

Highlights from FHWA's 2019 National Bridge Inventory Data

- Of the 2,461 bridges in the state, 314, or 12.8 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 348 bridges classified as structurally deficient in 2015.
- The deck area of structurally deficient bridges accounts for 7.5 percent of total deck area on all structures.
- 12 of the structurally deficient bridges are on the Interstate Highway System.
- 117 bridges are posted for load, which may restrict the size and weight of vehicles crossing the structure.
- The state has identified needed repairs on 335 bridges at an estimated cost of \$175.6 million.
- This compares to 912 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	163	117,751	1,595,780	6	3,589	77,190
Other principal arterial	137	97,628	1,042,504	12	7,702	79,833
Minor arterial	183	96,461	1,017,064	22	7,304	104,533
Major collector	464	169,796	1,049,743	64	22,582	132,670
Minor collector	267	72,757	326,573	31	6,987	35,233
Local	754	134,683	355,374	127	11,941	34,590
Urban Bridges						
Interstate	141	199,183	2,416,188	6	5,251	145,850
Freeway/expressway	23	46,749	206,268	0	0	0
Other principal arterial	53	85,368	748,539	6	3,009	68,549
Minor arterial	82	137,909	920,280	12	12,068	135,047
Collector	113	67,939	648,931	17	9,341	98,513
Local	81	23,360	115,089	11	4,461	12,102
Total	2,461	1,249,583	10,442,333	314	94,234	924,110

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	5	\$3	1,911	1,020
Widening & rehabilitation	1	\$1	799	480
Rehabilitation	328	\$172	942,783	97,400
Deck rehabilitation/replacement	0	\$0	0	0
Other work	1	\$0	5	40
Total	335	\$176	945,498	98,940

Top Most Traveled Structurally Deficient Bridges in Maine

County	Year Built	Daily Crossings	Type of Bridge	Location
Cumberland	1959	27,320	Urban Interstate	I-295 Northbound over Route 88
Cumberland	1959	27,080	Urban Interstate	I 295 Southbound over Route 88
Cumberland	1961	27,010	Urban Interstate	I 295 over Veranda St & US 1
Cumberland	1959	24,130	Urban Interstate	I 295 Northbound over Route US 1
Cumberland	1989	24,013	Urban other principal arterial	Routes 9 & 22 over Stroudwater River
Cumberland	1959	23,700	Urban Interstate	I 295 Southbound over Route US 1
Sagadahoc	1933	18,940	Rural arterial	US Route 1 over M C RR & A Marsh
Cumberland	1931	16,790	Urban minor arterial	US 201 over Androscoggin River
Penobscot	1952	16,728	Urban minor arterial	Stilwater Ave. over S Chan Stillwater River
Penobscot	1952	16,728	Urban minor arterial	Stilwater Ave. over N Chan Stillwater River

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.