

National Bridge Inventory: Maryland

- The state has identified needed repairs on 1,582 bridges.
- This compares to 1,619 bridges that needed work in 2020.
- Over the life of the IIJA, Maryland will receive a total of \$440.7 million in bridge formula funds, which will help make needed repairs.
- Maryland currently has access to \$264.4 million of that total, and has committed \$20.3 million towards 6 projects as of June 2024.
- Of the 5,484 bridges in the state, 250, or 4.6 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 273 bridges classified as structurally deficient in 2020.
- The deck area of structurally deficient bridges accounts for 3.0 percent of total deck area on all structures.

38

Compared to 39 in 2023

in the nation in % of structurally deficient bridges

1. Iowa	19.0%
37. Oregon	5.0%
38. Maryland	5.0%
39. New Mexico	5.0%

37

Compared to 37 in 2023

in the nation in # of structurally deficient bridges

1. Iowa	4,544
36. Puerto Rico	332
37. Maryland	250
38. Georgia	240

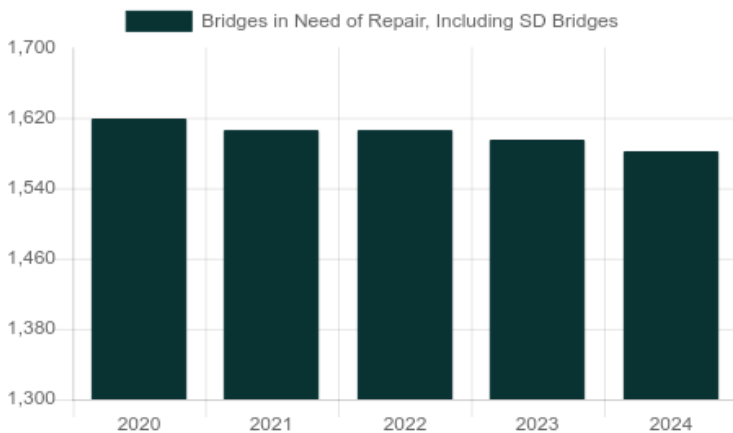
42

Compared to 44 in 2023

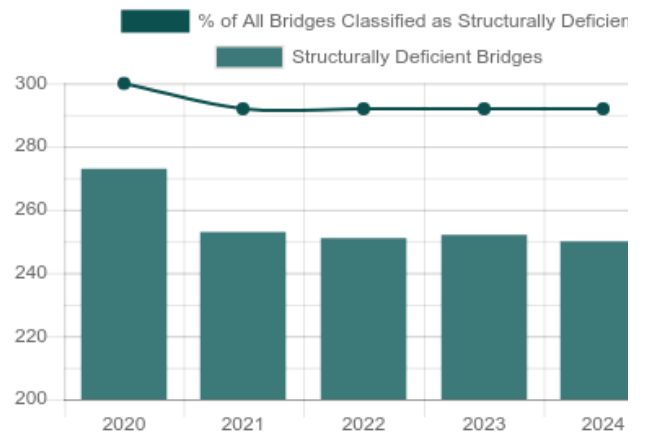
in the nation in % of structurally deficient bridge deck area

1. Rhode Island	14.0%
41. Indiana	3.0%
42. Maryland	3.0%
43. Oregon	3.0%

Number of Bridges in Need of Repair, Including Structurally Deficient Bridges



Number of Structurally Deficient Bridges



Top Most Traveled Structurally Deficient Bridges in Maryland

County	Year Built	Daily Crossings	Type of Bridge	Location
Baltimore	1965	74,402	Urban Interstate	Perring Pkwy Ramp over Herring Run
Baltimore	1951	70,700	Urban other principal arterial	Russell Street Via over Ostend Street and CSX
Washington	1966	62,680	Urban Interstate	IS 70 EB over MD 632
Washington	1965	62,680	Urban Interstate	IS 70 WB over US 11
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Baltimore	1921	58,858	Urban other principal arterial	Pulaski Highway over Herring Run
Baltimore	1961	55,154	Urban other principal arterial	Patapsco Avenue WB over Patapsco River
Prince George's	1959	46,652	Urban freeway/expressway	MD 4 WBr over MD 717
Baltimore	1963	46,276	Urban other principal arterial	Russell Street over CSX
Montgomery	1959	40,057	Urban local road	Clara Barton Parkw over Clara Barton Parkway (SB)
Washington	1968	37,200	Rural Interstate	IS 70 Ramp A over Beaver Creek
Baltimore	1936	35,470	Urban other principal arterial	Wilkens Avenue over Gwynns Falls
Baltimore	1961	34,803	Urban other principal arterial	Rolling Road over Tributary to Dead Run
Baltimore	1963	32,043	Urban collector	Brehms Lane over Herring Run
Montgomery	1984	31,600	Urban local road	Midcounty Hwy & MI over Mill Creek
Prince George's	1963	30,739	Urban collector	Oxon Hill Road over Broad Creek
Montgomery	1985	30,343	Urban local road	West Gude Drive over I-270
Baltimore	1962	29,900	Urban Interstate	I-83 over Mta Light Rail
Baltimore	1929	28,030	Urban other principal arterial	Hanover Street over CSX
Baltimore	1961	27,672	Urban local road	Patapsco Avenue EB over Patapsco River
Baltimore	1968	27,231	Urban other principal arterial	Broening Highway over Colgate Creek
Baltimore	1936	23,831	Urban other principal arterial	US 40, Orleans Str over I-83 and City Streets
Prince George's	1966	22,938	Urban local road	Cherry Hill Road over Little Paint Branch
Anne Arundel	1973	22,351	Urban minor arterial	MD 710 over Branch of Back Creek

Bridge Inventory: Maryland

Type of Bridge	Number of Bridges	Area of All Bridges (sq. meters)	Daily Crossings on All Bridges	Number of Structurally Deficient Bridges	Area of Structurally Deficient Bridges (sq. meters)	Daily Crossings on Structurally Deficient Bridges
Rural Interstate	188	243,244	9,134,530	1	472	37,200
Rural arterial	189	351,483	3,926,333	1	7,777	10,550
Rural minor arterial	233	135,721	1,766,131	5	6,561	31,732
Rural major collector	360	168,243	1,599,659	8	1,779	27,170
Rural minor collector	497	127,565	1,117,073	32	6,582	79,813
Rural local road	1,039	199,368	1,149,655	89	11,626	57,201
Urban Interstate	694	1,843,004	53,257,368	7	14,640	370,432
Urban freeway/expressway	428	847,092	18,978,313	4	2,718	77,056
Urban other principal arterial	422	660,658	11,612,324	16	54,204	469,106
Urban minor arterial	382	351,809	5,373,439	5	2,628	65,800
Urban collector	320	173,605	2,502,025	14	3,823	155,909
Urban local road	732	410,352	5,953,295	68	52,385	551,357
Total	5,484	5,512,145	116,370,145	250	165,193	1,933,326

Proposed Bridge Work

Type of Work	Number of Bridges	Cost to Repair (in millions)	Daily Crossings	Area of Bridges (sq. meters)
Bridge replacement	297	\$2,744	7,469,529	321,429
Widening & rehabilitation	188	\$1,321	2,674,212	233,288
Rehabilitation	602	\$3,573	14,383,675	644,374
Deck rehabilitation/replacement	26	\$1,075	572,738	175,613
Other structural work	469	\$2,648	6,845,514	519,763
Total	1,582	\$11,361	31,945,668	1,894,469

About the data:

Data and cost estimates are from the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), downloaded on August 20, 2024. 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 2023 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.
