

## Highlights from FHWA's 2019 National Bridge Inventory Data

- Of the 23,138 bridges in the state, 2,352, or 10.2 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 3,105 bridges classified as structurally deficient in 2015.
- The deck area of structurally deficient bridges accounts for 5.4 percent of total deck area on all structures.
- 31 of the structurally deficient bridges are on the Interstate Highway System.
- 3,788 bridges are posted for load, which may restrict the size and weight of vehicles crossing the structure.
- The state has identified needed repairs on 21,247 bridges at an estimated cost of \$9.1 billion.
- This compares to 22,083 bridges that needed work in 2015.

## 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	601	558,084	8,578,000	6	5,658	72,400
Other principal arterial	1,398	1,061,711	7,538,700	14	16,091	65,900
Minor arterial	1,210	753,862	3,699,087	26	28,919	91,410
Major collector	7,143	2,185,350	6,033,133	601	146,382	238,867
Minor collector	5	10,027	3,960	1	4,132	1,700
Local	9,529	1,402,421	1,808,471	1,505	135,132	184,552
<b>Urban Bridges</b>						
Interstate	499	762,070	18,654,587	25	33,998	973,550
Freeway/expressway	418	521,881	11,208,870	8	6,288	280,800
Other principal arterial	357	376,010	4,186,487	10	22,238	84,607
Minor arterial	701	442,438	4,704,377	44	20,264	292,309
Collector	579	439,368	3,395,845	43	31,146	147,666
Local	698	160,978	1,240,370	69	16,956	138,314
<b>Total</b>	<b>23,138</b>	<b>8,674,200</b>	<b>71,051,888</b>	<b>2,352</b>	<b>467,202</b>	<b>2,572,075</b>

## Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	15,827	\$8,339	45,317,183	7,028,335
Widening & rehabilitation	4,974	\$643	21,809,824	795,657
Rehabilitation	81	\$34	281,010	41,589
Deck rehabilitation/replacement	0	\$0	0	0
Other work	365	\$54	358,653	69,650
<b>Total</b>	<b>21,247</b>	<b>\$9,070</b>	<b>67,766,670</b>	<b>7,935,231</b>

## Top Most Traveled Structurally Deficient Bridges in Oklahoma

County	Year Built	Daily Crossings	Type of Bridge	Location
Oklahoma	1973	77,000	Urban Interstate	I-44 E-S Ramp over S.H. 66 & S.H. 3 Under
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	1971	47,200	Urban Interstate	I-444 over Houston Ave. Under
Oklahoma	1951	46,450	Urban Interstate	I-44 WB over Deep Fork Creek
Oklahoma	1951	46,150	Urban Interstate	I-44 EB over Deep Fork Creek
Tulsa	1972	46,000	Urban Interstate	I-444 over 6th St. Under
Tulsa	1972	45,300	Urban Interstate	I-444 Ramp over N. 30th St Under
Oklahoma	1962	43,900	Urban Interstate	I-235 NB over I-44 Under

**About the data:** Data is from the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), released April 2, 2020. 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 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 2018 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.