ROADS AND BRIDGES

The regional highway system functions as the primary means of distributing people and goods within and throughout Berks County. 51.9 miles of Interstate and 36.8 miles of expressways accommodate most of the highway traffic.

Our experience and perception of the transportation system is largely based on the condition of the roads and bridges we drive on every day. As stated earlier, the primary focus of this plan is to develop and maintain the county's road and bridge network to be satisfactory and safe for existing and planned traffic. To aid in this process, the Reading Area Transportation Study Annual Pavement and Bridge Condition Report was created. Through multiple facets of identification and analysis completed, this report helps to guide investment decisions to keep Berks County's roads and bridges in good order by determining potential projects for inclusion in the RATS TIP and LRTP.

ROADS

Historically, Berks County has been served by a radial system of five major arterial highways. U.S. 222 is the principal link between Reading and both Allentown and Lancaster, as well as a connection to the Pennsylvania Turnpike. PA 61 is the principal highway connection between Schuylkill County and Reading.

U.S. 422 provides a direct link to the Delaware Valley market center to the east. To the west, U.S. 422 connects Reading to Lebanon, Harrisburg and the Capitol region. Berks County has no Interstate link that crosses through the core urban area; however, Interstate 78 to the north and the Pennsylvania Turnpike (I-76) to the south bound the county. PA 183 and PA 61 act as connectors to I-78, while I-176 and U.S. 222 South link the urban area with the Turnpike.

In 2024, Berks County had 3,292.54 linear miles of roadway, largely owned by local government entities and PennDOT.

Road Ownership by Agency 2024									
Agency Linear Miles %									
Local	2,413.18	73.29%							
PennDOT	872.60	26.50%							
Other State/Federal	2.02	0.01%							
Turnpike	4.74	0.14%							
Total	3,292.54	100.00%							

Source: PennDOT, Pennsylvania Highway Statistics, 2024 Highway Data

Map 21 and the Roads by Functional Class table show the federal functional classifications assigned to roads in Berks County. The functional classification of a roadway may change over time based on changing traffic conditions. Classification of a road is based on an analysis of the

volume of traffic using the facility, the type of trip provided, the length of trip, and the speed of the trip.

Roads by Functional Class 2024										
Road Class	Road Class Miles %									
Local	2,388.8	72.55%								
Minor Collector	163.3	4.96%								
Major Collector	355.7	10.80%								
Minor Arterial	202.2	6.14%								
Principal Arterial	94.0	2.85%								
Interstate	51.9	1.58%								
Other Freeway/Expressway	36.8	1.12%								
Total	3,292.7	100.00%								

Source: PennDOT, Pennsylvania Highway Statistics, 2024

Arterials provide the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control. These roads are typically classified as principal arterials (sub-grouped by Interstate, Freeway/ Expressway, and other principal arterials) and minor arterials.

Collectors provide a lower level of service at a slower speed. They provide service for shorter distances by collecting traffic from local roads and connecting them with arterials. Collectors are classified as major collectors and minor collectors.

Local roads and streets are, by far, the most numerous of the road types in the county, accounting for 72.55 percent of all road segment miles in Berks County. These roads provide access to individual properties and serve short distance, low speed trips.

The National Highway System (NHS) consists of roadways important to the nation's economy, defense, and mobility. Principal Arterials are part of the National Highway System. Berks County has 184.4 miles of roads on the National Highway System and two intermodal connectors (see Maps 22 & 23). Currently, the NHS in Berks County is under review. Route mileage will change, and one Intermodal Connector is recommended for elimination.

National Highway System (NHS) in Berks County 2024							
Agency	Agency Linear Miles						
Local	0.5						
PennDOT	179.2						
Turnpike	4.7						
Total	184.4						

Source: PennDOT, Pennsylvania Highway Statistics, 2024 Highway Data

The Federal Aid System (with the exception of rural minor collectors and local roads) is a collection of roads in the county that are eligible for federal funds. In 2024, the federal aid system represented 733.5 linear miles or 22.28% of all roadways in Berks County.

Federal Aid System in Berks County 2024							
Agency Linear Miles							
Local	140.0						
PennDOT	593.5						
Total	733.5						

Source: PennDOT, Pennsylvania Highway Statistics, 2024

Average Annual Daily Traffic (AADT) is the total number of vehicles traveling along a roadway segment on an average day. Map 24 illustrates AADT on Berks County roadways.

DAILY VEHICLE MILES TRAVELED (DVMT)

In 2024 the county's roadways accommodated over 9 million miles of travel daily, the majority of which is on PennDOT owned roads. The COVID-19 pandemic decreased travel demand across the state and in Berks County in 2020, which should be kept in mind when viewing the two DVMT tables below. The 2020 Daily Vehicle Miles Traveled decreased to just under 8 million miles of travel daily from a DVMT of approximately 9.55 million in 2019, as less drivers traveled the roads due to the COVID-19 pandemic. This accounted for a 16.9% decrease in total DVMT for the year of 2020 compared to 2019. The DVMT on Berks County roads are still 500,000 less than in 2019.

The following table shows DVMT for Berks County roads by the agency that owns them from 2020 through 2024. In 2024, the county's roadways accommodated over 9 million miles of daily travel, the majority of which is on PennDOT owned roads. The total DVMT for Berks County increased from 2020 to 2024 by 13.80%.

	Change in DVMT by Agency in Berks County from 2020-2024													
Agency	2020	2021	2022	2023	2024	2020- 2024#	2020- 2024 %							
						Change	Change							
Local	1,264,344	1,626,303	1,704,877	1,506,007	1,388,118	123,774	9.79%							
PennDOT	6,404,952	7,905,375	7,654,150	7,862,851	7,456,892	1,051,940	16.42%							
Other	115,953	136,456	16,203	11,535	606	-115,347	-99.48%							
State/Federal	110,000	100,400	10,200	11,000	000	110,047	00.4070							
Turnpike	166,906	144,808	183,348	190,315	183,348	16,442	9.85%							
Total	7,934,155	9,812,942	9,588,578	9,570,708	9,028,964	1,094,809	13.80%							

Source: PennDOT, Pennsylvania Highway Statistics, 2020-2024

The DVMT, broken out by functional classification, shows almost all classes of through roads increasing in use while lower capacity local roads decreased in use from 2020-2024. Particularly of note, travel on the freeways/expressways grew 21.23% from 2020-2024. As noted earlier, the COVID-19 pandemic decreased travel demand by 16.9% for 2020 compared to 2019. It should

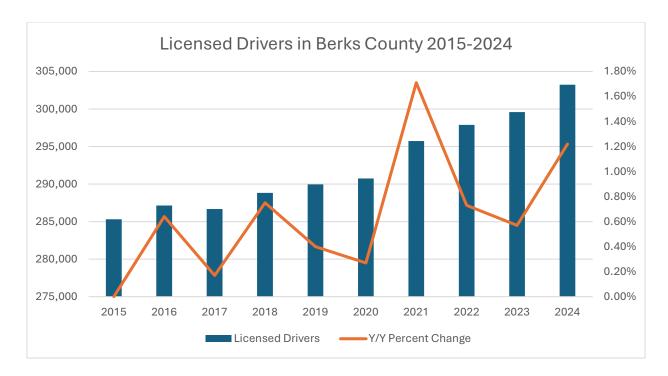
be noted that compared to the 2023 numbers, the only increase was in DVMT of the Interstate.

	Change in DVMT by Road Class in Berks County from 2020-2024												
Road Class	2020	2020 2021 2022 2023 2024		2024	2020- 2024 #	2020- 2024							
						Change	%						
							Change						
Local	1,039,823	1,327,886	1,307,074	1,076,916	980,398	-59,425	-5.71%						
Minor Collector	196,167	223,363	225,571	237,636	229,873	33,706	17.18%						
Major Collector	840,931	1,045,917	1,025,152	1,088,058	1,001,527	160,596	19.10%						
Minor Arterial	1,413,606	1,695,536	1,669,323	1,702,402	1,596,009	182,403	12.90%						
Principal Arterial	1,435,689	1,804,699	1,836,037	1,927,463	1,718,987	283,298	19.73%						
Interstate	1,577,070	1,885,969	1,796,737	1,747,965	1,767,555	190,485	12.08%						
Other Freeway/ Expressway	1,430,869	1,829,572	1,698,685	1,790,268	1,734,615	303,746	21.23%						
Total	7,934,155	9,812,942	9,558,579	9,570,708	9,028,964	1,094,809	13.80%						

Source: PennDOT, Pennsylvania Highway Statistics, 2020-2024

DRIVING POPULATION

As of 2024, there were 303,238 licensed drivers in Berks County. The following chart shows the 6.28% growth in licensed drivers since 2015. The largest change in number of licensed drivers from year to year was between 2020 and 2021, which could be attributed to less desire and opportunity to obtain a license during the COVID-19 pandemic.



Source: PennDOT Driver and Vehicle Services

REGISTERED VEHICLES

The following chart provides a sample of the types of vehicles that use the Berks County road network. There are 20,541 (5.3%) more vehicles registered in 2024 than in 2014. The Other Vehicle Types class rose significantly, but that was due to including cargo trailers and recreational trailers into this category that were unreported in previous years. Passenger cars have been the predominant vehicle on the road – with a steady rate of around 66% of all vehicles since 2014. With the addition of motorcycles and pick-up trucks, 84.8% of registered vehicles in the county are largely for passenger use. This chart is not indicative of the predominance of tractor- trailers since such vehicles can be registered in nearly any state. However, the chart below shows 319 more of those vehicles registered overall across weight classes inside the county since 2014.

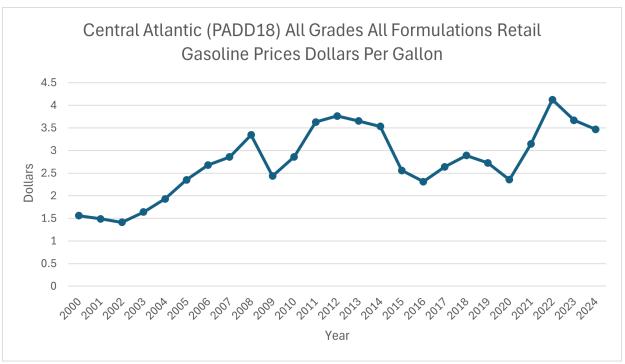
Change i	Change in Number and Type of Registered Vehicle in Berks County 2014 to 2024												
Registered	2014	2014 %	2019	2019 %	2024	2024 %	2014 to	2014 to					
Vehicles		of		of		of	2024 #	2024 %					
		Total		Total		Total	Change	Change					
Passenger	259,504	67.1%	264,231	66.5%	268,777	65.9%	9,273	3.6%					
Special Mobile Equipment	569	0.1%	591	0.1%	579	0.1%	10	1.8%					
Farm Vehicles (no exemption cert.)	5	0.0%	4	0.0%	4	0.0%	-1	-20.0%					

Motorhomes	1,248	0.3%	1,224	0.3%	1,148	0.3%	-100	-8.0%
Regular Motorcycle	15,412	4.0%	14,194	3.6%	14,437	3.5%	-975	-6.3%
Motorized Pedalcycle	72	0.0%	52	0.0%	52	0.0%	-20	-27.8%
Motor Drive Vehicle/Motor Driven Cycle	209	0.0%	146	0.0%	131	0.0%	-78	-37.3%
School Bus	1,416	0.4%	1,475	0.4%	939	0.2%	-477	-33.7%
Omni Bus	193	0.0%	161	0.0%	96	0.0%	-97	-50.3%
Bus	316	0.0%	242	0.0%	208	0.0%	-108	-34.2%
Mass Transit Bus	225	0.0%	228	0.0%	112	0.0%	-113	-50.2%
ARP Bus	66	0.0%	46	0.0%	39	0.0%	-27	-40.9%
Taxi	49	0.0%	47	0.0%	1	0.0%	-48	-98.0%
Limousine	55	0.0%	170	0.0%	113	0.0%	58	105.5%
Trailer (3,000 lbs or less)	21,025	5.4%	20,558	5.2%	19,281	4.7%	-1,744	-8.3%
Trailer (3,001 to 10,000 lbs)	11,997	3.1%	13,487	3.4%	13,416	3.3%	1,419	11.8%
Trailer (10,001 lbs or more)	8,658	2.2%	10,888	2.7%	12,645	3.1%	3,987	46.0%
Pickup Trucks (up to 14,000 lbs)	57,204	14.8%	59,651	15.0%	62,498	15.3%	5,294	9.3%
Truck (14,001 to 17,000 lbs)	1,053	0.3%	1,065	0.3%	1,098	0.3%	45	4.3%
Truck (17,001 to 21,000 lbs)	826	0.2%	1,037	0.3%	1,228	0.3%	402	48.7%
Truck (21,001, to 26,000 lbs)	2,325	0.6%	2,711	0.7%	3,136	0.8%	811	34.9%
Truck (26,001 to 30,000 lbs)	186	0.0%	147	0.0%	122	0.0%	-64	-34.4%
Trucks (30,001 to 33,000 lbs)	605	0.2%	510	0.1%	440	0.1%	-165	-27.3%
Truck (33,001+ lbs) Tractor Trailers	3,630	9.4%	3,772	0.9%	3,949	1.0%	319	8.8%
Other Vehicle Types	172	0.0%	512	0.1%	3,112	0.8%	2,940	1,709.3%
Total	387,020	100.0%	397,149	100.0%	407,561	100.0%	20,541	5.3%

Source: PennDOT Driver and Vehicle Services Annual Report of Registrations

GASOLINE PRICES

Despite gasoline prices remaining relatively low, it is still more expensive to drive around Berks County today than it was in the last 25 years. While gas prices generally do not affect how much we travel, it can affect how far and the mode in which we travel. If gas prices are high, we tend to keep trips closer to home, purchase more gas efficient vehicles, look to carpool, or if possible, take the bus or bike to work.



Source: United States Department of Energy, Energy Information Administration (EIA)

Note: This information is obtained from the EIA PASS 18 Annual Average Table

ROADS

Analyzing road and bridge conditions allows PennDOT and RATS to focus on setting goals to improve upon those conditions by programming road and bridge improvements. The <u>Reading Area Transportation Study's Pavement and Bridge Condition Report</u> is updated annually and identifies performance based on the trends of each indicator over a 5-year period. The RATS Pavement and Bridge Report is used to help develop the recommendations identified in <u>Chapter 4</u> of this plan.

Roadway surfaces in Berks County are mostly comprised of paved surface roadways. Of the paved surface roadways, pavements are either asphalt or concrete. PennDOT assesses pavement surface conditions using a variety of metrics that include International Roughness Index (IRI) and Overall Pavement Index (OPI). PennDOT uses OPI to evaluate both the surface and subsurface of the road.

IRI measures pavement roughness in terms of the number of inches per mile that a laser, mounted in a specialized van, jumps as it is driven along a highway – the lower the IRI, the smoother the ride. IRI categories are the main factor PennDOT uses in determining pavement condition. The categories are different for each business plan network. The table below displays ranges assigned to IRI categories for each business plan network. Note, the lower the IRI, the better the IRI category and condition.

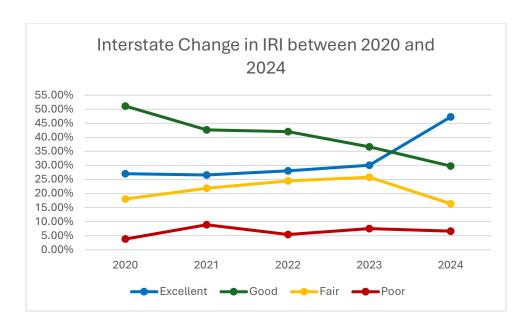
IRI Categories	Interstate	NHS	Non-NHS	Non-NHS
		Non-Interstate	≥ 2,000 ADT	< 2,000 ADT
<u><</u> 70	Excellent	Excellent	Excellent	Excellent
71-75	Good			
76-100		Good		
101-120	Fair		Good	
121-150		Fair		Good
151-170	Poor		Fair	
171-195		Poor		Fair
196-220			Poor	
>220				Poor

Source: PennDOT Roadway Management and Testing

The following tables track the number of miles in each IRI category and median IRI based on business plan network for Berks County roads from 2020-2024. The following line charts track the percentage of roadway categorized excellent to poor IRI from 2020-2024 for each business plan network. Map 25 shows the condition of roads based on IRI category in each planning region of the county.

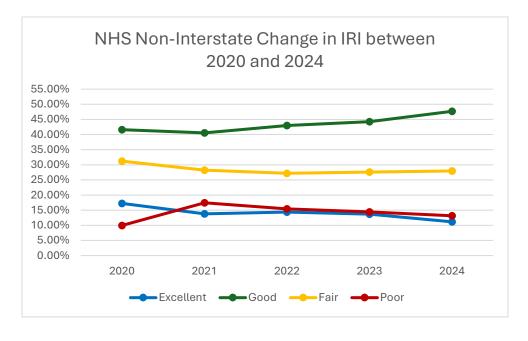
Overall, since 2020, Interstate roads in Berks County have improved, with the median IRI advancing from 81 to 72. The median IRI of 72 for Berks County interstate roads is considered good and near excellent by the IRI classification. The number of segment miles of poor condition interstate pavements have remained low, however nearly doubled between 2020 and 2024. The significant increase in excellent segment miles in 2024 can be attributed to large resurfacing and bridge maintenance projects on Interstate 78.

Change in	Change in Number of Interstate Segment Miles by Condition and Median IRI between 2020 and 2024												
Condition	2020	2021	2022	2023	2024	# Change	% Change						
Excellent	22.3	24.8	21.3	27.5	43.6	21.3	95.52%						
Good	42.2	39.8	32.0	33.5	27.5	-14.7	-34.83%						
Fair	14.9	20.4	18.6	23.6	15.1	0.2	1.34%						
Poor	3.1	8.3	4.1	6.8	6.1	3.0	96.77%						
Median IRI	81	83	82	85	72	-9	-11.11%						



Non-interstate miles on the National Highway System (NHS) in Berks County have remained relatively stable, with the median IRI worsening by only one point from 110 to 111. These roads are considered good by the IRI classification.

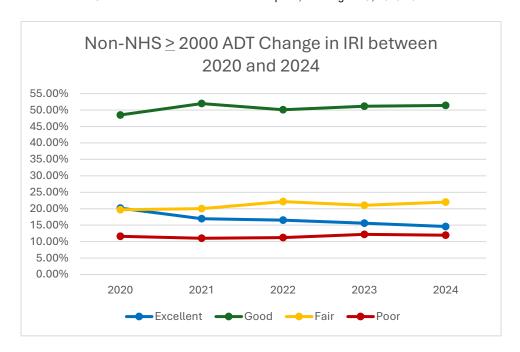
Change in	Change in Number of NHS Non-Interstate Segment Miles by Condition and Median IRI between 2020 and 2024												
Condition	2020	2021	2022	2023	2024	# Change	% Change						
Excellent	34.9	28.3	29.4	28.1	22.3	-12.6	-36.10%						
Good	84.3	83.1	88.1	90.6	95.1	10.8	12.81%						
Fair	63.3	57.8	55.7	56.5	55.8	-7.5	-11.85%						
Poor	20.2	35.7	31.6	29.6	26.3	6.1	30.20%						
Median IRI	110	114	112	111	111	1	0.91%						



Berks County roads that are not on the NHS with 2,000 or more vehicle trips per day have remained relatively stable, despite the decrease in excellent condition segment miles. The median IRI increased from 128 to 134, while not an improvement, this business plan network remains in good condition.

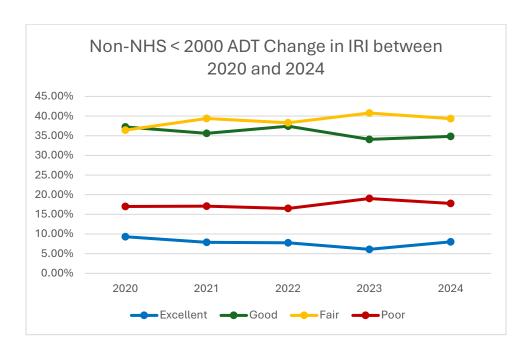
Change in Number of Non-NHS ≥2000 ADT Segment Miles by Condition and Median IRI between 2020 and 2024												
Condition	Condition 2020 2021 2022 2023 2024 # Change % Change											
Excellent	71.4	60.5	59.5	59.8	54.7	-16.7	-23.39%					
Good	171.8	185.4	180.1	196.4	192.5	20.7	12.05%					
Fair	69.7	71.5	79.6	80.8	82.5	12.8	18.36%					
Poor	41.2	39.3	40.3	46.9	44.8	3.6	8.74%					
Median IRI	128	128	130	131	134	6	4.69%					

Source: PennDOT Performance Measures Annual Reports, Reading MPO, 2020-2024



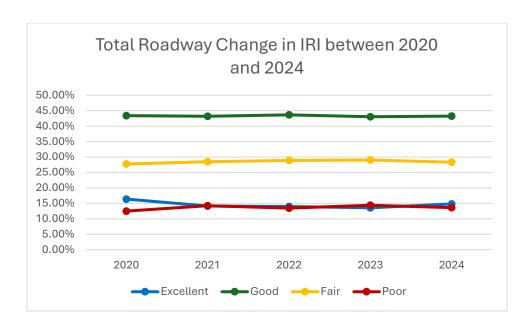
Berks County roads that are not on the NHS and see less than 2,000 vehicle trips per day have also declined in condition slightly with the median IRI changing from 173 to 178. This is the only business plan network not classified as good based on median IRI, instead a median IRI rating of 178 classifies this as fair.

Change in Number of Non-NHS <2000 ADT Segment Miles by Condition and Median IRI between 2020 and 2024											
Condition	n 2020 2021 2022 2023 2024 # Change % Change										
Excellent	31.6	26.7	25.8	19.0	25.7	-5.9	-18.67%				
Good	126.3	120.1	124.3	105.9	111.6	-14.7	-11.64%				
Fair	123.5	132.8	127.2	126.7	126.2	2.7	2.19%				
Poor	57.7	57.7	54.8	59.1	57.0	-0.7	-1.21%				
Median IRI	173	175	174	180	178	5	2.89%				



The total roadway network of Berks County has slightly declined in condition with a current median IRI of 140, however it has remained at this rating from 2021 through 2024. The largest change was a decrease in excellent condition roadway segment miles from 2020 to 2024.

Change in Number of Total Roadway Segment Miles by Condition and Median IRI between 2020 and 2024											
Condition	n 2020 2021 2022 2023 2024 # Change % Change										
Excellent	160.2	140.3	136.0	134.3	146.3	-13.9	-8.68%				
Good	424.6	428.3	424.4	426.3	426.7	2.1	0.49%				
Fair	271.4	282.5	281.1	287.6	279.6	8.2	3.02%				
Poor	122.2	141.0	130.8	142.4	134.2	12	9.82%				
Median IRI	136	140	140	140	140	4	2.94%				



The following table displays the pavement condition by Business Plan Network for 2024, however, looks at the difference in appropriate Business Plan Networks by analyzing condition based on whether it is state-owned or a Local Federal Aid (LFA).

2024 Pavement IRI Summary by Business Plan Network										
Business Plan	Excellent		G	Good		Fair		oor	Total	
Network	Seg-Mi	%	Seg	%	Seg	%	Seg	%	Tested Seg	
			Mi		Mi		Mi		Mi	
Interstate	43.6	46.78%	27.8	29.83%	15.1	16.20 %	6.7	7.19%	93.2	
Total NHS Non-	27.4	13.05%	96.9	46.14%	56.2	26.76%	29.5	14.05%	210.0	
Interstate										
State-Owned	1.6	5.63%	10.2	35.92%	12.3	43.31%	4.3	15.14%	• 28.4	
• LFA	25.8	14.21%	86.7	47.74%	43.9	24.17 %	25.2	13.88%	• 181.6	
Total Non-NHS >	54.7	14.50%	192.6	51.05%	82.8	21.95%	47.2	12.51%	377.3	
2,000 ADT										
State-Owned	37.9	13.12%	137.1	47.46%	70.5	24.40%	43.4	15.02%	• 288.9	
• LFA	16.8	19.00%	55.5	62.78%	12.3	13.91%	3.8	4.30%	• 88.4	
Total Non-NHS <	25.7	7.98%	112.3	34.89 %	126.4	39.27%	57.5	17.86%	321.9	
2,000 ADT										
State-Owned	25.7	8.34%	107.7	34.96%	122.2	39.66%	52.5	17.04%	• 308.1	
• LFA	0.0	0.00%	4.6	33.33%	4.2	30.43%	5.0	36.23%	• 13.8	
Total – Roadway	151.4	15.10%	429.6	42.86 %	280.5	27.98%	140.9	14.06%	1,002.4	

Source: PennDOT's Roadway Management System (RMS) Road Segments RMSSEG: 1/3/2025

BRIDGES

The Schuylkill River, two lakes and countless streams provide ample recreational activities and commercial activities but create transportation challenges to safely and efficiently move people and freight over them in Berks County. In 2024, there are 880 bridges in Berks County, with the

majority owned by PennDOT. These bridges are those that require inspections – state bridges longer than eight feet and local bridges longer than 20 feet. The slight change in the total number of bridges is in part due to PennDOT efforts to improve the classification of bridges.

Map 26 shows the approximate location of bridges in the county.

Bridges in Berks County Between 2020 and 2024										
Bridge Type	2020	2021	2022	2023	2024	# Change	% Change			
State <a>>8' Interstate/Ramps	65	64	60	64	64	-1	-1.53%			
State ≥8' NHS (non-interstate)	150	151	150	150	150	0	0.00%			
State >8' non-NHS >2000 ADT	239	236	237	246	243	4	1.67%			
State ≥8' non-NHS <2000 ADT	191	194	194	183	187	-4	-2.09%			
Local <u>≥</u> 20'	236	236	236	236	236	0	0.00%			
Total Bridges by Year	881	881	877	879	880	-1	-0.11%			

Source: PennDOT Performance Measures Annual Reports, Reading MPO, 2020-2024

As Berks County's bridges continue to age and deteriorate, it is sometimes necessary to close bridges unexpectedly due to problems revealed during routine inspections. Bridges closed to traffic are those structures deemed unsafe to carry any type of traffic. The number of bridges closed to traffic in the county increased 57.14% since 2020. As of 2024, 11 bridges are closed, with the majority being bridges owned by local municipalities. Map 27 shows the location of the closed and posted bridges.

Closed Bridges in Berks County Between 2020 and 2024										
Bridge Type	2020	2021	2022	2023	2024	# Change	% Change			
State ≥8' Interstate/Ramps	0	0	0	0	0	0	0.00%			
State <a>>8' NHS (non-interstate)	0	0	0	0	0	0	0.00%			
State <u>></u> 8' non-NHS >2000 ADT	0	0	0	0	0	0	0.00%			
State <u>></u> 8' non-NHS <2000 ADT	1	2	1	1	3	2	200.00%			
Local <u>≥</u> 20'	6	6	6	7	8	2	33.33%			
Total Closed Bridges by Year	7	8	7	8	11	4	57.14%			

Source: PennDOT Performance Measures Annual Reports, Reading MPO, 2020-2024

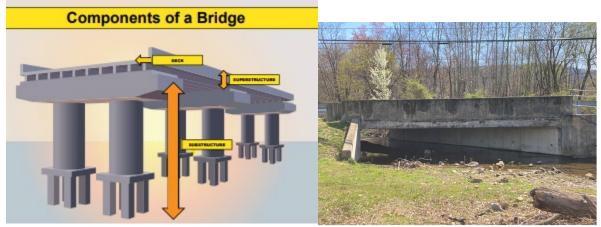
Load posting a bridge is required by the National Bridge Inspection Standards when a bridge is not capable of safely carrying a legal load. If a bridge is deemed deficient, officials will post a maximum load for the bridge. Bridges may also be posted for other load capacity restrictions including speed and number of vehicles permitted on the bridge. Sixty-two (62) bridges are posted in Berks County as of 2024, with the majority of those bridges owned by local municipalities. The number of posted bridges decreased 20.51% since 2020.

Posted Bridges in Berks County Between 2020 and 2024										
Bridge Type	2020	2021	2022	2023	2024	# Change	% Change			
State <u>></u> 8' Interstate/Ramps	2	2	0	0	0	-2	-200.00%			
State <a>>8' NHS (non-interstate)	1	1	1	1	1	0	0.00%			
State <a>8 ' non-NHS <a>2000 ADT	6	2	2	2	2	-4	-66.67%			
State >8' non-NHS <2000 ADT	8	10	8	7	6	-2	-25.00%			
Local <u>≥</u> 20'	61	60	56	55	53	-8	-13.11%			
Total Posted Bridges by Year	78	75	67	65	62	-16	-20.51%			

Bridge Inspection Overview

Bridges are characterized by the condition of their major components. State-owned bridges 8 feet in length or more and local-owned bridges over 20 feet in length are inspected on a regular, rotating basis of every two years, unless a higher frequency is determined. These inspections result in condition ratings for the deck, substructure, and superstructure. If the bridge is a culvert, then the one structural piece is given a condition rating. If any one of these structural parts has a condition rating of 4 or less, that bridge is deemed Poor. Bridges and culverts with a condition rating of 5 for any of the structural parts are considered Fair. Bridges and culverts with a condition rating of 6 or higher are considered Good. Each of these components is rated based on the Federal Highway Administration's Pavement and Bridge Condition Report Performance Measures final rule, which became effective in February 2017.

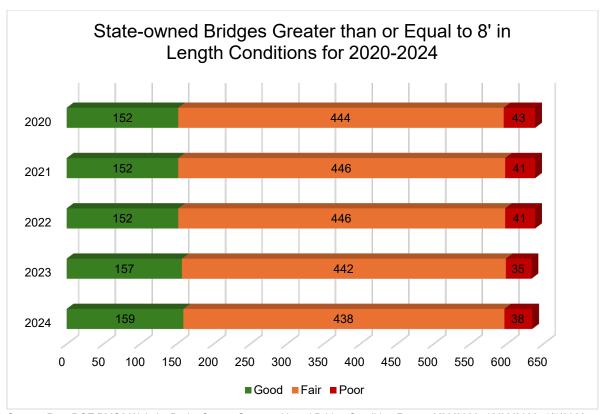
A poor designation does not imply that a bridge is unsafe. However, such bridges typically require significant maintenance and repair to remain in service and would eventually require major rehabilitation or replacement to address the underlying deficiency. Some examples of underlying deficiencies can include inadequate under-clearances, insufficient load-carrying capacity, poor alignment with the roadway, or can no longer adequately service today's traffic.



This graphic shows the locations of a bridge substructure, superstructure, and deck, which are all considered in the overall condition rating. The picture to the right is an example of a frame culvert in Muhlenberg Township. Since this type of bridge is one structural piece, it receives one condition rating.

State-owned Bridge Conditions

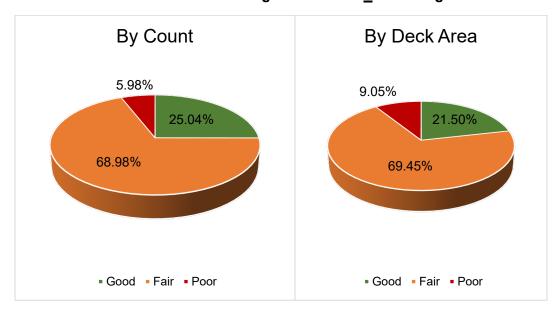
The following tables and charts explore the conditions for inspected state-owned bridges greater than or equal to 8 feet in length.



Source: PennDOT BMS2 Website Berks County State and Local Bridge Condition Report 8/26/2020, 12/08/2022, 1/5/2023, 1/4/2024, 1/3/2025

It is important to consider that bridges may be different lengths and carry different numbers and widths of lanes, although only 5.98% of state-owned bridges were in poor condition in 2024, 9.05% of the state bridge deck area was in poor condition.

2024 State-owned Bridge Conditions ≥ 8' in Length



Source: PennDOT BMS2 Website Berks County State and Local Bridge Condition Report 1/3/2025

Local-owned Bridge Conditions

Local-owned bridges consist of county, township, borough/city, and railroad owned bridges.

2024 Local-owned Bridges ≥ 20' Conditions by Count by Business Plan Network										
Business Plan Network	(Good	F	air	Po	Total				
	# %		#	%	#	%	#			
Local <u>></u> 20'	37	15.81%	126	53.85%	71	30.34%	234			
 County 	14	27.45%	21	41.18%	16	31.37%	51			
 Township 	20	12.66%	91	57.59%	47	29.75%	158			
 Borough/City 	2	9.09%	14	63.63%	6	27.27%	22			
 Railroad 	1	33.33%	0	0.00%	2	66.66%	3			

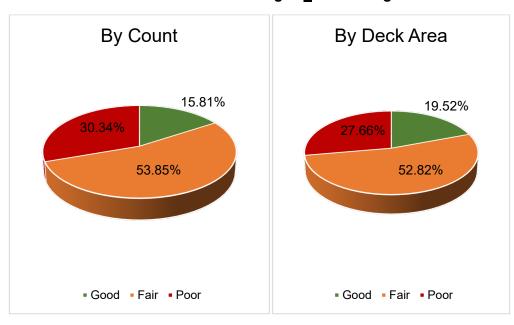
Source: PennDOT BMS2 Website Berks County State and Local Bridge Condition Report 1/3/2025

2024 Local-owned Bridges ≥ 20' Conditions by Deck Area by Business Plan Network											
Business Plan	Business Plan Good		Fa	ir	Po	Total					
Network	Deck	%	Deck	%	Deck	%	Deck				
	Area SF		Area SF		Area SF		Area SF				
Local > 20'	88,402.3	19.52%	239,219.8	52.82%	125,270.9	27.66%	452,893.0				
 County 	44,427.7	26.64%	89,899.6	53.90%	32,468.8	19.47%	166,796.1				
 Township 	38,106.5	18.23%	98,005.2	46.90%	72,866.2	34.87%	208,977.9				
Borough/City	3,338.5	4.97%	51,315.0	76.40%	12,512.3	18.63%	67,165.8				
 Railroad 	2,529.6	25.41%	0.0	0.00%	7,423.6	74.59%	9,953.2				

Source: PennDOT BMS2 Website Berks County State and Local Bridge Condition Report 1/3/2025

It is important to consider that bridges may be different lengths and carry different numbers and widths of lanes, although 30.34% of local-owned bridges were in poor condition in 2024, this represented 27.66% of local bridge deck area.

2024 Local-owned Bridges ≥ 20' in Length



Source: PennDOT BMS2 Website Berks County State and Local Bridge Condition Report: 1/3/2025

State-owned Bridges Versus Local-owned Bridges

The preceding tables and charts highlight the disparities that exist between state-owned bridge conditions compared to local-owned bridge conditions. While state-owned bridges greater than or equal to 8 feet in length are regularly inspected, only local-owned bridges greater than or equal to 20 feet require regular inspection. The majority of state-owned bridges in Berks County are either in Good or Fair condition by both Count (totaling 94.02%) and Deck Area (totaling 90.95%). Comparatively, a greater percentage of the larger local-owned bridges are in Poor condition, with fewer local-owned bridges in Good and Fair condition by both Count (totaling 69.66%) and Deck Area (totaling 72.07%).