

Highlights from FHWA's 2020 National Bridge Inventory Data

- Of the 19,327 bridges in the state, 1,111, or 5.7 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 1,464 bridges classified as structurally deficient in 2016.
- The deck area of structurally deficient bridges accounts for 3.7 percent of total deck area on all structures.
- 28 of the structurally deficient bridges are on the Interstate Highway System. A total of 95.1 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.
- 1,955 bridges are posted for load, which may restrict the size and weight of vehicles crossing the structure.
- The state has identified needed repairs on 3,198 bridges at an estimated cost of \$2.3 billion.

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	904	821,671	13,316,620	11	22,834	170,457
Other principal arterial	898	645,247	7,188,796	15	5,231	120,167
Minor arterial	739	424,534	4,020,160	21	12,110	117,286
Major collector	2,733	1,010,566	5,870,507	126	44,736	233,611
Minor collector	2,375	537,831	1,282,335	171	25,853	69,319
Local	7,571	1,164,076	2,010,023	554	66,769	99,905
Urban Bridges						
Interstate	782	1,231,773	34,539,204	17	30,612	1,123,058
Freeway/expressway	449	617,405	7,823,299	10	11,077	148,446
Other principal arterial	539	679,681	10,250,557	14	28,963	255,503
Minor arterial	768	586,836	7,961,930	45	23,142	425,325
Collector	679	314,943	4,009,732	44	19,509	182,408
Local	890	227,325	1,398,964	83	16,505	151,341
Total	19,327	8,261,888	99,672,128	1,111	307,342	3,096,826

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	1,257	\$368,453.1	1,203,798	158,831
Widening & rehabilitation	40	\$41,458.6	278,762	21,688
Rehabilitation	1,455	\$1,486,842.5	8,319,610	829,350
Deck rehabilitation/replacement	140	\$160,119.1	546,141	89,353
Other work	306	\$207,271.2	1,532,029	125,458
Total	3,198	\$2,264,144.5	11,880,340	1,224,680

Top Most Traveled Structurally Deficient Bridges in Indiana

County	Year Built	Daily Crossings	Type of Bridge	Location
Marion	1974	186,289	Urban Interstate	I-65, CD over CSX RR Ohio St
Marion	1974	186,289	Urban Interstate	I-65, CD over New York Street
Marion	1974	186,289	Urban Interstate	I-65, CD over Vermont Street
Marion	1973	137,908	Urban Interstate	I-70 over Meridian Street
Marion	1974	104,550	Urban Interstate	I-65 Ramp 5W S over Washington St/Old US 40
Marion	1974	82,883	Urban Interstate	I-65 NB, I-70 EB over East Tenth Street
Marion	1967	60,746	Urban Interstate	I-465 EB over West 96th Street
Marion	1967	60,746	Urban Interstate	I-465 WB over West 96th Street
Marion	1963	46,327	Urban Interstate	I-65 NB over Keystone Avenue
Vanderburgh	1956	44,520	Urban freeway/expressway	SR 62 over Evansville Western RR

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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