

### Highlights from FHWA's 2020 National Bridge Inventory Data

- Of the 23,155 bridges in the state, 2,326, or 10.0 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 2,877 bridges classified as structurally deficient in 2016.
- The deck area of structurally deficient bridges accounts for 4.9 percent of total deck area on all structures.
- 18 of the structurally deficient bridges are on the Interstate Highway System. A total of 98.4 percent of the structurally deficient bridges are not on the National Highway System, which includes the Interstate and other key roads linking major airports, ports, rail and truck terminals.
- 3,749 bridges are posted for load, which may restrict the size and weight of vehicles crossing the structure.
- The state has identified needed repairs on 21,200 bridges at an estimated cost of \$11.6 billion.

### Bridge Inventory

Type of Bridge <sup>4</sup>	All Bridges			Structurally Deficient Bridges		
	Total Number	Area (sq. meters)	Daily Crossings	Total Number	Area (sq. meters)	Daily Crossings
<b>Rural Bridges</b>						
Interstate	597	579,109	8,549,850	5	7,073	38,900
Other principal arterial	1,397	1,145,658	7,577,423	10	12,523	61,650
Minor arterial	1,205	786,483	3,688,887	19	25,105	71,740
Major collector	7,150	2,226,818	6,064,877	595	137,569	223,301
Minor collector	5	9,489	3,960	1	4,132	1,700
Local	9,524	1,393,417	1,833,413	1,505	137,098	190,738
<b>Urban Bridges</b>						
Interstate	496	775,279	18,602,387	13	20,568	518,700
Freeway/expressway	419	533,740	11,226,020	6	4,675	195,100
Other principal arterial	355	397,457	4,169,487	5	7,610	33,207
Minor arterial	703	456,323	4,714,780	47	20,907	333,077
Collector	586	462,429	3,459,790	54	37,768	230,222
Local	718	167,871	1,235,022	66	15,325	102,902
<b>Total</b>	<b>23,155</b>	<b>8,934,073</b>	<b>71,125,896</b>	<b>2,326</b>	<b>430,354</b>	<b>2,001,237</b>

### Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	15,643	\$10,694,425.1	45,150,585	6,990,326
Widening & rehabilitation	4,960	\$825,231.6	21,793,329	790,687
Rehabilitation	88	\$44,908.4	282,243	43,259
Deck rehabilitation/replacement				
Other work	509	\$84,562.2	473,716	90,999
<b>Total</b>	<b>21,200</b>	<b>\$11,649,127.2</b>	<b>67,699,873</b>	<b>7,915,271</b>

### Top Most Traveled Structurally Deficient Bridges in Oklahoma

County	Year Built	Daily Crossings	Type of Bridge	Location
Oklahoma	1975	62,800	Urban Interstate	I-44 over Oklahoma River/ Co. Rd.
Oklahoma	1975	61,950	Urban Interstate	I-44 over Oklahoma River/ Co. Rd.
Oklahoma	1974	55,650	Urban Interstate	I-44 NB over Independence Ave Under
Tulsa	1972	46,000	Urban Interstate	I-444 WB Ramp over I-244 Under
Oklahoma	1962	43,900	Urban Interstate	I-235 NB over I-44 Under
Tulsa	1968	42,850	Urban freeway/expressway	U.S. 64 / S.H. 51 over 15 St. Under
Tulsa	1968	42,400	Urban freeway/expressway	U.S. 64 / S.H. 51 over U.P. R.R. Under
Tulsa	1968	42,400	Urban freeway/expressway	U.S. 64 / S.H. 51 over Lewis Ave Under
Oklahoma	1962	40,300	Urban Interstate	I-235 SB over I-44 Under
Oklahoma	1960	39,000	Urban Interstate	I-40 EB over FAU 9440 (Se 15 St) Und

**About the data:** Data is from the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), downloaded on March 11, 2021. 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 2019 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.

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