



Passengers boarding at the BARTA terminal in downtown Reading. The BARTA fleet is comprised mostly of electric hybrid buses.
Photo Courtesy of South Central Transit Authority.

TRANSIT

Public transportation forms a key component of the Berks County transportation system. While most travel in the county is by automobile, there is a significant and growing segment of the population that relies on public transportation to fulfill their needs. Public transportation is provided by both non-profit and profit organizations, supplying fixed route, and demand response services.

The principal provider of public transportation services in Berks County is the South Central Transit Authority (SCTA). This authority oversees two divisions: the Berks Area Regional Transportation Authority (BARTA) that serves Berks County and the Red Rose Transit Authority (RTTA) that serves Lancaster County.

Headquartered in Lancaster County, the SCTA Board is comprised of five members appointed by Lancaster County Commissioners and five members appointed by Berks County Commissioners. BARTA operates a traditional fixed route bus system operating in the urban area surrounding the City of Reading and a Special Services division that provides demand-response services to elderly and handicapped citizens throughout the county. BARTA buses continue to be identified with the BARTA colors, name and logo, and all schedule and service information are provided under the BARTA name.

Moving Ahead for Progress in the 21st Century Act (MAP-21) established new requirements for transit authorities on asset management and investment strategies. The SCTA is required to meet the provisions of MAP-21 and the guidelines provided by the Federal Transit Administration (FTA) to prepare a Transit Asset Management Plan (TAMP). This asset management plan is performance based and must include a systematic means of operating, maintaining, and improving public transportation capital assets effectively. The South Central Transit Authority (SCTA) Transit Asset Management Plan (TAMP) was adopted in 2021. This plan is required to be updated as needed, but not more than every four years per FTA regulations.

SCTA updated their Transit Development Plan in August of 2018 which included recommendations for changes to occur over time. Goal 3 identified in the 2018 SCTA Transit Development Plan Final Report is to connect people to desired locations. A desired location for many is their jobs. One way to improve access to jobs would be for developers and planners to consider bus stop location early in the design process. As more businesses and jobs come to an area, planners and developers should work with BARTA early in the design process of a new project, rather than placing stops at later stages of construction, with considerations for pedestrian access, existing bus operations, and potential stop facilities.

An example of this type of coordination has been recently seen along the Route 61 Corridor which is serviced by BARTA's Route 20. As more businesses began development along the Route 61 corridor, planners worked with BARTA to add stops along this route and to accommodate the buses needs such as pull offs and larger turning radius. More stops have been added along the Route 61 corridor, BARTA's Route 20, to provide individuals access to new businesses and potential jobs.

The Pennsylvania Public Transportation Association (PPTA) in partnership with PennDOT published the Building Better Bus Stops Resource Guide in December 2020. This resource guide promotes safe access to fixed route bus service and provides municipalities, transit agencies, planners, and designers with resources to encourage consideration and incorporation of transit in planning and design. The review and implementation of strategies from this resource guide is encouraged in order to provide quality and efficient transit service and ensure bus stops meet the needs of all riders, transit agencies, and the community.

Fixed-Route Operations

BARTA provides fixed route services in the City of Reading, 17 Boroughs, and 15 Townships within Berks County and carries approximately 3 million passengers annually. Operating seven days a week, with a fleet of 50 buses, it services 39 bus shelters and nearly 1,500 bus stops on 19 routes with nearly 1.5 million route miles per year. According to the SCTA TDP BARTA Onboard Passenger Survey, a majority of those trips are work related, followed by shopping, and appointments or for other personal business. The majority of riders (41 percent) are between 18-34 years of age, and most are female (62 percent) and most do not have a valid driver's license (72 percent). The most heavily traveled route is Route 1-Temple, which services 5th Street between Reading and Muhlenberg Township.

BARTA Fixed Route Ridership was down for the fiscal year ending in June 2020. The COVID-19 Pandemic limited travel during the last quarter of this reported year. As many passengers utilize public transportation to commute, shop, and attend appointments, many retailers, restaurants, and businesses were closed from mid March 2020 through the end of June 2021 contributing to a decrease in Fixed Route ridership. The Special Fixed Route passenger category increased by 775%, which can be attributed to redefining this category from consisting only of Medial Assistance to including other passenger types.

BARTA Fixed Route Service							
Customer Type	2016	2017	2018	2019	2020	# Change	% Change
Farepaying	2,254,486	2,132,912	2,198,929	2,046,970	1,434,068	-820,418	-36.4%
Senior Citizens	415,799	413,914	459,677	453,786	398,214	-17,585	-4.2%
Transfers	180,259	217,822	210,627	220,772	148,995	-31,264	-17.3%
Specials	40,870	36,584	34,553	34,512	357,671	316,801	775.0%
Total Passengers	2,891,414	2,801,232	2,903,786	2,756,040	2,388,948	-552,466	-19.1%

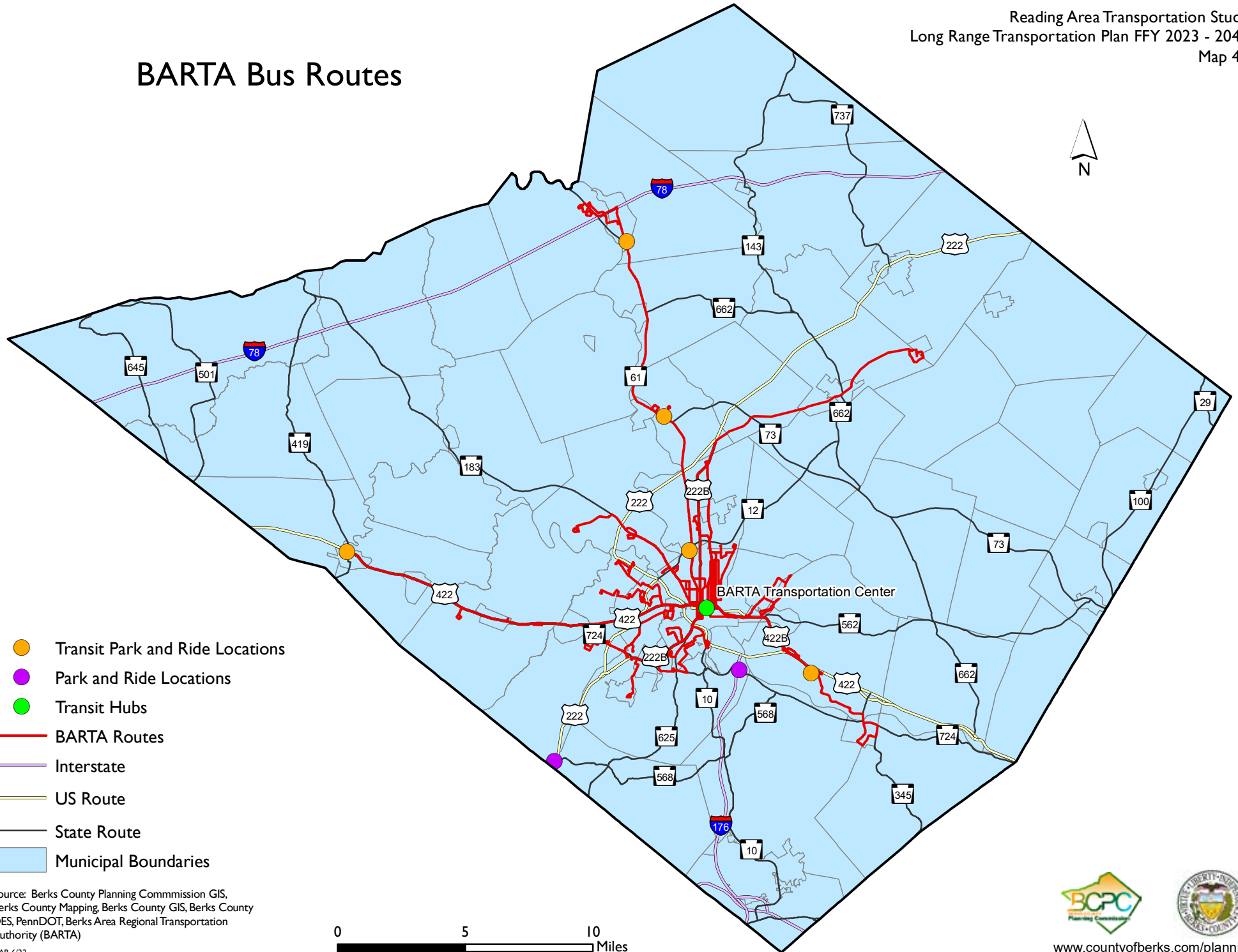
Source: South Central Transit Authority Berks Area Regional Transit Authority Fiscal Year Summaries

BARTA Ridership June 2019 – June 2020 Fiscal Year by Fixed Route	
Route	Ridership
Route 1 - Temple via 5th	466,106
Route 15 - Berkshire Mall	261,880
Route 4 - 10th St / 11th St	207,431
Route 16 - Broadcasting Square	184,407
Route 18 - Schuylkill Ave	159,870
Route 8 - Reiffton / Birdsboro	136,747
Route 14 - Wernersville via Sinking Spring	128,552
Route 3 - Temple via Kutztown Rd	112,643
Route 19 - Riverside / Cotton St	102,230
Route 10 - Brookline	93,057
Route 17 - Glenside	91,006
Route 5 - Albright College	83,944
Route 11 - Mohnton via Shillington	70,702
Route 20 - Rt 61 Hamburg	68,999
Route 7 - Pennside	64,634
Route 12 - Lincoln Park / Reading Hospital	44,945
Route 9 - Grill via Kenhorst	43,855
Route 22 - Lyon Station	14,217
Route 2 - Fairgrounds Square	3,723

Overall, most major trip origins and destinations (major employers, shopping centers, post-secondary schools) are served by BARTA fixed route bus service in and around the area surrounding the City of Reading. The majority of the un-served origins and destinations are located in the eastern, northeastern, northwestern, and southern peripheries of Berks County, which includes the boroughs of Boyertown and Kutztown.

Source: South Central Transit Authority Fixed Route Data Summary

BARTA Bus Routes



Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, Berks Area Regional Transportation Authority (BARTA)

BAB 6/22



BARTA's main vehicle servicing and administration facility is located on North 11th Street in the City of Reading. The main transfer point is the BARTA Transportation Center located on 8th Street. BARTA also provides service to five (5) Park and Ride lots in the county.

Special Services Operations

BARTA's Special Services Division is responsible for operating and administering most human service transportation in Berks County. These services include the Shared Ride, ADA, and Medical Assistance Transportation Program (MATP). They are specialized, demand-responsive paratransit services and provide public transportation to persons with disabilities who are unable to use fixed route transit.

BARTA provided nearly 200,000 trips in 2020 between their fleet of 42 paratransit vehicles and a contract with Easton Coach. According to the SCTA TDP BARTA Special Services Customer Survey, the majority of trips (90 percent) were for medical appointments, followed by shopping (4 percent) and other (3 percent). Similar to Fixed Route ridership with a decrease of 19.1%, Special Services ridership decreased by 19.9%.



The number of farepaying customers using BARTA decreased 36.4% between 2016 and 2020.

BARTA Special Services							
Customer Type	2016	2017	2018	2019	2020	# Change	% Change
Senior Citizens	78,088	94,600	92,269	100,429	72,692	-5,396	-6.9%
DPW-MATP	85,867	72,635	80,042	87,334	83,790	-2,077	-2.4%
BH/DS	15,839	33,159	25,028	21,678	14,405	-1,434	-9.1%
ADA Services	55,381	20,770	17,574	18,241	16,822	-38,559	-69.6%
Access to Jobs	n/a	47	158	143	214	n/a	n/a
Area Agency on Aging	2,446	4,501	2,333	955	149	-2,297	-93.9%
Other Agencies	10,426	10,901	11,940	9,738	10,866	440	4.2%
Total	248,047	236,613	229,344	238,518	198,938	-49,323	-19.9%

Source: South Central Transit Authority Berks Area Regional Transit Authority Fiscal Year Summaries (Access to Jobs not collected until 2017)

Inter-City Bus Service

Prior to 2019, Carl R. Bieber, Inc. headquartered in Kutztown, serviced customers throughout the United States, but primarily in central and eastern Pennsylvania, New York City, and New Jersey. With a fleet of 66 buses, it maintained a scheduled line of daily runs to various locations, between Berks, surrounding counties, Philadelphia, and New York City until February 15, 2019 when Bieber's operations ceased. Currently, several private operators have initiated limited service from Berks County to Philadelphia and New York City.

Commuter Services

Berks County joined Commuter Services of Pennsylvania, a program of the nonprofit Susquehanna Regional Transportation Partnership in 2009. The program covers 13 counties. It is locally sponsored by RATS, BARTA, and Greater Reading Chamber Alliance and offers transportation demand management strategies and assistance to employers and individuals for finding options other than driving alone to work. The program goal is to reduce the number of vehicle miles traveled and to increase the efficiency of the highway system by reducing congestion and improving air quality. Participation in the program is free. Participation in the program has been successful – increasing involvement and reducing VMT since 2009. The program is funded with federal Congestion Mitigation & Air Quality (CMAQ) funds through participating MPOs. More information on this program can be found at www.pacommuterservices.org

Commuter Services of Pennsylvania – Rideshare Program							
Berks County	2016	2017	2018	2019	2020	# Change	% Change
New Enrollees Per Year	436	479	414	388	243	-193	-44.3%
Total Employer/Organization Participation (#)	59	60	49	48	48	-11	-18.6%

Source: Commuter Services of Pennsylvania

Berks County Performance Measures							
Type	2016	2017	2018	2019	2020	# Change	% Change
Vehicle Miles Traveled Removed	n/a	n/a	199,951	139,834	243,437	43,486 (2018 to 2020)	21.7% (2018 to 2020)
Commuters Enrolled	2,311	2,522	1,915	2,270	2,346	35	1.5%

Source: Commuter Services of Pennsylvania (2018 - 2020 VMT Removed numbers are from real time data which was unavailable until 2018)

Taxi Service

There are six taxicab operators in Berks County as of 2019. All provide 24 hour/7 day service. The importance of the role played by taxi service, for all riders, is likely to grow in the future. Taxicabs operating within Pennsylvania are licensed by the Public Utility Commission, but generally are for-profit enterprises. The Public Utility Commission lists the following taxi operators as active in Berks County: Reading Checker Cab Inc, La Mexicana Express Service LLC, Reading Metro Taxi Cab Inc, Grab A Cab Inc, Dominicana Taxi Express LLC, and Reading Yellow Cab Inc.

Ride Sharing

Although many ridesharing companies are emerging across the country, Berks County is only serviced by Uber and Lyft. Uber began operations in 2015 with a limited service area in and around the City of Reading shortly followed by the emergence of Lyft. Service statistics are unknown.

Passenger Rail

Berks County is not currently served by passenger rail service. Originally served by both the Reading and Pennsylvania railroads, service was gradually reduced due to the loss of ridership to passenger vehicles and changing land uses along the line along with growing operating costs. The Southeastern Pennsylvania Transportation Authority (SEPTA) provided the last passenger rail service in the county between Reading and Philadelphia. It ended in 1982. Since that time, multiple studies have been undertaken investigating the feasibility of this service.

One of the more recent studies prepared by Transportation Economics and Management Systems, Inc. in July 2020 for Berks Alliance and the Greater Reading Chamber Alliance examined the potential for restoring passenger rail service to Berks County. The Restoring Passenger Rail Service to Berks County, PA plan includes information on service and operations, infrastructure needs and associated capital costs, projected ridership, benefits of reestablishing intercity passenger rail service, and next steps for implementation.

Another study was developed by PennDOT in December 2020. The Reading to Philadelphia Passenger Rail Analysis addresses the feasibility of restoring commuter passenger rail service along the historic rail corridor that connects Norristown to Pottstown. The analysis includes possible service alternatives, capital improvements, and identifies the next steps that are needed for implementation.

In early 2021, the Tri-County Passenger Rail Committee was created to assess the potential to establish passenger rail service between Reading and Philadelphia. The Committee was a collaborative effort between Berks County, Chester County, and Montgomery County to identify the level of support to reestablish passenger rail service and gather information. The Committee recognized the value that reestablishing service could have for economic development, property values, and increased job opportunities as a result of the additional transportation option passenger rail service offers.

The Tri-County Passenger Rail Committee evaluated both studies and the mode options. Intercity service has fewer longer distant trips. Commuter service offers increased frequency and a greater number of stops but at a higher cost. As this analysis was under way, the IJA was approved. It contained significant funds to improve intercity passenger rail service across the country. At this same time, AMTRAK released its vision plan for passenger rail expansion that included, among many other considerations, a proposed extension from its existing Northeast Corridor service in Philadelphia to Reading. Both AMTRAK and SEPTA were contacted regarding their potential interest in serving this corridor. AMTRAK

indicated its interest in moving forward based on its vision plan. SEPTA was not interested in looking at expanding its services to this corridor at this time based on its current focus of expanding another line into the King of Prussia area and high system maintenance needs.

In 2022, the Tri-County Passenger Rail Committee recommended the establishment of an authority. The Schuylkill River Passenger Rail Authority (SRPRA), approved in April, 2022, replaces the Tri-County Passenger Rail Committee and has the power to formalize agreements, procure funding and provide for a direct governmental body that can work with AMTRAK, PennDOT, the Federal Railroad Administration and other necessary partners.



Truck traffic on Interstate 78 near Shartlesville.
Up to 43% of traffic on the Interstate is truck traffic.

FREIGHT

The effectiveness and efficiency of freight transportation in Berks County is a major factor in manufacturing costs and in retail costs. Manufacturers look for reliability, speed, and quality control in the carriers that deliver their raw materials and finished products. Since the mid-1990s, the retail and wholesale industries use ‘just-in-time’ logistics management, where retailers assume that the cost of transporting a product will be less than the cost of maintaining large inventories of the product on site. This has prompted the growth of the logistics and warehousing industries, which rely on a network of warehouses and trucks to distribute freight. This change in how retailers manage inventory has had profound transportation and land use impacts in Berks and surrounding counties and, as a result, impacts on Berks County roads.

Freight takes a prominent role in this plan due to the MAP-21 and FAST Act legislation that emphasizes freight as an integral component of transportation planning. Federal transportation legislation developed a national freight network to help states strategically direct resources to improve highway freight movement. The identification of local freight corridors and preservation of freight mobility is a component of this Long Range Transportation Plan. By both weight and value, Berks County is primarily served by truck freight and supplemented by rail service. The county does not have a substantial air freight component as of the writing of this plan, as there are no scheduled air cargo carriers currently operating at the Reading Regional Airport.

Freight Types

Listed below are the top ten freight categories by origin and destination for 2020. Aggregate stone is the largest commodity leaving the county by weight, largely due to the number of quarries here.

Berks County Inbound and Outbound Commodities (2020)			
Inbound	Thousands of Tons	Outbound	Thousands of Tons
Broken stone or riprap	1,942,332.9	Broken stone or riprap	6,051,918.6
Warehouse & distribution center	1,671,556.3	Primary iron or steel products	1,453,324.7
Petroleum refining products	933,064.1	Warehouse & distribution center	1,362,117.9
Dairy products	422,581.9	Storage batteries or plates	738,855.5
Bituminous coal	388,752.4	Gravel or sand	613,568.4
Primary iron or steel products	340,090.1	Grain	599,677.8
Misc. industrial organic chemicals	331,800.0	Portland cement	570,247.2
Grain	321,760.0	Processed milk	437,835.9
Gravel or sand	314,022.5	Concrete products	404,530.8
Concrete products	247,215.1	Primary metal products, n.e.c.	335,002.8

Source: IHS Global Insight, Transearch

Berks County Freight Network

Trucks move a great majority of freight (in terms of both tonnage and value) within and through Berks County, illustrating the importance of the county's highway network. From Berks County, business can reach nearly 40% of the United States population and 50% of Canadian customers within a one-day drive.

Truck freight is the region's most utilized method of transporting goods. Of note, the sections of Interstates 176 (12 percent truck traffic) and 78 (33 percent truck traffic) in Berks County are on the Federal Highway Administration's (FHWA's) suggested Primary Freight Network (PFN). In the county, the Interstates are the primary routes transporting goods statewide. Routes 422, 222, and 61 are primary inter-county truck freight corridors. Route 422 links the Reading metropolitan area with Lebanon and Montgomery counties while Route 222 North (21 percent truck traffic) links Reading to the western end of Lehigh County. The Fogelsville area located in western Lehigh County has seen explosive growth in warehousing in the last decade. Route 61 provides a north-south route into Schuylkill County. As shown on Maps 41 and 42, the majority of freight generating businesses are located along these routes.

The county has one of the largest manufacturing concentrations in the seven-county region and serves as a major conduit between warehousing hubs elsewhere in Pennsylvania. This warehousing and industrial development is generally located along major freight corridors in eastern Pennsylvania, namely the Interstate system. Interstates 78 & 81 have been recognized as a logistics corridor, which stretches from Northeastern Pennsylvania, through the Lehigh Valley (including Berks County as the westernmost county), and into Central Pennsylvania. Berks County is centrally located along this corridor as it is the westernmost county of the Lehigh Valley Region, borders the southern portion of the Northeastern Pennsylvania Region, and borders Lebanon and Lancaster Counties to the east of the Central Pennsylvania Region. In addition, Berks is centrally located between industrial centers on Interstate 78. This corridor is leading in the growth of larger warehouses compared to major logistics markets in the country. Even with the growth of new larger warehouses, existing warehouses are being utilized creating a historic low of vacant warehouses along the I-78/I-81 Corridor. Warehouse and distribution center development along Interstate 78 in Berks County is expected to continue to grow, particularly as properties become less available to the east of Berks County in Lehigh and Northampton Counties and New Jersey.

Truck parking has been an issue affecting drivers in recent times especially since the inception of the Electronic Logging Device (ELD) Mandate in December of 2017. With Interstate 78 being part of the logistics corridor, truck parking is of high demand across northern Berks. When adequate truck parking is unavailable or full, some truck drivers resort to parking on the shoulders of ramps and interstates. A lack of truck parking has been recognized in Pennsylvania and state officials are searching for solutions for the safety of all drivers. PennDOT runs a public-private program that they refer to as P3. Through this program, the state of Pennsylvania works to increase the value and safety of the state's population. PennDOT has decided to use their public-private partnership (P3) program to address the state route's parking issues and create a pilot program. A way of increasing truck parking would be to encourage developers to include an area of safe truck parking within the property they are developing for the drivers that are delivering or picking up goods at their location.

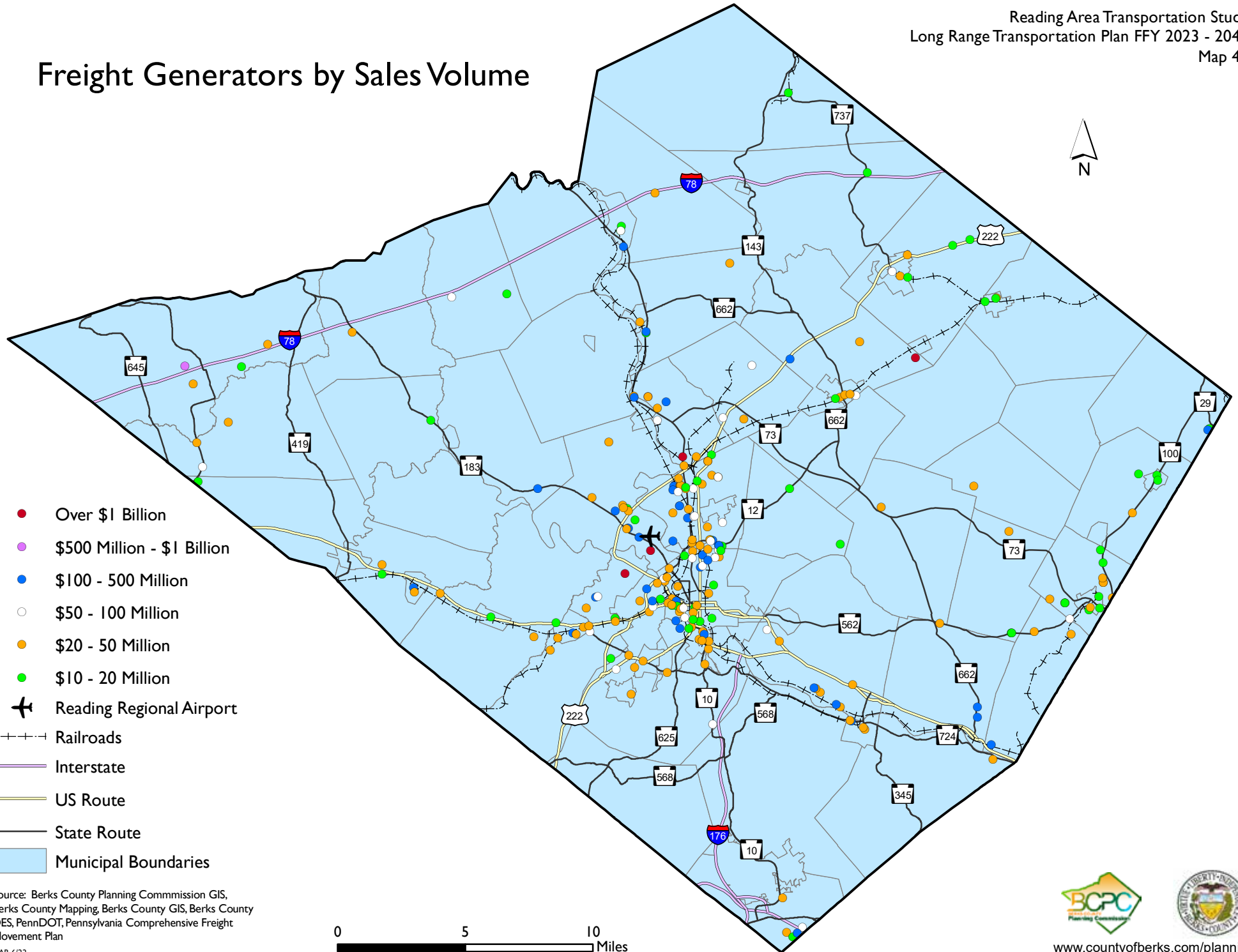
Rail Freight

Pennsylvania is a rail-intensive state. Railroads play a major role in moving freight within and throughout the state and across the country. The rail network in Berks County consists of Class I, Class II, and short line railroads. Class I railroads are freight railroads with an operating revenue of \$457 million or more. Class II railroads are much smaller than Class I railroads and are often considered regional railroads with an operating revenue between \$37 million and \$457 million. Short line railroads are freight railroads with operating revenues of less than \$475 million. Since 1981, this network has only served freight in the county. Presently, four railroad companies conduct business on 125 linear miles of operational railroad lines inside Berks County. The majority (approximately 101 miles or 81 percent) of the rail line mileage in the county is owned and operated by Norfolk Southern Corporation (NSC). The principal activity center for rail in the county is the Spring Street yard, located in the City of Reading at the junction of the Lebanon Valley Branch Line and the Reading Line. The Reading Line functions as a bridge between the Lehigh Line in Allentown/Bethlehem and the Harrisburg Line in the Dauphin County area. The Reading Line is the most heavily used track in Pennsylvania in terms of both carloads and ton-miles of traffic moved. It is part of the corridor that carries most of the Norfolk Southern rail traffic from the metropolitan New York area to points west and south. At Reading, rail traffic can continue to Philadelphia, South New Jersey, and Harrisburg. This line is also part of the Strategic Rail Corridor Network (STRACNET).



Reading Blue Mountain & Northern Railroad serves major businesses in 9 eastern Pennsylvania counties including Berks County.

Freight Generators by Sales Volume



Source: Berks County Planning Commission GIS,
 Berks County Mapping, Berks County GIS, Berks County
 DES, PennDOT, Pennsylvania Comprehensive Freight
 Movement Plan

BAB 6/22



Several short line railroads provide service in the county. Reading Blue Mountain and Northern Railroad (RBM&N) currently provides service on the line previously owned by Conrail along the west side of the Schuylkill River, north of Reading into northeastern Pennsylvania. The RBM&N also controls the Schuylkill Secondary Line that runs between Temple and Hamburg on the east side of the Schuylkill River. Service on this line is currently suspended. The railroad handled 28,940 carloads in 2015, up 19% from 2014.

East Penn Railroad owns and operates the Lancaster Line that runs from Sinking Spring to Ephrata, Lancaster County, and the Perkiomen Branch that runs from Allentown through Hereford Township to Pennsburg. East Penn provides additional service in Berks County on the Kutztown Transportation Authority-owned Kutztown Branch Line that runs between Topton and Kutztown. In total, East Penn Railroad, LLC operates 110 miles of track throughout southeastern Pennsylvania and Delaware.

The Eastern Berks Gateway Railroad provides service on the Colebrookdale Branch Line that runs from the Norfolk Southern Line in Pottstown to Boyertown linking Montgomery and Berks Counties.

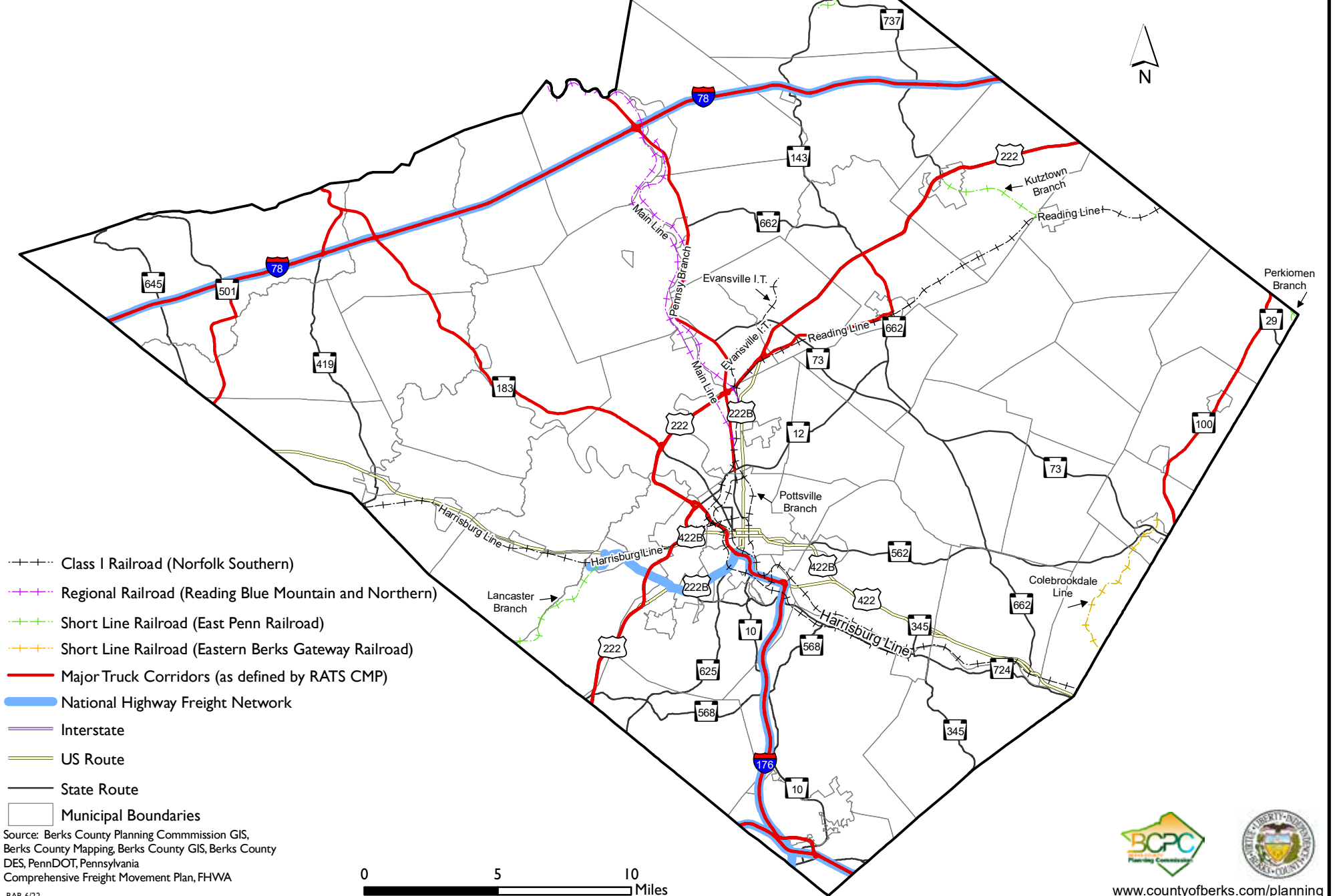
The Wanamaker, Kempton and Southern Railroad is a tourist carrier which operates between Wanamaker in Lehigh County and Kempton in Berks County, over tracks formerly part of the Reading Railroad's Schuylkill and Lehigh branch. The Wanamaker, Kempton and Southern is rail isolated. It does not connect to other rail lines or haul freight.

The Allentown and Auburn Railroad is a tourist carrier that operates between Topton and Kutztown on tracks owned by the Kutztown Transportation Authority. The railroad is not isolated as it shares an interchange with the Norfolk Southern Reading line in Topton. The Allentown and Auburn Railroad also offers freight services for local customers along the line.



The Colebrookdale Railroad serves tourist and freight customers between Boyertown and Pottstown.
Courtesy of the Colebrookdale Railroad

Freight Corridors



Source: Berks County Planning Commission GIS, Berks County Mapping, Berks County GIS, Berks County DES, PennDOT, Pennsylvania Comprehensive Freight Movement Plan, FHWA
 BAB 6/22

Road-Rail Crossings

A railroad at-grade crossing is an intersection where a roadway crosses railroad tracks at the same level (grade). At-grade crossings can also have significant impacts on the transportation network. The "gate-down delay" creates delays caused when passing trains block the crossing. In addition, grade crossings can reduce road capacity. The uneven surfaces at grade crossings require vehicles to cross at lower speeds and passing trains can preclude coordinating nearby traffic signals as they pass through that area.

There are 113 public at-grade highway-rail intersections in Berks County. Despite the number of crossings, the county has a low number of crashes at them, with 14 between 2016 and 2020. The annual average daily trips (AADT) on roadways with at-grade crossings are typically below 5,000 vehicles in Berks County, with the exception of the crossings shown below:



Berks County Road/Rail Crossings with > 5,000 AADT			
Railroad	Municipality	Street	2020 AADT
Reading/Blue Mountain & Northern Railroad Commission	Tilden	Industrial Drive	6,385
Reading/Blue Mountain & Northern Railroad Commission	Perry	S.R. 61/Pottsville Pike	9,788
Reading/Blue Mountain & Northern Railroad Commission	Leesport	Lee Street	7,572
Norfolk Southern	Muhlenberg	Tuckerton Road	6,698
Reading/Blue Mountain & Northern Railroad Commission	Muhlenberg	S.R. 61/Pottsville Pike	17,756
Norfolk Southern Corporation	Cumru	Philadelphia Avenue	11,015
Norfolk Southern Corporation	Reading	Eleventh Street	18,525
Norfolk Southern Corporation	Muhlenberg	Eleventh Street	18,525
Norfolk Southern Corporation	Reading	Kutztown Road	9,584
Norfolk Southern Corporation	Reading	Rockland Street	6,153
Norfolk Southern Corporation	Reading	Chestnut Street	5,661
Norfolk Southern Corporation	Reading	Franklin Street	7,912
Norfolk Southern Corporation	Reading	Penn Street	6,717
Norfolk Southern Corporation	Sinking Spring	Columbia Avenue	7,621
East Penn Railroad, LLC	Spring	Montello Road	6,934
East Penn Railroad, LLC	Spring	Vinemont Road	8,933
East Penn Railroad, LLC	Spring	Fritztown Road	5,717
Norfolk Southern Corporation	South Heidelberg	Krick Lane	5,860
Norfolk Southern Corporation	Cumru	Furnace Street	10,375
Norfolk Southern Corporation	Amity	West High Street	5,094
Norfolk Southern Corporation	Amity	Main Street	5,368
Norfolk Southern Corporation	Lyons	Kemp Street	4,999
Norfolk Southern Corporation	Fleetwood	South Richmond Street	6,818
Norfolk Southern Corporation	Maidencreek	Main Street	7,490
East Penn Railroad, LLC	Kutztown	Main Street	6,445
Eastern Berks Gateway Railroad	Boyertown	Philadelphia Ave	10,345

Source: US DOT Federal Railroad Administration, Railroad Crossings – At Grade & WBAPS Report

Note that changes to railroad operations may increase or decrease rail traffic at a crossing, affecting type of capital and safety improvement needs. Demand for rail service can change with the arrival or departure of industrial customers on the line. These and other economic changes can affect the volume, location and timing of rail traffic.

The Federal Railroad Administration’s Accident Prediction System (WBAPS) provides the chart below. The crossings are not considered dangerous or even the most heavily used crossings in the county. However, the model provides a listing of the crossings considering their physical and operating characteristics and accident history data that may be prone to crashes in the future and warrant additional attention.

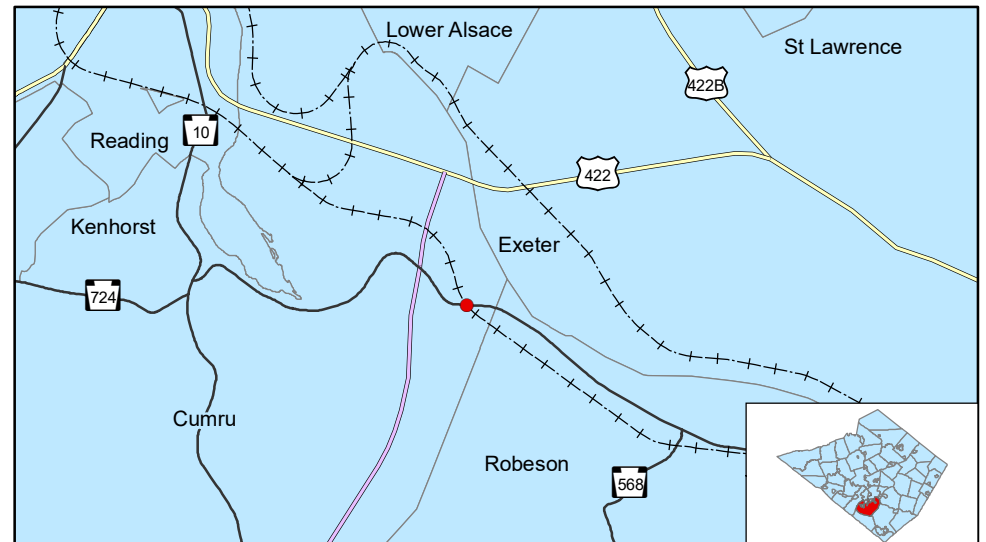
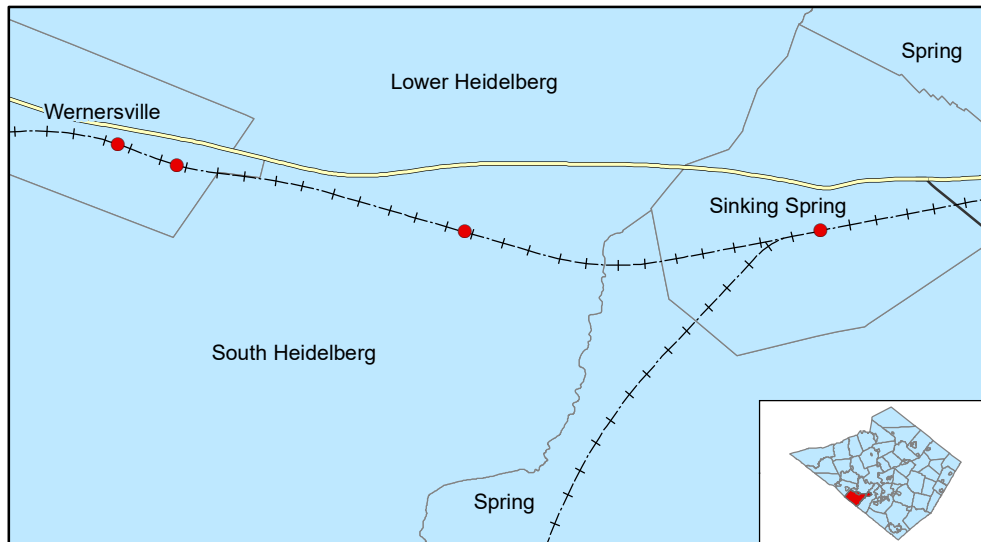
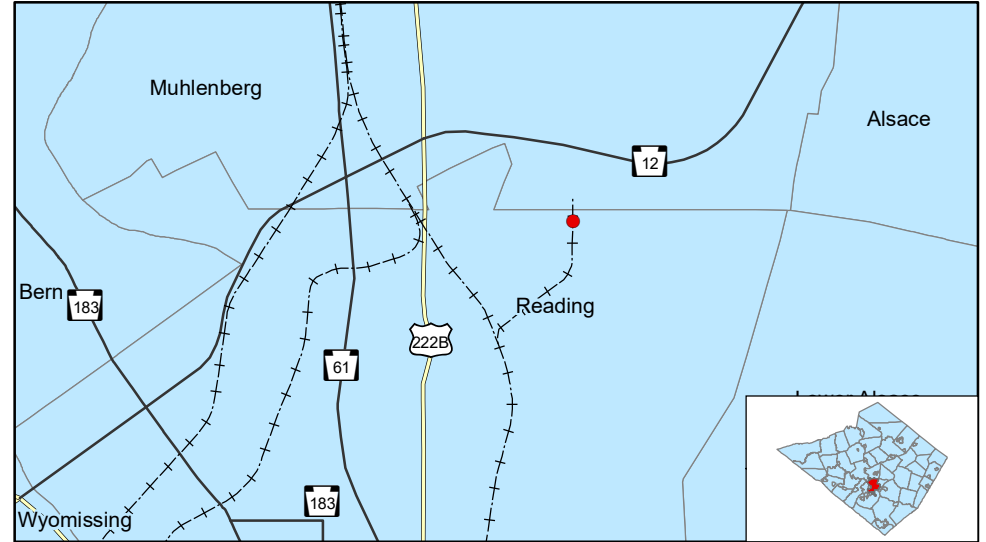
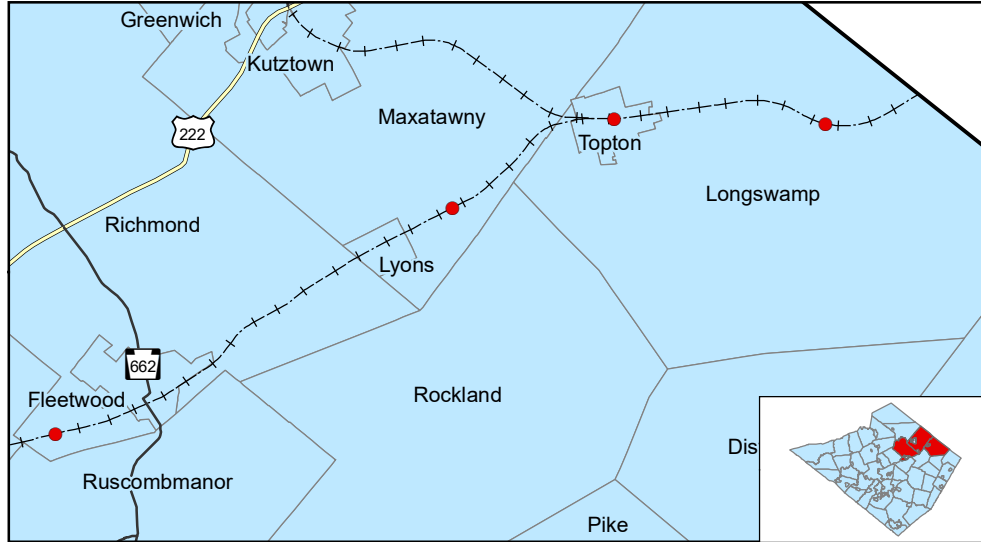
Top Ten Berks County Road/Rail Crossings with Greatest Potential for Crashes			
Railroad	Municipality	Street	2020 AADT
Norfolk Southern	Sinking Spring	Columbia Avenue	7,621
Norfolk Southern	South Heidelberg	Krick Lane	5,860
Norfolk Southern	Richmond	Walnuttown Road	n/a
Norfolk Southern	Cumru	Philadelphia Avenue	11,015
Norfolk Southern	Reading	11 th Street	18,525
Norfolk Southern	Wernersville	Werner Street	n/a
Norfolk Southern	Wernersville	Church Road	n/a
Norfolk Southern	Maxatawny	Bowers Road	n/a
Norfolk Southern	Longswamp	Kennedy Avenue	n/a
Norfolk Southern	Topton	Home Avenue	n/a

Source: Federal Railroad Administration, Office of Safety Analysis, Web Accident Prediction System (WBAPS),



: Norfolk Southern Railroad at-grade crossing on Penn Street in the City of Reading.

Federal Railroad Administration Office of Safety Analysis Road / Rail Crossings with Greatest Potential for Crashes



Source: Berks County Planning Commission GIS,
Berks County Mapping, Berks County GIS, Berks County
DES, PennDOT, Federal Railroad Administration 2019, Office of
Safety Analysis, Accident Prediction Report for At-Grade
Highway-Rail Crossings, 2019
BAB 6/22

- Top 10 Potential Crash Crossings
- Railroads
- Interstate
- US Route
- State Route
- Municipal Boundaries



EASTERN PENNSYLVANIA FREIGHT ALLIANCE

The Eastern Pennsylvania Freight Alliance is a group of Metropolitan Planning Organizations including: Lackawanna/Luzerne Metropolitan Planning Organization (LLTS), Lebanon County Metropolitan Planning Organization (LEBCO), Lehigh Valley Transportation Study (LVPC/LVTS), Northeastern Pennsylvania Alliance (NEPA MPO), and Reading Area Transportation Study (RATS) that have organized around the growing freight economy to address the opportunities and challenges posed by this industry especially as it relates to mobility, safety and infrastructure system maintenance and improvement.

The Eastern Pennsylvania Freight Alliance (EPFA) proposes to develop a multi-regional freight plan for the 10-county area comprised of Berks, Carbon, Lebanon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike and Schuylkill Counties. The EPFA anticipates developing a plan that coordinates all modes for freight travel to create a robust mega-regional transportation network that is safe, convenient and efficiently accommodates the growing industrial sector without jeopardizing system mobility, reliability or security. The study is funded by a grant from PennDOT with MPO matching funds.

The project area includes key access points and corridors along the Interstate 76, 78, 80, 81, 84, 380 and 476 highway networks as well as the key state roads such as Routes 6, 11, 22, 33, 61, 72, 222, 309, 315, 322, 422, 501 and 924, many other local and lower order roads, bridges, the freight rail and air cargo systems. The project area also, has direct connections to port facilities located outside of the region.



The transportation infrastructure inherited from previous generations was built to improve efficiency and serve the needs of the past. In today's global economy, freight movement is a complex and competitive component that is integral in all parts of society. Freight planning is an essential element of a region's Transportation Planning effort to ensure transportation is safe and efficient for all aspects of the community. Efficient movement of freight between markets is critical to the success and livelihood of the EPFA's and Pennsylvania's economy. Arguably the freight moving through the mega-region supports the Nation and is evidenced by the total Gross Domestic Product of the partner regions which totals \$99,227,187 annually (Bureau of Labor Statistics, December 2020). However, the rapid growth in new freight facilities across the region, the highest currently in the Nation, is posing significant strain and new challenges on land use, infrastructure, equity communities, government resources, local values, emergency management, the workforce and employers, housing and the environment.

The EPFA is home to nearly 2.2 million people or over 17% of the Commonwealth's population and employing 238,942 people in the 'industrial sector' which includes: transportation and warehousing, manufacturing, mining, quarrying, oil and gas extraction and wholesale trades alone (Bureau of Labor Statistics, January 2021).

The importance of establishing common objectives and goals for freight planning is recognized widely by the federal and state governments through laws and associated policies. With over 100 million square feet of existing industrial space in the EPFA market today and at least another 35 million square feet in planning or construction, the private sector continues to recognize the value of the mega-region's location and proximity to market, labor force, industrial legacy and available land, among other attributes that have caused this market to increase by at least a third in the last five years (CBRE quarterly market reports summaries). The American Transportation Research Institute notes that "Freight plans are critical blueprints for how the public sector will develop, manage and maintain public elements of freight networks... Freight plans also provide an understanding of how safe, efficient and productive freight systems benefit local and state economics and help meet local, regional, and national goals for safety and productivity." The time is now to manage, prepare and grow multi-regional freight planning.

Regional freight planning is a community based, data driven, multimodal planning process specific to freight movement that delivers an intentional and implementable strategy for improving freight mobility and safety. Although the vision,

goals and actions will be developed as part of the planning process, anticipated objectives include identifying the origins, routes, and destinations of freight movement, assessing the existing multimodal infrastructure, stakeholder communication, and making informed decisions to support the EPFA's vision for safety and the growth of its communities.

This freight plan is intended specifically to:

- **Improve the understanding of what freight planning is and how it impacts the mega-region**
- **Develop common language and definitions for freight planning**
- **Follow a data driven process**
- **Engage stakeholders, including equity and environmental justice communities**
- **Identify freight movement within the region and designate key freight routes**
- **Identify data resources and create analysis tools**
- **Develop an integrated multimodal Regional Freight Network specific to the mega-region**
- **Develop policies, land use, projects, and other initiatives to enhance the safety, mobility, and preservation of freight movement**
- **Develop community design guidance that supports the transportation-land use connection**
- **Develop and monitor a plan for evaluating and improving performance measures that support the safe, efficient, and reliable movement of freight**
- **Prepares the mega-region for changes in freight technologies and mobility**
- **Identify potential funding or grant programs to assist with projects and support each EPFA partner and the Pennsylvania Department of Transportation with their long-range transportation plan and transportation improvement program project selection processes**
- **Incorporate federal and state freight planning to maintain consistency and compliance across governments and communities.**

The Eastern Pennsylvania Freight Alliance proposes to develop a multi-regional freight plan for the 10-county area comprised of Berks, Carbon, Lebanon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill Counties and covering 398 municipalities within those counties. The plan will seek to coordinate for multimodal freight travel and discuss the multimodal travel to work for employees. The coordination of multimodal freight travel will seek to create a robust mega-regional transportation network that is safe, convenient, and efficiently accommodates the growing industrial sector without jeopardizing system mobility, reliability, or security.

The Consultant will work closely with Eastern Pennsylvania Freight Alliance, Pennsylvania Department of Transportation, US Department of Transportation and industry stakeholders to create a mega-regional freight plan.

This planning effort is anticipated to begin in mid-2022 and be completed by late 2023 and will be incorporated into future L RTP updates.





NON-MOTORIZED TRANSPORTATION

Non-motorized transportation is defined as any transportation other than by use of a vehicle including cars, buses, rideshares and motorcycles. Also known as “Active Transportation” or “Human Powered Transportation” this method of travel includes walking, bicycling and wheelchair travel as well as less common methods of transportation such as skateboards, scooters or buggies. Facilities serving these users include those built exclusively for non-motorized use such as sidewalks and trails as well as on-road accommodations such as bicycle lanes, crosswalks and sharrows. Non-motorized forms of transportation like walking and bicycling are commonly accessible, environmentally friendly and affordable options for transportation among many of Berks County’s population, and therefore hold an important role in the county’s overall transportation system.

Berks County has a diverse mix of urban landscapes and rural villages, new development and historical areas, public transit and country roads, active recreation and laid-back trails. While these qualities make the county a desirable place to live, work and play, they also create challenges to safely and efficiently travel throughout the county without a motor vehicle. Berks County has extensive trail and sidewalk networks, but connectivity from one community to the other can often be lacking.

Additionally, Berks County has a unique group of non-motorized travelers – the estimated 150 traditional Mennonite households concentrated mostly in the Fleetwood/Kutztown area. Many of these households do not use cars, relying instead on horse and buggy, bicycling and walking as their methods of transportation. Particularly in and around Fleetwood/Kutztown area, horse-drawn buggies or farm equipment often travel on rural, sometimes narrow roads alongside cars and trucks as they travel to retail centers, places of worship, schools or even between their own fields. Fortunately, in Berks County, the number of crashes involving horse and buggies is low.

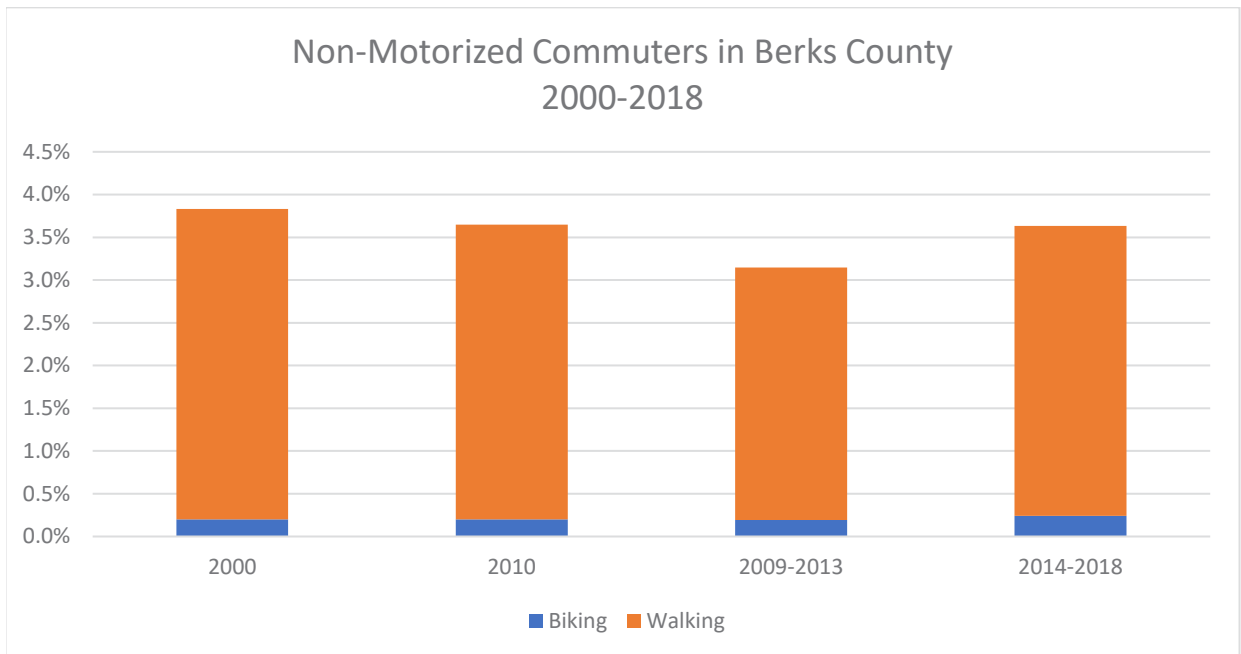
Crashes Involving Horse and Buggy in Berks County						
Type	2015	2016	2017	2018	2019	Total
Crashes	1	0	0	1	0	2
Injuries	1	0	0	0	0	1
Fatalities	0	0	0	0	0	0

Source: PennDOT PCIT, 2015-2019

Ten years ago, RATS, along with other community “stakeholders”, drafted a regional bicycle and pedestrian plan. The Bicycle and Pedestrian Plan, adopted in November 2010, evaluated the status of bicycle and pedestrian planning in Berks County based on level of service, demand and interest, and existing policy. The plan provided goals, recommendations, and implementation strategies but did not include a prioritized project listing. The MPO adopted an update of this plan in July 2020. This plan is both a policy and project-based plan and will be a supplement to the LRTP. The plan recommends overarching county-wide concepts such as sidewalk and curb ramp installation and maintenance, preservation and expansion of the Schuylkill River Trail, Union Canal Towpath and other bicycle and pedestrian networks, expansion of non-motorized access to transit stops, schools, recreation areas and other popular destinations, and improved safety and security of all bicycle and pedestrian accommodations. The plan emphasizes intergovernmental cooperation in order to achieve these goals. The Bicycle and Pedestrian plan also has a list of recommended projects throughout the county’s five planning regions based on three surveys that gathered desired improvements from the public, the county’s municipalities and local non-profit groups involved in related transportation efforts. A link to the current Bicycle and Pedestrian plan can be found here: <https://www.co.berks.pa.us/Dept/Planning/Pages/BicycleandPedestrianPlanning.aspx>

Non-motorized Transportation as a Means of Commuting

Census data shows that non-motorized transportation is not common means of getting to and from work in Berks County. Arguably, much of the county’s transportation infrastructure is designed to accommodate cars, complicating travel by walking or bicycling in many areas.



Source: U.S. Census 2000, 2010; American Community Survey 2009-2013, 2014-2018

Bikes

There are several active groups and organizations that support and organize biking in Berks County. The Berks County Bicycle Club was founded in 1973 and as of 2019 has around 200 members as well as volunteers. This club has created an online ride map database available to all looking for biking opportunities in Berks County, and hosts events such as the annual Shoo-Fly Classic, a ride through the Oley Valley.

Reading Radsport, through the Reading Recreation Commission, organizes two major bicycling events in the county. The Hill Climb is a 2.4-mile climb from City Park past the Pagoda and ending at the Fire Tower. The West Reading Criterium consists of laps around a 0.8-mile course racing at speeds of up to 40 mph. Both events attract around 500 cyclists annually.

Berks Area Mountain Biking Association (BAMBA), another bicycling advocacy group, was established in 2012 as the Berks County chapter of International Mountain Bicycling Association (IMBA). According to their website, BAMBA “is a non-profit educational association whose mission is to create, enhance and preserve great trail experiences for mountain bikers in Berks County.”

Reading has attained national designation from two bicycling organizations. The League of American Bicyclists named Reading a “Bike Friendly Community” in November 2015. Reading is one of only nine cities in the state of Pennsylvania to be awarded this designation. Reading and the surrounding area also attained “Bronze Level Riding Center” by the International Mountain Bicycling Association in 2015 for its 125 miles of mountain biking trails. With the help of BAMBA, the biking community is pursuing an upgrade for Berks County trails to “Silver Level Riding Center”.

Smoothly paved shoulders adjacent to travel lanes can significantly improve operating conditions for bicyclists and horse and buggies. The 2012 American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities states “...adding or improving paved shoulders can be the best way to accommodate bicyclists in rural areas, and also benefit motor vehicle traffic.” RATS will continue efforts to accommodate non-motorized travel with additional emphasis on providing and maintain road shoulders in appropriate corridors.





The City of Reading was named a "Bike Friendly Community" in 2015 by the League of American Bicyclists. Courtesy of the Reading Bike Hub

Sidewalks

Map 34 shows that 1,266 miles of sidewalks in Berks County are limited principally to the boroughs, the City of Reading, and some more urbanized townships. Sidewalks offer a mode of transportation to segments of the population who are less likely to own a vehicle and rely on walking or public transit as their primary mode of transportation. The presence of adequate sidewalks encourages those who use walking as a secondary means of transportation for health or environmental benefits as well. By encouraging the addition of safe and well-placed sidewalks, the county hopes to add more non-motorized users to this critical part of transportation infrastructure.

A majority of existing subdivisions and others that have been under development over the last 20 to 25 years in Berks County have had sidewalks incorporated with infrastructure construction. However, these sidewalks seldom connect to anything outside of the neighborhood. In addition to residential areas, a number of commercial developments in the region have sidewalks in place but there is little to no connectivity to adjacent neighborhoods. Connecting these commercial developments to the county's housing subdivisions as well as schools, recreation areas and employment centers is a priority identified in the Bicycle and Pedestrian plan referenced above.

Complete Streets

In August of 2015, Mayor Vaughn Spencer of Reading announced Reading's new status as a Complete Streets Community. Complete Streets create multi-modal transportation networks that have been designed for all users, regardless of age and abilities. These users include pedestrians, bicyclists, motorists, and transit vehicles. Some elements of a Complete Street could include sidewalks, bike lanes, curb extensions, and median islands. These elements of a streetscape are especially important for older adults, children, adolescents, those with disabilities and people living in low-income communities as these people are less likely to own a car or drive. Smart Growth America's National Complete Streets Coalition rated the City's policy as the best in the nation, achieving a perfect score of 100. Although supported by Spencer's successor, Mayor Wally Scott, and his administration, the Plan has not yet been adopted. Reading welcomed a new mayor, Eddie Moran in 2020. It is unclear where his administration stands with Reading's Complete Streets proposal.

Pedestrian and Bike Safety

The safety of non-motorized individuals is of great concern since they are the most vulnerable road users as they are not protected by a surrounding vehicle and with it, its safety features. As shown in the vulnerable users chart located on Page 114 the number of crashes, persons involved, and fatal crashes have remained relatively flat from 2009 to 2018. Although the figures related to injuries and fatalities is small, it is important to educate all age groups of safe bicycle and pedestrian practices along with promoting the enforcement of the laws pertaining to motorists, bicyclists, and pedestrians to make safety a top priority in Berks County. Please see the Safety section of this plan for data related to pedestrian and bicycle crashes

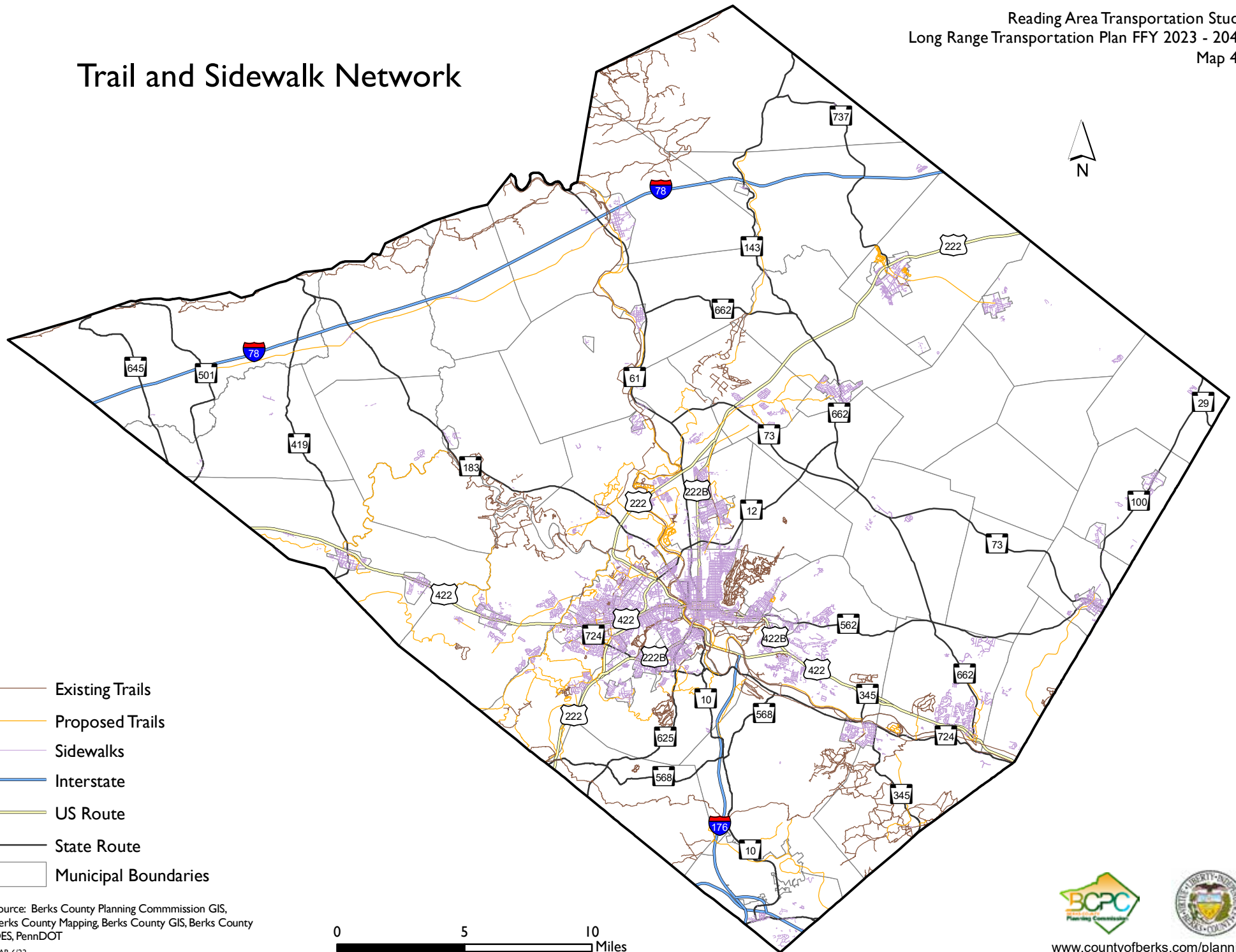
Trails & Greenways








Berks County has 524 miles of extensive trail system ranging from paved multipurpose trails to more rugged trails suitable for hiking or mountain biking. As shown on the map, these trails are often connected to greenways - corridors of open space that can be a small park in a borough or the City to large areas of forest in the townships.



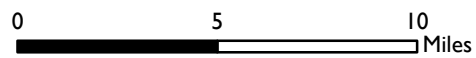
The County's trail system appeals to people of all ages and abilities.

Trail and Sidewalk Network



-  Existing Trails
-  Proposed Trails
-  Sidewalks
-  Interstate
-  US Route
-  State Route
-  Municipal Boundaries

Source: Berks County Planning Commission GIS,
 Berks County Mapping, Berks County GIS, Berks County
 DES, PennDOT
 BAB 6/22



AVIATION

The Berks County Aviation network is a vital transportation link consisting of 12 airports and 8 heliports. They vary in size and function from small general aviation airports to larger facilities with corporate/commercial air service.

Of the three public airports, the largest is the Reading Regional Airport. This is the county's primary air connection to national markets. Grimes Airport and Morgantown Airport are two smaller, privately owned, public use airports within Berks County.

The Grimes Airport is a privately owned, public-use airport with approximately 1,550 annual aircraft operations in 2021. The airport has one turf runway, Runway 11/29, which is 2,720 feet long. Services are provided by the airport. The majority of the airport's activity is recreational flying.

The Morgantown Airport is a privately owned, public-use airport with approximately 10,250 annual aircraft operations in 2021. The airport has one turf runway, Runway 10/28, which is 2,500 feet long and equipped with low intensity runway lighting (LIRL). Services are provided by the airport, and include fueling and tie-down aircraft parking. The majority of the airport's activity is recreational flying. The passage of an overlay altered the industrial office park zoning district to allow residential development in Morgantown Township. This could soon change the status of the Morgantown Airport as residential plans have been submitted for this property and construction could start as soon as January 2023.

The region also has nine private airports to those listed above including Dimascio Field Airport, Cuatros Vientos Airport, The Old Commonwealth Airport, Skyline Airstrip, Don's Place Airpark, Blue Mountain Academy Private Airport, Krill Personal Use Airport, Area 52 Airport, and Boyer Airport.

Reading Regional Airport

The Reading Regional Airport/Carl A Spaatz Field (KRDG) is a Class IV facility located in Bern Township and operated by the Reading Regional Airport Authority. The airport is also equipped with a control tower, a passenger terminal building, hangers, maintenance facilities, and crash-fire-rescue facilities. It has two ILS equipped asphalt runways: Runway 13/31 with a length of 6,350 feet and Runway 18/36 with a length of 5,151 feet. The airport had approximately 30,199 aircraft operations in 2020.



Charter plane on Reading Regional Airport's Main Terminal Apron.
Photo Courtesy of Zackary J. Tempesco, Reading Regional Airport Authority.

Aircraft Based at the Reading Regional Airport - 2020	
Type	#
Single Engine	63
Multi Engine	19
Jet	11
Helicopter	3
Other	1
Total Aircraft	97

Source: Federal Aviation Administration, Airport Data and Information Portal (ADIP)



The Reading Regional Airport is located in Bern Township at the intersection of Routes 222 and 183.

Regular passenger service ended in 2004. In its current role, the airport concentrates primarily on serving general aviation and corporate aircraft. In the future, the airport sees itself serving more flight training activity, along with more recreational, business, and air taxi operations and continues to build and increase its reputation as a recreational and corporate general aviation facility.

The Reading Regional Airport Authority conducts a Master Plan Study to determine the needs of the airport for the next 5, 10, and 20 years. This Airport Master Plan Update includes a number of changes based on FAA requirements and priorities as well as improvements that will allow the airport to meet forecasted demands. The Reading Regional Airport’s Capital Improvement Plan can be found in Chapter 4.

Despite a difficult operating environment in recent years, the airport had rebounded in 2019 due to growth in corporate, general aircraft, and charter operations. In 2019, there were 1,484 enplanements at the Reading Regional Airport, an increase of 8 enplanements from 2016. However, due to the COVID-19 pandemic, the numbers for total enplanements and total operations in 2020 decreased drastically at just over 55%. Total operations and based aircraft were projected to slowly increase after 2019. However, current annual projections are not showing an increase compared to the 2016 numbers until the year 2024. The Federal Aviation Administration expects increased interest in the airport due to an increased demand for corporate aircraft operations because of concerns about safety and flight delays at other larger airports.

Reading Regional Airport/Carl A Spaatz Field Historic and Forecast Data									
Type	2016	2017	2018	2019	2020	% Change	2025 FCST	2035 FCST	2045 FCST
Total Enplanements	1,476	1,375	1,629	1,484	651	-55.9%	1,511	1,511	1,511
Total Operations	67,400	53,261	46,495	46,594	30,199	-55.2%	49,025	49,243	49,463
Based Aircraft	135	129	129	100	97	-28.1%	106	126	146

Source: Federal Aviation Administration, APO Terminal Area Forecast Detail Report

The airport is part of Foreign Trade Zone #147 and has become a tourist destination as it is home to the Mid-Atlantic Air Museum. The Museum is home to dozens of rare aircraft and hosts a World War II Weekend since 1990 that draws more than 20,000 visitors annually.

The preservation of the airport from the encroachment of incompatible land uses is a priority for the RRA and is reflected

in the Airport's 2013 Master Plan. Land use conditions around the airport are the primary concern. The following are examples of issues that could impact service.

- Tall structures such as buildings, cell towers, power lines, wind turbine towers, trees and other vegetation.
- Visual obstructions and electronic interference such as dust, glare, smoke and steam and equipment that can cause electronic interference such as cell towers, power grids
- Sites that attract wildlife (especially birds) like surface waters, wetlands, landfills
- Developed land. Developed land puts more people on the ground in the path of the aircraft in case of an emergency landing or crash. Keeping land undeveloped around the airport can potentially reduce the amount of aircraft damage and enhance the survivability for the occupants of an aircraft forced to make an emergency landing away from one of the airport's runways.

As we enter 2022, the Reading Regional Airport Authority is initiating a strategic planning effort to discuss the strengths and challenges of the airport and create a new shared vision for the future of this facility.

The following charts and map show the 12 airports and 9 heliports in Berks County and where available, their based aircraft.

Berks County Airports			
Name	Municipality	Based Aircraft - 2020	Use
Reading Regional Airport (RDG)	Bern	97	Public
Grimes Airport (8N1)	Bethel	32	Public
Morgantown Airport (O03)	Caernarvon	27	Public
Dimascio Field Airport	Douglass	1	Private
Cuatros Vientos Airport	Albany	n/a	Private
The Old Commonwealth Aerodome	Upper Bern	1	Private
Skyline Airstrip	Perry	n/a	Private
Don's Place Airpark	Perry	1	Private
Blue Mountain Academy Private Airport	Tilden	3	Private
Krill Personal Use Airport	Bethel	1	Private
Area 52 Airport	Hereford	5	Private
Boyer Airport	South Heidelberg	1	Private

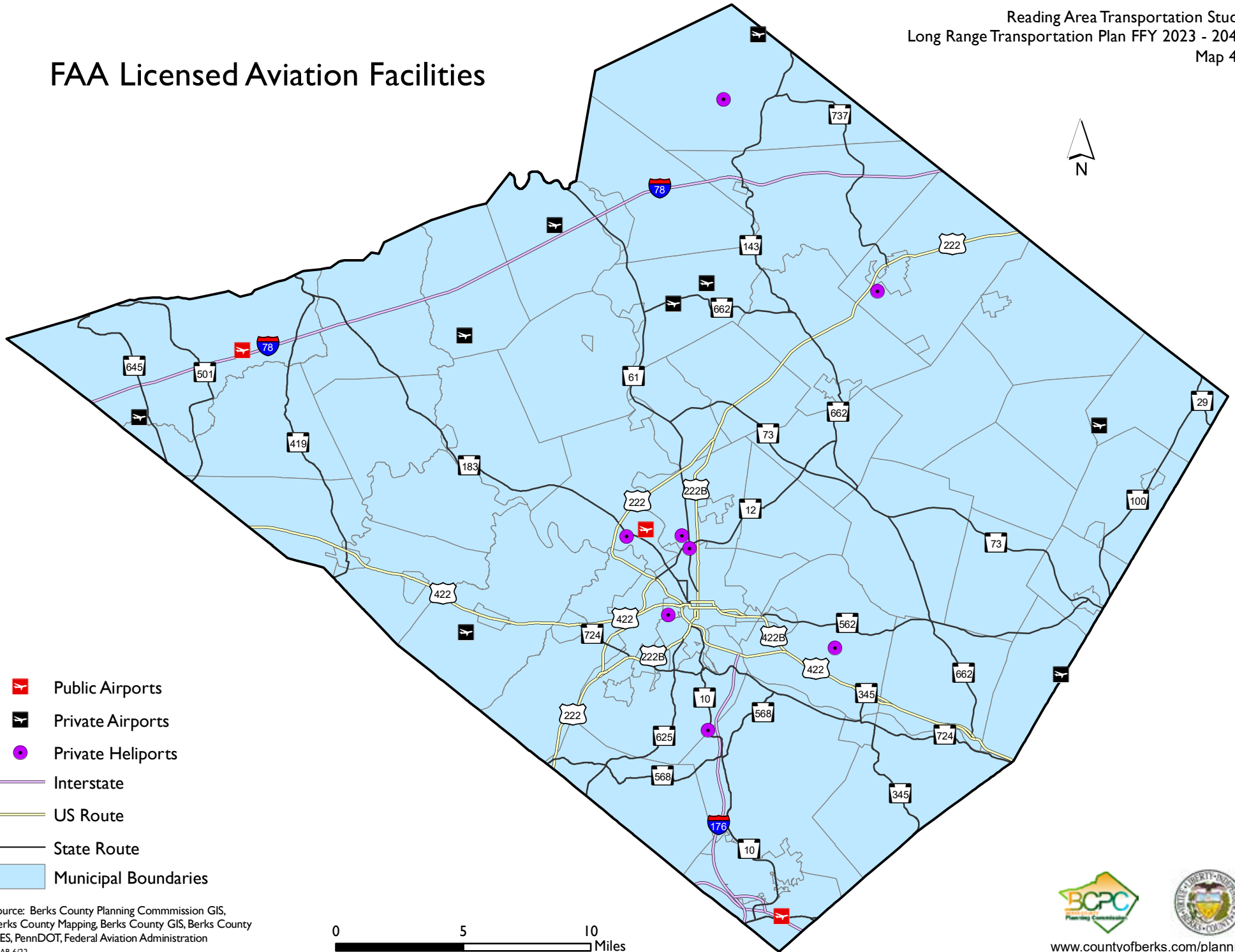
Source: Federal Aviation Administration and AirNav.com

Helicopters serve the Vertical Flight (VF) needs in Berks County. Helicopters operate within a radius of approximately 100 to 150 miles. Since helicopters operate at lower airspeeds and different flight profiles than fixed-wing aircraft, they are assigned to routes away from fixed-wing arrival and departure flows, preventing slow-flying helicopters from delaying faster fixed-wing aircraft. While the county's heliports are largely privately owned, there are three hospital heliports. State and Federal agencies require hospitals to have helipads in order to obtain certification as trauma facilities. These helipads, located in proximity to the respective hospital's emergency room, are a mix of both rooftop and ground level operations.

Berks County Heliports			
Name	Municipality	Based Aircraft - 2020	Use
King Air Heliport	Albany	n/a	Private
Lehigh Valley Health Network Kutztown Heliport	Maxatawny	1	Private
Reading Hospital Heliport	West Reading	n/a	Private
Car Tech Heliport	Muhlenberg	n/a	Private
Green Hills Corp Heliport	Cumru	1	Private
Metropolitan Edison Heliport	Muhlenberg	n/a	Private
St Joseph Regional Health Network Heliport	Bern	n/a	Private
GED Heliport	Exeter	1	Private

Source: Federal Aviation Administration and AirNav.com

FAA Licensed Aviation Facilities



Source: Berks County Planning Commission GIS,
 Berks County Mapping, Berks County GIS, Berks County
 DES, PennDOT, Federal Aviation Administration
 BAB 6/22



ISSUES AND NEEDS

Where We Stand Today and Where We Should Go Tomorrow

In 2022, there is significant interest in the condition of the infrastructure and the resources available to pay for much-needed repairs and improvements. Since the July 2018 LRTP, the lack of sufficient funding has compromised the ability of PennDOT and RATS to address the county's transportation needs.

During the past year, however, there have been strides to provide more funding. The passage of the IJA, along with significant contributions of discretionary funding from PennDOT, has allowed us to resume our pursuit of making major improvements to major corridors such as US 222 and US 422 while at the same time addressing some of our needs related to safety, maintenance, and mobility. Despite the increase in funding, RATS still has finite resources to invest in transportation and can't build and fix everything desired. RATS, along with PENNDOT, has created investment priorities so that we can effectively utilize those available resources.

So what about the future? We believe locally we need to focusing resources on not only maintaining the existing infrastructure, but also making proactive investments to make it safer and work better for you.



This bridge spans the Maiden and Saucony creeks on Route 143 between Richmond and Perry townships. Constructed in 2010, it replaced a bridge that had been closed since 1998.

Safety & Modernization

Safety is our highest priority in this plan, especially given that the changing demographics of the county and the number of population groups – pedestrians, bicyclists, motorcyclists, construction workers, teenagers, children, and the elderly susceptible to injury when traveling. Berks County has more drivers, aged 65+, on the road than ever before, and that number will continue to rise. There was a 24 percent increase in crashes involving drivers of that age between 2013 and 2019, so safety improvements tailored towards older drivers will be needed. RATS prioritizes “system”

improvements towards the corridors that have the highest number of crashes. These stretches of road are identified as having a higher incidence of fatalities and serious-injury traffic crashes than similar roadways. High crash corridors require a multidisciplinary approach to improving traffic safety, through engineering, education, and enforcement.

Berks County will be a leader in the use of roundabouts in Pennsylvania to make intersections safer. Roundabouts have demonstrated substantial safety and operational benefits compared to most other intersection forms and controls with especially significant reductions in fatal and injury crashes. Construction of the county's first roundabout at the intersection of Routes 222 and 662 was completed in 2019 with several more currently under construction and planned on the 222 corridor and other locations in the county.

An area of safety that requires additional attention is the lack of truck stops on major highways leading into and out of Berks County. Adequate truck parking at truck stops and rest areas on major national truck routes like Interstate 78 has become an issue as new laws restrict the number of hours that drivers may operate, along with the increased volume of truck traffic. The American Transportation Research Institute (ATRI) ranked the scarcity of truck parking as its fifth highest critical issue in



In 2015, PennDOT used 6.8 million tons of asphalt in road projects across the state.

2015, stating, "...the growing scarcity of available truck parking creates a dangerous situation for truck drivers who are often forced to drive beyond allowable rules or park in undesignated and, in many cases, unsafe locations."

State of Good Repair

Most of the modern Berks County transportation system was constructed between 1920 and 1970 with some bridges built before the 20th Century; the majority of the interstate highways in the county were constructed in the 1950s and 1960s. Most roads have been incrementally improved or repaired at one point or another; however, they are continuously subject to increased traffic and heavier loads than they were designed to handle.

The second highest priority will be to preserve and maintain the existing transportation system with a primary focus on paving and upgrading existing roads. RATS is committed to making investments to preserve, maintain, address safety issues on, and maximize the use of the existing transportation system before making investments to expand the capacity of the system.



U.S. 222 in Maiden Creek Township is both a congested and high crash corridor. Roundabouts and widening improvements have improved safety and reduced congestion in this corridor.

System Productivity and Efficiency

Berks County is located at the crossroads of Pennsylvania's transportation system. The county is within one day's drive of numerous major metropolitan areas and major economic centers. Today, Interstate 78 – where 33 percent of traffic is trucks and Route 222 into Lehigh County is 21 percent trucks - are congested corridors according to RATS' Congestion Management Process (CMP). In fact, this section of Route 222 is the most congested corridor in the county.

Pennsylvania's multimodal freight transportation system carries 1.1 billion tons of freight, valued at \$1.6 trillion, and is projected to grow to nearly 1.9 billion tons at a value of over \$3.7 trillion by 2040. In 2011, trucks handled 76 percent of the tons moved in, out, internally, and through the state and 81 percent of the value. This is expected to grow to 80 percent and 85 percent, respectively, by 2040.

The potential conflict of competing for capacity, mobility, and accessibility within an aging transportation network must be balanced so that the growing volume of commuter and freight movement within the region can be accommodated without major capacity-adding projects. New road infrastructure is not able to keep up with this increase in travel demand – in fact; it is impractical to build enough roads and infrastructure to accommodate it.

In 2015, Berks County has 33 "congested" corridors, where travel time is substantially slower due to traffic. The RATS Congestion Management Process (CMP), adopted in 2016 with current data, provides "management" solutions to the county's 33 congested corridors by targeting financial resources to provide strategies to address the congestion that are faster and less expensive to implement than constructing a new road.

PennDOT and RATS will need to continue and accelerate the expansion of the Intelligent Transportation Systems (ITS) network in the county. The advancement of ITS technologies is expected to bring significant improvement in transportation system performance, including reduced congestion and increased safety and traveler convenience with the provision of real time information to travelers. The use of ITS and the Freeway Service Patrol deployed in Berks County – will aid in detecting collisions and other incidents on specific roads in the county, coordinating emergency response, and notifying motorists. These activities will shorten the duration of incidents and minimize congestion that can result.

RATS remains committed to encouraging commuters to use transit through BARTA and ridesharing options through Commuter Services of PA. While the number of farepaying passengers has been slowly decreasing since 2014, BARTA saw the largest ridership gains in senior citizens using BARTA Special Services. In Berks County, 16.3 percent of the population is 65 and over, up from 14.9 percent in 2013. Statewide, the population age 65 and older is expected to rise from 15 percent in 2010 to 23 percent in 2040. BARTA will have to plan for the expansion of outreach and services to meet the needs of this growing sector of the Berks County population.

Strategic Capacity Improvements

RATS will need to pursue strategic capacity improvements to improve the efficiency of the transportation system. Examples of such projects are the reconstruction of the obsolete West Shore Bypass (Route 422) and the widening of Route 222 North to the Lehigh County line to handle an expected substantial increase in truck freight into Lehigh County. These projects will be undertaken after seriously considering the availability of funding and resource allocations, and priority will be given to preservation initiatives outlined in this plan.

Additional Considerations for Freight

Trucks move the most goods in and out of the county. The county can expect a significant increase in future freight transported not only by truck but also rail. The significant growth in warehouse and logistics development in Berks and surrounding counties will significantly affect freight transportation patterns in the county. Initially focused along the I-78 corridor, these facilities are now expanding throughout the county along highways such as PA 61, PA 183, PA 645 and US 222 North that are not currently suitable to accommodate large volumes of truck traffic. These developments are also located in areas that are remote from their workforce and in areas not easily or efficiently served by public transportation thereby adding additional commuter trips to the roadway. Future planning will focus on safely and efficiently accommodating truck traffic on Berks County highways and address the resulting wear on highway infrastructure. The Eastern PA Freight Study will prove beneficial in guiding these efforts.

Alternative Fuels

A growing issue is the introduction of alternative fueled vehicles, primarily liquid propane gas (LPG) and electric (EV). In the past, these were somewhat of a novelty but over recent years the growth of this sector has had dramatic impacts on both the environment, by lowering emissions, and on tax revenues, by lowering the consumption of gasoline, the tax on which is a primary source of revenue for transportation improvements.

The U.S. Department of Transportation Federal Highway Administration (FHWA) designates a national network of plug-in electric vehicle (EV) charging and hydrogen, propane, and natural gas fueling infrastructure along national highway system corridors. To designate these Alternative Fuel Corridors (AFC), FHWA solicits nominations from state and local officials and works with other federal officials and industry stakeholders.

In Berks County, two corridors, I-78 and I-76 (the PA Turnpike) have already been designated and a third, US 422, has just been nominated for consideration. This nomination supports the efforts by PennDOT and the Department of Environmental Protection (DEP) to further expand alternative fuel infrastructure throughout the state. The agencies have worked to support collaboration among city, regional and state agencies as well as other advocacy groups; develop partnerships to design, build, finance, operate and maintain alternative fuel stations; administer grant programs that are focused on the development of alternative fuel source infrastructure with an emphasis on the Federal Highway Administration (FHWA) designated corridors; and educate and communicate the existence of this infrastructure to promote increased alternative vehicle usage. The nominated highway and those routes previously designated are key state focus corridors for alternative fuel infrastructure and support regional and national travel and freight movement within Pennsylvania.

The IJA contains specific funding to support the development of infrastructure to support the expansion of EV's. It makes the most transformative investment in EV charging in United States (U.S.) history that will put us on a path to a nationwide network of 500,000 EV chargers that ensures a convenient, reliable, affordable, and equitable charging experience for all users. This national network will:

- Accelerate equitable adoption of EVs, including for those who cannot reliably charge at home.
- Reduce transportation-related greenhouse gas emissions and help put the U.S. on a path to net-zero emissions by no later than 2050.
- Position U.S. industries to lead global transportation electrification efforts and help create family-sustaining union jobs that cannot be outsourced.

This also supported by State funding programs through PennDOT and DEP. We will continue to support these programs moving forward.

