS Bridge Asset File.

Inspectors may code this item as either 0 or U with the understanding that the bridge will be considered scour critical, and a scour plan of action is required.

B.AP.04 – Scour Plan of Action: this item will require validation and is dependent on the Scour Vulnerability coding. Bridges appraised to be Scour Critical require a Scour Plan of Action to be included in the iTAMS Bridge Asset File.

Note: B.AP.05 (Seismic Vulnerability): item may be coded 0 during the SNBI Hybrid Inspection years, and INDOT will provide more coding guidance later.

SUBSECTION 7.5: WORK EVENTS

B.W.01 – Year Built
B.W.02 – Year Work Performed

Note: B.W.03 (Work Performed) may be left blank during the SNBI Hybrid Inspection years and INDOT will provide more coding guidance later. Pre-2026 work history events need not be coded.