American Road & Transportation Builders Association

National Bridge Inventory: Minnesota

- The state has identified needed repairs on 2,496 bridges.
- This compares to 2,698 bridges that needed work in 2020.
- Over the life of the IIJA, Minnesota will receive a total of $325.8 million in bridge formula funds, which will help make needed repairs.
- Minnesota currently has access to $195.5 million of that total, and has committed $11.2 million towards 4 projects as of June 2024.
- Of the 13,532 bridges in the state, 601, or 4.4 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 661 bridges classified as structurally deficient in 2020.
- The deck area of structurally deficient bridges accounts for 5.1 percent of total deck area on all structures.

40

Compared to 41 in 2023

in the nation in % of structurally deficient bridges

1. Iowa	**19.0%**
39. New Mexico	5.0%
40. Minnesota	4.0%
41. Tennessee	4.0%

23

Compared to 23 in 2023

in the nation in # of structurally deficient bridges

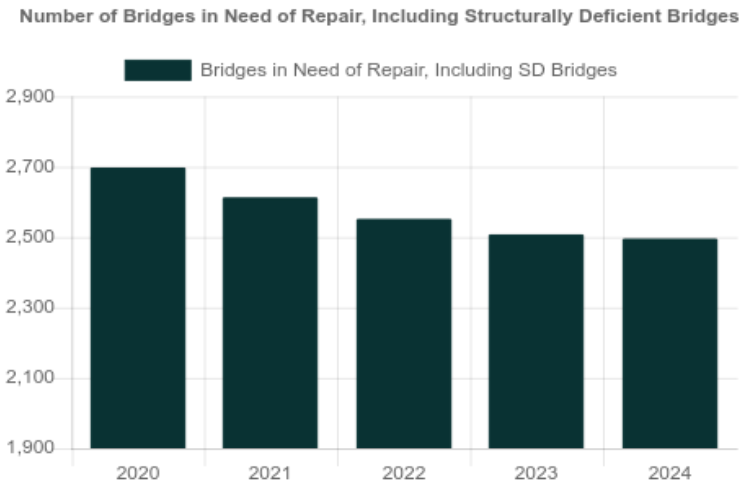
1. Iowa	**4,544**
22. Texas	695
23. Minnesota	601
24. South Carolina	586

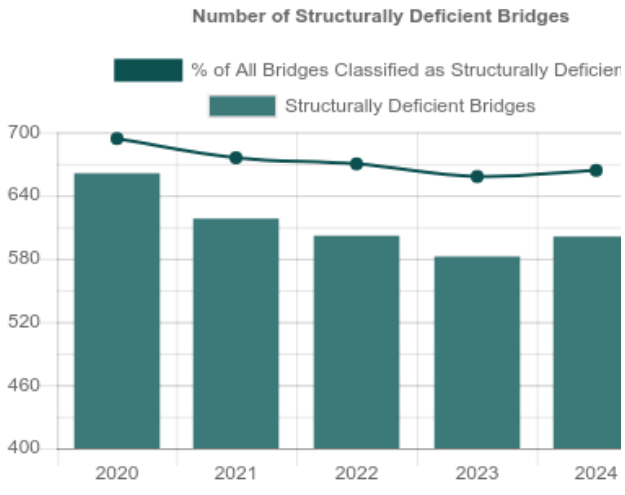
27

Compared to 26 in 2023

in the nation in % of structurally deficient bridge deck area

1. Rhode Island	**14.0%**
26. South Carolina	5.0%
27. Minnesota	5.0%
28. Tennessee	5.0%





Top Most Traveled Structurally Deficient Bridges in Minnesota

County	Year Built	Daily Crossings	Type of Bridge	Location
Dakota	1959	94,603	Urban Interstate	I 35W over UP RR, Cliff Rd (Csah32)
Hennepin	1981	44,357	Urban Interstate	I 494 over Minnesota River
Hennepin	1981	44,357	Urban Interstate	I 494 over Minnesota River
Ramsey	1964	42,500	Urban freeway/expressway	Mn 36 over I 35W
Blue Earth	1976	39,000	Urban freeway/expressway	US 14 over Minn River; UP RR
Hennepin	1967	39,000	Urban other principal arterial	Mn 55 over Cedar Ave
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
Hennepin	1973	23,800	Urban minor arterial	Csah 15 over BNSF; Dak RR; St
Wright	1971	23,000	Urban Interstate	I 94 over Csah 19
Ramsey	1967	22,391	Urban freeway/expressway	Mn 280 over NB On Ramp; Th 280 SB
Blue Earth	1985	20,700	Urban minor arterial	Unu 169 over Minn R, UP RR; Street
Hennepin	1927	19,510	Urban minor arterial	Csah 158 over Cp Rail
Anoka	1958	19,067	Urban other principal arterial	Mn 65 over Coon Creek
St. Louis	1969	17,750	Urban Interstate	I 35 over Cp Rail, Ramps; Strs
Ramsey	1926	17,600	Urban minor arterial	Mn 3 over Mississippi River; RR
Ramsey	1967	17,200	Urban minor arterial	Msas 233 over Cp Rail
Dakota	1969	16,800	Urban minor arterial	Msas 102 over I 35W
Blue Earth	1977	16,250	Urban freeway/expressway	US 14 over N Riverfront Dr
Polk	1963	15,475	Urban other principal arterial	US 2 over Red River
Ramsey	2009	15,400	Urban minor arterial	Csah 49 over BNSF RR
Grant	1963	15,302	Rural Interstate	I 94 over Pelican Creek
Hennepin	1923	14,987	Urban minor arterial	Csah 152 over Bassett Creek Tunnel
Blue Earth	1977	14,750	Urban freeway/expressway	US 14 over N Riverfront Dr
Stearns	1965	14,250	Rural Interstate	I 94 over Sauk River

Bridge Inventory: Minnesota

Type of Bridge	Number of Bridges	Area of All Bridges (sq. meters)	Daily Crossings on All Bridges	Number of Structurally Deficient Bridges	Area of Structurally Deficient Bridges (sq. meters)	Daily Crossings on Structurally Deficient Bridges
Rural Interstate	220	186,039	2,261,044	10	5,317	103,142
Rural arterial	630	405,723	3,281,292	10	6,496	47,126
Rural minor arterial	1,021	475,242	2,270,812	22	17,940	48,758
Rural major collector	1,901	628,563	1,605,050	83	29,769	64,720
Rural minor collector	1,318	347,879	414,344	77	15,888	27,044
Rural local road	5,619	829,670	408,729	286	34,567	18,770
Urban Interstate	516	1,078,278	18,307,179	10	118,367	283,564
Urban freeway/expressway	323	711,339	11,113,409	6	14,066	147,293
Urban other principal arterial	280	519,596	4,910,492	11	18,387	153,479
Urban minor arterial	771	1,368,287	9,498,516	32	71,020	323,600
Urban collector	640	495,553	2,402,958	28	20,610	97,693
Urban local road	293	116,929	311,412	26	9,807	37,639
Total	13,532	7,163,098	56,785,237	601	362,235	1,352,828

Proposed Bridge Work

Type of Work	Number of Bridges	Cost to Repair (in millions)	Daily Crossings	Area of Bridges (sq. meters)
Bridge replacement	8	$2	2,008	1,032
Widening & rehabilitation	1	$0	450	96
Rehabilitation	602	$565	1,352,833	362,290
Deck rehabilitation/replacement	2	$0	47	168
Other structural work	1,883	$1,158	8,799,185	778,125
Total	2,496	$1,725	10,154,523	1,141,710

About the data:

Data and cost estimates are from the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), downloaded on August 20, 2024. Note that specific conditions on bridges may have changed as a result 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 federal aid highway bill 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 2023 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.