

Chapter 4 - Community Facilities



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Community Facilities

A. Introduction

Community facilities and services are needed to provide for the basic, everyday needs of County residents. They include sanitary sewer and water systems, solid waste facilities, emergency services (fire, police, and ambulance), educational facilities, and stormwater management plans and facilities. Densely populated areas, designated growth areas, and areas proposed for future growth require more community facilities and services than areas that are more rural and sparsely populated.

B. Community Services

1. Libraries

The residents of Berks County are currently served by 23 public libraries. The Reading Public Library is the oldest public library in the County and one of the oldest in the United States. Originally founded in 1762 as a private subscription library, the Reading Library was transformed into a public library supported by the City of Reading in 1898. Reading Public Library and Hamburg Public Library are both Carnegie buildings. In the United States, 1,689 libraries were built, in the late 1800's and early 1900's, with money donated by the Scottish-American businessman Andrew Carnegie.

The Berks County Public Library System was established in 1986 as a department of County government that offers support to the federation of independent public libraries. A board of directors is appointed by the County Commissioners and charged with the oversight of library service development in the County.

The system provides many programs for all ages to County residents. In addition to many other programs, there is a Bookasaurus program that visits eligible pre-school and day care facilities, a summer reading program for pre-school through teenage years, as well as educational and job search help. The funding for the system is from Berks County, Pennsylvania, municipal, and local fundraising efforts.

The libraries face difficulty finding adequate local and state funding. A dedicated County-wide library tax would be the optimum answer to the problem. In addition, technology infrastructure must be maintained and updated to meet the growing demands of digital resources.

The Berks County Community Foundation established the Berks County Libraries Task Force in 2010. The Berks County Libraries Task Force Report, completed in February 2011, contains the Task Force's recommendations for improvements to the library system in Berks County.

Addressing the needs of the elderly has become a significant challenge. The system provided library service to the elderly until the community bookmobile was retired in 2009. Service could be reestablished using a van to provide desired materials for the residents of the County's nursing home, Berks Heim, and six Senior Neighborhood Centers.

In addition to public libraries, private or special interest libraries also serve the population within Berks. Five academic libraries (Albright College, Alvernia University, Kutztown University, Penn State-Berks Campus and the Reading Area Community College) serve the collegiate

population. Though public services are offered, collections and materials are geared mainly towards student needs and interests, with service to those students being a priority. The 19 public school districts within Berks also possess libraries with collections that are based on student ages and needs. Public use is usually limited to after-school and evening hours. Other libraries exist which are primarily for the use of the legal community, individual industries, and businesses. But, for the most part, these libraries are not open to the general public. The Law Library, located in the Berks County Courthouse, is a department of the 23rd District Court of Common Pleas. The Pennsylvania Judicial Code mandates that each county support a law library and that it be open to the public. The Berks County Historical Society's library contains a wealth of historical materials and data. Wernersville State Hospital and the Hamburg Center have developed libraries which serve their respective special populations.

2. Hospitals

Berks County is endowed with a wealth of medical facilities and expertise to serve the physical and mental health needs of its population. The County's three hospitals have the knowledge and capability to handle most medical emergencies. Saint Joseph Medical Center, once located within city limits, established a new location off of Route 183 in Bern Township. Surgical Institute of Reading (SIR) is a fully-licensed in-patient surgical specialty hospital, located in Wyomissing. SIR opened in 2007 and received its Joint Accreditation in 2008. Reading Hospital, the largest, is located on a 36 acre site in West Reading. The Reading Hospital is now certified as a level two trauma center. The two are in the continuous process of expanding facilities, services and programs to meet the growing needs of the population. Inpatient and outpatient services include, but are not limited to emergency care, same-day surgery, health and wellness programs, family-centered maternity programs, and inpatient/outpatient psychological and substance abuse treatment programs, as well as regular hospital functions. The Reading Hospital is known throughout the country for its high standing as a teaching institution for postgraduate physicians and nurses. St. Joseph's Hospital is also expanding its residency program. Both hospitals offer urgent and quick care locations for non-emergency related care along with various diagnostic facilities and other related facilities in various parts of the County. Lehigh Valley Hospital also offers a non-emergency urgent care and diagnostics facility at Moselem Springs.

Reading Hospital operates an outpatient surgical center at Spring Ridge. This allows surgeries that do not require overnight care to be completed off of the main campus. There are also a number of privately owned facilities within the County that treat and/or care for specific types of medical and health related issues. Many of these are owned by the physicians that use the facilities.

As part of the Reading Health System, the Reading Health Rehabilitation Hospital, located in Spring Township at Papermill Road, provides nationally recognized comprehensive rehabilitation services to inpatients and outpatients with physical disabilities and victims of head/spinal cord injury, orthopedic injury, stroke, and limb loss due to accident or illness. Vocational services include a range of programs to evaluate and prepare individuals for re-integration back into the work force.

The Wernersville State Hospital houses and treats mentally ill patients in the community. It is well known for its treatment and rehabilitation services. The Hamburg Center, another state-run institution, provides housing and treatment services to mentally disabled individuals.

The Caron Foundation, located in South Heidelberg Township, is one of many private institutions whose goal is the treatment and rehabilitation of those with alcohol and drug dependencies. These illnesses are treated in an atmosphere of caring, utilizing both extended residence and outpatient programs targeted at individual age groups and dependencies. Programs are also available to educate and help the families of those patients.

3. Nursing Homes, Assisted Living & Elderly Services

The 2010 Census of Population reported a total of 59,558 elderly (65+ years) persons living within Berks County. This figure represents 14.5 percent of the County's total population.

Since 1952, the County has operated the Berks Heim, a nursing home for both skilled and intermediate levels of care located at the North Campus in Bern Township. The Heim provides care for handicapped and older residents. The Berks Heim, is now located at its new facility, built in 2005, along County Welfare Road across from the Berks County Jail. Portions of the original Berks Heim and the Annex are now used for a Community Re-entry Program for the Berks County Jail, Veterans Affairs, Coroner's Office and the ICE (Immigration and Customs Enforcement).

The Berks County Office of Aging, established in 1974 under the provisions of the Older Americans Act, is responsible for the development and administration of a countywide community support system for older citizens. All of the County's residents, age 60 and older, are eligible for services. A full range of services provided include domiciliary care, long-term care assessment, family caregiver support, placement services, health screening, intergenerational activities, volunteer opportunities, Foster Grandparents, VISTA, attendant care, and corporate elder care referral. Other services include senior centers, consumer protection, counseling, life-skills education, community/adult education, employment services, case management, home-delivered meals, homemaker/homehealth aide, legal services, recreational, social and cultural programs, referral services, protective services, and specialized transportation.

4. Education

All forms of education are needed to ensure that the County will have a work force that is trained to meet the needs of local business. Local educational opportunities are crucial to a skilled and productive labor force. The importance of education starts out at the pre-school level and follows a person through their work life.

A key concern of the County is the income level of households in Berks County. The higher level of education a person attains the higher their income earned. While Berks County has shown an increase in the percentage of persons that achieved high school and bachelor degrees since 2000, there is still a lag behind the Pennsylvania and United States percentages. Also, the median household income has declined across the board since 2000 (Table 4.1).

During the 2010-2011 school year, the 19 public school districts in Berks County provided educational services to more than 70,000 students. There are more than 75 private, non-public schools that operate in the County and have enrollments that total more than 6,200 students. According to the Department of Education, public school enrollment for the 2011-2012 school year is anticipated to reach 74,640 students. Public school enrollment for the 2016-2017 school year is estimated to reach 81,152 students. Boyertown and Twin Valley School Districts include municipalities located outside of Berks County. One municipality, Hereford Township, is part of the Upper Perkiomen School District in Montgomery County (Figure 4.1).

Table 4.1
Income and Education
2000 and 2010

	<u>Individuals</u> <u>in</u> <u>Poverty (%)</u>	<u>Median</u> <u>Household</u> <u>Income (\$)</u>	<u>At Least a</u> <u>High School</u> <u>Degree (%)</u>	<u>At Least a</u> <u>Bachelor's</u> <u>Degree (%)</u>
2000 (current dollars)				
United States	12.4	41,994	80.4	24.4
Pennsylvania	11.0	40,106	81.9	22.4
Berks County	9.4	44,714	78.0	18.5
City of Reading	26.1	26,698	62.3	8.6
2010 (current dollars)				
United States	15.3	50,046	85.6	28.2
Pennsylvania	13.4	49,288	88.4	27.1
Berks County	14.1	51,759	84.6	22.8
City of Reading	41.3	25,045	63.4	7.5

Source: US Census Bureau, Census 2000 Tables DP-2 and DP-3; Census 2010, Tables DP-03 and S1501

The location of non-public schools is generally within students' residential area. However, some of the large parochial schools draw students from the entire County, including Berks Catholic High School. In 2011, Holy Name High School and Reading Central Catholic High School combined to form Berks Catholic High School, located in West Reading at the former Holy Name High School facility. Two other non-public schools in Berks County are Blue Mountain Academy in Tilden Township and Pine Forge Academy in Douglass Township.

In 1971, Pennsylvania State law established Intermediate Units (IU's) to serve as both suppliers of educational services and liaison agents for the PA Department of Education. The Berks County Intermediate Unit (BCIU) is a Countywide educational service agency providing a multitude of human services to the community. Primary emphasis is in the area of education and coordination of programs among the existing County school districts. In addition, BCIU provides programs in special education, vocational/technical school training, preschool education and institutional media services. Major problems targeted by BCIU include unemployability, lack of basic skills and knowledge, lack of general information/how to find services, specialized transportation problems, physical health disability, mental health, developmental disability/mental handicap, educational problems, and youth status offenses. These problems are addressed by a wide variety of programs and services. One of the largest programs provided by

the BCIU is Special Education Services. It educates and orients the mentally disabled into society and everyday life.

Vocational-Technical education prepares students for employment directly upon graduation. The curriculum covers a wide range of vocations including automotive subjects, cosmetology, graphic arts, millwork/carpentry/cabinet making, masonry, and welding. Berks Vo-Tech East and Berks Vo-Tech West serve 16 school districts (Table 4.1). Reading and Muhlenberg cooperatively run the Reading-Muhlenberg Vo-Tech School in Muhlenberg Township. Curriculum at the Reading-Muhlenberg Vo-Tech is similar to that at the other two schools.

Table 4.2
Public School Districts Served by Career & Technology Centers,
Berks County

<u>Berks Vo-Tech East Center</u>	<u>Berks Vo-Tech West Center</u>
Antietam	Conrad Weiser Area
Boyertown Area	Governor Mifflin
Brandywine Heights Area	Hamburg Area
Daniel Boone Area	Schuylkill Valley
Exeter Township	Tulpehocken Area
Fleetwood Area	Wilson
Kutztown	Wyomissing Area
Oley Valley	
Twin Valley	
<u>Reading-Muhlenberg Vo-Tech</u>	
Reading	
Muhlenberg	

Source: Berks County Intermediate Unit

In order for our students in K-12 to be successfully trained for future employment, it is important that all of the K-12 schools, BCIU, vocational, technological, higher education institutions, Pennsylvania Career Link, Workforce Investment Board, and the Berks Business Coalition work together to identify issues and develop a coordinated strategy and partnerships. Each school district faces difficulties with funding and meeting required standards while trying to provide a well rounded educational experience to its' students, especially the Reading School District. We all need to work together as a community and form partnerships that will encourage our K-12 students to achieve successful living wage or above employment.

Several private business schools exist within the Reading Urban Area. These schools specialize in training for employment that does not require a degree. Berks Technical Institute offers a variety of Diploma and Associates Degrees ranging from accounting to technical drawing/drafting. The PACE Institute also offers Diploma and Associates Degree programs that range from fashion design to travel and tourism. There are two other licensed private schools within Berks County that provide specialized training, East-West School of Massage Therapy and the New Horizons Computer Learning Center of Reading.

The Reading Hospital and Medical Center offers a number of medical training and education programs. The programs are offered through The Reading Hospital School of Health Sciences and include; Registered Nurse Diploma, Radiologic Technology, Clinical Pastoral Education, Paramedic Education, Emergency Medical Technician and Emergency Medical Responder. The Nursing Program is affiliated with a university so that the students will qualify for RN-BSN completion programs.

There are five degree-granting colleges and universities that supply higher education within Berks County. Albright College is one of two liberal arts colleges in Berks County. Albright College is the oldest higher education facility in Berks County and celebrated its 150th Anniversary in 2006. The college is affiliated with the United Methodist Church. The overall curriculum of the college targets a general liberal arts and sciences program with specific areas of concentration. Also offered are professional and pre-professional degree programs including Pre-Law, Pre-Medical, and Teacher Education.

Alvernia University is a private, Catholic church-sponsored institution of the liberal arts and professional programs. Located in Reading, the small student body can pursue coursework in the arts and natural sciences. Many Associate and Bachelor Degree programs are available. Alvernia added Graduate Degree programs in 1999. There are a number of Masters Degree programs and currently, Alvernia University offers a Ph. D. in Leadership.

Kutztown University, established in 1866 and part of the Pennsylvania State System of Higher Education, is well known for the number of educators it has trained over the years. The University has the largest full-time student body of the five colleges with over 10,000 students. The University is comprised of four Colleges; Business, Education, Liberal Arts and Sciences, and Visual and Performing Arts. Many Bachelor degrees are offered, as well as Masters degree programs.

The Berks campus of the Pennsylvania State University is part of the Penn State system. Being one of 22 Commonwealth Campuses, students undertake the first two-years of coursework at Berks, and complete their degree programs at University Park, Capital or Behrend Campuses. The Berks Campus offers various Associate Degree and two year Engineering Technology degrees, now in addition to these there are a number of certificate programs and four-year Bachelor degree programs. The Campus opened a new building in 2011, the New Gaige Technology and Business Innovation Building houses the Business; Engineering; Information Sciences and Technology; and Hotel, Restaurant, and Institutional Management degree programs. It is over 60,000 square feet and the largest academic facility at Penn State Berks.

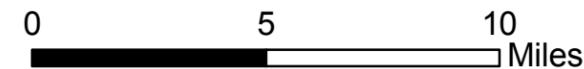
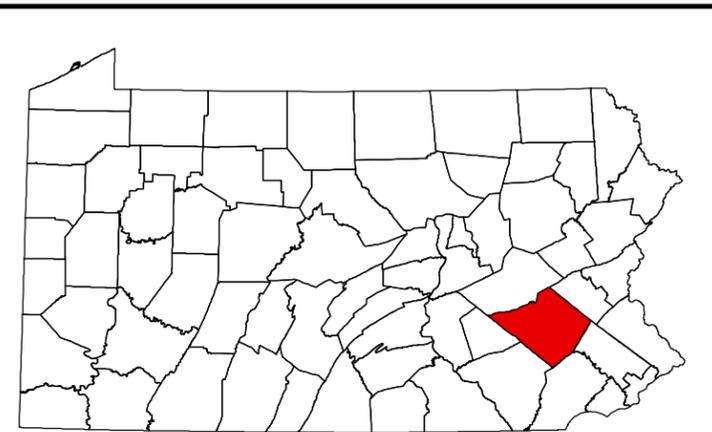
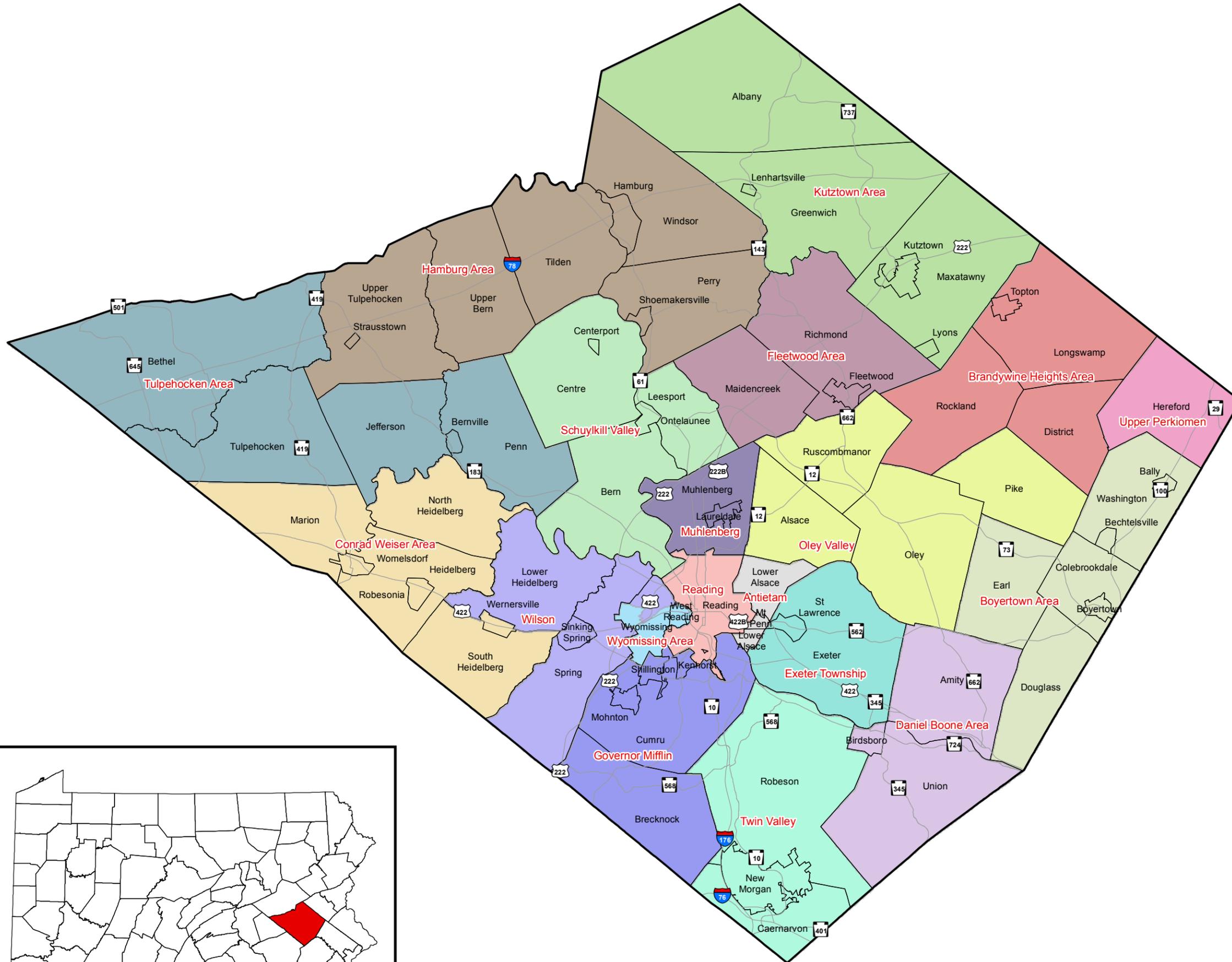
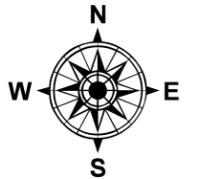
Established in 1971 by the Reading School District, now funded by the County, the Reading Area Community College (RACC) serves students seeking Associate Degrees, certificate programs, customized training and diploma programs. RACC offers workforce development courses to businesses within Berks County, tailored to the employee's educational background, needs and goals. There are an expanding number of agreements between RACC and other colleges and universities that allow students from RACC to transfer their credits to continue their education and obtain a higher degree. RACC continues to expand its campus and offerings,

Berks County Comprehensive Plan Update
Adopted: September 2013

School Districts Berks County, Pennsylvania

Legend

- Antietam
- Boyertown Area*
- Brandywine Heights Area
- Conrad Weiser Area
- Daniel Boone Area
- Exeter Township
- Fleetwood Area
- Governor Mifflin
- Hamburg Area
- Kutztown Area
- Muhlenberg
- Oley Valley
- Reading
- Schuylkill Valley
- Tulpehocken Area
- Twin Valley*
- Upper Perkiomen*
- Wilson
- Wyomissing Area
- Berks County Boundary
- Municipal Boundaries
- Major Roads



* Berks County portion of the School District only.

Source: Berks County Planning Commission, Berks County GIS, Berks County Mapping, Berks County Department of Emergency Services

Published by the Berks County Planning Commission

BAB 9/13



building the Schmidt Training Center in 2006 and the Miller Center for the Arts and Gateway Building in 2010. RACC and Kutztown University have a formal agreement for the transfer of credits from RACC to Kutztown. This will allow students to begin their bachelor's degree at RACC and complete it at Kutztown University.

The Pennsylvania Career Link, Berks County Workforce Investment Board (WIB), and the Berks Business Education Coalition do not directly educate individuals, however they do play a key role in the employment and educational needs of Berks County residents. Overall, these three entities work towards making sure that Berks County businesses have a pool of individuals who have the necessary basic and technical skills to be work-force ready.

The Pennsylvania Career Link is the States one-stop service for job listings, unemployment information, social services and training resources. There are numerous locations throughout the State, including the office in Berks County.

The purpose of the WIB is to identify the community's long-term workforce development needs, determine how to meet those needs through prioritization, build partnerships that support these needs and measure and evaluate the results. In 2009, the WIB completed its Berks County Strategic Plan. The Plan included specific information about general demographic conditions, general economic conditions, staffing patterns and WorkKeys[®] profiles by statewide industry cluster.

The Berks Business Education Coalition (BBEC) is a unique partnership between Berks County businesses and the education community. The BBEC taps the resources of the local business sector to promote three specific initiatives which include career development, academic achievement, and post-secondary education. These initiatives are designed to advance student competencies and promote life-long learning.

5. Recreation

Berks County possesses a wealth of recreation opportunities. Many of these recreational facilities are located in areas that have higher densities of population. Not surprisingly, the City of Reading has the greatest number of recreational opportunities for its residents and surrounding suburbs. The majority of the boroughs in Berks County also provide some type of recreation that serves not only the citizens of the boroughs but some of the surrounding rural population as well. Both passive and active recreational facilities exist in Berks County. The facilities are both privately and publicly owned.

The *Berks County Greenway, Park and Recreation Plan*, adopted in 2007, sets specific goals for the direction the County should take to provide future open space, greenways, and recreation for its citizens. *The Plan is adopted as an addendum to the County Comprehensive Plan.* The Plan also provides recommendations for the identification, protection, and preservation of the County's historic sites, historic districts, and ecological resources. The goals and recommendations set forth in the Plan are based on the year 2020. These goals and recommendations will change over time since recreational needs are dynamic. Changes in recreational trends will require development of new forms of preservation and recreational facilities and new strategies in the use of existing facilities.

Recreational sites include both indoor and outdoor facilities. The total acreage for these facilities is approximately 71,000+ acres. The largest owner of recreational land in Berks County is the Commonwealth of Pennsylvania, with nearly 30,000 acres. Prior to the completion of the *Greenway, Park and Recreation Plan*, residents of the County were surveyed to determine what recreational needs existed in the County, if any. The majority of residents surveyed felt that more multi-purpose trails were needed and that the County should preserve its heritage and ecological resources.

C. Emergency Services

Emergency services are necessary to protect the lives and property of County residents. Increases in population and nonresidential development require higher levels of police, fire and other emergency services. Emergency situations that involve multiple municipalities or service areas can be complicated by a lack of coordination or communication between response groups.

1. Fire Service

There are 59 fire companies, and the Berks Emergency Strike Team, that serve Berks County, both volunteer and paid, although a majority are volunteer. This is down from 80 fire companies in 2002. For most communities, the volunteer fire company serves as an outstanding example of citizen commitment. Traditionally, these volunteer companies also provide social and charitable services and are part of a community's identity, especially within the rural area.

Many of the companies have or are facing critical financial difficulties. A fire company, while receiving some financial backing from the municipality which it serves, is still responsible for raising a major portion of its total budget. This is often done through donations, membership fees, the operation of social clubs, or the holding of fund-raising events such as dinners and carnivals. While some companies do succeed in securing enough funding to adequately support themselves, other companies, especially those located within rural townships, have difficulty meeting both operational and capital needs.

The limited resources and in certain areas declining volunteers/manpower at certain times of the day have lead to increased cooperation and coordination among companies. Jurisdictions are not based on circular areas with the fire company located at the center. Rather, a company's service area is often times defined by municipal boundaries or traditional community boundaries dating back to that time when the company was first formed. Currently, companies that are in the same geographic areas are more willing to cooperate on service provisions, and try to augment each others' equipment purchases to maximize funding. Volunteer firefighters usually retain daytime jobs, often outside of their company's service area. Most companies cannot provide a full response to daytime emergencies. This has lead to some companies hiring a driver during the times of day where volunteers are less able to respond. A number of fire companies have merged in order to maximize both volunteers and equipment in order to maintain quality service to their areas.

Currently there are 6 merged fire companies that are made up of smaller fire companies that were once autonomous. One of these recent mergers is Western Berks Fire Department, which is made up of fire companies from Lower Heidelberg and South Heidelberg Townships and Wernersville and Sinking Spring Boroughs. Western Berks Fire Department has one paid

person, the Fire Chief, and the remaining personnel are volunteers. Volunteers must complete mandatory and continuing courses for certification as a firefighter. The amount of time required of a volunteer to adequately fill a position as an active fireman discourages many potential volunteers. It is expected that the trend towards coordination of fire services will continue with the success of the current mergers, and the continued need to identify ways to maximize funding and volunteers.

2. Police Service

There are 39 police departments, including three joint police forces that provide police service in Berks County. They are the Northern Berks Regional, Central Berks Regional and the Western Berks Regional police departments. The Berks-Lehigh Regional police department recently dissolved. The member municipalities are in the process of determining how to provide police coverage. Other departments around the County have expressed interest in joint police forces. The Pennsylvania State Police supplies additional police protection. The State Police have jurisdiction throughout Berks County, but also serve as the only source of police protection for a number of rural townships. Penn State Berks and Kutztown University commission State Police Officers to provide year-round protection on campus. The jurisdictions of local police departments are usually limited to the municipality in which the department is located. However, some departments provide protection to neighboring municipalities if they have none of their own. There is also mutual aid existing between departments.

The changes in development patterns and growth have severely impacted rural and urbanizing departments. Not only are these departments showing manpower problems, but also the newer residents, many of whom previously resided within urban areas, expect increased levels and different types of service. Municipal budget allocations for emergency services tend to grow at a slower rate than warranted by increased growth and development. As with other emergency services this has led to more cooperation and contracting for police services. Many departments now cooperate with each other including the County Sheriff and District Attorney Offices for a variety of specialized services.

The Berks County Commissioners contracted with the Police Executive Research Forum (PERF) to analyze police organizations around the County and identify alternative options for providing police services in Berks County. The final report, finished in July of 2009, identified five different ways of creating regionalized police coverage within the County. The five options studied were: County-wide Police Department, “Ring” Approach, Two Agencies, Metro Plan, Regional Departments. The five options identified each include information regarding jurisdiction, population, staffing, organization, estimated budgets, start-up costs and facility needs.

3. Emergency Medical Service

Ambulance and Emergency Medical Services (EMS) are provided both privately and publicly in Berks County. There are 17 providers of EMS in the County. Public service operates similarly to fire protection service, usually in the form of volunteer departments. More of the providers are either a non-profit or for profit entity now than in the past. EMS units are often located in fire department facilities. Units are dispatched to emergencies, mostly through the County’s Communication Center.

Besides ambulance service, advanced emergency medical assistance is provided through paramedic and emergency air transport services. Paramedics, while able to offer varying degrees of medical assistance, are usually unable to transport victims and are dispatched in conjunction with an ambulance. Emergency air transport is provided primarily through the PennStar4, Med Evac and Life Lion helicopters associated with the Reading Hospital, through the University of Pennsylvania Health System, Lehigh Valley Hospital Center in Allentown, and the Milton S. Hershey Medical Center in Hershey, respectively. These units are dispatched to situations where a victim is in immediate need of medical assistance at a hospital but cannot be accessed or transported quickly enough by ambulance.

4. Emergency Communications

During 1989, the County's Communications Center relocated to the Courthouse and implemented one of the most advanced emergency systems found throughout the nation. Since then, the County's 911 Communications Center and Emergency Management have combined to form the Berks County Department of Emergency Services. The backbone of the system is "Enhanced 9-1-1", a centralized emergency system that not only provides for centralized receipt of emergency calls, but also identifies the location of the caller, along with other vital emergency information. The Communications Center also employs a form of computer-assisted-dispatch to send the appropriate response units. Approximately 40 municipal/regional Police Departments, 12 federal, state, and county law departments, and 65 fire companies are dispatched from the Communications Center, now located in Bern Township.

Currently, the County is in the process of upgrading its' emergency communications system to meet new federal requirements. This is part of the federal mandate, by the Federal Communication Commission (FCC), that public safety licensees in the VHF and UHF bands migrate to narrowband channels by January 1, 2013. The system that the County is proceeding with will improve coverage, reduce congestion and provide for interoperability. In conjunction with the new system, the County will build additional communications towers to improve signal coverage. Due to the high cost of the new system, the County is working with municipalities to help finance some of their up-front costs over a period of years.

5. Hazardous Material Response

The County, through its office of Emergency Management, implemented a HAZMAT program. HAZMAT programs are certified at one of three levels. Berks County's response team is rated at the highest category, Level III, and is qualified to handle emergencies involving large quantities of hazardous materials. The County has four Level II teams including Reiffton, Goodwill-Muhlenberg, Zone 4, and Reading Bureau of Fire.

D. Other Energy and Telecommunications

Two electric utility companies service the County. First Energy is based in Ohio. Met-Ed, a subsidiary of First Energy, is based in Muhlenberg Township which serves the greater portion of customers throughout Berks County. The Titus Station, a coal fired generating plant located in Cumru Township, supplies power. Throughout the First Energy system, there are 36 plants with a capacity of more than 23,000 Megawatts. The system has interconnections with all bordering electric utilities throughout the Pennsylvania/New Jersey/Maryland (PJM) Powerpool. Should additional electricity be needed, it may be purchased from neighboring utilities. The

Pennsylvania Power and Light (PPL) Company, a Lancaster County based utility, serves 83 square miles in the southwestern portion of the County.

In addition to the Titus Station, Ontelaunee Energy Center is a gas-coal fired generating plant located along Route 61 in Ontelaunee Township that is owned by Dynegy. This facility, which began operations in 2002, is also part of the PJM Powerpool and can supply up to 580 Megawatts. Also, with the higher costs of energy there are more businesses installing on-site energy producing equipment, such as solar and wind systems, in the County.

A number of local companies and/or schools are also installing energy generating systems to offset their utility expenses. Western Berks Water Authority and UGI's liquefied natural gas plant have installed solar arrays; Evergreen Community Power (United Corestack) and Reading Hospital are using bio-mass; Wilson School Districts new elementary and middle schools in Lower Heidelberg Township are using geo-thermal technology.

Natural gas for heating, cooking and other uses is supplied by two utilities. The Reading Gas Division of UGI Corporation serves the demand within the City of Reading, 24 Boroughs, and 26 townships surrounding the City with low- (up to 1 psi), medium- (to 60 psi), and high- (400 psi) pressure gas for various residential and industrial customers. The Allied Gas Company supplies natural gas and liquid petroleum (LP) gas to customers in the northern section of Berks, mainly Hamburg and Shoemakersville Boroughs, as well as portions of Centre, Perry, Tilden and Windsor Townships.

Several telephone companies supply telephone, data transmission and teletype services within Berks County. Five major companies service the greater portion of Berks which include Verizon, Frontier Communications, Windstream Communications, Contel Telephone Co., and General Telephone Co. (GTE). Other independent companies serve smaller portions of Berks, as well as surrounding areas. Other service options available, depending on the local carrier, include voice mail, business systems, cellular telephone service, radio pagers, and digital telephone systems.

Five carriers provide television cable service within Berks County. The largest, Comcast Cable, services the City of Reading and the surrounding area, including Bern Township and Mt. Penn, as well as the Hamburg and Leesport areas. Service Electric Cable TV Incorporated services southeastern and northeastern portions of Berks County, including the Birdsboro area. Kutztown and Service Electric both provide cable to Kutztown.

The Borough of Kutztown formed "Hometown Utilicom" in 2002 as a trade name and service mark to provide various utility services, including a newly constructed fiber optics network serving Kutztown Borough. The Borough of Kutztown also provides electric service to residents within the Borough.

The telecommunications market has exploded with growth in the last five years. Multiple companies provide cellular communication service throughout the County. This is an area that is sure to expand in the future due to the quickly evolving market areas and increase in reliability of cellular phone signal in the County.

E. Sewer and Water Systems

As development in Berks County increases, the supporting infrastructure must also grow. Sewer and water service are two of the most important types of supporting infrastructure. These systems allow local governments to plan for future residential, commercial, and industrial growth in areas where development is appropriate at greater density. Sanitary sewer and water systems are extremely important in any county that wants to maintain, improve, or attract economic growth. Sewer and water service can be provided for individual sites or entire communities.

The Sewer and Water Regionalization Study 1998, and its recent 2011 update, address the issues of regionalization opportunities and include both physical and non-physical approaches to cooperation for both sewer and water systems. In order for development to occur in the appropriate place, sewer and water infrastructure either needs to be in place or proposed. This infrastructure also needs continued maintenance and upgrades.

1. On-Site Sewer Systems

On-site septic systems exist in a variety of forms. Each is designed to eliminate sanitary wastes for an individual lot while remaining independent from other systems. Most on-site systems use the filtering properties of soils to eliminate the actual wastes from the water in which they are suspended. Other systems may rely on sand, evaporation, or intense bacterial activity to eliminate the wastes. These systems all have appropriate uses and situations where one may function more efficiently and effectively than another.

2. Public Sewer Systems

Public sewer systems operate in densely developed areas where on-lot systems are impractical and even unhealthy. They can be large, treating several million gallons of sewage per day, or small, treating a few thousand gallons per day. The basic operating method of a public system, no matter the size, is the same. A collection system consists of underground pipes connecting the various structures in a given area. These pipes feed into a large main that leads to a sewage treatment plant (STP). The collection system may operate by gravity, where all sewage generated enters the piping system and travels downhill to the plant with no mechanical aid, or it may utilize pumps to force the sewage uphill or around obstacles to reach the STP.

Once the sewage reaches the STP, it must be treated. The actual treatment process can be carried out utilizing several different techniques. However, the basic principle remains unchanged. Sewage entering the STP contains both liquid and solid waste. The sewage will usually be screened first, to prevent large debris from traveling further into the plant. The sewage will then flow into an area where the solids are separated from the remaining liquid. These solids, called sludge, are dewatered and then disposed. After the sludge is removed from the sewage, the remaining wastewater receives further treatment. Many treatment plants use bacteria and filtering to purify the wastewater. The bacteria decompose and consume pollutants in the water and the filters trap and further remove pollutant particles. Once cleansed, the wastewater is released as effluent into a stream or river. STPs are always trying to identify avenues for disposal of sludge, a byproduct of sewage treatment. Sludge dryers, land application of liquid sludge or dried sludge, incineration and sending sludge to a landfill are some forms of disposal used by local municipalities.

3. Sewage Disposal Problems in Berks County

Many areas of Berks County still rely on on-lot sewage disposal systems. However, a majority of the soil in the rural areas of the County is considered unsuitable for on-lot sewage systems. On-lot systems, if constructed properly and placed in proper areas, will operate efficiently. However, problems result when these systems are constructed in soils that are inappropriate.

Normally, the soil will remove the pollutants from the water, allowing the water to enter the underlying water table purified. However, due to limestone's solubility, and the depths of its soils, wastewater disposed of by an on-lot sewage system may enter the underlying water table relatively unfiltered. Wastewater that encounters the limestone bedrock without sufficient filtering can travel through the openings in the limestone and pollute the ground water. Households using both on-lot sewage disposal systems and on-lot wells on limestone soils can pollute their own water supplies if the sewage systems do not operate properly.

The number and extent of on-lot disposal problems is impacted by an areas' residential density. Frequently, households using on-lot systems must have a minimum lot size of one acre. It is possible to have an efficient system on land less than one acre. However, large subdivisions, even if they are at a density of one acre per dwelling unit or more, are at risk of overburdening the soil and polluting ground water.

Public sewer systems in Berks County serve the more developed urban regions. These systems function effectively, provided appropriate improvements and expansions occur periodically. The most common problems afflicting plants operating within Berks County are lack of reserve capacity and improvement needed to meet tighter Federal standards.

The high costs of providing public sewer systems, along with the dependency on public funding makes it critical that municipalities work together on sewer issues. Berks County has many small villages and older developments in need of public sewer due to malfunctioning on-lot systems. Additionally, many municipalities are faced with expansion of their existing sewage treatment plants to accommodate additional development. The Berks County Planning Commission's policy is to regionalize sewage treatment systems where financially and/or geographically possible.

4. On-Site Water Systems

Public water systems are basically similar to individual on-lot systems except they are much larger in scale. A public system consists of supply sources such as wells, storage facilities, and a distribution pumping system. Additionally, public systems may filter and chlorinate water for safety purposes. These systems are designed to serve developed areas where individual on-lot systems would be impractical. Each component of a public water system must be developed carefully to assure quality and dependability.

Sources of supply for a public water system include wells, springs/streams, and reservoirs. Wells are constructed basically the same as they are for individual on-lot systems, but on a larger scale. Since most public water systems supply a large number of customers, more than one well is usually constructed to guarantee a sufficient and dependable supply. A Wellhead Protection Plan is a way of protecting a public water supply. This controls development near the public

wells. The Borough of Kutztown is an example of a municipality having this type of plan to help protect the water supply.

Springs, streams and rivers are also used for water supply. Water from springs, streams, and rivers is drawn off or pumped into the supply system. Municipalities that depend on these types of supplies must protect them from disturbance and pollution. Often an authority or municipality which owns the area surrounding a supply stream or spring, has a natural forested area to act as a buffer against disturbance. These municipally protected watersheds, in addition to protecting a water supply source, can serve as habitats for many flora and fauna species.

Surface reservoirs are the third type of public supply source. Most public water systems depend upon some type of reservoir to store water. A reservoir can be a large enclosed tank, or an open lake or pond. The Pennsylvania Department of Environmental Protection has adopted regulations, which require public water systems to use enclosed reservoirs (tanks) to prevent contamination. Very large systems, such as the Reading Area Water Authority, must rely on large surface lakes (in this case, Lake Ontelaunee) for supply. Some larger reservoirs can also function as multi-purpose recreational sites, provided the water's quality is not severely affected. Many water suppliers have or are completing source water protection plans for their water systems that identify issues and action plans to address these issues in an emergency. An example of this is the Maiden Creek Source Water Protection Plan, completed by the Reading Area Water Authority.

5. Water Quantity and Quality Problems in Berks County

Water is evaluated by quality and quantity. While quantity problems can be severe, rarely do we hear of instances in Berks County where water is totally unavailable for an area. Quality problems however, can cause entire water systems to shut down and affect the health of all individuals who rely on the system. The Pennsylvania Department of Environmental Protection has established guidelines for potable water. Public water systems that fail to meet these guidelines face fines and penalties. Formal penalties, however, are of little comfort to residents who justly expect to receive uncontaminated water.

When a water quality problem affects public water systems, certain steps are taken. First, a clean source of water is obtained for customers. Second, the cause of the problem is determined. Finally, the necessary measures are taken to correct the problem.

Pollution of household wells can occur in a variety of ways. Septic tank malfunction is the most common, particularly in areas with poor soils. In Berks County, septic tanks in limestone soils can malfunction, allowing untreated wastewater to enter underground aquifers. Extremely wet or dry soils can also cause on-lot sewage systems to malfunction thus polluting groundwater. Industrial pollution and intensive agricultural activity can also cause groundwater pollution. Commercial agriculture production may impact both the quality and quantity of water supply sources. Lawful activities such as extraction of minerals impact water supply sources and such activities are governed by statutes regulating mineral extraction that specify replacement and restoration of water supplies affected by such activities. Although providing public water service is generally not as costly as providing public sewer service, correcting groundwater pollution is extremely difficult and expensive.

A decline in the amount of available groundwater accounts for most problems regarding household wells. Groundwater supplies fluctuate with weather conditions, increased withdrawals, and decreases in re-charge. It is rare that a single residential well will deplete an underground aquifer. However, large developments where each individual lot owner has his own well can burden underground water supplies and cause quantity problems. It is imperative that municipalities enforce stormwater management and water quality regulations.

6. Stormwater Management

The development of land, without adequate stormwater regulations, can create excess stormwater runoff, inadequate stormwater drainage, and reduced water quality. In response to these problems, Pennsylvania has mandated that every county must create an Act 167 Stormwater Management Plan for its watersheds. There are 13 designated Act 167 Watersheds with some portion located within the County. Of these, 5 Watersheds were assigned to Berks County for completion of an Act 167 Plan. 4 of these Watersheds, the Sacony Creek, Tulpehocken Creek, Maiden Creek and Schuylkill River have Stormwater Management Plans. The Manatawny Creek, and the small sections of the remaining 7 designated Watersheds have a Phase 1 Study completed, but due to the lack of funding at the State level do not have the Phase 2 completed, which is the Stormwater Management Plan portion.

The development of large areas of the County creates a problem for the management of stormwater. The Act 167 Plans help to control excess stormwater runoff from new development, inadequate stormwater drainage and reduce water pollution while increasing water infiltration at the Watershed level, rather than a municipal level. The intent of the Act 167 Plans is to help alleviate localized flooding problems by regulating when and how much water a developer may release from a new development. The Plans should be evaluated periodically to determine their effectiveness and revised to include any changes that have occurred in the development patterns of the watershed. Other means of controlling localized flood damage include restricting new residential growth in the 1-percent-annual-chance floodplain and enforcing an up to date approved Floodplain Ordinance. Local government should identify areas with existing stormwater problems and create a plan to fix or upgrade those areas. Stormwater also increases water pollution problems when not adequately controlled. Silt and contamination are washed into surface water after every storm event. Best Management Practices (BMP), such as rain gardens and porous pavement, will improve the quality of water that exits a facility.

Under the 1987 Clean Water Act Amendments, the U.S. EPA developed new stormwater regulations to address stormwater that might impact water quality. These new regulations were set up in two Phases depending upon population. Phase I affected Allentown and Philadelphia and the Phase II portion of the regulation applied to about 1,000 municipalities in Pennsylvania. Those municipalities that are located within an "urbanized area" as defined by the 1990 Census and the 2000 Census were required to apply for a National Pollutant Discharge Elimination System (NPDES) permit to discharge stormwater from their municipal separate storm sewer system (MS4s). The number of municipalities within the County and in Pennsylvania that must comply with the Phase II NPDES MS4 requirements will increase once the new urbanized areas are drawn based upon the 2010 census information.

To meet the requirements each municipality submitted a permit application to DEP by March 10, 2003. The permit period is for five (5) years. However, the permit timeframe has been extended and the DEP and EPA have not agreed upon how to enforce the regulations. The permit application was generally an action plan for the municipality to institute six requirements called minimum control measures (MCMs): 1. Public Education, 2. Public Participation, 3. Illicit Discharge Detection and Elimination, 4. Construction Site Storm Water Runoff Control, 5. Post-Construction Storm Water Management in New Development and Redevelopment, and 6. Pollution Prevention/Good Housekeeping for Municipal Operations Maintenance. The municipality had five years to put these protocols into effect, however certain protocols must be completed earlier than others. Many of these six components are directly related to the PA Act 167 Stormwater Management Plan Program.

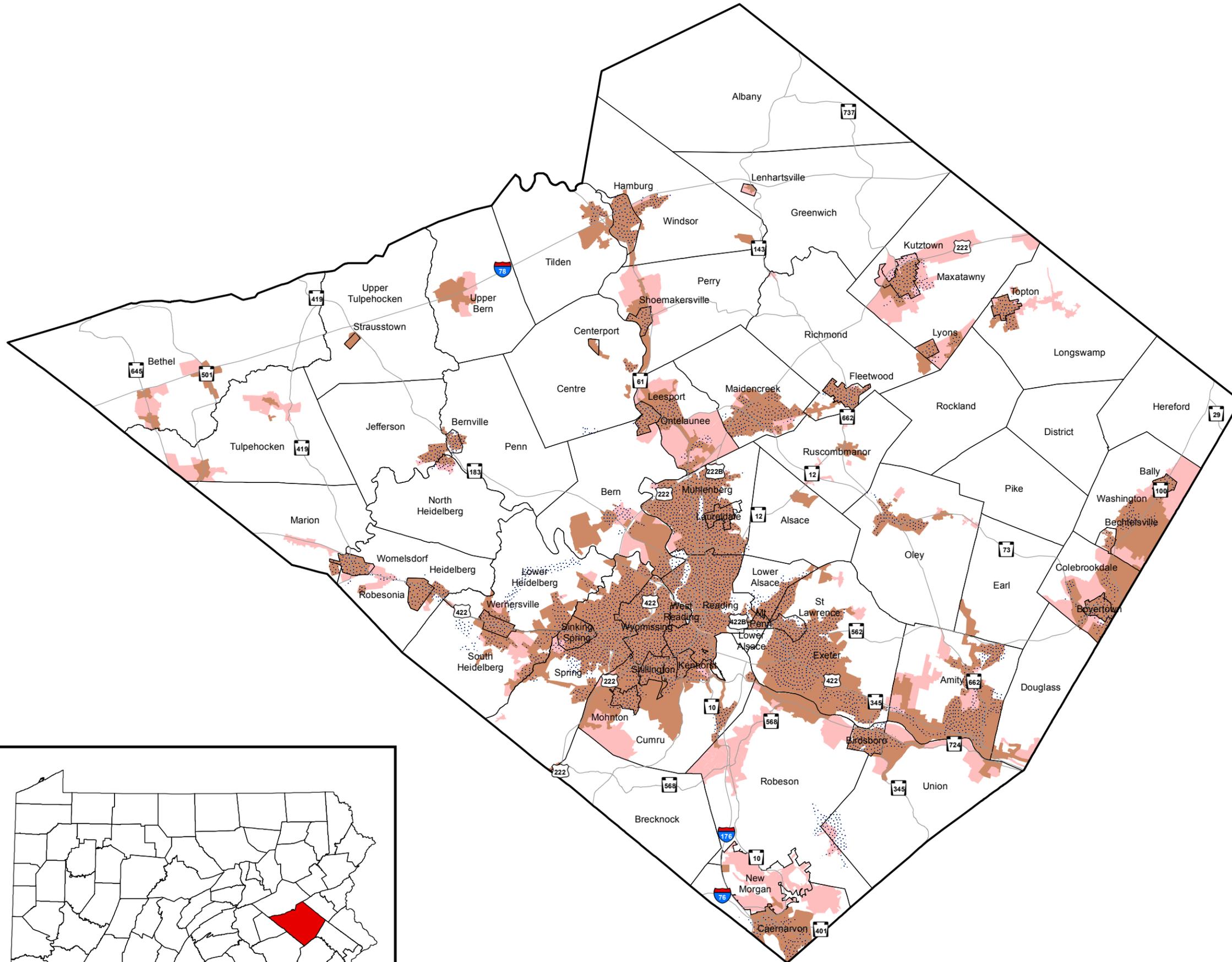
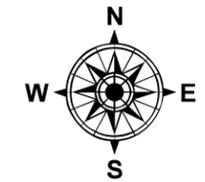
F. Solid Waste

Solid waste activities include both disposal of waste and recycling of materials. Berks County began a waste-planning program in accordance with the prevailing legislation in 1985. This was known as PA Act 97. Later that year, the Commonwealth enacted the Municipal Waste Planning, Recycling and Waste Reduction Act (Act 101), which targeted different policies in a more aggressive manner than Act 97. The County forfeited its option to “grandfather” the Act 97 Plan and embarked on a strategy to fulfill all of the new Act 101 requirements. Act 101 dramatically altered the responsibility of Berks County. The County adopted a Solid Waste Management Plan in September of 1990 in accordance with the newly adopted Act 101. Previously, municipalities had responsibility for developing and implementing waste management plans. Under Act 101, the responsibility for planning and implementing a waste management plan is specifically assigned to counties. Then in September of 2005, the Berks County Solid Waste Authority adopted the Berks County Municipal Waste Management Plan Revision. This document sets the framework by which Berks County will continue to manage its solid waste disposal for the near future.

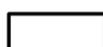
For further details on background and recommendations, the reader is referred to the Berks County Municipal Solid Waste Management Plan Revision, released on September, 2005.

Berks County Comprehensive Plan Update
Adopted: September 2013

Public Sewer and Water Service Areas Berks County, Pennsylvania

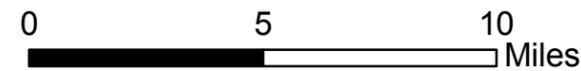
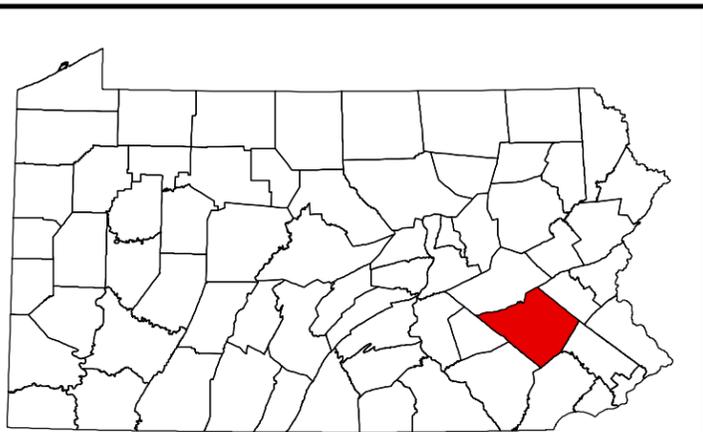


Legend

-  Existing Water Service
-  Existing Sewer Service
-  Proposed Sewer Service
-  Berks County Boundary
-  Municipal Boundaries
-  Major Roads

Source: Berks County Planning Commission, Berks County GIS,
Berks County Mapping, Berks County Department of Emergency Services
Published by the Berks County Planning Commission

BAB 9/13



Community Facilities Policies

Community Facilities Goal:

To provide and maintain community facilities and services that meet the basic needs of County residents and support the land use policies of this plan.

a. Sewer and Water

Goal:

To improve, maintain, and provide sanitary sewer and water systems in Existing Developed Areas, Designated Growth Areas, and Future Growth Areas.

Policies:

- (1) Berks County, through the ideas and implementation strategies of the Sewer and Water Master Plan 1970, Sewer and Water Study 1995, Sewer and Water Regionalization Study (Parts 1 and 2) 1998, Sewer and Water Regionalization Study Update 2011, and the Pennsylvania State Water Plan 2009, promotes and plans for the necessity of protecting and improving its water supply in compliance with the requirements of Article III Section 301 (b) of the Municipalities Planning Code Act 247.
- (2) The County should direct development to areas that currently have public sewer and/or public water, some level of excess capacity, or to areas that can build additional capacity through expansion(s).
- (3) The County will work with municipalities to promote higher density development in areas with existing or proposed sewer systems.
- (4) The Berks County Planning Commission will only endorse new sewer systems or extensions of existing sewer systems into the Agriculture Preservation Areas if the three requirements for expansion are met:
 - The Municipalities Act 537 Sewage Facilities Plan identifies the area as having a high concentration of existing mal-functioning septic systems;
 - The identified mal-functions cannot be corrected on site;
 - Any new sewer system or extension of an existing system will serve only those existing developed areas as identified by the Act 537 Plan, or a regional economic development project;
- (5) The County will encourage connecting areas with malfunctioning on-lot systems, areas with contaminated water supplies, and small privately owned sewer or water systems to existing sewer or water systems where economically and physically possible.
- (6) The County supports municipalities maintaining an up-to-date Sewage Facilities Plan (Act 537). This includes implementation of an On-Lot Disposal Ordinance that promotes the maintenance of on-lot septic systems.
- (7) The County supports the preservation of sewer capacity by maintaining sewer lines, joint facilities, and by following a maintenance schedule for inflow and infiltration.
- (8) The Berks County Planning Commission will not endorse projects that fail to comply with this Comprehensive Plan, in accordance with the Pennsylvania Municipalities Planning Code (Act 247), the Sewage Facilities Planning (Act 537), and any other review processes.
- (9) The County should keep current and maintain the Sewer and Water System Regionalization Study.

- (10) The County should work with the appropriate agencies to create a program to provide sewer and water infrastructure for economic development.
- (11) The County will encourage the Penn State Cooperative Extension, the Berks County Conservation District, and other appropriate agencies to work with farms in the vicinity of water sources to develop nutrient management and other plans that minimize nitrates and other contaminants.
- (12) Berks County will support water systems that encourage water conservation by maintaining water lines, promoting water conservation, and implementation of an incremental fee schedule.
- (13) The County will encourage small water systems to increase their reliability by adding wells or storage tanks and to complete Surface Water Infiltration Protocol (SWIP) testing on all of their water sources.
- (14) The County does not recommend the establishment of new privately-owned small water companies, serving only a new development or small geographic area.

b. Solid Waste

Goal:

To provide and maintain solid waste management facilities sufficient to serve the needs of County residents and business establishments, as well as create a program to address the clean-up of areas that are affected by pollution problems.

Policies:

- (1) The Berks County Solid Waste Authority (Authority) should begin revising the Berks County Solid Waste Management Plan (PA State Act 101) and make changes as necessary to maintain the current plan.
- (2) The Authority should continue to operate and expand the household hazardous waste program, tire disposal program, Pharmaceutical program and paper shredding events.
- (3) The Authority should continue to operate and expand the Recycling Center, while researching new markets for recyclable materials including the expansion of the electronic waste recycling facility that was opened in July of 2010.
- (4) The County should investigate the possibility of creating Countywide overlay zoning for solid waste disposal facilities.
- (5) The County should encourage municipalities to develop programs that will identify illegal dump sites, identify ways to prevent future illegal dumping, and work to clean up existing illegal dump sites with assistance from other organizations such as PA Cleanways and the Berks County Solid Waste Authority.
- (6) The County should actively promote Conservation, Nutrient Management, and Odor and Fly Abatement Plans on all farms that have animal or mushroom operations and/or incorporate food waste in their composting operation.
- (7) The County will only support sewage sludge application on land within Agricultural Preservation Areas in accordance with appropriate standards.
- (8) The County should continue to track and seek the cleanup of all Superfund sites in the County.
- (9) The County should work with municipalities to create a listing of all Countywide Brownfield sites and identify funding sources available for clean up and redevelopment.

c. Emergency Services**Goal:**

To maintain and develop coordinated, modern emergency service systems.

Policies:

- (1) The County should maintain and expand, where applicable, the current level of service provided by the County's Emergency Services Department and the hazardous materials response groups.
- (2) The County should work with municipalities to develop countywide mutual aid agreements for fire, police, emergency medical services, and public works.
- (3) The County and municipalities should establish minimum standards for equipment purchases for fire, police, and emergency medical services.
- (4) The County should assist local fire companies and water systems to know where water sources are located and other information useful in the event of a fire.
- (5) The County and local municipalities should explore how to help fire companies and emergency medical services improve their financial structure and recruit volunteers.
- (6) The County and local municipalities should continue to explore and consider how to consolidate service areas and coordinate programs to improve operations.
- (7) The County should support UCC codes and promote the enforcement of adopted building, maintenance, and rental codes.
- (8) The Berks County Emergency Management Agency should inventory existing services and equipment and develop minimum standards for emergency services that receive funding through public sources to prevent duplication of services and equipment incompatibility.

d. Education**Goal:**

To expand educational opportunities to meet the need for skilled and professional workers.

Policies:

- (1) The County should support the use of local institutions and Ride to Prosperity Economic Development to improve and assist the existing work force through education and skill development.
- (2) The County should continue to sponsor the Reading Area Community College by ensuring a continuous and adequate level of funding and expanding access to all areas of the County.
- (3) The County library system should strengthen their level of service, management and financial structure.
- (4) The County should encourage municipalities to investigate tax sharing to support regional libraries.

e. Stormwater Management**Goal:**

To improve existing stormwater management facilities and develop Act 167 Stormwater Management Plans to protect water resources in all watersheds.

Policies:

- (1) The County should complete Act 167 Stormwater Management Plans for the remaining watersheds in Berks County, including the Maiden Creek, Manatawny Creek, and Schuylkill River as funding becomes available.
- (2) The County should continue to participate in the development of those Act 167 Stormwater Management Plans that are being completed by adjoining counties that encompass small portions of Berks County.
- (3) The County will complete, as required by Act 167, five year updates to each completed Stormwater Management Plan to determine the need for necessary changes to that Plan as funding becomes available.
- (4) The County will provide outreach and education to encourage municipalities to follow Act 167 guidelines, including the Act 167 requirement for municipalities to adopt Stormwater Management Ordinances and updates for each watershed.
- (5) The County will discourage development in the 1% annual chance floodplain.
- (6) The County will provide outreach and education to encourage municipalities to maintain the most up-to-date Floodplain Ordinances in coordination with the Berks County Conservation District.
- (7) The County supports municipal policies for the maintenance of stormwater management facilities and encourages municipal ownership and proper maintenance. The County does not recommend that individual property owners have the maintenance responsibility and/or ownership of stormwater facilities.
- (8) The County will encourage municipalities to identify areas with existing stormwater problems and create a plan to fix and/or alleviate the identified problems.
- (9) The County will encourage the use of Best Management Practices associated with stormwater facilities to improve the quality of water that is exiting the facility.
- (10) The County will encourage the protection and preservation of riparian buffers, wetlands, and stormwater recharge areas.