

# National Bridge Inventory: Wisconsin

- The state has identified needed repairs on 2,217 bridges.
- This compares to 1,836 bridges that needed work in 2020.
- Over the life of the IIJA, Wisconsin will receive a total of \$225.0 million in bridge formula funds, which will help make needed repairs.
- Wisconsin currently has access to \$135.0 million of that total, and has committed \$80.8 million towards 291 projects as of June 2024.
- Of the 14,446 bridges in the state, 942, or 6.5 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 979 bridges classified as structurally deficient in 2020.
- The deck area of structurally deficient bridges accounts for 4.3 percent of total deck area on all structures.

23 Compared to 23 in 2023 in the nation in % of structurally deficient				
bridges				
1. Iowa	19.0%			
22. Hawaii	7.0%			
23. Wisconsin	7.0%			

24. Wyoming

19
Compared to 19 in 2023
in the nation in # of
structurally deficient
bridges
lowa 4,544

1. Iowa	4,544
18. South Dakota	963
19. Wisconsin	942
20. Tennessee	898

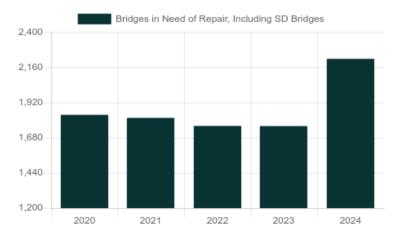
**32** Compared to 32 in 2023

in the nation in % of structurally deficient bridge deck area

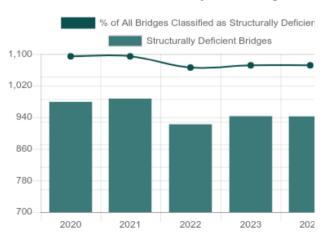
1. Rhode Island	14.0%
31. Hawaii	5.0%
32. Wisconsin	4.0%

#### Number of Bridges in Need of Repair, Including Structurally Deficient Bridges

7.0%



Number of Structurally Deficient Bridges



## Top Most Traveled Structurally Deficient Bridges in Wisconsin

County	Year Built	Daily Crossings	Type of Bridge	Location
Milwaukee	1959	79,000	Urban Interstate	IH 94 WB-E-W Freew over Lrd Mitchell Blvd
Milwaukee	1967	58,500	Urban Interstate	IH 41/Ush 45/Sth 1 over Cth W Mill Rd (Cth S)
Milwaukee	1967	58,500	Urban Interstate	IH 41/Ush 45/Sth 1 over Cth W Mill Rd (Cth S)
Dane	1975	43,200	Urban other principal arterial	Lrd John Nolen Dr over Lake Monona
Dane	1968	36,900	Urban other principal arterial	Lrd John Nolen Dr over Lake Monona
Dane	1968	36,900	Urban other principal arterial	Lrd John Nolen Dr over Lake Monona
Dane	1968	36,900	Urban other principal arterial	Lrd John Nolen Dr over Lake Monona
Dane	1966	36,900	Urban other principal arterial	Lrd John Nolen Dr over Lake Monona
Dunn	1959	34,700	Rural Interstate	IH 94 over E Br Wilson Creek
Douglas	1961	33,021	Urban Interstate	I 535 over St Louis R; RR,Street
Milwaukee	1958	31,100	Urban other principal arterial	Lrd W Silver Sprin over Lincoln Creek
Marathon	1915	28,144	Urban other principal arterial	Ush Sth 52 EB-USH over Wisconsin River 31
Milwaukee	1963	26,700	Urban other principal arterial	Lrd W Layton Ave over Sth 24-Forest Home Ave
Dane	1956	22,500	Urban other principal arterial	Cth M / Century Av over Pheasant Branch Creek
Milwaukee	1936	21,700	Urban minor arterial	Lrd N Teutonia Ave over Lincoln Creek
Dane	1968	21,600	Urban other principal arterial	Lrd John Nolen Dr over Lake Monona
Dane	1963	21,200	Rural Interstate	IH 94 WB over Sth 73
Eau Claire	1988	20,800	Urban other principal arterial	USH 12 over Otter Creek
Jefferson	1965	19,150	Rural Interstate	IH 94 WB over Lrd Rock Lake Rd
Dane	1963	19,150	Rural Interstate	IH 94 WB over Lrd Missouri Rd
Milwaukee	1987	19,025	Urban other principal arterial	Lrd S 43rd St over Kinnickinnick River
Milwaukee	1933	18,735	Urban minor arterial	Lrd 35th Street Vi over Lrd W Pierce St
Milwaukee	1934	18,300	Urban other principal arterial	Lrd North Ave East over Menomonee River
Milwaukee	1934	18,300	Urban other principal arterial	Lrd North Ave - We over Menomonee River
Milwaukee	1966	18,200	Urban Interstate	IH 43 NB over Root River Marsh

## Bridge Inventory: Wisconsin

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	650	532,758	12,806,953	9	4,022	150,607
Rural arterial	1,162	870,331	8,790,629	13	4,604	63,500
Rural minor arterial	1,145	541,279	4,059,452	27	20,891	71,192
Rural major collector	1,809	575,368	2,853,538	215	60,209	281,972
Rural minor collector	725	173,658	640,495	91	15,442	52,693
Rural local road	5,916	990,797	2,063,551	464	53,687	85,491
Urban Interstate	675	1,192,909	24,302,675	5	51,073	247,221
Urban freeway/expressway	213	352,259	4,786,963	0	0	0
Urban other principal arterial	790	994,207	11,836,577	30	24,767	578,319
Urban minor arterial	569	621,872	4,744,565	30	59,721	217,827
Urban collector	196	125,830	880,861	15	4,009	55,234
Urban local road	596	280,145	2,062,769	43	13,957	89,912
Total	14,446	7,251,413	79,829,028	942	312,383	1,893,968

### Proposed Bridge Work

Type of Work	Number of Bridges	Cost to Repair (in millions)	Daily Crossings	Area of Bridges (sq. meters)
Bridge replacement	2,189	\$1,890	13,146,302	1,173,714
Widening & rehabilitation	0	\$0	0	0
Rehabilitation	6	\$51	33,916	47,803
Deck rehabilitation/replacement	15	\$3	13,830	3,111
Other structural work	7	\$1	1,392	758
Total	2,217	\$1,945	13,195,440	1,225,385

#### 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.