

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

- Of the 27,072 bridges in the state, 1,377, or 5.1 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 1,882 bridges classified as structurally deficient in 2016.
- The deck area of structurally deficient bridges accounts for 3.4 percent of total deck area on all structures.
- 20 of the structurally deficient bridges are on the Interstate Highway System. A total of 95.2 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.
- 1,465 bridges are posted for load, which may restrict the size and weight of vehicles crossing the structure.
- The state has identified needed repairs on 3,263 bridges at an estimated cost of \$2.4 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	560	638,745	12,885,901	3	1,350	55,045
Other principal arterial	977	672,706	6,554,389	11	5,056	62,633
Minor arterial	851	347,444	3,701,657	13	5,553	76,487
Major collector	3,889	1,179,578	7,658,478	136	38,298	246,703
Minor collector	2,637	476,268	2,010,531	176	23,848	132,404
Local	10,008	1,596,288	5,885,525	712	87,833	320,841
<b>Urban Bridges</b>						
Interstate	1,638	3,026,216	73,929,918	17	59,964	675,456
Freeway/expressway	1,009	1,504,655	19,526,381	6	4,643	77,254
Other principal arterial	1,239	1,804,486	17,086,434	51	76,790	678,138
Minor arterial	1,570	1,505,530	14,362,524	69	97,100	599,349
Collector	1,372	810,122	7,008,121	72	41,077	314,165
Local	1,322	492,513	3,467,501	111	28,751	166,366
<b>Total</b>	<b>27,072</b>	<b>14,054,551</b>	<b>174,077,360</b>	<b>1,377</b>	<b>470,264</b>	<b>3,404,841</b>

### Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	1,170	\$636,604.4	3,424,868	318,656
Widening & rehabilitation	117	\$102,363.3	700,939	73,455
Rehabilitation	1,495	\$1,004,216.1	4,726,071	731,327
Deck rehabilitation/replacement	179	\$439,415.9	2,471,796	313,507
Other work	302	\$182,044.9	1,154,588	132,099
<b>Total</b>	<b>3,263</b>	<b>\$2,364,644.6</b>	<b>12,478,262</b>	<b>1,569,045</b>

### Top Most Traveled Structurally Deficient Bridges in Ohio

County	Year Built	Daily Crossings	Type of Bridge	Location
Cuyahoga	1960	112,665	Urban Interstate	Ir90 over E 152nd over Cr-362 (E 152 St)
Cuyahoga	1971	106,617	Urban Interstate	Ir 90 over Rocky River Valley
Stark	1969	82,023	Urban Interstate	I.R. 77 over W Br Nimish Cr & Abd RR
Cuyahoga	1980	77,220	Urban Interstate	Ramp Es from I-480 over IR 480 Mainline
Franklin	1975	61,022	Urban Interstate	I-70 over 70WB over Scioto River
Stark	1969	52,522	Urban Interstate	I.R. 77 over Market Cleveland & 15th
Hamilton	1931	43,788	Urban other principal arterial	Western Hills Viad over Mill Creek, State Ave
Franklin	1960	41,064	Urban Interstate	I-71 over Frank Rd
Richland	1958	35,205	Urban freeway/expressway	Usr 30 over Erie RR Spur
Franklin	1962	28,627	Urban other principal arterial	Broad St (US40) over I-71

**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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