

Highlights from FHWA's 2023 National Bridge Inventory Data

- The state has identified needed repairs on 2,508 bridges.
- Over the life of the IJJA, Minnesota will receive a total of \$325.8 million in bridge formula funds, which will help make needed repairs.
- Minnesota currently has access to \$130.3 million of that total, but has yet to commit any funds towards projects as of June 2023.
- Of the 13,502 bridges in the state, 582, or 4.3 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 631 bridges classified as structurally deficient in 2019.

Bridge Inventory

Type of Bridge	All Bridges			Structurally Deficient Bridges		
	Total Number	Area (sq. meters)	Daily Crossings	Total Number	Area (sq. meters)	Daily Crossings
Rural Bridges						
Interstate	220	186,039	2,314,603	10	5,317	103,355
Other principal arterial	627	404,753	3,366,733	15	9,945	70,190
Minor arterial	1,023	474,310	2,381,688	23	18,918	45,659
Major collector	1,902	629,132	1,596,284	76	24,548	59,276
Minor collector	1,320	343,288	403,380	67	14,164	27,042
Local	5,598	826,255	405,863	286	33,234	17,661
Urban Bridges						
Interstate	517	1,084,925	18,277,837	8	105,297	242,571
Freeway/expressway	320	709,832	11,202,578	6	15,079	199,250
Other principal arterial	279	512,305	4,812,125	13	20,634	204,829
Minor arterial	763	1,353,870	9,683,973	31	82,943	339,185
Collector	643	495,847	2,521,076	24	17,917	100,022
Local	290	117,167	277,562	23	7,542	37,199
Total	13,502	7,137,724	57,243,704	582	355,537	1,446,239

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	7	\$2.1	887	949
Widening & rehabilitation	1	\$0.1	1,550	96
Rehabilitation	583	\$586.6	1,446,244	355,592
Deck rehabilitation/replacement	2	\$0.3	47	168
Other work	1,915	\$1,238.0	9,122,303	770,783
Total	2,508	\$1,827.1	10,571,031	1,127,587

Top Most Traveled Structurally Deficient Bridges in Minnesota

County	Year Built	Daily Crossings	Type of Bridge	Location
Dakota	1959	92,000	Urban Interstate	I 35W over UP RR, Cliff Rd (Csah32)
Anoka	1962	66,000	Urban freeway/expressway	US 10 over Rum River
Hennepin	1981	46,000	Urban Interstate	I 494 over Minnesota River
Hennepin	1981	46,000	Urban Interstate	I 494 over Minnesota River
Ramsey	1964	42,500	Urban freeway/expressway	Mn 36 over I 35W
Hennepin	1967	39,000	Urban other principal arterial	Mn 55 over Franklin Ave
Hennepin	1967	39,000	Urban other principal arterial	Mn 55 over Cedar Ave
Blue Earth	1976	39,000	Urban freeway/expressway	US 14 over Minn River; UP RR
Ramsey	1986	38,500	Urban other principal arterial	US 61 over Bike Path
St. Louis	1961	33,021	Urban Interstate	I 535 over St Louis R; RR, Street

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.

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.

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, [published by FHWA](#). 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.