## TRANSPORTATION PLAN

Moving into, around and through the Governor Mifflin Area 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 Governor Mifflin School District 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.



State Route 222 in Cumru Township

In addition to experiencing population growth discussed in the demographics section of the Appendix. the demographic and socioeconomic characteristics of the population in the school district have changed significantly and will continue to change in the future. These demographic changes contain challenges for the provision of transportation facilities and services. For example, as the area's 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 and commercial 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, 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.

### 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 the case of the Governor Mifflin Area, 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

RATS is the regional transportation planning organization for the Reading, Pennsylvania metropolitan area. The Reading MPO covers all of Berks County. Working with PennDOT and the Federal Highway Administration (FHWA). RATS facilitates and is responsible for prioritizing approximately \$80 million annually to advance transportation improvement projects throughout the county. PennDOT, South Central Transportation Authority (SCTA), and the 72 municipalities in the County are responsible for project implementation.

#### **ROADS**

The Governor Mifflin Area has 246 miles of roads, with 83 miles of state-owned routes, 143 miles of municipal roads and 20 miles of private roads/streets. Nearly all of the roads are paved or improved. All roads owned by the municipalities are part of the Pennsylvania State Liquid Fuels Program 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 2006 and 2016. The amount of money allocated to each

municipality increased and overall, LFF increased 55.7% Streets and roads owned and maintained by Governor Mifflin Area municipalities are 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.

Liqu	Liquid Fuels Allocations by GMSD Municipality 2006 & 2016											
2006					% Increase							
Brecknock	38.37	\$130,698.96		Brecknock	38.63	\$198,573	51.9%					
Cumru	65.66	\$296,558.52		Cumru	67.24	\$471,249	58.9%					
Kenhorst	9.13	\$50,168.67		Kenhorst	9.13	\$78,365	56.2%					
Mohnton	10.88	\$57,079.96		Mohnton	10.88	\$86,630	51.8%					
Shillington	17.59	\$95,448.85		Shillington	17.52	\$146,035	53.0%					
TOTAL	141.6	\$629,954.96		TOTAL	143.4	\$980,852	55.7%					

Source: PennDOT Bureau of Municipal Services MLF Allocations Report, 2006 & 2016

Figure 16 shows 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 Routes I-176, Routes 222, 422, 10, 724 and 625. 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. Local roads and streets are, by far, the most numerous of the road types in the area, accounting for nearly 66 percent of all roads. These roads provide access to individual properties and serve short distance, low speed trips. Examples include Madison Road/Madison Street and Mountain View Road. These roads are owned by PennDOT and the municipalities.

The National Highway System (NHS) consists of roadways important to the nation's economy, defense, and mobility. Principal Arterials are part of the National Highway System. The area has 26 miles of roads on the National Highway System.

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 five Governor Mifflin Area 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. Figure 16 illustrates 2014 AADT on area roadways. The heaviest traveled roads are the arterials in the area, namely Routes 222 and 422.

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. Since PennDOT uses IRI in its pavement condition performance measures, Figure 18 shows 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 Governor Mifflin Area are in good shape. In 2014, there are 58 bridges in the area, with the majority (47 bridges) owned by PennDOT. These bridges are those that require inspections - state bridges longer than eight feet and local bridges longer than 20 feet. Figure 18 shows 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 2016, there are no closed bridges in the region.

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 six (6) load-posted bridges in the area.

Structurally deficient 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 "structurally deficient" (SD) 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 15 such bridges in the area. Ten bridges are owned by PennDOT and five are owned by municipalities. Figure 18 shows the location of the closed and posted bridges.

A functionally obsolete bridge does not meet current design standards. Examples include a bridge that is too narrow, has inadequate under-clearances, has insufficient load-carrying capacity, is poorly aligned with the roadway, or can no longer adequately service today's traffic. Functionally obsolete does not mean the bridge is unsafe or necessarily structurally deficient. It means that the bridge is showing its age and should be upgraded or replaced to improve its function. The area has 11 such bridges, all owned by PennDOT.

The table below shows the bridges of most concern in the region because municipalities own them and they are structurally deficient as of June 2016. Of most concern is the Poplar Neck Bridge in Cumru Township. The oldest and largest of the five bridges on the list and the largest municipal owned bridge in the County, it will require expensive repairs to keep the bridge from further deteriorating, being posted for lower Bridge on Route 625 in Cumru Township over Angelica Creek weight and eventually closing.



Bridges of Local Concern											
Bridge	Location	Built	Reconstructed	Municipality	Length	Deck Area	AADT	Issue			
Poplar Neck Road	Nw Of Pa 724/I-176 Inter.	1917	1952	Cumru	550	15,290	1,086	POSTED, SD			
Werner Street	Mohnton/Pennwyn	1965	1965	Cumru	39	2,067	431	POSTED, SD			
High Boulevard	Kenhorst/Grill	1969	0	Cumru	55	3,080	2,306	POSTED, SD			
Maple Grove Road	Kramer Road Intersection	1968	0	Brecknock	24	907	375	STRUCTURALLY DEFICIENT			
Gebhart School Road	Near Hartz Store Road	1981	0	Brecknock	33	1,040	450	POSTED, SD			

Source: PennDOT



#### 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 ranked using both a Travel Time Index (TTI) and the Average Annual Daily Trips (AADT) in that corridor. Please note that these rankings are not a definitive account of congestion along the network or a representation of prioritizing one corridor over another for improvements. Rather, it is an introduction to useful data and highlights the bottlenecks and most congested segments in the Governor Mifflin Area. Figures 13 and 14 show those congested corridors in detail. The rankings shown on the map represent where the corridor is ranked countywide.

<b>County Rank</b>	<b>GMSD</b> Rank	Corridor	Peak TTI	Max AADT
2	1	U.S. 222 Business (U.S. 222 Merge to U.S. 422 West Shore Bypass)	4.42	22,310
7	2	PA 724 (Sinking Spring to U.S. 222 Business)	2.38	14,301
18	3	PA 724 (U.S. 222 Business to Interstate 176)	1.78	12,196
26	4	PA 724 (Interstate 176 to Birdsboro)	1.57	11,333
29	5	U.S. 422 (West Shore Bypass)	1.44	78,134
33	6	Interstate 176/SR 2089	1.32	3,722
38	7	U.S. 222 (Lancaster County to U.S. 422 Merge	1.03	44,135

Source: RATS Congestion Management Process, 2016

### **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 GMA 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 a significant amount of crashes – ranking sixth in the state in the number of overall crashes and fifth in the number of fatal crashes between 2009 and 2014. During the same span, there were 2,341 crashes in the Governor Mifflin Area, with 81% of them in Cumru Township. Nearly 64% of crashes occur on state roads and 36% on local roads in the area. Between 2009 and 2014, crashes increased 20% in the area. Fourteen of those crashes were fatal.

	Total Number of Crashes in GMSD Municipalities											
MUNICIPALITY	2009	2010	2011	2012	2013	2014	2015	Total	% of Total	% Increase		
BRECKNOCK	33	36	35	34	36	46	54	274	13.8%	63.6%		
CUMRU	233	229	229	202	223	222	270	1,608	80.9%	15.9%		
KENHORST	21	17	10	17	14	15	13	107	5.4%	-38.1%		
MOHNTON	7	2	2	10	7	7	7	42	2.1%	0.0%		
SHILLINGTON	42	52	42	34	38	42	60	310	15.6%	42.9%		
TOTAL	336	336	318	297	318	332	404	2,341		20.2%		

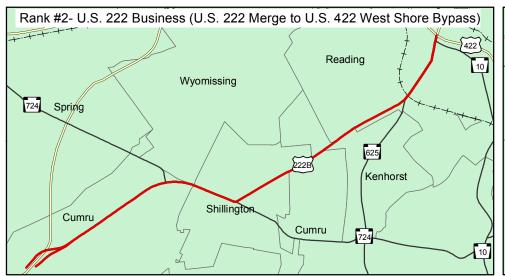
Source: PennDOT, Pennsylvania Crash Facts and Statistics, 2009-2014



FIGURE 13

www.countyofberks.com/planning

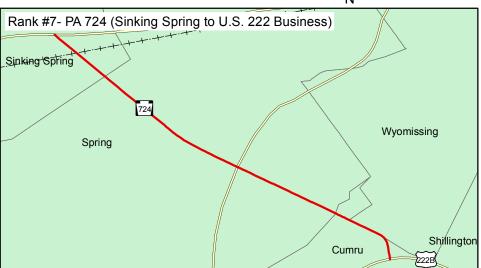
Governor Mifflin Joint Comprehensive Plan Congested Corridors
Based on Travel Time and Volume

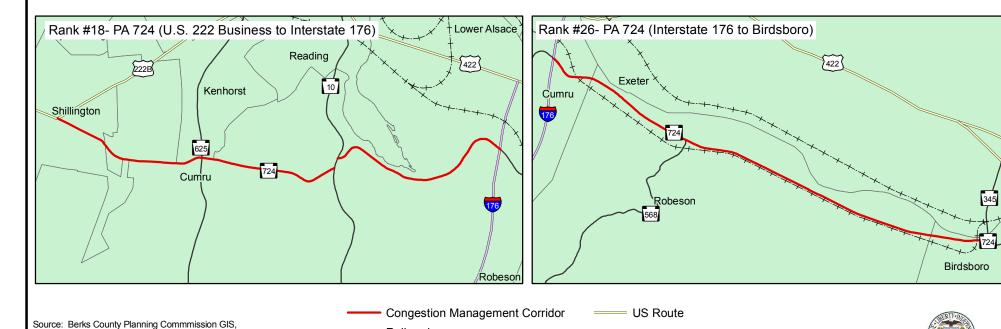


Berks County Mapping, Berks County GIS, Berks DES,

PennDOT, Berks County Congestion Management

Process Plan 2016



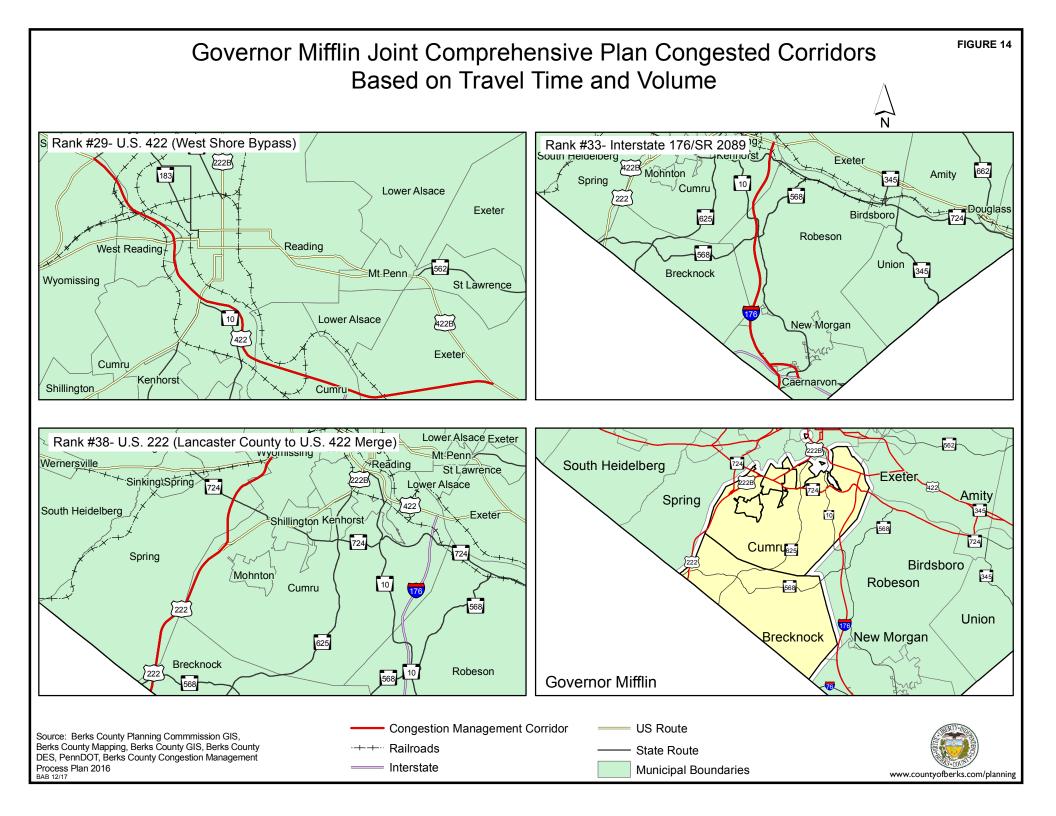


State Route

Municipal Boundaries

Railroads

Interstate



	Fatal Crashes in GMSD Municipalities											
MUNICIPALITY	2009	2010	2011	2012	2013	2014	2015	Total				
BRECKNOCK	2	0	0	1	0	0	0	3				
CUMRU	1	3	1	1	1	0	1	8				
KENHORST	0	0	0	0	0	0	0	0				
MOHNTON	0	0	0	0	0	0	0	0				
SHILLINGTON	0	0	1	1	0	1	0	3				
TOTAL	3	3	2	3	1	1	1	14				

Source: PennDOT, Pennsylvania Crash Facts and Statistics, 2009-2014

### **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 since 2009. We are more distracted and more prone to speeding than we 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.

Distracted	Distracted Driving Behaviors that Contributed to Crashes in GMSD Municipalities										
MUNICIPALITY	2009	2010	2011	2012	2013	2014	2015	Total			
BRECKNOCK	4	3	4	4	3	2	3	23			
CUMRU	27	23	20	21	24	18	26	159			
KENHORST	2	1	2	2	3	1	2	13			
MOHNTON	0	0	1	0	1	0	0	2			
SHILLINGTON	7	2	7	2	3	2	6	29			
TOTAL	40	29	34	29	34	23	37	226			

Source: PennDOT, Pennsylvania Crash Facts and Statistics, 2009-2014

Aggressive	Aggressive Driving Behaviors that Contributed to Crashes in GMSD Municipalities										
MUNICIPALITY	2009	2010	2011	2012	2013	2014	2015	Total			
BRECKNOCK	13	17	13	15	18	24	28	128			
CUMRU	116	120	112	98	106	101	121	774			
KENHORST	9	6	3	6	4	5	7	40			
MOHNTON	1	1	1	7	2	4	1	17			
SHILLINGTON	15	21	14	13	12	17	16	108			
TOTAL	154	165	143	139	142	151	173	1,067			

Source: PennDOT, Pennsylvania Crash Facts and Statistics, 2009-2014

	Speeding that Contributed to Crashes in GMSD Municpalities										
MUNICIPALITY	2009	2010	2011	2012	2013	2014	2015	Total			
BRECKNOCK	0	2	3	0	3	3	2	13			
CUMRU	7	3	1	4	2	5	10	32			
KENHORST	0	0	0	0	0	1	0	1			
MOHNTON	0	0	0	1	0	2	0	3			
SHILLINGTON	0	0	1	1	0	1	0	3			
TOTAL	7	5	5	6	5	12	12	52			

Source: PennDOT, Pennsylvania Crash Facts and Statistics, 2009-2014

## AT-RISK DRIVERS

At-risk drivers include older drivers (65+) and young drivers (16-17). Older drivers are in crashes at a higher rate than young drivers are. The rise of elderly drivers on the road coupled with their higher crash rates suggests that safety programming targeted towards the elderly driver is needed.

	Crashes by At-Risk Drivers (Age 16)											
MUNICIPALITY	2009	2010	2011	2012	2013	2014	2015	Total				
BRECKNOCK	0	1	0	0	0	0	0	1				
CUMRU	3	6	4	5	0	0	1	19				
KENHORST	0	0	0	0	0	0	0	0				
MOHNTON	0	0	0	0	1	0	0	1				
SHILLINGTON	1	0	0	0	0	1	1	3				
TOTAL	4	7	4	5	1	1	2	24				

Source: PennDOT, Pennsylvania Crash Facts and Statistics, 2009-2014

	Crashes by At-Risk Drivers (Age 65-74)											
MUNICIPALITY	2009	2010	2011	2012	2013	2014	2015	Total				
BRECKNOCK	2	1	2	3	2	4	2	16				
CUMRU	12	20	12	17	19	21	20	121				
KENHORST	1	2	1	0	2	2	2	10				
MOHNTON	0	0	0	1	2	0	1	4				
SHILLINGTON	4	5	5	3	2	1	6	26				
TOTAL	19	28	20	24	27	28	31	177				

Source: PennDOT, Pennsylvania Crash Facts and Statistics, 2009-2014

Crashes by At-Risk Drivers (Age 75+)										
MUNICIPALITY	NICIPALITY 2009 2010 2011 2012 2013 2014 2015 Total									
BRECKNOCK	1	2	2	2	1	1	1	10		
CUMRU	18	12	14	14	10	15	14	97		
KENHORST	3	2	2	3	0	3	1	14		
MOHNTON	1	0	0	1	0	0	0	2		
SHILLINGTON	3	8	2	6	3	2	6	30		
TOTAL	26	24	20	26	14	21	22	153		

Source: PennDOT, Pennsylvania Crash Facts and Statistics, 2009-2014

## **VULNERABLE 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. While fatality rates for vulnerable road users is low and declining, the charts below shows that motorcycle fatalities are the largest of the three classes of VRUs.

Crashes Involving Pedestrians										
MUNICIPALITY 2009 2010 2011 2012 2013 2014 2015 Total										
BRECKNOCK	0	0	0	0	0	0	0	0		
CUMRU	3	2	1	1	4	1	2	14		
KENHORST	0	0	1	1	0	1	0	3		
MOHNTON	0	0	0	0	1	1	0	2		
SHILLINGTON	1	1	1	1	0	0	1	5		
TOTAL	4	3	3	3	5	3	3	24		

Source: PennDOT, Pennsylvania Crash Facts and Statistics, 2009-2014

Crashes Involving Bicycles										
MUNICIPALITY	IICIPALITY 2009 2010 2011 2012 2013 2014 2015 Total									
BRECKNOCK	0	0	0	0	0	0	0	0		
CUMRU	1	0	1	1	0	0	2	5		
KENHORST	0	0	0	0	0	0	0	0		
MOHNTON	0	0	0	0	0	1	0	1		
SHILLINGTON	1	0	0	0	0	0	0	0		
TOTAL	2	0	1	1	0	1	2	7		

Source: PennDOT, Pennsylvania Crash Facts and Statistics, 2009-2014

Crashes Involving Motorcycles									
MUNICIPALITY 2009 2010 2011 2012 2013 2014 2015 Total									
BRECKNOCK	5	2	1	7	3	3	1	22	
CUMRU	9	2	8	6	4	3	6	38	
KENHORST	0	0	0	0	0	0	0	0	
MOHNTON	1	0	0	1	0	0	0	2	
SHILLINGTON	1	1	1	0	1	2		6	
TOTAL	16	5	10	14	8	8	7	68	

Source: PennDOT, Pennsylvania Crash Facts and Statistics, 2009-2014

#### **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.

The principal provider of public transportation services in Berks County is the South Central Regional Transit Authority (SCTA). This authority oversees two divisions: the 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 32 Berks County municipalities and carries approximately 3.1 million passengers annually. Operating six days a week, with a fleet of 57 buses, it services 30 bus shelters and more than 1,000 bus stops on 21 routes over 1.6 million route miles. According to BARTA, 42% of those trips are work related, followed by 23% for shopping and 14% for personal business. The majority of riders (64%) are between 18-44 years of age, and most are female (58%) and most do not have a valid driver's license (68%). While the number of farepaying passengers increased 8.4% since 2010, BARTA saw the largest ridership gains in passengers using the service to get to and from medical appointments.

BARTA Fixed Route Service									
Customer Type 2010 2011 2012 2013 2014 2015 # Change % Change									
Farepaying	2,259,607	2,425,463	2,496,962	2,507,398	2,562,745	2,449,131	189,524	8.4%	
Senior Citizens	462,628	452,387	469,391	465,485	455,012	413,238	-49,390	-10.7%	
Transfer	122,270	125,743	133,886	132,375	135,101	128,859	6,589	5.4%	
Other-MATP (Medical Assistance)	64,258	64,258	52,577	40,641	44,763	73,724	9,466	14.7%	
Total Passengers	2,908,763	3,067,851	3,152,816	3,145,899	3,197,621	3,064,952	156,189	5.4%	

Source: South Central Transit Authority

Overall, major trip origins/destinations (major employers, shopping centers, post-secondary schools) are served by BARTA fixed route bus service. Route 11, which provides service between Mohnton and Shillington, was the 12th busiest route in the BARTA system, serving nearly 110,000 passengers in 2015.

BARTA Fixed Ridership 2014-2015 by Route					
Route	Ridership				
Route 1 - Temple	470,604				
Route 4 - 10th & 11th Street	354,891				
Route 16 - Broadcasting Square	321,153				
Route 15 - Berkshire Mall	236,105				
Route 14 - Wernersville	230,105				
Route 18 - Schuylkill Avenue	198,907				
Route 10 - Brookline	149,860				
Route 19 - Riverside/Cotton St.	142,825				
Route 8 - Reiffton/Birdsboro	132,566				
Route 3 - Kutztown Road	128,591				
Route 17 - Glenside	120,905				
Route 11 - Mohnton Via Shillington	109,517				
Route 20 - Hamburg	93,407				
Route 7 - Pennside	89,995				
Route 5 - Albright College	88,522				
Route 12 - Lincoln Park Via Reading Hospital	64,354				
Route 9 - Grill Via Kenhorst	52,090				
Route 22 - East Penn	24,703				
Route 6- Crosstown	10,125				
Route 2 - Fairgrounds Square	5,967				
Route 21 - Morgantown	5,632				

Source: South Central Transit Authority

## **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 42 paratransit vehicles, BARTA provided nearly 245,000 trips in 2015. The majority of trips (41%) were for medical appointments, followed by work (18%) and accessing senior centers (11%).

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## NON-MOTORIZED TRANSPORTATION

Anytime you don't use your car, the bus or other motorized transport, you become a "non-motorized" traveler. 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 non-motorized transportation system. The mix of rural roads in Brecknock Township to borough streets in Shillington, and the 57 miles of trails and 118 miles of sidewalks provide bicyclists and pedestrians with varied routes. Most pedestrian trips are short; therefore, Kenhorst, Mohnton and Shillington have the greatest influence on creating viable pedestrian transportation networks. Continuous sidewalks are recognized as the basic network for urban pedestrian transportation.

Data previously discussed in the demographics chapter showed that walking and biking are not popular means of getting to and from work in the district. Arguably, much of the county's transportation infrastructure is designed to accommodate cars, complicating travel by walking or bicycling in many areas.

### **FUTURE PROJECTS**

### The Reconstruction of the West Shore Bypass - MPMS #63192 and 78814

The US 422 West Shore Bypass constitutes the most significant maintenance need facing the region. It currently carries traffic ranging from 46,000 vehicles per day on the eastern side to nearly 80,000 vehicles per day on the western end. This highway serves as the principal arterial through the urban area and provides the primary regional access to the City of Reading. This highway was originally constructed in 1964 and there are some sections of original pavement while others have seen some overlay. Safety and capacity issues exist at each interchange. The section also contains 7 bridges in need of significant repairs or replacement. Four (4) of these are currently designated as Structurally Deficient. The design of the highway and the structures does not allow for the provision of maintaining two through lanes of traffic in each direction during reconstruction and the opportunities for detour routes are extremely limited.

The study phase was completed and identified over \$650 million in improvements required to bring the corridor up to current design standards and to accommodate future traffic growth. Initial phases of this program are included for more detailed design in the Short-Range Period for the segment extending from SR 12 to just east of I-176 with the actual reconstruction of this section scheduled to occur in the Mid- and Long-Range Periods. The final section extending east to Perkiomen Avenue remains a candidate project at this time. Construction on the West Shore Bypass project is expected to begin in 2022.

## Bridge Reconstruction on Route 724 over the Angelica Creek - MPMS #78881

This project replaces a posted, structurally deficient bridge in Kenhorst that was built in 1960. The project is expected to begin in 2017.

#### Airports and Railroads

Given the regional nature of airport and railroad development and support, this Comprehensive Plan calls for no specific with regard to air and rail service and instead adopts the RATS FFY 2017-2040 Long Range Transportation Plan in regards to these modes as reference. It should be noted that a significant portion of the Governor Mifflin Area falls within an Airport Hazard Area associated with the Reading Regional Airport and is subject to Airport Hazard Zoning regulations.

