

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

- The state has identified needed repairs on 2,305 bridges.
- Over the life of the IIJA, South Dakota will receive a total of \$225.0 million in bridge formula funds, which will help make needed repairs.
- South Dakota currently has access to \$90.0 million of that total, and has committed \$12.4 million towards 1 project as of June 2023.
- Of the 5,889 bridges in the state, 985, or 16.7 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 991 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
<b>Rural Bridges</b>						
Interstate	333	201,862	1,942,043	4	4,119	27,350
Other principal arterial	462	265,848	1,001,487	11	16,403	13,088
Minor arterial	541	246,037	677,412	14	15,400	18,755
Major collector	1,162	339,202	493,914	139	33,885	51,871
Minor collector	227	58,958	39,819	52	8,521	10,829
Local	2,738	392,656	216,709	741	77,007	50,243
<b>Urban Bridges</b>						
Interstate	122	111,135	1,725,829	0	0	0
Freeway/expressway	8	10,892	68,202	0	0	0
Other principal arterial	77	95,739	819,757	4	15,333	49,092
Minor arterial	91	85,895	665,702	3	848	12,475
Collector	56	34,834	207,929	6	5,487	42,796
Local	72	19,240	68,789	11	2,502	5,023
<b>Total</b>	<b>5,889</b>	<b>1,862,300</b>	<b>7,927,592</b>	<b>985</b>	<b>179,504</b>	<b>281,522</b>

## Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	1,180	\$741.8	636,756	262,364
Widening & rehabilitation	2	\$2.8	22,990	1,357
Rehabilitation	451	\$248.4	199,588	130,075
Deck rehabilitation/replacement	48	\$64.6	134,515	32,955
Other work	624	\$217.9	237,226	115,031
<b>Total</b>	<b>2,305</b>	<b>\$1,275.5</b>	<b>1,231,075</b>	<b>541,781</b>

**Top Most Traveled Structurally Deficient Bridges in South Dakota**

County	Year Built	Daily Crossings	Type of Bridge	Location
Brown	1954	20,595	Urban other principal arterial	US012 over Moccasin Ck
Minnehaha	1979	18,174	Urban collector	49th Street over Big Sioux River
Hughes	1962	15,450	Urban other principal arterial	US014 over Missouri Rv
Minnehaha	1986	9,363	Urban collector	S. Cliff Avenue over Big Sioux River
Minnehaha	1999	9,273	Urban other principal arterial	Benson Road over Big Sioux Diversion
Minnehaha	1989	8,325	Rural Interstate	I090 E over Sd038
Minnehaha	1975	7,850	Urban collector	6th Street over Big Sioux River
Moody	1966	7,560	Rural Interstate	I029 S over Big Sioux Rv
Moody	1966	7,560	Rural Interstate	I029 N over Big Sioux Rv
Hughes	1950	7,155	Urban minor arterial	Capitol Ave over Capitol Lake Outlet

**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.