Moving into, around and through the Northern Berks region is reliable and predictable. The area is connected to Berks and surrounding counties, enabling local and regional access for businesses and neighborhoods. The municipalities in the Northern Berks region are served by an extensive transportation system comprised of roads and bridges, bus and paratransit services and rail. In addition, an extensive sidewalk and trail system serves pedestrian and bicycle travel. The roads, bridges, and public transit system accommodate thousands of trips every day.

In addition to experiencing population growth discussed in Chapter 3, the demographic and socioeconomic characteristics of the population in the Northern Berks region have changed and will continue to change in the future. These demographic changes contain challenges for the provision of transportation facilities and services. For example, all seven of the municipalities in the Northern Berks region currently have a larger percentage of elderly age (65+) residents than the county and state. In addition, five out of the seven municipalities have larger percentages of working age (25-64) residents than the county and state, and as this population ages, it becomes more important to provide transportation options and services geared to their needs with more emphasis on safety improvements tailored to elderly drivers.



It is also important to remember that there is a direct correlation between land use and transportation needs. As residential, commercial, and industrial land is developed, more and more people use the roads, and the roads become congested for longer periods of time. This is particularly true for rush hours. In response, as roads are improved to address the traffic congestion, the adjoining land becomes easier and more lucrative to develop, and more traffic is generated.

The highest priority of this plan will continue to be to preserve and maintain the existing transportation system with a primary focus on paving and upgrading existing roads and bridges.

Transportation Planning Context

A key aspect of transportation planning is effective coordination between the different government agencies responsible for maintaining the various parts of the transportation infrastructure. In addition to the Northern Berks region municipalities, these include the Reading Area Transportation Study (RATS), the Pennsylvania Department of Transportation (PennDOT), Berks County, and neighboring communities. As part of the process of preparing this transportation chapter, the RATS FFY 2017-2040 Long Range Transportation Plan (LRTP) was reviewed and considered. This section of the plan will focus on the local transportation infrastructure. Details on the PennDOT owned infrastructure can be found in the RATS Transportation Improvement Program (TIP) and the LRTP.

RATS is the regional transportation planning organization for the Reading, Pennsylvania metropolitan area, which covers all of Berks County. Working with PennDOT and the Federal Highway Administration (FHWA), RATS facilitates and is responsible for prioritizing annual funding to advance transportation improvement projects throughout the county. PennDOT, South Central Transit Authority (SCTA), and the 72 municipalities in the County are responsible for project implementation.

Capital Improvement Plans

Capital Improvement Plans (CIP) outline a schedule of public service expenditures over a certain period of years. The CIP does not address all the capital expenditures for the municipality, but provides for large, physical improvements that are permanent, including the basic facilities, services and installations needed for the functioning of the community. These include utilities, municipal facilities and other miscellaneous projects.

Roads

According to Berks County DES centerline GIS data, the Northern Berks region has approximately 369 miles of roads, including approximately 120 miles of state-owned routes, 164 miles of municipal roads, and 21 miles of private lanes. Nearly all of the roads are paved or improved. All roads owned by the municipalities are part of the Pennsylvania State Liquid Fuels Programs that provides state payments to the municipalities for road maintenance and reconstruction based on population and miles of roads meeting PennDOT specifications. However, the Liquid Fuels funds comprise only a small part of the municipal maintenance budgets and do not cover the cost of long-term maintenance and reconstruction.

Shown below is a comparison of the liquid fuels allocations in 2015 and 2020. The amount of money allocated to each municipality increased and overall, LFF in the Northern Berks region increased 26.3%. Streets and roads owned and maintained by Northern Berks region municipalities are mostly in good condition. Municipalities will focus on continued maintenance, including resurfacing, and monitor the need to correct specific drainage problems and add shoulders based on available funding. Paving projects are scheduled annually based on street/road condition and available funding.

	2015			2020				
Municipality	Miles	Allocation	Municipality	Miles	Allocation			
Hamburg	18.16	\$108,785	Hamburg	18.16	\$142,899	31.4%		
Perry	40.78	\$143,208	Perry	41.05	\$183,366	28%		
Shoemakersville	5.1	\$34,052	Shoemakersville	5.1	\$43,460	27.6%		
Tilden	36.26	\$149,063	Tilden	34.95	\$185,652	24.5%		
Upper Bern	28.07	\$99,629	Upper Bern	25.52	\$118,435	18.9%		
Upper Tulpehocken	32.23	\$118,169	Upper Tulpehocken	33.75	\$149,411	26.4%		
Windsor	29.71	\$112,108	Windsor	29.71	\$142,875	27.4%		
TOTAL	190.31	\$765,014	TOTAL	188.24	\$966,098	26.3%		

Figures 17 through 19 show the federal functional classifications assigned to roads in the area. 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.

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. Examples of roads of this type in the area include I-78 and Route 61. These roads are owned and maintained by PennDOT.

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. These roads provide access to individual properties and serve short distance, low speed trips. Examples include Route 662, Route 143, Old Route 22, Windsor Castle Road, South and North 4th Street, Industrial Drive, Mountain Road, Shartlesville Road, and East Noble Avenue. These roads are owned by PennDOT and the municipalities.

Average Annual Daily Traffic (AADT) is the total number of vehicles traveling on a road on an average day. Annual average daily traffic (AADT) volumes provide an overview of the traffic flow in the seven Northern Berks Region municipalities for planning purposes. An important point to remember is that AADT does not reflect daily and seasonal traffic volumes that can far exceed AADT. The proportionate increase in daily and seasonal counts can be significant. PennDOT conducts traffic counts on state roads, and the counts provide the means to assess the overall traffic conditions in the area. Figures 17 through 19 illustrate 2018 AADT on area roadways. The heaviest traveled roads are the arterials in the area, namely I-78 and Route 61.

Roadway surfaces in the area 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). 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 highway – the lower the IRI, the smoother the ride. PennDOT uses IRI in its pavement condition performance measures, Figures 20 through 22 show the condition of pavement on state roads in the area.

Bridges

The topography and hydrology of the area provide ample recreational activities and commercial activities, but also create a transportation challenge to safely and efficiently move people and freight over them in Berks County. Overall, the bridges in the Northern Berks region are in fair condition. In 2020, there are 97 bridges in the area, with the majority (72 bridges) owned by PennDOT. These bridges are those that require inspections – state bridges longer than eight (8) feet and local bridges longer than twenty (20) feet. Figures 20 through 22 show the approximate location of bridges in the area.

As the area'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. As of September 2020, there is one closed bridge in the Northern Berks region. This bridge is a local-owned bridge located on South Second Street in Hamburg Borough. Although the bridge deck and superstructure are in satisfactory condition, this concrete slab, single span bridge built in 1920 has a substructure rated as imminent failure.



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 be posted for other load-capacity restrictions including speed and number of vehicles permitted on the bridge. There are four (4) load-posted bridges in the area, and all are local-owned.

Poor condition bridges are characterized by deteriorated conditions of the major components of a bridge. This may include cracked concrete, the bridge deck, the support structure, or the entire bridge itself. 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. There are nine (9) such bridges in the area. Four (4) bridges are owned by PennDOT and five (5) are owned by municipalities. The state plans on rehabilitations/replacements for all four (4) poor condition bridges in the region with the latest completion date being in 2026. Figures 20 through 22 show the location of the closed and posted bridges.

The table below shows the bridges of most concern in the region because municipalities own them and they are in poor condition as of July 2020.

	Bridges of Concern										
Bridge	Location	Built	Municipality	Length (ft)	Deck Area (sq ft)	AADT	Condition/Issue				
Pine Street	East end of borough	1940	Hamburg	24	804	n/a	Poor				
Second Street	Between Pine and State Sts	1920	Hamburg	26	416	n/a	Poor/Closed				
Dreibelbis Mill Road	Intersection of Allendale Rd	1960	Perry	24	583.2	n/a	Poor/Posted				
Skyline Drive	East of Shartlesville	1989	Upper Bern	28	904.4	n/a	Poor				
Spring Road	600 feet East of SR 183	1954	Upper Tulpehocken	29	638	n/a	Poor/Posted				
Source: PennDOT Bridg	Source: PennDOT Bridge Condition Summary Report										

Congested Corridors

RATS developed a Congestion Management Process (CMP) in May 2016 that included an examination of the 38 most congested corridors in the County. These corridors were identified using both a Travel Time Index (TTI) and the Average Annual Daily Trips (AADT) in that corridor. The TTI is the ratio of the peak-period travel time to the free flow travel time. This congested speed data, from purchased GPS information, shows peak period travel (7-9 a.m. and 4-6 p.m.) speeds as a function of free-flow (non-congested) speeds. By plotting segments with TTI greater than 1.20 (speeds 20 percent slower than free-flow averages), congested segments can be easily identified. The identification of these segments can support effective decision making when providing input into regional transportation plans. Of the 38 most congested corridors in Berks County, three (3) have been identified with at least a portion in the Northern Berks region.

Corridor	Peak TTI	AADT	Length (Miles)	Truck %
PA 61 (U.S. 222 to Schuylkill County)	2.03	16,455-28,743	13.07	10-17
I-78	1.10	14,092-21,746	35.22	29-43
PA 183 (U.S. 222 to Schuylkill County)	2.02	5,378-23,350	16.55	5-10
Source: RATS Congestion Management Process, 2016	'	'		

Freight

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 most utilized method of transporting goods in the Northern Berks region. Of note, Interstate 78 (33 percent truck traffic) is on the Federal Highway Administration's (FHWA's) suggested Primary Freight Network (PFN). Interstate 78 is the primary route transporting goods region wide. Route 61 is a primary intercounty truck freight corridor. Route 61 provides a north-south route from the city of Reading to Schuylkill County.



Berks County has one of the largest manufacturing concentrations of the surrounding counties and serves as a major conduit between warehousing hubs elsewhere in Pennsylvania. Interstate 78 has been recognized as a logistics corridor through the Lehigh Valley to the east and into Central Pennsylvania to the west. The Northern Berks region is centrally located along this corridor. This corridor is leading in the growth of larger warehouses compared to all 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 Interstate 78 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 in the Northern Berks region. 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. Municipalities in the Northern Berks region should encourage areas of truck parking to reduce truck parking in non-designated areas. Rather than developing designated truck parking areas and rest stops another way to increase 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.

Pennsylvania is a rail-intensive state. Railroads play a major role in moving freight within and throughout the state and across the country. Several short line railroads provide service in the Northern Berks region. 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 as a spur 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.

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.

The annual average daily trips (AADT) on roadways with at-grade crossings are typically below 5,000 vehicles in Berks County. There are only 21 crossings in Berks County that fit this criteria, and two of 21 are located in the Northern Berks region. Both of these crossings are owned by Reading/Blue Mountain & Northern Railroad Commission. The crossing with the highest 2018 AADT is located in Perry Township on Route 61 with 19,261 AADT. The other crossing is located in Tilden Township on Industrial Drive with 6,385 AADT. 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.

Safety

Maintaining a safe transportation system is essential to sustaining and enhancing the quality of life for Berks County residents. Deaths and injuries resulting from traffic crashes are a public health concern and impact local communities with medical costs, lost wages, insurance costs, taxes, police, fire, and emergency medical services, legal and court costs, and property damage.

As part of its safety program, PennDOT collects traffic crash data for the entire state and reports data at the state, county, and municipal level. For the purposes of this plan, county crash data for Berks County was analyzed. Motor vehicle crashes generally involve multiple contributing factors that may be related to drivers, the roadway, or the vehicle(s) involved, thus making transportation safety a multidisciplinary concern.

Analyzing crash trends allows PennDOT, RATS, and Northern Berks region municipalities to focus on setting goals to improve upon those trends by programming safety improvements to the road system itself or encouraging greater emphasis on education and enforcement.

Berks County has been attempting to reduce the significant amount of crashes occurring on the roads. According to the 2019 Pennsylvania Crash Facts and Statistics released by PennDOT, Berks County ranked seventh in the state (tied with Delaware County) in the number of overall crashes and third in the number of fatal crashes in 2019. During the time period of 2013 through 2019, there were 1,998 crashes in the Northern Berks region. Approximately 38% of crashes occur on state roads, 20% on local roads, 13% at intersections of state and local roads, and 29% on Interstate roads in the area. Between 2013 and 2019, crashes decreased by 5.8% in the area. Twenty-seven (27) of the 1,998 crashes were fatal.

Safety concerns along the Interstate 78 corridor have been a major concern for residents, municipalities, and commuters traveling within and through the Northern Berks region. Due to this concern, many transportation improvement projects have occurred over the years and are still occurring on Interstate 78 and it's interchanges. The current and planned transportation improvement projects involving this corridor can be found in the Future Projects section of this chapter.

One of the current projects is the Hamburg Traffic Study, PennDOT Project ID 113325. This project was driven by safety concerns at the intersection of 4th Street and State Street in the Borough of Hamburg. These safety concerns are emphasized anytime there is an accident on Interstate 78 in the Northern Berks region as State Street is on the designated detour route. When an event requiring a detour on Interstate 78 occurs the volume spikes on State Street in Hamburg Borough and the number of turning actions at this intersection increase as well. This intersection, centrally located in the Borough of Hamburg, is a small, but major intersection with no turn lanes. When large trucks, common to Interstate 78, make turning movements at this intersection, it causes congestion, safety issues, and property damage. With the spike in traffic volume it also increases safety concerns for vulnerable road users such as pedestrians and bicyclists.

The two tables below show the total number of crashes and fatal crashes in each municipality for the years 2013 through 2019. The numbers shown in red on these tables illustrate how many of the total crashes located in each cell occurred on Interstate 78. Analyzing the total number of crashes in each municipality and how many of those crashes occurred on Interstate 78, one can gather that from 2013 through 2019, 15.8% of Hamburg's crashes occurred on Interstate 78, 31.5% of Tilden's crashes occurred on Interstate 78, 54.5% of Upper Bern's crashes occurred on Interstate 78, 33.2% of Upper Tulpehocken's crashes occurred on Interstate 78, and 43.8% of Windsor's crashes occurred on Interstate 78. Of the 27 fatal crashes that occurred in the Northern Berks region between 2013 and 2019, three (3) occurred on Interstate 78, with two (2) reported in Upper Bern Township and one (1) reported in Windsor Township. These three (3) fatal crashes that occurred on Interstate 78 represent 11.1% of the fatal crashes in the Northern Berks region from 2013 through 2019.

		Total N	umber of	Crashes in	Northern	Berks Reg	ion			
Municipality	2013	2014	2015	2016	2017	2018	2019	Total	% of Total	% Change
Hamburg	37 <mark>(7)</mark>	46 (10)	36 <mark>(5)</mark>	49 <mark>(6)</mark>	54 (10)	46 <mark>(5)</mark>	35 <mark>(5)</mark>	303 (48)	15.2%	-5.4%
Perry	39	39	42	41	45	34	40	280	14.0%	2.6%
Shoemakersville	9	8	8	15	6	7	8	61	3.1%	-11.1%
Tilden	69 (20)	71 (17)	62 (15)	93 (32)	83 (32)	74 (24)	52 (19)	504 (159)	25.2%	-24.6%
Upper Bern	38 (18)	23 (8)	40 (29)	30 (14)	33 (19)	40 (26)	27 (12)	231 (126)	11.6%	-28.9%
Upper Tulpehocken	38 (12)	42 (17)	53 (19)	40 (9)	53 (19)	48 (19)	57 (15)	331 (110)	16.6%	50%
Windsor	46 (26)	31 (5)	47 (21)	39 (15)	41 (20)	43 (21)	41 (18)	288 (126)	14.4%	-10.9%
Total	276 (83)	260 (57)	288 (89)	307 (78)	315 (100)	292 (95)	260 (69)	1,998 (571)		-5.8%
Source: PennDOT, Pennsylvar	nia Crash Infor	mation Tool, 2	013-2019							

Fatal Crashes in Northern Berks Region									
2013	2014	2015	2016	2017	2018	2019	Total		
0	0	0	0	0	0	0	0		
1	1	2	1	0	0	1	6		
0	1	0	0	1	1	0	3		
0	0	0	2	3	2	0	7		
1 (1)	0	0	0	1 (1)	1	0	3 (2)		
1	0	0	1	1	1	2	6		
0	1	0	0	0	1 (1)	0	2 (1)		
3 (1)	3	2	4	6 (1)	6 (1)	3	27 (3)		
	0 1 0 0 1 (1) 1	2013 2014 0 0 1 1 0 1 0 0 1 (1) 0 1 0 0 1	2013 2014 2015 0 0 0 1 1 2 0 1 0 0 0 0 1(1) 0 0 1 0 0 0 1 0	2013 2014 2015 2016 0 0 0 0 1 1 2 1 0 1 0 0 0 0 0 2 1(1) 0 0 0 1 0 0 1 0 1 0 0	2013 2014 2015 2016 2017 0 0 0 0 0 1 1 2 1 0 0 1 0 0 1 0 0 0 2 3 1 (1) 0 0 0 1 (1) 1 0 0 1 1 0 1 0 0 0	2013 2014 2015 2016 2017 2018 0 0 0 0 0 0 1 1 2 1 0 0 0 1 0 0 1 1 0 0 0 2 3 2 1(1) 0 0 0 1(1) 1 1 0 0 1 1 1 0 1 0 0 0 1(1)	2013 2014 2015 2016 2017 2018 2019 0 0 0 0 0 0 0 0 1 1 1 2 1 0 0 1 1 0 0 1 0 0 1 0 0 0 1 0 0 1 1 0 0 1 1 0 0 1 1 1 0 0 1 1 1 1 2 0 0 1 1 1 1 2 0 0 1 1 1 1 2 0 0 1 1 1 0 0 0 1 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		

Driving Behaviors

Unsafe driving behavior plays a significant role in crashes in Berks County. Aggressive driving and speeding are major factors, with distracted driving and tailgating as increasingly present contributors to crashes. Drivers are more distracted and more prone to speeding than they were in the 1990s or 2000s. Of note, crashes because of distracted driving in Berks County began to rise with the mass adoption of smartphones in the early-mid 2000s.

Distracte	ed Driving B	ehaviors th	at Contribu	ited to Cras	hes in Nort	hern Berks	Region	
Municipality	2013	2014	2015	2016	2017	2018	2019	Total
Hamburg	9	3	4	7	7	3	6	39
Perry	3	3	4	5	4	2	1	22
Shoemakersville	2	2	2	2	0	1	2	11
Tilden	10	7	6	8	9	8	6	54
Upper Bern	3	3	3	2	2	1	2	16
Upper Tulpehocken	1	3	4	3	6	3	7	27
Windsor	3	4	6	2	3	3	1	22
Total	31	25	29	29	31	21	25	191
Source: PennDOT, Pennsylvania	Crash Information	on Tool, 2013-20)19	•				

Aggressi	Aggressive Driving Behaviors that Contributed to Crashes in Northern Berks Region										
Municipality	2013	2014	2015	2016	2017	2018	2019	Total			
Hamburg	3	13	4	2	7	3	5	37			
Perry	3	3	2	2	2	2	4	18			
Shoemakersville	1	1	0	1	0	1	0	4			
Tilden	4	6	6	5	5	2	2	30			
Upper Bern	3	1	3	0	3	2	0	12			
Upper Tulpehocken	3	2	4	1	2	2	3	17			
Windsor	4	2	1	2	0	3	2	14			
Total	21	28	20	13	19	15	16	132			
Source: PennDOT, Pennsylvania	Crash Informati	on Tool, 2013-20	019								

Vulerable Road Users (VRUs)

Vulnerable road users are those that are using the road without a vehicle surrounding them for protection. Most commonly, these are pedestrians, bicyclists, and motorcyclists in Berks County.

The chart below shows there were sixteen (16) accidents involving pedestrians from 2013 to 2019, there was one (1) pedestrian fatality in Tilden Township in 2018. There were seven (7) accidents involving a bicycle during the same time period, however none of these resulted in fatality. The majority of accidents involving pedestrians and bicyclists between 2013 and 2019 occurred in the Borough of Hamburg and Tilden Township. Hamburg and Tilden are neighboring municipalities, Hamburg with a denser population typical of a borough and Tilden being a shopping destination which also provides access to recreational and through trails such as the Appalachian Trail and the Schuylkill River Trail. To minimize the amount of accidents involving pedestrians and bicyclists, these municipalities should focus on creating safe links between the Borough of Hamburg and the adjacent shopping destination in western Tilden Township. A safe bicycle and pedestrian network connecting the Appalachian Trail and Schuylkill River Trail to the shopping area in Tilden Township would also provide a safer way for vulnerable road users to access this shopping destination. This could be achieved through widening of shoulders and/or the addition of protected bike lanes.

From 2013 through 2019, fifty-six (56) crashes occurred involving a motorcycle, with four (4) of the crashes resulting in fatalities. While fatality rates for vulnerable road users is low and declining, the charts below show that motorcycle crashes are by far the largest of the three classes of VRUs in the Northern Berks Region.

	Crashes Involving Pedestrians in Northern Berks Region										
Municipality	2013	2014	2015	2016	2017	2018	2019	Total			
Hamburg	1	2	2	1	0	0	0	6			
Perry	0	0	0	1	0	0	0	1			
Shoemakersville	0	0	0	1	0	0	0	1			
Tilden	1	0	1	1	1	1	0	5			
Upper Bern	0	0	0	0	0	0	0	0			
Upper Tulpehocken	0	0	0	0	1	0	0	1			
Windsor	2	0	0	0	0	0	0	2			
Total	4	2	3	4	2	1	0	16			
Source: PennDOT, Pennsylvania	Crash Information	on Tool, 2013-20	019								

	Crashes Involving Bicycles in Northern Berks Region									
Municipality	2013	2014	2015	2016	2017	2018	2019	Total		
Hamburg	0	0	1	0	1	1	0	3		
Perry	0	0	1	0	0	0	0	1		
Shoemakersville	0	0	1	0	0	0	0	1		
Tilden	0	0	0	0	1	1	0	2		
Upper Bern	0	0	0	0	0	0	0	0		
Upper Tulpehocken	0	0	0	0	0	0	0	0		
Windsor	0	0	0	0	0	0	0	0		
Total	0	0	3	0	2	2	0	7		
Source: PennDOT, Pennsylvania	Crash Informati	on Tool, 2013-20	019	•						

	Crashe	s Involving	Motorcycle	es in Northe	ern Berks Re	egion		
Municipality	2013	2014	2015	2016	2017	2018	2019	Total
Hamburg	0	0	0	1	0	1	1	3
Perry	2	0	0	3	1	2	1	9
Shoemakersville	0	0	0	0	1	0	1	2
Tilden	0	3	1	3	2	4	1	14
Upper Bern	1	1	0	2	1	0	0	5
Upper Tulpehocken	3	0	0	0	1	0	2	6
Windsor	5	1	3	2	1	2	3	17
Total	11	5	4	11	7	9	9	56
Source: PennDOT, Pennsylvania	Crash Information	on Tool, 2013-20)19					

Transit

Public transportation forms a key component of the Berks County transportation system. While most travel in the area 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. For reference, transit routes in the Northern Berks region at the time of this publication are depicted on Figures 23 through 25 at the end of this chapter.

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

The BARTA fixed route services 33 Berks County municipalities and carried approximately 2.9 million passengers in 2018. Operating seven days a week, with a fleet of 50 buses, it services 39 bus shelters and 1,475 bus stops on 19 routes over 1.4 million route miles. According to BARTA, 42% of those trips are work related, followed by 23% for shopping and 14% for personal business.

Overall, major trip origins/destinations (major employers, shopping centers, post-secondary schools) are served by BARTA fixed route bus service. Route 20, which provides service between Reading and the Cabela's in Tilden Township, had the 14th greatest weekday ridership out of the 19 routes in the BARTA system, serving 79,606 passenger trips in 2018. This route currently runs Monday through Saturday serving the townships of Perry, Tilden, and Windsor and the boroughs of Hamburg and Shoemakersville in the Northern Berks region. Major Activity Centers in The Northern Berks region include Cabela's Shopping Center and the Hamburg Parkand-Ride. Route 20 averages 323 riders on weekdays and 127 riders on Saturdays.

SCTA updated their Transit Development Plan in August of 2018 which included recommendations for changes to occur over time. One proposed change to Route 20 identified in the plan is to adjust frequency by adding a fourth roundtrip during the AM peak period in order to better match ridership patterns. Another change that was proposed was to reduce the number of local stops in Reading that are already serviced by Route 19 and instead focus on major stops/hubs and park-and-rides.

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 the Northern Berks region, 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.

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. The Building a Better Bus Stop Resource Guide can be found at: www.ppta.net/pages/betterbusstops/index.html.

Special Services Operations

BARTA's Special Services Division is responsible for operating and administering most human service transportation in Berks County. These services including the Shared Ride, ADA, and Medical Assistance Transportation Program (MATP) programs, and are specialized, demand-responsive paratransit service and provide public transportation to persons whose disabling condition prevents the use of fixed route transit.

With a fleet of 58 paratransit vehicles, BARTA provided nearly 230,000 trips in 2018. The majority of trips (41%) were for medical appointments, followed by work (18%) and accessing senior centers (11%).

Taxi Service and Ride Sharing

For areas in the Region that are not served by BARTA, or individuals unable to take advantage of BARTA's Special Services Division, other options exist. One of the options is to receive transportation through one of the six taxicab operators that provide 24 hour/7 day service in Berks County. 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 has emerged as a popular mode of transportation when personal transportation does not exist to an individual. Berks County has been serviced by Uber since operations began in 2015, shortly followed by Lyft.

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 of Commerce and Industry 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 MPO's.

When new businesses move into the Northern Berks Region, it is important to promote Commuter Services of Pennsylvania. Commuter Services of Pennsylvania can provide free assistance in tailoring programs to meet employer's needs and aid in building a program that works at getting employees out of their individual vehicles and/or rush hour traffic. Benefits to employers from working with Commuter Services of Pennsylvania can include recruiting and retaining workers, savings on payroll taxes, reducing parking costs and/or spaces, getting employees to work on time, improving attendance, improving morale, and achieving environmental benefits. These benefits can be provided through working with Commuter Services of Pennsylvania to achieve plans specific to each employer. Options tailored to employers can include carpooling/vanpooling, transit promotion, Emergency Ride Home program, preferential parking, active transportation options, teleworking, staggered shifts, compressed work weeks, payroll tax savings, and promotional/educational activities.

Not only do employers have an option to partner with Commuter Services of Pennsylvania, but communities can as well. Community Partners work with the Commuter Services of Pennsylvania program to provide commute option assistance to their member organizations, residents, and other interested parties within their communities.

Active Transportation

Active transportation is defined as any form of human-powered transportation that engages individuals in healthy, physical activity while traveling from place to place. These trips take place on a variety of different facilities, some reserved exclusively for non-motorized users such as sidewalks and trails, while others take place on multi-function transportation facilities such as bike lanes on streets. Walking and biking are important parts of the area's overall transportation system as they are two of the most basic and affordable forms of transportation available.



The area has a diverse active transportation system. Active transportation facilities in the region can be viewed on Figures 23 through 25. The mix of rural roads in the townships to borough streets in Hamburg and Shoemakersville, and the 79 miles of trails and 28 miles of sidewalks provide bicyclists and pedestrians with varied routes. The Schuylkill River Trail is a major north-south trail corridor consisting of continuous and unconnected segments of trails from Philadelphia into Schuylkill County. As of August 2020, there are 5 miles of on road and 0.24 miles off road trail that is part of the Schuylkill River Trail through the Northern Berks region. There are plans to close the gaps in the Schuylkill River Trail and turn on road sections off road where available. To connect and improve safety on the Schuylkill River Trail, there are currently 4 miles of proposed on road and 8 miles of proposed off road trails in the Northern Berks region.

Most pedestrian trips are short; therefore, the Hamburg and Shoemakersville areas have the greatest influence on creating viable pedestrian transportation networks. Sidewalks in the Northern Berks region outside of these downtowns are mostly limited to subdivisions. Sidewalks provide a safe means for residents of these neighborhoods to access nearby attractions such as schools, parks, and adjacent subdivisions to the existing sidewalk network. Going forward, new land developments and subdivisions, especially ones served by public sewer and water utilities, should be encouraged to have sidewalks on one side of all streets when within two (2) miles of a school, or half (0.5) of a mile of a greenway, park, shopping center, business complex, transit stop, or when there is an existing sidewalk network adjacent to the proposed development.

RATS updated their Bicycle and Pedestrian Transportation Plan in 2020 and identified potential projects based on public, municipal, and non-profit survey responses. Potential projects identified in the Northern Berks region

include the completion of the Schuylkill River Trail, sidewalks along West State Street and Industrial Drive, and marked lanes or bike lanes on Old Route 22/Hex Highway. Other concerns noted during the development of the Northern Berks Joint Comprehensive Plan include connecting sidewalks along Main Street in Perry Township to Main Street in Shoemakersville Borough to allow for safer travel for Perry Township residents into Shoemakersville Borough to access amenities such as the pool and park as well as businesses located along Main Street and Noble Avenue. Another request was safe crossings of Pine Street in Hamburg Borough and Windsor Township to provide access to and around the Hamburg Area School District schools and facilities including a priority to safely connect the schools to Kaercher Creek. These additional requests have been considered and will be added to the Berks County Bicycle and Pedestrian Transportation Plan when updated.

Future Projects

Figure numbers 26 and 27 show the location of these proposed projects and their corresponding project numbers.

PA 61 Restoration Phase 2A - PennDOT Project ID 10328

This project will focus on highway restoration of State Route (SR) 61 from 4th Street to the SR 4028/Schuylkill River Bridge in Hamburg Borough. A median barrier will be installed between 4th Street and Grand Street. The project also includes the rehabilitation of the SR 61 over RBMN bridge and the SR 61 over Mill Creek bridge. The replacement of the SR 61 over Kaerchers Creek bridge is also included.

PA 61 Restoration Phase 2B – PennDOT Project ID 10867

This project involves the highway restoration of State Route (SR) 61 and median barrier installation from Zions Church Road to the SR 61/4th Street intersection which will be reconfigured.

<u>State Street Bridge over Mill Creek – PennDOT Project ID 10693</u>

This project replaces the 3 span concrete arch bridge carrying SR 4028 (State Street) over Mill Creek that is rated in poor condition and was built in 1901. The project is expected to be completed in 2021.

<u>I-78 Shartlesville to Hamburg - Resurface – PennDOT Project ID 72807</u>

This project involves the milling and resurfacing of EB & WB mainline and shoulders of (I-78) with stone matrix asphalt mixture design, bituminous milling, concrete and bituminous patching, Type 6-SP shoulders, all-weather pavement markers, line painting, MASH standard guiderail and glare screen, and bridge preservation activities, along with other miscellaneous construction items. The project is located in Tilden and Upper Bern Townships from Shartlesville to Hamburg for a construction distance of approximately 12.72 miles (67,162 FT).

I-78 Midway to Shartlesville Resurface – PennDOT Project ID 85903

This project involves the milling and resurfacing of NB & SB mainline and shoulders of (I-78) with stone matrix asphalt mixture design, bituminous milling, concrete and bituminous patching, Type 6-SP shoulders, all-weather pavement markers, line painting, MASH standard guiderail and glare screen, and bridge preservation activities, along with other miscellaneous construction items from the Berks/Lebanon County Line to Midway Exit 16.

The Midway (SR 8008) and Shartlesville Ramps (SR 8010) involve the milling and resurfacing with superpave asphalt mixture design, bituminous milling and patching, line painting, and bridge preservation activities, along with other miscellaneous construction items. This project has a construction distance of approximately 15.13 miles (79,887 FT).

I-78 Lenhartsville ASR – PennDOT Project ID 87645

This project involves the treatment of ASR for mainline and shoulders of (I-78), from milepost 33.4 to milepost 35.4, with Ultra Thin Bonded Wearing Course and Stone Matrix Asphalt overlay, bituminous milling, concrete patching, MASH standard guiderail, reflective tape pavement markers, line painting, and bridge rehabilitation/preservation activities, and bridge preservation activities, along with other miscellaneous construction items.

PA 183 over Little Northkill Creek & Tributary to Northkill – PennDOT Project ID 91976

Bridge rehabilitation/replacement of two bridges on PA 183 (Bernville Road) over Little Northkill Creek in Upper Tulpehocken Township.

I-78-Rt 61 Bridge Replace - PennDOT Project ID 93494

Reconstruction of I-78 and SR 61 Interchange including the bridge replacement and widening of two I-78 mainline bridges and roadway reconstruction.

PA 61 Restoration Phase 1 – PennDOT Project ID 96373

This project involves the highway restoration of State Route 61 from approximately 1700 feet south of Cabela Drive in Tilden Township, Berks County to south end of the bridge over the Reading Blue Mountain & Northern RR and Schuylkill River with maintenance, protection and traffic extending into Port Clinton Borough, Schuylkill County. Bridge preservation activities to include minor deck repairs and application of a waterproofing membrane will occur on the structure over Bartram Trail.

SR 61 Median Barrier – PennDOT Project ID 97258

This project involves the installation of a median barrier and pavement markings on State Route 61 anticipated to be from Zion's Church Road to 4th Street in conjunction with the SR 61 Restoration Phase 2B (PennDOT Project ID 10867) in Perry and Windsor Townships and Hamburg Borough.

61 Median Barrier - PennDOT Project ID 109337

This project will add a median barrier from the Walmart entrance at Lowland Road to a point approximately 0.4 miles north in Tilden Township.

SR 61 Bridge Rehabilitation – PennDOT Project ID 109894

This project involves the rehabilitation of the bridge on State Route 61 over SR 4028 (West State Street), the Schuylkill River and Reading Northern Railroad in the Borough of Hamburg and Tilden Township.

SR 4040 Old Route 22 over Tributary to Northkill Creek - PennDOT Project ID 110078

This project involves the bridge rehabilitation/replacement of State Route 4040 (Old Route 22) over Northkill Creek in Upper Tulpehocken Township.

SR 4040 Old Route 22 - PennDOT Project ID 110082

This project involves the resurfacing and guide rail upgrades to State Route 4040 (Old Route 22) from the Bethel Township Line to State Route 4028 (St. Michaels Road) in Upper Tulpehocken, Upper Bern, and Tilden Townships.

SR 4040 Old Route 22 over Birch Creek - PennDOT Project ID 110189

This project includes the Utility and Right of Way phases for the rehabilitation/replacement of the State Route 4040 (Old Route 22) bridge over Birch Creek in Upper Tulpehocken Township. Preliminary Engineering, Final Design and Construction phases are being completed under the SR 4040 Bridge Rehab Bundle, MPMS #110013.

SR 4040 Old Route 22 over Birch Creek – PennDOT Project ID 110191

This project includes the Utility and Right of Way phases for the rehabilitation/replacement of the State Route 4040 (Old Route 22) bridge over Birch Creek in Upper Tulpehocken Township. Preliminary Engineering, Final Design and Construction phases are being completed under the SR 4040 Bridge Rehabilitation Bundle, MPMS #110013.

SR 4040 Old Route 22 over Tributary to Birch Creek – PennDOT Project ID 110192

This project includes the Utility and Right of Way phases for the rehabilitation/replacement of the State Route 4040 (Old Route 22) bridge over a Tributary of Birch Creek in Upper Tulpehocken Township. Preliminary Engineering, Final Design and Construction phases are being completed under the SR 4040 Bridge Rehabilitation Bundle, MPMS #110013.

SR 4040 Old Route 22 over Mollhead Creek - PennDOT Project ID 110193

This project includes the Utility and Right of Way phases for the rehabilitation/replacement of the State Route 4040 (Old Route 22) bridge over Mollhead Creek in Upper Tulpehocken Township. Preliminary Engineering, Final Design and Construction phases are being completed under the SR 4040 Bridge Rehabilitation Bundle, MPMS #110013.

SR 4040 Old Route 22 over Tributary to Mollhead Creek – PennDOT Project ID 110194

This project includes the Utility and Right of Way phases for the rehabilitation/replacement of the State Route 4040 (Old Route 22) bridge over a Tributary to Mollhead Creek in Upper Tulpehocken Township. Preliminary Engineering, Final Design and Construction phases are being completed under the SR 4040 Bridge Rehab Bundle, MPMS #110013.

SR 4040 Old Route 22 Bridge Bundle – PennDOT Project ID 110013

This project involves the bridge rehabilitation/replacement of a bundle of bridges on State Route 4040 (Old Route 22) in Bethel and Upper Tulpehocken Townships. Structures included in this bundle located in Upper Tulpehocken Township are bridges that carry SR 4040 over Birch Creek, SR 4040 over a Tributary to Birch Creek, SR 4040 over Northkill Creek.

Hamburg Traffic Study - PennDOT Project ID 113325

This project will involve selected recommendations from an ongoing Comprehensive Transportation Study on State Street (SR 4028) and Fourth Street (SR 4035) within the Borough of Hamburg in Berks County.

I-78 Emergency Gates and 12M Temp Signals EGS – PennDOT Project ID 114569

This project will provide installation of seven interchange manually operated ramp emergency closure gates and two temporary signals along the emergency detour route for the I-78 Global Emergency Management Plan through Berks and Lehigh Counties.

<u>I-78 12M Emergency Detour – PennDOT Project ID 114570</u>

This project will provide installation of a temporary emergency traffic signal at the intersection of Old Route 22 (SR 4028) and SR 143 to be used during emergency closure and detour of Interstate 78.

Airports and Railroads

Given the regional nature of airport and railroad development and support, this Comprehensive Plan calls for no specific regard to air and rail service and instead adopts the RATS FFY 2017-2040 Long Range Transportation Plan in regard to these modes as reference.



Transportation Goals

The municipalities in the planning region should have a "united voice" to vote or petition legislators for the benefit of transportation issues within the Region and communicate unified requests for improvements to RATS through the TIP and LRTP.

The municipalities should pursue preliminary technical evaluation of identified priorities and share recommendations with the appropriate municipalities and agencies. The analysis may determine that a project is not feasible before cost is incurred.

The municipalities should collaborate on a regional basis to focus limited funding on the most effective solutions and to maximize the potential for cost sharing and savings.

Review municipal ordinances, especially in the Boroughs, for parking standards and amend as necessary to ensure parking requirements are both appropriate and flexible.

The municipalities should encourage areas of truck parking to reduce trucks parking in non-designated or unsafe areas. Consideration should be given to encourage developers to include an area of safe truck parking within the property they are developing for drivers that are servicing that location.

Each municipality should implement low-cost safety improvements where such measures provide an immediate impact on safety.

The municipalities should ensure future development does not create detrimental access issues, increase congestion, or create safety problems.

Communicate with the operators of commercial and industrial facilities regarding issues with regular truck movements and designated routes.

Consider the development of a regional trail/pedestrian/bicycle plan that provides guidance for an interconnected system of pedestrian improvements between the municipalities.

Ensure municipal subdivision and land development ordinances contain requirements for sidewalks in appropriate locations. Going forward, new land developments and subdivisions, especially ones served by public sewer and water utilities, should be encouraged to have sidewalks on one side of all streets when within two (2) miles of school, or half (0.5) of a mile of a greenway, park, shopping center, business complex, transit stop, or when there is an existing sidewalk network adjacent to the proposed development.

Encourage the addition of sidewalks within the planning area especially where there are missing links or where sidewalks would facilitate appropriate connections to existing or future neighborhoods and destinations (such as schools, parks, recreation facilities, major job generators, or shopping centers).

Communicate with SCTA\BARTA regarding future bus routes, shuttles, and other transit opportunities. Municipal officials and developers should work with SCTA/BARTA early in the design process of a new project, rather than placing stops at later stages in construction, with considerations for pedestrian access, existing bus operations, and potential stop facilities.





















