

National Bridge Inventory: Oklahoma

- The state has identified needed repairs on 20,449 bridges.
- This compares to 21,200 bridges that needed work in 2020.
- Over the life of the IIJA, Oklahoma will receive a total of \$288.0 million in bridge formula funds, which will help make needed repairs.
- Oklahoma currently has access to \$172.8 million of that total, and has committed \$163.3 million towards 87 projects as of June 2024.
- Of the 22,917 bridges in the state, 1,764, or 7.7 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 2,326 bridges classified as structurally deficient in 2020.
- The deck area of structurally deficient bridges accounts for 3.4 percent of total deck area on all structures.

17 Compared to 16 in 2023				
in the nation in % of				
structurally deficient				
bridges				
1. Iowa	19.0%			
16. Alaska	8.0%			
17. Oklahoma	8.0%			

18. New Hampshire

5
Compared to 5 in 2023
in the nation in # of
structurally deficient
bridges

I. IOWA	4,544
4. Missouri	2,203
5. Oklahoma	1 764
	1,704

37 Compared to 36 in 2023 in the nation in % of structurally deficient bridge deck area

1. Rhode Island	14.0%
36. Ohio	4.0%
37. Oklahoma	3.0%
38. Idaho	3.0%

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

8.0%



Number of Structurally Deficient Bridges



Top Most Traveled Structurally Deficient Bridges in Oklahoma

County	Year Built	Daily Crossings	Type of Bridge	Location
Oklahoma	1959	99,100	Urban Interstate	I-240 over I-35 Under
Tulsa	1978	34,000	Urban freeway/expressway	U.S. 75 over Creek
Tulsa	1999	23,380	Urban local road	Kenosha St. over Floral Haven Creek
Oklahoma	1971	22,800	Urban minor arterial	NW 122nd St. over Spring Creek
Oklahoma	1974	22,500	Urban minor arterial	Macarthur Blvd. over N. Canadian River
Oklahoma	1952	22,000	Urban minor arterial	May Ave. over Northwest Expy Under
Oklahoma	1954	21,300	Urban minor arterial	SE 29th St(E1090) over Kuhlman Creek
Oklahoma	1942	20,500	Rural major collector	SE 29th St(1090) over Crutcho Creek
Oklahoma	1945	20,000	Urban minor arterial	S.W 59th Street over Lightning Creek
Oklahoma	1940	20,000	Urban minor arterial	NW 136th St. over Creek
Tulsa	1965	19,481	Urban collector	Fau 83(E 31St S over Mingo Creek
Tulsa	1975	19,279	Urban collector	Fau 83(E.31St.) over Brookhollow Creek
Oklahoma	1980	19,000	Urban minor arterial	N Macarthur Blvd. over Spring Creek
Oklahoma	1971	17,000	Urban minor arterial	NW 10th St. W.B. over Street-Ramp-Creek Under
Pottawatomie	1961	16,750	Rural Interstate	I-40 over U.S. 177 Under
Oklahoma	1985	16,500	Urban minor arterial	NE 10th St over N. Canadian River
Pottawatomie	1961	16,100	Rural minor arterial	U.S. 270 Ramp S-W over I-40 /U.S. 177 Under
Oklahoma	1974	15,000	Urban collector	E1070 (Reno Ave.) over Crutcho Creek
Comanche	1942	14,994	Urban other principal arterial	Fau 7681 (Sheridan over Numu Creek
McClain	1968	14,950	Rural Interstate	I-35 over S.H. 39 Under
Tulsa	1965	14,523	Urban collector	Fau 8220 (E 71St S over Joe Creek
Oklahoma	1971	14,400	Urban minor arterial	E.B. NW 10 St. over StreetCreek Under
Oklahoma	1940	14,100	Urban collector	Portland Ave. over Deep Fork Creek
Oklahoma	2000	14,000	Urban minor arterial	Western Ave. over Brock Creek
Oklahoma	1984	13,800	Urban local road	NW 178th St. over Creek

Bridge Inventory: Oklahoma

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	604	577,576	8,662,126	3	1,571	39,150
Rural arterial	1,410	1,165,730	7,752,383	10	13,177	39,050
Rural minor arterial	1,211	819,092	3,711,028	9	8,843	44,740
Rural major collector	7,081	2,285,980	6,119,645	492	97,409	206,259
Rural minor collector	6	9,532	3,195	1	4,132	830
Rural local road	9,210	1,447,842	1,842,081	1,090	116,780	164,642
Urban Interstate	553	945,697	19,822,579	1	2,621	99,100
Urban freeway/expressway	444	600,471	11,249,990	1	123	34,000
Urban other principal arterial	361	435,700	4,147,429	4	2,516	39,344
Urban minor arterial	707	459,838	4,778,434	52	27,194	389,557
Urban collector	581	451,980	3,461,660	40	29,427	192,539
Urban local road	749	178,877	1,274,837	61	16,082	93,896
Total	22,917	9,378,315	72,825,387	1,764	319,876	1,343,107

Proposed Bridge Work

Type of Work	Number of Bridges	Cost to Repair (in millions)	Daily Crossings	Area of Bridges (sq. meters)
Bridge replacement	14,675	\$12,798	43,955,623	6,801,686
Widening & rehabilitation	4,881	\$983	21,532,013	770,545
Rehabilitation	102	\$57	294,678	44,659
Deck rehabilitation/replacement	0	\$0	0	0
Other structural work	791	\$156	829,658	135,174
Total	20,449	\$13,994	66,611,972	7,752,064

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.