

PRESERVING PENNSYLVANIA'S BRIDGES

THE CONDITION AND FUNDING NEEDS OF PENNSYLVANIA'S AGING BRIDGE SYSTEM



JUNE 2024



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Executive Summary

Pennsylvania’s bridges are a critical element of the state’s transportation system, supporting commerce, economic vitality and personal mobility. To retain businesses, accommodate population and economic growth, and preserve economic competitiveness, Pennsylvania will need to maintain and modernize its bridges by repairing or replacing deficient bridges and providing needed maintenance on other bridges. Continuing to make needed improvements to Pennsylvania’s bridges will require increased and reliable funding from local, state and federal governments, which will also provide a significant boost to the state’s economy by creating jobs in the short term and stimulating long term economic growth as a result of preserved and enhanced mobility and access.

PENNSYLVANIA BRIDGES ARE AGING AND DETERIORATED

Thirteen percent (2,835 of 22,043) of Pennsylvania’s locally and state-maintained bridges are rated in poor condition, the sixth highest rate in the U.S. and nearly double the national average of seven percent. The bridge condition data in this report is from the [National Bridge Inventory](#) which is maintained by the Federal Highway Administration and provides condition ratings for all bridges 20 feet or longer that carry vehicular traffic.

This is a significant improvement from 2013, when 25 percent of Pennsylvania’s bridges were rated in poor condition, the highest share in the nation. A bridge is rated in poor condition if there is significant deterioration of the bridge deck, supports or other major components. Bridges that are rated in poor condition may be posted for lower weight limits or closed if their condition warrants such action. Fifty-three percent of Pennsylvania’s locally and state-maintained bridges have been rated in fair condition. A fair rating indicates that a bridge’s structural elements are sound but minor deterioration has occurred to the bridge’s deck, substructure or superstructure. The remaining 34 percent of the state’s bridges are rated in good condition.

The chart below details the number and share of poor, fair and good bridges statewide and in Pennsylvania’s largest urban areas. For the purposes of this report, each urban area includes the following counties: Erie: Erie County; Harrisburg: Cumberland, Dauphin, Perry and York Counties; Lehigh Valley: Lehigh and Northampton Counties; Philadelphia: Bucks, Chester, Delaware, Montgomery and Philadelphia Counties; Pittsburgh: Allegheny, Armstrong, Beaver, Butler, Fayette, Lawrence, Washington and Westmoreland Counties; Scranton/Wilkes-Barre: Lackawanna, Luzerne and Wyoming Counties.

LOCATION	POOR		FAIR		GOOD		TOTAL BRIDGES
	Number	Share	Number	Share	Number	Share	
Erie	43	10%	229	52%	172	39%	444
Harrisburg	151	10%	935	60%	465	30%	1551
Lehigh Valley	67	10%	383	56%	230	34%	680
Philadelphia	438	14%	1893	60%	835	26%	3166
Pittsburgh	510	12%	2204	53%	1476	35%	4190
Scranton/Wilkes-Barre	215	22%	418	43%	329	34%	962
PENNSYLVANIA STATEWIDE	2,835	13%	11,849	54%	7,359	33%	22,043

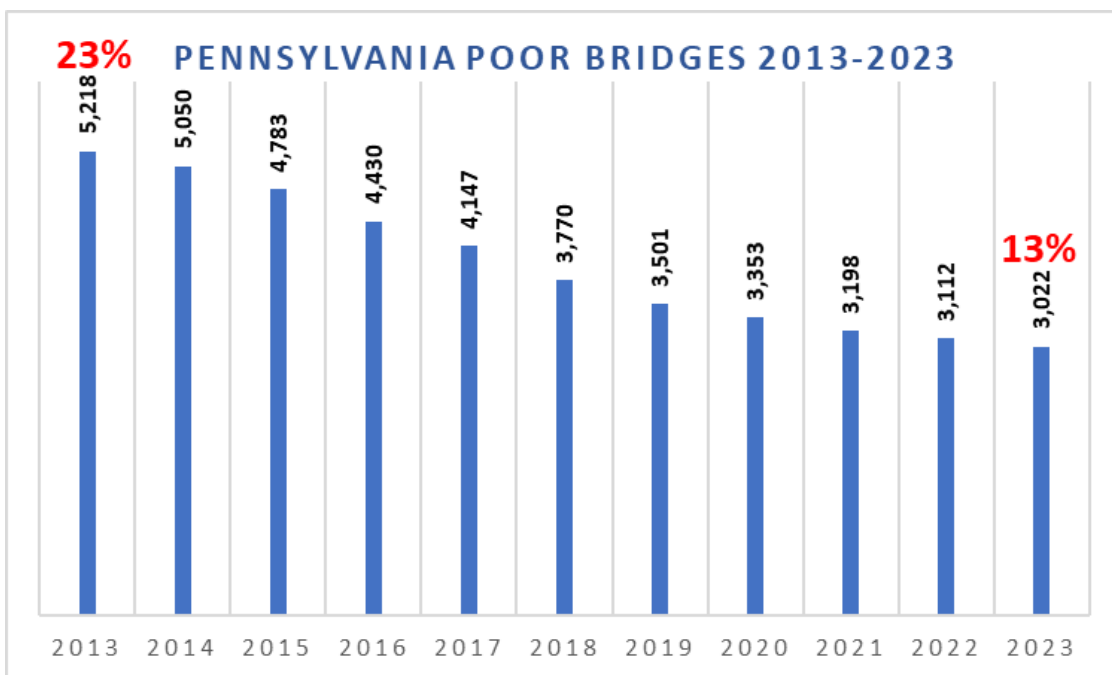
Nearly two-thirds - 64 percent - of Pennsylvania’s bridges are rural, while the remaining 36 percent are urban bridges. In 2023, 15 percent of the state’s rural bridges were in poor condition, while 10 percent of Pennsylvania’s urban bridges were in poor condition.

Location	POOR		FAIR		GOOD		TOTAL BRIDGES
	Number	Share	Number	Share	Number	Share	
RURAL	2,158	15%	7,412	50%	5,289	36%	14,868
URBAN	864	10%	4,943	59%	2,528	28%	8,389

Every day, approximately 10.1 million vehicles cross Pennsylvania bridges that are rated in poor condition. The chart below details the number of vehicles in the state’s largest urban areas and statewide that cross a bridge in poor condition each day.

LOCATION	Vehicles Traveling Over Poor Bridges Daily
Erie	71,373
Harrisburg	590,348
Lehigh Valley	366,976
Philadelphia	4,501,408
Pittsburgh	1,170,321
Scranton/Wilkes-Barre	1,355,093
PENNSYLVANIA STATEWIDE	10,121,202

Bridge conditions in Pennsylvania have improved steadily over the last decade, with the number of poor bridges in the state decreasing by 42 percent from 2013 to 2023, as a result of increased transportation funding at the state and federal levels. Pennsylvania’s share of bridges in poor condition decreased from 23 percent in 2013 – the highest in the nation at that time – to 13 percent in 2024.



If there is no increase to the current funding levels, the share of poor bridges in Pennsylvania is expected to rise to 17 percent in 2029, while an increase in funding of 50 percent would result in 14 percent of bridges rated in poor condition in 2029.

PENNSYLVANIA’S MOST DEFICIENT BRIDGES

The list below details the five most heavily traveled poor bridges in the Erie, Harrisburg, Lehigh Valley, Philadelphia, Pittsburgh and Scranton/Wilkes-Barre areas. ADT is average daily traffic. A list of the 20 most heavily traveled poor bridges in each area can be found in the body of the report.

Rank	County	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
ERIE								
1	Erie	SR 505 PERRY HWY	OVER MILL CREEK	MILL CREEK TOWNSHIP	1952	2	9804	Open
2	Erie	SR 90 WB	OVER SR 20 E/WB E MAIN	NORTH EAST TOWNSHIP	1959	3	9004	Open
3	Erie	SR 90 EB & RAMP	OVER SR 20 E/WB E MAIN	NORTH EAST TOWNSHIP	1959	3	7671	Open
4	Erie	SR 99 MAIN STREET	OVER ELK CREEK	MCKEAN BOROUGH	1952	2	6640	Open
5	Erie	SR 832 STERRETTANA	OVER SR 90 EB/WB	MCKEAN TOWNSHIP	1959	2	6211	Open
HARRISBURG								
1	York	I-83; SR 0083	US 30; SR 0030	I83 & US RT 30 INTERCHNG.	1959	5	59180	Open
2	York	83	181 George St	EXIT-22 I-83 & PA 181	1957	4	59180	Open
3	York	I-83; SR 0083	2002/Springwood Rd	.6 MI N OF PA 74 INTER	1959	4	55949	Open
4	Cumberland	I-81 NB; SR 0081	PA TURNPIKE	I-81N.B. OVER TURNPIKE	1963	2	31302	Open
5	Cumberland	I-81 SB; SR 0081	PA TURNPIKE	I-81S.B. OVER TURNPIKE	1963	2	30599	Open
LEHIGH VALLEY								
1	Lehigh	US 22(LR 771)	MICKLEY ROAD	0.7 M.E.OF 15TH ST.EXIT	1952	4	100082	Open
2	Northampton	PA 33 NB(LR1098)	BUSHKILL CREEK	0.5 MI S OF PA 191 EXIT	2004	2	28748	Open
3	Northampton	PA 33 SB (LR1098)	BUSHKILL CREEK	0.5MI S OF PA 191 EXIT	2004	2	28699	Open
4	Lehigh	RAMP AB	PA TPK (I-476)	LEHIGH VALLEY INTERCHANGE	1956	2	21503	Open
5	Lehigh	SR1011 (8TH AVE)	NORFOLK SOUTHERN RR	AT RTE. 378 INTERCHANGE	1967	4	15604	Posted
PHILADELPHIA								
1	Philadelphia	INTERSTATE 95	TACONY ST.AND BRIDGE ST.	NR. WAKELIN ST	1967	3	230798	Open
2	Philadelphia	INTERSTATE 95	FRALEY STREET	NEAR BRIDGE ST.	1967	4	230798	Open
3	Philadelphia	INTERSTATE 95	COMLY STREET	NR.VAN KIRK ST.	1967	3	230798	Open
4	Philadelphia	INTERSTATE 95	EARTH FILL & SEWER ACCES	NR.FRANKFORD CREEK	1968	6	185518	Open
5	Philadelphia	DELAWARE EXPWAY.	VENANGO STREET	NEAR TIOGA STREET	1965	8	145923	Open
PITTSBURGH								
1	Allegheny	PA TURNPIKE (I-76)	PLUM CREEK	NEAR PENN HILLS	1952	4	38689	Open
2	Allegheny	WASHINGTON AV	CHARTIERS CREEK	SOUTH END BRIDGE	1985	4	25048	Open
3	Washington	SR 0022	RACCOON CREEK	SMITH TOWNSHIP	1970	4	22756	Open
4	Allegheny	PENN AV	EAST BUSWAY N-S RR	PENN AVE BRDG	1981	5	22333	Open
5	Allegheny	BLVD OF THE ALLIES	CSX RR & BIKE TRAIL	Charles Anderson Brid	1938	4	21211	Posted
SCRANTON/WILKES-BARRE								
1	Luzerne	TR309 CROSS VALLEY	TOBY CREEK	COURTDLE BO .7M N SR 1002	1963	4	37437	Open
2	Luzerne	TR309 CROSS VALLEY	TOBY CREEK	CRTDALE BO .8 M N SR 1002	1963	4	37437	Open
3	Lackawanna	SR 6006	SR 0011 TR 11	SCRANTON OVER TR11 NB&SB	1963	2	34701	Open
4	Luzerne	SR 0309 TR 309	TOBYS CREEK	KINGSTON TWP .1M S SR1036	1928	4	31449	Open
5	Luzerne	SR 0309 TR 309	RAMP A; SR 8039	LUZERNE BORO OVER SR 8039	1980	4	29899	Open

The list below details the five poor bridges in the state’s largest urban areas (carrying a minimum of 500 vehicles per day) with the lowest average rating for the condition of the deck, substructure and superstructure. Each major component of a bridge is rated on a scale of zero to nine, with a score of four or below indicating poor condition. A bridge receiving a rating of four or below for its deck, substructure or superstructure is rated as poor. A list of the 20 bridges in each area with the lowest average rating for the major components of the bridge can be found in the body of the report.

Rank	County	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
ERIE								
1	Erie	T-480 OLD RTE 99	LAMSON RUN	1700 N OF STANCLIFF RD	1913	2	610	Posted
2	Erie	SR 8 WATERFORD RD	OVER FRENCH CREEK E BR	AMITY TOWNSHIP	1925	2	3482	Open
3	Erie	T-480 OLD RTE 99	LAMSON RUN TRIB.	AT S. HILL RD INTERSECT	1913	2	695	Posted
4	Erie	SR 99 EDINBORO RD	OVER SR 90 EB/WB	SUMMIT TOWNSHIP	1959	2	5207	Open
5	Erie	T406 OLD STERRETT	WALNUT CREEK	450 E OF STEAMWOOD DR	1929	2	1146	Posted
HARRISBURG								
1	Dauphin	PA 147; S.RIVER RD	POWELLS CREEK	.25 MI S OF INGLENOOK	1860	2	6401	Open
2	Dauphin	SR 2019 S.Nyes Rd.	BEAVER CREEK	1.5 MI.N.W. HUMMELSTOWN	1984	2	11339	Open
3	York	PA 921; SR 0921	LITTLE CONEWAGO CREEK	0.2 MI.W.I-83	1948	2	6590	Open
4	Dauphin	SR 3024 LOCUST LN.	TRIB TO BEAVER CREEK	3 MI. S. LINGLESTOWN	1959	2	6413	Open
5	York	SR 2024 PAPER MILL	N BR OF MUDDY CREEK	1 MI. E. MCKINLEY	1937	2	642	Posted
LEHIGH VALLEY								
1	Northampton	PA 611 (LR 48027)	OUGHOUGHTON CREEK	RICHMOND	1926	2	3243	Posted
2	Northampton	SR 3016(LR48068)	HOKENDAUQUA CREEK	INDIAN TRAIL ROAD	1939	2	2687	Posted
3	Northampton	SR 1015 (LR 165)	MARTINS CREEK	@ INT. WITH T-690	1920	2	1567	Posted
4	Lehigh	WALNUT STREET	CEDAR CREEK	ST ELMO ST & READING ROAD	1824	2	1000	Posted
5	Lehigh	SR 4024 (LR 39056)	ONTELAUNEE CREEK	MOSSERVILLE ROAD	1933	2	848	Posted
PHILADELPHIA								
1	Chester	EMBREEVILLE ROAD	WEST BR.BRANDYWINE CREEK	EMBREEVILLE	1923	2	2670	Closed
2	Bucks	CALLOWHILL ROAD	BR PLEASANT SPRING CREEK	AT BEDMINSTER RD.	1907	2	5478	Closed
3	Montgomery	KEIM STREET	SCHUYLKILL RIVER	MADISON BRIDGE	1935	2	8408	Closed
4	Montgomery	PERKIOMENVILLE RD.	SCIOTO CREEK	FREDERICK	1932	2	1592	Posted
5	Delaware	CONCHESTER HWY	CSX RAILROAD	1MILE WEST OF I-95	1949	2	29211	Open
PITTSBURGH								
1	Allegheny	SPRING HILL RD	N-S RR/R-R ST/CREEK	P09203 WALL BOROUGH	1915	2	2002	Closed
2	Westmoreland	LOGAN FERRY ROAD	HAYMAKER RUN	LOGAN FERRY RD @ SR4033	1979	2	6376	Posted
3	Westmoreland	HEATHER DRIVE	HAYMAKER RUN	200 WEST OF SR 4033	1988	2	2000	Posted
4	Westmoreland	OLD WILL PENN HIGH	TURTLE CREEK	EXPORT/MURRYSVILLE LINE	1982	2	10000	Posted
5	Beaver	FALLSTON BR	BEAVER RIVER	004026 FALLSTON BRIDGE	1884	2	6523	Closed
SCRANTON/WILKES-BARRE								
1	Luzerne	N. WASHINGTON ST.	LUZERNE & SUSQUEHANNA RR	100 NE OF E. CHESTNUT ST	1929	2	1000	Closed
2	Lackawanna	ELM STREET	LACKAWANNA RIVER	500 NW OF S WASHINGTON	1958	2	11900	Posted
3	Lackawanna	W. LACKAWANNA AVE.	NSRR / DLRR	500 FT NW OF 7TH AVE.	1972	4	10700	Posted
4	Lackawanna	PARKER STREET	LACKAWANNA RIVER	900 EAST OF N. MAIN AVE.	1964	1	2110	Posted
5	Luzerne	WATER STREET	SUSQ RIV / LUZ & SUSQ RR	PITTSTON / WEST PITTSTON	1914	2	8665	Closed

PENNSYLVANIA'S BRIDGES ARE AGING

A significant number of Pennsylvania's bridges have surpassed or are approaching 50 years old, which is typically the intended design life for bridges built during this era. The average age of all Pennsylvania's bridges is 55 years, while the average age of the state's bridges that are rated in poor condition is 84 years. The chart below details the average age of all bridges and bridges rated in poor condition in Pennsylvania's largest urban areas and statewide.

LOCATION	Average Age of ALL Bridges	Average Age of POOR Bridges
Erie	49 years	81 years
Harrisburg	53 years	78 years
Lehigh Valley	57 years	93 years
Philadelphia	62 years	93 years
Pittsburgh	53 years	82 years
Scranton/Wilkes-Barre	52 years	73 years
PENNSYLVANIA STATEWIDE	55 years	84 years

TRANSPORTATION FUNDING AND PRESERVING PENNSYLVANIA’S AGING BRIDGES

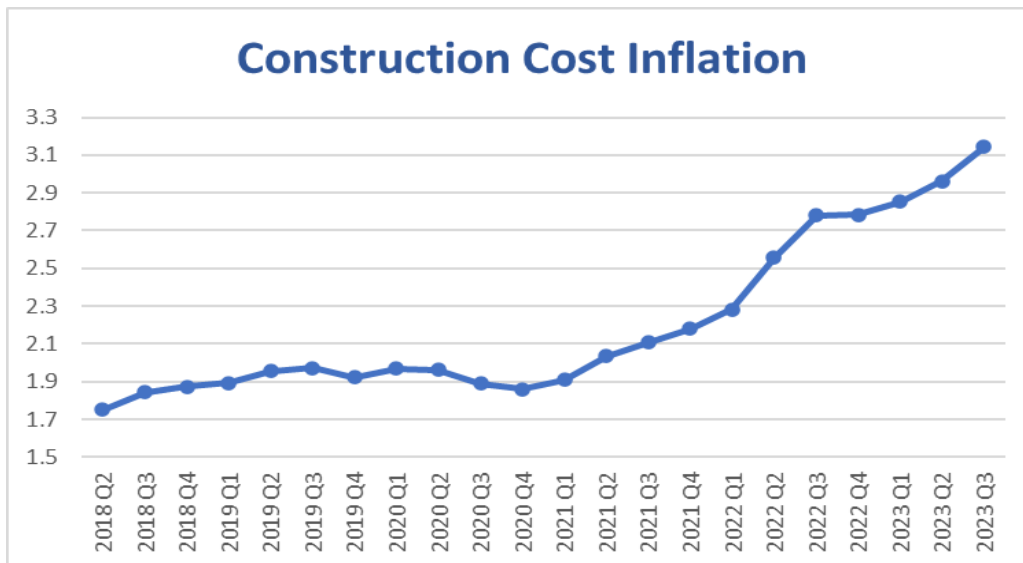
The ability of PennDOT to adequately maintain the state’s major roads, highways and bridges, depends on long-term, consistent, and sufficient funding that targets the assets in greatest need of repair and improvements. To address a lack of adequate transportation funding, in 2013 [Act 89](#) was passed by Pennsylvania’s legislature and signed into law by the governor, providing an additional \$2.3 billion in transportation funding each year and allowing the state to improve or rebuild thousands of bridges and more than 10,000 roadway miles. Since the passage of Act 89 in 2013, the number of poor bridges in the state has decreased by 42 percent.

The federal [Infrastructure Investment and Jobs Act](#) (IIJA) was signed into law in November 2021 and will provide \$13.1 billion in funds for highway and bridge investments in Pennsylvania over five years, including a 46 percent funding increase over the first three years of the program from FY 2022 to FY 2024. Federal funds currently support 43 percent of the revenue used by PennDOT to fund highway and bridge improvements.

In maintaining the serviceability of Pennsylvania’s bridges, PennDOT utilizes a lowest practical life-cycle cost bridge asset management strategy, which is designed to maximize the life of an asset at the lowest cost through a risk-based prioritization of preservation, rehabilitation, and reconstruction. This strategy works to assure that the right treatment is provided at the right time.

The ability of revenue from the Pennsylvania and the federal motor fuel tax -- and other sources of state and federal transportation funding -- to keep pace with the state’s future transportation needs is likely to erode as a result of increasing vehicle fuel efficiency, the increasing use of electric vehicles and inflation in highway construction costs.

The Federal Highway Administration’s national highway construction cost index, which measures labor and materials cost, increased by 44 percent in 2022 and the first three quarters of 2023, and has increased 69 percent since the beginning of 2021.



TRANSPORTATION AND ECONOMIC DEVELOPMENT

The health and future growth of Pennsylvania’s economy is riding on its transportation system. In 2022 Pennsylvania’s freight system moved 897 million tons of freight, valued at \$1.1 trillion – the fifth largest value of freight moved of all states. From 2022 to 2050, freight moved annually in Pennsylvania by trucks is expected to increase 57 percent by weight and 98 percent by value (inflation-adjusted dollars), the 14th largest projected increase in the nation.

A [report](#) by the [American Road & Transportation Builders Association](#) found that the design, construction and maintenance of transportation infrastructure in Pennsylvania supports nearly 183,000 full-time jobs across all sectors of the state economy. These workers earn \$6.9 billion annually. Nearly 2.7 million full-time jobs in Pennsylvania in key industries like tourism, manufacturing, retail sales, agriculture are completely dependent on the state's transportation infrastructure network.

Sources of information for this report include the Federal Highway Administration (FHWA), the National Bridge Inventory (NBI), the Bureau of Transportation Statistics (BTS), the American Road and Transportation Builders Association (ARTBA) and the U.S. Census Bureau. Cover photo credit: Getty Images.

INTRODUCTION

Pennsylvania's transportation system provides links for the state's residents, visitors and businesses, providing daily access to homes, jobs, shopping, natural resources and recreation. Modernizing Pennsylvania's transportation system, including its bridges, is critical to fostering quality of life improvements and economic competitiveness in the Keystone State. Safe, reliable transportation is central to economic vitality and personal mobility, connecting people to opportunity and to each other.

The ability of PennDOT and local governments to adequately maintain the state's major roads, highways and bridges, depends on long-term, consistent, and sufficient funding that targets the assets in greatest need of repair and improvements. Additional state transportation funding made available by the passage of [Act 89](#) in 2013 and the federal [Infrastructure Investment and Jobs Act](#) (IIJA) in 2021 has allowed the state to make significant progress in improving bridge conditions, reducing the share of Pennsylvania bridges in poor condition from 23 percent in 2013 to 13 percent in 2023. But additional funding and improvements are needed, as the state still has the sixth highest share of poor bridges in the nation and Pennsylvania's rate of poor bridges is nearly double the national average.

Maintaining Pennsylvania's aging network of bridges is becoming more challenging as the bridges age. A significant number of Pennsylvania's bridges have surpassed or are approaching 50 years old, which is typically the intended design life for bridges built during this era. The average age of all of Pennsylvania's bridges is 55 years old, while the average age of the state's bridges that are rated in poor condition is 84 years. The cost of repairing and preserving bridges increases dramatically as they age and as they reach the end of their intended design life. Despite the advancing age of the state's bridges, the number of Pennsylvania bridges in poor condition has decreased year-over-year in the last decade due to increased state and federal funding and PennDOT's focus on improving its bridge network.

This report examines trends in bridge conditions in the state and provides regionalized lists of the state's most-heavily traveled poor bridges and the bridges with the lowest condition rating regardless of travel level. The report also provides information on the cost to repair the state's poor bridges and the impact of highway construction cost inflation on Pennsylvania's ability to make further progress in reducing the share of its aging bridges in poor condition.

Bridge condition data in this report is from the Federal Highway Administration's (FHWA) National Bridge Inventory (NBI) for 2023. Specific conditions of some bridges may have changed as a result of recent work.

This report examines the condition and use of Pennsylvania's bridges, funding needs, and the future mobility needs of the state. Sources of information for this study include the Federal Highway Administration (FHWA), the National Bridge Inventory (NBI), the U.S. Census Bureau, the Bureau of Transportation Statistics (BTS), and the American Road and Transportation Builders Association (ARTBA).

POPULATION, TRAVEL AND ECONOMIC TRENDS IN PENNSYLVANIA

Pennsylvania residents and businesses require a high level of personal and commercial mobility. To foster quality of life and spur economic growth in Pennsylvania, it is critical that the state provides a safe and modern transportation system that can accommodate future growth in population, business, tourism, recreation and vehicle travel.

Pennsylvania's population grew to approximately 13 million residents in 2023, a six percent increase since 2000.¹ Pennsylvania had approximately 9.1 million licensed drivers in 2022.² From 2000 to 2021, Pennsylvania's gross domestic product (GDP), a measure of the state's economic output, increased by 32 percent when adjusted for inflation.³ U.S. GDP, adjusted for inflation, increased 48 percent during this period.⁴

Due to the COVID-19 pandemic, vehicle travel in Pennsylvania dropped by as much as 47 percent in April 2020 (as compared to vehicle travel during the same month the previous year).⁵ By 2023, Pennsylvania’s overall VMT levels had rebounded to two percent above 2019’s pre-pandemic levels.⁶

BRIDGE CONDITIONS IN PENNSYLVANIA

Pennsylvania’s bridges form key links in the state’s highway system, providing communities and individuals access to employment, schools, shopping and medical facilities, and facilitating commerce and access for emergency vehicles.

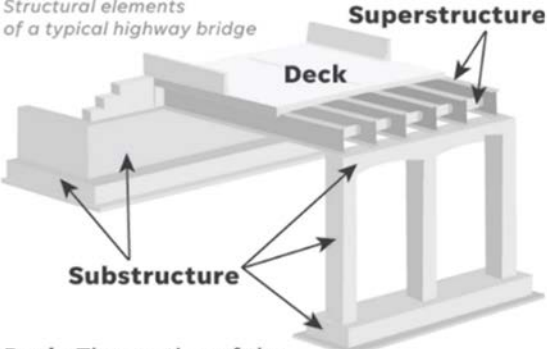
Bridges are inspected on a regular basis by the organization responsible for their upkeep and maintenance. PennDOT is responsible for the inspection of the third largest number of state-owned bridges in the nation.

The components of the bridge are evaluated and given a score between zero and nine based on their condition. The overall condition of the bridge is determined by the lowest rating for the deck, superstructure, substructure or culvert. If the lowest rating for any of these components is less than or equal to four, the bridge is rated poor; if it is five or six, the bridge is rated fair; and if it is greater than or equal to seven, the bridge is rated good.

Bridge structural elements

Using the National Bridge Inventory rating scale, inspectors rate these three structural elements for each bridge:

Structural elements of a typical highway bridge



Deck: The portion of the bridge that directly carries traffic.

Superstructure: The portion of the bridge that supports the deck and connects one substructure element to another.

Substructure: The portion of the bridge that supports the superstructure and distributes all bridge loads to below-ground bridge footings.

Culvert (not pictured): A pipe or small structure used for drainage under a road, railroad or other embankment. A culvert gets one overall rating.

SOURCE Michigan Department of Transportation

Chart 1. Bridge component ratings and definitions.

SCORE	CONDITION	DEFINITION
9	Excellent	No problems noted.
8	Very Good	No problems noted.
7	Good	Some minor problems.
6	Satisfactory	Minor deterioration to structural elements.
5	Fair	Primary structural elements are sound, but may have minor section loss, cracking, spalling or scour.
4	Poor	Advanced section loss, deterioration, spalling or scour.
3	Serious	Loss of section, deterioration, spalling or scour have seriously affected primary components. Local failures possible, fatigue cracks in steel or concrete may be present.
2	Critical	Advanced deterioration of primary elements, cracks in steel or concrete. Requires close monitoring or closure until corrective action.
1	Imminent Failure	Major deterioration or section loss, obvious vertical or horizontal movement affecting structure stability. Closed to traffic but corrective action may put back in light service.
0	Failed	Out of service, beyond corrective action.

Source. Federal Highway Administration National Bridge Inventory.

The bridge condition data in this report is from the [National Bridge Inventory](#), which is maintained by the Federal Highway Administration and provides condition ratings for all bridges 20 feet or longer that carry vehicular traffic.⁷

Thirteen percent of Pennsylvania’s locally and state-maintained bridges are rated as poor, the sixth highest rate in the nation and nearly double the national average of seven percent.⁸ Bridges rated poor may be posted for lower weight limits or closed if their condition warrants such action.

Fifty-four percent of Pennsylvania’s locally and state-maintained bridges have been rated in fair condition.⁹ A fair rating indicates that a bridge’s primary structural elements are sound but minor deterioration has occurred to the bridge’s deck, substructure or superstructure. The remaining 33 percent of the state’s bridges are rated in good condition.

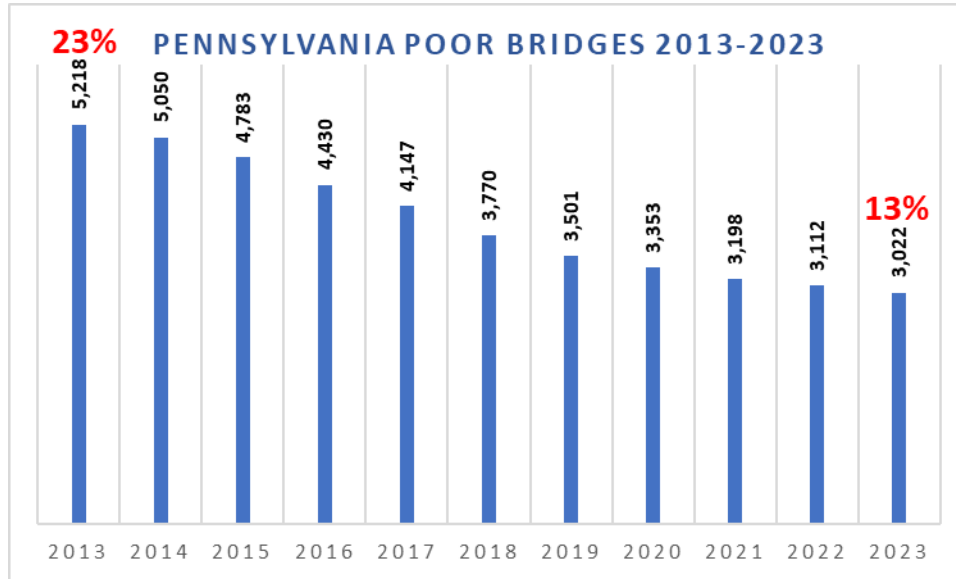
Chart 2. Pennsylvania bridge conditions and definitions.

PENNSYLVANIA STATEWIDE BRIDGE CONDITIONS		
POOR	13%	Bridges rated in poor condition may be posted for lower weight limits or closed if their condition warrants such action. Poor bridges may have advanced section loss, deterioration, spalling or scour.
FAIR	54%	A fair rating indicates that a bridge’s structural elements are sound but minor deterioration has occurred to the bridge’s deck, substructure or superstructure. Fair bridges may have minor section loss, cracking, spalling or scour.
GOOD	33%	Bridges rated in good condition have no problems noted or minor problems.

Source. Federal Highway Administration National Bridge Inventory.

Bridge conditions in Pennsylvania have improved steadily over the last decade, as a result of increased transportation funding at the state and federal levels. When Act 89 was signed into law in 2013, 23 percent of Pennsylvania’s bridges were rated in poor/structurally deficient condition, which was the highest share in the nation at that time.¹⁰ The number of Pennsylvania bridges in poor condition has decreased from 5,218 in 2013 to 3,022 in 2023.¹¹

Chart 3. Share of Pennsylvania bridges in poor condition, 2013-2023.



Source: Federal Highway Administration National Bridge Inventory, 2013-2023.

At the current funding levels, the share of poor bridges in Pennsylvania is expected to increase to 17 percent in 2029. However, if Pennsylvania bridge funding is increased by 50 percent, the share of Pennsylvania’s bridges in poor condition would increase to 14 percent in 2029.¹²

Deteriorated bridges can have a significant impact on daily life. Restrictions on vehicle weight may cause many vehicles – especially emergency vehicles, commercial trucks, school buses and farm equipment – to use alternate routes to avoid weight-restricted bridges. Redirected trips also lengthen travel time, waste fuel and reduce the efficiency of the local economy.

A significant number of Pennsylvania’s bridges have surpassed or are approaching 50 years old, which is typically the intended design life for bridges built during this era. The average age of all Pennsylvania’s bridges is 55 years, while the average age of bridges that are rated in poor condition is 84 years.¹³

Despite the advancing age of the state’s bridges, the number of Pennsylvania bridges in poor condition has decreased year-over-year in the past decade due to additional state and federal funding and PennDOT’s focus on improving the condition of its bridge network. The cost of repairing and preserving bridges increases as they age and as they reach the end of their intended design life. The chart below details the average age of all bridges and the average age of bridges rated in poor condition in Pennsylvania’s largest urban areas and statewide.

Chart 4. Average age of all bridges and average age of bridges rated in poor condition.

LOCATION	Average Age of ALL Bridges	Average Age of POOR Bridges
Erie	49 years	81 years
Harrisburg	53 years	78 years
Lehigh Valley	57 years	93 years
Philadelphia	62 years	93 years
Pittsburgh	53 years	82 years
Scranton/Wilkes-Barre	52 years	73 years
PENNSYLVANIA STATEWIDE	55 years	84 years

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory data, 2023.

The chart below details the number and share of poor, fair and good bridges in each Pennsylvania County.

Chart 5. Pennsylvania bridge conditions by county.

COUNTY	POOR		FAIR		GOOD		TOTAL BRIDGES
	Number	Share	Number	Share	Number	Share	
Adams	17	7%	141	56%	96	38%	254
Allegheny	120	9%	788	61%	386	30%	1,294
Armstrong	23	9%	154	59%	85	32%	262
Beaver	24	8%	146	49%	125	42%	295
Bedford	38	9%	252	60%	127	30%	417
Berks	101	15%	425	64%	137	21%	663
Blair	38	11%	161	48%	139	41%	338
Bradford	48	12%	180	45%	170	43%	398
Bucks	114	17%	401	59%	161	24%	676
Butler	52	14%	217	58%	108	29%	377
Cambria	22	8%	154	54%	108	38%	284
Cameron	6	10%	29	48%	26	43%	61
Carbon	25	19%	82	62%	26	20%	133
Centre	22	6%	168	46%	175	48%	365
Chester	100	15%	408	60%	173	25%	681
Clarion	14	8%	107	63%	50	29%	171
Clearfield	42	14%	138	47%	112	38%	292
Clinton	7	3%	115	54%	90	42%	212
Columbia	27	10%	127	47%	115	43%	269
Crawford	72	18%	185	46%	142	36%	399
Cumberland	18	5%	194	56%	133	39%	345
Dauphin	38	8%	311	69%	101	22%	450
Delaware	48	12%	244	63%	97	25%	389
Elk	13	10%	64	51%	49	39%	126
Erie	43	10%	229	52%	172	39%	444
Fayette	74	18%	180	43%	166	40%	420
Forest	9	13%	36	52%	24	35%	69
Franklin	24	8%	181	62%	87	30%	292

Fulton	17	11%	91	57%	51	32%	159
Greene	51	17%	143	47%	111	36%	305
Huntingdon	27	11%	106	44%	107	45%	240
Indiana	60	20%	156	52%	85	28%	301
Jefferson	14	7%	129	64%	59	29%	202
Juniata	24	14%	91	54%	53	32%	168
Lackawanna	69	19%	162	44%	135	37%	366
Lancaster	93	12%	456	57%	249	31%	798
Lawrence	30	11%	106	40%	130	49%	266
Lebanon	21	9%	142	63%	63	28%	226
Lehigh	44	12%	229	60%	107	28%	380
Luzerne	115	25%	205	45%	136	30%	456
Lycoming	20	4%	224	47%	233	49%	477
McKean	46	20%	83	37%	96	43%	225
Mercer	74	17%	200	46%	165	38%	439
Mifflin	23	12%	93	47%	80	41%	196
Monroe	62	20%	173	55%	80	25%	315
Montgomery	98	12%	454	55%	275	33%	827
Montour	6	6%	48	44%	54	50%	108
Northampton	34	10%	209	59%	112	32%	355
Northumberland	23	8%	154	51%	123	41%	300
Perry	26	14%	103	56%	56	30%	185
Philadelphia	78	13%	386	65%	129	22%	593
Pike	51	31%	59	36%	52	32%	162
Potter	27	13%	85	42%	92	45%	204
Schuylkill	103	28%	194	52%	73	20%	370
Snyder	7	4%	79	49%	74	46%	160
Somerset	74	16%	232	51%	147	32%	453
Sullivan	11	9%	56	47%	51	43%	118
Susquehanna	56	20%	127	45%	99	35%	282
Tioga	14	3%	205	48%	206	48%	425
Union	8	5%	72	44%	83	51%	163
Venango	28	15%	94	50%	67	35%	189
Warren	41	19%	94	44%	81	38%	216
Washington	86	13%	318	49%	251	38%	655
Wayne	81	31%	107	40%	77	29%	265
Westmoreland	101	16%	295	48%	225	36%	621
Wyoming	31	22%	51	36%	58	41%	140
York	69	12%	327	57%	175	31%	571

Source: Federal Highway Administration National Bridge Inventory, 2023.

The chart below details the number and share of poor bridges statewide and in the state's largest urban areas. For the purposes of this report, each urban area includes the following counties: Erie: Erie County; Harrisburg: Cumberland, Dauphin, Perry and York Counties; Lehigh Valley: Lehigh and Northampton Counties; Philadelphia: Bucks, Chester, Delaware, Montgomery and Philadelphia Counties; Pittsburgh: Allegheny, Armstrong, Beaver, Butler, Fayette, Lawrence, Washington and Westmoreland Counties; Scranton/Wilkes-Barre: Lackawanna, Luzerne and Wyoming Counties.

Chart 6: Number and share of poor, fair and good bridges in Pennsylvania’s largest urban areas and statewide.

LOCATION	POOR		FAIR		GOOD		TOTAL BRIDGES
	Number	Share	Number	Share	Number	Share	
Erie	43	10%	229	52%	172	39%	444
Harrisburg	151	10%	935	60%	465	30%	1551
Lehigh Valley	67	10%	383	56%	230	34%	680
Philadelphia	438	14%	1893	60%	835	26%	3166
Pittsburgh	510	12%	2204	53%	1476	35%	4190
Scranton/Wilkes-Barre	215	22%	418	43%	329	34%	962
PENNSYLVANIA STATEWIDE	2,835	13%	11,849	54%	7,359	33%	22,043

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory data, 2023.

Every day, approximately 10.1 million vehicles cross Pennsylvania bridges that are in poor condition. The chart below details the number of vehicles in Pennsylvania’s largest urban areas and statewide that cross a poor bridge each day.

Chart 7. Number of vehicles crossing bridges in poor condition daily.

LOCATION	Vehicles Traveling Over Poor Bridges Daily
Erie	71,373
Harrisburg	590,348
Lehigh Valley	366,976
Philadelphia	4,501,408
Pittsburgh	1,170,321
Scranton/Wilkes-Barre	1,355,093
PENNSYLVANIA STATEWIDE	10,121,202

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory data, 2023.

Nearly two-thirds - 64 percent - of Pennsylvania’s bridges are rural, while the remaining 36 percent are urban bridges.¹⁴ In 2023, 15 percent of the state’s rural bridges are in poor condition, while 10 percent of Pennsylvania’s urban bridges are in poor condition.¹⁵

Chart 8. Pennsylvania rural and urban bridge conditions (2023).

Location	POOR		FAIR		GOOD		TOTAL BRIDGES
	Number	Share	Number	Share	Number	Share	
RURAL	2,158	15%	7,412	50%	5,289	36%	14,868
URBAN	864	10%	4,943	59%	2,528	28%	8,389

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory data, 2023.

Each major component of a bridge is rated on a scale of zero to nine, with a score of four or below indicating poor condition. If a bridge receives a rating of four or below for its deck, substructure or superstructure, it is rated as poor.

Bridge condition data in this report is from the Federal Highway Administration’s (FHWA) 2023 National Bridge Inventory (NBI). Specific conditions of bridges may have changed as a result of recent work.

The list below details the 20 most heavily traveled poor bridges in the Erie area. ADT is average daily traffic.

Chart 9. Erie area poor bridges with highest average daily traffic.

Rank	County	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Erie	SR 505 PERRY HWY	OVER MILL CREEK	MILL CREEK TOWNSHIP	1952	2	9804	Open
2	Erie	SR 90 WB	OVER SR 20 E/WB E MAIN	NORTH EAST TOWNSHIP	1959	3	9004	Open
3	Erie	SR 90 EB & RAMP	OVER SR 20 E/WB E MAIN	NORTH EAST TOWNSHIP	1959	3	7671	Open
4	Erie	SR 99 MAIN STREET	OVER ELK CREEK	MCKEAN BOROUGH	1952	2	6640	Open
5	Erie	SR 832 STERRETTANA	OVER SR 90 EB/WB	MCKEAN TOWNSHIP	1959	2	6211	Open
6	Erie	SR 5 EAST LAKE RD.	OVER SIX MILE CREEK	HARBOR CREEK TOWNSHIP	1933	2	6173	Restricted
7	Erie	SR 99 EDINBORO RD	OVER SR 90 EB/WB	SUMMIT TOWNSHIP	1959	2	5207	Open
8	Erie	SR 20 RIDGE RD	OVER ABANDONED B&LE R R	GIRARD TOWNSHIP	1951	4	4036	Open
9	Erie	SR 8 WATERFORD RD	OVER FRENCH CREEK E BR	AMITY TOWNSHIP	1925	2	3482	Open
10	Erie	SR 4104 BARGAIN RD	OVER SR 79 NB/SB	MCKEAN TOWNSHIP	1969	2	1635	Open
11	Erie	T406 OLD STERRETT	WALNUT CREEK	450 E OF STEAMWOOD DR	1929	2	1146	Posted
12	Erie	T-609 JORDAN RD	OVER SR 90 EB/WB	HARBOR CREEK TOWNSHIP	1959	2	780	Open
13	Erie	T-602 DONATION RD.	E BR LEOEUF CREEK	1500 SE OF SAMPSON RD	1988	2	756	Open
14	Erie	SR 2018 ELGIN RD	OVER FRENCH CREEK S BR	CONCORD TOWNSHIP	1966	2	754	Open
15	Erie	T-480 OLD RTE 99	LAMSON RUN TRIBUTARY	AT S. HILL RD INTERSECT	1913	2	695	Posted
16	Erie	T-578 MOREHOUSE RD	OVER SR 90 EB/WB	GREENE TOWNSHIP	1959	2	618	Open
17	Erie	SR 4013 DUNN VLY.R	OVER ELK CREEK	MCKEAN TOWNSHIP	1955	2	614	Open
18	Erie	T-480 OLD RTE 99	LAMSON RUN	1700 N OF STANCLIFF RD	1913	2	610	Posted
19	Erie	T-480 OLD RTE 99	LAMSON RUN	750 N OF STANCLIFF RD	1941	2	561	Open
20	Erie	SR 3022 KINTER HL.	OVER LT CONNEAUTTEE CK	WASHINGTON TOWNSHIP	1959	2	558	Open

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory data, 2023.

The following 20 poor bridges in the Erie area (carrying a minimum of 500 vehicles per day) have the lowest average rating for deck, substructure and superstructure. Each major component of a bridge is rated on a scale of zero to nine, with a score of four or below indicating poor condition. If a bridge receives a rating of four or below for its deck, substructure or superstructure, it is rated as poor.

Chart 10. Erie area bridges with lowest average rating for deck, substructure and superstructure.

Rank	County	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Erie	T-480 OLD RTE 99	LAMSON RUN	1700 N OF STANCLIFF RD	1913	2	610	Posted
2	Erie	SR 8 WATERFORD RD	OVER FRENCH CREEK E BR	AMITY TOWNSHIP	1925	2	3482	Open
3	Erie	T-480 OLD RTE 99	LAMSON RUN TRIBUTARY	AT S. HILL RD INTERSECT	1913	2	695	Posted
4	Erie	SR 99 EDINBORO RD	OVER SR 90 EB/WB	SUMMIT TOWNSHIP	1959	2	5207	Open
5	Erie	T406 OLD STERRETT	WALNUT CREEK	450 E OF STEAMWOOD DR	1929	2	1146	Posted
6	Erie	T-602 DONATION RD.	E BR LEOBOEUF CREEK	1500 SE OF SAMPSON RD	1988	2	756	Open
7	Erie	SR 832 STERRETTANA	OVER SR 90 EB/WB	MCKEAN TOWNSHIP	1959	2	6211	Open
8	Erie	SR 20 RIDGE RD	OVER ABANDONED B&L R R	GIRARD TOWNSHIP	1951	4	4036	Open
9	Erie	SR 4013 DUNN VLY.R	OVER ELK CREEK	MCKEAN TOWNSHIP	1955	2	614	Open
10	Erie	T-480 OLD RTE 99	LAMSON RUN	750 N OF STANCLIFF RD	1941	2	561	Open
11	Erie	SR 215 KIDDERS CRN	OVER CONNEAUT CREEK	SPRINGFIELD TOWNSHIP	1900	2	514	Posted
12	Erie	SR 90 WB	OVER SR 20 E/WB E MAIN	NORTH EAST TOWNSHIP	1959	3	9004	Open
13	Erie	SR 90 EB & RAMP	OVER SR 20 E/WB E MAIN	NORTH EAST TOWNSHIP	1959	3	7671	Open
14	Erie	SR 5 EAST LAKE RD.	OVER SIX MILE CREEK	HARBOR CREEK TOWNSHIP	1933	2	6173	Restricted
15	Erie	SR 4104 BARGAIN RD	OVER SR 79 NB/SB	MCKEAN TOWNSHIP	1969	2	1635	Open
16	Erie	T-609 JORDAN RD	OVER SR 90 EB/WB	HARBOR CREEK TOWNSHIP	1959	2	780	Open
17	Erie	SR 3022 KINTER HL.	OVER LT CONNEAUTTEE CK	WASHINGTON TOWNSHIP	1959	2	558	Open
18	Erie	WELLINGTON STREET	SIXTEEN MILE CREEK	700 FT EAST OF SR 89	1976	2	536	Open
19	Erie	SR 505 PERRY HWY	OVER MILL CREEK	MILL CREEK TOWNSHIP	1952	2	9804	Open
20	Erie	SR 99 MAIN STREET	OVER ELK CREEK	MCKEAN BOROUGH	1952	2	6640	Open

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory data, 2023.

The list below details the 20 most heavily traveled poor bridges in the Harrisburg area. ADT is average daily traffic.

Chart 11. Harrisburg area poor bridges with highest average daily traffic.

Rank	County	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	York	I-83; SR 0083	US 30; SR 0030	I83 & US RT 30 INTERCHNG.	1959	5	59180	Open
2	York	83	181 George St	EXIT-22 I-83 & PA 181	1957	4	59180	Open
3	York	I-83; SR 0083	2002/Springwood Rd	.6 MI N OF PA 74 INTER	1959	4	55949	Open
4	Cumberland	I-81 NB; SR 0081	PA TURNPIKE	I-81N.B. OVER TURNPIKE	1963	2	31302	Open
5	Cumberland	I-81 SB; SR 0081	PA TURNPIKE	I-81S.B. OVER TURNPIKE	1963	2	30599	Open
6	Cumberland	US 11; SR 0011	LETORT SPRING CREEK	1 MI EAST OF MIDDLESEX	1908	4	29454	Open
7	Dauphin	PA 230; SR 0230	ASYLUM RUN	HARRISBURG	1950	4	20782	Open
8	Perry	US 11&15; STATE.RD	FISHING CREEK	MARYSVILLE BORO	1936	2	16986	Open
9	Dauphin	SR 3009 Paxton St	Norfolk Southern RR	2nd and Paxton Sts Hbg	1929	2	16020	Open
10	Dauphin	SR 3012	SPRING CREEK	DERRY STREET-PAXTANG	1938	2	12572	Open
11	York	PA 74; Queen St.	SR 0083	PA 74 OVER I-83	1959	4	12458	Open
12	Dauphin	SR 2019 S.Nyes Rd.	BEAVER CREEK	1.5 MI.N.W. HUMMELSTOWN	1984	2	11339	Open
13	York	PA 116; YORK RD.	TRIB CODORUS CREEK	SPRING GROVE	1958	2	10618	Open
14	Dauphin	SR 3012 WEST SPANS	SUSQUEHANNA RIVER (WEST)	CITY OF HARRISBURG	1928	2	10617	Open
15	Dauphin	MACLAY ST. /TURNBK	Norfolk Southern RR	MACLAY ST IN HARRISBURG	1940	2	9845	Open
16	York	PA 216 BLOOMING GR	LAKE MARBURG	LAKE MARBURG	1967	2	8828	Open
17	York	SR 4001	LITTLE CONEWAGO CREEK	3MILES E OF DOVER BORO	1937	2	8077	Open
18	Dauphin	SR 3007	NORFOLK SOUTHERN	19TH STREET 3007C09	1965	4	8060	Open
19	Dauphin	MARKET STREET	PAXTON CREEK	MARKET ST/ PAXTON CRK	1900	3	8000	Open
20	Dauphin	13TH STREET	NORFOLK SOUTHERN	OFF PAXTON ST/HARRISBURG	1965	4	7500	Open

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory data, 2023.

The following 20 poor bridges in the Harrisburg area (carrying a minimum of 500 vehicles per day) have the lowest average rating for deck, substructure and superstructure.

Chart 12. Harrisburg area bridges with lowest average rating for deck, substructure and superstructure.

Rank	County	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Dauphin	PA 147; S.RIVER RD	POWELLS CREEK	.25 MI S OF INGLENOOK	1860	2	6401	Open
2	Dauphin	SR 2019 S.Nyes Rd.	BEAVER CREEK	1.5 MI.N.W. HUMMELSTOWN	1984	2	11339	Open
3	York	PA 921; SR 0921	LITTLE CONEWAGO CREEK	0.2 MI.W.I-83	1948	2	6590	Open
4	Dauphin	SR 3024 LOCUST LN.	TRIB TO BEAVER CREEK	3 MI. S. LINGLESTOWN	1959	2	6413	Open
5	York	SR 2024 paper mill	N BR OF MUDDY CREEK	1 MI. E. MCKINLEY	1937	2	642	Posted
6	York	INDUSTRIAL HIGHWAY	THREE MILE RUN	.2 E.BLCKBRN PRK 3 MI RUN	1970	2	7500	Open
7	York	PA 216; MAIN ST.	S BRANCH CODORUS CREEK	BORO OF GLEN ROCK	1923	2	5732	Open
8	York	WEST COLLEGE AVE	CODORUS CREEK	W COLL; CODORUS CR ; YORK	1961	2	4953	Posted
9	Cumberland	SR 2031	CEDAR CREEK	LOWER ALLEN TWP	1952	2	2206	Open
10	York	SR 2079 red lion a	TRIB TO MUDDY CREEK	FELTON BORO	1951	2	2050	Open
11	Cumberland	HEMPST ROAD (T-573)	HOGESTOWN RUN	2.4 NW MCHNICBRG/HOGESTOW	1952	2	2000	Posted
12	Perry	SR 3011; TWP RD	SHERMANS CREEK	1 MI SOUTH OF LOYSVILLE	1962	2	1183	Posted
13	York	NORTH GRANTHAM RD	YELLOW BREECHES CREEK	0.7 MI S OF SR 2004	1955	2	1022	Posted
14	Perry	SR 3016; TWP RD	TRIB SHERMANS CREEK	2 MI.S.W. OF SHERMANSDALE	1918	2	647	Posted
15	Dauphin	PA 230; SR 0230	ASYLUM RUN	HARRISBURG	1950	4	20782	Open
16	Dauphin	US 209; SR 0209	WICONISCO CREEK	LYKENS BORO LINE WEST	1974	2	6226	Open
17	Cumberland	US 11; RITNER HWY	BURDS RUN	BORO OF SHIPPENSBURG	1940	2	6223	Open
18	York	PA 177; SR 0177	BEAVER CK; PINCHOT LAKE	0.5 MI.N.E. OF ROSSVILLE	1959	2	4370	Open
19	Perry	SR 1015	COCOLAMUS CREEK	1.5 MI S OF MILLERSTOWN	1925	2	3426	Posted
20	Perry	PA 74; SR 0074	BAKEN CREEK	NEAR ALINDA	1959	2	1776	Open

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory data, 2023.

The list below details the 20 most heavily traveled poor bridges in the Lehigh Valley area. ADT is average daily traffic.

Chart 13. Lehigh Valley area poor bridges with highest average daily traffic.

Rank	County	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Lehigh	US 22(LR 771)	TWP.RD.567* MICKLEY ROAD	0.7 M.E.OF 15TH ST.EXIT	1952	4	100082	Open
2	Northampton	PA 33 NB(LR1098)	BUSHKILL CREEK	0.5 MI S OF PA 191 EXIT	2004	2	28748	Open
3	Northampton	PA 33 SB (LR1098)	BUSHKILL CREEK	0.5MI S OF PA 191 EXIT	2004	2	28699	Open
4	Lehigh	RAMP AB	PA TPK (I-476)	LEHIGH VALLEY INTERCHANGE	1956	2	21503	Open
5	Lehigh	SR1011 (8TH AVE)	NORFOLK SOUTHERN RR	AT RTE. 378 INTERCHANGE	1967	4	15604	Posted
6	Lehigh	SR 329(LR 175)	LEHIGH RIVER	CEMENTON BRIDGE	1933	2	15017	Posted
7	Lehigh	BASIN STREET	LITTLE LEHIGH CREEK	BETWEEN 3RD & 4TH STREET	1959	4	14700	Posted
8	Lehigh	HAMILTON STREET	JORDAN CREEK & RJCN	EAST OF FOURTH STREET	1973	3	13600	Open
9	Lehigh	SR1004;LR39032/125	LEHIGH RIVER	RACE ST. BRIDGE	1957	2	10691	Open
10	Northampton	PA 512 (LR 48046)	MONOCACY CREEK	BETH-BATH PIKE	1923	2	9850	Open
11	Northampton	SR 2025 (LR 166)	LITTLE BUSHKILL CREEK	STOCKERTOWN CENTER ST.	1929	2	8966	Open
12	Lehigh	PINE STREET	LEHIGH R. NS RR WATER ST	NORTHWEST CATAUQUA	1953	2	8000	Open
13	Northampton	SR 3020(LR 48063)	EAST BR.MONACACY CREEK	1.5 MI.EAST OF BATH	1939	2	7915	Open
14	Northampton	SR 3020(LR 48063)	TRIB.TO MONOCACY CREEK	NEWBURG RD.@GEORGETOWN RD	1940	2	7915	Open
15	Lehigh	SR 2010 (LR 39109)	LITTLE LEHIGH CREEK	FISH HATCHERY ROAD	1939	2	7182	Open
16	Northampton	SR 512 (LR 165)	MARTINS CREEK	MARKET STREET	1911	2	6557	Open
17	Lehigh	SR 4003 (LR 39048)	JORDAN CREEK	KERNVILLE	1929	2	5743	Open
18	Lehigh	SR 3017	SCHAEFER RUN	SR 3017 TREXLERTOWN	2005	2	5431	Open
19	Northampton	SR2031COUNTRY CLUB	US 22 (LR 772)	T-454 OVER U.S. 22	1954	2	5093	Open
20	Lehigh	4TH STREET	JORDAN CK & SUMNER AVE.	NORTH OF TILGHMAN STREET	1959	2	5000	Open

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory data, 2023.

The following 20 poor bridges in the Lehigh Valley area (carrying a minimum of 500 vehicles per day) have the lowest average rating for deck, substructure and superstructure.

Chart 14. Lehigh Valley area bridges with lowest average rating for deck, substructure and superstructure.

Rank	County	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Northampton	PA 611 (LR 48027)	OUGHOUGHTON CREEK	RICHMOND	1926	2	3243	Posted
2	Northampton	SR 3016(LR48068)	HOKENDAUQUA CREEK	INDIAN TRAIL ROAD	1939	2	2687	Posted
3	Northampton	SR 1015 (LR 165)	MARTINS CREEK	@ INT. WITH T-690	1920	2	1567	Posted
4	Lehigh	WALNUT STREET	CEDAR CREEK	ST ELMO ST & READING ROAD	1824	2	1000	Posted
5	Lehigh	SR 4024 (LR 39056)	ONTELAUNEE CREEK	MOSSVILLE ROAD	1933	2	848	Posted
6	Lehigh	SR 4009 (LR 39057)	MILL CREEK	HOLLENBACHS BRIDGE	1912	2	646	Posted
7	Northampton	SR 512 (LR 165)	MARTINS CREEK	MARKET STREET	1911	2	6557	Posted
8	Lehigh	SR 4003 (LR 39048)	JORDAN CREEK	KERNSVILLE	1929	2	5743	Posted
9	Lehigh	S.WALNUT STREET	TROUT CREEK & FACTORY ST	SLATINGTON	1925	2	3000	Posted
10	Lehigh	SR 2024 (LR 39007)	TRIB. TO SAUCON CREEK	MILL ROAD	1937	2	2692	Posted
11	Northampton	SR 2001 (LR 48009)	EAST BRANCH SAUCON CREEK	LOWER SAUCON RD.@ SR 2006	1930	2	1357	Posted
12	Lehigh	WOOD STREET	CATASAUQUA CREEK	100 E. OF AMERICAN ST.	1950	2	500	Posted
13	Lehigh	LEHIGH PARKWAY E.	LITTLE LEHIGH CREEK	SCHREIBERS BRIDGE	1828	2	1000	Posted
14	Lehigh	SR1011 (8TH AVE)	NORFOLK SOUTHERN RR	AT RTE. 378 INTERCHANGE	1967	4	15604	Posted
15	Lehigh	SR 329(LR 175)	LEHIGH RIVER	CEMENTON BRIDGE	1933	2	15017	Posted
16	Northampton	PA 512 (LR 48046)	MONOCACY CREEK	BETH-BATH PIKE	1923	2	9850	Posted
17	Northampton	SR 2025 (LR 166)	LITTLE BUSHKILL CREEK	STOCKERTOWN CENTER ST.	1929	2	8966	Posted
18	Lehigh	SR 2010 (LR 39109)	LITTLE LEHIGH CREEK	FISH HATCHERY ROAD	1939	2	7182	Posted
19	Lehigh	SR 2029(LR.39002)	HOSENSACK CREEK	LIMEPORT PIKE	1933	2	2822	Posted
20	Lehigh	SR 2018(LR 39026)	BRANCH OF SWABIA CREEK	MACUNGIE-LEHIGH ST.	1929	2	1746	Posted

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory data, 2023.

The list below details the 20 most heavily traveled poor bridges in the Philadelphia area. ADT is average daily traffic.

Chart 15. Philadelphia area poor bridges with highest average daily traffic.

Rank	County	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Philadelphia	INTERSTATE 95	TACONY ST.AND BRIDGE ST.	NR.WAKELIN ST	1967	3	230798	Open
2	Philadelphia	INTERSTATE 95	FRALEY STREET	NEAR BRIDGE ST.	1967	4	230798	Open
3	Philadelphia	INTERSTATE 95	COMLY STREET	NR.VAN KIRK ST.	1967	3	230798	Open
4	Philadelphia	INTERSTATE 95	EARTH FILL & SEWER ACCES	NR.FRANKFORD CREEK	1968	6	185518	Open
5	Philadelphia	DELAWARE EXPWAY.	VENANGO STREET	NEAR TIOGA STREET	1965	8	145923	Open
6	Philadelphia	DELAWARE EXPWAY.	WHEATSHEAF LANE	NEAR RICHMOND ST.	1965	5	145923	Open
7	Chester	ROUTE 30 BY-PASS	CREEK RD BRANDYWINE CK.	EAST CALN TWP.	1961	2	64245	Open
8	Philadelphia	ROOSEVELT BLVD.	5TH STREET (OVERPASS)	1MI.NORTH TR 611	1955	3	51019	Open
9	Montgomery	POTTSTOWN EXPRSWAY	SANATOGA RD SANATOGA CR	SANATOGA	1965	2	50793	Open
10	Philadelphia	ROOSEVELT BLVD EXT	ROBERTS AVE;SEPTA;CSX	WAYNE JNC VIA	1960	2	50762	Open
11	Delaware	INTERSTATE 95 (NB)	NAAMANS CREEK ROAD	.2MI.N.DELAWARE	1967	3	47283	Open
12	Bucks	PA TPK (I-276)	T-346 BLOMSDAL RD	EAST OF DELAWARE VAL INTG	1954	6	46280	Open
13	Bucks	PA TURNPIKE(I-276)	BRISTOL IND.RR:DB-252	EAST OF DELAWARE VAL INTG	1954	6	46280	Open
14	Bucks	BETH.PK;W.END BLVD	MORGAN CREEK	2MI.S QUAKERTOWN	1936	2	44240	Open
15	Bucks	NEW US-1 BY-PASS	CSX/SEPTA SR2037 SPUR B	.5MI.N.NESHAMINY	1967	2	44208	Open
16	Montgomery	EB COUNTY LINE EXP	NORTH GULPH ROAD	VALLEY FORGE	1965	3	43271	Open
17	Bucks	EASTON ROAD	BRANCH NESHAMINY CREEK	EDISON	1937	2	43144	Open
18	Bucks	PA TPK (I-276)	SR 2027 & NESH.CR	NEAR NEWPORTVILLE	1954	4	41867	Open
19	Bucks	BETH.PK;W.END BLVD	BEAVER RUN	.3MI.TO LR 09118	1936	2	41137	Open
20	Bucks	BETHLEHEM PIKE	BR W BR NESHAMINY CREEK	.5MI.S.LR.09112	1934	2	39723	Open

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory data, 2023.

The following 20 poor bridges in the Philadelphia area (carrying a minimum of 500 vehicles per day) have the lowest average rating for deck, substructure and superstructure.

Chart 16. Philadelphia area bridges with lowest average rating for deck, substructure and superstructure.

Rank	County	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Chester	EMBREEVILLE ROAD	WEST BR.BRANDYWINE CREEK	EMBREEVILLE	1923	2	2670	Closed
2	Bucks	CALLOWHILL ROAD	BR PLEASANT SPRING CREEK	AT BEDMINSTER RD.	1907	2	5478	Closed
3	Montgomery	KEIM STREET	SCHUYLKILL RIVER	MADISON BRIDGE	1935	2	8408	Closed
4	Montgomery	PERKIOMENVILLE RD.	SCIOTO CREEK	FREDERICK	1932	2	1592	Posted
5	Delaware	CONCHESTER HIGHWAY	CSX RAILROAD	1MILE WEST OF I-95	1949	2	29211	Open
6	Montgomery	MILL CREEK ROAD	MILL CREEK	0.33MI NE OF US30	1956	2	9898	Closed
7	Delaware	SELLERS AVENUE	AMTRAK MAIN LINE	4MILES NORTH US-13	1904	2	3404	Closed
8	Montgomery	FETTERS MILL ROAD	PENNYPACK CREEK	.6 Mi NW PA-232	1883	1	3280	Closed
9	Montgomery	SNYDER ROAD	PERKIOMEN CREEK	SNYDER ROAD LR158	1903	1	600	Closed
10	Chester	N. PENNOCKS BR. RD	WEST BR.WHITE CLAY CREEK	NEW LONDON AIRPORT	1931	2	568	Closed
11	Montgomery	Delaware Drive	Pine Run 3257-K9	1/4M E Pinetown Rd	1956	2	500	Posted
12	Montgomery	MARKLEY/ELM STREET	STONY CREEK	0.4 Mi W US-202 N	1878	4	23065	Open
13	Delaware	SOUTH CREEK ROAD	BRANDYWINE CR OCTORARO R	2MI.S.CHADDS FORD	1925	2	1806	Posted
14	Montgomery	RIDGE PIKE	NORFOLK SOUTHERN	300 SE I-276 ADC	1937	2	36517	Open
15	Delaware	MARSHALL ROAD	COBBS CREEK	PHILADELPHIA CITY	1964	5	24920	Posted
16	Philadelphia	FRANKFORD AVENUE	FRANKFORD CREEK	NR.HUNTING PARK	1903	2	15216	Posted
17	Philadelphia	2nd Street	AMTRAK (NE CORRIDOR)	N of Venango Street	1926	2	14600	Open
18	Philadelphia	Abbottsford Avenue	CONRAIL and SEPTA	W of Wissahickon	1929	2	13600	Open
19	Philadelphia	MARKET STREET	CSX RAILROAD	CENTER CITY PHILA.	1932	4	13013	Open
20	Philadelphia	5TH STREET	CONRAIL(TRACKS REMOVED)	5TH STREET	1917	2	12422	Closed

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory data, 2023.

The list below details the most heavily traveled poor bridges in the Pittsburgh area. ADT is average daily traffic.

Chart 17. Pittsburgh area poor bridges with highest average daily traffic.

Rank	County	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Allegheny	PA TURNPIKE (I-76)	PLUM CREEK	NEAR PENN HILLS	1952	4	38689	Open
2	Allegheny	WASHINGTON AV	CHARTIERS CREEK	SOUTH END BRIDGE	1985	4	25048	Open
3	Washington	SR 0022	RACCOON CREEK	SMITH TOWNSHIP	1970	4	22756	Open
4	Allegheny	PENN AV	EAST BUSWAY N-S RR	PENN AVE BRDG-EB03	1981	5	22333	Open
5	Allegheny	BLVD OF THE ALLIES	CSX RR & BIKE TRAIL	Charles Anderson Brid	1938	4	21211	Posted
6	Allegheny	N AVE&BRIGHTON RD	N-S RR-ALLEGHENY PARK	W North Ave & Bright	1905	4	21000	Posted
7	Allegheny	PANTHER HOLLOW RD	OVERLOOK DRIVE	Panther Hollow Overpa	1988	4	21000	Closed
8	Allegheny	KENNYWOOD BLVD	UNION RR THOMPSON RUN	UNION RR YARD	1928	4	20512	Open
9	Butler	SR3022	BRUSH CREEK	ROCHESTER ROAD NO.1	1965	2	17335	Open
10	Allegheny	CONNOR RD	PAT TROLLEY # 9830	200W.OF INTER.W/SR 0088	1983	4	16993	Open
11	Allegheny	Old William Penn	Thompson Run	Intersect Thompson Run	1924	2	16904	Open
12	Allegheny	MCKEESPORT BLVD	UNION RAILROAD	0.5 MI NW OF SR 0837	1960	4	16226	Posted
13	Lawrence	EAST WASHINGTON ST	NESHANNOCK CREEK	@ TR 108&168 INTERSECTION	1909	4	15923	Open
14	Allegheny	EIGHTH AVE	HOMESTEAD RUN	AT US STEEL PLANT	1940	2	15756	Open
15	Allegheny	TARENTUM BR RMP.B	NS RR 4TH AVE ROSS ST	Tarentum Bridge	1952	2	15651	Open
16	Allegheny	RAMP A TARENTUM BR	4TH AVE RAMPD NS RR	Tarentum Bridge	1952	2	15618	Open
17	Allegheny	PAINTERS RUN RD	PAINTERS RUN	PAINTERS RUN NO. 3	1955	2	15049	Open
18	Allegheny	SOUTH NEGLEY AV	N-S RR & PAT EBUSWAY	102 S Negley Ave Bridge	1924	2	15000	Open
19	Washington	SR 0040	CATFISH RUN	CITY OF WASHINGTON	1943	2	13469	Open
20	Beaver	BEAVER VALLEY EX	SR 3016-GREEN GARDEN RD	INTER. OF GREENGARDENRD	1969	3	13444	Open

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory data, 2023.

The following poor bridges in the Pittsburgh area (carrying a minimum of 500 vehicles per day) have the lowest average rating for deck, substructure and superstructure.

Chart 18. Pittsburgh area bridges with lowest average rating for deck, substructure and superstructure.

Rank	County	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Allegheny	SPRING HILL RD	N-S RR/R-R ST/CREEK	WALL BOROUGH	1915	2	2002	Closed
2	Westmoreland	LOGAN FERRY ROAD	HAYMAKER RUN	LOGAN FERRY RD @ SR4033	1979	2	6376	Posted
3	Westmoreland	HEATHER DRIVE	HAYMAKER RUN	200 WEST OF SR 4033	1988	2	2000	Posted
4	Westmoreland	OLD WILL PENN HIGH	TURTLE CREEK	EXPORT/MURRYSVILLE LINE	1982	2	10000	Posted
5	Beaver	FALLSTON BR	BEAVER RIVER	FALLSTON BRIDGE	1884	2	6523	Closed
6	Westmoreland	T827 Lloyd Ave Ext	MONASTERY RUN	BTW T600 & SR981	1979	2	4000	Posted
7	Lawrence	SOUTH MAIN ST	BR.OF HICKORY RUN	446 S OF SR 317	1930	2	601	Open
8	Westmoreland	SR 4019	BRUSH CREEK	NORTH HUNTINGDON TOWNSHIP	1912	1	4520	Open
9	Lawrence	EASTBROOK ROAD	HOTTENBAUGH RUN	500 WEST OF SR 1009	1959	2	2957	Posted
10	Allegheny	CAVITT RD	ABERS CREEK	AB04 ABERS CREEK NO. 4	1987	2	500	Open
11	Washington	COAL CENTER BRIDGE	PIKE RUN	100 FROM MON RIVER	1887	1	500	Posted
12	Westmoreland	T-887 SEGER RD	MCGEE RUN	1/2 MI NW OF SR 217	1980	2	500	Posted
13	Allegheny	MCKEESPORT BLVD	UNION RAILROAD	0.5 MI NW OF SR 0837	1960	4	16226	Posted
14	Lawrence	EAST WASHINGTON ST	NESHANNOCK CREEK	@ TR 108&168 INTERSECTION	1909	4	15923	Open
15	Allegheny	LARIMER AV	WASHINGTON BLVD (RT 8)	047 Larimer Ave over Wash	1912	2	8000	Posted
16	Lawrence	WEST WASHINGTON ST	ISS RAILROAD	1/2 MI. WEST OF SR 0018	1924	4	7349	Posted
17	Allegheny	SWINDELL BR	I279 HOV RAMP G EAST ST	109 SWINDELL BRIDGE	1930	2	5700	Closed
18	Allegheny	STEEN RD	CHARTIERS CRK FLOOD CHAN	STEEN RD OV AQUADT	1972	2	3215	Posted
19	Allegheny	HAWKINS AV	SIXTH STREET	N BRADDOCK BORO	1926	2	2843	Posted
20	Beaver	LOVI RD	CROWS RUN	AT SR 2002 INT.	1930	2	2196	Open

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory data, 2023.

The list below details the 20 most heavily traveled poor bridges in the Scranton/Wilkes-Barre area. ADT is average daily traffic.

Chart 19. Scranton/Wilkes Barre area poor bridges with highest average daily traffic.

Rank	County	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Luzerne	TR309 CROSS VALLEY	TOBY CREEK	COURTDLE BO .7M N SR 1002	1963	4	37437	Open
2	Luzerne	TR309 CROSS VALLEY	TOBY CREEK	CRTDALE BO .8 M N SR 1002	1963	4	37437	Open
3	Lackawanna	SR 6006	SR 0011 TR 11	SCRANTON OVER TR11 NB&SB	1963	2	34701	Open
4	Luzerne	SR 0309 TR 309	TOBY CREEK	KINGSTON TWP .1M S SR1036	1928	4	31449	Open
5	Luzerne	SR 0309 TR 309	RAMP A; SR 8039	LUZERNE BORO OVER SR 8039	1980	4	29899	Open
6	Luzerne	SR 0081 I-81 SB	JOHNSON ALLAN SPRING RUN	W-B TWP .2 M N EXIT 165	1966	2	28064	Open
7	Luzerne	SR 0309 TR 309	TOBY CREEK	KINGSTON TWP 1M S SR 1014	1941	5	27451	Open
8	Luzerne	SR 0309 TR 309	TOBY CREEK	KINGSTON TP .8M S SR 1014	1941	5	27451	Open
9	Luzerne	SR 0309 TR 309	TOBY CREEK	KINGSTON TP .7M S SR 1014	1941	5	27451	Open
10	Luzerne	SR 0081 I-81 NB	SR 6309	ASHLEY BORO OVER SR 6309	1967	3	26595	Open
11	Luzerne	I-81 NB	LUZ CO RAIL AUTHORITY	ASHLEY BO .5M N EXIT 165	1966	2	26595	Open
12	Luzerne	I-81 NB	JOHNSON ALLAN SPRING RUN	W-B TWP .2 M N EXIT 165	1966	2	26595	Open
13	Luzerne	SR 0081 I-81 SB	SR 8011 RAMP A	HANVR TP OVR SR8011 RMP A	1967	3	25600	Open
14	Luzerne	SR 0081 I-81 SB	SR 2003 HAZELTON STREET	ASHLEY BORO OVER SR 2003	1967	2	25600	Open
15	Luzerne	I-81 SB	LUZ CO RAIL AUTHORITY	ASHLEY BORO .7M N EXT 164	1966	2	25600	Open
16	Luzerne	SR 0309 TR 309 SB	SR 2022 RAILRD N.WASHING	WILKESBARRE OVER SR 2022	1984	3	23706	Open
17	Luzerne	MR 0115 TR 115	READING BLUEMT& NORTHERN	PLAINS TWP .6 M N SR 2039	1941	4	20315	Open
18	Luzerne	SR 0081 I-81 NB	SR 8011	HANOVER TWP OVR TR29 RAMP	1967	2	20094	Open
19	Luzerne	SR 1009 MARKET ST	SUSQUEHANNA RIVER	WILKES BARRE OVER SUSQ RV	1926	5	19757	Open
20	Luzerne	SR 0081 I-81 NB	NRFLK STHRN RR & BL CRK	W HAZLETON BOR .7 S TR 93	1967	2	19458	Open

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory data, 2023.

The following 20 poor bridges in the Scranton/Wilkes-Barre area (carrying a minimum of 500 vehicles per day) have the lowest average rating for deck, substructure and superstructure.

Chart 20. Scranton/Wilkes-Barre area bridges with lowest average rating for deck, substructure and superstructure.

Rank	County	Facility Carried	Feature Intersected	Location	Year Built	Lanes	ADT	Open, Closed, Posted
1	Luzerne	N. WASHINGTON ST.	LUZERNE & SUSQUEHANNA RR	100 NE OF E. CHESTNUT ST	1929	2	1000	Closed
2	Lackawanna	ELM STREET	LACKAWANNA RIVER	500 NW OF S WASHINGTON	1958	2	11900	Posted
3	Lackawanna	W. LACKAWANNA AVE.	NSRR / DLRR	500 FT NW OF 7TH AVE.	1972	4	10700	Posted
4	Lackawanna	PARKER STREET	LACKAWANNA RIVER	900 EAST OF N. MAIN AVE.	1964	1	2110	Posted
5	Luzerne	WATER STREET	SUSQ RIV / LUZ & SUSQ RR	PITTSTON / WEST PITTSTON	1914	2	8665	Closed
6	Luzerne	SR 3019	HAZLE CREEK	HAZLE TWP .3 M S SR 3030	1961	2	2585	Posted
7	Lackawanna	MILL STREET	DEL-LACK RR/ROARING BRK	3/4 MI SE OF SR 6011	1917	2	2000	Posted
8	Lackawanna	ASH STREET	ROARING BROOK	100 FT SE OF RICHTER AVE	1958	2	1900	Posted
9	Lackawanna	MYRTLE STREET	ROARING BROOK	AT RICHTER ST. INTERSECT.	1979	2	1300	Posted
10	Luzerne	SR 0437 TR 437	LITTLE NESCOPECK CREEK	DENNISON TWP 5M N SR 2048	1938	2	4177	Open
11	Luzerne	I-81 NB	W. FOOTHILLS DRIVE	BUTLER TWP 2 M N TR 93	1965	2	15804	Open
12	Luzerne	SR 0415 TR 415	TOBY CREEK	DALLAS BO 440 S SR 1045	1941	3	14932	Open
13	Luzerne	SR 2010	SUGAR NOTCH RUN CREEK	HANOVER TWP .5 M E TR 29	1961	2	4485	Open
14	Lackawanna	SR 8001	SR 0011 TR 11 NB	MOOSIC BORO OVER TR 11 NB	1955	2	2370	Open
15	Lackawanna	MARY STREET	LEGGETTS CREEK	500 EAST OF W MARKET ST	1979	2	2000	Posted
16	Lackawanna	POPLAR STREET	LACKAWANNA RIVER	600 SE OF 7TH AVENUE	1978	2	1740	Open
17	Wyoming	SR 0092 TR 92	MONROE CREEK	NICHOLSON TP 249N SR1011	1931	2	1727	Posted
18	Lackawanna	SR 2013	MEADOW BROOK	CLIFTON TWP 500 W TR 435	1961	2	1404	Posted
19	Luzerne	SR 0081 I-81 SB	JOHNSON ALLAN SPRING RUN	W-B TWP .2 M N EXIT 165	1966	2	28064	Open
20	Luzerne	I-81 NB	JOHNSON ALLAN SPRING RUN	W-B TWP .2 M N EXIT 165	1966	2	26595	Open

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory data, 2023.

TRANSPORTATION FUNDING AND PRESERVING PENNSYLVANIA’S BRIDGES

Investment in Pennsylvania’s roads, highways and bridges is funded by local, state and federal governments. A lack of sufficient funding at all levels will make it difficult to adequately maintain and improve the state’s bridges.

The ability of PennDOT to adequately maintain the state’s major roads, highways and bridges, depends on long-term, consistent, and sufficient funding that targets the assets in greatest need of repair and improvements. To address a lack of adequate transportation funding, in 2013 [Act 89](#) was passed by Pennsylvania’s legislature and signed into law by the governor. The legislation eliminated the 12-cent retail gas tax and replaced it with an equivalent increase in the Oil Company Franchise Tax (OCFT), which is a wholesale tax on gasoline and diesel distributors. It also increased vehicle registration and driver licensing fees over several years, with future increases tied to inflation. Act 89 addresses all modes of transportation and increased funding for transportation by \$2.3 billion annually. The additional funding allowed the state to improve or rebuild thousands of bridges and more than 10,000 roadway miles.

The additional state highway funding will enhance the increased federal highway and transit funding provided by the [Infrastructure Investment and Jobs Act](#) (IIJA), signed into law in November 2021. The IIJA will provide \$13.1 billion in state funds for highway and bridge investments in Pennsylvania over five years, including a 46 percent funding increase over the first three years of the program from FY 2022 to FY 2024.¹⁶ Federal funds currently support 43 percent of the revenue used by PennDOT to fund highway and bridge improvements.¹⁷

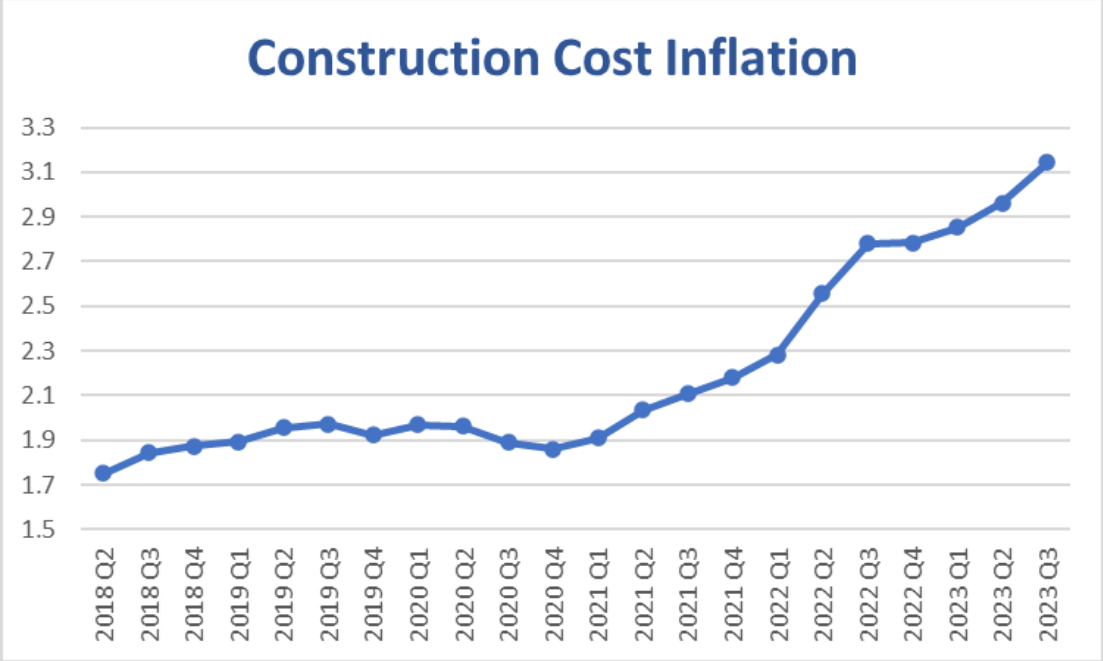
Most federal funds for highway and transit improvements in Pennsylvania are provided by federal highway user fees, largely an 18.4 cents-per-gallon tax on gasoline and a 24.4 cents-per-gallon tax on diesel fuel (additional revenue is generated by fees on the sale of large trucks, a highway use tax levied on vehicles in excess of 55,000 pounds and a tax on the sale of large truck tires).

The ability of revenue from the Pennsylvania and the federal motor fuel tax -- and other sources of state and federal transportation funding -- to keep pace with the state’s future transportation needs is likely to erode as a result of increasing vehicle fuel efficiency, the increasing use of electric vehicles and inflation in highway construction costs.

The average fuel efficiency of U.S. passenger vehicles increased from 20 miles per gallon in 2010 to 24.5 miles per gallon in 2020. Average fuel efficiency is expected to increase another 31 percent by 2030, to 32 miles per gallon, and increase 51 percent by 2040, to 37 miles per gallon.¹⁸ The share of electric vehicles of total passenger vehicle sales in the U.S. is expected to increase to five percent by 2023 and 60 percent by 2040, by which time electric vehicles will represent approximately 30 percent of the passenger vehicle fleet.¹⁹

The Federal Highway Administration’s national highway construction cost index, which measures labor and materials cost, increased by 44 percent in 2022 and the first three quarters of 2023, and has increased 69 percent since the beginning of 2021.²⁰

Chart 21. FHWA’s national highway construction cost index.



Source: Federal Highway Administration.

Highway and bridge spending multiplies through the economy by stimulating additional output. A 2021 macroeconomic [analysis](#) by [IHS Markit](#) found that every dollar spent on highway and bridge improvements results in \$3.4 dollars in combined direct, indirect and induced output from industries throughout the economy, resulting in a multiplier for highway and bridge investment of 3.4.²¹

State and local transportation agencies are increasingly taking an asset management approach to bridge preservation that emphasizes enhanced maintenance techniques, delaying the need for costly reconstruction or replacement.²²

Under pressure from fiscal constraints, aging bridges, and increased wear due to growing travel volume, particularly by large trucks, transportation agencies are adopting cost-effective life cycle planning strategies focused on performing multiple, lower cost maintenance and preservation strategies than to allow an asset to deteriorate to the point of requiring a major rehabilitation or event complete replacement.²³

Depending on the type of bridge, the condition and type of deterioration of the bridge, and typical traffic levels, one of the following types of improvements may be necessary. The cost of bridge improvements required increases based on the amount of deterioration present.

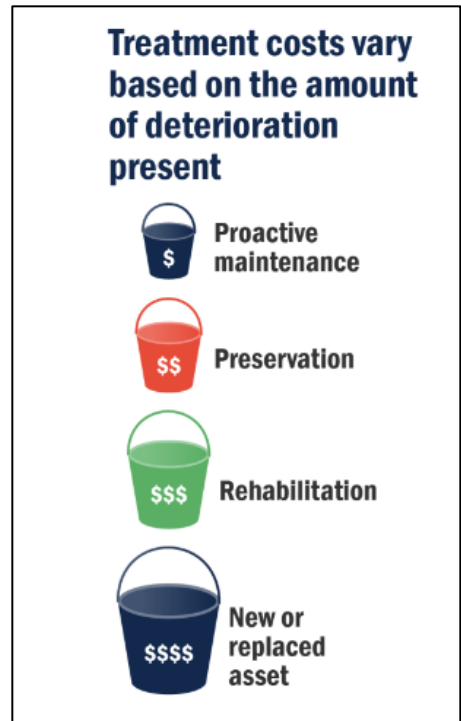
Maintenance: This includes planned activities to a specific bridge component, such as expansion joint replacement, bearing replacement, steel repair, concrete repair, deck patching, and overlays.

Preservation: With limited funding available to address bridge deficiencies, transportation agencies need to extend the life of a bridge to defer higher replacement costs as long as possible. Bridge preservation is essentially any work that preserves or extends the useful life of a bridge and is part of achieving the 75-year design life target. Preservation may include lower-cost treatments applied to bridges in relatively good condition to slow their rate of deterioration including washing, sealing deck joints, facilitating drainage, sealing concrete, painting steel, removing channel debris, and protecting against stream erosion. This work keeps a bridge from prematurely deteriorating and extends the years before a bridge needs to be replaced.

Rehabilitation: Rehabilitation involves major work required to restore the structural integrity of a bridge and work necessary to correct major safety defects. This includes rehabilitation to, or replacement of, one or more of the major bridge elements, such as deck replacement, superstructure replacement, or substructure rehabilitation.

Construction/Reconstruction: Replacement projects include total replacements, superstructure replacements, and bridge widening. When a bridge deteriorates to the point that it is rated poor, the cost to restore the bridge to good condition increases significantly. The need to repair or replace high priority bridges tends to create a funding cycle that makes it difficult to keep pace with the needed preservation activities.

In maintaining the serviceability of Pennsylvania’s bridges, PennDOT utilizes a lowest practical life-cycle cost bridge asset management strategy, which is designed to maximize the life of an asset at the lowest cost through a risk-based prioritization of preservation, rehabilitation, and reconstruction.²⁴ This strategy aims to provide the right treatment at the right time.²⁵



IMPORTANCE OF TRANSPORTATION TO ECONOMIC GROWTH

Today’s culture of business demands that an area have well-maintained and efficient roads, highways and bridges if it is to remain economically competitive. Global communications and the impact of free trade in North America and elsewhere have resulted in a significant increase in freight movement, making the quality of a region’s transportation system a key component in a business’ ability to compete locally, nationally and internationally.

Businesses have responded to improved communications and the need to cut costs with a variety of innovations including just-in-time delivery, increased small package delivery, demand-side inventory management and e-commerce. The result of these changes has been a significant improvement in logistics efficiency as firms move from a push style distribution system, which relies on large-scale warehousing of materials, to a pull-style distribution system, which relies on smaller, more strategic movement of goods. These improvements have made mobile inventories the norm, resulting in the nation’s trucks literally becoming rolling warehouses.

Bridges are vitally important to continued economic development in Pennsylvania, particularly to the state's agriculture, industrial manufacturing and tourism industries. As the economy expands, creating more jobs and increasing consumer confidence, the demand for consumer and business products grows. In turn, manufacturers ship greater quantities of goods to market to meet this demand, a process that adds to truck traffic on the state's highways, bridges and major arterial roads.

In 2022 Pennsylvania's freight system moved 897 million tons of freight, valued at \$1.1 trillion – the fifth largest value of freight moved of all states.²⁶ Fourteen percent of travel on Pennsylvania's Interstate highways and 24 percent of travel on its rural Interstate highways is by combination trucks – the 13th highest share in the nation.²⁷ From 2022 to 2050, freight moved annually in Pennsylvania by trucks is expected to increase 57 percent by weight and 98 percent by value (inflation-adjusted dollars), the 14th largest projected increase in the nation.²⁸

Local, regional and state economic performance is improved when a region's surface transportation system is expanded or repaired. This improvement comes as a result of the initial job creation and increased employment created over the long-term because of improved access, reduced transport costs and improved safety.

A [report](#) by the American Road & Transportation Builders Association found that the design, construction and maintenance of transportation infrastructure in Pennsylvania play a critical role in the state's economy, supporting the equivalent of nearly 183,000 full-time jobs across all sectors of the state economy, earning these workers approximately \$6.9 billion annually.²⁹ These jobs include approximately 91,000 full-time jobs directly involved in transportation infrastructure construction and related activities and 92,000 full-time jobs as a result of spending by employees and companies in the transportation design and construction industry.³⁰ Transportation construction in Pennsylvania annually contributes an estimated \$1.3 billion in state and local income, corporate and unemployment insurance taxes and the federal payroll tax.

Approximately 2.7 million full-time jobs in Pennsylvania in key industries like tourism, retail sales, agriculture and manufacturing are dependent on the quality, safety and reliability of the state's transportation infrastructure network. These workers earn \$106 billion in wages and contribute an estimated \$19.3 billion in state and local income, corporate and unemployment insurance taxes and the federal payroll tax.³¹

Local, regional and state economic performance is improved when a region's surface transportation system is expanded or repaired. This improvement comes as a result of the initial job creation and increased employment created over the long-term because of improved access, reduced transport costs and improved safety.

Increasingly, companies are looking at the quality of a region's transportation system when deciding where to re-locate or expand. Regions with congested or poorly maintained roads may see businesses relocate to areas with a smoother, more efficient and more modern transportation system. Highway access has a significant impact on the competitiveness of a region's economy. In a 2023 [survey of corporate executives by Area Development Magazine](#), 78 percent of corporate executives said that highway accessibility was an important or very important factor in making decisions about expansion or investment.³²

CONCLUSION

It is critical Pennsylvania provides a 21st century network of roads, highways and bridges that can accommodate the mobility demands of a modern society.

Additional state and federal transportation funding has allowed Pennsylvania to make significant progress in improving the condition of its bridges and roadways. Sustainable, long-term transportation funding will be needed in the future for Pennsylvania to continue to modernize and improve its transportation network to provide safe, efficient and reliable mobility for motorists and businesses. Making additional needed improvements to Pennsylvania's bridges could provide a

significant boost to the state's economy by creating jobs in the short term and stimulating long-term economic growth as a result of enhanced mobility and access.

To retain businesses, accommodate population and economic growth, and preserve economic competitiveness, Pennsylvania will need to maintain and modernize its bridges by repairing or replacing bridges in poor condition and providing needed maintenance on other bridges. Making needed improvements to Pennsylvania's bridges will require increased and reliable funding from local, state and federal governments.

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ENDNOTES

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- ² Highway Statistics (2022). Federal Highway Administration. DL-1C
- ³ TRIP analysis of Bureau of Economic Analysis data (2020).
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https://www.fhwa.dot.gov/policyinformation/travel_monitoring/tvt.cfm
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- ⁷ Federal Highway Administration (2024). National Bridge Inventory (NBI).
<https://www.fhwa.dot.gov/bridge/nbi.cfm> Bridge condition data for Pennsylvania bridges not included in the NBI can be found at www.projects.penndot.pa.gov
- ⁸ Federal Highway Administration National Bridge Inventory, 2023.
- ⁹ Ibid.
- ¹⁰ Federal Highway Administration National Bridge Inventory, 2013. And Federal Highway Administration National Bridge Inventory, 2014-2023.
- ¹¹ Ibid.
- ¹² PennDOT (2024). Response to TRIP survey.
- ¹³ Ibid.
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- ¹⁶ American Road & Transportation Builders Association (2021). Economic Impact of the Infrastructure Investment & Jobs Act: Pennsylvania. [Federal Highway Program Impact IJA - State - The American Road & Transportation Builders Association \(ARTBA\)](#)
- ¹⁷ Ibid.
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- ²⁷ Highway Statistics (2022). Federal Highway Administration. Chart VM-2.
- ²⁸ TRIP analysis of Federal Highway Administration’s Freight Analysis Framework data (2023). Data is for 2022.
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- ²⁹ American Road & Transportation Builders Association (2015). The 2015 U.S. Transportation Construction Industry Profile. https://www.transportationcreatesjobs.org/pdf/Economic_Profile.pdf
- ³⁰ Ibid.
- ³¹ Ibid.
- ³² Area Development Magazine, Q1 2023. 37th Annual Corporate Survey.
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