

Highlights from FHWA’s 2023 National Bridge Inventory Data

- Of the 1,966 bridges in the counties of this district, 196, or 10.0 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 258 bridges classified as structurally deficient in 2019.
- Repairs are needed on 1,122 bridges in the district, which will cost an estimated \$4.1 billion.
- This compares to 1,125 bridges that needed work in 2019.
- The state has committed \$1.4 million in IJA bridge formula funds to support 3 projects in the District.

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	57	67,766	1,046,808	1	190	38,689
Other principal arterial	25	34,599	255,291	1	103	12,678
Minor arterial	36	11,014	169,592	5	1,078	24,308
Major collector	63	20,878	95,631	5	5,298	10,791
Minor collector	50	13,212	48,888	8	1,153	5,678
Local	286	42,134	103,899	48	5,576	9,714
Urban Bridges						
Interstate	268	536,249	6,710,654	5	6,325	32,261
Freeway/expressway	136	204,938	2,329,356	1	507	9,824
Other principal arterial	303	530,526	5,049,951	23	33,495	300,665
Minor arterial	259	206,807	1,970,656	27	17,018	176,015
Collector	148	69,702	666,107	13	4,604	56,939
Local	335	154,353	954,665	59	18,142	183,413
Total	1,966	1,892,178	19,401,498	196	93,489	860,975

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	95	\$102.3	382,791	21,723
Widening & rehabilitation	5	\$4.3	22,761	1,445
Rehabilitation	816	\$3,419.2	10,501,454	1,047,122
Deck rehabilitation/replacement	76	\$240.3	712,089	74,770
Other work	130	\$304.5	846,730	96,876
Total	1,122	\$4,070.7	12,465,825	1,241,936

Top Most Traveled Structurally Deficient Bridges in this District

County	Year Built	Daily Crossings	Type of Bridge	Location
Allegheny	1952	38,689	Rural Interstate	Pa Turnpike (I-76) over Plum Creek
Allegheny	1985	25,048	Urban other principal arterial	Washington Av over Chartiers Creek
Allegheny	1981	22,333	Urban other principal arterial	Penn Av over East Busway,N-S RR
Allegheny	1938	21,211	Urban other principal arterial	Bldv of The Allies over CSX RR & Bike Trail
Allegheny	1988	21,000	Urban other principal arterial	Panther Hollow Rd overlook Drive
Allegheny	1905	21,000	Urban local road	N Ave&Brighton Rd over N-S RR-Allegheny Park
Allegheny	1928	20,512	Urban other principal arterial	Kennywood Blvd over Union RR, Thompson Run
Butler	1965	17,335	Urban collector	SR3022 over Brush Creek
Allegheny	1983	16,993	Urban other principal arterial	Connor Rd over Pat Trolley # 9830
Allegheny	1924	16,904	Urban local road	Old William Penn over Thompson Run

Data includes information for the following area(s): Allegheny County, Beaver County, Butler County

About the data: Data is from the Federal Highway Administration (FHWA) National Bridge Inventory (NBI), downloaded on July 3, 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.