

National Bridge Inventory: Pennsylvania

- The state has identified needed repairs on 12,604 bridges.
- This compares to 11,946 bridges that needed work in 2020.
- 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 \$1.1 billion of that total, and has committed \$729.4 million towards 359 projects as of June 2024.
- Of the 23,299 bridges in the Commonwealth, 2,932, or 12.6 percent, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is down from 3,353 bridges classified as structurally deficient in 2020.
- The deck area of structurally deficient bridges accounts for 6.7 percent of total deck area on all structures.

Compared to 6 in 2023 in the nation in % of structurally deficient		2 Compared to 2 in the nation structurally	2 Compared to 2 in 2023 in the nation in # of structurally deficient		14 Compared to 21 in 2023 in the nation in % of structurally deficient bridge deck area	
bridges		bridges		1. Rhode Island	14.0%	
1. Iowa	19.0%	1. Iowa	4,544	13. Washington	7.0%	
7. Pennsylvania	13.0%	2. Pennsylvania	2,932	14. Pennsylvania	7.0%	
8. Louisiana	12.0%	3. Illinois	2,517	15. California	7.0%	

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



Number of Structurally Deficient Bridges



Top Most Traveled Structurally Deficient Bridges in Pennsylvania

County	Year Built	Daily Crossings	Type of Bridge	Location
Philadelphia	1967	251,200	Urban Interstate	Interstate 95 over Comly Street
Philadelphia	1967	251,200	Urban Interstate	Interstate 95 over Fraley Street
Philadelphia	1967	251,200	Urban Interstate	Interstate 95 over Tacony St.And Bridge St.
Philadelphia	1968	201,917	Urban Interstate	Interstate 95 over earth fill & sewer access
Philadelphia	1965	158,822	Urban Interstate	Delaware Expway. over Venango Street
Philadelphia	1965	158,822	Urban Interstate	Delaware Expway. over Wheatsheaf Lane
Montgomery	1951	85,964	Urban Interstate	Schuylkill Expway. over Waverly Road(T669)
Dauphin	1960	85,221	Urban Interstate	SR 83; I-83 over Susq.River;R.R.Lowther S
Berks	1963	82,168	Urban freeway/expressway	SR 422 (Lr793) over Thun Recreational Trail
Philadelphia	1975	80,788	Urban Interstate	Interstate 95 N.B. over Fairmount Avenue
Lehigh	1952	76,351	Urban freeway/expressway	US 22(LR 771) over Twp.Rd.567* Mickley Road
Montgomery	1950	68,760	Urban Interstate	Schuylkill Expway. over Matsonford Road
Philadelphia	1975	66,507	Urban Interstate	Interstate 95 S.B. over Fairmount Avenue
York	1959	64,412	Urban Interstate	I-83; SR 83 over US 30; SR 30
York	1957	64,412	Urban Interstate	83 over 181 George St
Chester	1961	64,245	Urban freeway/expressway	Route 30 By-Pass over Creek Rd, Brandywine Ck.
Montgomery	1965	55,039	Urban freeway/expressway	Pottstown Expway over Sanatoga Rd, Sanatoga Cr
Philadelphia	1960	55,005	Urban freeway/expressway	Roosevelt Blvd Ext over Roberts Ave;Septa;CSX
Berks	1963	54,692	Urban freeway/expressway	SR 422(LR 793) over Schuylkill River
York	1959	54,017	Urban Interstate	I-83; SR 83 over 22/Springwood Rd
Allegheny	1962	52,457	Urban Interstate	Parkway East over Old Wm Penn Hwy,Leak Run
Delaware	1967	51,626	Urban Interstate	Interstate 95 (NB) over Naaman S Creek Road
York	1959	51,452	Urban Interstate	I-83; SR 83 over 462; Market
Philadelphia	1955	49,662	Urban other principal arterial	Roosevelt Blvd. over 5th Street (overpass)
Berks	1955	49,583	Urban Interstate	I-78 (LR 285) over Reading/Northern RR T571

Bridge Inventory: Pennsylvania

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	1,050	1,037,399	16,729,647	25	32,252	406,407
Rural arterial	1,038	1,092,927	8,209,525	39	21,342	383,447
Rural minor arterial	1,436	528,651	5,059,055	123	27,883	317,707
Rural major collector	1,909	589,488	3,086,947	179	45,275	295,352
Rural minor collector	2,059	425,851	1,508,424	272	39,993	179,546
Rural local road	7,407	1,213,282	2,903,720	1,445	175,141	460,898
Urban Interstate	1,456	3,067,790	52,323,945	53	117,081	2,694,365
Urban freeway/expressway	929	1,345,834	25,603,387	29	59,400	903,035
Urban other principal arterial	1,523	1,896,580	23,976,738	135	129,416	2,186,861
Urban minor arterial	1,475	1,081,087	13,107,558	159	120,088	1,444,395
Urban collector	1,448	602,880	5,827,392	161	46,870	615,003
Urban local road	1,569	578,220	3,587,802	312	92,865	604,778
Total	23,299	13,459,989	161,924,140	2,932	907,606	10,491,794

Proposed Bridge Work

Type of Work	Number of Bridges	Cost to Repair (in millions)	Daily Crossings	Area of Bridges (sq. meters)
Bridge replacement	1,830	\$1,747	4,648,939	395,697
Widening & rehabilitation	101	\$451	717,993	148,863
Rehabilitation	7,533	\$16,594	65,020,226	5,494,100
Deck rehabilitation/replacement	1,010	\$1,983	6,236,804	657,748
Other structural work	2,130	\$3,376	11,397,686	1,119,596
Total	12,604	\$24,151	88,021,648	7,816,004

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.