

National Bridge Inventory: Delaware

- The state has identified needed repairs on 315 bridges.
- This compares to 325 bridges that needed work in 2020.
- Over the life of the IIJA, Delaware will receive a total of \$225.0 million in bridge formula funds, which will help make needed repairs.
- Delaware currently has access to \$135.0 million of that total, and has committed \$65.7 million towards 37 projects as of June 2024.
- Of the 872 bridges in the state, 11, or 1.3 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 19 bridges classified as structurally deficient in 2020.
- The deck area of structurally deficient bridges accounts for 2.5 percent of total deck area on all structures.

49 Compared to 49 in 2023 in the nation in % of structurally deficient bridges		Compared to S in the nation structurally	51 Compared to 51 in 2023 in the nation in # of structurally deficient bridges		445 Compared to 45 in 2023 in the nation in % of structurally deficient bridge deck area 1. Rhode Island 14.0%	
1. Iowa	19.0%	1. Iowa	4,544	44. Virginia	3.0%	
48. Georgia	2.0%	50. Nevada	24	45. Delaware	3.0%	
49. Delaware	1.0%	51. Delaware	11	46. Alabama	2.0%	
50. Texas	1.0%					

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



Number of Structurally Deficient Bridges



Top Most Traveled Structurally Deficient Bridges in Delaware

County	Year Built	Daily Crossings	Type of Bridge	Location
New Castle	1920	10,619	Rural minor arterial	Dupont Pkw/US13 SB over Blackbird Creek
Kent	1941	10,208	Rural arterial	US Route 13 over C & D Canal
Kent	1965	8,726	Urban collector	Lebanon Rd/SR10 WB over St. Jones River
Sussex	1957	7,555	Rural major collector	SR 54 over Assawoman Bay
New Castle	1929	4,556	Urban local road	James St. over Christina River
New Castle	1973	840	Rural major collector	SR 9 over Appoquinimink River
New Castle	1918	532	Rural local road	Guyencourt Rd. over Reading RR
Sussex	1973	200	Rural local road	Craigs Mill Rd over Craigs Pond Spillway
New Castle	1915	99	Rural local road	Private/Park Road over Red Clay Creek
Kent	1977	99	Urban local road	Maple Ave over Mispillion River
Sussex	1931	77	Rural local road	Cods Road over Slaughter Creek

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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	0	0	0	0	0	0
Rural arterial	102	246,868	2,109,325	1	21,040	10,208
Rural minor arterial	20	11,688	203,405	1	159	10,619
Rural major collector	90	45,964	374,188	2	2,288	8,395
Rural minor collector	31	9,349	128,773	0	0	0
Rural local road	163	24,468	176,474	4	305	908
Urban Interstate	90	335,507	3,876,547	0	0	0
Urban freeway/expressway	30	36,209	620,641	0	0	0
Urban other principal arterial	123	178,193	2,894,611	0	0	0
Urban minor arterial	77	78,141	836,254	0	0	0
Urban collector	81	37,441	515,246	1	969	8,726
Urban local road	65	23,611	117,994	2	1,053	4,655
Total	872	1,027,438	11,853,458	11	25,814	43,511

Proposed Bridge Work

Type of Work	Number of Bridges	Cost to Repair (in millions)	Daily Crossings	Area of Bridges (sq. meters)
Bridge replacement	129	\$518	2,547,085	118,013
Widening & rehabilitation	20	\$58	298,237	19,557
Rehabilitation	135	\$978	1,780,183	329,282
Deck rehabilitation/replacement	0	\$0	0	0
Other structural work	31	\$230	675,465	77,187
Total	315	\$1,783	5,300,970	544,040

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.