National Bridge Inventory: Iowa

- The state has identified needed repairs on 14,923 bridges.
- This compares to 15,308 bridges that needed work in 2020.
- 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 $280.2 million of that total, and has committed $92.0 million towards 119 projects as of June 2024.
- Of the 23,719 bridges in the state, 4,544, 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 4,571 bridges classified as structurally deficient in 2020.
- The deck area of structurally deficient bridges accounts for 9.9 percent of total deck area on all structures.

1

Compared to 2 in 2023

in the nation in % of structurally deficient bridges

1. Iowa	19.0%
2. West Virginia	19.0%

1

Compared to 1 in 2023

in the nation in # of structurally deficient bridges

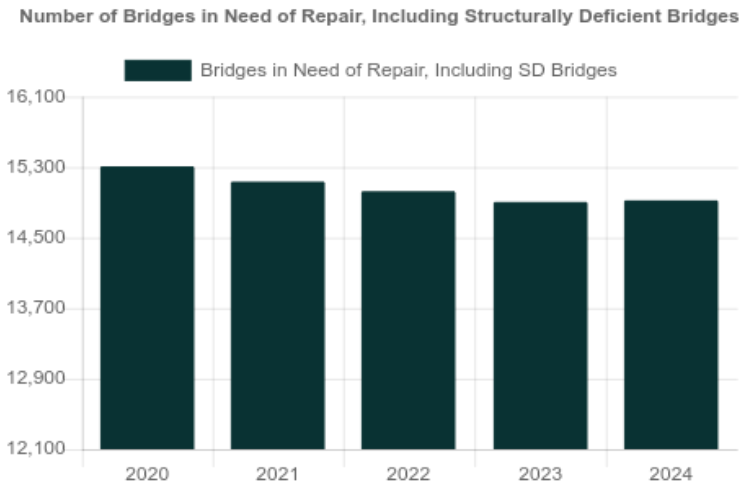
1. Iowa	4,544
2. Pennsylvania	2,932

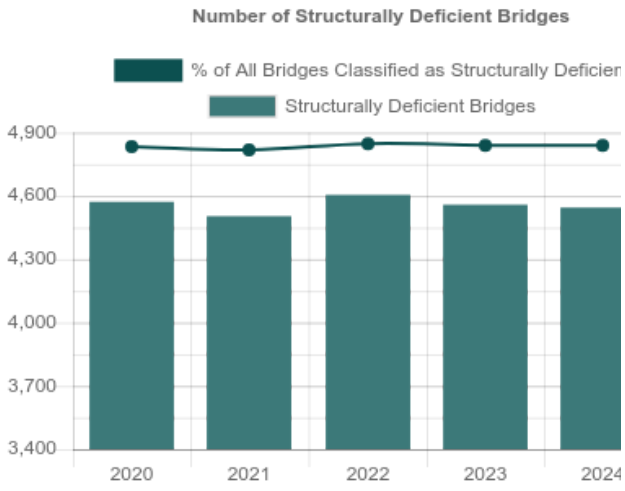
8

Compared to 7 in 2023

in the nation in % of structurally deficient bridge deck area

1. Rhode Island	14.0%
8. Iowa	10.0%
9. South Dakota	9.0%





Top Most Traveled Structurally Deficient Bridges in Iowa

County	Year Built	Daily Crossings	Type of Bridge	Location
Scott	1940	26,500	Urban other principal arterial	Centennial Bridge
Polk	1936	15,634	Urban other principal arterial	Fleur Dr over Old UP RR & SW 22nd
Scott	1900	15,300	Urban minor arterial	Eastern Ave over Duck Creek
Polk	1967	14,108	Urban minor arterial	Sw 9th St over Cherry, RR, Mlk Pkwy
Johnson	1972	14,025	Urban minor arterial	Gilbert St over Ralston Creek
Poweshiek	1963	13,300	Rural Interstate	I 80 WB over Iowa 21
Polk	1967	12,809	Urban minor arterial	Sw 9th St over Raccoon River & Trail
Lee	1915	10,953	Urban minor arterial	Ave L over Dry Creek
Johnson	1915	10,950	Urban other principal arterial	Ia 1 NB over Iowa River
Linn	1988	10,789	Urban minor arterial	8th Ave over Indian Creek
Marshall	1951	10,448	Urban minor arterial	So Center St over Linn Creek
Linn	1969	10,268	Urban other principal arterial	Edgewood Rd NE over Cedar River & RR
Scott	1978	10,200	Urban minor arterial	Eastern Ave over Goose Creek
Webster	1968	9,860	Urban minor arterial	1St Ave S over 21St St & RR
Linn	1968	9,703	Urban minor arterial	Center Point Rd over Cc RR
Marshall	1951	9,491	Urban minor arterial	So Center St over RR and Madison St
Linn	1938	9,382	Urban other principal arterial	8th Ave over Cedar River
Woodbury	1962	8,957	Urban minor arterial	6th St over Floyd River
Webster	1955	8,894	Urban other principal arterial	5th Ave over drainage Ditch
Webster	1974	8,798	Urban minor arterial	N 15th St over Soldier Creek
Black Hawk	1950	8,392	Urban minor arterial	E Ridgeway Ave over Dry Run Creek
Polk	1976	7,911	Urban minor arterial	Se 6th St over Des Moines River
Benton	1950	7,600	Rural arterial	US 30 over Prairie Creek
Pottawattamie	1976	7,488	Urban other principal arterial	South Expressway over Viaduct(RR & Streets)
Floyd	1914	6,893	Urban minor arterial	Gilbert St over Shermans Creek

Bridge Inventory: Iowa

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	377	380,974	5,090,625	1	648	13,300
Rural arterial	1,281	1,037,766	5,682,800	5	3,103	19,850
Rural minor arterial	1,073	617,125	2,027,605	17	8,691	29,887
Rural major collector	3,424	1,275,619	2,553,251	669	245,912	444,374
Rural minor collector	3,847	1,009,142	547,303	722	147,759	86,617
Rural local road	11,322	1,841,792	603,068	2,959	335,555	127,254
Urban Interstate	347	780,298	8,081,530	0	0	0
Urban freeway/expressway	0	0	0	0	0	0
Urban other principal arterial	650	1,148,948	5,663,796	7	38,372	89,116
Urban minor arterial	560	631,358	3,289,445	50	78,480	300,160
Urban collector	322	204,088	819,661	30	20,727	52,181
Urban local road	516	168,533	411,361	84	19,861	57,031
Total	23,719	9,095,643	34,770,445	4,544	899,108	1,219,770

Proposed Bridge Work

Type of Work	Number of Bridges	Cost to Repair (in millions)	Daily Crossings	Area of Bridges (sq. meters)
Bridge replacement	6,386	$1,651	1,395,340	1,136,343
Widening & rehabilitation	54	$27	106,598	27,284
Rehabilitation	1,104	$371	832,090	374,414
Deck rehabilitation/replacement	37	$19	36,694	19,366
Other structural work	7,342	$1,924	2,990,399	1,946,554
Total	14,923	$3,993	5,361,121	3,503,960

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.