

Highlights from FHWA's 2019 National Bridge Inventory Data

- Of the 14,394 bridges in the state, 1,042, or 7.2 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 1,074 bridges classified as structurally deficient in 2015.
- The deck area of structurally deficient bridges accounts for 5.0 percent of total deck area on all structures.
- 26 of the structurally deficient bridges are on the Interstate Highway System.
- 4,315 bridges are posted for load, which may restrict the size and weight of vehicles crossing the structure.
- The state has identified needed repairs on 3,377 bridges at an estimated cost of \$2.5 billion.
- This compares to 3,452 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
Rural Bridges						
Interstate	423	494,741	8,513,266	10	14,079	208,680
Other principal arterial	799	968,481	4,956,693	6	12,562	54,861
Minor arterial	675	480,354	2,828,479	28	25,428	104,500
Major collector	1,919	760,930	3,956,052	132	38,685	238,909
Minor collector	2,434	601,645	1,644,344	216	41,014	144,329
Local	5,865	829,689	1,262,854	521	55,626	120,113
Urban Bridges						
Interstate	460	917,774	28,835,837	16	85,684	1,044,311
Freeway/expressway	140	145,312	3,199,482	0	0	0
Other principal arterial	285	449,566	4,180,284	7	6,977	133,991
Minor arterial	506	546,870	5,512,897	19	20,408	218,867
Collector	427	228,973	1,801,923	44	19,729	156,359
Local	461	113,115	696,155	43	6,591	45,915
Total	14,394	6,537,450	67,388,264	1,042	326,782	2,470,835

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	650	\$550	1,155,053	291,936
Widening & rehabilitation	2,067	\$1,474	20,559,516	1,105,202
Rehabilitation	532	\$186	890,926	148,744
Deck rehabilitation/replacement	3	\$18	5,558	13,163
Other work	125	\$225	1,045,357	164,133
Total	3,377	\$2,453	23,656,410	1,723,179

Top Most Traveled Structurally Deficient Bridges in Kentucky

County	Year Built	Daily Crossings	Type of Bridge	Location
Jefferson	1959	118,646	Urban Interstate	I-65 over S Brook, E Kentucky St
Jefferson	1957	118,646	Urban Interstate	I-65 over CSX RR, Burnett, Hill St
Jefferson	1965	90,900	Urban Interstate	I-64 over CSX, 1St, Flyd, Prestn, Rvr
Jefferson	1972	90,176	Urban Interstate	I-64 over 3rd, 5th, Rvr Rd, Belvedere
Jefferson	1963	84,001	Urban Interstate	I-65 over Brook St, Muhammad Ali
Jefferson	1970	77,284	Urban Interstate	I-64 EB On Ramp over Mid Fk Beargrass Creek
Jefferson	1976	72,943	Urban Interstate	I-64 over Old P and L RR (7-13 St)
Jefferson	1984	70,202	Urban Interstate	I-265 over Avoca-Quarry Rd
Jefferson	1970	67,529	Urban Interstate	I-264 over P and L Railway Wye
Jefferson	1963	47,313	Urban Interstate	I-64 EB over Tucker Station Rd

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.