

District Bridge Profile

Highlights from FHWA's 2023 National Bridge Inventory Data

- Of the 1,155 bridges in the counties of this district, 94, or 8.1 percent, are classified as structurally deficient.
 This means one of the key elements is in poor or worse condition.
- This is down from 98 bridges classified as structurally deficient in 2019.
- Repairs are needed on 1,155 bridges in the district, which will cost an estimated \$3.4 billion.
- This compares to 1,160 bridges that needed work in 2019.
- There currently are now projects in the District that use IIJA formula bridge funds.

	All Bridges			Structurally Deficient Bridges		
Type of Bridge	Total Number	Area (sq. meters)	Daily Crossings	Total Number	Area (sq. meters)	Daily Crossings
Rural Bridges						
Interstate	5	4,669	48,410	0	0	0
Other principal arterial	21	8,298	128,126	2	559	12,769
Minor arterial	20	5,609	55,208	1	390	633
Major collector	68	23,403	157,684	7	4,241	23,171
Minor collector	49	16,473	60,366	3	1,765	3,343
Local	140	29,676	71,756	12	1,878	3,673
Urban Bridges						
Interstate	154	354,412	5,931,245	5	7,096	231,570
Freeway/expressway	125	151,681	2,291,659	9	5,737	83,971
Other principal arterial	142	171,960	2,341,698	13	19,298	174,020
Minor arterial	144	145,703	1,122,533	14	14,839	105,394
Collector	125	53,325	430,450	10	10,748	41,801
Local	162	58,9 <mark>9</mark> 9	234,071	18	10,423	22,6 <mark>98</mark>
Total	1,155	1,024,208	12,873,206	94	76,973	703,043

Bridge Inventory

Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	0	\$0	0	0
Widening & rehabilitation	1,063	\$3,132.9	12,368,354	942,820
Rehabilitation	0	\$0	0	0
Deck rehabilitation/replacement	92	\$281.6	504,852	81,388
Other work	0	\$0	0	0
Total	1,155	\$3,414.5	12,873,206	1,024,208



District Bridge Profile

Top Most Traveled Structurally Deficient Bridges in this District

County	Year Built	Daily Crossings	Type of Bridge	Location	
Erie	1957	75,744	Urban Interstate	Rte I190 over Peabody St	
Erie	1982	51,953	Urban Interstate	Rte I290 over Rte 952T	
Erie	1982	48,868	Urban Interstate	Rte I290 over Rte 952T	
Erie	1965	40,588	Urban freeway/expressway	Rte 5 over Abd Buffalo Creek RR	
Erie	1954	35,622	Urban Interstate	Rte I290 over Wehrle Dr	
Erie	1957	24,142	Urban other principal arterial	Rte 75 over 90Ix, Rte 190	
Erie	1929	21,396	Urban other principal arterial	Rte 20 over Cazenovia Creek	
Erie	1962	19,829	Urban other principal arterial	Rte 5 over Foster Brook	
Erie	1984	19,383	Urban Interstate	Rte 1990 over Ellicott Creek, Ellicott	
Erie	1932	15,530	Urban other principal arterial	Rte 240 over Cazenovia Creek	

Data includes information for the following area(s): Erie County, Niagara County

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, <u>published</u> <u>by FHWA</u>. 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.

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.