

# **State Bridge Profile**

## Highlights from FHWA's 2023 National Bridge Inventory Data

- The state has identified needed repairs on 932 bridges.
- Over the life of the IIJA, Montana will receive a total of \$225.0 million in bridge formula funds, which will help make needed repairs.
- Montana currently has access to \$90.0 million of that total, and has committed \$54.2 million towards 23 projects as of June 2023.
- Of the 5,218 bridges in the state, 358, or 6.9 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 380 bridges classified as structurally deficient in 2019.

### **Bridge Inventory**

	All Bridges			Structurally Deficient Bridges		
Type of Bridge	Total Number	Area (sq. meters)	Daily Crossings	Total Number	Area (sq. meters)	Daily Crossings
Rural Bridges						
Interstate	742	598,027	6,133,212	13	25,392	104,961
Other principal arterial	477	275,293	1,729,487	27	10,033	51,822
Minor arterial	476	225,588	552,766	38	31,031	48,401
Major collector	645	227,213	378,903	39	9,474	17,542
Minor collector	419	92,755	112,126	21	3,617	6,090
Local	2,138	362,858	253,155	211	32,231	19,894
Urban Bridges						
Interstate	86	84,860	1,470,381	1	724	25,583
Freeway/expressway	0	0	0	0	0	0
Other principal arterial	58	115,286	1,023,078	2	10,122	33,528
Minor arterial	58	58,494	415,132	3	9,088	25,158
Collector	48	25,072	142,847	1	107	431
Local	71	27,948	95,783	2	213	200
Total	5,218	2,093,393	12,306,870	358	132,032	333,610

#### **Proposed Bridge Work**

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	515	\$634.7	1,561,922	267,480
Widening & rehabilitation	4	\$1.0	205	475
Rehabilitation	357	\$244.7	438,797	134,722
Deck rehabilitation/replacement	6	\$0.7	299	327
Other work	50	\$27.2	15,222	12,903
Total	932	\$908.3	2,016,445	415,906

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### **Top Most Traveled Structurally Deficient Bridges in Montana**

County	Year Built	Daily Crossings	Type of Bridge	Location	
Missoula	1966	25,583	Urban Interstate	I 90 over Int Reserve Street	
Yellowstone	1960	16,764	Urban other principal arterial	Montana Ave over U1024-25-RR	
Yellowstone	1960	16,764	Urban other principal arterial	Montana Ave over U1025-RR	
Missoula	1962	15,620	Urban minor arterial	S Higgins Ave over Clark Fork R-Ped Paths	
Granite	1970	11,920	Rural Interstate	I 90 over Clark Fork River	
Powell	1973	11,770	Rural Interstate	I 90 over RR	
Powell	1973	11,770	Rural Interstate	I 90 over RR	
Deer Lodge	1978	10,055	Rural Interstate	I 90 over Int Warm Springs	
Missoula	1979	9,311	Rural Interstate	I 90 over Clark Fork River	
Missoula	1964	9,311	Rural Interstate	I 90 over Clark Fork River	

About the data: Data is from the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), downloaded on February 1, 2023. Note that specific conditions on bridges may have changed because of recent work or updated inspections.

The new definition limits the classification to bridges where one of the key structural elements—the deck, superstructure, substructure or culverts, are rated in poor or worse condition. During inspection, the conditions of a variety of bridge elements are rated on a scale of 0 (failed condition) to 9 (excellent condition). A rating of 4 is considered "poor" condition.

Cost estimates have been derived by ARTBA, based on 2020 and average bridge replacement costs for structures on and off the National Highway System, <u>published</u> <u>by FHWA</u>. Bridge rehabilitation costs are estimated to be 68 percent of replacement costs. A bridge is considered to need repair if the structure has identified repairs as part of the NBI, a repair cost estimate is supplied by the bridge owner or the bridge is classified as structurally deficient. Please note that for a few states, the number of bridges needing to be repaired can vary significantly from year to year, and reflects the data entered by the state.

Bridges are classified by FHWA into types based on the functional classification of the roadway on the bridge. Interstates comprise routes officially designated by the Secretary of Transportation. Other principal arterials serve major centers of urban areas or provide mobility through rural areas. Freeways and expressways have directional lanes generally separated by a physical barrier, and access/egress points generally limited to on- and off-ramps. Minor arterials serve smaller areas and are used for trips of moderate length. Collectors funnel traffic from local roads to the arterial network; major collectors have higher speed limits and traffic volumes and are longer in length and spaced at greater intervals, while minor collectors are shorter and provide service to smaller communities. Local roads do not carry through traffic and are intended for short distance travel.

Effective January 1, 2018, FHWA changed the definition of structurally deficient as part of the final rule on highway and bridge performance measures, published May 20, 2017 pursuant to the 2012 surface transportation law Moving Ahead for Progress in the 21st Century Act (MAP-21). Two measures that were previously used to classify bridges as structurally deficient are no longer used. This includes bridges where the overall structural evaluation was rated in poor or worse condition, or where the adequacy of waterway openings was insufficient.