

Highlights from FHWA's 2018 National Bridge Inventory Data

- Of the 27,277 bridges in the state, 1,518, or 5.6 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 2,017 bridges classified as structurally deficient in 2014.
- 20 of the structurally deficient bridges are on the Interstate Highway System.
- 1,206 bridges are posted for load, which may restrict the size and weight of vehicles crossing the structure.
- The state has identified needed repairs on 3,296 bridges at an estimated cost of \$1.6 billion.
- This compares to 3,236 bridges that needed work in 2014.

Bridge Inventory

Type of Bridge ⁴	All Bridges			Structurally Deficient Bridges		
	Total Number	Area (sq. meters)	Daily Crossings	Total Number	Area (sq. meters)	Daily Crossings
Rural Bridges						
Interstate	838	954,122	19,873,431	6	4,642	122,032
Other principal arterial	1,408	1,228,030	10,793,029	16	5,429	103,891
Minor arterial	926	438,801	4,506,243	18	6,733	98,109
Major collector	3,872	1,343,429	9,254,378	141	41,941	256,391
Minor collector	3,016	576,200	2,914,033	198	32,283	179,033
Local	10,657	1,819,753	7,290,316	817	109,817	402,825
Urban Bridges						
Interstate	1,348	2,691,485	67,716,608	14	24,281	501,526
Freeway/expressway	767	1,160,300	16,380,500	7	4,696	86,663
Other principal arterial	908	1,342,162	13,576,514	46	83,601	705,737
Minor arterial	1,101	1,124,153	10,394,530	60	104,140	540,771
Collector	1,014	682,884	7,026,717	76	34,122	374,705
Local	1,422	595,265	4,745,955	119	30,386	264,481
Total	27,277	13,956,582	174,472,256	1,518	482,071	3,636,164

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	1,109	\$574,460	2,723,414	278,820
Widening & rehabilitation	122	\$75,877	743,103	76,201
Rehabilitation	1,619	\$552,566	4,866,214	759,370
Deck rehabilitation/replacement	163	\$317,025	2,362,469	300,614
Other work	283	\$89,609	949,548	116,642
Total	3,296	\$1,609,538	11,644,748	1,531,647

Top Most Traveled Structurally Deficient Bridges in Ohio

County	Year Built	Daily Crossings	Type of Bridge	Location
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
Lucas	1964	63,710	Urban Interstate	I-75 over Segur Ave
Hamilton	1938	56,580	Urban other principal arterial	Columbia Parkway over IR471,Ramp,Egg,Cul
Stark	1969	52,522	Urban Interstate	I.R. 77 over Market Cleveland & 15th
Cuyahoga	1964	48,713	Urban Interstate	I-77 over IR-77-1436Sw,IR-77-1437N
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
Summit	1963	37,830	Urban Interstate	I-76 over On Rmp over Main to 76 W
Richland	1958	35,205	Urban freeway/expressway	US 30 over Erie RR Spur

About the data: Data is from the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), released March 15, 2019. 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 2017 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.