

Highlights from FHWA's 2018 National Bridge Inventory Data

- Of the 6,746 bridges in the state, 544, or 8.1 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 570 bridges classified as structurally deficient in 2014.
- 40 of the structurally deficient bridges are on the Interstate Highway System.
- 307 bridges are posted for load, which may restrict the size and weight of vehicles crossing the structure.
- The state has identified needed repairs on 2,305 bridges at an estimated cost of \$7.0 billion.
- This compares to 2,445 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	63	90,073	2,621,405	2	1,276	115,299
Other principal arterial	88	176,412	2,036,874	9	7,201	181,084
Minor arterial	79	37,513	586,829	12	3,479	86,834
Major collector	157	49,967	588,449	15	5,214	54,122
Minor collector	81	21,213	190,839	4	472	7,403
Local	562	97,527	463,591	51	4,810	22,564
Urban Bridges						
Interstate	1,046	2,393,105	59,930,557	38	48,938	1,786,358
Freeway/expressway	816	1,275,574	43,965,526	30	161,859	1,794,689
Other principal arterial	920	1,311,445	27,913,571	107	118,485	2,762,988
Minor arterial	1,216	866,192	15,049,358	136	103,903	1,718,240
Collector	695	310,195	4,399,408	68	23,933	408,862
Local	1,023	373,214	3,502,285	72	15,375	169,053
Total	6,746	7,002,430	161,248,688	544	494,945	9,107,496

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	624	\$2,046,299	9,949,361	401,293
Widening & rehabilitation	561	\$722,679	10,044,092	321,314
Rehabilitation	183	\$1,142,599	4,060,402	399,988
Deck rehabilitation/replacement	96	\$191,731	2,774,309	75,121
Other work	841	\$2,857,826	19,968,953	1,120,493
Total	2,305	\$6,961,134	46,797,117	2,318,209



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 & Rrvvw
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
Bergen	1931	124,295	Urban other principal arterial	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
Hudson	1929	113,235	Urban freeway/expressway	NJ Rt 3 over Northern Sec. & Ramp A
Hudson	1951	106,480	Urban freeway/expressway	NJ495EB & Rmps B, J over NJ 3 EB & US 1 Ramp
Hunterdon	1941	103,858	Urban Interstate	I-78 over Beaver Brook

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.