Delaware

American Road & Transportation Builders Association

State Bridge Profile

Highlights from FHWA's 2023 National Bridge Inventory Data

- The state has identified needed repairs on 315 bridges.
- 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 $90.0 million of that total, and has committed $34.3 million towards 22 projects as of June 2023.
- Of the 874 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 28 bridges classified as structurally deficient in 2019.

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	0	0	0	0	0	0
Other principal arterial	102	246,111	1,959,555	1	21,040	10,208
Minor arterial	20	11,688	203,305	1	159	10,738
Major collector	90	45,964	335,996	2	2,288	8,218
Minor collector	31	9,349	66,382	0	0	0
Local	164	24,563	158,571	4	305	956
Urban Bridges						
Interstate	90	335,507	3,626,617	0	0	0
Freeway/expressway	30	36,209	600,674	0	0	0
Other principal arterial	123	178,193	2,872,000	0	0	0
Minor arterial	77	78,141	823,879	0	0	0
Collector	81	37,441	518,958	1	969	7,685
Local	66	23,837	113,445	2	1,053	4,514
Total	**874**	**1,027,002**	**11,279,382**	**11**	**25,814**	**42,319**

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	129	$503.6	2,384,878	118,013
Widening & rehabilitation	20	$56.6	294,215	19,557
Rehabilitation	135	$932.1	1,707,398	329,282
Deck rehabilitation/replacement				
Other work	31	$222.5	643,888	77,187
Total	**315**	**$1,714.8**	**5,030,379**	**544,040**

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Top Most Traveled Structurally Deficient Bridges in Delaware

County	Year Built	Daily Crossings	Type of Bridge	Location
New Castle	1920	10,738	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	7,685	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	4,415	Urban local road	James St. over Christina River
New Castle	1973	663	Rural major collector	SR 9 over Appoquinimink River
New Castle	1918	439	Rural local road	Guyencourt Rd. over Reading RR
Sussex	1931	224	Rural local road	Cods Road over Slaughter Creek
Sussex	1973	194	Rural local road	Craigs Mill Rd over Craigs Pond Spillway
Kent	1977	99	Urban local road	Maple Ave over Mispillion River

About the data: Data is from the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), downloaded on February 1, 2023. Note that specific conditions on bridges may have changed because 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 2020 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.