Ohio

American Road & Transportation Builders Association

State Bridge Profile

Highlights from FHWA's 2023 National Bridge Inventory Data

- The state has identified needed repairs on 3,183 bridges.
- Over the life of the IIJA, Ohio will receive a total of $521.5 million in bridge formula funds, which will help make needed repairs.
- Ohio currently has access to $208.6 million of that total, and has committed $24.6 million towards 37 projects as of June 2023.
- Of the 26,960 bridges in the state, 1,251, or 4.6 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 1,457 bridges classified as structurally deficient in 2019.

Bridge Inventory

Type of Bridge	All Bridges			Structurally Deficient Bridges		
	Total Number	Area (sq. meters)	Daily Crossings	Total Number	Area (sq. meters)	Daily Crossings
Rural Bridges						
Interstate	554	645,178	12,405,737	1	487	20,873
Other principal arterial	969	674,940	6,592,080	10	4,178	60,556
Minor arterial	852	361,442	3,753,445	17	6,389	75,453
Major collector	3,719	1,115,492	7,040,937	116	26,617	205,883
Minor collector	2,548	453,168	1,916,562	162	22,311	91,963
Local	9,917	1,554,805	5,573,489	655	79,563	288,317
Urban Bridges						
Interstate	1,636	3,068,898	74,246,379	26	80,499	1,220,632
Freeway/expressway	999	1,426,512	19,427,566	9	10,243	135,299
Other principal arterial	1,230	1,849,940	17,568,705	42	100,522	673,300
Minor arterial	1,543	1,517,897	14,599,296	63	100,268	644,259
Collector	1,624	957,896	8,270,367	72	36,080	318,038
Local	1,369	498,778	3,170,543	78	21,919	149,818
Total	**26,960**	**14,124,945**	**174,565,104**	**1,251**	**489,076**	**3,884,391**

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	1,155	$829.6	3,551,448	322,664
Widening & rehabilitation	112	$118.7	650,657	69,578
Rehabilitation	1,418	$1,337.2	5,266,358	774,865
Deck rehabilitation/replacement	190	$544.3	2,576,928	323,317
Other work	308	$228.7	1,132,929	132,742
Total	**3,183**	**$3,058.5**	**13,178,320**	**1,623,167**

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Top Most Traveled Structurally Deficient Bridges in Ohio

County	Year Built	Daily Crossings	Type of Bridge	Location
Cuyahoga	1971	142,337	Urban Interstate	Ir 480 over Cr 8 (Lee Rd)
Cuyahoga	1971	106,617	Urban Interstate	Ir 90 over Rocky River Valley
Hamilton	1960	91,244	Urban Interstate	IR 75 over Tributary Mill Creek
Cuyahoga	1980	77,220	Urban Interstate	Ramp SW from I-71 over IR 480 Mainline
Cuyahoga	1980	77,220	Urban Interstate	Ramp Es from I-480 over IR 480 Mainline
Hamilton	1965	67,075	Urban Interstate	NB IR 75 over Mill Cr;Benson St;Nsrr;S
Franklin	1975	61,022	Urban Interstate	I-70 over IR 70W over Scioto River
Cuyahoga	1962	59,893	Urban Interstate	IR 77 over E 22 St
Cuyahoga	1962	59,893	Urban Interstate	IR 77 over US-422 WB (Cuy-422-0125)
Cuyahoga	1962	59,893	Urban Interstate	IR 77 over E 14th St

About the data: Data is from the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), downloaded on February 1, 2023. Note that specific conditions on bridges may have changed because 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 2020 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.