

In examining the proposed changes to the existing NBI Coding Guide in the proposed Bridge Inventory Specifications, there are many items with significant changes and many items with negligible changes. To assist the reviewer, the following tables are provided whereby the items are tabulated by the magnitude of the change. The tables are typically sorted by NBI Item, expect of course for the new items added. Tables are provided for items that receive the following types of changes:

- **New Items:** Items added to the specifications (Table 1)
- **Eliminated Items:** Items proposed for deletion (Table 2)
- **Changes to Accommodate English & Metric Units:** The items listed in this table are only changed to accommodate English and Metric units. It may be noted that items with unit changes are also included in the table for minor and significant changes if there are other modifications. (Table 3)
- **Negligible or No Changes:** Items with effectively equivalent coding and descriptions. (Table 4)
- **Minor Changes:** Minor changes include changes to the precision of an item, small changes to the coding of an item, and changes to the descriptions or guidance regarding the coding of an item. (Table 5)
- **Significant changes:** Significant changes include renumbering of existing codes, significant additions or deletions to the current codes, and other changes that results in a significant difference when the Specifications are compared with the current Coding Guide. (Table 6)

Items added to the Specifications are shown in Table 1.

*Table 1: New Items*

<b>Specification Topic/Description</b>
Abutment Material, Design & Foundation Types
Main Pier/Bent Material, Design and Foundation Types
Approach Pier/Bent Material, Design, and Foundation Types
Fracture Critical Member & Underwater Inspection Dates
Load Rating Date
Posted Load Rating Factor & Controlling Vehicle
Scour Plan of Action
Additional Appraisal Rating Items (to replace existing appraisal items with additional detail).

The proposed Specifications eliminate the NBI items shown in Table 2.

**Table 2: Eliminated Items**

<b>NBI Code</b>	<b>NBI Item Description</b>	<b>Comments</b>
10	Inv. Rte. Min. Vertical Clearance	Information collected in other items
12	Base Highway Network	Recommended for deletion by stakeholders
14, 15, 18	Reserved Items	Not Used in Current Guide
23 – 25, 57	Reserved Items	Not Used in Current Guide
35	Structure Flared	Recommended for deletion by stakeholders
47	Inv. Rte Total Horiz. Clearance	Required info collected by other items.
53	Min. Vertical Clearance Over	Information collected in other items
54	Min. Vertical Underclearance	Information collected in geometric items
55	Min. Lateral Underlearnce on Rt.	Information collected in geometric items
73, 74	Reserved Items	Not Used in Current Guide
75	Type of Work	Recommended for deletion by stakeholders
76	Length of Structure Improvement	Recommended for deletion by stakeholders
77-89	Reserved Items	Not Used in Current Guide
94 – 96	Bridge, Roadway, Project Costs	Recommended for deletion by stakeholders
97	Year of Improvement Cost	No longer required with elimination of 94 - 97
101	Parallel Structure Designation	Recommended for deletion by stakeholders
103	Temporary Structure Designation	Recommended for deletion by stakeholders. Guidance on coding of other items discussed for temporary structure conditions.
110	Designated National Network	Recommended for deletion by stakeholders
114	Future ADT	Recommended for deletion by stakeholders
115	Year of Future ADT	No longer required with elimination of 114
116	Navigation Vertical Clearance	Replaced by other clearance items.

Several items received negligible changes in terms of the coding but received changes in the applicability. For instance, items which are currently required only for on-records may be proposed for on and under routes in the proposed Specifications. Items with changes in applicability are as follows. The reader is encouraged to evaluate the commentary for differences on the applicability of the items:

***Table 3: Changes to Accommodate Metric & English Units***

<b>NBI Code</b>	<b>NBI Item Description</b>	<b>NBI Code</b>	<b>NBI Item Description</b>
11	Kilometerpoint/Milepoint	48	Length of Maximum Span
13a	LRS Inventory Route	49	Structure Length
19	Bypass, Detour Length	51	Bridge Road Width
32	Approach Roadway Width	52	Deck Width, Out to Out
40	Navigation Vertical Clearance		

***Table 4: Negligible or No Change***

<b>NBI Code</b>	<b>NBI Item Description</b>	<b>NBI Code</b>	<b>NBI Item Description</b>
2	Highway Agency District	27	Year Built
3	County (Parish) Code	29	Average Daily Traffic
4	Place Code	30	Year of Average Daily Traffic
5A	Record Type	34	Skew
5B	Route Type	37	Historical Significance
5C	Designated Level of Svc.	45, 46	Number of Main/Approach Spans
8	Structure Number	91	Designated Inspection Frequency
13b	LRS Subroute Number	99	Border Bridge Structure Number
20	Toll	100	STRAHNET Designation
21	Maintenance Responsibility	109	Average Daily Truck Traffic
22	Owner	112	NBIS Bridge Length
26	Functional Classification	113	Scour Critical Bridges

Items with minor changes are tabulated below. Minor changes include changes to the precision of an item, small changes to the coding of an item, changes to the size of the fields, and changes to the descriptions or guidance regarding the coding of an item.

**Table 5: Minor Changes**

<b>NBI Code</b>	<b>NBI Item Description</b>	<b>Comment</b>
1	State Code	Removed FHWA Region Code
5D	Route Number	Combined with Item 5E
6	Feature Intersected	Field length increased to 50 characters
7	Facility Carried	Field length increased to 50 characters
9	Location	Field length increased to 50 characters
16, 17	Latitude, Longitude	Changed from DMS to Decimal Degrees
28	Lanes On & Under	On and Under Defined in Separate Fields
36	Traffic Safety Features	Items defined as separate fields
42	Type of Service	On and Under Defined in Separate Fields.
50	Curb/Sidewalk Widths	Items converted to dual units and stored in separate fields.
90	Inspection Date	Format changed to MM/DD/YYYY
92	Critical feature inspection	Fracture critical and underwater inspection information is retained. Other special inspection information is eliminated.
93	Critical feature inspection date	Format changed to MM/DD/YYYY
98a	Border Bridge State/Country Code	This was changed to be in conformance with the State Code (old NBI tem 1) by removal of the FHWA Region Code and changing indicators for Canada (CN) and Mexico (MX) to 2 digit codes.
105	Federal Lands Highway	Code 0 changed to N

Significant and notable changes are proposed for the items in the following table. Significant changes include renumbering of existing codes, significant additions or deletions to the current codes, and other changes that result in a significant difference when the Specifications are compared with the current Coding Guide.

**Table 6: Notable or Significant Changes**

<b>NBI Item</b>	<b>NBI Description</b>	<b>Specification Description</b>
31	Design Load	Changed to 2-digit code. Added codes for HL-93.
33	Bridge Median	Changed to indicate number of medians
38	Navigation Control	Simplified to indicate whether bridge crosses a navigable waterway.
39	Navigation Vert. Clearance	Modified for units only for most structures. Definition change for vertical lift bridges
41	Structure Open, Posted Closed	Added field for open, closure recommended.
43 & 44	Material Types (main and approach)	Compound field for material and design is replaced by separate fields and addition of a field for continuity. Material types are modified. Design types added for culverts & channel beams.
56	Min. Lateral Clearance on Left	Changed applicability and modified to accommodate English & Metric units.
58 to 62	Condition Ratings	0 to 9 scale has been retained. Significant additional detail has been added to the descriptions. Graphs have been added to aid in assignment of ratings.
63, 65	Method to Determine Operating and Inventory Ratings	Modified so that the method used for inventory and operating rating are consistent; therefore, only one field is provided to record the method.
64, 66	Operating & Inventory Rating	Changed from metric tons to rating factor
67 to 69 71, 72	Appraisal Ratings	Changed from a 0 to 9 scale to a 1 through 4 scale. Ratings indicate an appraisal of the structure based on whether it meets or exceeds minimum or desirable criteria
67	Structural Evaluation	Changed to 1 to 4 scale and modified to only contribute to structural deficiencies.
70	Bridge Posting	Changed form a quantitative indication of the reduction, in percent, over the legal loads to a binary Y or N field indicating whether the structure is posted not the level of posting.
98b	Border Bridge % Responsibility	Changed to indicate primary States responsibility instead of border States responsibility
102	Direction of Traffic	Code 3 (two-way traffic on 1 lane bridge) has been eliminated.
104	HW System of Inv. Route	Changed to a Y/N field to for NHS designation
106	Year Reconstructed	Changed to Year Rehabilitated
107	Deck Structure Type	Added codes for FRP and exodermic decks.
108	Wearing Surface/Protective System	Codes were added to the type of wearing surface and deck protection. The type of membrane was changed to a Y/N field to indicate the presence of a membrane.
111	Pier & Abutment Protection	Codes redeveloped based on standards