MONTANA
Department of Transportation

Malcolm "Mack" Long, Director

2701 Prospect ▪ PO Box 201001
Helena MT 59620-1001

Memorandum

From:	Tim Welter, E.I.T., Bridge Maintenance Engineer
Approved By:	Henry Henning, P.E., Bridge Inspection Engineer
Date:	March 31st, 2022
Subject:	Roadway Information

HCH

This document is intended to aid the inspector when entering roadway information for bridges. When creating a new bridge, the inspector is responsible for entering roadway information into the Inspection>Inventory>Roads section of BrM. The information needed for entering in the roadway information can be found on the Montana Bridges Arc Map.

To start find the bridge on the Montana Bridges map which should match BrM. If you have troubles with the map it is recommended to clear your browsing history and cookies and re-open the map. Once the bridge is found on the map the routes information can be selected. Please note that the route information on this map may not be updated for new alignments so some routes may not exist anymore. If you run into this issue, please contact the Bridge Inspection Engineer.

When creating a new bridge BrM will automatically create the roadway on the structure. To get the roadway information select the route on the map being careful to select the route and not the bridge. When you select the route, a box will show up with the roadway information needed.

The following is the roadway sections in BrM and guidance and resources on coding. All roadway information will need to be entered for any roadways on or under the bridge.

Identification

Road Name (MDT035) – This field is used to capture the signed road name. This information can be found on the Montana bridges map under Route Name but should always be checked in the field especially for Off-System Routes.

Position (NBI 5A) – This field will automatically populate inside BrM and cannot be edited by the inspector unless the create a new roadway.

Kind Highway (NBI 5B) – This field is used to describe the type of route. The most common coding for this includes Interstate, US Numbered Highway, State Highway, County Highway, or City Street.

Level of Service (NBI 5C) – This field is used to track the designated level of service for each roadway.

Option 0 – None of the below should only ever be used under the direction of bridge management.

The most common coding for this in Montana will be Mainline however the others are possible depending on the route mainly spur and ramp.

Route Number (NBI 5D) – This field is used for the route number and is limited to 5 numeric characters. The route number can be found as the department route on the Montana Bridges map. In cases where this number is longer than 5 numbers cut off the last digit. In cases where this number shorter than 5 digits 0 (zero) should be used before the route number. For example, I-15 route number is 00015.

Department Route (MDT007) – This field also used for route number but is not limited. This field can be copied directly from department route on the Montana Bridges map.

Suffix (NBI 5E) – This field is used for defining the route direction. For example, if the route runs north this should be coded as north.

Traffic

Most of the traffic information will automatically update based on the LRS Inventory Route Number and the Lat and Long of the bridge. The only field the inspector is responsible for is MDT 030 Roadway Speed which is used for roadway posted speed limit.

Highway Networks & Service Classification

Accumulated Miles (NBI 11) – This field should automatically update.
National Base Network (NBI 12) – This field will be coded as on base network for all state routes and not on base network for all county routes.
LRS Inventory Route (NBI 13A) – This value can be copied directly from the Montana Bridges map under the Route ID section.
Sub # (NBI 13B) - This value is always 00 and defaults to 00
Toll Facility (NBI 20) – This value is always 3 On Free Road and defaults to 3 On Free Road
Functional Class (NBI 26) – This value should be coded with the same wording as found on the Montana bridges map for Functional Class. Note that the numeric value for the coding is different than what is used for NBI. Also note there is a difference between Urban and Rural Routes.
Traffic Direction (NBI102) – Should be coded in accordance with the NBI coding guide in the bridge inspection manual.

Alternate Classifications

Defense Highway (NBI 100) – Map is linked here. (Not T&E Routes)
National Highway System (NBI 104) – This value can be coded using the Montana Bridges Map. Purple and Blue routes are noted in the legend as National Highway System (NHS) Routes.
National Truck Network (NBI 110) – Map is linked here.