

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

- The state has identified needed repairs on 14,905 bridges.
- Over the life of the IIJA, Iowa will receive a total of \$467.1 million in bridge formula funds, which will help make needed repairs.
- Iowa currently has access to \$186.8 million of that total, and has committed \$29.8 million towards 39 projects as of June 2023.
- Of the 23,720 bridges in the state, 4,558, or 19.2 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 4,575 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	377	379,884	5,111,860	1	648	13,450
Other principal arterial	1,273	1,029,882	5,681,607	6	3,782	20,580
Minor arterial	1,068	610,510	2,014,429	15	8,348	25,434
Major collector	3,420	1,271,628	2,572,999	654	240,107	436,880
Minor collector	3,850	1,003,648	552,145	730	149,178	87,706
Local	11,359	1,837,644	612,931	2,978	335,901	129,747
<b>Urban Bridges</b>						
Interstate	338	722,537	7,991,500	4	35,060	47,100
Freeway/expressway	0	0	0	0	0	0
Other principal arterial	644	1,136,452	5,689,639	5	27,941	68,772
Minor arterial	557	628,706	3,272,466	48	66,653	303,465
Collector	322	196,493	824,494	33	18,266	55,936
Local	512	158,159	414,973	84	17,516	51,233
<b>Total</b>	<b>23,720</b>	<b>8,975,543</b>	<b>34,739,044</b>	<b>4,558</b>	<b>903,401</b>	<b>1,240,303</b>

## Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	6,616	\$1,810.0	1,467,476	1,196,064
Widening & rehabilitation	56	\$28.1	107,189	27,449
Rehabilitation	1,105	\$412.4	829,113	392,736
Deck rehabilitation/replacement	40	\$21.0	37,196	20,069
Other work	7,088	\$1,919.9	2,771,595	1,868,800
<b>Total</b>	<b>14,905</b>	<b>\$4,191.4</b>	<b>5,212,569</b>	<b>3,505,119</b>

## Top Most Traveled Structurally Deficient Bridges in Iowa

County	Year Built	Daily Crossings	Type of Bridge	Location
Scott	1940	29,800	Urban other principal arterial	Centennial Bridge
Scott	1970	23,900	Urban Interstate	I-280 over Mississippi River & Road
Polk	1936	17,535	Urban minor arterial	2nd Ave over Birdland Dr
Polk	1935	17,535	Urban minor arterial	2nd Ave over Des Moines River
Scott	1900	15,300	Urban minor arterial	Eastern Ave over Duck Creek
Polk	1967	14,122	Urban minor arterial	Sw 9th St over Cherry, RR, Mlk Pkwy
Johnson	1972	14,039	Urban minor arterial	Gilbert St over Ralston Creek
Poweshiek	1963	13,450	Rural Interstate	I 80 WB over Iowa 21
Poweshiek	1962	11,100	Urban Interstate	EB I 80 over Iowa 146
Lee	1915	10,964	Urban minor arterial	Ave L over Dry Creek

**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.