

Highlights from FHWA's 2018 National Bridge Inventory Data

- Of the 5,357 bridges in the state, 274, or 5.1 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 305 bridges classified as structurally deficient in 2014.
- 14 of the structurally deficient bridges are on the Interstate Highway System.
- 489 bridges are posted for load, which may restrict the size and weight of vehicles crossing the structure.
- The state has identified needed repairs on 1,634 bridges at an estimated cost of \$3.5 billion.
- This compares to 1,660 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	188	235,585	8,907,508	0	0	0
Other principal arterial	173	316,398	3,709,828	4	2,112	40,820
Minor arterial	219	125,119	1,755,448	11	4,565	94,291
Major collector	357	164,538	1,525,672	21	4,356	89,177
Minor collector	491	121,865	960,966	30	6,639	52,790
Local	1,015	191,132	952,671	98	12,022	61,393
Urban Bridges						
Interstate	696	1,829,995	54,374,536	14	35,817	1,736,385
Freeway/expressway	430	850,231	19,173,229	4	2,859	85,901
Other principal arterial	455	710,199	11,844,002	16	47,327	419,516
Minor arterial	331	323,354	4,844,674	12	11,101	107,006
Collector	296	153,561	2,171,621	12	2,990	120,232
Local	706	404,533	5,911,307	52	44,992	471,520
Total	5,357	5,426,512	116,131,464	274	174,778	3,279,031

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	323	\$1,063,693	7,567,949	322,407
Widening & rehabilitation	202	\$307,330	2,861,677	191,147
Rehabilitation	609	\$1,120,334	14,784,475	684,069
Deck rehabilitation/replacement	22	\$351,701	354,416	172,437
Other work	478	\$687,677	5,621,720	523,292
Total	1,634	\$3,530,735	31,190,237	1,893,352



Top Most Traveled Structurally Deficient Bridges in Maryland

County	Year Built	Daily Crossings	Type of Bridge	Location
Prince George's	1963	203,660	Urban Interstate	IS 95/495 over MD 214
Prince George's	1963	203,660	Urban Interstate	IS 95/495 over MD 214
Prince George's	1963	185,190	Urban Interstate	IS 95 IL over Suitland Parkway
Prince George's	1963	185,190	Urban Interstate	IS 95 OL over Suitland Parkway
Prince George's	1963	177,270	Urban Interstate	IS 95 IL over Suitland Road
Prince George's	1963	177,270	Urban Interstate	IS 95 OL over Suitland Road
Baltimore	1950	113,761	Urban Interstate	IS 83 NBR over Padonia Road
Frederick	1950	109,670	Urban Interstate	IS 270 NB over MD 85
Frederick	1950	109,670	Urban Interstate	IS 270 SB over MD 85
Baltimore	1965	72,000	Urban Interstate	Perring Pkwy Ramp over Herring Run

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.