

Highlights from FHWA's 2019 National Bridge Inventory Data

- Of the 6,786 bridges in the state, 529, or 7.8 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 549 bridges classified as structurally deficient in 2015.
- The deck area of structurally deficient bridges accounts for 7.4 percent of total deck area on all structures.
- 37 of the structurally deficient bridges are on the Interstate Highway System.
- 308 bridges are posted for load, which may restrict the size and weight of vehicles crossing the structure.
- The state has identified needed repairs on 2,357 bridges at an estimated cost of \$9.9 billion.
- This compares to 2,339 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	62	103,683	2,575,109	2	1,278	115,299
Other principal arterial	90	176,710	2,097,232	8	7,011	166,361
Minor arterial	80	42,620	591,470	12	3,479	86,834
Major collector	158	50,222	595,226	14	4,236	47,364
Minor collector	82	21,056	193,773	4	470	7,489
Local	557	93,057	456,640	48	4,650	22,172
Urban Bridges						
Interstate	1,064	2,706,374	61,569,823	35	118,153	1,730,904
Freeway/expressway	835	1,379,823	45,439,503	29	147,471	1,867,797
Other principal arterial	916	1,317,524	27,186,023	102	116,390	2,470,252
Minor arterial	1,220	872,615	15,096,263	136	108,948	1,746,243
Collector	696	312,913	4,382,351	64	22,622	374,048
Local	1,026	374,919	3,533,817	75	16,645	155,589
Total	6,786	7,451,516	163,717,232	529	551,354	8,790,352

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	629	\$2,085	9,874,068	408,605
Widening & rehabilitation	563	\$1,240	10,229,969	359,999
Rehabilitation	207	\$1,804	4,502,613	528,954
Deck rehabilitation/replacement	97	\$270	2,838,187	78,654
Other work	861	\$4,500	21,390,301	1,313,063
Total	2,357	\$9,899	48,835,138	2,689,274

Top Most Traveled Structurally Deficient Bridges in New Jersey

County	Year Built	Daily Crossings	Type of Bridge	Location
Bergen	1931	159,180	Urban freeway/expressway	NJ 4 over Hackensack Rivr & Road
Passaic	1969	158,151	Urban Interstate	I-80 over Pas Riv, Mcbride & Rvrvw
Hudson	1939	154,150	Urban freeway/expressway	NJ 495 over US1&9, Paterson Plank Rd
Passaic	1939	135,620	Urban other principal arterial	US 46 over Lower Notch Road
Essex	1970	130,764	Urban Interstate	Njtpk Snw&Nsw Rwy over Passaic Riv, Pcurr, Crr, Con
Bergen	1931	126,781	Urban freeway/expressway	NJ 17 over Central Avenue
Bergen	1932	124,190	Urban freeway/expressway	NJ 17 over NYS & W RR Spur
Bergen	1931	124,190	Urban freeway/expressway	NJ 17 over NYS & W RR
Morris	1959	116,241	Urban Interstate	I-80 Eastbound over Rockaway River
Hudson	1929	113,235	Urban freeway/expressway	NJ Rt 3 over Northern Sec. & Ramp A

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.