

Highlights from FHWA's 2018 National Bridge Inventory Data

- Of the 2,494 bridges in the state, 224, or 9.0 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 260 bridges classified as structurally deficient in 2014.
- 13 of the structurally deficient bridges are on the Interstate Highway System.
- 160 bridges are posted for load, which may restrict the size and weight of vehicles crossing the structure.
- The state has identified needed repairs on 2,444 bridges at an estimated cost of \$3.7 billion.
- This compares to 2,437 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	207	120,791	1,840,003	1	99	12,500
Other principal arterial	123	56,746	1,043,188	11	5,574	95,100
Minor arterial	164	60,901	758,084	9	3,359	45,860
Major collector	199	66,947	524,174	22	9,582	50,470
Minor collector	178	36,552	224,021	13	3,182	19,740
Local	840	109,401	344,352	99	8,250	46,000
Urban Bridges						
Interstate	161	205,734	5,260,310	12	18,005	333,910
Freeway/expressway	92	105,461	2,775,653	2	9,602	32,000
Other principal arterial	113	159,276	1,751,773	8	13,152	146,415
Minor arterial	133	101,362	1,434,359	15	13,282	168,656
Collector	118	58,141	631,990	12	5,390	58,600
Local	166	48,912	273,970	20	3,841	28,320
Total	2,494	1,130,225	16,861,876	224	93,318	1,037,571

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	2,435	\$3,717,838	16,848,115	1,124,525
Widening & rehabilitation	0	\$0	0	0
Rehabilitation	4	\$117	135	539
Deck rehabilitation/replacement	1	\$39	50	180
Other work	4	\$481	11,007	2,209
Total	2,444	\$3,718,475	16,859,307	1,127,453



Top Most Traveled Structurally Deficient Bridges in New Hampshire

County	Year Built	Daily Crossings	Type of Bridge	Location
Merrimack	1959	42,600	Urban Interstate	I-89 over South Street
Merrimack	1980	41,300	Urban Interstate	I-393,US 4,US202 over Fort Eddy Rd
Merrimack	1958	41,300	Urban Interstate	I-393,US 4,US202 over I-93
Hillsborough	1960	41,000	Urban Interstate	I-293 SB,Nh101 EB over Merrimack River,Par
Merrimack	1958	36,488	Urban Interstate	I-93,Fee Tpk SB over Hall Street
Merrimack	1958	32,900	Urban minor arterial	US202 over NHRR,Constitution Av.
Rockingham	1962	32,000	Urban other principal arterial	Nh102 over I-93
Hillsborough	1923	25,000	Urban other principal arterial	US 3,NH 3A over I-293,NH 3A,PAR,Merr R
Hillsborough	1956	22,000	Urban Interstate	I-293,NH 3A,Tpk S over Black Brook
Hillsborough	1956	22,000	Urban Interstate	I-293,NH 3A,Tpk N over Black 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.