

## Highlights from FHWA's 2023 National Bridge Inventory Data

- The state has identified needed repairs on 12,409 bridges.
- Over the life of the IIJA, Pennsylvania will receive a total of \$1.8 billion in bridge formula funds, which will help make needed repairs.
- Pennsylvania currently has access to \$706.8 million of that total, and has committed \$406.6 million towards 231 projects as of June 2023.
- Of the 23,257 bridges in the Commonwealth, 3,022, or 13.0 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 3,501 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
<b>Rural Bridges</b>						
Interstate	1,049	1,038,766	17,153,094	25	23,514	369,007
Other principal arterial	1,014	1,078,042	7,965,677	32	11,322	291,433
Minor arterial	1,446	537,931	5,133,225	127	27,914	353,842
Major collector	1,916	591,549	3,149,899	192	47,808	335,777
Minor collector	2,057	423,329	1,517,923	284	41,661	193,132
Local	7,386	1,207,416	2,921,268	1,498	178,901	511,155
<b>Urban Bridges</b>						
Interstate	1,458	3,089,399	53,777,359	48	81,944	2,120,688
Freeway/expressway	921	1,337,254	25,036,228	31	62,603	939,746
Other principal arterial	1,479	1,874,794	23,351,440	135	135,344	2,218,801
Minor arterial	1,521	1,101,689	13,421,196	165	92,440	1,500,865
Collector	1,448	605,332	5,810,758	173	51,007	671,022
Local	1,562	577,012	3,554,046	312	94,148	615,734
<b>Total</b>	<b>23,257</b>	<b>13,462,513</b>	<b>162,792,112</b>	<b>3,022</b>	<b>848,606</b>	<b>10,121,202</b>

## Proposed Bridge Work

Type of Work	Number	Cost (millions)	Daily Crossings	Area (sq. meters)
Bridge replacement	1,815	\$1,773.7	4,612,654	389,356
Widening & rehabilitation	103	\$458.8	728,725	140,068
Rehabilitation	7,453	\$17,154.3	64,976,400	5,324,225
Deck rehabilitation/replacement	977	\$2,092.1	6,076,587	656,374
Other work	2,061	\$3,561.4	11,218,523	1,119,836
<b>Total</b>	<b>12,409</b>	<b>\$25,040.3</b>	<b>87,612,889</b>	<b>7,629,860</b>

## Top Most Traveled Structurally Deficient Bridges in Pennsylvania

County	Year Built	Daily Crossings	Type of Bridge	Location
Philadelphia	1967	230,798	Urban Interstate	Interstate 95 over Tacony St. And Bridge St.
Philadelphia	1967	230,798	Urban Interstate	Interstate 95 over Fraley Street
Philadelphia	1967	230,798	Urban Interstate	Interstate 95 over Comly Street
Philadelphia	1968	185,518	Urban Interstate	Interstate 95 over earth fill & sewer access
Philadelphia	1965	145,923	Urban Interstate	Delaware Expway. over Venango Street
Philadelphia	1965	145,923	Urban Interstate	Delaware Expway. over Wheatsheaf Lane
Lehigh	1952	100,082	Urban freeway/expressway	US 22(LR 771) over Twp.Rd.567* Mickley Road
Berks	1963	75,828	Urban freeway/expressway	SR 422 (Lr793) over Thun Recreational Trail
Chester	1961	64,245	Urban freeway/expressway	Route 30 By-Pass over Creek Rd, Brandywine Ck.
York	1959	59,180	Urban Interstate	I-83; SR 83 over US 30; SR 30

**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.